

## 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 non-fuel 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. 832. Gross Domestic Product of Natural Resource-Related Industries in Current and Real (1996) Dollars by Industry: 1990 to 2000

[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	1999	2000	1990	1995	1999	2000
<b>All industries, total</b> <sup>1</sup> . . . . .	<b>5,803.2</b>	<b>7,400.5</b>	<b>9,268.6</b>	<b>9,872.9</b>	<b>6,707.9</b>	<b>7,543.8</b>	<b>8,856.5</b>	<b>9,224.0</b>
<b>Industries covered</b> . . . . .	<b>297.3</b>	<b>306.7</b>	<b>334.8</b>	<b>367.2</b>	<b>321.9</b>	<b>329.9</b>	<b>365.7</b>	<b>355.5</b>
Percent of all industries . . . . .	5.12	4.14	3.61	3.72	4.80	4.37	4.13	3.85
Agriculture, forestry, and fishing . . . . .	108.3	109.8	127.2	135.8	118.5	123.1	153.4	166.3
Farms . . . . .	79.6	73.2	74.3	79.0	84.2	85.5	106.0	120.5
Agricultural services . . . . .	28.7	36.7	53.0	56.7	34.6	37.6	46.7	47.3
Mining . . . . .	111.9	95.7	103.3	127.1	105.8	113.0	112.0	95.2
Metal mining . . . . .	5.2	6.5	5.0	4.9	4.4	5.5	8.2	7.4
Coal mining . . . . .	11.8	10.7	10.6	10.1	7.5	10.1	13.5	13.5
Oil and gas extraction . . . . .	87.1	69.3	76.2	99.5	87.5	88.6	79.8	63.4
Nonmetallic minerals, except fuels . . . . .	7.8	9.1	11.5	12.6	8.1	9.1	10.9	12.4
Timber-related manufacturing . . . . .	77.2	101.3	104.2	104.4	97.6	93.8	100.3	94.1
Lumber and wood products . . . . .	32.2	42.3	46.3	44.4	45.1	41.6	43.0	44.1
Paper and allied products . . . . .	45.0	58.9	58.0	59.9	52.5	52.2	57.3	50.0

<sup>1</sup> For additional industry detail, see Table 632.

Source: U.S. Bureau of Economic Analysis, *National Income and Product Accounts, 1929-97*; and *Survey of Current Business* November 2001.

## No. 833. Natural Resource-Related Industries—Employees, Annual Payroll, and Establishments by Industry: 2000

[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]

Industry	NAICS code <sup>1</sup>	Number of employees <sup>2</sup> (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
<b>Natural resource-related industries, total</b> . . . . .	(X)	<b>1,791.3</b>	<b>66.58</b>	<b>37,166</b>	<b>72,932</b>	<b>56,913</b>	<b>11,929</b>	<b>3,758</b>	<b>332</b>
Percent of all industries . . . . .	(X)	1.57	1.72	109.28	1.03	0.94	1.44	2.40	1.74
Forestry, fishing, hunting and agriculture support . . . . .	11	183.6	4.68	25,509	26,076	24,437	1,463	167	9
Forestry and logging . . . . .	113	83.1	2.26	27,137	13,347	12,639	681	26	1
Timber tract operations . . . . .	1131	3.3	0.13	39,563	469	429	37	3	-
Forest nurseries & gathering forest products . . . . .	1132	1.7	0.07	39,933	258	243	15	-	-
Logging . . . . .	1133	78.1	2.06	26,331	12,620	11,967	629	23	1
Fishing, hunting & trapping . . . . .	114	10.0	0.34	34,287	2,671	2,583	75	12	1
Fishing . . . . .	1141	7.5	0.27	35,669	2,308	2,237	61	10	-
Hunting & trapping . . . . .	1142	2.5	0.08	30,173	363	346	14	2	1
Agriculture & forestry support activities . . . . .	115	90.4	2.08	23,043	10,058	9,215	707	129	7
Crop production support activities . . . . .	1151	57.6	1.35	23,400	5,061	4,507	453	96	5
Animal production support activities . . . . .	1152	18.2	0.38	21,086	3,450	3,300	134	16	-
Forestry support activities . . . . .	1153	14.7	0.35	24,067	1,547	1,408	120	17	2
Mining . . . . .	21	456.1	22.09	48,432	23,738	19,422	3,524	708	84
Oil & gas extraction . . . . .	211	83.0	5.39	64,967	7,740	6,926	683	121	10
Oil & gas extraction . . . . .	2111	83.0	5.39	64,967	7,740	6,926	683	121	10
Mining (except oil & gas) . . . . .	212	204.3	9.34	45,731	7,231	5,132	1,718	343	38
Coal mining . . . . .	2121	70.7	3.54	50,125	1,253	654	416	169	14
Metal ore mining . . . . .	2122	34.8	1.72	49,353	522	402	47	53	20
Nonmetallic mineral mining & quarrying . . . . .	2123	98.8	4.08	41,313	5,456	4,076	1,255	121	4
Mining support activities . . . . .	213	168.8	7.35	43,570	8,767	7,364	1,123	244	36
Mining support activities . . . . .	2131	168.8	7.35	43,570	8,767	7,364	1,123	244	36
Timber-related manufacturing . . . . .	(X)	1,151.6	39.80	34,562	23,118	13,054	6,942	2,883	239
Wood product manufacturing . . . . .	321	597.7	16.51	27,626	17,328	11,247	4,600	1,412	69
Sawmills & wood preservation . . . . .	3211	131.4	3.78	28,798	4,695	3,110	1,256	327	2
Veneer, plywood & engineered wood product manufacturing . . . . .	3212	120.6	3.75	31,098	1,904	756	780	356	12
Other wood product manufacturing . . . . .	3219	345.8	8.95	25,882	10,729	7,381	2,564	729	55
Paper manufacturing . . . . .	322	553.9	23.29	42,406	5,790	1,807	2,342	1,471	170
Pulp, paper & paperboard mills . . . . .	3221	177.1	9.48	53,490	597	73	162	239	123
Converted paper product manufacturing . . . . .	3222	376.8	13.82	36,666	5,193	1,734	2,180	1,232	47

- Represents zero. X Not applicable.

<sup>1</sup> North American Industry Classification System, 1997. <sup>2</sup> 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: 2000*, Series CBP/00-1. See also <<http://www.census.gov/prod/2002pubs/00cbp/cbp00-1.pdf>> (issued May 2002).

## No. 834. 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:									
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:									
Cattle and horses	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

<sup>1</sup> Includes land exchanges. <sup>2</sup> Covers number actually grazed. Excludes Puerto Rico. <sup>3</sup> 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. 835. National Forest System Land—State and Other Area: 2000

[In thousands of acres (232,245 represents 232,245,000). As of Sept. 30]

State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>	State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>	State and other area	Gross area within unit boundaries <sup>1</sup>	National Forest System Land <sup>2</sup>
<b>Total</b>	<b>232,245</b>	<b>192,363</b>	IA	-	-	ND	1,106	1,106
			KS	116	108	OH	834	233
<b>U.S.</b>	<b>232,189</b>	<b>192,335</b>	KY	2,210	805	OK	772	398
			LA	1,025	604	OR	17,501	15,662
AL	1,288	666	ME	93	53	PA	743	513
AK	24,355	21,987	MD	-	-	RI	-	-
AZ	11,891	11,262	MA	-	-	SC	1,376	617
AR	3,540	2,587	MI	4,894	2,864	SD	2,369	2,013
CA	24,430	20,709	MN	5,467	2,839	TN	1,276	700
CO	16,015	14,481	MS	2,320	1,169	TX	1,994	755
CT	-	-	MO	3,060	1,494	UT	9,209	8,189
DE	-	-	MT	19,108	16,903	VT	817	386
DC	-	-	NE	442	352	VA	3,224	1,661
FL	1,255	1,109	NV	6,275	5,835	WA	10,110	9,252
GA	1,856	866	NH	828	728	WV	1,869	1,034
HI	-	-	NJ	-	-	WI	2,023	1,523
ID	21,653	20,463	NM	10,455	9,417	WY	9,703	9,238
IL	857	291	NY	16	16	PR	56	28
IN	644	199	NC	3,167	1,247	VI	-	-

- Represents zero or rounds to zero. <sup>1</sup> 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. <sup>2</sup> Federally owned land within the "gross area within unit boundaries."

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

## No. 836. Forest and Timberland Area, Sawtimber, and Stock: 1987 to 1996

[As of Jan. 1. 731 acres represents 731,000,000 acres]

Year and region	Total forest land (mil. acres)	Timberland, ownership <sup>1</sup> (mil. acres)			Sawtimber, <sup>3</sup> net volume		Growing stock, <sup>4</sup> net volume		
		All owner-ships	Federally owned or managed <sup>2</sup>	State and local Private	Total (bil. bd. ft.)	Soft-wood (bil. bd. ft.)	Total (bil. cu. ft.)	Soft-wood (bil. cu. ft.)	
<b>United States, 1987.</b>	<b>731</b>	<b>485</b>	<b>97</b>	<b>34</b>	<b>354</b>	<b>2,853</b>	<b>2,040</b>	<b>766</b>	<b>453</b>
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
<b>United States, 1992.</b>	<b>737</b>	<b>490</b>	<b>97</b>	<b>35</b>	<b>358</b>	<b>2,992</b>	<b>2,047</b>	<b>786</b>	<b>450</b>
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
<b>United States, 1996.</b>	<b>746</b>	<b>518</b>	<b>124</b>	<b>35</b>	<b>357</b>	<b>3,227</b>	<b>2,231</b>	<b>860</b>	<b>503</b>
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

<sup>1</sup> 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. <sup>2</sup> Includes Indian lands. <sup>3</sup> 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. <sup>4</sup> 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. 837. Timber-Based Manufacturing Industries—Employees, Payroll, and Shipments: 2000

[Based on the Annual Survey of Manufactures; for description, see Appendix III]

Selected industries	1987 NAICS code <sup>1</sup>	All employees			Value added by manufactures <sup>2</sup>			
		Payroll			Production workers, total (1,000)	Total (mil. dol.)	Per production worker (dol.)	Value of ship- ments <sup>3</sup> (mil. dol.)
		Number (1,000)	Total (mil. dol.)	Per employee (dol.)				
<b>Manufacturing, all industries . . . . .</b>	<b>31-33</b>	<b>16,681</b>	<b>618,217</b>	<b>37,060</b>	<b>11,959</b>	<b>2,002,649</b>	<b>167,456</b>	<b>4,217,852</b>
<b>Timber-based manufacturing, total . . . . .</b>	<b>(X)</b>	<b>1,137</b>	<b>38,955</b>	<b>34,273</b>	<b>914</b>	<b>114,260</b>	<b>124,992</b>	<b>259,867</b>
Percent of total manufacturing . . . . .	(X)	6.81	6.30	(X)	7.64	5.70	(X)	6.16
Wood product manufacturing	321	585	16,136	27,581	487	36,093	74,156	93,767
Sawmills & wood preservation . . . . .	3211	129	3,648	28,385	109	8,340	76,270	28,124
Sawmills . . . . .	321113	117	3,333	28,506	100	7,478	74,672	23,424
Wood preservation . . . . .	321114	12	316	27,169	9	861	93,673	4,700
Veneer, plywood, & engineered wood product . . . . .	3212	120	3,660	30,457	100	8,474	84,984	21,269
Other wood product . . . . .	3219	336	8,828	26,246	278	19,279	69,436	44,374
Millwork . . . . .	32121	152	4,228	27,879	126	9,465	75,056	22,802
Wood container & pallet . . . . .	32192	51	1,123	21,878	44	2,302	52,544	5,060
All other wood product . . . . .	32199	133	3,478	26,069	108	7,512	69,728	16,512
Paper . . . . .	322	552	22,819	41,372	427	78,166	182,896	166,099
Pulp, paper, & paperboard mills . . . . .	3221	182	9,570	52,605	143	40,735	284,574	78,515
Pulp mills . . . . .	32211	7	411	56,059	6	1,827	322,178	3,701
Paper mills . . . . .	32212	124	6,463	52,266	98	26,994	275,065	51,445
Paperboard mills . . . . .	32213	51	2,695	52,927	29	11,914	302,875	23,369
Converted paper product . . . . .	3222	370	13,249	35,843	284	37,432	131,690	87,584
Paperboard container . . . . .	32221	213	7,669	36,085	164	18,383	112,011	48,048
Paper bag & coated & treated paper . . . . .	32222	71	2,678	37,931	53	8,953	170,121	19,370
Stationery product . . . . .	32223	47	1,499	32,003	36	3,490	96,629	8,133
Other converted paper product . . . . .	32229	40	1,403	35,366	31	6,606	210,525	12,033

X Not applicable. <sup>1</sup> North American Industry Classification System, 1997; see text, Section 15, Business Enterprise.  
Source: U.S. Census Bureau, *Annual Survey of Manufactures, 2000*, Series M00(AS)-1. See also <<http://www.census.gov/prod/2002pubs/m00-as1.pdf>> (issued February 2002).

## No. 838. Timber Products—Production, Foreign Trade, and Consumption by Type of Product: 1990 to 2000

[In millions of cubic feet, roundwood equivalent (15,577 represents 15,577,000,000)]

Type of product	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>Industrial roundwood:</b> <sup>1</sup>											
Domestic production . . . . .	15,577	14,894	15,280	15,011	15,306	14,683	14,496	14,790	14,899	15,034	14,399
Softwoods . . . . .	10,968	10,402	10,563	10,090	10,268	9,795	9,700	10,180	10,097	10,390	10,186
Hardwoods . . . . .	4,609	4,493	4,717	4,921	5,038	4,888	4,795	4,609	4,802	4,643	4,213
Imports . . . . .	3,091	2,808	3,090	3,465	3,632	3,764	3,754	3,864	3,979	4,222	4,371
Exports . . . . .	2,307	2,393	2,344	2,143	2,139	2,145	2,112	2,136	1,813	1,838	1,824
Consumption <sup>2</sup> . . . . .	16,361	15,310	16,026	16,334	16,800	16,302	16,137	16,519	17,065	17,418	16,946
Softwoods . . . . .	11,779	11,011	11,536	11,539	11,906	11,581	11,575	12,114	12,348	12,812	12,744
Hardwoods . . . . .	4,582	4,299	4,490	4,795	4,894	4,721	4,562	4,404	4,718	4,606	4,201
<b>Lumber:</b>											
Domestic production . . . . .	7,317	6,746	6,983	6,887	7,052	6,815	6,886	7,103	7,298	7,629	7,201
Imports . . . . .	1,909	1,714	1,960	2,240	2,395	2,522	2,616	2,619	2,690	2,810	2,832
Exports . . . . .	589	619	561	532	512	460	449	452	350	404	421
Consumption . . . . .	8,637	7,841	8,383	8,595	8,935	8,877	9,053	9,270	9,638	10,035	9,612
<b>Plywood and veneer:</b>											
Domestic production . . . . .	1,423	1,267	1,294	1,293	1,320	1,303	1,281	1,213	1,201	1,208	1,172
Imports . . . . .	97	83	100	100	94	107	97	114	131	160	155
Exports . . . . .	109	95	106	100	86	89	87	103	55	45	42
Consumption . . . . .	1,410	1,255	1,288	1,293	1,328	1,321	1,291	1,224	1,276	1,323	1,285
<b>Pulp products:</b>											
Domestic production . . . . .	5,313	5,397	5,516	5,423	5,576	5,225	4,991	5,183	5,187	4,964	4,857
Imports . . . . .	1,038	969	992	1,065	1,102	1,073	969	1,063	1,082	1,159	1,207
Exports . . . . .	646	746	801	724	758	768	739	775	679	642	677
Consumption . . . . .	5,704	5,620	5,706	5,764	5,920	5,530	5,221	5,472	5,590	5,481	5,387
<b>Logs:</b>											
Imports . . . . .	4	2	7	15	18	13	18	20	30	47	68
Exports . . . . .	674	602	524	460	429	451	422	384	316	326	331
Pulpwood chips, exports . . . . .	288	332	351	326	354	377	416	422	412	422	354
<b>Fuelwood consumption . . . . .</b>	<b>3,019</b>	<b>3,028</b>	<b>3,044</b>	<b>3,084</b>	<b>3,134</b>	<b>2,937</b>	<b>2,739</b>	<b>2,542</b>	<b>2,523</b>	<b>2,542</b>	<b>2,561</b>

<sup>1</sup> Includes log exports. <sup>2</sup> Includes log imports.  
Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965-1999*, Research Paper FPL-RP-595; and unpublished data. See also <<http://www.fpl.fs.fed.us/documents/flpr/flpr595.pdf>>.

## No. 839. Selected Timber Products—Imports and Exports: 1990 to 2000

Product	Unit	1990	1993	1994	1995	1996	1997	1998	1999	2000
<b>IMPORTS</b> <sup>1</sup>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	13,063	15,368	16,534	17,524	18,363	18,237	19,012	19,900	20,200
From Canada	Percent	91.2	98.0	97.4	97.0	97.1	96.2	96	93	92
Logs, total	Mil. bd. ft. <sup>3</sup>	23	94	110	80	115	128	185	294	427
From Canada	Percent	84	95	77	70	82	83	91	95	96
Paper and board <sup>4</sup>	1,000 tons	12,195	12,990	13,651	14,292	13,023	14,525	14,538	16,917	17,555
Woodpulp	1,000 tons	4,893	5,413	5,650	5,969	5,692	6,398	5,984	6,650	7,227
Plywood	Mil. sq. ft. <sup>5</sup>	1,687	1,786	1,693	1,951	1,780	2,111	2,429	2,989	2,918
<b>EXPORTS</b>										
Lumber, total <sup>2</sup>	Mil. bd. ft.	2,549	3,280	3,115	2,958	2,898	2,933	2,189	2,549	2,700
To: Canada	Percent	26	17	20	22	23	24	26	26	26
Japan	Percent	14	36	34	33	33	27	16	14	12
Europe	Percent	21	17	18	17	17	20	26	21	18
Logs, total	Mil. bd. ft. <sup>3</sup>	4,213	2,876	2,684	2,820	2,636	2,398	1,978	2,038	2,068
To: Canada	Percent	9	14	16	25	20	30	39	39	41
Japan	Percent	62	65	68	61	69	56	51	49	45
China: Mainland	Percent	9	5	3	1	1	1	1	-	-
Paper and board <sup>4</sup>	1,000 tons	5,163	6,835	7,536	7,621	9,118	10,368	9,103	9,477	10,003
Woodpulp	1,000 tons	5,905	6,499	6,728	8,261	7,170	6,990	6,025	5,438	6,409
Plywood	Mil. sq. ft. <sup>5</sup>	1,766	1,677	1,455	1,517	1,499	1,802	970	833	758

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

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965-1999*, Research Paper FPL-RP-595; and unpublished data. See also <<http://www.fpl.fs.fed.us/documnts/flrpl/fplr595.pdf>>.

## No. 840. Lumber Consumption by Species Group and End Use: 1995 to 2000

[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	1997	1998	1999	2000	End-use	1995	1997	1998	1999	2000
<b>Total</b>	<b>59.3</b>	<b>63.0</b>	<b>65.1</b>	<b>68.3</b>	<b>66.1</b>	New housing	<b>15.9</b>	<b>19.2</b>	<b>20.6</b>	<b>22.1</b>	<b>20.6</b>
Per capita	225	235	241	250	240	Residential upkeep and improvements	14.3	15.1	14.7	15.1	16.4
Species group:						New nonresidential construction <sup>1</sup>	5.8	7.5	7.8	7.6	7.7
Softwoods	47.6	50.9	52.1	54.5	54.0	Manufacturing	5.5	8.4	8.4	7.9	7.6
Hardwoods	11.7	12.1	13.0	13.8	12.2	Shipping	8.5	6.9	7.2	7.4	7.7
						Other <sup>2</sup>	10.2	6.5	6.1	7.2	6.7

<sup>1</sup> In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. <sup>2</sup> 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, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1965-1999*, Research Paper FPL-RP-595. See also <<http://www.fpl.fs.fed.us/documnts/flrpl/fplr595.pdf>>.

## No. 841. Selected Timber Products—Producer Price Indexes: 1990 to 2001

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

Product	1990	1994	1995	1996	1997	1998	1999	2000	2001, prel.
<b>Lumber and wood products</b>	<b>129.7</b>	<b>180.0</b>	<b>178.1</b>	<b>176.1</b>	<b>183.8</b>	<b>179.1</b>	<b>183.6</b>	<b>178.2</b>	<b>174.3</b>
Lumber	124.6	188.4	173.4	179.8	194.5	179.5	188.2	178.8	171.4
Softwood lumber	123.8	198.1	178.5	189.5	206.5	182.7	196.0	178.6	170.0
Hardwood lumber	131.0	168.3	167.0	163.9	174.1	178.7	177.3	185.9	181.1
Millwork	130.4	162.4	163.8	166.6	170.9	171.1	174.7	176.4	179.1
General millwork	132.0	163.6	165.4	167.9	171.1	172.4	175.6	178.0	181.6
Prefabricated structural members	122.3	169.3	163.5	167.5	177.8	170.1	178.1	175.1	173.4
Plywood	114.2	158.6	165.3	156.4	159.3	157.3	176.4	157.6	154.1
Softwood plywood	119.6	176.8	188.1	173.7	175.5	174.9	207.0	173.3	168.0
Hardwood plywood and related products	102.7	122.3	122.2	124.9	127.1	126.9	128.6	130.2	129.8
Other wood products	114.7	137.7	143.7	127.5	128.4	135.2	131.1	130.5	130.5
Boxes	119.1	141.3	145.0	147.1	149.2	150.7	152.3	155.2	154.5
Pulp, paper, and allied products	141.2	152.5	172.2	168.7	167.9	171.7	174.1	183.7	184.7
Pulp, paper, and prod., ex. bldg. paper	132.9	133.1	163.4	149.7	144.7	147.0	147.9	161.4	157.6
Woodpulp	151.3	115.9	183.2	133.1	128.6	122.6	119.7	145.3	125.6
Wastepaper	138.9	209.5	371.1	141.6	163.3	145.4	183.6	282.5	148.6
Paper	128.8	126.0	159.0	149.4	143.9	145.4	141.8	148.9	150.7
Writing and printing papers	129.1	121.7	158.4	144.6	140.0	139.9	137.8	146.6	146.5
Newsprint	119.6	116.7	161.8	159.5	133.9	143.4	(NA)	127.5	138.4
Paperboard	135.7	140.5	183.1	155.1	144.4	151.6	153.2	176.7	171.9
Converted paper & paperboard products	135.2	136.7	157.0	153.4	148.4	152.2	153.5	162.7	164.5
Office supplies and accessories	121.4	116.9	134.9	132.9	131.0	131.2	129.5	133.8	136.9
Building paper & building board mill prods.	112.2	144.1	144.9	137.2	129.6	132.9	141.6	138.8	128.9

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

## No. 842. Selected Species—Stumpage Prices In Current and Constant (1996) Dollars: 1990 to 2000

[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	2000
<b>CURRENT DOLLARS</b>											
Softwoods:											
Douglas fir <sup>1</sup>	466	395	477	318	652	454	436	331	254	315	433
Southern pine <sup>2</sup>	127	166	198	217	266	248	241	307	288	269	142
Sugar pine <sup>3</sup>	285	241	492	598	625	397	318	212	177	224	183
Ponderosa pine <sup>3,4</sup>	218	238	292	535	291	150	274	270	205	181	155
Western hemlock <sup>5</sup>	203	164	165	364	335	297	248	211	161	96	46
Hardwoods:											
All eastern hardwoods <sup>6</sup>	146	160	167	264	352	309	259	287	241	195	341
Oak, white, red, and black <sup>6</sup>	188	164	211	195	317	297	237	265	270	317	258
Maple, sugar	135	121	145	220	313	286	238	357	395	448	314
<b>CONSTANT (1996) DOLLARS<sup>8</sup></b>											
Softwoods:											
Douglas fir <sup>1</sup>	428	362	438	292	598	417	436	304	233	289	397
Southern pine <sup>2</sup>	117	152	182	199	244	228	241	282	264	247	130
Sugar pine <sup>3</sup>	262	221	451	549	574	364	318	195	163	206	168
Ponderosa pine <sup>3,4</sup>	200	218	268	491	267	138	274	248	188	166	142
Western hemlock <sup>5</sup>	186	150	151	334	307	272	248	194	148	88	42
Hardwoods:											
All eastern hardwoods <sup>6</sup>	134	147	153	242	323	283	259	263	221	179	313
Oak, white, red, and black <sup>6</sup>	172	150	194	179	291	272	237	243	248	291	237
Maple, sugar	124	111	133	202	287	262	238	328	362	411	288

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

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

## No. 843. Paper and Paperboard—Production and New Supply: 1990 to 2000

[In millions of short tons (80.45 represents 80,445,000)]

Item	1990	1993	1994	1995	1996	1997	1998	1999	2000, prel.
<b>Production, total</b>	<b>80.45</b>	<b>86.69</b>	<b>90.90</b>	<b>91.33</b>	<b>92.25</b>	<b>96.85</b>	<b>96.28</b>	<b>98.77</b>	<b>96.44</b>
Paper, total	39.36	41.75	43.36	42.87	42.48	44.70	44.76	45.98	45.64
Paperboard, total	39.32	43.11	45.72	46.64	47.95	50.33	49.70	50.97	48.99
Unbleached kraft	20.36	21.45	22.47	22.70	22.23	23.23	23.20	23.03	21.80
Semichemical	5.64	5.67	5.94	5.66	5.62	6.05	5.89	6.01	5.95
Bleached kraft	4.40	4.58	5.03	5.30	5.24	5.55	5.48	5.71	5.44
Recycled	8.92	11.41	12.28	12.98	14.87	15.51	15.14	16.22	15.80
Wet machine board E	0.15	0.15	0.15	0.15	0.10	0.10	0.10	0.10	0.10
Building paper E	0.81	0.81	0.81	0.81	0.79	0.79	0.79	0.79	0.79
Insulating board E	0.86	0.86	0.86	0.86	0.93	0.93	0.93	0.93	0.93
<b>New supply, all grades, excluding products</b>	<b>87.68</b>	<b>93.15</b>	<b>97.45</b>	<b>98.16</b>	<b>98.34</b>	<b>101.20</b>	<b>102.88</b>	<b>107.01</b>	<b>105.48</b>
Paper, total	49.49	51.25	53.08	52.77	50.69	54.15	55.13	57.30	57.30
Newsprint	13.41	12.75	12.89	12.76	11.77	12.61	12.80	13.09	13.13
Printing/writing papers	25.46	27.85	29.44	29.55	28.30	30.75	31.38	32.53	32.96
Packaging and ind. conv. papers	4.72	4.63	4.64	4.24	4.33	4.29	4.29	4.71	4.27
Tissue	5.90	6.02	6.11	6.22	6.29	6.66	6.66	6.98	6.95
Paperboard, total	36.30	39.95	42.44	43.45	43.67	45.06	45.55	47.52	46.03
Construction and other	1.90	1.95	1.94	1.95	1.99	1.99	2.20	2.19	2.14

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

## No. 844. Fishery Products—Domestic Catch, Imports, and Disposition: 1990 to 2000

[Live weight, in millions of pounds (16,349 represents 16,349,000,000). For data on commercial catch for selected countries, see Table 1339, Section 30, Comparative International Statistics]

Item	1990	1993	1994	1995	1996	1997	1998	1999	2000
<b>Total</b> . . . . .	<b>16,349</b>	<b>20,334</b>	<b>19,309</b>	<b>16,484</b>	<b>16,474</b>	<b>17,131</b>	<b>16,897</b>	<b>17,378</b>	<b>17,338</b>
For human food . . . . .	12,662	13,821	13,714	13,584	13,625	13,739	14,175	14,462	14,738
For industrial use . . . . .	3,687	6,513	5,595	2,900	2,848	3,392	2,722	2,916	2,599
<b>Domestic catch</b> . . . . .	<b>9,404</b>	<b>10,467</b>	<b>10,461</b>	<b>9,788</b>	<b>9,565</b>	<b>9,845</b>	<b>9,194</b>	<b>9,339</b>	<b>9,068</b>
For human food . . . . .	7,041	8,214	7,936	7,667	7,476	7,248	7,174	6,832	6,912
For industrial use . . . . .	2,363	2,253	2,525	2,121	2,090	2,597	2,020	2,507	2,157
<b>Imports</b> <sup>1</sup> . . . . .	<b>6,945</b>	<b>9,867</b>	<b>8,848</b>	<b>6,696</b>	<b>6,909</b>	<b>7,286</b>	<b>7,703</b>	<b>8,039</b>	<b>8,269</b>
For human food . . . . .	5,621	5,607	5,778	5,917	6,150	6,491	7,001	7,630	7,827
For industrial use . . . . .	1,324	4,260	3,070	779	759	795	702	409	442
<b>Disposition of domestic catch</b> . . . . .	<b>9,404</b>	<b>10,467</b>	<b>10,461</b>	<b>9,788</b>	<b>9,565</b>	<b>9,846</b>	<b>9,194</b>	<b>9,339</b>	<b>9,069</b>
Fresh and frozen . . . . .	6,501	7,744	7,475	7,099	7,054	6,877	6,870	6,416	6,657
Canned . . . . .	751	649	622	769	678	648	516	712	530
Reduced . . . . .	126	115	95	90	93	108	129	133	119
Reduced to meal, oil, etc.	2,026	1,959	2,269	1,830	1,740	2,213	1,679	2,078	1,763

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

## No. 845. Fisheries—Quantity and Value of Domestic Catch: 1980 to 2000

Year	Quantity (mil. lb. <sup>1</sup> )				Average price per lb. (cents)	Year	Quantity (mil. lb. <sup>1</sup> )				Average price per lb. (cents)
	Total	For human food	For industrial products <sup>2</sup>	Value (mil. dol.)			Total	For human food	For industrial products <sup>2</sup>	Value (mil. dol.)	
1980 . . . . .	6,482	3,654	2,828	2,237	34.5	1991 . . . . .	9,484	7,031	2,453	3,308	34.9
1981 . . . . .	5,977	3,547	2,430	2,388	40.0	1992 . . . . .	9,637	7,618	2,019	3,678	38.2
1982 . . . . .	6,367	3,285	3,082	2,390	37.5	1993 . . . . .	10,467	8,214	2,253	3,471	33.2
1983 . . . . .	6,439	3,238	3,201	2,355	36.6	1994 . . . . .	10,461	7,936	2,525	3,807	36.8
1984 . . . . .	6,438	3,320	3,118	2,350	36.5	1995 . . . . .	9,788	7,667	2,121	3,770	38.5
1985 . . . . .	6,258	3,294	2,964	2,326	37.2	1996 . . . . .	9,565	7,474	2,091	3,487	36.5
1986 . . . . .	6,031	3,393	2,638	2,763	45.8	1997 . . . . .	9,842	7,244	2,598	3,448	35.0
1987 . . . . .	6,896	3,946	2,950	3,115	45.2	1998 . . . . .	9,194	7,173	2,021	3,128	34.0
1988 . . . . .	7,192	4,588	2,604	3,520	48.9	1999 . . . . .	9,339	6,832	2,507	3,467	37.1
1989 . . . . .	8,463	6,204	2,259	3,338	38.3	2000 . . . . .	9,069	6,912	2,157	3,550	39.1
1990 . . . . .	9,404	7,041	2,363	3,522	37.5						

<sup>1</sup> Live weight. <sup>2</sup> Meal, oil, fish solubles, homogenized condensed fish, shell products, bait, and animal food. <sup>3</sup> Represents record year.

## No. 846. Domestic Fish and Shellfish Catch and Value by Major Species Caught: 1990 to 2000

Species	Quantity (1,000 lb.)				Value (\$1,000)			
	1990	1995	1999	2000	1990	1995	1999	2000
<b>Total</b> . . . . .	<b>9,403,571</b>	<b>9,787,554</b>	<b>9,339,034</b>	<b>9,068,985</b>	<b>3,521,995</b>	<b>3,735,615</b>	<b>3,467,084</b>	<b>3,549,481</b>
<b>Fish, total</b> <sup>1</sup> . . . . .	<b>8,091,068</b>	<b>8,520,086</b>	<b>7,811,868</b>	<b>7,689,661</b>	<b>1,900,097</b>	<b>1,915,642</b>	<b>1,558,292</b>	<b>1,594,815</b>
<b>Cod:</b>								
Atlantic . . . . .	95,881	29,631	21,445	25,060	61,329	28,184	23,943	26,384
Pacific . . . . .	526,396	591,399	523,987	530,505	91,384	109,680	83,227	142,330
Flounder . . . . .	254,519	423,443	331,218	412,723	112,921	150,239	89,946	109,910
Halibut . . . . .	70,454	44,796	80,330	75,190	96,700	66,781	124,696	143,826
Herring, sea; Atlantic . . . . .	113,095	147,181	175,478	160,269	5,746	8,654	11,082	9,972
Herring, sea; Pacific . . . . .	108,120	117,479	91,059	74,835	32,178	49,245	14,989	12,043
Menhaden . . . . .	1,962,160	1,846,959	1,989,081	1,760,498	93,896	99,131	113,082	112,403
Pollock, Alaska . . . . .	3,108,031	2,852,618	2,325,889	2,606,802	268,344	259,614	162,812	160,525
Salmon . . . . .	733,146	1,020,765	814,896	628,638	612,367	486,107	359,785	270,213
Tuna . . . . .	62,393	63,864	58,120	50,779	105,040	102,638	86,254	95,176
Whiting (Atlantic, silver) . . . . .	44,500	33,548	30,997	26,855	11,281	14,632	14,282	11,370
Whiting (Pacific, hake) . . . . .	21,232	390,302	478,154	452,718	1,229	18,002	18,593	18,809
<b>Shellfish, total</b> <sup>1</sup> . . . . .	<b>1,312,503</b>	<b>1,267,468</b>	<b>1,527,166</b>	<b>1,379,324</b>	<b>1,621,898</b>	<b>1,819,973</b>	<b>1,908,792</b>	<b>1,954,666</b>
Clams . . . . .	139,198	134,224	112,230	118,482	130,194	140,414	135,024	153,973
Crabs . . . . .	499,416	363,639	458,307	299,006	483,837	511,987	521,237	405,006
Lobsters: American . . . . .	61,017	66,406	87,469	83,180	154,677	214,838	322,957	301,300
Oysters . . . . .	29,193	40,380	26,983	41,146	93,718	101,574	72,658	90,667
Sea . . . . .	39,917	18,316	23,038	32,747	153,696	92,826	125,289	164,609
Shrimp . . . . .	346,494	306,869	304,173	332,486	491,433	570,034	560,501	690,453
Squid, Pacific . . . . .	36,082	155,280	199,888	259,508	2,636	22,660	34,954	27,077

<sup>1</sup> Includes other types of fish and shellfish, not shown separately.

Source of Tables 844-846: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <<http://www.st.nmfs.gov/st1/fus/fus00/2000-fus.pdf>> (released August 2001).



## No. 847. U.S. Private Aquaculture—Trout and Catfish Production and Value: 1990 to 2001

[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	1995	1996	1997	1998	1999	2000	2001
<b>TROUT FOODSIZE</b>									
Number sold	Millions	67.8	60.2	56.5	59.3	57.6	61.0	58.5	54.6
Total weight	Mil. lb.	56.8	55.6	53.6	56.9	57.9	60.2	59.2	56.9
Total value of sales	Mil. dol.	64.6	60.8	57.0	60.7	60.3	64.7	63.7	64.5
Average price received	Dol./lb.	1.14	1.09	1.06	1.07	1.04	1.07	1.08	1.13
Percent sold to processors	Percent	58	68	67	63	62	68	70	68
<b>CATFISH FOODSIZE</b>									
Number sold	Millions	272.9	321.8	375.4	391.8	409.8	424.5	420.1	406.7
Total weight	Mil. lb.	392.4	481.5	526.3	569.6	601.4	635.2	633.8	647.2
Total value of sales	Mil. dol.	305.1	378.1	403.3	406.8	445.4	464.7	468.8	410.5
Average price received	Dol./lb.	0.78	0.79	0.77	0.71	0.74	0.73	0.74	0.63
Fish sold to processors	Mil. lb.	360.4	446.9	472.1	524.9	564.4	596.6	593.6	597.1
Avg. price paid by processors	Cents/lb.	75.8	78.6	77.3	71.2	74.3	73.7	75.1	64.7
Processor sales	Mil. lb.	183.1	227.0	237.2	261.8	281.4	292.7	297.2	296.4
Avg. price received by processors	Cents/lb.	224.1	240.3	236.9	226.0	229.0	234.0	236.0	226.0
Inventory (Jan. 1)	Mil. lb.	9.4	10.9	11.9	11.9	10.8	12.6	13.6	15.0

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

## No. 848. Supply of Selected Fishery Items: 1990 to 2000

[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	1993	1994	1995	1996	1997	1998	1999	2000
Shrimp	Heads-off weight	734	808	847	832	842	923	1,002	1,084	1,172
Tuna, canned	Canned weight	856	835	850	875	859	829	912	1,020	980
Snow crab	Round weight	37	66	40	42	46	110	254	216	122
Clams	Meat weight	152	156	144	144	134	124	119	125	133
Salmon, canned	Canned weight	148	114	117	147	104	82	83	123	95
American lobster	Round weight	95	92	101	94	97	112	110	122	124
Spiny lobster	Round weight	89	76	76	89	81	76	100	91	97
Scallops	Meat weight	74	66	76	62	71	66	58	64	77
Sardines, canned	Canned weight	61	41	48	44	46	49	50	57	(NA)
Oysters	Meat weight	56	48	50	63	58	58	61	55	71
King crab	Round weight	19	8	12	21	30	45	62	52	49
Crab meat, canned	Canned weight	9	9	9	12	13	15	22	26	29

NA Not available.

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

## No. 849. Canned, Fresh, and Frozen Fishery Products—Production and Value: 1990 to 2000

[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	1998	1999	2000	1990	1995	1998	1999	2000
<b>Canned, total</b> <sup>1</sup>	<b>1,178</b>	<b>1,927</b>	<b>1,533</b>	<b>1,897</b>	<b>1,744</b>	<b>1,562</b>	<b>1,887</b>	<b>1,775</b>	<b>1,861</b>	<b>1,623</b>
Tuna	581	667	681	664	671	902	939	983	946	855
Salmon	196	244	159	234	171	366	419	274	393	288
Clam products	110	129	113	123	125	76	110	105	110	117
Sardines, Maine	13	14	12	12	(Z)	17	24	19	20	(Z)
Shrimp	1	1	2	2	2	3	7	2	10	11
Crabs	1	(Z)	(Z)	(Z)	(Z)	4	(Z)	(Z)	(Z)	(Z)
Oysters	1	(Z)	(Z)	(Z)	(Z)	1	(Z)	(Z)	(Z)	(Z)
<b>Fish fillets and steaks</b> <sup>3</sup>	<b>441</b>	<b>385</b>	<b>422</b>	<b>362</b>	<b>369</b>	<b>843</b>	<b>841</b>	<b>961</b>	<b>807</b>	<b>830</b>
Cod	65	65	67	61	56	132	152	161	108	165
Flounder	54	35	24	23	27	154	86	70	67	72
Haddock	7	3	6	5	5	24	11	22	20	21
Ocean perch, Atlantic	1	(Z)	1	1	1	1	1	2	2	2
Rockfish	33	25	16	11	11	53	38	33	23	25
Pollock, Atlantic	12	4	4	2	2	21	10	7	4	4
Pollock, Alaska	164	135	161	144	160	174	184	190	169	179
Other	105	118	143	115	107	284	359	476	414	362

Z Less than 500,000 pounds or \$500,000. <sup>1</sup> Includes other products, not shown separately. <sup>2</sup> Includes oyster specialties. <sup>3</sup> Fresh and frozen.

Source: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States*, annual. See also <<http://www.st.nmfs.gov/st1/fus/fus00/2000-fus.pdf>> (released August 2001).

## No. 850. 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 <sup>1</sup>	All employees						
		Estab- lish- ments	Number <sup>2</sup>	Payroll		Produc- tion workers, total <sup>2</sup>	Value added by manufac- tures (mil. dol.)	Value of ship- ments (mil. dol.)
				Total (mil. dol.)	Per employee (dol.)			
<b>Mining, total . . . . .</b>	<b>21</b>	<b>25,000</b>	<b>509,006</b>	<b>20,798</b>	<b>40,861</b>	<b>389,232</b>	<b>133,636</b>	<b>173,985</b>
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

<sup>1</sup> North American Industrial Classification System, 1997; see text, Section 15, Business Enterprise. <sup>2</sup> For pay period including March 12.

Source: U.S. Census Bureau, 1997 Economic Census, Mining, Series EC97N21S-GS, April 2001. The next update for these data will be after the 2002 Economic Census.

## No. 851. 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				Value added by manufac- tures (mil. dol.)	State	All employees				Value added by manufac- tures (mil. dol.)
	Estab- lish- ments, total	Num- ber <sup>1</sup>	Payroll (mil. dol.)	Produc- tion work- ers <sup>1</sup>			Estab- lish- ments, total	Num- ber <sup>1</sup>	Payroll (mil. dol.)	Produc- tion work- ers <sup>1</sup>	
<b>United States . . . . .</b>	<b>25,000</b>	<b>509,006</b>	<b>20,798</b>	<b>389,232</b>	<b>133,636</b>	Montana . . . . .	294	5,328	216	3,864	1,047
Alabama . . . . .	291	9,066	371	7,421	1,775	Nebraska . . . . .	150	1,078	31	858	104
Alaska . . . . .	141	10,137	672	7,585	9,565	Nevada . . . . .	250	14,035	626	12,451	1,959
Arizona . . . . .	206	12,889	510	10,699	2,171	New Hampshire . . . . .	32	396	18	293	44
Arkansas . . . . .	307	3,250	98	2,602	704	New Jersey . . . . .	95	1,864	84	1,350	243
California . . . . .	910	22,110	945	16,908	7,497	New Mexico . . . . .	606	14,600	574	11,520	5,336
Colorado . . . . .	885	12,263	522	7,881	2,872	New York . . . . .	359	3,879	142	2,819	474
Connecticut . . . . .	62	626	27	467	105	North Carolina . . . . .	171	3,231	118	2,644	533
Delaware <sup>2</sup> . . . . .	11	107	4	90	15	North Dakota . . . . .	227	4,098	176	3,361	1,017
Florida . . . . .	225	6,688	249	5,424	1,009	Ohio . . . . .	828	11,997	454	8,961	1,746
Georgia . . . . .	205	6,354	233	4,984	1,024	Oklahoma . . . . .	2,271	25,976	967	16,957	5,509
Hawaii . . . . .	7	120	6	100	22	Oregon . . . . .	134	1,739	61	1,216	161
Idaho . . . . .	118	3,021	118	2,418	291	Pennsylvania . . . . .	914	17,522	677	14,262	2,411
Illinois . . . . .	650	10,798	437	8,557	1,381	Rhode Island . . . . .	16	120	5	82	13
Indiana . . . . .	347	6,007	241	5,013	795	South Carolina . . . . .	74	1,388	47	1,039	166
Iowa . . . . .	177	1,700	55	1,428	217	South Dakota . . . . .	67	1,837	67	1,635	166
Kansas . . . . .	1,026	7,998	245	5,993	2,178	Tennessee . . . . .	221	4,473	137	3,614	479
Kentucky . . . . .	691	22,400	832	19,413	3,297	Texas . . . . .	6,412	105,492	4,334	73,686	32,485
Louisiana . . . . .	1,608	52,816	2,302	38,255	21,889	Utah . . . . .	316	8,134	335	6,593	1,875
Maine . . . . .	21	76	1	50	4	Vermont . . . . .	52	658	22	538	72
Maryland . . . . .	93	1,771	64	1,429	257	Virginia . . . . .	417	11,711	429	9,860	1,449
Massachusetts . . . . .	72	1,063	42	704	110	Washington . . . . .	154	2,890	114	2,170	349
Michigan . . . . .	445	6,687	271	5,030	1,182	West Virginia . . . . .	766	23,927	1,042	20,450	4,161
Minnesota . . . . .	145	7,154	348	6,071	954	Wisconsin . . . . .	147	2,304	92	1,598	312
Mississippi . . . . .	368	4,096	115	3,100	531	Wyoming . . . . .	669	15,436	723	12,367	5,395
Missouri . . . . .	306	4,561	146	3,645	503	Offshore areas . . . . .	41	11,135	455	9,717	5,782

<sup>1</sup> For pay period including March 12. <sup>2</sup> District of Columbia is included with Delaware.

Source: U.S. Census Bureau, 1997 Economic Census, Mining, Series EC97N21S-GS, April 2001. The next update for these data will be after the 2002 Economic Census.

## No. 852. Mining and Primary Metal Production Indexes: 1990 to 2001

[Index 1992=100]

Industry group	1990	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Mining</b>	<b>104.8</b>	<b>100.0</b>	<b>102.3</b>	<b>102.0</b>	<b>103.5</b>	<b>105.3</b>	<b>102.9</b>	<b>98.2</b>	<b>100.7</b>	<b>101.3</b>
Coal	103.7	94.0	103.0	102.6	105.0	108.2	109.7	107.8	107.1	111.7
Oil and gas extraction	106.4	101.1	101.6	100.4	101.6	102.5	98.6	92.4	95.6	96.1
Crude oil and natural gas	101.6	98.0	98.1	96.5	95.9	95.6	93.8	90.5	90.6	90.9
Oil and gas drilling	151.1	122.4	126.2	125.8	137.5	147.8	131.6	103.3	132.0	140.2
Metal mining	93.1	98.7	100.5	101.8	104.3	108.8	108.1	99.8	97.2	88.4
Iron ore	101.4	100.0	104.3	112.3	111.3	113.6	112.7	103.6	113.6	83.1
Nonferrous ores	91.9	98.5	100.0	100.4	103.4	108.1	107.5	99.4	94.5	89.3
Copper ore	89.4	102.0	104.7	104.7	108.7	109.9	105.4	90.7	81.4	76.9
<b>Primary metals, manufacturing</b>	<b>104.0</b>	<b>105.1</b>	<b>113.8</b>	<b>116.2</b>	<b>119.7</b>	<b>125.5</b>	<b>127.7</b>	<b>129.4</b>	<b>131.9</b>	<b>116.9</b>
Nonferrous metals	100.9	103.9	113.0	115.7	120.4	127.3	132.3	136.1	137.7	122.3
Copper	81.6	116.4	111.4	121.8	103.4	109.6	133.4	124.8	100.1	102.1
Aluminum	100.4	91.7	81.8	83.7	88.5	89.4	92.1	93.7	90.8	65.5
Iron and steel	106.4	106.0	114.4	116.6	119.1	123.9	124.0	123.9	127.3	112.6

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. 853. Mineral Industries—Employment, Hours, and Earnings: 1990 to 2001

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

Industry and item	Unit	1990	2000	2001	Industry and item	Unit	1990	2000	2001
All mining:					Avg. weekly hours	Number	43.9	41.5	41.4
All employees	1,000	709	543	563	Avg. weekly earnings	Dollars	568	718	738
Production workers	1,000	509	417	441	Metal mining:				
Avg. weekly hours	Number	44.1	43.1	43.4	All employees	1,000	58	41	36
Avg. weekly earnings	Dollars	603	743	766	Production workers	1,000	46	31	27
Coal mining:					Avg. weekly hours	Number	42.8	43.4	43.5
All employees	1,000	147	77	78	Avg. weekly earnings	Dollars	601	809	825
Production workers	1,000	119	63	66	Nonmetallic minerals, except fuels:				
Avg. weekly hours	Number	44.0	44.5	47.1	All employees	1,000	110	114	113
Avg. weekly earnings	Dollars	735	850	897	Production workers	1,000	83	87	86
Oil and gas extraction:					Avg. weekly hours	Number	45.3	46.2	46.8
All employees	1,000	395	311	337	Avg. weekly earnings	Dollars	525	707	737
Production workers	1,000	261	237	263					

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

## No. 854. Selected Mineral Products—Average Prices: 1980 to 2001

[Excludes Alaska and Hawaii, except as noted]

Year	Nonfuels							Fuels			
	Copper, electro-lytic (cents per lb.)	Platinum <sup>1</sup> (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 <sup>2</sup> (dol./metric ton)	Bituminous coal <sup>3,4</sup> (dol./short ton)	Crude petroleum <sup>3</sup> (dol./bbl.)	Natural gas <sup>3</sup> (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	619	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	1.96
1999	76	379	280	5.25	44	366	54	37.81	23.88	15.56	2.19
2000	89	549	280	5.00	44	370	56	24.73	24.15	26.72	3.69
2001	77	533	272	4.39	44	315	44	(NA)	(NA)	21.84	4.12

NA Not available. <sup>1</sup> Average annual dealer prices. <sup>2</sup> F.o.b. works. <sup>3</sup> Average value at the point of production or domestic first purchase price. <sup>4</sup> 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. 855. Mineral Production: 1990 to 2001

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

Mineral	Unit	1990	1995	1999	2000	2001, est.
<b>FUEL MINERALS</b>						
Coal, total	Mil. sh. tons	1,029.1	1,033.0	1,100.4	1,073.6	1,121.3
Bituminous	Mil. sh. tons	693.2	613.8	601.7	574.3	(NA)
Subbituminous	Mil. sh. tons	244.3	328.0	406.7	409.2	(NA)
Lignite	Mil. sh. tons	88.1	86.5	87.2	85.6	(NA)
Anthracite	Mil. sh. tons	3.5	4.7	4.8	4.6	(NA)
Natural gas (marketed production)	Tril. cu. ft.	18.59	19.51	19.80	20.00	20.47
Petroleum (crude)	Mil. bbl. <sup>1</sup>	2,686	2,394	2,147	2,125	2,118
Uranium (recoverable content)	Mil. lb.	8.9	6.0	4.6	4.0	2.6
<b>NONFUEL MINERALS</b>						
Asbestos (sales)	1,000 metric tons	(D)	9	7	5	5
Barite, primary, sold/used by producers	1,000 metric tons	430	543	434	392	400
Boron minerals, sold or used by producers	1,000 metric tons	1,090	1,190	1,220	1,070	(NA)
Bromine, sold or used by producers	1,000 metric tons	177	218	239	228	204
Cement:						
Portland	Mil. metric tons	67	73	82	84	(NA)
Masonry	Mil. metric tons	3	4	4	4	(NA)
Clays	1,000 metric tons	42,900	43,100	42,200	40,800	40,600
Diatomite	1,000 metric tons	631	722	747	677	735
Feldspar <sup>2</sup>	1,000 metric tons	630	880	875	790	780
Fluorspar, finished shipments	1,000 metric tons	64	51	-	-	-
Garnet (industrial)	1,000 metric tons	47	46	61	60	53
Gypsum, crude	Mil. metric tons	15	17	22	20	19
Helium <sup>3</sup>	Mil. cu. meters	85	101	114	98	100
Lime, sold or used by producers	Mil. metric tons	16	19	20	20	19
Mica, scrap & flake, sold/used by producers	1,000 metric tons	109	108	104	101	95
Peat, sales by producers	1,000 metric tons	721	660	731	755	812
Perlite, processed, sold or used	1,000 metric tons	576	700	711	672	650
Phosphate rock (marketable)	Mil. metric tons	46	44	41	39	34
Potash (K <sub>2</sub> O equivalent) sales	1,000 metric tons	1,710	1,480	1,200	1,300	1,200
Pumice & pumicite, producer sales	1,000 metric tons	443	529	643	697	687
Salt, common, sold/used by producers	Mil. metric tons	37	41	45	46	45
Sand & gravel, sold/used by producer	Mil. metric tons	855	935	1,139	1,148	1,149
Construction	Mil. metric tons	829	907	1,110	1,120	1,120
Industrial	Mil. metric tons	26	28	29	28	29
Sodium carbonate (natural) (soda ash)	1,000 metric tons	9,100	10,100	10,200	10,200	10,300
Sodium sulfate (natural)	1,000 metric tons	349	327	599	491	510
Stone	Mil. metric tons	1,110	2,420	2,600	2,810	2,920
Crushed and broken	Mil. metric tons	1,110	1,260	1,540	1,560	1,620
Dimension <sup>5</sup>	1,000 metric tons	1,120	1,160	1,250	1,250	1,300
Sulfur: Total shipments	1,000 metric tons	11,500	12,100	11,100	10,300	9,200
Sulfur: Frasch mines (shipments)	1,000 metric tons	3,680	(D)	(D)	10,500	9,100
Talc, and pyrophyllite, crude	1,000 metric tons	1,270	1,060	925	851	914
Vermiculite concentrate	1,000 metric tons	209	171	175	150	150
<b>METALS</b>						
Antimony ore and concentrate	Metric tons	(D)	262	449	(D)	300
Aluminum	1,000 metric tons	4,048	3,375	3,779	3,668	2,600
Bauxite (dried)	1,000 metric tons	(D)	(D)	(NA)	(NA)	(NA)
Copper (recoverable content)	1,000 metric tons	1,590	1,850	1,600	1,440	1,340
Gold (recoverable content)	Metric tons	294	317	341	353	350
Iron ore (gross weight) <sup>6</sup>	Mil. metric tons	57	61	58	63	60
Lead (recoverable content)	1,000 metric tons	484	394	520	468	420
Magnesium metal	1,000 metric tons	139	142	(D)	(D)	(D)
Manganiferous ore (gross weight) <sup>7</sup>	1,000 metric ton	(D)	(D)	-	-	(NA)
Mercury <sup>8</sup>	Metric tons	562	(D)	(NA)	(NA)	-
Molybdenum (concentrate)	1,000 metric tons	62	61	43	41	38
Nickel	1,000 metric tons	-	2	-	-	-
Palladium metal	Kilograms	5,930	5,260	9,800	10,300	12,000
Platinum metal	Kilograms	1,810	1,590	2,920	3,110	3,600
Silicon (silicon content)	1,000 metric tons	418	396	423	367	301
Silver (recoverable content)	Metric tons	2,120	1,560	1,950	1,860	1,800
Titanium concentrate: Ilmenite (gross weight)	1,000 metric tons	(D)	(D)	(D)	(NA)	(NA)
Tungsten ore and concentrate <sup>9</sup>	Metric tons	(D)	(D)	-	-	(NA)
Zinc (recoverable content)	1,000 metric tons	515	614	843	829	830

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. <sup>1</sup> 42 gal. bbl. <sup>2</sup> Beginning 1995, includes apatite. <sup>3</sup> Refined. <sup>4</sup> Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table. Includes calcareous marl and slate. <sup>5</sup> Includes Puerto Rico. <sup>6</sup> Represents shipments; includes byproduct ores. <sup>7</sup> 5 to 35 percent manganiferous ore. <sup>8</sup> Covers mercury recovered as a byproduct of gold ores only. <sup>9</sup> 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. 856. Nonfuel Mineral Commodities—Summary: 2001

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

Mineral	Mineral disposition					Average price per unit (dollars)	Employment (number)
	Unit	Production	Exports	Net import reliance <sup>1</sup> (percent)	Consumption, apparent		
Aluminum . . . . .	1,000 metric tons.	2,600	1,500	35	6,000	<sup>2</sup> 70.00	15,700
Antimony (contained) . . . . .	Metric tons . . . . .	<sup>3</sup> 300	1,500	86	49,800	<sup>6</sup> 265.00	70
Asbestos . . . . .	1,000 metric tons.	5	16	100	(NA)	206.00	20
Barite . . . . .	1,000 metric tons.	400	40	87	2,960	<sup>4</sup> 425.00	340
Bauxite and alumina . . . . .	1,000 metric tons.	(NA)	(NA)	100	3,200	<sup>4</sup> 424.00	(NA)
Beryllium (contained) . . . . .	Metric tons . . . . .	180	40	39	295	<sup>2</sup> <sup>8</sup> 338.00	(NA)
Bismuth (contained) . . . . .	Metric tons . . . . .	-	600	95	2,200	<sup>3</sup> 38.00	-
Boron (B <sub>2</sub> O <sub>3</sub> content) . . . . .	1,000 metric tons.	650	100	( <sup>5</sup> )	482	<sup>4</sup> <sup>7</sup> 376.00	1,300
Bromine (contained) . . . . .	1,000 metric tons.	204	20	5	214	<sup>8</sup> <sup>9</sup> 67.00	1,700
Cadmium (contained) . . . . .	Metric tons . . . . .	<sup>3</sup> 1,400	280	3	1,440	<sup>2</sup> <sup>10</sup> 0.15	(NA)
Cement . . . . .	1,000 metric tons.	89,600	738	21	114,000	<sup>4</sup> 79.00	18,000
Chromium . . . . .	1,000 metric tons.	<sup>11</sup> 120	60	78	540	<sup>4</sup> <sup>12</sup> (NA)	-
Clays . . . . .	1,000 metric tons.	40,600	5,130	( <sup>5</sup> )	35,500	<sup>2</sup> 10.70	9,250
Cobalt (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 2,500	3,000	78	11,200	<sup>2</sup> 10.70	(NA)
Copper (Mine, contained) . . . . .	1,000 metric tons.	1,340	670	31	2,770	<sup>10</sup> 1.00	-
Diamond (industrial) . . . . .	Million carats . . . . .	418	911	83	626	<sup>14</sup> 0.31	-
Diatomite . . . . .	1,000 metric tons.	735	131	( <sup>5</sup> )	604	<sup>4</sup> 256.00	1,000
Feldspar . . . . .	1,000 metric tons.	780	5	( <sup>3</sup> )	782	<sup>4</sup> 54.00	400
Fluorspar . . . . .	1,000 metric tons.	(NA)	21	100	636	0.00	5
Garnet (industrial) . . . . .	Metric tons . . . . .	52,500	10,000	20	59,600	<sup>4</sup> 50-2,000	220
Germanium (contained) . . . . .	Kilograms . . . . .	20,000	(NA)	(NA)	(NA)	(NA)	90
Gold (contained) . . . . .	Metric tons . . . . .	350	580	( <sup>5</sup> )	(NA)	<sup>17</sup> 280.00	9,800
Gypsum (crude) . . . . .	1,000 metric tons.	18,800	198	25	33,200	<sup>8</sup> 8.46	5,900
Iodine . . . . .	Metric tons . . . . .	1,700	1,000	72	6,000	<sup>8</sup> <sup>21</sup> 14.28	30
Iron ore (usable) . . . . .	Million metric tons.	63	6	15	71	<sup>4</sup> <sup>22</sup> 25.00	6,000
Iron and steel slag (metal) . . . . .	1,000 metric tons.	18,000	20	8	19,000	<sup>4</sup> 8.60	2,700
Lead (contained) . . . . .	1,000 metric tons.	420	100	20	1,650	<sup>2</sup> 44.00	1,000
Lime . . . . .	1,000 metric tons.	18,700	90	(Z)	18,800	76.00	5,500
Magnesium compounds . . . . .	1,000 metric tons.	360	50	( <sup>5</sup> )	590	(NA)	450
Magnesium metal . . . . .	1,000 metric tons.	(D)	20	44	120	1.25	375
Mercury . . . . .	Metric tons . . . . .	<sup>11</sup> (NA)	50	(NA)	(NA)	<sup>26</sup> 140.00	(NA)
Mica, scrap and flake . . . . .	1,000 metric tons.	95	10	19	118	<sup>4</sup> 140.00	(NA)
Molybdenum (contained) . . . . .	Metric tons . . . . .	38,300	32,300	( <sup>5</sup> )	22,300	<sup>5</sup> 20.00	290
Nickel (contained) . . . . .	Metric tons . . . . .	-	9,040	56	128,000	<sup>2</sup> <sup>27</sup> 2.69	1
Nitrogen (fixed)-ammonia . . . . .	1,000 metric tons.	9,500	670	29	13,500	<sup>4</sup> <sup>28</sup> 150.00	1,800
Peat . . . . .	1,000 metric tons.	812	25	50	1,620	<sup>4</sup> 23.00	800
Perlite . . . . .	1,000 metric tons.	650	39	18	796	<sup>4</sup> 31.55	145
Phosphate rock . . . . .	1,000 metric tons.	34,200	50	2	(NA)	<sup>4</sup> 25.00	6,000
Platinum-group metals . . . . .	Kilograms . . . . .	(NA)	(NA)	(NA)	(NA)	<sup>17</sup> <sup>29</sup> (NA)	(NA)
Potash (K <sub>2</sub> O equivalent) . . . . .	1,000 metric tons.	1,200	410	80	5,400	<sup>4</sup> <sup>30</sup> 155.00	670
Pumice and pumicite . . . . .	1,000 metric tons.	687	25	35	1,050	<sup>4</sup> 24.53	80
Salt . . . . .	1,000 metric tons.	45,100	900	17	54,200	<sup>4</sup> <sup>31</sup> 117.00	4,100
Silicon (contained) . . . . .	1,000 metric tons.	301	25	42	518	(NA)	(NA)
Silver (contained) . . . . .	Metric tons . . . . .	1,800	470	44	5,800	<sup>17</sup> 5.00	1,300
Sodium carbonate (soda ash) . . . . .	1,000 metric tons.	10,300	4,100	( <sup>5</sup> )	6,200	<sup>33</sup> 105.00	2,700
Sodium sulfate . . . . .	1,000 metric tons.	510	220	( <sup>5</sup> )	330	<sup>34</sup> 114.00	225
Stone (crushed) . . . . .	Million metric tons.	1,620	4	1	1,631	<sup>4</sup> 5.53	79,200
Sulfur (all forms) . . . . .	1,000 metric tons.	9,200	840	12	10,400	<sup>4</sup> <sup>35</sup> 18.00	2,700
Talc . . . . .	1,000 metric tons.	914	136	1	925	<sup>4</sup> 118.00	620
Thallium (contained) . . . . .	Kilograms . . . . .	-	(NA)	100	(NA)	<sup>84</sup> 295.00	(NA)
Tin (contained) . . . . .	Metric tons . . . . .	<sup>11</sup> 15,500	6,800	88	56,900	<sup>2</sup> 19.00	(NA)
Titanium dioxide . . . . .	1,000 metric tons.	1,340	432	( <sup>5</sup> )	1,100	<sup>2</sup> <sup>36</sup> 1.00	4,600
Tungsten (contained) . . . . .	Metric tons . . . . .	-	5,140	59	14,000	<sup>37</sup> 64.00	(NA)
Vermiculite . . . . .	1,000 metric tons.	150	5	27	205	<sup>4</sup> 11.00	230
Zinc (contained) . . . . .	1,000 metric tons.	830	532	60	1,500	<sup>2</sup> 20.45	2,400
Zirconium (Zr <sub>2</sub> O <sub>2</sub> ) content . . . . .	Metric tons . . . . .	(D)	41,180	(D)	(NA)	<sup>4</sup> <sup>39</sup> 350	(D)

- Represents or rounds to zero. D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Calculated as a percent of apparent consumption. <sup>2</sup> Dollars per pound. <sup>3</sup> Refinery production. <sup>4</sup> Dollars per metric ton. <sup>5</sup> Net exporter. <sup>6</sup> Metal, vacuum-cast ingot. <sup>7</sup> Granulated pentahydrate borax in bulk, f.o.b. mine. <sup>8</sup> Dollars per kilogram. <sup>9</sup> Bulk, purified bromine. <sup>10</sup> 1- to 5-short ton lots. <sup>11</sup> Secondary production. <sup>12</sup> Turkish, chromite price. <sup>13</sup> Columbite price. <sup>14</sup> Value of imports, dollars per carat. <sup>15</sup> Reported consumption. <sup>16</sup> Zone refined. <sup>17</sup> Dollars per troy ounce. <sup>18</sup> Price of flake imports. <sup>19</sup> Includes employment at calcining plants. <sup>20</sup> 99.97% indium. <sup>21</sup> C.i.f. value, crude, per kilogram. <sup>22</sup> Price of eastern Canadian ore. <sup>23</sup> Delivered, No. 1 Heavy Melting composite price. <sup>24</sup> Year-end price. <sup>25</sup> 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. <sup>26</sup> Dollars per 76-pound flask. <sup>27</sup> London Metal Exchange cash price. <sup>28</sup> F.o.b. gulf coast. <sup>29</sup> Dealer price of platinum. <sup>30</sup> Price of K2O, muriate. <sup>31</sup> Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. <sup>32</sup> Ferrosilicon, 50% Si. <sup>33</sup> Quoted year-end price, dense, bulk, f.o.b. Green River, WY, dollars per short ton. <sup>34</sup> Quoted price, bulk, f.o.b. works, East, dollars per short ton. <sup>35</sup> Elemental sulfur, f.o.b. mine and/or plant. <sup>36</sup> Rutile, list, year-end. <sup>37</sup> Dollars per unit W03 (7.93 kilograms of contained tungsten per unit). <sup>38</sup> All forms. <sup>39</sup> Price for imported zircon, f.o.b. U.S. east coast.

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

## No. 857. Value of Domestic Nonfuel Mineral Production by State: 1990 to 2001

[In millions of dollars (33,445 represents 33,445,000,000), except as indicated. For similar data on fuels, see Table 864]

State						2001, prel.		
	1990	1995	1998	1998	2000	Total (mil. dol.)	Rank	Percent of U.S.
<b>United States<sup>1</sup> . . .</b>	<b>33,445</b>	<b>38,506</b>	<b>39,600</b>	<b>39,100</b>	<b>40,100</b>	<b>38,900</b>	<b>(X)</b>	<b>100.00</b>
Alabama . . . . .	559	706	1,010	1,080	1,070	938	16	2.41
Alaska . . . . .	577	538	999	1,090	1,140	1,060	13	2.73
Arizona . . . . .	3,085	4,190	2,770	2,510	2,550	2,110	4	5.43
Arkansas . . . . .	381	492	484	518	506	491	30	1.26
California . . . . .	2,771	2,760	2,980	3,200	3,350	3,250	1	8.35
Colorado . . . . .	377	570	650	555	566	676	22	1.74
Connecticut . . . . .	122	93	99	<sup>3</sup> 103	<sup>3</sup> 100	104	43	0.27
Delaware <sup>2</sup> . . . . .	10	312	310	312	312	13	50	0.03
Florida . . . . .	1,574	1,540	1,810	1,930	1,920	1,750	5	4.5
Georgia . . . . .	1,504	1,690	1,720	1,840	1,660	1,610	7	4.13
Hawaii . . . . .	106	114	85	89	91	70	45	0.18
Idaho . . . . .	375	510	453	420	398	344	35	0.88
Illinois . . . . .	667	828	875	913	907	911	17	2.34
Indiana . . . . .	428	589	691	717	729	718	20	1.84
Iowa . . . . .	310	456	518	537	510	487	31	1.25
Kansas . . . . .	349	498	551	566	624	640	23	1.64
Kentucky . . . . .	359	432	498	483	497	531	26	1.37
Louisiana . . . . .	368	434	347	374	404	274	37	0.7
Maine . . . . .	65	68	92	101	<sup>3</sup> 102	91	44	0.23
Maryland . . . . .	368	324	352	336	357	356	33	0.92
Massachusetts . . . . .	128	190	204	204	210	209	39	0.54
Michigan . . . . .	1,440	1,520	1,670	1,660	1,670	1,620	6	4.17
Minnesota . . . . .	1,482	1,530	1,740	1,580	1,570	1,440	8	3.7
Mississippi . . . . .	111	131	149	190	157	177	41	0.45
Missouri . . . . .	1,105	1,140	1,320	1,380	1,320	1,340	9	3.45
Montana . . . . .	573	574	502	491	582	514	29	1.32
Nebraska . . . . .	90	146	96	163	170	163	42	0.42
Nevada . . . . .	2,621	3,060	3,170	2,780	<sup>3</sup> 2,800	2,930	2	7.53
New Hampshire . . . . .	36	50	368	364	359	60	47	0.16
New Jersey . . . . .	229	243	290	300	286	348	34	0.9
New Mexico . . . . .	1,103	1,130	888	671	812	615	24	1.58
New York . . . . .	773	886	972	935	970	1,050	14	2.7
North Carolina . . . . .	586	735	750	761	779	744	19	1.91
North Dakota . . . . .	25	31	38	38	42	39	48	0.1
Ohio . . . . .	733	891	1,030	1,040	1,060	1,070	12	2.74
Oklahoma . . . . .	259	357	460	475	453	530	28	1.36
Oregon . . . . .	205	239	301	303	<sup>3</sup> 439	326	36	0.84
Pennsylvania . . . . .	1,031	1,080	1,230	<sup>3</sup> 1,270	<sup>3</sup> 1,250	1,270	11	3.27
Rhode Island . . . . .	18	31	25	25	24	28	49	0.07
South Carolina . . . . .	450	447	562	574	560	531	27	1.36
South Dakota . . . . .	319	332	258	226	260	255	38	0.66
Tennessee . . . . .	663	665	705	710	770	708	21	1.82
Texas . . . . .	1,459	1,680	1,820	1,780	2,050	2,210	3	5.68
Utah . . . . .	1,335	1,850	1,320	1,260	<sup>3</sup> 1,420	1,310	10	3.36
Vermont . . . . .	87	60	74	83	43	69	46	0.18
Virginia . . . . .	507	515	636	667	692	751	18	1.93
Washington . . . . .	483	582	609	631	691	545	25	1.4
West Virginia . . . . .	133	181	170	180	<sup>3</sup> 182	185	40	0.48
Wisconsin . . . . .	215	416	323	<sup>3</sup> 334	349	368	32	0.95
Wyoming . . . . .	911	973	1,070	956	922	986	15	2.53

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

Source: U.S. Geological Survey, *Minerals Yearbook*, annual, and *Mineral Commodities Summaries*, annual. See also <<http://minerals.er.usgs.gov/minerals/pubs/mcs/2002/mcs2002.pdf>> (released 25 January 2002).

## No. 858. 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
<b>Fuels:</b> <sup>1</sup>									
Coal	Mil. sh. ton	4,193	5,386	5,218	5,059	19.8	19.1	20.0	21.7
Petroleum (crude)	Bil. bbl	21.8	22.1	22.8	24.9	14.4	12.2	10.5	8.9
Natural gas (dry, marketable)	Tril. cu. ft	53.5	73.6	78.0	88.0	36.3	24.2	23.9	21.2
Natural gas plant liquids	Bil. bbl	1.3	1.7	2.0	2.3	45.7	33.7	32.1	30.9
<b>Nonmetals:</b>									
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	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 <sub>2</sub> O 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
<b>Metals, mine basis:</b>									
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 <sup>2</sup>	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	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 <sup>2</sup>	1,000 metric tons	52	43	39	32	5	14	-	35
Vanadium <sup>2</sup>	1,000 metric tons	37	31	35	42	12	(D)	(D)	(D)
Zinc <sup>2</sup>	1,000 metric tons	5,954	7,184	7,240	8,000	6	8	9	11
<b>Metals, smelter basis:</b>									
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 <sup>3</sup>	1,000 metric tons	5,430	5,763	5,590	2,980	23	23	25	16
Magnesium <sup>4</sup>	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 <sup>5</sup>	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. <sup>1</sup> Source: Energy Information Administration, *International Energy Annual*. <sup>2</sup> Content of ore and concentrate. <sup>3</sup> Refinery production. <sup>4</sup> Primary production; no smelter processing necessary. <sup>5</sup> 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. 859. Federal Strategic and Critical Materials Inventory: 1990 to 2000

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

Mineral	Unit	Quantity <sup>1</sup>				Value (mil. dol.) <sup>2</sup>			
		1990	1995	1999	2000	1990	1995	1999	2000
Bauxite <sup>3</sup>	1,000 lg. ton	18,033	16,032	9,492	6,267	888	203	71	49
Chromium <sup>4</sup>	1,000 sh. ton	1,074	1,192	1,068	937	917	839	628	606
Cobalt	Mil. lb.	53	44	28	23	443	1,121	295	313
Diamonds: Stones	Carat 1,000	7,777	5,135	2,497	1,509	267	52	25	15
Industrial, bort	Carat 1,000	17,353	1,967	-	-	16	9	-	-
Lead 1,000 sh. ton	(NA)	465	277	226	(NA)	263	140	103	84
Manganese <sup>5</sup>	1,000 sh. ton	4,017	2,817	2,144	2,146	962	464	270	255
Palladium	1,000 troy oz.	(NA)	1265	1,099	842	(NA)	143	343	326
Platinum	1,000 troy oz.	453	453	342	217	186	154	120	84
Silver	1,000 troy oz.	92,151	46,667	26,203	15,942	374	158	86	61
Tantalum Group	1,000 lb	(NA)	3031	2,689	2,282	(NA)	127	126	94
Tin	1,000 metric ton	169	130	72	60	962	908	391	323
Titanium	1,000 sh. ton	37	37	35	30	402	221	124	96
Tungsten <sup>6</sup>	Mil. lb.	82	82	79	74	253	253	174	156
Zinc	1,000 sh. ton	379	301	198	151	483	281	203	152

- Represents or rounds to zero. NA Not available. <sup>1</sup> Consists of stockpile and nonstockpile grades and reflects uncommitted balances. <sup>2</sup> Market values are estimated trade values of similar materials and not necessarily amounts that would be realized at time of sale. <sup>3</sup> Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. <sup>4</sup> Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal. <sup>5</sup> Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med. carbon, ferro-silicon, and metal. <sup>6</sup> 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. 860. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption: 1980 to 2001

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

Minerals in rank of dependency	1980	1990	1995	1996	1997	1998	1999	2000	2001
Bauxite <sup>1</sup>	94	98	99	100	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
Vanadium	35	(D)	84	(D)	(D)	78	80	(NA)	100
Tin	79	71	84	83	86	85	85	86	88
Barite	44	71	65	70	76	80	67	71	87
Potash	65	68	75	77	80	80	80	70	80
Tantalum	90	71	80	80	75	80	80	80	80
Chromium	91	84	80	79	75	80	80	78	78
Cobalt	93	86	79	76	76	73	73	74	78
Zinc	60	41	35	33	35	35	30	60	60
Tungsten	53	81	90	89	84	77	81	68	59
Nickel	76	64	60	59	56	64	63	58	56
Silver	7	(NA)	(NA)	(NA)	( <sup>c</sup> )	14	14	52	44
Aluminum	( <sup>3</sup> )	36	23	22	23	27	30	33	35
Copper	16	15	27	14	13	14	27	37	31
Gypsum	35	46	30	29	28	28	29	22	25
Iron and steel	13	13	21	20	20	27	22	17	15
Iron ore	25	3	14	14	14	12	17	19	15
Sulfur	14	21	21	13	13	18	17	22	12
Cadmium	55	( <sup>c</sup> )	23	32	16	20	19	6	3
Mercury	27	(D)	(NA)	(NA)	(D)	(NA)	(NA)	(NA)	(NA)
Platinum group	87	88	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Selenium	59	46	31	38	(D)	(D)	(D)	(NA)	(NA)

D Withheld to avoid disclosure. NA Not available. <sup>1</sup> Includes alumina. <sup>2</sup> 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; 1996 and 1997, 70 percent; 1998, 69 percent; and 1999, 71 percent. <sup>3</sup> 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. 861. Federal Offshore Leasing, Exploration, Production, and Revenue: 1990 to 2001

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

Item	Unit	1990	1995	1996	1997	1998	1999	2000	2001
Tracts offered	Number	10,459	10,995	12,230	9,870	8,205	7,453	7,992	8,790
Tracts leased	Number	825	835	1,537	1,780	1,157	333	553	942
Acres offered	Millions	56.79	59.70	70.00	26.24	44.10	40.22	42.89	49.15
Acres leased	Millions	4.30	4.34	8.15	9.62	6.34	1.77	2.92	5.00
Bonus paid for leased tracts	Bil. dol.	0.6	0.4	0.9	(NA)	1.3	0.3	0.3	1.0
New wells being drilled:									
Active	Number	120	124	835	186	173	219	224	213
Suspended	Number	266	247	1,323	244	122	110	146	97
Cumulative wells (since 1953):									
Wells completed	Number	13,167	13,475	13,583	13,546	13,702	13,676	13,718	13,921
Wells plugged and abandoned	Number	14,677	18,008	18,268	18,728	21,050	22,115	22,814	24,218
Revenue, total <sup>1</sup>	Bil. dol.	3.4	2.7	4.3	5.3	4.3	3.2	5.2	<sup>4</sup> 5.8
Bonuses	Bil. dol.	0.8	0.4	0.8	1.4	1.3	0.2	0.4	<sup>4</sup> 0.5
Oil and gas royalties <sup>1</sup>	Bil. dol.	2.6	2.1	3.1	3.4	2.7	2.6	4.1	<sup>4</sup> 7.5
Rentals	Bil. dol.	0.09	0.09	0.16	0.23	0.26	0.21	0.21	<sup>4</sup> 0.13
Sales value <sup>2</sup>	Bil. dol.	17.0	13.8	19.8	22.3	17.6	17.4	27.4	<sup>4</sup> 31.4
Oil	Bil. dol.	7.0	6.3	8.0	9.0	6.2	6.5	11.5	<sup>4</sup> 11.3
Natural gas	Bil. dol.	9.5	7.5	11.8	13.3	11.4	10.9	15.9	<sup>4</sup> 20.1
Sales volume: <sup>3</sup>									
Oil	Mil. bbls.	324	409	438	479	477	513	566	<sup>4</sup> 463
Natural gas	Bil. cu. ft.	5,093	4,692	5,024	5,077	4,836	4,992	4,723	<sup>4</sup> 3,470

NA Not available. <sup>1</sup> Includes condensate royalties. <sup>2</sup> Production value is value at time of production, not current value. <sup>3</sup> Excludes sales volumes for gas lost, gas plant products or sulfur. <sup>4</sup> Covers January through September 2001 only.

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



## No. 862. Petroleum Industry—Summary: 1980 to 2001

[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	1995	1996	1997	1998	1999	2000	2001
Crude oil producing wells (Dec. 31)	1,000	548	602	574	574	573	562	546	534	(NA)
Daily output per well	Bbl.	15.9	12.2	11.4	11.3	11.3	11.1	10.8	10.9	(NA)
Completed wells drilled, total	1,000	57.73	31.56	21.06	22.90	27.47	24.08	18.18	25.14	(NA)
Crude oil	1,000	30.88	12.20	7.63	8.31	10.44	7.06	4.09	4.73	(NA)
Gas	1,000	15.25	11.04	8.35	9.30	11.33	12.11	10.51	15.21	(NA)
Dry	1,000	11.60	8.31	5.08	5.28	5.70	4.91	3.58	5.20	(NA)
Average depth per well <sup>1</sup>	Feet	4,171	4,871	5,596	5,636	5,704	6,213	5,944	6,516	(NA)
Average cost per well	\$1,000	368	384	513	496	604	769	856	(NA)	(NA)
Average cost per foot <sup>1</sup>	Dollars	77.02	76.07	87.22	88.92	107.83	128.97	152.02	(NA)	(NA)
Crude oil production, total	Mil. bbl.	3,138	2,685	2,394	2,360	2,355	2,282	2,141	2,139	2,118
Value at wells	Bil. dol.	67.7	53.8	35.0	43.6	40.6	24.8	33.3	57.2	46.3
Average price per barrel	Dollars	21.59	20.03	14.62	18.46	17.23	10.87	15.56	26.72	21.84
Lower 48 states	Mil. bbl.	2,548	2,037	1,853	1,851	1,882	1,853	1,764	1,775	1,766
Alaska	Mil. bbl.	590	647	542	508	473	429	383	354	351
Onshore	Mil. bbl.	2,760	2,290	1,838	1,789	1,753	1,664	1,508	1,494	(NA)
Offshore	Mil. bbl.	377	395	557	570	602	618	639	635	(NA)
Imports: Crude oil	Mil. bbl.	1,921	2,151	2,639	2,740	3,002	3,178	3,187	3,260	3,405
Refined petroleum products	Mil. bbl.	601	775	586	719	707	731	775	789	636
Exports: Crude oil	Mil. bbl.	104.8	39.8	34.7	40.2	39.4	40.2	43.1	18.3	7.4
Proved reserves	Bil. bbl.	29.8	26.3	22.4	22.0	22.5	21.0	21.8	22.0	(NA)
Operable refineries	Number	319	205	175	170	164	163	159	158	(NA)
Capacity (Jan. 1)	Mil. bbl.	6,566	5,683	5,632	5,595	5,639	5,734	5,935	6,026	(NA)
Refinery input, total	Mil. bbl.	5,117	5,325	5,555	5,654	5,807	5,891	5,877	5,950	(NA)
Crude oil	Mil. bbl.	4,920	4,895	5,099	5,179	5,351	5,435	5,402	5,504	(NA)
Natural gas plant liquids	Mil. bbl.	168	172	172	164	153	146	135	135	(NA)
Other liquids	Mil. bbl.	29	259	285	307	303	310	339	310	(NA)
Refinery output, total	Mil. bbl.	5,336	5,574	5,836	5,957	6,117	6,216	6,201	6,296	(NA)
Motor gasoline	Mil. bbl.	2,369	2,540	2,723	2,759	2,825	2,880	2,894	2,902	(NA)
Jet fuel	Mil. bbl.	365	544	518	555	566	558	573	588	(NA)
Distillate fuel oil	Mil. bbl.	971	1,066	1,153	1,212	1,237	1,248	1,241	1,307	(NA)
Residual fuel oil	Mil. bbl.	577	347	288	266	259	277	256	259	(NA)
Liquefied petroleum gases	Mil. bbl.	120	183	237	241	252	245	248	256	(NA)
Utilization rate	Percent	75.4	87.1	92.0	94.1	95.2	95.6	92.6	92.6	(NA)

NA Not available. <sup>1</sup> 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. 863. U.S. Petroleum Balance: 1980 to 2001

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

Item	1980	1990	1995	1996	1997	1998	1999	2000	2001
<b>Petroleum products supplied for domestic use</b>	<b>6,242</b>	<b>6,201</b>	<b>7,087</b>	<b>6,701</b>	<b>6,796</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>
Production of products	5,765	5,934	6,940	6,511	6,671	6,733	6,774	6,903	6,942
Crude input to refineries	4,934	4,894	5,718	5,195	5,351	5,434	5,403	5,514	5,522
Oil, field production	3,138	2,685	2,406	2,366	2,355	2,282	2,147	2,131	2,118
Alaska	592	647	542	510	473	429	383	355	351
Lower 48 States	2,555	2,037	1,853	1,856	1,882	1,853	1,764	1,776	1,766
Net imports	1,821	2,112	2,604	2,708	2,963	3,137	3,144	3,301	3,398
Imports (gross excluding SPR) <sup>1</sup>	1,910	2,142	2,639	2,748	3,002	3,178	3,184	3,317	3,401
SPR <sup>1</sup> imports	16	10	-	-	-	-	3	3	4
Exports	-105	40	35	40	39	40	43	18	7
Other sources	33	98	102	122	34	15	113	82	7
Natural gas liquids (NGL), supply	577	574	708	716	721	717	757	799	801
Other liquids	253	465	514	599	599	582	614	589	619
Net imports of refined products	484	326	101	181	154	225	252	305	303
Imports	578	598	407	491	469	508	537	648	636
Exports	94	272	307	310	315	283	284	343	333
Stock withdrawal, refined products	-7	-59	46	9	-29	-53	98	2	-73
<b>TYPE OF PRODUCT SUPPLIED</b>									
<b>Total products supplied for domestic use</b>	<b>6,242</b>	<b>6,201</b>	<b>6,469</b>	<b>6,701</b>	<b>6,796</b>	<b>6,905</b>	<b>7,125</b>	<b>7,211</b>	<b>7,172</b>
Finished motor gasoline	2,407	2,641	2,843	2,888	2,926	3,012	3,077	3,101	3,143
Distillate fuel oil	1,049	1,103	1,170	1,232	1,254	1,263	1,304	1,362	1,404
Residual fuel oil	918	449	311	311	291	324	303	333	296
Liquefied petroleum gases <sup>2</sup>	414	568	693	736	744	713	801	816	746
Other	1,454	1,440	1,452	1,535	1,582	1,593	1,639	1,598	1,583
<b>ENDING STOCKS</b>									
<b>Ending stocks, all oils</b>	<b>1,392</b>	<b>1,621</b>	<b>1,563</b>	<b>1,052</b>	<b>1,560</b>	<b>1,647</b>	<b>1,493</b>	<b>1,468</b>	<b>1,586</b>
Crude oil and lease condensate	358	323	303	284	305	324	284	286	312
Strategic Petroleum Reserve (SPR)	108	586	592	566	563	571	567	541	550
Other	926	712	668	202	692	752	641	641	724

- Represents zero. <sup>1</sup> SPR=Strategic petroleum reserve. For more information, see Table 889. <sup>2</sup> Includes ethane.

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*, Volume 1. See also <<http://www.eia.doe.gov/pub/oilgas/petroleum/datapublications/petroleumsupplyannual/psavolume1/current/pdf/volume1all.pdf>> (released June 2002).

## No. 864. Crude Petroleum and Natural Gas—Production and Value by Major Producing States: 1990 to 2000

[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 <sup>1</sup>					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1990	1999	2000	1990	1999	2000	1990	1999	2000	1990	1999	2000
<b>Total <sup>2</sup></b>	<b>2,685</b>	<b>2,141</b>	<b>2,131</b>	<b>53,772</b>	<b>33,311</b>	<b>56,932</b>	<b>18,594</b>	<b>19,805</b>	<b>20,002</b>	<b>31,658</b>	<b>43,325</b>	<b>73,620</b>
AL	18	11	10	387	186	289	135	547	523	373	1,263	2,087
AK	658	383	355	10,086	4,829	8,439	403	463	459	554	635	807
AR	10	7	7	222	113	193	175	170	172	360	697	898
CA	322	268	271	5,732	3,772	6,729	363	383	377	857	905	1,812
CO	31	19	18	722	333	533	243	739	753	377	1,436	2,765
FL	6	5	5	(NA)	(NA)	(NA)	6	6	6	15	(NA)	(NA)
IL	20	12	12	467	210	343	1	-	-	1	(NA)	(NA)
IN	3	2	2	73	34	59	(Z)	1	1	1	2	3
KS	59	33	34	1,359	567	970	574	553	526	893	998	1,690
KY	5	3	3	124	46	92	75	77	82	169	159	258
LA	148	110	105	3,409	1,951	3,060	5,242	5,314	5,069	9,587	11,649	18,642
MI	20	8	8	458	130	222	140	277	297	420	491	724
MS	30	19	20	630	299	520	95	111	89	167	181	293
MT	20	15	15	429	253	429	50	61	70	90	103	198
NE	5	3	3	119	46	83	1	1	1	2	2	3
NM	66	66	67	1,472	1,146	1,935	965	1,512	1,687	1,629	3,191	5,790
NY	(Z)	-	-	9	4	6	25	16	18	55	35	67
ND	39	33	33	849	549	922	52	53	52	93	123	206
OH	8	6	7	196	98	181	155	110	105	393	346	426
OK	117	71	70	2,690	1,265	2,035	2,258	1,571	1,613	3,548	3,223	5,857
PA	2	2	2	54	28	43	178	175	201	417	(NA)	(NA)
TX	674	449	443	15,060	7,769	12,681	6,343	6,118	6,205	9,939	14,106	24,384
UT	23	16	16	524	290	446	146	263	269	249	506	883
WV	2	1	1	43	23	38	178	176	264	568	(NA)	(NA)
WY	103	62	61	2,169	1,014	1,633	736	823	1,088	856	1,621	3,640
Federal offshore	296	534	558	6,468	8,699	28,420	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

- Represents zero. NA Not available. Z Less than 500,000 barrels, 500 million cubic feet, or less than \$500,000.  
<sup>1</sup> Excludes nonhydrocarbon gases. <sup>2</sup> 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. 865. Crude Oil, Natural Gas, and Natural Gas Liquids—Reserves by State: 1990 and 2000

[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				2000			
	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.)
<b>United States <sup>1</sup></b>	<b>26,254</b>	<b>3,483</b>	<b>169,346</b>	<b>7,586</b>	<b>22,045</b>	<b>(NA)</b>	<b>177,427</b>	<b>8,345</b>
Lower 48 States	19,730	2,514	160,046	7,246	17,184	(NA)	168,190	8,068
Alabama	44	(Z)	4,125	170	34	(NA)	4,149	150
Alaska	6,524	969	9,300	340	4,861	(NA)	9,237	277
Arkansas	60	1	1,731	9	48	(NA)	1,581	5
California	24,658	21,425	23,185	2105	3,813	(NA)	2,849	101
Colorado	305	8	4,555	169	217	(NA)	10,428	316
Florida	(NA)	(NA)	(NA)	(NA)	76	(NA)	82	11
Illinois	(NA)	(NA)	(NA)	(NA)	111	(NA)	(NA)	(NA)
Indiana	131	-	(NA)	(NA)	15	(NA)	(NA)	(NA)
Kansas	(NA)	(NA)	(NA)	(NA)	237	(NA)	5,299	306
Kentucky	321	(Z)	9,614	313	24	(NA)	1,760	56
Louisiana	33	-	1,016	25	529	(NA)	9,239	436
Michigan	(NA)	(NA)	(NA)	(NA)	56	(NA)	2,729	35
Mississippi	(NA)	(NA)	(NA)	(NA)	182	(NA)	618	8
Montana	(NA)	(NA)	(NA)	(NA)	235	(NA)	885	4
Nebraska	221	-	899	15	18	(NA)	(NA)	(NA)
New Mexico	(NA)	(NA)	(NA)	(NA)	719	(NA)	17,322	896
New York	687	256	17,260	990	(NA)	(NA)	322	(NA)
North Dakota	285	-	586	60	270	(NA)	433	54
Ohio	65	-	1,214	(NA)	59	(NA)	1,185	(NA)
Oklahoma	734	37	16,151	657	610	(NA)	13,699	734
Pennsylvania	22	-	1,720	(NA)	15	(NA)	1,741	(NA)
Texas	27,106	618	238,192	22,575	5,273	426	42,082	2,819
Utah	249	44	1,510	( <sup>3</sup> )	283	(NA)	4,235	( <sup>3</sup> )
Virginia	(NA)	(NA)	138	(NA)	(NA)	(NA)	1,704	(NA)
West Virginia	31	-	2,207	86	12	(NA)	2,900	105
Wyoming	794	42	9,944	4812	561	(NA)	16,158	4947
Federal offshore	2,805	49	31,433	619	3,770	(NA)	26,748	1,078

- Represents or rounds to zero. NA Not available. Z Less than 500,000 barrels. <sup>1</sup> Includes miscellaneous not shown separately. <sup>2</sup> Excludes federal offshore. <sup>3</sup> Included with Wyoming. <sup>4</sup> Includes Utah.

Source: Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2000 Annual Report*, December 2001.

## No. 866. World Daily Crude Oil Production by Major Producing Country: 1980 to 2000

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

Country	1980	1990	1994	1995	1996	1997	1998	1999	2000
<b>World, total <sup>1</sup></b> . . . . .	<b>59,600</b>	<b>60,566</b>	<b>60,991</b>	<b>62,335</b>	<b>63,711</b>	<b>65,690</b>	<b>66,921</b>	<b>65,848</b>	<b>68,103</b>
Saudi Arabia . . . . .	9,900	6,410	8,120	8,231	8,218	8,362	8,389	7,833	8,404
Russia (X) . . . . .	(X)	(X)	6,135	5,995	5,850	5,920	5,854	6,079	6,479
<b>United States</b> . . . . .	<b>8,597</b>	<b>7,355</b>	<b>6,662</b>	<b>6,560</b>	<b>6,465</b>	<b>6,452</b>	<b>6,252</b>	<b>5,881</b>	<b>5,822</b>
Iran . . . . .	1,662	3,088	3,618	3,643	3,686	3,664	3,634	3,557	3,696
China . . . . .	2,114	2,774	2,939	2,990	3,131	3,200	3,198	3,195	3,249
Norway . . . . .	528	1,704	2,521	2,768	3,104	3,143	3,017	3,018	3,197
Mexico . . . . .	1,936	2,553	2,685	2,618	2,855	3,023	3,070	2,906	3,012
Venezuela . . . . .	2,168	2,137	2,588	2,750	2,938	3,280	3,167	2,826	2,949
Iraq . . . . .	2,514	2,040	553	560	579	1,155	2,150	2,508	2,571
United Arab Emirates . . . . .	1,709	2,117	2,193	2,233	2,278	2,316	2,345	2,169	2,368
United Kingdom . . . . .	1,622	1,820	2,375	2,489	2,568	2,518	2,616	2,684	2,275
Nigeria . . . . .	2,055	1,810	1,931	1,993	2,001	2,132	2,153	2,130	2,144
Kuwait . . . . .	1,656	1,175	2,025	2,057	2,062	2,007	2,085	1,898	2,126
Canada . . . . .	1,435	1,553	1,746	1,805	1,837	1,922	1,981	1,907	1,977
Indonesia . . . . .	1,577	1,462	1,510	1,503	1,547	1,520	1,518	1,472	1,423
Libya . . . . .	1,787	1,375	1,378	1,390	1,401	1,446	1,390	1,319	1,410
Brazil . . . . .	182	631	671	695	795	841	969	1,132	1,269
Algeria . . . . .	1,106	1,175	1,180	1,202	1,242	1,277	1,246	1,202	1,244
Oman . . . . .	282	685	810	851	883	904	900	910	940
Argentina . . . . .	491	483	650	715	756	834	847	802	761
Egypt . . . . .	595	873	896	920	922	856	834	852	748
Angola . . . . .	150	475	536	646	709	714	735	745	646
Qatar . . . . .	472	406	415	442	510	550	696	665	737
Australia . . . . .	380	575	536	562	570	588	544	539	722
Colombia . . . . .	126	440	450	585	623	652	733	816	691
Malaysia . . . . .	283	619	645	682	695	700	720	693	690
India . . . . .	182	660	590	703	651	675	661	653	646
Kazakhstan (X) . . . . .	(X)	(X)	352	362	403	466	476	530	599
Syria . . . . .	164	388	560	575	582	561	553	538	523
Yemen . . . . .	-	193	335	345	340	362	388	409	440

- Represents or rounds to zero. X Not applicable. <sup>1</sup> Includes countries not shown separately.

Source: U.S. Energy Information Administration, *International Energy Annual, 2000*. See also <<http://www.eia.doe.gov/pub/pdf/international/021900.pdf>> (issued May 2002).

## No. 867. Liquefied Petroleum Gases—Summary: 1980 to 2001

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

Item	1980	1990	1995	1996	1997	1998	1999	2000	2001
<b>Production</b> . . . . .	<b>561</b>	<b>638</b>	<b>760</b>	<b>789</b>	<b>799</b>	<b>775</b>	<b>814</b>	<b>845</b>	<b>813</b>
At natural gas plants . . . . .	441	456	521	547	547	529	564	587	570
At refineries . . . . .	121	182	234	242	252	246	250	258	243
Imports . . . . .	79	68	53	61	62	71	66	79	75
Refinery input . . . . .	85	107	105	102	96	92	87	87	88
Exports . . . . .	9	14	21	19	18	15	18	27	16
Stocks, Dec. 31 . . . . .	116	98	93	86	89	115	89	83	121

Source: U.S. Energy Information Administration, *Petroleum Supply Annual*, volume 1.

## No. 868. Natural Gas Plant Liquids—Production and Value: 1980 to 2000

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

Item	Unit	1980	1990	1994	1995	1996	1997	1998	1999	2000
Field production <sup>1</sup> . . . . .	Mil. bbl . . .	576	566	630	643	670	663	642	675	699
Pentanes plus . . . . .	Mil. bbl . . .	126	112	119	122	123	116	113	111	112
Liquefied petroleum gases . . . . .	Mil. bbl . . .	441	454	511	521	547	547	529	564	587
Natural gas processed . . . . .	Tril. cu. ft. .	15	15	16	17	17	17	17	17	17

<sup>1</sup> Includes other finished petroleum products, not shown separately.

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

## No. 869. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1980 to 2000

[182 represents 182,000 wells]

Item	Unit	1980	1990	1994	1995	1996	1997	1998	1999	2000
Producing wells (year-end)	1,000	182	269	292	299	302	311	317	302	306
Production value at wells	Bil. dol	32.1	31.8	36.5	30.2	43.0	46.1	38.2	43.4	73.6
Avg. per 1,000 cu. ft.	Dollars	1.59	1.71	1.85	1.55	2.17	2.32	1.96	2.19	3.68
Proved reserves <sup>1</sup>	Tril. cu. ft.	199	169	164	165	166	167	164	167	177
<b>Marketed production<sup>2</sup></b>	<b>Bil. cu. ft.</b>	<b>20,180</b>	<b>18,594</b>	<b>19,710</b>	<b>19,506</b>	<b>19,812</b>	<b>19,866</b>	<b>19,961</b>	<b>19,805</b>	<b>20,002</b>
Minus: Extraction losses <sup>3</sup>	Bil. cu. ft.	777	784	889	908	958	964	938	973	1,016
Equals: Dry production	Bil. cu. ft.	19,403	17,810	18,821	18,599	18,854	18,902	19,024	18,832	18,987
Plus: Supplemental gas supplies	Bil. cu. ft.	155	123	111	110	109	103	102	99	86
Equals: Dry production with supplemental gas	Bil. cu. ft.	19,558	17,932	18,932	18,709	18,964	19,005	19,126	18,931	19,073
Plus: Withdrawals from storage	Bil. cu. ft.	1,972	1,986	2,579	3,025	2,981	2,894	2,432	2,808	3,550
Plus: Imports <sup>4</sup>	Bil. cu. ft.	985	1,532	2,624	2,841	2,937	2,994	3,152	3,586	3,782
Plus: Balancing item	Bil. cu. ft.	-640	-152	-416	-230	217	61	-334	-897	-827
Equals: Total supply	Bil. cu. ft.	21,875	21,299	23,719	24,345	25,099	24,954	24,376	24,427	25,577
Minus: Exports	Bil. cu. ft.	49	86	162	154	153	157	159	163	244
Minus: Additions to storage <sup>5</sup>	Bil. cu. ft.	1,949	2,499	2,865	2,610	2,979	2,870	2,961	2,636	2,721
<b>Equals: Consumption, total</b>	<b>Bil. cu. ft.</b>	<b>19,877</b>	<b>18,715</b>	<b>20,708</b>	<b>21,581</b>	<b>21,967</b>	<b>21,959</b>	<b>21,277</b>	<b>21,620</b>	<b>22,547</b>
Lease and plant fuel	Bil. cu. ft.	1,026	1,236	1,124	1,220	1,250	1,203	1,173	1,079	1,130
Pipeline fuel	Bil. cu. ft.	635	660	685	700	711	751	635	645	644
Residential	Bil. cu. ft.	4,752	4,391	4,848	4,850	5,241	4,984	4,520	4,726	4,992
Commercial <sup>6</sup>	Bil. cu. ft.	2,611	2,623	2,895	3,031	3,158	3,215	2,999	3,045	3,218
Industrial	Bil. cu. ft.	7,172	7,018	8,167	8,580	8,870	8,832	8,686	9,006	9,512
Vehicle fuel	Bil. cu. ft.	(NA)	-	2	3	3	4	5	6	8
Electric utilities	Bil. cu. ft.	3,682	2,786	2,987	3,197	2,732	2,965	3,258	3,113	3,043
World production (dry)	Tril. cu. ft.	53.5	73.6	76.9	78.0	81.7	81.5	83.0	84.9	88.0
U.S. production (dry)	Tril. cu. ft.	19.4	17.8	18.8	18.6	18.9	18.9	19.0	18.8	19.0
Percent U.S. of world	Percent	36.3	24.2	24.5	23.9	23.1	23.2	22.9	22.2	21.6

- Represents zero. NA Not available. <sup>1</sup> Estimated, end of year. Source: U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, annual. <sup>2</sup> 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. <sup>3</sup> Volumetric reduction in natural gas resulting from the extraction of natural gas constituents at natural gas processing plants. <sup>4</sup> Includes imports of liquefied natural gas. <sup>5</sup> Includes liquefied natural gas (LNG) storage in above ground tanks. <sup>6</sup> 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*, Volume I and II, and *Monthly Energy Review*.

## No. 870. World Natural Gas Production by Major Producing Country: 1980 to 2000

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

Country	1980	1990	1994	1995	1996	1997	1998	1999	2000
<b>World, total<sup>1</sup></b>	<b>53.35</b>	<b>73.57</b>	<b>76.93</b>	<b>77.96</b>	<b>81.65</b>	<b>81.52</b>	<b>83.03</b>	<b>84.91</b>	<b>88.03</b>
Russia	(X)	(X)	21.45	21.01	21.23	20.17	20.87	20.83	20.63
<b>United States</b>	<b>19.40</b>	<b>17.81</b>	<b>18.82</b>	<b>18.60</b>	<b>18.85</b>	<b>18.90</b>	<b>19.02</b>	<b>18.83</b>	<b>18.99</b>
Canada	2.76	3.85	5.27	5.60	5.71	5.76	5.98	6.26	6.47
United Kingdom	1.32	1.75	2.47	2.67	3.18	3.03	3.14	3.49	3.83
Algeria	0.41	1.79	1.81	2.05	2.19	2.43	2.60	2.88	2.94
Netherlands	3.40	2.69	2.95	2.98	3.37	2.99	2.84	2.67	2.57
Indonesia	0.63	1.53	2.21	2.24	2.35	2.37	2.27	2.51	2.36
Iran	0.25	0.84	1.12	1.25	1.42	1.66	1.77	2.04	2.13
Uzbekistan	(X)	(X)	1.67	1.70	1.70	1.74	1.94	1.96	1.99
Norway	0.92	0.98	1.04	1.08	1.45	1.62	1.63	1.76	1.81
Saudi Arabia	0.33	1.08	1.33	1.34	1.46	1.60	1.65	1.63	1.76
Turkmenistan	-	-	1.26	1.14	1.31	0.90	0.47	0.79	1.64
Malaysia	0.06	0.65	0.92	1.02	1.23	1.36	1.37	1.42	1.50
United Arab Emirates	0.20	0.78	0.91	1.11	1.19	1.28	1.31	1.34	1.41
Mexico	0.90	0.90	0.97	0.96	1.06	1.17	1.27	1.29	1.33
Argentina	0.28	0.63	0.79	0.88	0.94	0.97	1.04	1.22	1.32
Australia	0.31	0.72	0.93	1.03	1.06	1.06	1.10	1.10	1.12
Qatar	0.18	0.28	0.48	0.48	0.48	0.61	0.69	0.78	1.03
Venezuela	0.52	0.76	0.88	0.89	0.96	0.99	1.11	0.95	0.96
China	0.51	0.51	0.59	0.60	0.67	0.75	0.78	0.85	0.96
Pakistan	0.29	0.48	0.63	0.65	0.70	0.70	0.71	0.78	0.86
India	0.05	0.40	0.59	0.63	0.70	0.72	0.76	0.75	0.79
Germany	-	-	0.70	0.74	0.80	0.79	0.77	0.82	0.78
Thailand	-	0.21	0.34	0.37	0.43	0.54	0.57	0.63	0.66
Egypt	0.03	0.29	0.42	0.44	0.47	0.48	0.49	0.52	0.65
Ukraine	(X)	(X)	0.64	0.62	0.64	0.64	0.64	0.63	0.64
Italy	0.44	0.61	0.73	0.72	0.71	0.68	0.67	0.62	0.57
Romania	1.20	1.00	0.69	0.68	0.63	0.61	0.52	0.50	0.50
Trinidad and Tobago	0.08	0.18	0.25	0.27	0.30	0.33	0.33	0.41	0.49
Nigeria	0.04	0.13	0.16	0.18	0.19	0.21	0.21	0.25	0.44

- Represents zero. X Not applicable. <sup>1</sup> Includes countries not shown separately.

Source: U.S. Energy Information Administration, *International Energy Annual*, 2000. See also <<http://www.eia.doe.gov/pub/pdf/international/021900.pdf>> (issued May 2002).

## No. 871. Coal and Coke—Summary: 1980 to 2000

[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	1995	1996	1997	1998	1999	2000
<b>COAL</b>									
<b>Coal production, total</b> <sup>1</sup>	<b>Mil. sh. tons</b>	<b>830</b>	<b>1,029</b>	<b>1,033</b>	<b>1,064</b>	<b>1,090</b>	<b>1,118</b>	<b>1,100</b>	<b>1,074</b>
Value	Bil. dol.	20.45	22.39	19.45	19.68	19.77	19.75	19.42	18.02
Anthracite production	Mil. sh. tons	6.1	3.5	4.7	4.8	4.7	5.3	4.8	4.6
Bituminous coal and lignite	Mil. sh. tons	824	1,026	1,028	1,059	1,085	1,112	1,096	1,069
Underground	Mil. sh. tons	337	425	396	410	421	417	392	374
Surface	Mil. sh. tons	487	605	637	654	669	700	709	700
Exports	Mil. sh. tons	92	105.804	89	90	84	78	59	59
Imports	Mil. sh. tons	1	3	9	8	8	9	9	13
Consumption <sup>2</sup>	Mil. sh. tons	703	896	941	1,006	1,030	1,038	1,045	1,081
Electric power utilities	Mil. sh. tons	569	774	829	875	900	911	894	859
Industrial	Mil. sh. tons	126	115	106	103	102	96	94	94
Number of mines	Number	5,598	3,243	2,104	1,903	1,828	1,726	1,591	707
Daily employment	1,000	225	131	90	83	82	85	79	72
Production, by state:									
Alabama	Mil. sh. tons	26	29	25	25	24	23	20	19
Illinois	Mil. sh. tons	63	60	48	47	41	40	40	33
Indiana	Mil. sh. tons	31	36	26	30	35	37	34	28
Kentucky	Mil. sh. tons	150	173	154	152	156	150	140	131
Montana	Mil. sh. tons	30	38	39	38	41	43	41	38
Ohio	Mil. sh. tons	39	35	26	29	29	28	22	22
Pennsylvania	Mil. sh. tons	93	71	62	68	76	81	76	75
Virginia	Mil. sh. tons	41	47	34	36	36	34	32	33
West Virginia	Mil. sh. tons	122	169	163	170	174	171	158	158
Wyoming	Mil. sh. tons	95	184	264	278	282	314	337	339
Other States	Mil. sh. tons	140	187	192	192	195	196	200	197
World production	Mil. sh. tons	4,200	5,386	5,218	5,265	5,278	5,169	5,052	5,059
Percent U.S. of world	Percent	19.8	19.1	19.8	20.2	20.6	21.6	21.8	21.2
<b>COKE</b>									
Coke production <sup>3</sup>	Mil. sh. tons	46.13	27.62	23.75	23.08	22.12	20.04	20.02	20.81
Imports	Mil. sh. tons	0.66	0.77	3.82	2.54	3.14	3.83	3.22	3.78
Exports	Mil. sh. tons	2.07	0.57	1.36	1.62	1.27	1.13	0.90	1.15
Consumption	Mil. sh. tons	41.28	27.82	25.85	23.97	24.02	23.11	22.42	23.24

<sup>1</sup> Includes bituminous coal, subbituminous coal, lignite, and anthracite. <sup>2</sup> Includes some categories not shown separately.

<sup>3</sup> Includes beehive coke.

Source: U.S. Energy Information Administration, *Coal Industry*, annual; *Annual Energy Review*, *International Energy Annual*, and *Quarterly Coal Report*. See also <<http://ftp.eia.doe.gov/pub/pdf/coal.nuclear/05842000.pdf>> (issued June 2002).

## No. 872. World Coal Production by Major Producing Country: 1980 to 2000

[In millions of short tons (4,188.6 represents 4,188,600,000)]

Country	1980	1990	1994	1995	1996	1997	1998	1999	2000
<b>World, total</b>	<b>4,188.6</b>	<b>5,440.9</b>	<b>5,082.5</b>	<b>5,218.0</b>	<b>5,265.1</b>	<b>5,278.3</b>	<b>5,169.0</b>	<b>5,052.9</b>	<b>5,059.2</b>
China	683.6	1190.4	1403.5	1537.0	1545.3	1507.1	1429.0	1365.0	1314.4
<b>United States</b>	<b>829.7</b>	<b>1029.1</b>	<b>1033.5</b>	<b>1033.0</b>	<b>1063.9</b>	<b>1089.9</b>	<b>1117.5</b>	<b>1100.4</b>	<b>1073.6</b>
India	125.9	233.4	279.7	297.8	314.9	326.1	322.2	328.5	345.0
Australia	116.1	225.8	248.5	266.6	272.4	292.1	316.8	322.2	337.2
South Africa	132.0	247.6	272.3	288.4	297.1	324.6	322.0	320.2	326.1
Russia	(X)	(X)	312.7	296.4	304.0	257.9	241.0	259.2	281.4
Germany	532.2	513.7	291.8	274.2	265.0	251.7	233.0	226.1	225.3
Poland	253.5	237.1	220.4	220.2	193.1	221.5	196.2	187.6	178.6
Korea, North	39.7	99.2	108.0	106.9	105.7	104.7	99.5	100.5	101.4
Ukraine	(X)	(X)	104.1	94.6	83.5	84.8	85.1	91.2	90.3
Kazakhstan	(X)	(X)	115.3	91.9	84.7	80.1	76.9	64.4	82.4
Canada	40.4	75.4	80.3	82.6	83.5	86.7	83.1	79.9	76.2
Turkey	20.2	52.6	59.9	60.7	62.1	66.1	74.3	73.9	74.2
Indonesia	0.6	11.6	34.2	45.7	55.5	60.2	66.5	71.2	73.9
Czech Republic	(X)	(X)	84.8	81.9	84.0	81.0	74.4	65.2	71.8
Greece	25.6	57.2	62.5	63.6	65.9	64.9	67.1	68.4	69.5
Colombia	4.5	22.6	25.0	28.4	33.1	35.9	37.2	36.1	42.0
Yugoslavia	(X)	(X)	42.3	44.1	42.4	44.8	48.6	36.7	37.8
United Kingdom	143.8	104.1	53.9	52.5	55.3	53.5	44.1	39.9	35.3
Romania	38.8	42.1	44.7	45.3	46.2	37.3	28.9	25.2	32.2
Bulgaria	39.6	39.0	31.6	33.9	33.7	32.8	34.1	28.7	29.8
Spain	40.9	39.6	32.7	31.3	30.8	29.2	28.7	26.8	25.8
Thailand	1.6	13.7	18.9	20.3	23.9	25.8	22.0	20.1	19.6
Hungary	28.3	19.7	15.6	16.1	16.7	17.2	17.1	16.8	15.3
Mexico	4.0	8.6	10.1	10.3	11.1	11.5	12.4	11.3	10.9

X Not applicable. <sup>1</sup> For 1980 and 1990, represents East and West Germany combined.

Source: U.S. Energy Information Administration, *International Energy Annual, 2000*. See also <<http://www.eia.doe.gov/pub/pdf/international/021900.pdf>> (issued May 2002).

## No. 873. Demonstrated Coal Reserves by Type of Coal and Major Producing State: 2001

[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	Under ground	Surface
<b>United States . . . . .</b>	<b>501,059</b>	<b>7,465</b>	<b>266,629</b>	<b>183,160</b>	<b>43,805</b>	<b>338,525</b>	<b>162,534</b>
Alabama . . . . .	4,389	-	3,306	-	1,083	1,157	3,232
Alaska . . . . .	6,118	-	698	5,407	14	5,423	695
Colorado . . . . .	16,552	26	8,550	3,787	4,190	11,780	4,772
Illinois . . . . .	104,773	-	104,773	-	-	88,188	16,586
Indiana . . . . .	9,738	-	9,738	-	-	8,831	907
Iowa . . . . .	2,189	-	2,189	-	-	1,732	457
Kentucky . . . . .	31,053	-	31,053	-	-	17,797	13,257
Kentucky, Eastern . . . . .	11,326	-	11,326	-	-	1,727	9,598
Kentucky, Western . . . . .	19,728	-	19,728	-	-	16,069	3,658
Missouri . . . . .	5,992	-	5,992	-	-	1,479	4,513
Montana . . . . .	119,472	-	1,385	102,329	15,758	70,958	48,514
New Mexico . . . . .	12,324	2	3,658	8,664	-	6,203	6,121
North Dakota . . . . .	9,243	-	-	-	9,243	-	9,243
Ohio . . . . .	23,495	-	23,495	-	-	17,679	5,816
Oklahoma . . . . .	1,566	-	1,566	-	-	1,235	331
Pennsylvania . . . . .	28,101	7,208	20,893	-	-	23,769	4,332
Anthracite . . . . .	7,208	7,208	-	-	-	3,847	3,361
Bituminous . . . . .	20,893	-	20,893	-	-	19,922	971
Texas . . . . .	12,672	-	-	-	12,672	-	12,672
Utah . . . . .	5,639	-	5,638	1	-	5,371	268
Virginia . . . . .	1,960	125	1,835	-	-	1,332	628
Washington . . . . .	1,368	-	304	1,056	8	1,332	36
West Virginia . . . . .	34,244	-	34,244	-	-	30,097	4,147
Wyoming . . . . .	66,219	-	4,320	61,898	-	42,501	23,718
East of the MS River . . . . .	239,379	7,333	230,962	-	1,083	190,116	49,262
West of the MS River . . . . .	261,680	132	35,666	183,160	42,722	148,409	113,271

- Represents or rounds to zero.

Source: U.S. Energy Information Administration, unpublished data from the Coal Reserves Database.

## No. 874. Uranium Concentrate (U<sub>3</sub>O<sub>8</sub>) Industry—Summary: 1990 to 2001

[See also Table 898 in Section 19, Energy and Utilities]

Item	Unit	1990	1994	1995	1996	1997	1998	1999	2000	2001
Exploration and development, surface drilling	Mil. ft. . . . .	1.7	0.7	1.3	3.0	4.9	4.6	2.5	1.0	0.7
Expenditures	Mil. dol. . . . .	17.1	3.7	6.0	10.1	30.4	21.7	9.0	6.7	4.8
Number of mines operated . . . . .	Number . . . . .	39	12	12	13	14	15	14	10	7
Underground . . . . .	Number . . . . .	27	-	-	1	1	4	3	1	-
Openpit . . . . .	Number . . . . .	2	-	-	-	-	-	-	-	-
In situ leaching . . . . .	Number . . . . .	7	5	5	6	7	6	6	4	3
Other sources . . . . .	Number . . . . .	3	7	7	6	6	5	5	5	4
Mine production . . . . .	1,000 pounds . . . . .	5,876	2,526	3,528	4,705	4,710	4,782	4,548	3,123	2,647
Underground . . . . .	1,000 pounds . . . . .	(D)	-	-	(D)	(D)	(D)	(D)	(D)	-
Openpit . . . . .	1,000 pounds . . . . .	1,881	-	-	-	-	-	-	-	-
In situ leaching . . . . .	1,000 pounds . . . . .	(D)	2,448	3,372	4,379	4,084	3,721	3,830	2,995	(D)
Other sources . . . . .	1,000 pounds . . . . .	3,995	78	156	326	626	1,062	718	128	(D)
Uranium concentrate production <sup>1</sup> , mills and plants	1,000 pounds . . . . .	8,886	3,352	6,043	6,321	5,643	4,705	4,611	3,958	2,639
Concentrate shipments from	1,000 pounds . . . . .	12,957	6,319	5,500	5,982	5,817	4,863	5,527	3,187	2,203
Employment	Person-years . . . . .	1,335	980	1,107	1,118	1,097	1,120	848	627	423

- Represents zero. D Data withheld to avoid disclosing figures for individual companies. <sup>1</sup> U<sub>3</sub>O<sub>8</sub>.

Source: U.S. Department of Energy, *Uranium Industry*, annual. See also <<http://www.eia.doe.gov/coal/nuclear/ua/ua.pdf>> (released May 2001) and <<http://www.eia.doe.gov/coal/nuclear/ua/ua/contents.html>> (released 27 June 2002).