Section 18

Natural Resources

This section presents data on the area, ownership, production, trade, reserves, and disposition of natural resources. Natural resources is defined here as including forestry, fisheries, and mining and mineral products.

Forestry—Presents data on the area, ownership, and timber resource of commercial timberland; forestry statistics covering the National Forests and Forest Service cooperative programs; product data for lumber, pulpwood, woodpulp, paper and paperboard, and similar data.

The principal sources of data relating to forests and forest products are *Forest Resources of the United States, 1991; Timber Demand and Technology Assessment, 2001; U.S. Timber Production, Trade, Consumption, and Price Statistics; Land Areas of the National Forest System,* issued annually by the Forest Service of the Department of Agriculture; *Agricultural Statistics* issued by the Department of Agriculture; and reports of the annual survey of manufactures, see Table 851) and the annual *Current Industrial Reports,* issued by the Census Bureau on the Internet and in print in the annual *Manufacturing Profiles.* Additional information is published in the monthly *Survey of Current Business* of the Bureau of Economic Analysis, and the annual *Wood Pulp* and *Fiber Statistics* and *The Statistics of Paper, Paperboard, and Wood Pulp* of the American Forest and Paper Association, Washington, DC.

The completeness and reliability of statistics on forests and forest products vary considerably. The data for forest land area and stand volumes are much more reliable for areas which have been recently surveyed than for those for which only estimates are available. In general, more data are available for lumber and other manufactured products such as particle board and softwood panels, etc., than for the primary forest products such as poles and piling and fuelwood.

Fisheries—The principal source of data relating to fisheries is *Fisheries of the United States,* issued annually by the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA). The NMFS collects and disseminates data on commercial landings of fish and shellfish. Annual reports include quantity and value of commercial landings of fish and shellfish disposition of landings and number and kinds of fishing vessels and fishing gear. Reports for the fish-processing industry include annual output for the wholesaling and fish processing establishments, annual and seasonal employment. The principal source for these data is the annual *Fisheries of the United States.*

Mining and mineral products—Presents data relating to mineral industries and their products, general summary measures of production and employment, and more detailed data on production, prices, imports and exports, consumption, and distribution for specific industries and products. Data on mining and mineral products may also be found in Sections 19, 21, and 28 of this *Abstract;* data on mining employment may be found in Section 12.

Mining comprises the extraction of minerals occurring naturally (coal, ores, crude petroleum, natural gas) and quarrying, well operation, milling, refining and processing, and other preparation customarily done at the mine or well site or as a part of extraction activity. (Mineral preparation plants are usually operated together with mines or quarries.) Exploration for minerals is included as is the development of mineral properties.

The principal governmental sources of these data are the *Minerals Yearbook* and *Mineral Commodity Summaries,* published by the U.S. Geological Survey, Department of the Interior, and various monthly and annual publications of the Energy Information Administration, Department of

Energy. See text, Section 19, for a list of Department of Energy publications. In addition, the Census Bureau conducts a census of mineral industries every 5 years (for 1997 results, see Tables 864 and 865).

Nongovernment sources include the *Annual Statistical Report* of the American Iron and Steel Institute, Washington, DC; *Metals Week* and the monthly *Engineering and Mining Journal,* issued by the McGraw-Hill Publishing Co., New York, NY; *The Iron Age,* issued weekly by the Chilton Co., Philadelphia, PA; and the *Joint Association Survey of the U.S. Oil and Gas Industry,* conducted jointly by the American Petroleum Institute, Independent Petroleum Association of America, and Mid-Continent Oil and Gas Association.

Mineral statistics, with principal emphasis on commodity detail, have been collected by the U.S. Geological Survey and the former Bureau of Mines since 1880. Current data in U.S. Geological Survey publications include quantity and value of nonfuel minerals produced, sold or used by producers, or shipped; quantity of minerals stocked; crude materials treated and prepared minerals recovered; and consumption of mineral raw materials.

Censuses of mineral industries have been conducted by the Census Bureau at various intervals since 1840. Beginning with the 1967 census, legislation provides for a census to be conducted every 5 years for years ending in "2" and "7." The most recent results, published for 1997, are based on the North American Industry Classification System (NAICS). The censuses provide, for the various types of mineral establishments, information on operating costs, capital expenditures, labor, equipment, and energy requirements in relation to their value of shipments and other receipts. Commodity statistics on many manufactured mineral products are also collected by the Census Bureau at monthly, quarterly, or annual intervals and issued in its *Current Industrial Reports* series.

In general, figures shown in the individual commodity tables include data for outlying areas and may therefore not agree with summary tables. Except for crude petroleum and refined products, the export and import figures include foreign trade passing through the customs districts of United States and Puerto Rico but exclude shipments between U.S. territories and the customs districts.

No. 846. Gross Domestic Product of Natural Resource-Related Industries in Current and Real (1996) Dollars by Industry: 1990 to 1999

[**In billions of dollars (5,803.2 represents 5,803,200,000,000). Data are based on the 1987 SIC.** Data include nonfactor charges (capital consumption allowances, indirect business taxes, etc.) as well as factor charges against gross product; corporate profits and capital consumption allowances have been shifted from a company to an establishment basis]

Industry	Current dollars				Chained (1996) dollars			
	1990	1995	1998	1999	1990	1995	1998	1999
All industries, total [1]	**5,803.2**	**7,400.5**	**8,790.2**	**9,299.2**	**6,707.9**	**7,543.8**	**8,515.7**	**8,875.8**
Industries covered	**297**	**307**	**329**	**338**	**322**	**330**	**365**	**370**
Percent of all industries	5.12	4.14	3.75	3.64	4.80	4.37	4.29	4.16
Agriculture, forestry, and fishing	108.3	109.8	127.2	125.4	118.5	123.1	144.0	150.9
Farms	79.6	73.2	80.8	74.2	84.2	85.5	100.2	106.3
Agricultural services	28.7	36.7	46.5	51.2	34.6	37.6	43.2	44.4
Mining	111.9	95.7	105.6	111.8	105.8	113.0	126.2	121.9
Metal mining	5.2	6.5	5.1	5.5	4.4	5.5	7.3	8.6
Coal mining	11.8	10.7	11.3	11.3	7.5	10.1	12.5	13.1
Oil and gas extraction	87.1	69.3	77.4	82.8	87.5	88.6	94.9	89.1
Nonmetallic minerals, except fuels	7.8	9.1	11.8	12.3	8.1	9.1	11.5	11.4
Manufacturing	1,040.6	1,289.1	1,436.0	1,500.8	1,102.3	1,284.7	1,446.4	1,529.4
Timber-related manufacturing	77.2	101.3	96.4	101.1	97.6	93.8	94.9	96.8
Lumber and wood products	32.2	42.3	41.4	44.1	45.1	41.6	39.5	40.8
Paper and allied products	45.0	58.9	55.1	57.0	52.5	52.2	55.3	56.0

[1] Includes private households and statistical discrepancy, not shown separately.

Source: U.S. Bureau of Economic Analysis, *National Income and Product Accounts, 1929-97,* (forthcoming); and *Survey of Current Business,* December 2000.

No. 847. Natural Resource-Related Industries—Employees, Annual Payroll, and Establishments by Industry: 1999

[Excludes government employees, railroad employees, self-employed persons, etc. See "General Explanation" in source for definitions and statement on reliability of data. An *establishment* is a single physical location where business is conducted or where services or industrial operations are performed]

Year and industry	NAICS code [1]	Number of employees [2] (1,000)	Annual payroll (bil. dol.)	Average payroll per employee (dol.)	Establishment by employment size-class (1,000)			
					Total	Under 20 employees	20 to 99 employees	100 to 499 employees	500 and over employees
Natural resource-related industries, total	**(X)**	**1,803.0**	**42.2**	**23,397**	**73,981**	**58,088**	**11,828**	**3,698**	**367**
Percent of all industries	(X)	1.63	1.19	72.87	1.06	0.96	1.47	2.43	2.01
Forestry, fishing, hunting and agriculture support	11	192.2	4.8	25,046	26,926	25,246	1,487	178	15
Forestry and logging	113	83.8	2.3	26,916	13,694	13,019	648	25	2
Timber tract operations	1131	3.3	0.1	37,422	431	392	35	4	-
Forest nurseries & gathering forest products	1132	1.4	-	35,954	252	241	11	-	-
Logging	1133	79.2	2.1	26,326	13,011	12,386	602	21	2
Fishing, hunting & trapping	114	10.0	0.3	33,302	2,541	2,449	78	13	1
Fishing	1141	7.6	0.3	34,645	2,181	2,109	61	11	-
Hunting & trapping	1142	2.4	0.1	28,998	360	340	17	2	1
Agriculture & forestry support activities	115	98.3	2.2	22,613	10,691	9,778	761	140	12
Crop production support activities	1151	67.4	1.6	23,386	5,929	5,276	534	111	8
Animal production support activities	1152	16.7	0.3	19,507	3,269	3,140	113	16	-
Forestry support activities	1153	14.1	0.3	22,603	1,493	1,362	114	13	4
Mining	21	456.6	21.0	45,935	23,699	19,459	3,456	694	90
Oil & gas extraction	211	90.0	5.4	59,742	7,556	6,746	666	128	16
Oil & gas extraction	2111	90.0	5.4	59,742	7,556	6,746	666	128	16
Mining (except oil & gas)	212	215.9	9.6	44,572	7,280	5,104	1,759	377	40
Coal mining	2121	76.4	3.7	48,413	1,336	683	443	196	14
Metal ore mining	2122	39.9	1.8	46,206	529	397	54	57	21
Nonmetallic mineral mining & quarrying	2123	99.6	4.1	40,972	5,415	4,024	1,262	124	5
Mining support activities	213	150.7	6.0	39,641	8,863	7,609	1,031	189	34
Mining support activities	2131	150.7	6.0	39,641	8,863	7,609	1,031	189	34
Timber-related manufacturing	(X)	1,154.2	16.4	14,206	23,356	13,383	6,885	2,826	262
Wood product manufacturing	321	595.2	16.4	27,509	17,473	11,493	4,537	1,364	79
Sawmills & wood preservation	3211	131.9	3.8	28,431	4,839	3,250	1,275	311	3
Veneer, plywood & engineered wood product manufacturing	3212	117.5	3.6	30,846	1,886	770	746	360	10
Other wood product manufacturing	3219	345.7	9.0	26,023	10,748	7,473	2,516	693	66
Paper manufacturing	322	559.0	23.2	41,549	5,883	1,890	2,348	1,462	183
Pulp, paper & paperboard mills	3221	185.2	9.7	52,607	592	72	154	234	132
Converted paper product manufacturing	3222	373.8	13.5	36,071	5,291	1,818	2,194	1,228	51

- Represents zero. X Not applicable. [1] North American Industry Classification System, 1977. [2] Covers full- and part-time employees who are on the payroll in the pay period including March 12.

Source: U.S. Census Bureau, *County Business Patterns,* annual. See also <http://www.census.gov/prod/2001pubs/cbp99/cbp99-1.pdf> (issued April 2001).

No. 848. National Forest System—Summary: 1980 to 1998

[**For fiscal years ending in year shown;** see text, Section 8, State and Local Government Finances and Employment. Includes Alaska and Puerto Rico, except as noted]

Item	Unit	1980	1990	1993	1994	1995	1996	1997	1998
Timber cut, total value	Mil. dol.	737	1,192	919	787	620	548	502	450
Commercial and cost sales: [1]									
Volume	Mil. bd. ft.	9,178	10,500	5,917	4,815	3,866	3,725	3,285	3,298
Value	Mil. dol.	730	1,188	915	783	616	544	498	446
Livestock grazing: [2]									
Cattle and horses [3]	1,000	1,521	1,236	1,318	1,224	1,311	1,167	1,225	1,208
Sheep and goats	1,000	1,328	958	1,111	925	1,068	859	932	909
Receipts, total	Mil. dol.	703	971	504	515	387	273	285	294
Timber use	Mil. dol.	625	849	425	432	303	195	197	208
Grazing use	Mil. dol.	16	10	11	11	9	7	7	7
Special land use, etc	Mil. dol.	62	112	68	72	75	71	81	79

[1] Includes land exchanges. [2] Covers number actually grazed. Excludes Puerto Rico. [3] Excludes animals under 6 months of age.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment,* RWU-4861. Also in *Agricultural Statistics,* annual.

No. 849. National Forest System Land—State and Other Area: 1999

[**In thousands of acres (232,786 represents 232,786,000). As of Sept. 30**]

State and other area	Gross area [1]	NFS land [2]	State and other area	Gross area [1]	NFS land [2]	State and other area	Gross area [1]	NFS land [2]
Total	**232,786**	**191,938**	IA	-	-	ND	1,106	1,106
			KS	116	108	OH	835	229
U.S.	**232,730**	**191,910**	KY	2,102	693	OK	772	397
			LA	1,024	604	OR	17,496	15,656
AL	1,288	665	ME	93	53	PA	743	513
AK	24,355	21,974	MD	-	-	RI	-	-
AZ	11,891	11,255	MA	-	-	SC	1,375	613
AR	3,539	2,579	MI	4,895	2,857	SD	2,367	2,012
CA	24,403	20,653	MN	5,467	2,838	TN	1,212	634
CO	16,052	14,509	MS	2,310	1,159	TX	1,994	755
CT	-	-	MO	3,060	1,495	UT	9,211	8,111
DE	-	-	MT	19,104	16,886	VT	817	368
DC	-	-	NE	442	352	VA	3,224	1,659
FL	1,379	1,147	NV	6,275	5,826	WA	10,088	9,202
GA	1,856	865	NH	1,554	827	WV	1,870	1,033
HI	-	-	NJ	-	-	WI	2,023	1,521
ID	21,655	20,459	NM	10,367	9,327	WY	9,704	9,238
IL	856	292	NY	-	-	PR	56	28
IN	644	196	NC	3,166	1,244	VI	-	-

- Represents zero or rounds to zero. [1] Comprises all publicly and privately owned land within authorized boundaries of national forests, purchase units, national grasslands, land utilization projects, research and experimental areas, and other areas. [2] Federally owned land within the "gross area within unit boundaries."

Source: U.S. Forest Service, *Land Areas of the National Forest System,* annual.

No. 850. Forest and Timberland Area, Sawtimber, and Stock: 1970 to 1996

[**754 acres represents 754,000,000 acres. As of Jan. 1**]

Year and region	Total forest land (mil. acres)	Timberland, ownership [1]				Sawtimber, net volume [3]		Growing stock, net volume [4]	
		All ownerships (mil. acres)	Federally owned or managed [2] (mil. acres)	State and local (mil. acres)	Private (mil. acres)	Total (bil. bd. ft.)	Softwood (bil. bd. ft.)	Total (bil. cu. ft.)	Softwood (bil. cu. ft.)
United States, 1970.	**754**	**504**	**116**	**29**	**360**	**2,587**	**2,035**	**694**	**458**
North	(NA)	154	11	18	126	295	81	146	39
South	(NA)	203	15	3	185	569	302	191	87
Rocky Mountains	(NA)	65	42	2	20	398	384	101	95
Pacific Coast	(NA)	82	47	5	29	1,325	1,268	257	238
United States, 1987.	**731**	**485**	**97**	**34**	**354**	**2,853**	**2,040**	**766**	**453**
North	165	154	11	19	124	459	126	190	48
South	203	197	16	4	177	781	388	245	106
Rocky Mountains	142	61	39	3	20	411	394	108	100
Pacific Coast	220	72	31	8	32	1,202	1,132	223	199
United States, 1992.	**737**	**490**	**97**	**35**	**358**	**2,992**	**2,047**	**786**	**450**
North	168	158	11	19	127	540	137	207	51
South	212	199	16	4	179	842	389	251	103
Rocky Mountains	140	63	40	3	20	415	397	110	101
Pacific Coast	217	70	30	8	32	1,196	1,124	218	195
United States, 1996.	**746**	**518**	**124**	**35**	**357**	**3,227**	**2,231**	**860**	**503**
North	170	180	32	21	127	574	146	213	49
South	214	201	16	5	180	858	393	256	105
Rocky Mountains	143	68	44	2	21	482	457	141	126
Pacific Coast	219	69	32	7	29	1,313	1,235	250	223

NA Not available. [1] Timberland is forest land that is producing or is capable of crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. Areas qualifying as timberland have the capability of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included. [2] Includes Indian lands. [3] Sawtimber is timber suitable for sawing into lumber. Live trees of commercial species containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9.0-inches diameter, and hardwood trees must be at least 11.0-inches diameter at 4 1/2 feet above ground. International 1/4-inch rule. [4] Live trees of commercial species meeting specified standards of quality or vigor. Cull trees are excluded. Includes only trees 5.0-inches diameter or larger at 4 1/2 feet above ground.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment, 1996,* RWU-4851.

No. 851. Timber-Based Manufacturing Industries—Employees, Payroll, and Shipments: 1999

Selected industries	1987 NAICS code [1]	All employees			Production workers, total (1,000)	Value added by manufactures		Value of shipments (mil. dol.)
		Number (1,000)	Payroll			Total (mil. dol.)	Per production worker (dol.)	
			Total (mil. dol.)	Per employee (dol.				
Manufacturing, all industries	**31-33**	**16,711**	**600,090**	**35,910**	**12,011**	**1,962,644**	**163,406**	**4,038,109**
Timber-based manufacturing, total	**(X)**	**1,149**	**38,743**	**33,707**	**925**	**113,015**	**122,210**	**255,074**
Percent of total manufacturing	(X)	6.88	6.46	(X)	7.70	5.76	(X)	6.32
Wood product manufacturing	321	589	15,954	27,076	493	38,413	77,932	97,583
Sawmills & wood preservation	3211	133	3,644	27,433	113	9,610	84,690	30,209
Sawmills	321113	120	3,311	27,526	103	8,620	83,396	25,249
Wood preservation	321114	13	332	26,540	10	990	97,922	4,960
Veneer, plywood, & engineered wood product	3212	116	3,471	29,953	97	9,553	98,923	21,988
Other wood product	3219	341	8,839	25,957	283	19,250	68,054	45,386
Millwork	32191	154	4,121	26,838	128	8,619	67,149	21,693
Wood container & pallet	32192	49	1,039	21,009	42	2,128	50,575	4,772
All other wood product	32199	138	3,679	26,753	112	8,503	75,631	18,921
Paper	322	560	22,789	40,683	432	74,602	172,749	157,491
Pulp, paper, & paperboard mills	3221	187	9,725	52,137	146	37,526	257,141	73,509
Pulp mills	32211	7	390	53,342	6	1,444	259,688	3,112
Paper mills	32212	128	6,656	51,984	101	25,716	254,761	49,468
Paperboard mills	32213	51	2,678	52,348	39	10,365	262,876	21,229
Converted paper product	3222	374	13,065	34,966	286	37,076	129,675	83,982
Paperboard container	32221	212	7,515	35,493	163	17,526	107,803	44,536
Paper bag & coated & treated paper	32222	73	2,728	37,402	55	8,763	160,789	19,511
Stationery product	32223	48	1,439	30,041	36	3,626	99,385	7,926
Other converted paper product	32229	41	1,383	33,665	32	7,162	221,302	12,009

X Not applicable. [1] North American Industry Classification System, 1997; see text, Section 15, Business Enterprise.

Source: U.S. Census Bureau, *Annual Survey of Manufactures, 1999,* Series M99(AS)-1.

No. 852. Timber Products—Production, Foreign Trade, and Consumption by Type of Product: 1980 to 1999

[**In millions of cubic feet roundwood equivalent (12,081 represents 12,081,000,000)**]

Type of product	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Industrial roundwood:											
Domestic production [1]	12,081	15,577	14,894	15,280	15,011	15,306	16,681	16,506	16,799	16,918	16,908
Softwoods	8,988	10,968	10,402	10,563	10,090	10,268	10,875	10,812	10,180	10,097	10,389
Hardwoods	3,093	4,609	4,493	4,717	4,921	5,038	5,806	5,694	6,619	6,821	6,519
Imports	2,395	3,091	2,808	3,090	3,465	3,632	4,174	4,137	4,273	4,388	4,661
Exports	1,469	2,307	2,393	2,344	2,143	2,139	2,467	2,445	2,475	2,114	2,097
Consumption [2]	13,008	16,361	15,310	16,026	16,334	16,800	18,389	18,197	18,598	19,192	19,471
Softwoods	9,839	11,779	11,011	11,536	11,539	11,906	12,709	12,715	12,114	12,348	12,827
Hardwoods	3,168	4,582	4,299	4,490	4,795	4,894	5,680	5,482	6,483	6,844	6,644
Lumber:											
Domestic production	5,623	7,317	6,746	6,983	6,887	7,052	6,815	6,886	7,103	7,298	7,629
Imports	1,530	1,909	1,714	1,960	2,240	2,395	2,522	2,616	2,619	2,690	2,810
Exports	407	589	619	561	532	512	460	449	452	350	404
Consumption	6,745	8,637	7,841	8,383	8,595	8,935	8,877	9,053	9,270	9,638	10,035
Plywood and veneer:											
Domestic production	1,272	1,423	1,267	1,294	1,293	1,320	1,303	1,281	1,213	1,201	1,208
Imports	81	97	83	100	100	94	107	97	114	131	160
Exports	30	109	95	106	100	86	89	87	103	55	46
Consumption	1,323	1,410	1,255	1,288	1,293	1,328	1,321	1,291	1,224	1,276	1,322
Pulp products:											
Domestic production	4,250	5,313	5,397	5,516	5,423	5,576	7,223	7,001	7,193	7,206	6,838
Imports	765	1,038	969	992	1,065	1,102	1,483	1,352	1,472	1,491	1,597
Exports	510	646	746	801	724	758	1,090	1,072	1,114	981	899
Consumption	4,505	5,704	5,620	5,706	5,764	5,920	7,617	7,281	7,551	7,716	7,536
Logs:											
Imports	20	4	2	7	15	18	13	18	20	30	47
Exports	522	674	602	524	460	429	451	422	384	316	326
Pulpwood chips, exports	278	288	332	351	326	354	377	416	422	412	422
Fuelwood consumption	3,105	3,019	3,028	3,044	3,084	3,134	2,937	2,739	2,542	2,523	2,542

[1] Includes log exports. [2] Includes log imports.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment,* RWU-4861. Also in *Agricultural Statistics,* annual.

No. 853. Selected Timber Products—Imports and Exports: 1980 to 1999

Product	Unit	1980	1990	1993	1994	1995	1996	1997	1998	1999
IMPORTS [1]										
Lumber, total [2]	Mil. bd. ft.	9,866	13,063	15,368	16,534	17,524	18,363	18,237	19,012	19,900
From Canada	Percent	97.5	91.2	98.0	97.4	97.0	97.1	96.2	96	93
Logs, total	Mil. bd. ft.[3]	128	23	94	110	80	115	128	185	294
From Canada	Percent	95	84	95	77	70	82.3	82.9	91	95
Paper and board [4]	1,000 tons	8,013	12,195	12,990	13,651	14,292	13,023	14,525	14,538	16,917
Woodpulp	1,000 tons	4,051	4,893	5,413	5,650	5,969	5,692	6,398	5,984	6,650
Plywood	Mil. sq. ft.[5]	1,235	1,687	1,786	1,693	1,951	1,780	2,111	2,429	2,989
EXPORTS										
Lumber, total [2]	Mil. bd. ft.	2,507	4,614	3,280	3,115	2,958	2,898	2,933	2,189	2,549
To: Canada	Percent	25.2	14.3	17.3	19.6	22	22.9	24.3	26.3	25.9
Japan	Percent	26	28	36	34	33	33	27	16	14
Europe	Percent	23.7	14.9	16.7	17.5	17.4	16.7	20.2	25.6	20.8
Logs, total	Mil. bd. ft.[3]	3,261	4,213	2,876	2,684	2,820	2,636	2,398	1,978	2,038
To: Canada	Percent	10	9	14	16	25	20	30	39	39
Japan	Percent	78	62.3	65.4	67.9	61.3	68.6	56.2	50.8	49
China: Mainland	Percent	3	9	5	3	1	1	1	1	-
Paper and board [4]	1,000 tons	4,241	5,163	6,835	7,536	7,621	9,118	10,368	9,103	9,477
Woodpulp	1,000 tons	3,806	5,905	6,499	6,728	8,261	7,170	6,990	6,025	5,438
Plywood	Mil. sq. ft.[5]	413	1,766	1,677	1,455	1,517	1,499	1,802	970	833

- Represents zero. [1] Customs value of imports; see text, Section 28, Foreign Commerce and Aid. [2] Includes railroad ties. [3] Log scale. [4] Includes paper and board products. Excludes hardboard. [5] 3/8 inch basis.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment,* RWU-4851. Also in *Agricultural Statistics,* annual.

No. 854. Lumber Consumption by Species Group and End Use: 1995 to 1999

[**In million board feet (59.3 represents 59,300,000), except per capita in board feet.** Per capita consumption based on estimated resident population as of **July 1**]

Item	1995	1996	1997	1998	1999	End-use	1995	1996	1997	1998	1999
Total	**59.3**	**62.2**	**63.0**	**65.1**	**68.3**	New housing	15.9	19.0	(NA)	(NA)	(NA)
Per capita	225	234	235	241	250	Residential upkeep and improvements	12.4	17.7	(NA)	(NA)	(NA)
Species group:						New nonresidential construction [1]	5.8	4.6	(NA)	(NA)	(NA)
Softwoods	47.6	50.2	50.9	52.1	54.5	Manufacturing	5.5	7.6	(NA)	(NA)	(NA)
Hardwoods	11.7	12.0	12.1	13.0	13.8	Shipping	8.5	6.3	(NA)	(NA)	(NA)
						Other [2]	8.8	6.8	(NA)	(NA)	(NA)

NA Not available. [1] In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. [2] Includes upkeep and improvement of nonresidential buildings and structures; made-at-home projects, such as furniture, boats, and picnic tables; made-on-the-job items such as advertising and display structures; and miscellaneous products and uses.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment,* RWU-4851. Also in *Agricultural Statistics,* annual.

No. 855. Selected Timber Products—Producer Price Indexes: 1990 to 2000

[**1982=100.** For information about producer prices, see text, Section 14, Prices]

Product	1990	1993	1994	1995	1996	1997	1998	1999	2000, prel.
Lumber and wood products	129.7	174.0	180.0	178.1	176.1	183.8	179.1	183.6	178.2
Lumber	124.6	183.4	188.4	173.4	179.8	194.5	179.5	188.2	178.7
Softwood lumber	123.8	193.0	198.1	178.5	189.5	206.5	182.7	196.0	178.6
Hardwood lumber	131.0	163.3	168.3	167.0	163.9	174.1	178.7	177.3	185.8
Millwork	130.4	156.6	162.4	163.8	166.6	170.9	171.1	174.7	176.4
General millwork	132.0	158.5	163.6	165.4	167.9	171.1	172.4	175.6	178.0
Prefabricated structural members	122.3	159.7	169.3	163.5	167.5	177.8	170.1	178.1	175.0
Plywood	114.2	152.8	158.6	165.3	156.4	159.3	157.3	176.4	157.8
Softwood plywood	119.6	169.7	176.8	188.1	173.7	175.5	174.9	207.0	173.8
Hardwood plywood and related products	102.7	115.4	122.3	122.2	124.9	127.1	126.9	128.6	130.1
Other wood products	114.7	135.3	137.7	143.7	127.5	128.4	135.2	131.1	130.4
Boxes	119.1	138.2	141.3	145.0	147.1	149.2	150.7	152.3	155.2
Pulp, paper, and allied products	141.2	147.3	152.5	172.2	168.7	167.9	171.7	174.1	183.6
Pulp, paper, and prod., ex. bldg. paper	132.9	127.6	133.1	163.4	149.7	144.7	147.0	147.9	161.4
Woodpulp	151.3	104.2	115.9	183.2	133.1	128.6	122.6	119.7	145.4
Wastepaper	138.9	117.4	209.5	371.1	141.6	163.3	145.4	183.6	282.2
Paper	128.8	123.8	126.0	159.0	149.4	143.9	145.4	141.8	149.9
Writing and printing papers	129.1	120.5	121.7	158.4	144.6	140.0	139.9	137.8	146.8
Newsprint	119.6	112.1	116.7	161.8	159.5	133.9	143.4	(NA)	127.3
Paperboard	135.7	130.0	140.5	183.1	155.1	144.4	151.6	153.2	176.6
Converted paper & paperboard products	135.2	133.7	136.7	157.0	153.4	148.4	152.2	153.5	162.6
Office supplies and accessories	121.4	115.3	116.9	134.9	132.9	131.0	131.2	129.5	133.9
Building paper & building board mill prods.	112.2	132.7	144.1	144.9	137.2	129.6	132.9	141.6	138.8

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes,* monthly.

No. 856. Selected Species—Stumpage Prices In Current and Constant (1992) Dollars: 1990 to 1999

[**In dollars per 1,000 board feet.** Stumpage prices are based on sales of sawtimber from National Forests]

Species	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
CURRENT DOLLARS										
Softwoods:										
Douglas fir [2]	466	395	477	318	652	454	436	331	254	315
Southern pine [3]	127	166	198	217	266	248	241	307	288	269
Sugar pine [4]	285	241	492	598	625	397	318	234	200	227
Ponderosa pine [4 5]	218	238	292	535	291	150	274	270	205	181
Western hemlock [6]	203	164	165	364	335	297	248	211	161	96
Hardwoods:										
All eastern hardwoods [7]	146	160	167	264	352	309	259	287	241	195
Oak, white, red, and black [7]	188	164	211	195	317	297	237	265	270	317
Maple, sugar [8]	135	121	145	220	313	286	238	357	395	448
CONSTANT (1992) DOLLARS [1]										
Softwoods:										
Douglas fir [2]	470	397	477	313	635	426	400	305	230	262
Southern pine [3]	128	167	198	214	259	233	221	282	261	223
Sugar pine [4]	287	242	492	589	609	373	292	215	181	189
Ponderosa pine [4 5]	220	239	292	527	283	141	251	248	186	151
Western hemlock [6]	205	165	165	359	326	279	227	194	146	80
Hardwoods:										
All eastern hardwoods [7]	293	321	335	530	707	620	520	576	218	162
Oak, white, red, and black [7]	378	329	424	392	637	596	475	531	245	264
Maple, sugar [8]	271	243	291	442	629	574	478	717	358	373

[1] Deflated by the producer price index, all commodities. [2] Western Washington and western Oregon. [3] Southern region. [4] Pacific Southwest region (formerly California region). [5] Includes Jeffrey pine. [6] Pacific Northwest region. [7] Eastern and Southern regions. [8] Eastern region.

Source: U.S. Forest Service, *Timber Demand and Technology Assessment,* RWU-4851. Also in *Agricultural Statistics,* annual.

No. 857. Paper and Paperboard—Production and New Supply: 1990 to 1999

[**In thousands of short tons (80,445 represents 80,445,000)**]

Item	1990	1992	1993	1994	1995	1996	1997	1998	1999, prel.
Production, total	**80,445**	**84,701**	**86,693**	**90,897**	**91,325**	**92,199**	**96,846**	**96,343**	**96,902**
Paper, total	39,361	40,973	41,745	43,356	42,868	42,481	44,697	44,777	46,012
Paperboard, total	39,318	41,895	43,113	45,724	46,640	47,901	50,332	49,749	50,890
Unbleached kraft	20,357	21,658	21,447	22,469	22,697	22,178	23,222	23,199	22,958
Semichemical	5,640	5,762	5,672	5,943	5,662	5,619	6,047	5,894	5,954
Bleached kraft	4,399	4,503	4,583	5,029	5,304	5,236	5,548	5,487	5,712
Recycled	8,921	9,973	11,410	12,283	12,977	14,868	15,514	15,170	16,266
Wet machine board E	96	93	95	96	96	96	96	96	(NA)
Building paper E	723	795	797	787	787	787	787	787	(NA)
Insulating board E	946	945	943	934	934	934	934	934	(NA)
New supply, all grades, excluding products	**87,683**	**89,631**	**93,146**	**97,448**	**98,164**	**95,896**	**101,201**	**102,869**	**(NA)**
Paper, total	49,485	49,232	51,246	53,077	52,769	50,687	54,149	55,068	(NA)
Newsprint	13,412	12,658	12,750	12,889	12,762	11,768	12,612	12,721	(NA)
Printing/writing papers	25,456	26,013	27,846	29,444	29,550	28,300	30,751	31,384	(NA)
Packaging and ind. conv. papers	4,718	4,783	4,628	4,640	4,241	4,325	4,265	4,285	(NA)
Tissue	5,899	5,778	6,022	6,105	6,215	6,294	6,521	6,680	(NA)
Paperboard, total	36,301	38,453	39,950	42,435	43,448	43,214	45,061	45,597	(NA)
Construction and other	1,897	1,946	1,949	1,935	1,947	1,994	1,991	2,203	(NA)

NA Not available.

Source: American Forest and Paper Association, Washington, DC, *Monthly Statistical Summary of Paper, Paperboard and Woodpulp.*

No. 858. Fishery Products—Domestic Catch, Imports, and Disposition: 1990 to 1999

[**Live weight, in millions of pounds (16,349 represents 16,349,000,000).** For data on commercial catch for selected countries, see Table 1358, Section 30, Comparative International Statistics]

Item	1990	1992	1993	1994	1995	1996	1997	1998	1999
Total	**16,349**	**16,106**	**20,334**	**19,309**	**16,484**	**16,474**	**17,131**	**16,897**	**17,378**
For human food	12,662	13,242	13,821	13,714	13,584	13,625	13,739	14,175	14,462
For industrial use	3,687	2,864	6,513	5,595	2,900	2,848	3,392	2,722	2,916
Domestic catch	**9,404**	**9,637**	**10,467**	**10,461**	**9,788**	**9,565**	**9,845**	**9,194**	**9,339**
For human food	7,041	7,618	8,214	7,936	7,667	7,476	7,248	7,174	6,832
For industrial use	2,363	2,019	2,253	2,525	2,121	2,090	2,597	2,020	2,507
Imports [1]	**6,945**	**6,469**	**9,867**	**8,848**	**6,696**	**6,909**	**7,286**	**7,703**	**8,039**
For human food	5,621	5,624	5,607	5,778	5,917	6,150	6,491	7,001	7,630
For industrial use [2]	1,324	845	4,260	3,070	779	759	795	702	409
Disposition of domestic catch	**9,404**	**9,637**	**10,467**	**10,461**	**9,788**	**9,565**	**9,846**	**9,194**	**9,339**
Fresh and frozen	6,501	7,288	7,744	7,475	7,099	7,054	6,877	6,870	6,416
Canned	751	543	649	622	769	678	648	516	712
Cured	126	100	115	95	90	93	108	129	133
Reduced to meal, oil, etc	2,026	1,696	1,959	2,269	1,830	1,740	2,213	1,679	2,078

[1] Excludes imports of edible fishery products consumed in Puerto Rico; includes landings of tuna caught by foreign vessels in American Samoa. [2] Fish meal and sea herring.

No. 859. Fisheries—Quantity and Value of Domestic Catch: 1980 to 1999

Year	Quantity (mil. lb. [1])			Value (mil. dol.)	Average price per lb. (cents)	Year	Quantity (mil. lb. [1])			Value (mil. dol.)	Average price per lb. (cents)
	Total	For human food	For industrial products [2]				Total	For human food	For industrial products [2]		
1980	6,482	3,654	2,828	2,237	34.5	1990	9,404	7,041	2,363	3,522	37.5
1981	5,977	3,547	2,430	2,388	40.0	1991	9,484	7,031	2,453	3,308	34.9
1982	6,367	3,285	3,082	2,390	37.5	1992	9,637	7,618	2,019	3,678	38.2
1983	6,439	3,238	3,201	2,355	36.6	1993	[3]10,467	8,214	2,253	3,471	33.2
1984	6,438	3,320	3,118	2,350	36.5	1994	10,461	7,936	2,525	3,807	36.8
1985	6,258	3,294	2,964	2,326	37.2	1995	9,788	7,667	2,121	3,770	38.5
1986	6,031	3,393	2,638	2,763	45.8	1996	9,565	7,474	2,091	3,487	36.5
1987	6,896	3,946	2,950	3,115	45.2	1997	9,842	7,244	2,598	3,448	35.0
1988	7,192	4,588	2,604	3,520	48.9	1998	9,194	7,173	2,021	3,128	34.0
1989	8,463	6,204	2,259	3,238	38.3	1999	9,339	6,832	2,507	3,467	37.1

[1] Live weight. [2] Meal, oil, fish solubles, homogenized condensed fish, shell products, bait, and animal food. [3] Represents record year.

No. 860. Domestic Fish and Shellfish Catch and Value by Species: 1990 to 1999

Species	Quantity (1,000 lb.)				Value ($1,000)			
	1990	1995	1998	1999	1990	1995	1998	1999
Total	**9,403,571**	**9,787,554**	**9,193,970**	**9,339,034**	**3,521,995**	**3,735,615**	**3,128,469**	**3,467,084**
Fish, total [1]	**8,091,068**	**8,520,086**	**7,888,020**	**7,811,868**	**1,900,097**	**1,915,642**	**1,446,942**	**1,558,292**
Cod:								
Atlantic	95,881	29,631	24,514	21,445	61,329	28,184	25,474	23,943
Pacific	526,396	591,399	555,993	523,987	91,384	109,680	87,717	83,227
Flounder	254,519	423,443	391,178	331,218	112,921	150,239	96,804	89,946
Halibut	70,454	44,796	73,260	80,330	96,700	66,781	103,974	124,696
Menhaden	1,962,160	1,846,959	1,705,677	1,989,081	93,896	99,131	103,836	113,082
Pollock, Alaska	3,108,031	2,852,618	2,716,458	2,325,889	268,344	259,614	190,152	162,812
Sablefish	89,802	65,904	43,500	48,255	58,865	123,694	91,823	97,148
Salmon	733,146	1,020,765	644,434	814,896	612,367	486,107	257,456	359,785
Tuna	62,393	63,864	84,999	58,120	105,040	102,638	94,462	86,254
Shellfish, total [1]	**1,312,503**	**1,267,468**	**1,305,950**	**1,527,166**	**1,621,898**	**1,819,973**	**1,681,527**	**1,908,792**
Clams	139,198	134,224	107,959	112,230	130,194	140,414	135,237	135,024
Crabs	499,416	363,639	552,716	458,307	483,837	511,987	473,378	521,237
Lobsters: American	61,017	66,406	79,642	87,469	154,677	214,838	253,636	322,957
Oysters	29,193	40,380	33,538	26,983	93,718	101,574	88,627	72,658
Scallops:								
Calico	(NA)	957	(NA)	4,105	(NA)	1,219	(NA)	3,880
Sea	39,917	18,316	13,061	23,038	153,696	92,826	79,606	125,289
Shrimp	346,494	306,869	277,757	304,173	491,433	570,034	515,616	560,501

NA Not available. [1] Includes other types of fish and shellfish, not shown separately.

Source of Tables 858-860: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States,* annual.

No. 861. U.S. Private Aquaculture—Trout and Catfish Production and Value: 1990 to 2000

[**67.8 represents 67,800,000. Periods are from Sept. 1 of the previous year to Aug. 31 of stated year.** Data are for foodsize fish, those over 12 inches long]

Item	Unit	1990	1994	1995	1996	1997	1998	1999	2000
TROUT FOODSIZE									
Number sold	Millions	67.8	58.3	60.2	56.5	59.3	57.6	61.0	58.5
Total weight	Mil. lb	56.8	52.1	55.6	53.6	56.9	57.9	60.2	59.2
Total value of sales	Mil. dol.	64.6	52.7	60.8	57.0	60.7	60.3	64.7	63.7
Average price received	Dol./lb	1.14	1.01	1.09	1.06	1.07	1.04	1.07	1.08
Percent sold to processors	Percent	58	68	68	67	63	62	67.7	69.7
CATFISH FOODSIZE									
Number sold	Millions	272.9	347.6	321.8	375.4	391.8	409.8	424.5	420.1
Total weight	Mil. lb	392.4	479.4	481.5	526.3	569.6	601.4	635.2	633.8
Total value of sales	Mil. dol.	305.1	373.6	378.1	403.3	406.8	445.4	464.7	468.8
Average price received	Dol./lb	0.78	0.78	0.79	0.77	0.71	0.74	0.73	0.74
Fish sold to processors	Mil. lb	360.4	439.3	446.9	472.1	524.9	564.4	596.6	593.6
Avg. price paid by processors	Cents/lb	75.8	78.4	78.6	77.3	71.2	74.3	73.7	75.1
Processor sales	Mil. lb	183.1	216.5	227.0	237.2	261.8	281.4	292.7	297.2
Avg. price received by processors	Cents/lb	224.1	238.5	240.3	236.9	226.0	229.0	234.0	236.0
Inventory (Jan. 1)	Mil. lb	9.4	11.6	10.9	11.9	11.9	10.8	12.6	13.6

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Trout Production* released September; *Catfish Production* released February; and *Catfish Processing* released February. Also in *Agricultural Statistics,* annual.

No. 862. Supply of Selected Fishery Items: 1990 to 1999

[**In millions of pounds (734 represents 734,000,000).** Totals available for U.S. consumption are supply minus exports plus imports. Round weight is the complete or full weight as caught]

Species	Unit	1990	1992	1993	1994	1995	1996	1997	1998	1999
Shrimp	Heads-off weight	734	820	808	847	832	842	923	1,002	1,084
Tuna, canned	Canned weight	856	922	835	850	875	859	829	912	996
Snow crab	Round weight	37	88	66	40	42	46	110	254	216
Clams	Meat weight	152	155	156	144	144	134	124	119	125
Salmon, canned	Canned weight	148	73	114	117	147	104	82	83	123
American lobster	Round weight	95	95	92	101	94	97	112	110	122
Spiny lobster	Round weight	89	81	76	76	89	81	76	100	91
Scallops	Meat weight	74	69	66	76	62	71	66	58	64
Sardines, canned	Canned weight	61	41	41	48	44	46	49	50	57
Oysters	Meat weight	56	50	48	50	63	58	58	61	55
King crab	Round weight	19	15	8	12	21	30	45	62	52
Crab meat, canned	Canned weight	9	9	9	9	12	13	15	22	27

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States,* annual.

No. 863. Canned, Fresh, and Frozen Fishery Products: 1990 to 1999

[Fresh fishery products exclude Alaska and Hawaii. Canned fishery products data are for natural pack only]

Product	Production (mil. lb.)					Value (mil. dol.)				
	1990	1995	1997	1998	1999	1990	1995	1997	1998	1999
Canned, total [1]	**1,178**	**1,927**	**1,565**	**1,533**	**1,874**	**1,562**	**1,887**	**1,593**	**1,775**	**1,867**
Tuna	581	667	627	681	669	902	939	919	983	946
Salmon	196	244	162	159	234	366	419	253	274	393
Clam products	110	129	125	113	124	76	110	115	105	111
Sardines, Maine	13	14	16	12	12	17	24	29	19	20
Shrimp	1	1	1	2	2	3	7	5	2	2
Crabs	1	(Z)	(Z)	(Z)	1	4	(Z)	(Z)	(Z)	(Z)
Oysters [2]	1	(Z)	(Z)	(Z)	(Z)	1	(Z)	(Z)	(Z)	(Z)
Fish fillets and steaks [3]	**441**	**385**	**410**	**422**	**369**	**843**	**841**	**961**	**961**	**835**
Cod	65	65	79	67	61	132	152	179	161	109
Flounder	54	35	27	24	24	154	86	79	70	68
Haddock	7	3	7	6	5	24	11	24	22	20
Ocean perch, Atlantic	1	(Z)	1	1	1	1	1	2	2	2
Rockfish	33	25	17	16	12	53	38	33	33	25
Pollock, Atlantic	12	4	1	4	2	21	10	2	7	4
Pollock, Alaska	164	135	112	161	144	174	184	129	190	169
Other	105	118	166	143	120	284	359	513	507	438

Z Less than 500,000 pounds or $500,000. [1] Includes other products, not shown separately. [2] Includes oyster specialties. [3] Fresh and frozen.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States,* annual.

No. 864. Mining Industries—Employees, Payroll, and Shipments: 1997

[The mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity]

Selected industries	NAICS code [1]	All employees			Production workers, total [3]	Value added by manufactures (mil. dol.)	Value of shipments (mil. dol.)
		Establishments	Number [2]	Payroll: Total (mil. dol.)	Payroll: Per employee (dol.)		
Mining, total	**21**	**25,000**	**509,006**	**20,798**	**40,861**	**389,232**	**133,636**	**173,985**
Oil and gas extraction	211	8,312	110,881	5,511	49,698	67,197	82,350	102,834
Oil and gas extraction	2111	8,312	110,881	5,511	49,698	67,197	82,350	102,834
Mining (except oil & gas)	212	7,348	229,319	9,422	41,085	188,988	35,207	51,253
Coal mining	2121	1,511	87,965	3,984	45,289	75,398	15,567	23,427
Metal ore mining	2122	493	45,467	1,993	43,837	39,103	7,387	11,204
Iron ore mining	21221	32	7,920	394	49,738	6,787	992	1,938
Gold ore & silver ore mining	21222	316	18,292	810	44,308	16,199	2,865	4,073
Copper, nickel, lead, and zinc mining	21223	80	15,872	640	40,291	13,447	3,050	4,549
Other metal ore mining	21229	65	3,383	149	44,110	2,670	480	644
Nonmetallic mineral mining and quarrying	2123	5,344	95,887	3,445	35,924	74,487	12,253	16,621
Stone mining & quarrying	21231	2,367	44,052	1,551	35,206	35,260	5,549	7,385
Sand, gravel, clay, ceramic and refractory minerals mining and quarrying	21232	2,674	37,052	1,261	34,044	27,646	4,080	5,541
Other nonmetallic mineral mining and quarrying	21239	303	14,783	632	42,777	11,581	2,624	3,695
Support activities for mining	213	9,340	168,806	5,866	34,751	133,047	16,079	19,899

[1] North American Industrial Classification System, 1997; see text, Section 15, Business Enterprise. [2] For pay period including March 12. [3] Covers production, development, and exploration workers. For pay period including March 12.

Source: U.S. Census Bureau, *1997 Economic Census, Mining,* Series EC97N21S-GS, April 2001.

No. 865. Mining Summary by State: 1997

[The mining sector comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity]

State	All employees: Establishments, total	All employees: Number [1]	All employees: Payroll (mil. dol.)	Production workers [2]	Value added by manufactures (mil. dol.)	State	All employees: Establishments, total	All employees: Number [1]	All employees: Payroll (mil. dol.)	Production workers [2]	Value added by manufactures (mil. dol.)
U.S.	**25,000**	**509,006**	**20,798**	**389,232**	**133,636**	MT	294	5,328	216	3,864	1,047
						NE	150	1,078	31	858	104
AL	291	9,066	371	7,421	1,775	NV	250	14,035	626	12,451	1,959
AK	141	10,137	672	7,585	9,565	NH	32	396	18	293	44
AZ	206	12,889	510	10,699	2,171	NJ	95	1,864	84	1,350	243
AR	307	3,250	98	2,602	704	NM	606	14,600	574	11,520	5,336
CA	910	22,110	945	16,908	7,497	NY	359	3,879	142	2,819	474
CO	885	12,263	522	7,881	2,872	NC	171	3,231	118	2,644	533
CT	62	626	27	467	105	ND	227	4,098	176	3,361	1,017
DE [3]	11	107	4	90	15	OH	828	11,997	454	8,961	1,746
FL	225	6,688	249	5,424	1,009	OK	2,271	25,976	967	16,957	5,509
GA	205	6,354	233	4,984	1,024	OR	134	1,739	61	1,216	161
HA	7	120	6	100	22	PA	914	17,522	677	14,262	2,411
ID	118	3,021	118	2,418	291	RI	16	120	5	82	13
IL	650	10,798	437	8,557	1,381	SC	74	1,388	44	1,099	166
IN	347	6,007	241	5,013	795	SD	67	1,837	67	1,635	166
IA	177	1,700	55	1,428	217	TN	221	4,473	137	3,614	479
KS	1,026	7,998	245	5,993	2,178	TX	6,412	105,492	4,334	73,686	32,485
KY	691	22,400	832	19,413	3,297	UT	316	8,134	335	6,593	1,875
LA	1,608	52,816	2,302	38,255	21,889	VT	52	658	22	538	72
ME	21	76	1	50	4	VA	417	11,711	429	9,860	1,449
MD	93	1,771	64	1,429	257	WA	154	2,890	114	2,170	349
MA	72	1,063	42	704	110	WV	766	23,927	1,042	20,450	4,161
MI	445	6,687	271	5,030	1,182	WI	147	2,304	92	1,598	312
MN	145	7,154	348	6,071	954	WY	669	15,436	723	12,367	5,395
MS	368	4,096	115	3,100	531	Offshore areas [3]	41	11,135	455	9,717	5,782
MO	306	4,561	146	3,645	503						

[1] For pay period including March 12. [2] Covers production, development, and exploration workers. For pay period including March 12. [2] District of Columbia is included with Delaware. [3] Not associated with a state.

Source: U.S. Census Bureau, *1997 Economic Census, Mining,* Series EC97N21S-GS, issued April 2001.

No. 866. Mining and Primary Metal Production Indexes: 1990 to 2000

[Index 1992=100]

Industry group	1990	1992	1993	1994	1995	1996	1997	1998	1999	2000
Mining	**104.8**	**100.0**	**100.0**	**102.3**	**102.0**	**103.5**	**105.3**	**103.0**	**98.0**	**99.9**
Coal	103.7	100.0	94.0	103.0	102.6	105.0	108.2	109.7	107.8	108.9
Oil and gas extraction	106.4	100.0	101.1	101.6	100.4	101.6	102.6	98.7	92.5	95.0
Crude oil and natural gas	101.6	100.0	98.0	98.1	96.5	95.9	95.7	93.9	90.5	89.7
Oil and gas drilling	151.1	100.0	122.4	126.2	125.8	137.5	147.8	131.6	103.3	131.8
Metal mining	93.1	100.0	98.7	100.5	101.8	104.3	108.8	108.1	99.9	96.8
Iron ore	101.4	100.0	100.0	104.3	112.3	111.3	113.6	112.7	103.6	114.0
Nonferrous ores	91.9	100.0	98.5	100.0	100.4	103.4	108.1	107.6	99.4	94.1
Copper ore	89.4	100.0	102.0	104.7	104.7	108.7	109.9	105.4	90.9	83.5
Primary metals, manufacturing	**104.0**	**100.0**	**105.1**	**113.7**	**116.2**	**119.6**	**125.4**	**127.8**	**130.4**	**133.5**
Nonferrous metals	100.9	100.0	104.0	113.1	115.7	120.5	127.4	131.8	135.0	136.4
Copper	81.6	100.0	116.7	111.7	121.9	103.5	106.3	131.5	115.0	90.9
Aluminum	100.4	100.0	91.7	81.8	83.7	88.5	89.4	92.1	93.7	90.8
Iron and steel	106.4	100.0	105.9	114.3	116.5	118.9	123.8	124.6	126.7	131.0

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; and *Industrial Production and Capacity Utilization,* Statistical Release G.17, monthly.

No. 867. Mineral Industries—Employment, Hours, and Earnings: 1990 to 1999

[Based on the Current Employment Statistics Program, see Appendix III]

Item	Unit	1990	1995	1999	Item	Unit	1990	1995	1999
All mining:					Avg. weekly hours	Number	43.9	44.2	42.5
All employees	1,000	709	581	535	Avg. weekly earnings	Dollars	568	642	717
Production workers	1,000	509	424	404	Metal mining:				
Avg. weekly hours	Number	44.1	44.7	43.8	All employees	1,000	58	51	45
Avg. weekly earnings	Dollars	603	684	746	Production workers	1,000	46	41	35
Coal mining:					Avg. weekly hours	Number	42.8	43.8	44.5
All employees	1,000	147	104	85	Avg. weekly earnings	Dollars	601	735	812
Production workers	1,000	119	84	71	Nonmetallic minerals, except fuels:				
Avg. weekly hours	Number	44.0	44.9	44.8	All employees	1,000	110	105	112
Avg. weekly earnings	Dollars	735	828	866	Production workers	1,000	83	80	82
Oil and gas extraction:					Avg. weekly hours	Number	45.3	46.6	46.3
All employees	1,000	395	320	293	Avg. weekly earnings	Dollars	525	624	700
Production workers	1,000	261	218	212					

Source: U.S. Bureau of Labor Statistics, *Bulletin 2370* and *Employment and Earnings,* March and June issues.

No. 868. Selected Mineral Products—Average Prices: 1980 to 2000

[Excludes Alaska and Hawaii, except as noted]

Year	Nonfuels								Fuels		
	Copper, electrolytic (cents per lb.)	Platinum [1] (dol./troy oz.)	Gold (dol./fine oz.)	Silver (dol./fine oz.)	Lead (cents per lb.)	Tin (New York) (cents per lb.)	Zinc (cents per lb.)	Sulfur, crude [2] (dol./metric ton)	Bituminous coal [3 4] (dol./short ton)	Crude petroleum [3] (dol./bbl.)	Natural gas [3] (dol./1,000 cu. ft.)
1980	101	677	613	20.63	43	846	37	89.06	29.17	21.59	1.59
1981	84	446	460	10.52	37	733	45	111.48	31.51	31.77	1.98
1982	73	327	376	7.95	26	654	39	108.27	32.15	28.52	2.46
1983	77	424	424	11.44	22	655	41	87.24	31.11	26.19	2.59
1984	67	357	361	8.14	26	624	49	94.31	30.63	25.88	2.66
1985	67	291	318	6.14	19	596	40	106.46	30.78	24.09	2.51
1986	66	461	368	5.47	22	383	38	105.22	28.84	12.51	1.94
1987	83	553	478	7.01	36	419	42	89.78	28.19	15.40	1.67
1988	121	523	438	6.53	37	441	60	85.95	27.66	12.58	1.69
1989	131	507	383	5.50	39	520	82	86.62	27.40	15.86	1.69
1990	123	467	385	4.82	46	386	75	80.14	27.43	20.03	1.71
1991	109	371	363	4.04	34	363	53	71.45	27.49	16.54	1.64
1992	107	360	345	3.94	35	402	58	48.14	26.78	15.99	1.74
1993	92	375	361	4.30	32	350	46	31.86	26.15	14.25	2.04
1994	111	411	385	5.29	37	369	49	28.60	25.68	13.19	1.85
1995	138	425	386	5.15	42	416	56	44.46	25.56	14.62	1.55
1996	109	398	389	5.19	49	412	51	34.11	25.17	18.46	2.17
1997	107	397	332	4.89	47	381	65	36.06	24.64	17.23	2.32
1998	79	375	295	5.54	45	373	51	29.14	24.87	10.87	1.94
1999	76	379	280	5.25	44	366	54	37.81	23.92	15.56	2.17
2000	89	391	280	5.25	44	370	56	32.00	(NA)	26.73	3.60

NA Not available. [1] Average annual dealer prices. [2] F.o.b. works. [3] Average value at the point of production or domestic first purchase price. [4] Includes lignite.

Source: Nonfuels, through 1994, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook* and *Mineral Commodities Summaries,* annual; fuels, U.S. Energy Information Administration, *Annual Energy Review* and most recent year from the *Monthly Energy Review.*

No. 869. Mineral Production: 1990 to 2000

[Data represent production as measured by mine shipments, mine sales or marketable production]

Mineral	Unit	1990	1995	1999	2000, est.
FUEL MINERALS					
Coal, total	Mil. sh. tons	1,029.1	1,033.0	1,099.1	1,075.5
Bituminous	Mil. sh. tons	693.2	613.8	621.3	(NA)
Subbituminous	Mil. sh. tons	244.3	328.0	388.3	(NA)
Lignite	Mil. sh. tons	88.1	86.5	84.4	(NA)
Anthracite	Mil. sh. tons	3.5	4.7	5.2	(NA)
Natural gas (marketed production)	Tril. cu. ft.	18.59	19.51	19.67	20.07
Petroleum (crude)	Mil. bbl. [1]	2,686	2,394	2,164	2,125
Uranium (recoverable content)	Mil. lb.	8.9	6.0	4.7	4.0
NONFUEL MINERALS					
Asbestos (sales)	1,000 metric tons	(D)	9	7	5
Barite, primary, sold/used by producers	1,000 metric tons	430	543	434	600
Boron minerals, sold or used by producers	1,000 metric tons	1,090	1,190	1,220	(NA)
Bromine, sold or used by producers	1,000 metric tons	177	218	239	229
Cement:					
Portland	Mil. metric tons	67	73	82	(NA)
Masonry	Mil. metric tons	3	4	4	(NA)
Clays	1,000 metric tons	42,900	43,100	42,200	40,700
Diatomite	1,000 metric tons	631	722	747	808
Feldspar [2]	1,000 metric tons	630	880	875	850
Fluorspar, finished shipments	1,000 metric tons	64	51	-	-
Garnet (industrial)	1,000 metric tons	47	46	61	50
Gypsum, crude	Mil. metric tons	15	17	22	25
Helium [3]	Mil. cu. meters	85	101	114	117
Lime, sold or used by producers	Mil. metric tons	16	19	20	20
Mica, scrap & flake, sold/used by producers	1,000 metric tons	109	108	104	110
Peat, sales by producers	1,000 metric tons	721	660	731	727
Perlite, processed, sold or used	1,000 metric tons	576	700	711	675
Phosphate rock (marketable)	Mil. metric tons	46	44	41	40
Potash (K_2O equivalent) sales	1,000 metric tons	1,710	1,480	1,200	1,300
Pumice & pumicite, producer sales	1,000 metric tons	443	529	643	749
Salt, common, sold/used by producers	Mil. metric tons	37	41	45	45
Sand & gravel, sold/used by producer	Mil. metric tons	855	935	1,139	(NA)
Construction	Mil. metric tons	829	907	1,110	1,170
Industrial	Mil. metric tons	26	28	29	30
Silica [4]	Metric tons	3,710	979	(NA)	(NA)
Sodium carbonate (natural) (soda ash)	1,000 metric tons	9,100	10,100	10,200	10,200
Sodium sulfate (natural)	1,000 metric tons	349	327	599	525
Stone [5]	Mil. metric tons	1,110	2,420	2,600	(NA)
Crushed and broken	Mil. metric tons	1,110	1,260	1,540	1,590
Dimension [6]	1,000 metric tons	1,120	1,160	1,250	1,250
Sulfur: Total shipments	1,000 metric tons	11,500	12,100	11,100	10,600
Sulfur: Frasch mines (shipments)	1,000 metric tons	3,680	(D)	(D)	(NA)
Talc, and pyrophyllite, crude	1,000 metric tons	1,270	1,060	925	961
Vermiculite concentrate	1,000 metric tons	209	171	175	175
METALS					
Antimony ore and concentrate	Metric tons	(D)	262	449	340
Aluminum	1,000 metric tons	4,048	3,375	3,779	3,700
Bauxite (dried)	1,000 metric tons	(D)	(D)	(NA)	(NA)
Copper (recoverable content)	1,000 metric tons	1,590	1,850	1,600	1,450
Gold (recoverable content)	Metric tons	294	317	341	330
Iron ore (gross weight) [7]	Mil. metric tons	57	61	58	61
Lead (recoverable content)	1,000 metric tons	484	394	520	480
Magnesium metal	1,000 metric tons	139	142	(D)	(D)
Manganiferous ore (gross weight) [8]	1,000 metric ton	(D)	(D)	-	-
Mercury [9]	Metric tons	562	(D)	(NA)	(NA)
Molybdenum (concentrate)	1,000 metric tons	62	61	43	32
Nickel	1,000 metric tons	-	2	-	-
Palladium metal	Kilograms	5,930	5,260	9,800	10,000
Platinum metal	Kilograms	1,810	1,590	2,920	3,050
Silicon (silicon content)	1,000 metric tons	418	396	423	374
Silver (recoverable content)	Metric tons	2,120	1,560	1,950	2,060
Titanium concentrate: Ilmenite (gross weight)	1,000 metric tons	(D)	(D)	(D)	(NA)
Tungsten ore and concentrate [10]	Metric tons	(D)	(D)	-	-
Zinc (recoverable content)	1,000 metric tons	515	614	843	860

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. [1] 42 gal. bbl. [2] Beginning 1995, includes aplite. [3] Refined. [4] Includes grindstones, oilstones, whetstones, and deburring media. Excludes grinding pebbles, and tubemill liners. [5] Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table. Includes calcareous marl and slate. [6] Includes Puerto Rico. [7] Represents shipments; includes byproduct ores. [8] Five to 35 percent manganiferous ore. [9] Covers mercury recovered as a by products of gold ores only. [10] Content of ore and concentrate.

Source: Nonfuels, through 1995, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook* and *Mineral Commodities Summaries,* annual; fuels, U.S. Energy Information Administration, *Annual Energy Review* and *Uranium Industry Annual.*

No. 870. Nonfuel Mineral Commodities—Summary: 1999

[Preliminary estimates. Average price in dollars per metric tons except as noted]

Mineral	Unit	Mineral disposition				Average price per unit (dollars)	Employment (number)
		Production	Exports	Net import reliance [1] (percent)	Consumption, apparent		
Aluminum	1,000 metric tons.	3,779	1,640	31	7,740	[2]65.7	18,200
Antimony (contained)	Metric tons	[3]449	3,660	82	36,500	[2]63	75
Asbestos	1,000 metric tons.	7	22	100	(NA)	210	25
Barite	1,000 metric tons.	434	22	66	1,280	[4]25.60	300
Bauxite and alumina	1,000 metric tons.	(NA)	(NA)	100	4,880	[4]22	(NA)
Beryllium (contained)	Metric tons	200	40	48	385	[2 6]327	48
Bismuth (contained)	Metric tons	-	257	95	2,050	[2]3.85	-
Boron (B_2O_3 content)	1,000 metric tons.	618	107	(5)	534	[4 7]376	900
Bromine (contained)	1,000 metric tons.	239	10	(5)	238	[8 9]87.0	1,700
Cadmium (contained)	Metric tons	[3]1,190	20	9	1,300	[2 10]0.14	(NA)
Cement	1,000 metric tons.	85,952	694	21	108,862	[4]78.27	18,000
Chromium	1,000 metric tons.	[11]118	60	79	558	[4 12]145	-
Clays	1,000 metric tons.	42,200	4,800	(5)	37,500	-	9,000
Cobalt (contained)	Metric tons	[11]2,720	1,550	75	10,700	[2]17.02	-
Copper (Mine, contained)	1,000 metric tons.	1,600	(NA)	27	3,130	-	11.6
Diamond (industrial)	Million carats	-	98	88	328	[14]	-
Diatomite	1,000 metric tons.	747	123	(5)	625	[4]238	1,000
Feldspar	1,000 metric tons.	875	10	(5)	872	[4]49	400
Fluorspar	1,000 metric tons.	-	55	100	615	-	-
Garnet (industrial)	Metric tons	60,700	10,000	(5)	39,100	[4]50	220
Germanium (contained)	Kilograms	20,000	(NA)	12,400	28,000	(NA)	85
Gold (contained)	Metric tons	341	523	(5)	(NA)	[17]280	10,300
Gypsum (crude)	1,000 metric tons.	(NA)	112	25	36,800	[4]6.99	6,000
Iodine	Metric tons	1,620	1,130	62	4,540	[8 21]16.15	40
Iron ore (usable)	Million metric tons.	58	6	18	70	[4 22]25.52	6,820
Iron and steel slag (metal)	1,000 metric tons.	19,000	12	5	19,900	[4]8.50	2,750
Lead (contained)	1,000 metric tons.	(NA)	94	20	1,760	[2]43.7	(NA)
Lime	1,000 metric tons.	19,600	59	(Z)	19,700	79.70	5,600
Magnesium compounds	1,000 metric tons.	395	52	41	52	(NA)	550
Magnesium metal	1,000 metric tons.	(NA)	29	38	179	(NA)	800
Mercury	Metric tons	[11](NA)	181	(NA)	(NA)	[26]140	(NA)
Mica, scrap and flake	1,000 metric tons.	104	11	17	125	[4]95	(NA)
Molybdenum (contained)	Metric tons	43,000	27,900	(5)	33,100	[8]5.90	475
Nickel (contained)	Metric tons	(NA)	7,430	63	140,000	[2 27]2,732	1
Nitrogen (fixed)-ammonia	1,000 metric tons.	12,900	562	21	16,300	[4 28]109	2,200
Peat	1,000 metric tons.	731	40	54	40	[4]26.48	800
Perlite	1,000 metric tons.	711	47	12	808	[4]33.40	150
Phosphate rock	1,000 metric tons.	40,600	272	7	(NA)	[4]30.56	6,500
Platinum-group metals	Kilograms	(NA)	(NA)	(NA)	(NA)	[17 29](NA)	(NA)
Potash (K_2O equivalent)	1,000 metric tons.	1,200	460	80	5,100	[4 30]145	660
Pumice and pumicite	1,000 metric tons.	643	23	34	23	[4]27.69	85
Salt	1,000 metric tons.	44,900	892	15	52,400	[4 31]112.49	4,100
Silicon (contained)	1,000 metric tons.	423	61	34	61	(NA)	(NA)
Silver (contained)	Metric tons	1,950	481	39	2,660	[17]5.25	1,600
Sodium carbonate (soda ash)	1,000 metric tons.	10,200	3,620	(5)	6,740	[33]105	2,600
Sodium sulfate	1,000 metric tons.	599	137	(5)	549	[34]114	225
Stone (crushed)	Million metric tons.	1,540	4	-	1,548	[4]5.35	79,000
Sulfur (all forms)	1,000 metric tons.	11,300	736	16	13,400	[4 35]37.81	3,000
Talc	1,000 metric tons.	925	147	6	986	[4]116	700
Thallium (contained)	Kilograms	-	(NA)	100	380	[8]1,295	-
Tin (contained)	Metric tons	[11]16,300	6,770	85	59,700	[2]2.55	-
Titanium dioxide	1,000 metric tons.	1,350	383	(5)	1,160	[2 36]1.01	4,600
Tungsten (contained)	Metric tons	(D)	200	81	12,000	[37]47	-
Vermiculite	1,000 metric tons.	(D)	10	(D)	(D)	(D)	230
Zinc (contained)	1,000 metric tons.	775	600	30	1630	[2]0.51	(NA)
Zirconium (Z_rO_2) content	Metric tons	(D)	46,670	(D)	(NA)	[4 39]300	(D)

- Represents or rounds to zero. D Withheld to avoid disclosure. NA Not available. [1] Calculated as a percent of apparent consumption. [2] Dollars per pound. [3] Refinery production. [4] Dollars per metric ton. [5] Net exporter. [6] Metal, vacuum-cast ingot. [7] Granulated pentahydrate borax in bulk, f.o.b mine. [8] Dollars per kilogram. [9] Bulk, purified bromine. [10] 1- to 5-short ton lots. [11] Secondary production. [12] Turkish, chromite price. [13] Columbite price. [14] Value of imports, dollars per carat. [15] Reported consumption. [16] Zone refined. [17] Dollars per troy ounce. [18] Price of flake imports. [19] Includes employment at calcining plants. [20] 99.97% indium. [21] C.i.f. value, crude, per kilogram. [22] Price of eastern Canadian ore. [23] Delivered, No. 1 Heavy Melting composite price. [24] Year-end price. [25] 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. [26] Dollars per 76-pound flask. [27] London Metal Exchange cash price. [28] F.o.b. gulf coast. [29] Dealer price of platinum. [30] Price of K20, muriate. [31] Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. [32] Ferrosilicon, 50% Si. [33] Quoted year-end price, dense, bulk, f.o.b. Green River, WY, dollars per short ton. [34] Quoted price, bulk, f.o.b. works, East, dollars per short ton. [35] Elemental sulfur, f.o.b. mine and/or plant. [36] Rutile, list, year-end. [37] Dollars per unit W03 (7.93 kilograms of contained tungsten per unit). [38] All forms. [39] Price for imported zircon, f.o.b. U.S. east coast.

Source: U.S. Geological Survey, *Mineral Commodity Summaries,* annual.

No. 871. Value of Domestic Nonfuel Mineral Production by State: 1990 to 2000

[In millions of dollars (33,445 represents 33,445,000,000), except as indicated. For similar data on fuels, see Table 878]

State	1990	1995	1996	1997	1998	1999	2000, prel. Total (mil. dol.)	2000, prel. Rank	2000, prel. Percent of U.S.
United States[1]	**33,445**	**38,506**	**38,800**	**40,471**	**39,600**	**39,100**	**40,100**	**(X)**	**100.00**
Alabama	559	706	778	881	1,010	1,080	1,070	13	2.65
Alaska	577	538	613	958	999	1,090	1,140	12	2.83
Arizona	3,085	4,190	3,580	3,540	2,770	2,510	2,550	3	6.35
Arkansas	381	492	435	487	484	518	506	29	1.26
California	2,771	2,760	2,830	3,040	2,980	3,200	3,350	1	8.34
Colorado	377	570	513	524	650	555	566	27	1.41
Connecticut	122	93	82	80	99	[3]103	[3]100	44	0.25
Delaware[2]	10	9	7	12	12	[3]10	[3]12	50	0.03
Florida	1,574	1,540	1,760	1,830	1,810	1,930	1,920	5	4.78
Georgia	1,504	1,690	1,740	1,680	1,720	1,840	1,660	7	4.13
Hawaii	106	114	110	94	85	89	91	45	0.23
Idaho	375	510	492	469	453	420	398	34	0.99
Illinois	667	828	846	829	875	913	907	17	2.26
Indiana	428	589	628	670	691	717	729	21	1.82
Iowa	310	456	470	486	518	537	510	28	1.27
Kansas	349	498	530	539	551	566	624	24	1.55
Kentucky	359	432	442	498	498	483	497	30	1.24
Louisiana	368	434	393	402	347	374	404	33	1.01
Maine	55	68	69	70	92	101	[3]102	43	0.25
Maryland	368	324	332	371	352	336	357	35	0.89
Massachusetts	128	190	200	193	204	204	210	39	0.52
Michigan	1,440	1,520	1,540	1,660	1,670	1,660	1,670	6	4.17
Minnesota	1,482	1,530	1,540	1,680	1,740	1,580	1,570	8	3.9
Mississippi	111	131	144	175	149	190	157	42	0.39
Missouri	1,105	1,140	1,250	1,310	1,320	1,380	1,320	10	3.28
Montana	573	574	491	498	502	491	582	25	1.45
Nebraska	90	146	148	165	99	163	170	41	0.42
Nevada	2,621	3,060	3,230	3,270	3,170	2,780	[3]2,800	2	6.96
New Hampshire	36	50	52	49	68	[3]64	[3]59	46	0.15
New Jersey	229	243	246	267	290	300	286	37	0.71
New Mexico	1,103	1,130	992	1,040	888	671	812	18	2.02
New York	773	886	891	955	972	935	970	15	2.42
North Carolina	586	735	690	741	750	761	779	19	1.94
North Dakota	25	31	31	34	38	38	42	48	0.1
Ohio	733	891	969	1,040	1,030	1,040	1,060	14	2.63
Oklahoma	259	357	369	386	460	475	453	31	1.13
Oregon	205	239	265	285	301	303	[3]439	32	1.09
Pennsylvania	1,031	1,080	1,170	1,200	1,230	[3]1,270	[3]1,250	11	3.12
Rhode Island	18	31	23	27	25	[3]25	24	49	0.06
South Carolina	450	447	493	567	562	574	560	26	1.4
South Dakota	319	332	357	328	258	226	260	38	0.65
Tennessee	663	665	662	707	705	710	770	20	1.92
Texas	1,459	1,680	1,730	1,790	1,820	1,780	2,050	4	5.09
Utah	1,335	1,850	1,730	1,680	1,320	1,260	[3]1,420	9	3.53
Vermont	87	60	66	84	74	[3]83	43	47	0.11
Virginia	507	515	549	642	636	667	692	22	1.72
Washington	483	582	535	555	609	631	691	23	1.72
West Virginia	133	181	185	205	170	180	[3]182	40	0.45
Wisconsin	215	416	396	358	323	[3]334	349	36	0.87
Wyoming	911	973	1,080	1,120	1,070	956	922	16	2.3

X Not applicable. [1] Includes undistributed not shown separately. [2] Includes District of Columbia. [3] Partial data only; excludes values withheld to avoid disclosing individual company data.

Source: U.S. Bureau of Mines, *Minerals Yearbook,* annual, and *Mineral Commodities Summaries,* annual; thereafter U.S. Geological Survey.

No. 872. Principal Fuels, Nonmetals, and Metals—World Production and the U.S. Share: 1980 to 2000

Mineral	Unit	World production				Percent U.S. of world			
		1980	1990	1995	2000	1980	1990	1995	2000
Fuels: [1]									
Coal	Mil. sh. ton	4,200	5,386	5,161	[2]4,737	19.8	19.1	20.0	[2]23.2
Petroleum (crude)	Bil. bbl	21.8	22.1	22.8	[2]24.0	14.4	12.2	10.5	[2]8.9
Natural gas (dry, marketable)	Tril. cu. ft	53.5	73.6	78.0	[2]84.7	36.3	24.2	23.9	[2]22.0
Natural gas plant liquids	Bil. bbl	1.3	1.7	2.0	[2]2.2	45.7	33.7	32.1	[2]30.9
Nonmetals:									
Asbestos	1,000 metric tons.	4,699	4,003	2,420	1,900	2	(D)	(Z)	(Z)
Barite	1,000 metric tons.	7,495	5,633	4,300	5,700	27	8	13	11
Feldspar	1,000 metric tons.	3,202	5,456	6,780	9,100	20	12	13	9
Fluorspar	1,000 metric tons.	5,006	5,131	4,050	4,480	2	1	1	-
Gypsum	Mil. metric tons	78	100	97	110	14	15	17	23
Mica (incl. scrap)	1,000 metric tons.	228	215	253	300	46	51	43	37
Nitrogen, (fixed) - ammonia	Mil. metric tons	74	97	96	104	20	13	14	13
Phosphate rock, gross wt.	Mil. metric tons	144	162	130	139	38	29	33	29
Potash (k_2O equivalent)	Mil. metric tons	28	28	25	27	8	6	6	5
Sulfur, elemental	Mil. metric tons	55	58	53	57	22	20	22	19
Metals, mine basis:									
Bauxite	Mil. metric tons	89	109	107	127	2	(D)	(D)	(NA)
Columbian concentrates (Nb content)	1,000 metric tons.	15	15	18	24	-	-	-	-
Copper	1,000 metric tons.	7,405	9,017	10,100	12,900	16	18	18	11
Gold	Metric tons	1,219	2,133	2,220	2,445	2	14	14	14
Iron ore	Mil. metric tons	891	982	1,027	1,010	8	6	6	6
Lead [3]	1,000 metric tons.	3,470	3,353	2,780	2,980	17	15	14	16
Mercury	Metric tons	6,806	4,523	3,160	1,800	16	12	(D)	(D)
Molybdenum	1,000 metric tons.	111	128	141	112	62	48	43	29
Nickel [3]	1,000 metric tons.	779	965	1,030	1,230	2	(Z)	(Z)	(Z)
Silver	1,000 metric tons.	11	16	15	18	9	13	10	12
Tantalum concentrates	Metric tons	544	400	362	513	-	-	-	-
Titanium concentrates:									
Ilmenite	1,000 metric tons.	3,726	4,072	3,970	4,000	14	(D)	(D)	(NA)
Rutile	1,000 metric tons.	436	481	416	410	(D)	(D)	(D)	(NA)
Tungsten [3]	1,000 metric tons.	52	43	39	32	5	14	-	-
Vanadium [3]	1,000 metric tons.	37	31	35	42	12	(D)	(D)	(D)
Zinc [3]	1,000 metric tons.	5,954	7,184	7,240	8,000	6	8	9	11
Metals, smelter basis:									
Aluminum	1,000 metric tons.	15,383	19,292	19,900	23,900	30	21	17	16
Cadmium	1,000 metric tons.	18	20	19	19	9	8	7	6
Copper	1,000 metric tons.	7,649	9,472	10,200	12,900	14	15	16	11
Iron, pig	Mil. metric tons	514	532	533	571	12	9	10	9
Lead [4]	1,000 metric tons.	5,430	5,763	5,590	2,980	23	23	25	16
Magnesium [5]	1,000 metric tons.	316	354	389	284	49	39	37	(NA)
Raw Steel	Mil. metric tons	717	771	755	833	14	12	13	13
Tin [6]	1,000 metric tons.	251	223	201	200	1	-	-	-
Zinc	1,000 metric tons.	6,049	7,060	7,550	8,000	6	5	5	11

- Represents or rounds to zero. D Withheld to avoid disclosing company data. NA Not available. Z Less than half the unit of measure. [1] Source: Energy Information Administration, *International Energy Annual.* [2] 1999 production and percent of production. [3] Content of ore and concentrate. [4] Refinery production. [5] Primary production; no smelter processing necessary. [6] Production from primary sources only.

Source: Nonfuels, through 1990, U.S. Bureau of Mines, thereafter, U.S. Geological Survey, *Minerals Yearbook,* annual, and *Mineral Commodities Summaries,* annual; fuels, U.S. Energy Information Administration, *International Energy Annual.*

No. 873. Federal Strategic and Critical Materials Inventory: 1990 to 1999

[**As of Dec. 31.** Covers strategic and critical materials essential to military and industrial requirements in time of national emergency]

Mineral	Unit	Quantity [1]				Value (mil. dol.) [2]			
		1990	1995	1998	1999	1990	1995	1998	1999
Bauxite [3]	1,000 lg. ton	18,033	16,032	12,288	9,492	888	203	95	71
Chromium [4]	1,000 sh. ton	1,074	1,192	1,070	1,068	917	839	715	628
Cobalt	Mil. lb.	53	44	32	28	443	1,121	504	295
Diamonds: Stones	Carat 1,000	7,777	5,135	3,097	2,497	267	52	31	25
Industrial, bort	Carat 1,000	17,353	1,967	62	-	16	9	-	-
Lead [5]	1,000 sh. ton	(NA)	(NA)	337	277	(NA)	(NA)	198	140
Manganese [5]	1,000 sh. ton	4,017	2,817	2,251	2,144	962	464	284	270
Palladium	1,000 troy oz	(NA)	(NA)	1,247	1,099	(NA)	(NA)	183	343
Platinum	1,000 troy oz	453	453	440	342	186	154	162	120
Silver	1,000 troy oz	92,151	46,667	35,121	26,203	374	158	105	86
Tantalum Group	1,000 lb	(NA)	(NA)	82,313	2,689	(NA)	(NA)	127	126
Tin	1,000 metric ton	169	130	84	72	962	908	461	391
Titanium	1,000 sh. ton	37	37	35	35	402	221	122	124
Tungsten [6]	Mil. lb.	82	82	82	79	253	253	316	174
Zinc	1,000 sh. ton	379	301	213	198	483	281	220	203

- Represents or rounds to zero. NA Not available. [1] Consists of stockpile and nonstockpile grades and reflects uncommitted balances. [2] Market values are estimated trade values of similar materials and not necessarily amounts that would be realized at time of sale. [3] Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. [4] Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal. [5] Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med. carbon, ferro-silicon, and metal. [6] Consists of carbide powder, ferro, metal powder, and ores and concentrates.

Source: U.S. Defense Logistics Agency, *Statistical Supplement, Stockpile Report to the Congress* (AP-3).

No. 874. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption: 1980 to 2000

[In percent. Based on net imports which equal the difference between imports and exports plus or minus government stockpile and industry stock changes]

Mineral	1980	1990	1994	1995	1996	1997	1998	1999	2000
Bauxite [1]	94	98	99	99	100	100	100	100	100
Columbium	100	100	100	100	100	100	100	100	100
Manganese	98	100	100	100	100	100	100	100	100
Mica (sheet)	100	100	100	100	100	100	100	100	100
Strontium	100	100	100	100	100	100	100	100	100
Tin	79	71	83	84	83	86	85	85	86
Tantalum	90	71	75	80	80	75	80	80	80
Chromium	91	84	81	80	79	75	80	80	78
Cobalt	93	86	80	79	76	76	73	73	74
Barite	44	71	64	65	70	76	80	67	71
Potash	65	68	76	75	77	80	80	80	70
Tungsten	53	81	95	90	89	84	77	81	68
Titanium	32	[3]	(D)	64	50	63	49	(NA)	(NA)
Zinc [2]	60	41	35	35	33	35	35	30	60
Nickel	76	64	64	60	59	56	64	63	58
Silver	7	(NA)	(NA)	(NA)	(NA)	[3]	14	14	52
Copper	16	15	12	27	14	13	14	27	37
Aluminum	[3]	36	31	23	22	23	27	30	33
Gypsum	35	46	3	30	29	28	28	29	22
Sulfur	14	21	18	21	13	13	18	17	22
Iron ore	25	3	13	14	14	14	12	17	19
Iron and steel	13	13	22	21	20	20	27	22	17
Cadmium	55	[3]	30	23	32	16	20	19	6
Mercury	27	(D)	(D)	(NA)	(NA)	(D)	(NA)	(NA)	(NA)
Platinum group	87	88	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Selenium	59	46	31	31	38	(D)	(D)	(D)	(NA)
Vanadium	35	(D)	(D)	84	(D)	(D)	78	80	(NA)

D Withheld to avoid disclosure. NA Not available. [1] Includes alumina. [2] Beginning 1990, effect of sharp rise in exports of concentrates. If calculated on a refined zinc-only basis, reliance would be about the same as pre-1990 level; 1990, 64 percent; 1991, 61 percent; 1992, 61 percent; 1993, 67 percent; 1994, 70 percent; 1995, 71 percent; and 1996 and 1997, 70 percent; 1998, 69 percent; and 1999, 71 percent. [3] Net exports.

Source: Through 1994, U.S. Bureau of Mines; thereafter, U.S. Geological Survey, *Mineral Commodity Summaries;* import and export data from U.S. Census Bureau.

No. 875. Federal Offshore Leasing, Exploration, Production, and Revenue: 1990 to 2000

[See source for explanation of terms and for reliability statement]

Item	Unit	1990	1994	1995	1996	1997	1998	1999	2000
Tracts offered	Number	10,459	10,861	10,995	12,230	9,870	8,205	7,453	7,992
Tracts leased	Number	825	560	835	1,537	1,780	1,157	333	553
Acres offered	Millions	56.79	58.90	59.70	70.00	26.24	44.10	40.22	42.89
Acres leased	Millions	4.30	2.78	4.34	8.15	9.62	6.34	1.77	2.92
Bonus paid for leased tracts	Bil. dol.	0.6	0.3	0.4	0.9	(NA)	1.3	0.3	0.3
New wells being drilled:									
Active	Number	120	120	124	835	186	173	219	224
Suspended	Number	266	222	247	1,323	244	122	110	146
Cumulative wells (since 1953):									
Wells completed	Number	13,167	13,342	13,475	13,583	13,546	13,702	13,676	13,718
Wells plugged and abandoned	Number	14,677	17,427	18,008	18,268	18,728	21,050	22,115	22,814
Revenue, total [1]	Bil. dol.	3.4	2.9	2.7	4.3	5.3	4.3	3.2	5.2
Bonuses	Bil. dol.	0.8	0.3	0.4	0.8	1.4	1.3	0.2	0.4
Oil and gas royalties [1]	Bil. dol.	2.6	2.3	2.1	3.1	3.4	2.7	2.6	4.1
Rentals	Bil. dol.	0.09	0.06	0.09	0.16	0.23	0.26	0.21	0.21
Sales value [2]	Bil. dol.	17.0	15.0	13.8	19.8	22.3	17.6	17.4	27.4
Oil	Bil. dol.	7.0	5.2	6.3	8.0	9.0	6.2	6.5	11.5
Natural gas	Bil. dol.	9.5	9.8	7.5	11.8	13.3	11.4	10.9	15.9
Sales volume: [3]									
Oil	Mil. bbls.	324	369	409	438	479	477	513	566
Natural gas	Bil. cu. ft	5,093	4,700	4,692	5,024	5,077	4,836	4,992	4,723

NA Not available. [1] Includes condensate royalties. [2] Production value is value at time of production, not current value. [3] Excludes sales volumes for gas lost, gas plant products or sulfur.

Source: U.S. Dept. of the Interior, Minerals Management Service, *Federal Offshore Statistics,* annual.

No. 876. Petroleum Industry—Summary: 1980 to 2000

[Includes all costs incurred for drilling and equipping wells to point of completion as productive wells or abandonment after drilling becomes unproductive. Based on sample of operators of different size drilling establishments]

Item	Unit	1980	1990	1994	1995	1996	1997	1998	1999	2000
Crude oil producing wells (Dec. 31)	1,000	548	602	582	574	574	573	562	554	(NA)
Daily output per well	Bbl.	15.9	12.2	11.4	11.4	11.3	11.3	11.1	10.7	(NA)
Completed wells drilled, total	1,000	57.73	26.50	17.87	17.75	19.71	24.39	21.39	18.21	17.77
Crude oil	1,000	30.88	11.54	6.15	7.09	7.83	10.01	6.76	4.72	5.08
Gas	1,000	15.25	10.36	8.81	7.78	8.73	10.79	11.53	10.04	9.75
Dry	1,000	11.60	4.60	2.90	2.88	3.15	3.59	3.10	3.45	2.94
Average depth per well [1]	Feet	4,171	4,653	5,731	5,505	5,506	5,552	6,060	5,632	(NA)
Average cost per well [1]	$1,000	368	384	483	513	496	604	769	856	(NA)
Average cost per foot [1]	Dollars	77.02	76.07	79.49	87.22	88.92	107.83	128.97	152.02	(NA)
Crude oil production, total	Mil. bbl.	3,138	2,685	2,432	2,394	2,360	2,355	2,282	2,147	2,125
Value at wells	Bil. dol	67.7	53.8	32.1	35.0	43.6	40.6	24.8	33.7	(NA)
Average price per barrel	Dollars	21.59	20.03	13.19	14.62	18.46	17.23	10.87	15.56	26.73
Lower 48 states	Mil. bbl.	2,548	2,037	1,863	1,853	1,851	1,882	1,853	1,763	1,771
Alaska	Mil. bbl.	590	647	569	542	508	473	429	383	354
Onshore	Mil. bbl.	2,760	2,290	1,931	1,838	1,789	1,753	1,664	1,650	(NA)
Offshore	Mil. bbl.	377	395	500	557	570	602	618	513	(NA)
Imports: Crude oil	Mil. bbl.	1,921	2,151	2,578	2,639	2,740	3,002	3,178	3,187	3,311
Refined petroleum products	Mil. bbl.	601	775	706	586	719	707	731	775	872
Exports: Crude oil	Mil. bbl.	104.8	39.8	36.1	34.7	40.2	39.4	40.2	43.1	18.3
Proved reserves	Bil. bbl.	29.8	26.3	22.5	22.4	22.0	22.5	21.0	21.8	(NA)
Operable refineries	Number	319	205	179	175	170	164	163	159	(NA)
Capacity (Jan. 1)	Mil. bbl.	6,566	5,683	5,486	5,632	5,595	5,639	5,734	5,935	(NA)
Refinery input, total	Mil. bbl.	5,117	5,325	5,482	5,555	5,654	5,807	5,891	5,880	(NA)
Crude oil	Mil. bbl.	4,920	4,895	5,063	5,099	5,179	5,351	5,435	5,406	(NA)
Natural gas plant liquids	Mil. bbl.	168	172	172	172	164	153	146	135	(NA)
Other liquids	Mil. bbl.	29	259	252	285	307	303	310	339	(NA)
Refinery output, total	Mil. bbl.	5,336	5,574	5,763	5,836	5,957	6,117	6,216	6,209	(NA)
Motor gasoline	Mil. bbl.	2,369	2,540	2,621	2,723	2,759	2,825	2,880	2,898	(NA)
Jet fuel	Mil. bbl.	365	544	529	518	555	566	558	573	(NA)
Distillate fuel oil	Mil. bbl.	971	1,066	1,168	1,153	1,212	1,237	1,248	1,245	(NA)
Residual fuel oil	Mil. bbl.	577	347	303	288	266	259	277	256	(NA)
Liquefied petroleum gases	Mil. bbl.	120	183	223	237	241	252	245	252	(NA)
Utilization rate	Percent	75.4	87.1	92.6	92.0	94.1	95.2	95.6	92.7	(NA)

NA Not available. [1] Source: American Petroleum Institute, *Joint Association Survey on Drilling Costs,* annual.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, Petroleum Supply Annual; U.S. Crude Oil, Natural Gas,* and *Natural Gas Liquids Reserves*; and *Monthly Energy Review.*

No. 877. U.S. Petroleum Balance: 1980 to 2000

[In millions of barrels (6,242 represents 6,242,000,000)]

Item	1980	1990	1994	1995	1996	1997	1998	1999	2000
Petroleum products supplied for domestic use	**6,242**	**6,201**	**6,467**	**7,087**	**6,701**	**6,796**	**6,905**	**7,125**	**7,211**
Production of products	5,765	5,934	6,244	6,940	6,511	6,671	6,733	6,774	6,903
Crude input to refineries	4,934	4,894	5,061	5,718	5,195	5,351	5,434	5,403	5,514
Oil, field production	3,138	2,685	2,431	2,406	2,366	2,355	2,282	2,147	2,131
Alaska	592	647	569	542	510	473	429	383	355
Lower 48 states	2,555	2,037	1,863	1,853	1,856	1,882	1,853	1,764	1,776
Net imports	1,821	2,112	2,542	2,604	2,708	2,963	3,137	3,144	3,301
Imports (gross excluding SPR) [1]	1,910	2,142	2,574	2,639	2,748	3,002	3,178	3,184	3,317
SPR [1] imports	16	10	4	-	-	-	-	3	3
Exports	-105	40	36	35	40	39	40	43	18
Other sources	33	98	88	102	122	34	15	113	82
Natural gas liquids (NGL), supply	577	574	694	708	716	721	717	757	799
Other liquids	253	465	489	514	599	599	582	614	589
Net imports of refined products	484	326	217	101	181	154	225	252	305
Imports	578	598	518	407	491	469	508	537	648
Exports	94	272	302	307	310	315	283	284	343
Stock withdrawal, refined products	-7	-59	6	46	9	-29	-53	98	2
TYPE OF PRODUCT SUPPLIED									
Total products supplied for domestic use	**6,242**	**6,201**	**6,467**	**6,469**	**6,701**	**6,796**	**6,905**	**7,125**	**7,211**
Finished motor gasoline	2,407	2,641	2,774	2,843	2,888	2,926	3,012	3,077	3,101
Distillate fuel oil	1,049	1,103	1,154	1,170	1,232	1,254	1,263	1,304	1,362
Residual fuel oil	918	449	373	311	311	291	324	303	333
Liquified petroleum gases [2]	414	568	686	693	736	744	713	801	816
Other	1,454	1,440	1,480	1,452	1,535	1,582	1,593	1,639	1,598
ENDING STOCKS									
Ending stocks, all oils	**1,392**	**1,621**	**1,653**	**1,563**	**1,052**	**1,560**	**1,647**	**1,493**	**1,468**
Crude oil and lease condensate	358	323	337	303	284	305	324	284	286
Strategic Petroleum Reserve (SPR) [1]	108	586	592	592	566	563	571	567	541
Other	926	712	724	668	202	692	752	641	641

- Represents zero. [1] SPR=Strategic petroleum reserve. For more information, see Table 905. [2] Includes ethane.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual.*

No. 878. Crude Petroleum and Natural Gas—Production and Value by Major Producing States: 1990 to 1999

[2,685 mil. bbl. represents 2,685,000,000 bbl. or 18,594 bil. cu. ft. represents 18,594,000,000,000 cu. ft.]

State	Crude petroleum						Natural gas marketed production [1]					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1990	1998	1999	1990	1998	1999	1990	1998	1999	1990	1998	1999
Total [2]	**2,685**	**2,282**	**2,147**	**53,772**	**24,804**	**33,403**	**18,594**	**19,646**	**19,596**	**31,658**	**38,206**	**42,538**
AL	18	12	11	387	150	186	135	564	547	373	1,237	1,263
AK	658	429	383	10,086	3,669	4,829	403	467	463	554	614	635
AR	10	8	7	222	89	114	175	188	170	360	738	697
CA	322	284	273	5,732	2,709	3,844	363	315	383	857	621	905
CO	31	22	18	722	281	321	243	696	739	377	1,323	1,436
FL	6	6	5	(NA)	(NA)	(NA)	6	6	6	15	(NA)	(NA)
IL	20	14	12	467	175	210	1	-	-	1	(NA)	(NA)
IN	3	2	2	73	28	34	(Z)	1	1	1	1	2
KS	59	36	29	1,359	433	496	574	604	553	893	1,027	998
KY	5	3	3	124	34	46	75	82	77	169	196	159
LA	148	134	120	3,409	1,690	2,128	5,242	5,288	5,314	9,587	10,555	11,649
MI	20	9	8	458	111	130	140	278	277	420	491	491
MS	30	22	18	630	228	277	95	108	111	167	153	181
MT	20	16	15	429	186	247	50	58	61	90	88	103
NE	5	3	3	119	37	46	1	2	1	2	2	2
NM	66	72	64	1,472	894	1,124	965	1,501	1,512	1,629	2,649	3,191
NY	(Z)	-	-	9	3	4	25	17	16	55	43	35
ND	39	36	33	849	405	549	52	53	53	93	114	123
OH	8	7	6	196	80	98	155	109	110	393	243	346
OK	117	78	71	2,690	988	1,254	2,258	1,645	1,571	3,548	2,915	3,223
PA	2	2	1	54	27	27	178	68	175	417	-	-
TX	674	505	449	15,060	6,197	7,767	6,343	6,319	6,118	9,939	13,003	14,106
UT	23	19	16	524	240	288	146	277	263	249	479	506
WV	2	1	1	43	18	24	178	178	176	568	-	-
WY	103	65	61	2,169	693	1,007	736	761	823	856	1,352	1,621

- Represents or round to zero. NA Not available. Z Less than 500 million cubic feet or less than $500,000. [1] Excludes nonhydrocarbon gases. [2] Includes other states not shown separately. State production does not include state offshore production.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual,* and *Petroleum Marketing Annual; and Natural Gas Annual,* and *Natural Gas Monthly.*

No. 879. Crude Oil, Natural Gas, and Natural Gas Liquids—Reserves by State: 1990 and 1999

[26,254 mil. bbl. represents 26,254,000,000 bbl. As of December 31. Proved reserves are estimated quantities of the mineral, which geological and engineering data demonstrate with reasonable certainty, to be recoverable in future years from known reservoirs under existing economic and operating conditions. Indicated reserves of crude oil are quantities other than proved reserves, which may become economically recoverable from existing productive reservoirs through the application of improved recovery techniques using current technology. Based on a sample of operators of oil and gas wells]

Area	1990				1999			
	Crude oil		Natural gas	Natural gas liquids	Crude oil		Natural gas	Natural gas liquids
	Proved (mil. bbl.)	Indicated (mil. bbl.)	(bil. cu. ft.)	(mil. bbl.)	Proved (mil. bbl.)	Indicated (mil. bbl.)	(bil. cu. ft.)	(mil. bbl.)
United States	**26,254**	**3,483**	**169,346**	**7,586**	**21,765**	**2,865**	**167,406**	**7,906**
Lower 48 States	19,730	2,514	160,046	7,246	16,865	2,400	157,672	7,515
Alabama	44	(Z)	[1]4,125	170	49	(NA)	4,287	107
Alaska	6,524	969	9,300	340	4,900	464	9,734	299
Arkansas	60	1	1,731	9	48	-	1,542	5
California	[2]4,658	[2]1,425	[2]3,185	[2]105	3,934	1,400	2,387	98
Colorado	305	8	4,555	169	203	21	8,987	303
Florida	(NA)	(NA)	(NA)	(NA)	85	-	84	16
Illinois	(NA)	(NA)	(NA)	(NA)	100	-	(NA)	(NA)
Indiana	131	-	(NA)	(NA)	10	-	(NA)	(NA)
Kansas	(NA)	(NA)	(NA)	(NA)	175	-	5,753	358
Kentucky	321	(Z)	9,614	313	24	-	1,435	69
Louisiana	33	-	1,016	25	600	278	9,242	457
Michigan	(NA)	(NA)	(NA)	(NA)	52	-	2,255	48
Mississippi	(NA)	(NA)	(NA)	(NA)	163	-	677	10
Montana	(NA)	(NA)	(NA)	(NA)	207	-	841	8
Nebraska	221	-	899	15	17	-	(NA)	(NA)
New Mexico	(NA)	(NA)	(NA)	(NA)	718	165	15,449	954
New York	687	256	17,260	990	(NA)	(NA)	221	(NA)
North Dakota	285	-	586	60	262	1	416	53
Ohio	65	-	1,214	(NA)	51	-	1,179	(NA)
Oklahoma	734	37	16,151	657	621	58	12,543	749
Pennsylvania	22	-	1,720	(NA)	16	-	1,772	(NA)
Texas	[2]7,106	618	[2]38,192	[2]2,575	5,339	426	40,157	2,584
Utah	249	44	1,510	([3])	268	42	3,213	([3])
Virginia	(NA)	(NA)	138	(NA)	(NA)	(NA)	2,017	(NA)
West Virginia	31	-	2,207	86	21	-	2,936	73
Wyoming	794	42	9,944	[4]812	590	5	14,226	[4]615
Federal offshore	2,805	49	31,433	619	3,297	5	25,987	998

- Represents or rounds to zero. NA Not available. Z Less than 500,000 barrels. [1] Includes state offshore. [2] Excludes federal offshore. [3] Included with Wyoming. [4] Includes Utah.

Source: Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1999 Annual Report,* September 2000.

No. 880. World Daily Crude Oil Production by Major Producing Country: 1980 to 1999

[In thousands of barrels per day (59,600 barrels represents 59,600,000 barrels)]

Country	1980	1990	1993	1994	1995	1996	1997	1998	1999
World, total [1]	**59,600**	**60,566**	**60,236**	**60,991**	**62,335**	**63,711**	**65,690**	**66,921**	**65,870**
Saudi Arabia	9,900	6,410	8,198	8,120	8,231	8,218	8,362	8,389	7,833
Russia	(X)	(X)	6,730	6,135	5,995	5,850	5,920	5,854	6,079
United States	**8,597**	**7,355**	**6,847**	**6,662**	**6,560**	**6,465**	**6,452**	**6,252**	**5,881**
Iran	1,662	3,088	3,540	3,618	3,643	3,686	3,664	3,634	3,557
China	2,114	2,774	2,890	2,939	2,990	3,131	3,200	3,198	3,195
Norway	528	1,704	2,350	2,521	2,768	3,104	3,143	3,017	3,018
Mexico	1,936	2,553	2,673	2,685	2,618	2,855	3,023	3,070	2,906
Venezuela	2,168	2,137	2,450	2,588	2,750	2,938	3,280	3,167	2,826
United Kingdom	1,622	1,820	1,915	2,375	2,489	2,568	2,518	2,616	2,684
Iraq	2,514	2,040	512	553	560	579	1,155	2,150	2,508
United Arab Emirates	1,709	2,117	2,159	2,193	2,233	2,278	2,316	2,345	2,169
Nigeria	2,055	1,810	1,960	1,931	1,993	2,001	2,132	2,153	2,130
Canada	1,435	1,553	1,679	1,746	1,805	1,837	1,922	1,981	1,907
Kuwait	1,656	1,175	1,852	2,025	2,057	2,062	2,007	2,085	1,898
Indonesia	1,577	1,462	1,511	1,510	1,503	1,547	1,520	1,518	1,472
Libya	1,787	1,375	1,361	1,378	1,390	1,401	1,446	1,390	1,319
Algeria	1,106	1,175	1,162	1,180	1,202	1,242	1,277	1,246	1,202
Brazil	182	631	643	671	695	795	841	969	1,132
Oman	282	685	776	810	851	883	904	900	887
Egypt	595	873	890	896	920	922	856	834	852
Colombia	126	440	456	450	585	623	652	733	816
Argentina	491	483	594	650	715	756	834	847	802
Angola	150	475	509	536	646	709	714	735	766
Malaysia	283	619	640	645	682	695	700	720	693
Qatar	472	406	413	415	442	510	550	696	665
India	182	660	534	590	703	651	675	661	653
Australia	380	575	503	536	562	570	588	544	539
Syria	164	388	554	560	575	582	561	553	538
Kazakhstan	(X)	(X)	408	352	362	403	466	476	530
Yemen	-	193	220	335	345	340	362	388	409

- Represents or rounds to zero. X Not applicable. [1] Includes countries not shown separately.

Source: U.S. Energy Information Administration, *International Energy Review, 1999*. See also <http://www.eia.doe.gov/pub/pdf/international/021999.pdf> (issued February 2001).

No. 881. Liquefied Petroleum Gases—Summary: 1980 to 1999

[In millions of 42-gallon barrels (561 barrels represents 561,000,000 barrels). Includes ethane]

Item	1980	1990	1993	1994	1995	1996	1997	1998	1999
Production	**561**	**638**	**850**	**734**	**760**	**789**	**799**	**775**	**814**
At natural gas plants	441	456	634	511	521	547	547	529	564
At refineries	121	182	216	223	234	242	252	246	250
Imports	79	68	70	67	53	61	62	71	66
Refinery input	85	107	179	108	105	102	96	92	88
Exports	9	14	16	14	21	19	18	15	18
Stocks, Dec. 31	116	98	117	99	93	86	89	115	89

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*.

No. 882. Natural Gas Plant Liquids—Production and Value: 1980 to 1999

[Barrels of 42 gallons (576 barrels represents 576,000,000 barrels)]

Item	Unit	1980	1990	1993	1994	1995	1996	1997	1998	1999
Field production [1]	Mil. bbl	576	566	634	630	643	670	663	642	675
Pentanes plus	Mil. bbl	126	112	122	119	122	123	116	113	111
Liquefied petroleum gases	Mil. bbl	441	454	512	511	521	547	547	529	564
Natural gas processed	Tril. cu. ft.	15	15	16	16	17	17	17	17	17

[1] Includes other finished petroleum products, not shown separately.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual* and *Natural Gas Annual*.

No. 883. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1980 to 1999

[182 represents 182,000 wells]

Item	Unit	1980	1990	1993	1994	1995	1996	1997	1998	1999
Producing wells (year-end)	1,000	182	269	282	292	299	302	311	317	307
Production value at wells	Bil. dol	32.1	31.8	38.7	36.5	30.2	43.0	46.1	38.2	42.5
Avg. per 1,000 cu. ft	Dollars	1.59	1.71	2.04	1.85	1.55	2.17	2.32	1.94	2.17
Proved reserves [1]	Tril. cu. ft	199	169	162	164	165	166	167	164	167
Marketed production [2]	**Tril. cu. ft**	**20,180**	**18,594**	**18,982**	**19,710**	**19,506**	**19,812**	**19,866**	**19,809**	**19,596**
Minus: Extraction losses [3]	Tril. cu. ft	777	784	886	889	908	958	964	938	901
Equals: Dry production	Tril. cu. ft	19,403	17,810	18,095	18,821	18,599	18,854	18,902	18,871	18,695
Plus: Withdrawals from storage	Tril. cu. ft	1,972	1,986	2,799	2,579	3,025	2,981	2,894	2,432	2,873
Plus: Imports [4]	Tril. cu. ft	985	1,532	2,350	2,624	2,841	2,937	2,994	3,152	3,586
Plus: Balancing item	Tril. cu. ft	-640	-152	-110	-416	-230	217	61	-180	-683
Equals: Total supply	Tril. cu. ft	21,875	21,299	23,254	23,719	24,345	25,099	24,954	24,377	24,569
Minus: Exports	Tril. cu. ft	49	86	140	162	154	153	157	159	163
Minus: Additions to storage [5]	Tril. cu. ft	1,949	2,499	2,835	2,865	2,610	2,979	2,870	2,961	2,703
Equals: Consumption, total	**Tril. cu. ft**	**19,877**	**18,715**	**20,279**	**20,708**	**21,581**	**21,967**	**21,959**	**21,279**	**21,694**
Lease and plant fuel	Tril. cu. ft	1,026	1,236	1,172	1,124	1,220	1,250	1,203	1,174	1,077
Pipeline fuel	Tril. cu. ft	635	660	624	685	700	711	751	635	735
Residential	Tril. cu. ft	4,752	4,391	4,956	4,848	4,850	5,241	4,984	4,520	4,724
Commercial [6]	Tril. cu. ft	2,611	2,623	2,862	2,895	3,031	3,158	3,215	2,999	3,049
Industrial	Tril. cu. ft	7,172	7,018	7,981	8,167	8,580	8,870	8,832	8,686	8,990
Vehicle fuel	Tril. cu. ft	(NA)	-	1	2	3	3	4	5	6
Electric utilities	Tril. cu. ft	3,682	2,786	2,682	2,987	3,197	2,732	2,968	3,258	3,113
World production (dry)	Tril. cu. ft	53.5	73.6	76.4	76.9	78.0	81.7	81.6	82.8	84.7
U.S. production (dry)	Tril. cu. ft	19.4	17.8	18.1	18.8	18.6	18.8	18.9	18.9	18.6
Percent U.S. of world	Percent	36.3	24.2	23.7	24.5	23.9	23.0	23.2	22.8	22.0

- Represents or rounds to zero. NA Not available. [1] Estimated, end of year. Source: U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas,* and *Natural Gas Liquids Reserves, annual.* [2] Marketed production includes gross withdrawals from reservoirs less quantities used for reservoir repressuring and quantities vented or flared. For 1980 and thereafter, it excludes the nonhydrocarbon gases subsequently removed. [3] Volumetric reduction in natural gas resulting from the extraction of natural gas constituents at natural gas processing plants. [4] Includes imports of liquefied natural gas. [5] Includes liquefied natural gas (LNG) storage in above ground tanks. [6] Includes deliveries to municipalities and public authorities for institutional heating and other purposes.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, International Energy Annual, Natural Gas Annual,* Volumes I and II and *Monthly Energy Review.*

No. 884. World Natural Gas Production by Major Producing Country: 1980 to 1999

[In trillion cubic feet (53.35 represents 53,350,000,000,000)]

Country	1980	1990	1993	1994	1995	1996	1997	1998	1999
World, total [1]	**53.35**	**73.57**	**76.36**	**76.93**	**77.96**	**81.71**	**81.61**	**82.79**	**84.69**
Russia	(X)	(X)	21.81	21.45	21.01	21.23	20.17	20.87	20.83
United States	**19.40**	**17.81**	**18.10**	**18.82**	**18.60**	**18.85**	**18.90**	**18.71**	**18.62**
Canada	2.76	3.85	4.91	5.27	5.60	5.78	5.86	6.05	6.26
United Kingdom	1.32	1.75	2.31	2.47	2.67	3.18	3.03	3.14	3.49
Algeria	0.41	1.79	1.90	1.81	2.05	2.19	2.43	2.60	2.90
Netherlands	3.40	2.69	3.11	2.95	2.98	3.37	2.99	2.84	2.65
Indonesia	0.63	1.53	1.97	2.21	2.24	2.35	2.37	2.27	2.34
Uzbekistan	(X)	(X)	1.59	1.67	1.70	1.70	1.74	1.94	1.96
Iran	0.25	0.84	0.96	1.12	1.25	1.42	1.66	1.77	1.87
Norway	0.92	0.98	0.97	1.04	1.08	1.45	1.62	1.63	1.76
Saudi Arabia	0.33	1.08	1.27	1.33	1.34	1.46	1.60	1.65	1.63
Malaysia	0.06	0.65	0.88	0.92	1.02	1.23	1.36	1.37	1.45
United Arab Emirates	0.20	0.78	0.94	0.91	1.11	1.19	1.28	1.31	1.34
Mexico	0.90	0.90	0.95	0.97	0.96	1.06	1.17	1.27	1.29
Argentina	0.28	0.63	0.76	0.79	0.88	0.94	0.97	1.04	1.22
Australia	0.31	0.72	0.86	0.93	1.03	1.06	1.06	1.10	1.10
Venezuela	0.52	0.76	0.81	0.88	0.89	0.96	0.99	1.11	1.09
China	0.51	0.51	0.56	0.59	0.60	0.67	0.75	0.78	0.85
Qatar	0.18	0.28	0.48	0.48	0.48	0.48	0.61	0.69	0.85
Germany	0.93	0.72	0.68	0.70	0.74	0.80	0.79	0.77	0.82
Turkmenistan	(X)	(X)	2.29	1.26	1.14	1.31	0.90	0.47	0.79
Pakistan	0.29	0.48	0.58	0.63	0.65	0.70	0.70	0.71	0.78
India	0.05	0.40	0.53	0.59	0.63	0.70	0.72	0.76	0.75
Thailand	-	0.21	0.31	0.34	0.37	0.43	0.54	0.57	0.63
Ukraine	(X)	(X)	0.68	0.64	0.62	0.64	0.64	0.64	0.63
Italy	0.44	0.61	0.69	0.73	0.72	0.71	0.68	0.67	0.62
Egypt	0.03	0.29	0.40	0.42	0.44	0.47	0.48	0.49	0.55
Romania	1.20	1.00	0.75	0.69	0.68	0.63	0.61	0.52	0.50
Trinidad and Tobago	0.08	0.18	0.22	0.25	0.27	0.30	0.33	0.33	0.41
Brunei	0.32	0.32	0.29	0.30	0.33	0.33	0.32	0.32	0.33

- Represents or rounds to zero. X Not applicable. [1] Includes countries not shown separately.

Source: U.S. Energy Information Administration, *International Energy Review, 1999.* See also <http://www.eia.doe.gov/pub/pdf/international/021999.pdf> (issued February 2001).

No. 885. Coal and Coke—Summary: 1980 to 1999

[**830 short tons represents 830,000,000 short tons.** Includes coal consumed at mines. Demonstrated coal reserve base for United States on Jan. 1, 1997, was an estimated 508 billion tons. Recoverability varies between 40 and 90 percent for individual deposits; 50 percent or more of overall U.S. coal reserve base is believed to be recoverable]

Item	Unit	1980	1990	1994	1995	1996	1997	1998	1999
COAL									
Coal production, total [1]	**Mil. sh. tons**	**830**	**1,029**	**1,034**	**1,033**	**1,064**	**1,090**	**1,118**	**1,100**
Value	Bil. dol.	20.45	22.39	20.06	19.45	19.68	19.77	19.75	19.42
Anthracite production	Mil. sh. tons	6.1	3.5	4.6	4.7	4.8	4.7	5.3	4.8
Bituminous coal and lignite	Mil. sh. tons	824	1,026	1,029	1,028	1,059	1,085	1,112	1,096
Underground	Mil. sh. tons	337	425	399	396	410	421	417	392
Surface	Mil. sh. tons	487	605	634	637	654	669	700	709
Exports	Mil. sh. tons	92	105.804	71	89	90	84	78	58
Imports	Mil. sh. tons	1	3	8	9	8	7	9	9
Consumption [2]	Mil. sh. tons	703	896	930	941	1,006	1,030	1,038	1,045
Electric power utilities	Mil. sh. tons	569	774	817	829	875	900	911	894
Industrial	Mil. sh. tons	126	115	107	106	103	102	96	93
Number of mines	Number	5,598	3,243	2,354	2,104	1,903	1,828	1,726	1,591
Daily employment	1,000	225	131	98	90	83	82	85	79
Production, by state:									
Alabama	Mil. sh. tons	26	29	23	25	25	24	23	20
Illinois	Mil. sh. tons	63	60	53	48	47	41	40	40
Indiana	Mil. sh. tons	31	36	31	26	30	35	37	34
Kentucky	Mil. sh. tons	150	173	162	154	152	156	150	140
Montana	Mil. sh. tons	30	38	42	39	38	41	43	41
Ohio	Mil. sh. tons	39	35	30	26	29	29	28	22
Pennsylvania	Mil. sh. tons	93	71	62	62	68	76	81	76
Virginia	Mil. sh. tons	41	47	37	34	36	36	34	32
West Virginia	Mil. sh. tons	122	169	162	163	170	174	171	158
Wyoming	Mil. sh. tons	95	184	237	264	278	282	314	337
Other states	Mil. sh. tons	140	187	195	192	192	195	196	200
World production	Mil. sh. tons	4,200	5,386	5,026	5,161	5,165	5,184	5,006	4,737
Percent U.S. of world	Percent	19.8	19.1	20.6	20.0	20.6	21.0	22.3	23.2
COKE									
Coke production [3]	Mil. sh. tons	46.13	27.62	22.69	23.75	23.08	22.12	20.04	20.02
Imports	Mil. sh. tons	0.66	0.77	3.34	3.82	2.54	3.14	3.83	3.22
Exports	Mil. sh. tons	2.07	0.57	0.99	1.36	1.62	1.27	1.13	0.90
Consumption	Mil. sh. tons	41.28	27.82	25.56	25.90	23.97	24.02	23.11	22.42

[1] Includes bituminous coal, subbituminous coal, lignite, and anthracite. [2] Includes some categories not shown separately. [3] Includes beehive coke.

Source: U.S. Energy Information Administration, *Coal Industry,* annual; *Annual Energy Review, International Energy Annual,* and *Quarterly Coal Report.*

No. 886. World Coal Production by Major Producing Country: 1980 to 1999

[**In millions of short tons (4,200 represents 4,200,000,000)**]

Country	1980	1990	1993	1994	1995	1996	1997	1998	1999
World, total	**4,200**	**5,386**	**4,952**	**5,026**	**5,161**	**5,165**	**5,184**	**5,006**	**4,737**
China	684	1,190	1,304	1,404	1,537	1,515	1,461	1,337	1,118
United States	**830**	**1,029**	**945**	**1,034**	**1,033**	**1,064**	**1,090**	**1,118**	**1,099**
India	126	233	281	280	298	315	326	322	328
Australia	116	226	248	248	267	272	292	314	321
Russia	(X)	(X)	364	313	296	304	290	257	276
South Africa	132	193	207	216	227	227	246	248	248
Germany	532	514	315	292	274	265	252	233	226
Poland	254	237	218	220	220	193	222	197	190
Ukraine	-	-	128	104	99	83	85	83	91
Korea, North	51	99	109	108	107	106	99	94	85
Canada	40	75	76	80	83	83	87	83	80
Turkey	20	52	54	60	61	62	66	74	74
Indonesia	1	12	30	34	46	55	60	66	71
Greece	26	57	60	62	64	66	65	67	67
Czech Republic	(X)	(X)	94	85	82	84	84	83	65
Kazakhstan	(X)	(X)	123	115	92	85	80	66	64
United Kingdom	144	104	75	54	52	55	54	46	41
Colombia	5	23	23	25	28	33	36	37	36
Serbia and Montenegro	(X)	(X)	41	42	44	42	45	48	36
Bulgaria	40	39	32	32	34	34	33	34	29
Romania	39	42	44	45	45	46	37	29	28
Spain	41	40	35	33	31	31	29	29	27
Thailand	2	14	17	19	20	24	26	22	20
Hungary	28	20	16	16	16	17	17	16	16
Vietnam	6	5	7	6	9	11	13	12	12

- Represents zero. X Not applicable.

Source: U.S. Energy Information Administration, *International Energy Review, 1999.* See also <http://www.eia.doe.gov/pub/pdf/international/021999.pdf> (issued February 2001).

No. 887. Demonstrated Coal Reserves by Type of Coal and Major Producing State: 1997

[**In millions of short tons. As of January 1.** The demonstrated reserve base represents the sum of coal in both measured and indicated resource categories of reliability. Measured resources of coal are estimates that have a high degree of geologic assurance from sample analyses and measurements from closely spaced and geological well known sample sites. Indicated resources are estimates based partly from sample and analyses and measurements and partly from reasonable geologic projections. For more information on the classification of coal resources and related terminology, see report cited below]

State	Total reserves	Type of coal				Method of mining	
		Anthracite	Bituminous	Sub-bituminous	Lignite	Underground	Surface
United States	**507,740**	**7,477**	**270,910**	**185,118**	**44,235**	**341,775**	**165,965**
Alabama	4,547	-	3,464	-	1,083	1,290	3,256
Alaska	6,126	-	698	5,414	14	5,423	703
Colorado	16,756	26	8,711	3,830	4,190	11,979	4,777
Illinois	105,069	-	105,069	-	-	88,461	16,608
Indiana	9,917	-	9,917	-	-	8,860	1,057
Iowa	2,190	-	2,190	-	-	1,733	457
Kentucky	32,041	-	32,041	-	-	18,508	13,533
Kentucky, Eastern	12,086	-	12,086	-	-	2,247	9,839
Kentucky, Western	19,954	-	19,954	-	-	16,261	3,694
Missouri	5,994	-	5,994	-	-	1,479	4,515
Montana	119,677	-	1,385	102,531	15,760	70,958	48,718
New Mexico	12,483	2	3,706	8,774	-	6,204	6,279
North Dakota	9,395	-	-	-	9,395	-	9,395
Ohio	23,664	-	23,664	-	-	17,789	5,875
Oklahoma	1,575	-	1,575	-	-	1,237	338
Pennsylvania	28,646	7,220	21,427	-	-	24,232	4,414
Anthracite	7,220	7,220	-	-	-	3,850	3,370
Bituminous	21,427	-	21,427	-	-	20,382	1,044
Texas	12,931	-	-	-	12,931	-	12,931
Utah	5,850	-	5,849	1	-	5,583	268
Virginia	2,202	126	2,077	-	-	1,528	674
Washington	1,390	-	304	1,078	8	1,332	57
West Virginia	35,397	-	35,397	-	-	30,968	4,429
Wyoming	67,815	-	4,343	63,472	-	42,516	25,299
East of the MS River	243,156	7,345	234,728	-	1,083	192,939	50,217
West of the MS River	264,584	132	36,182	185,118	43,152	148,836	115,747

- Represents or rounds to zero.

Source: U.S. Energy Information Administration, *U.S. Coal Reserves: 1997 Update,* February 1999.

No. 888. Uranium Concentrate (U_3O_8) Industry—Summary: 1990 to 2000

[See also Table 914]

Item	Unit	1990	1993	1994	1995	1996	1997	1998	1999	2000
Exploration and development, surface drilling	Mil. ft.	1.7	1.1	0.7	1.3	3.0	4.9	4.6	2.5	1.0
Expenditures	Mil. dol.	17.1	11.3	3.7	6.0	10.1	30.4	21.7	9.0	6.7
Number of mines operated	Number	39	12	12	12	13	14	15	14	10
Underground	Number	27	-	-	-	1	1	4	3	1
Openpit	Number	2	-	-	-	-	-	-	-	-
In situ leaching	Number	7	5	5	5	6	7	6	6	4
Other sources	Number	3	7	7	7	6	6	5	5	5
Mine production	1,000 pounds	5,876	2,050	2,526	3,528	4,705	4,710	4,782	4,548	3,123
Underground	1,000 pounds	(D)	-	-	-	(D)	(D)	(D)	(D)	(D)
Openpit	1,000 pounds	1,881	-	-	-	-	-	-	-	-
In situ leaching	1,000 pounds	(D)	(D)	2,448	3,372	4,379	4,084	3,721	3,830	2,995
Other sources	1,000 pounds	3,995	2,050	78	156	326	626	1,062	718	128
Uranium concentrate production[1]	1,000 pounds	8,886	3,063	3,352	6,043	6,321	5,643	4,705	4,611	3,958
Concentrate shipments from mills and plants	1,000 pounds	12,957	3,374	6,319	5,500	5,982	5,817	4,863	5,527	3,187
Employment	Person-years	1,335	871	980	1,107	1,118	1,097	1,120	848	627

- Represents or rounds to zero. D Data withheld to avoid disclosing figures for individual companies. [1] U_3O_8.

Source: U.S. Department of Energy, *Uranium Industry,* annual.