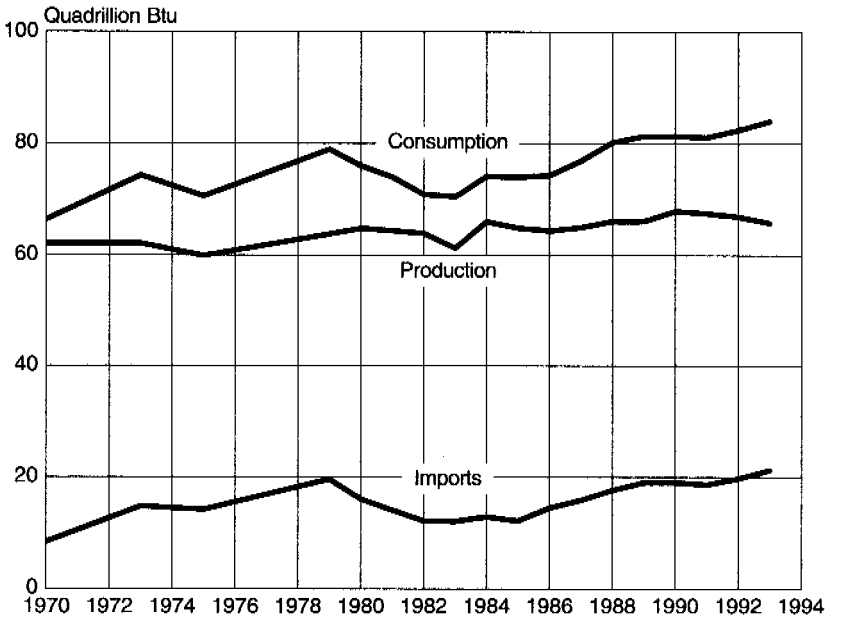
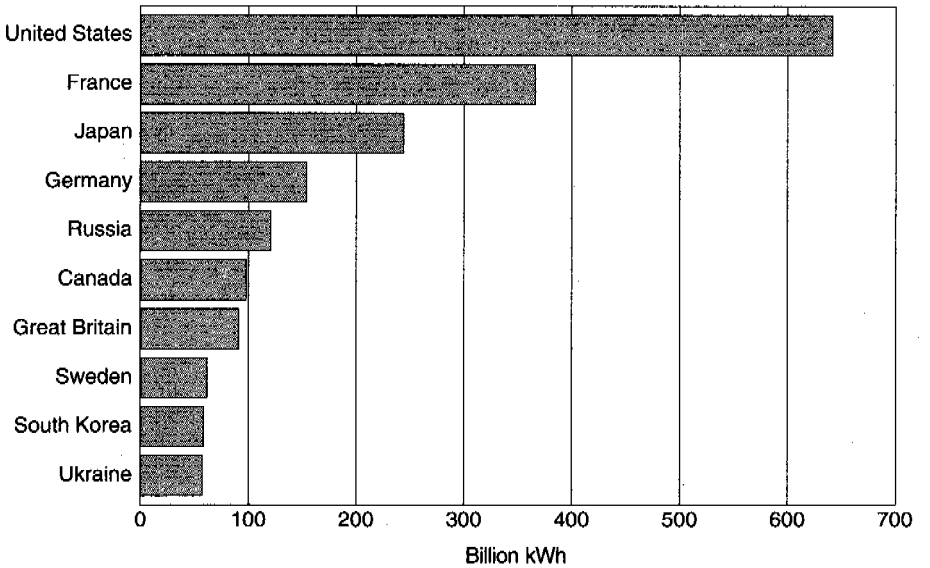
Figure 19.1
Energy Supply and Disposition: 1970 to 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 920.

Figure 19.2
Commercial Nuclear Power Generation— Top 10 Countries: 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 952.

Energy

This section presents statistics on fuel resources, energy production and consumption, electric energy, hydroelectric power, nuclear power, solar energy, wood energy and the electric and gas utility industries. The principal sources are the U.S. Department of Energy's Energy Information Administration (EIA), the Edison Electric Institute, Washington, DC, and the American Gas Association, Arlington, VA. For additional data on transportation, see section 21; on fuels, see section 24; and on energy-related housing characteristics, see section 25.

In Brief

Energy expenditures amount to $467 billion in 1991

Crude oil imports almost equal domestic production in 1993 with 6.7 million barrels per day compared to 6.8 for production

Solar collector shipments up 8 percent between 1991 and 1992 to 7.1 million square feet

The EIA, in its *Annual Energy Review,* provides statistics and trend data on energy supply, demand, and prices. Information is included on petroleum and natural gas, coal, electricity, hydroelectric power, nuclear power, solar, wood, and geothermal energy. Among its annual reports are *Annual Energy Review, Electric Power Annual, Natural Gas Annual, Petroleum Supply Annual, State Energy Data Report, State Energy Price and Expenditure Report, Financial Statistics of Selected Electric Utilities, Performance Profiles of Major Energy Producers, Annual Energy Outlook,* and *International Energy Annual.* These various publications contain State, national, and international data on production of electricity, net summer capability of generating plants, fuels used in energy production, energy sales and consumption, and hydroelectric power. The EIA also issues the *Monthly Energy Review,* which presents current supply, disposition, and price data, and monthly publications on petroleum, coal, natural gas, and electric power. Data on residential energy consumption, expenditures, and conservation activities are available from EIA's Residential Energy Consumption Survey and are published triennially in *Residential Energy Consumption Survey: Consumption and Expenditures,* and *Residential Energy Consumption Survey: Housing Characteristics,* and several other reports.

The Edison Electric Institute's monthly bulletin and annual *Statistical Year Book of the Electric Utility Industry for the Year* contain data on the distribution of electric energy by public utilities; information on the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment is presented in the annual *Year End Summary of the Electric Power Situation in the United States.* The American Gas Association, in its monthly and quarterly bulletins and its yearbook, *Gas Facts,* presents data on gas utilities, including sales, revenues, customers, prices, and other financial and operating statistics.

Btu conversion factors.—Various energy sources are converted from original units (e.g., short tons, cubic feet, barrels, kilowatt-hours) to the thermal equivalent using British thermal units (Btu). A Btu is the amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (F) at or near 39.2 degrees F. Factors are calculated annually from the latest final annual data available; some are revised as a result. The following list provides conversion factors used in 1992 for production and consumption, in that order, for various fuels: Petroleum, 5.800 and 5.376 mil. Btu per barrel; total coal, 21.675 and 21.164 mil. Btu per short ton; and natural gas (dry), 1,030 Btu per cubic foot for both. The factors for the production of nuclear power and geothermal power were 10,740 and 20,997 Btu per kilowatt-hour, respectively. The fossil fuel steam-electric power plant generation factor of 10,332 Btu per kilowatt-hour was used for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

No. 918. Total Horsepower of All Prime Movers: 1960 to 1992

[**In millions, except percent.** As of **January,** except as noted. Prime movers are mechanical engines and turbines, and work animals, which originally convert fuels or force (as wind or falling water) into work and power. Electric motors, which obtain their power from prime movers, are excluded to avoid duplication. See also *Historical Statistics, Colonial Times to 1970,* series S 1-14]

YEAR	Total horsepower	AUTOMOTIVE [1 2]		NONAUTOMOTIVE							
		Total	Percent of total	Total	Factories [3 4]	Mines [3 4]	Railroads [5]	Merchant ships and sailing vessels [4]	Farms	Electric central stations [2]	Aircraft [5 6]
1960	11,008	10,367	94.2	641	42	35	47	24	240	217	37
1965	15,096	14,306	94.8	790	48	40	44	24	272	307	55
1970	20,408	19,325	94.7	1,083	54	45	54	22	290	435	183
1975	25,100	23,752	94.6	1,348	60	47	62	22	318	654	185
1980	28,922	27,362	94.6	1,564	64	48	63	28	345	806	210
1981	29,507	27,909	94.6	1,598	64	48	65	29	345	835	212
1982	30,495	28,852	94.6	1,643	64	48	64	29	352	854	232
1983	31,337	29,662	94.7	1,675	64	47	62	29	356	877	240
1984	31,819	30,117	94.7	1,702	65	47	61	30	359	886	254
1985	32,529	30,792	94.7	1,737	65	47	58	29	358	912	268
1986	32,660	30,893	94.6	1,767	65	47	56	29	358	942	270
1987	33,266	31,488	94.7	1,778	65	47	53	29	357	958	269
1988	34,200	32,415	94.8	1,785	65	47	53	28	356	969	267
1989	34,579	32,790	94.8	1,789	65	47	50	28	356	976	267
1990	34,958	33,158	94.7	1,800	67	48	50	28	356	984	267
1991	34,962	33,158	94.8	1,804	67	48	50	27	355	991	266
1992	35,300	33,431	94.7	1,869	68	47	50	29	352	[7] 1,057	266

[1] Includes passenger cars, trucks, buses, and motorcycles. [2] As of July 1, except beginning 1992, as of January 1. [3] Beginning 1965, data are estimates. [4] This is an extension of trends, since government agencies suspended compilation of these power capacity statistics. Beginning 1992, includes vessels on the Great Lakes. [5] Beginning 1965, not strictly comparable with earlier years. [6] Includes private planes and commercial airlines. [7] Includes 57 million horsepower in cogenerating and industrial electric power capacity.

Source: John A. Waring, Arlington, VA, unpublished estimates.

No. 919. Energy Production and Consumption, by Major Source: 1960 to 1993

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. See also *Historical Statistics, Colonial Times to 1970,* series M 76-92]

YEAR	Total production (quad. Btu)	PERCENT OF PRODUCTION				Total consumption (quad. Btu)	PERCENT OF CONSUMPTION				Consumption/production ratio
		Coal	Petroleum [1]	Natural gas [2]	Other [3]		Coal	Petroleum [1]	Natural gas [2]	Other [3]	
1960	41.5	26.1	36.0	34.0	3.9	43.8	22.5	45.5	28.3	3.8	1.06
1965	49.3	26.5	33.5	35.8	4.3	52.7	22.0	44.1	29.9	4.0	1.07
1970	62.1	23.5	32.9	38.9	4.7	66.4	18.5	44.4	32.8	4.3	1.07
1971	61.3	21.5	32.7	40.5	5.3	67.9	17.1	45.0	33.1	4.8	1.11
1972	62.4	22.6	32.1	39.7	5.6	71.3	16.9	46.2	31.9	5.0	1.14
1973	62.1	22.5	31.4	39.9	6.2	74.3	17.5	46.9	30.3	5.3	1.20
1974	60.8	23.1	30.5	38.9	7.4	72.5	17.5	46.1	30.0	6.5	1.19
1975	59.9	25.0	29.6	36.8	8.6	70.5	17.9	46.4	28.3	7.4	1.18
1976	59.9	26.1	28.8	36.4	8.6	74.4	18.3	47.3	27.4	7.1	1.24
1977	60.2	26.2	29.0	36.4	8.5	76.3	18.2	48.7	26.1	7.0	1.27
1978	61.1	24.4	30.2	35.6	9.9	78.1	17.6	48.6	25.6	8.1	1.28
1979	63.8	27.4	28.4	35.1	9.1	78.9	19.0	47.0	26.2	7.7	1.24
1980	64.8	28.7	28.2	34.2	8.9	76.0	20.3	45.0	26.9	7.8	1.17
1981	64.4	28.5	28.2	34.2	9.1	74.0	21.5	43.2	26.9	8.4	1.15
1982	63.9	29.1	28.6	32.1	10.2	70.9	21.6	42.6	26.1	9.7	1.11
1983	61.3	28.1	30.0	30.6	11.2	70.5	22.5	42.6	24.6	10.2	1.15
1984	66.0	29.9	28.6	30.7	10.8	74.1	23.0	41.9	25.0	10.1	1.12
1985	64.9	29.8	29.3	29.6	11.3	74.0	23.6	41.8	24.1	10.5	1.14
1986	64.4	30.3	28.6	29.0	12.1	74.3	23.2	43.3	22.5	10.9	1.15
1987	65.0	31.0	27.2	29.8	12.0	76.9	23.4	42.7	23.1	10.8	1.18
1988	66.1	31.4	26.1	30.0	12.4	80.2	23.5	42.7	23.1	10.7	1.21
1989	66.1	32.3	24.4	30.3	13.1	81.3	23.3	42.1	23.8	10.8	1.23
1990	[4] 67.9	33.1	22.9	30.3	13.7	81.3	23.5	41.3	23.8	11.5	1.20
1991	67.5	32.0	23.3	30.4	14.3	81.1	23.1	40.5	24.2	12.2	1.20
1992	66.9	32.3	22.8	31.0	13.9	82.4	22.9	40.7	24.4	11.9	1.23
1993	65.8	31.1	22.0	32.5	14.4	[5] 84.0	23.4	40.2	24.8	11.6	1.28

[1] Production includes crude oil and lease condensate. Consumption includes domestically produced crude oil, natural gas liquids, and lease condensate, plus imported crude oil and products. [2] Production includes natural gas liquids; consumption excludes natural gas liquids. [3] Comprised of hydropower, nuclear power, geothermal energy, and other. [4] Represents peak year for U.S. energy production. [5] Represents peak year for U.S. energy consumption.

Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 920. Energy Supply and Disposition, by Type of Fuel: 1970 to 1993

[In quadrillion British thermal units (Btu). For Btu conversion factors, see text, section 19]

TYPE OF FUEL	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Production [2]	**62.1**	**62.1**	**59.9**	**64.8**	**64.9**	**64.4**	**65.0**	**66.1**	**66.1**	[1]**67.9**	**67.5**	**66.9**	**65.8**
Crude oil [2]	20.4	19.5	17.7	18.3	19.0	18.4	17.7	17.3	16.1	15.6	15.7	15.2	14.5
Natural gas liquids	2.5	2.6	2.4	2.3	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.4	2.4
Natural gas [3]	21.7	22.2	19.6	19.9	17.0	16.5	17.1	17.6	17.9	18.4	18.3	18.3	19.0
Coal	14.6	14.0	15.0	18.6	19.3	19.5	20.1	20.7	21.4	22.5	21.6	21.6	20.5
Nuclear electric power	0.2	0.9	1.9	2.7	4.2	4.5	4.9	5.7	5.7	6.2	6.6	6.7	6.5
Hydroelectric power	2.6	2.9	3.2	2.9	3.0	3.1	2.6	2.3	2.8	2.9	2.9	2.5	2.8
Geothermal and other	(Z)	(Z)	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net trade [4]	**-5.7**	**-12.7**	**-11.7**	**-12.3**	**-7.9**	**-10.3**	**-11.9**	**-13.2**	**-14.2**	**-14.1**	**-13.4**	**-14.6**	**-16.9**
Exports	2.7	2.1	2.4	3.7	4.2	4.1	3.9	4.4	4.8	4.9	5.2	5.0	4.3
Coal	1.9	1.4	1.8	2.4	2.4	2.3	2.1	2.5	2.6	2.8	2.9	2.7	(NA)
Imports	8.4	14.7	14.1	16.0	12.1	14.4	15.8	17.6	19.0	19.0	18.6	19.7	21.2
Crude oil	2.8	6.9	8.7	11.2	6.8	9.0	10.1	11.0	12.6	12.8	12.6	13.2	(NA)
Consumption	**66.4**	**74.3**	**70.6**	**76.0**	**74.0**	**74.3**	**76.9**	**80.2**	**81.3**	**81.3**	**81.1**	**82.4**	[5]**84.0**
Petroleum products	29.5	34.8	32.7	34.2	30.9	32.2	32.9	34.2	34.2	33.6	32.9	33.5	33.8
Natural gas [3]	21.8	22.5	20.0	20.4	17.8	16.7	17.7	18.6	19.4	19.3	19.6	20.3	20.8
Coal	12.3	13.0	12.7	15.4	17.5	17.3	18.0	18.9	18.9	19.1	18.8	18.9	19.6
Nuclear power	0.2	0.9	1.9	2.7	4.2	4.5	4.9	5.7	5.7	6.2	6.6	6.7	6.5
Hydroelectric power [6]	2.7	3.0	3.2	3.1	3.4	3.5	3.1	2.7	2.9	3.0	3.1	2.8	3.1
Geothermal and other	(Z)	(Z)	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2

Z Less than 50 trillion. NA Not available. [1] Represents peak year for U.S. energy production. [2] Includes lease condensate. [3] Dry marketed gas. [4] Exports minus imports. [5] Represents peak year for U.S. energy consumption. [6] Includes industrial generation of hydropower and net electricity imports.

No. 921. Energy Imports and Exports, by Type of Fuel: 1970 to 1992

[In quadrillion of Btu. For definition of Btu, see text, section 19]

TYPE OF FUEL	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
Net imports:[1]												
Coal	-1.93	-1.42	-1.74	-2.39	-2.39	-2.19	-2.05	-2.45	-2.57	-2.70	-2.77	-2.59
Natural Gas (dry)	0.77	0.98	0.90	0.96	0.90	0.69	0.94	1.22	1.28	1.46	1.67	1.84
Petroleum	6.92	12.98	12.51	13.50	8.95	11.53	12.53	14.01	15.33	15.29	14.22	14.87
Other [2]	-0.04	0.14	0.08	0.18	0.41	0.36	0.49	0.37	0.14	0.03	0.24	0.30
Imports:												
Coal	(Z)	(Z)	0.02	0.03	0.05	0.06	0.04	0.05	0.07	0.07	0.08	0.10
Natural Gas (dry)	0.85	1.06	0.98	1.01	0.95	0.75	0.99	1.30	1.39	1.55	1.80	2.09
Petroleum	7.47	13.47	12.95	14.66	10.61	13.20	14.16	15.75	17.16	17.12	16.35	16.88
Other [2]	0.07	0.20	0.16	0.28	0.49	0.43	0.57	0.47	0.33	0.25	0.35	0.39
Exports:												
Coal	1.94	1.43	1.76	2.42	2.44	2.25	2.09	2.50	2.64	2.77	2.85	2.68
Natural Gas (dry)	0.07	0.08	0.07	0.05	0.06	0.06	0.05	0.07	0.11	0.09	0.13	0.25
Petroleum	0.55	0.49	0.44	1.16	1.66	1.67	1.63	1.74	1.84	1.82	2.13	2.01
Other [2]	0.11	0.06	0.08	0.09	0.08	0.08	0.08	0.10	0.18	0.23	0.11	0.09

Z Less than .005 quadrillion Btu. [1] Net imports equals imports minus exports. Minus sign (-) denotes an excess of exports over imports. [2] Coal coke and small amounts of electricity transmitted across U.S. borders with Canada and Mexico.

No. 922. Selected Energy Indicators—Summary: 1970 to 1993

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. Minus sign (-) indicates decrease]

ITEM	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
AVERAGE ANNUAL PERCENT CHANGE [1]													
Gross domestic product [2]	3.0	1.7	-0.7	-0.1	0.6	2.9	3.0	3.9	2.5	1.2	-0.7	2.5	3.0
Energy production, total [3]	4.6	-0.2	-1.8	0.3	-0.3	-0.8	0.9	1.8	0.0	2.6	-0.5	-0.9	-1.6
Crude oil [4]	4.2	-0.9	-4.7	0.2	0.2	-3.3	-3.9	-2.3	-6.9	-3.4	0.8	-3.1	-5.0
Natural gas	6.4	0.0	-6.1	-0.2	-1.2	-2.6	3.5	2.7	1.4	2.8	-0.7	0.8	3.3
Coal	2.2	-0.2	3.4	1.2	-0.4	1.0	3.2	2.9	2.9	5.1	-3.9	(-Z)	-5.2
Energy consumption, total [5]	4.6	1.4	-2.6	-0.8	0.0	0.4	3.4	4.2	1.4	-0.1	-0.2	1.3	2.2
Petroleum products	4.8	1.9	-3.1	-1.6	-0.1	4.0	2.1	4.1	0.0	-1.9	-2.1	2.1	0.7
Natural gas (dry)	6.5	-0.3	-6.0	-0.3	-0.7	-6.5	6.0	4.5	4.4	-0.5	1.6	2.6	3.2
Coal	1.1	2.4	-1.2	0.5	0.5	-1.2	4.2	4.6	0.4	0.9	-1.7	0.5	4.0
PER CAPITA [5] (mil. Btu)													
Energy production	304	294	278	285	273	268	268	270	268	272	268	262	255
Energy consumption	327	351	327	334	311	309	317	328	329	326	322	322	326
Energy consumption per dollar of GDP [2] (1,000 Btu)	23.1	22.7	21.9	20.1	17.3	16.9	16.9	17.0	16.8	16.6	16.7	16.5	16.3

Z Less than .05 percent. [1] Represents percent change from immediate prior year; for example, 1970, change from 1965. Percent change derived from Btu values. [2] Gross domestic product in constant (1987) dollars. [3] Includes types of fuel or power, not shown separately. [4] Includes lease condensate. [5] Based on resident population estimated as of July 1.

Source of tables 929 to 931: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*, March 1994.

No. 923. Energy Consumption—End-Use Sector and Selected Source, by State: 1991

[In trillions of Btu, except as indicated. For Btu conversion factors, see text, section 19]

REGION, DIVISION, AND STATE	Total[1]	Per capita[2] (mil. Btu)	END-USE SECTOR				SOURCE				
			Residential	Commercial	Industrial	Transportation	Petroleum	Natural gas (dry)	Coal	Hydroelectric power	Nuclear electric power
United States	**81,119**	**321.7**	**16,377**	**13,020**	**[3]29,601**	**22,121**	**32,846**	**19,625**	**18,754**	**3,116**	**6,579**
Northeast	**13,270**	**260.4**	**3,285**	**3,097**	**3,346**	**3,542**	**6,012**	**2,943**	**2,124**	**651**	**1,562**
New England	**3,920**	**296.9**	**1,030**	**1,071**	**812**	**1,007**	**1,898**	**905**	**353**	**349**	**373**
Maine	362	292.9	79	58	119	106	229	5	9	52	67
New Hampshire	239	215.8	69	40	54	75	143	14	35	23	73
Vermont	132	232.5	39	25	26	42	75	7	(Z)	33	44
Massachusetts	1,313	219.0	376	342	213	382	759	261	117	23	47
Rhode Island	215	214.2	60	46	50	58	92	56	(Z)	2	-
Connecticut	732	222.5	221	172	135	204	419	105	23	6	132
Middle Atlantic	**9,350**	**247.6**	**2,255**	**2,026**	**2,534**	**2,535**	**4,114**	**2,038**	**1,771**	**302**	**1,189**
New York	3,558	197.2	951	1,013	693	901	1,669	900	344	297	306
New Jersey	2,300	295.9	485	481	539	795	1,202	476	62	[4]-2	266
Pennsylvania	3,492	292.3	819	532	1,302	839	1,243	662	1,365	7	617
Midwest	**19,687**	**327.1**	**4,581**	**3,192**	**7,197**	**4,718**	**6,652**	**4,814**	**6,696**	**172**	**1,769**
East North Central	**13,787**	**325.2**	**3,216**	**2,195**	**5,253**	**3,124**	**4,397**	**3,447**	**4,679**	**45**	**1,339**
Ohio	3,687	337.0	828	582	1,490	787	1,090	799	1,413	2	159
Indiana	2,421	431.8	440	272	1,147	562	806	464	1,340	4	-
Illinois	3,513	304.8	889	658	1,219	747	1,110	1,006	758	1	772
Michigan	2,754	293.8	697	442	927	689	911	844	760	6	290
Wisconsin	1,412	285.4	362	241	470	339	480	334	408	32	118
West North Central	**5,900**	**331.7**	**1,365**	**997**	**1,944**	**1,594**	**2,255**	**1,367**	**2,017**	**127**	**430**
Minnesota	1,364	308.2	324	197	485	357	511	318	301	32	130
Iowa	937	335.9	220	146	347	225	309	235	346	9	44
Missouri	1,513	293.4	399	295	346	473	622	259	534	11	107
North Dakota	320	505.3	54	40	159	67	114	42	379	23	-
South Dakota	205	292.2	53	33	53	67	101	27	36	41	-
Nebraska	522	328.2	127	116	132	147	204	114	152	11	86
Kansas	1,039	417.2	188	170	422	258	394	372	269	(Z)	63
South	**33,578**	**386.3**	**5,893**	**4,443**	**14,508**	**8,737**	**13,772**	**8,592**	**7,834**	**499**	**2,586**
South Atlantic	**12,508**	**281.5**	**2,916**	**2,290**	**3,567**	**3,736**	**5,185**	**1,553**	**3,593**	**166**	**1,641**
Delaware	237	348.1	47	35	90	64	136	43	57	-	-
Maryland	1,215	249.8	322	178	379	336	495	178	275	15	97
Dist. of Columbia	175	294.5	34	81	34	27	35	31	2	-	-
Virginia	1,848	293.9	421	384	466	578	744	182	357	(Z)	256
West Virginia	783	435.2	129	87	423	144	293	119	800	11	-
North Carolina	1,962	290.7	458	340	632	532	725	172	522	62	326
South Carolina	1,209	339.6	240	162	495	312	408	137	291	26	463
Georgia	2,057	310.3	441	323	630	663	791	332	646	49	279
Florida	3,022	227.7	824	700	418	1,080	1,558	359	643	3	220
East South Central	**5,763**	**375.4**	**1,119**	**651**	**2,451**	**1,543**	**1,999**	**949**	**2,186**	**259**	**446**
Kentucky	1,476	397.3	280	183	638	376	508	196	805	38	-
Tennessee	1,746	352.6	383	200	724	440	567	235	566	109	178
Alabama	1,591	389.0	287	164	731	409	526	261	720	112	170
Mississippi	950	366.5	169	104	358	318	398	257	95	-	98
West South Central	**15,307**	**564.1**	**1,858**	**1,502**	**8,490**	**3,458**	**6,588**	**6,090**	**2,055**	**74**	**499**
Arkansas	770	324.8	167	105	268	230	271	213	216	37	136
Louisiana	3,469	817.4	294	214	2,217	745	1,444	1,579	214	-	150
Oklahoma	1,283	405.0	241	183	515	344	432	582	292	19	-
Texas	9,785	563.9	1,156	1,000	5,490	2,139	4,441	3,716	1,333	18	213
West	**15,503**	**286.7**	**2,803**	**2,677**	**4,757**	**5,265**	**6,590**	**3,735**	**2,271**	**2,004**	**670**
Mountain	**4,563**	**325.4**	**870**	**858**	**1,458**	**1,378**	**1,703**	**1,035**	**2,071**	**343**	**270**
Montana	342	423.5	61	52	146	83	145	47	180	124	-
Idaho	388	373.9	81	71	146	90	127	53	12	87	-
Wyoming	391	853.8	36	40	236	78	116	103	450	8	-
Colorado	964	286.1	217	237	234	277	345	268	322	17	-
New Mexico	588	380.0	76	94	189	229	236	227	234	2	-
Arizona	924	246.7	205	204	184	331	353	128	348	75	270
Utah	566	320.4	108	89	217	153	207	142	345	6	-
Nevada	400	310.6	86	71	106	137	174	67	180	24	-
Pacific	**10,940**	**273.2**	**1,933**	**1,819**	**3,299**	**3,887**	**4,887**	**2,700**	**200**	**1,661**	**400**
Washington	1,965	391.7	390	294	700	581	776	178	69	908	45
Oregon	953	326.5	210	166	276	301	363	127	33	460	16
California	7,162	235.5	1,264	1,273	1,922	2,703	3,283	2,024	64	283	339
Alaska	588	1,033.9	46	58	334	149	198	368	13	9	-
Hawaii	272	239.7	23	28	67	153	267	3	1	1	-

- Represents zero. Z Less than 500 million Btu. [1] Sources of energy includes geothermal, wood and waste, and net interstate sales of electricity, including losses, not shown separately. [2] Based on estimated resident population as of July 1. [3] Includes 8.9 trillion Btu of net imports of coal coke not allocated by State. [4] A negative number occurs when more electricity is expended than is created to provide electricity during peak demand periods.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1991.*

No. 924. Primary Energy Consumption, by End-Use Sector: 1960 to 1993

[Btu = British thermal unit. For residential and commercial, industrial, and transportation, represents consumption of fossil fuels only. For Btu conversion factors, see text, section 19]

YEAR	Total consumption (quad. Btu)	Residential and commercial (quad. Btu)	Industrial and miscellaneous (quad. Btu)	Transportation (quad. Btu)	Electricity generation (quad. Btu)	PERCENT OF TOTAL			
						Residential and commercial	Industrial and miscellaneous	Transportation	Electricity generation
1960	43.8	8.8	16.3	10.6	8.2	20.1	37.2	24.2	18.7
1970	66.4	12.1	21.9	16.1	16.3	18.2	33.0	24.2	24.5
1973	74.3	12.3	23.6	18.6	19.9	16.6	31.8	25.0	26.8
1975	70.6	11.6	20.4	18.2	20.4	16.4	28.9	25.8	28.9
1976	74.4	12.3	21.5	19.1	21.6	16.5	28.9	25.7	29.0
1977	76.3	11.9	21.9	19.8	22.7	15.6	28.7	26.0	29.8
1978	78.1	11.9	21.9	20.8	23.7	15.2	28.0	26.4	30.3
1979	78.9	11.5	22.8	20.4	24.1	14.6	28.9	25.9	30.5
1980	76.0	10.7	21.1	19.7	24.5	14.1	27.8	25.9	32.2
1981	74.0	10.0	19.7	19.5	24.8	13.5	26.6	26.4	33.5
1982	70.9	10.1	17.5	19.0	24.3	14.2	24.7	26.8	34.3
1983	70.5	9.7	16.8	19.1	25.0	13.8	23.8	27.1	35.5
1984	74.1	10.0	18.3	19.8	26.0	13.5	24.7	26.7	35.1
1985	74.0	9.8	17.7	20.0	26.5	13.2	23.9	27.0	35.8
1986	74.3	9.6	17.3	20.8	26.7	12.9	23.3	28.0	35.9
1987	76.9	9.7	18.2	21.4	27.6	12.6	23.7	27.8	35.9
1988	80.2	10.3	19.0	22.3	28.7	12.8	23.7	27.8	35.8
1989	81.3	10.4	19.1	22.5	29.3	12.8	23.5	27.7	36.0
1990	81.3	9.6	19.6	22.5	29.6	11.8	24.1	27.7	36.4
1991	81.1	9.8	19.3	22.1	29.9	12.1	23.8	27.3	36.9
1992	82.1	10.0	20.2	22.4	29.5	12.2	24.6	27.3	36.0
1993	84.0	10.4	20.3	22.8	30.4	12.4	24.2	27.1	36.3

Source: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*, March 1994.

No. 925. Energy Expenditures and Average Fuel Prices, by Source and Sector: 1970 to 1991

[For definition of Btu, see text, section 19. End-use sector and electric utilities exclude expenditures and prices on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

SOURCE AND SECTOR	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991
EXPENDITURES (mil. dol.)											
Total[1] [2]	82,579	111,616	171,782	373,900	435,444	381,250	393,525	407,597	434,338	469,468	467,132
Natural gas	10,892	13,933	20,061	51,062	72,938	59,701	58,019	61,089	65,382	64,104	64,701
Petroleum products[2]	48,088	65,305	103,859	238,408	223,197	174,539	186,402	189,261	206,261	234,510	222,017
Motor gasoline	31,596	39,667	59,446	124,408	118,044	91,526	99,809	103,212	112,585	126,471	123,051
Coal	4,593	6,229	13,048	22,648	29,719	27,907	27,586	28,371	28,107	28,381	27,869
Electricity sales	23,351	33,780	50,680	98,098	149,242	151,806	154,692	162,070	169,340	176,742	184,822
Residential sector	20,083	27,078	36,844	68,825	98,307	96,203	97,552	102,773	108,423	109,265	114,740
Commercial sector	10,668	15,104	22,835	46,881	70,263	68,444	68,777	71,579	75,467	78,922	81,488
Industrial sector	16,458	23,531	41,189	94,520	105,723	90,496	89,975	91,315	93,812	100,951	99,701
Transportation sector[2]	35,370	45,904	70,934	163,674	161,150	126,107	137,220	141,930	156,637	180,330	171,203
Motor gasoline	30,525	38,598	57,992	121,809	115,201	89,404	97,527	100,988	110,168	123,775	120,555
Electric utilities	4,316	7,817	16,396	37,435	42,558	35,793	36,681	37,435	38,895	38,443	36,501
AVERAGE FUEL PRICES (dol. per mil. Btu)											
All sectors	1.65	2.02	3.33	6.91	8.42	7.36	7.37	7.30	7.69	8.37	8.33
Residential sector	2.12	2.73	3.83	7.55	11.14	10.99	10.95	10.90	11.26	12.14	12.34
Commercial sector	1.97	2.56	4.09	7.88	11.71	11.35	11.06	10.91	11.4	12.03	12.21
Industrial sector	0.83	1.08	2.20	4.71	6.09	5.40	5.19	5.03	5.11	5.40	5.34
Transportation sector	2.31	2.57	4.02	8.61	8.26	6.22	6.57	6.56	7.16	8.26	7.97
Electric utilities	0.32	0.46	0.96	1.75	1.85	1.55	1.51	1.45	1.48	1.46	1.37

[1] Includes electricity sales; excludes electricity generation. [2] Includes sources or fuel types not shown separately.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

No. 926. Energy Expenditures—End-Use Sector and Selected Source, by State: 1991

[**In millions of dollars, except as indicated.** End-use sector and electric utilities exclude expenditures on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

REGION, DIVISION, AND STATE	Total[1]	Per capita[2] (dol.)	END-USE SECTOR				SOURCE				
			Residential	Commercial	Industrial	Transportation	Petroleum products		Natural gas	Coal	Electricity sales
							Total	Gasoline			
U.S.	**467,132**	**1,853**	**114,740**	**81,488**	**[3]99,701**	**171,203**	**222,016**	**123,051**	**64,700**	**27,869**	**184,822**
Northeast	**90,251**	**1,771**	**26,855**	**20,208**	**14,402**	**28,786**	**41,168**	**22,348**	**12,837**	**3,182**	**37,703**
N.E.	**24,093**	**1,826**	**7,477**	**5,130**	**3,395**	**8,092**	**12,431**	**6,685**	**2,625**	**343**	**9,714**
ME	2,538	2,057	708	379	504	947	1,538	715	27	25	979
NH	1,906	1,727	597	301	318	691	1,045	609	87	63	800
VT	1,094	1,930	353	188	156	397	658	337	32	1	406
MA	10,598	1,767	3,264	2,498	1,301	3,535	5,284	2,864	1,471	205	4,271
RI	1,756	1,747	531	358	310	558	781	460	331	-	650
CT	6,201	1,885	2,024	1,405	806	1,965	3,126	1,681	678	50	2,608
M.A	**66,159**	**1,752**	**19,378**	**15,079**	**11,007**	**20,695**	**28,737**	**15,683**	**10,212**	**2,839**	**27,988**
NY	28,006	1,551	8,786	7,825	3,296	8,098	11,822	6,644	4,630	567	12,665
NJ	15,874	2,047	4,115	3,558	2,562	5,639	7,671	3,728	2,296	109	6,088
PA	22,279	1,863	6,478	3,695	5,149	6,957	9,244	5,311	3,286	2,163	9,235
Midwest	**112,712**	**1,871**	**28,861**	**18,298**	**26,502**	**39,051**	**49,448**	**29,707**	**19,328**	**9,598**	**42,353**
E.N.C	**79,414**	**1,872**	**20,660**	**13,157**	**19,556**	**26,041**	**32,897**	**19,962**	**14,879**	**7,159**	**30,549**
OH	21,089	1,928	5,421	3,559	5,285	6,823	8,421	5,326	3,509	2,110	8,827
IN	11,920	2,125	2,645	1,423	3,530	4,322	5,387	2,770	1,903	1,958	4,063
IL	21,500	1,863	6,018	4,140	4,880	6,463	8,155	5,005	4,306	1,286	6,857
MI	16,754	1,786	4,340	2,789	4,201	5,425	7,034	4,456	3,538	1,232	6,042
WI	8,152	1,645	2,237	1,247	1,660	3,008	3,900	2,406	1,421	574	2,761
W.N.C.	**33,298**	**1,869**	**8,201**	**5,140**	**6,946**	**13,011**	**16,551**	**9,745**	**4,648**	**2,439**	**11,805**
MN	7,597	1,714	1,869	949	1,741	3,039	3,832	2,398	1,111	390	2,639
IA	5,212	1,865	1,356	750	1,161	1,946	2,476	1,553	833	398	1,829
MO	9,393	1,821	2,539	1,634	1,509	3,711	4,562	2,786	1,157	718	3,654
ND	1,589	2,502	303	202	505	579	831	415	110	442	416
SD	1,270	1,804	314	170	216	569	744	427	109	44	409
NE	3,093	1,942	681	562	556	1,295	1,634	882	438	118	1,019
KS	5,143	2,061	1,139	875	1,258	1,872	2,473	1,284	890	330	1,839
South	**173,973**	**2,002**	**39,590**	**25,633**	**43,323**	**65,428**	**87,420**	**45,942**	**20,020**	**12,315**	**69,652**
S.A.	**77,618**	**1,748**	**20,804**	**13,594**	**13,415**	**29,806**	**36,834**	**22,822**	**6,073**	**6,073**	**35,361**
DE	1,388	2,040	369	218	286	514	750	389	146	99	568
MD	8,049	1,657	2,310	1,093	1,658	2,988	3,809	2,433	822	445	3,483
DC	1,130	1,899	222	470	170	267	308	214	189	3	638
VA	11,038	1,758	2,921	2,042	1,508	4,567	5,501	3,340	818	558	4,558
WV	3,751	2,081	742	457	1,271	1,282	2,012	1,007	455	1,209	1,133
NC	12,601	1,871	3,391	1,988	2,579	4,643	5,849	3,735	676	926	5,973
SC	6,840	1,921	1,641	927	1,752	2,520	3,057	1,912	493	478	3,212
GA	12,479	1,884	3,063	2,133	2,457	4,826	5,605	3,494	1,471	1,161	5,317
FL	20,343	1,533	6,145	4,267	1,732	8,200	9,943	6,297	1,004	1,195	10,479
E.S.C	**29,644**	**1,931**	**6,423**	**3,570**	**7,862**	**11,789**	**14,212**	**8,366**	**2,886**	**3,175**	**12,139**
KY	7,188	1,936	1,474	852	1,924	2,938	3,592	2,054	659	998	2,800
TN	9,274	1,872	2,024	1,074	2,548	3,628	4,271	2,655	830	725	4,041
AL	8,301	2,029	1,858	1,001	2,309	3,133	3,832	2,260	872	1,292	3,357
MS	4,881	1,882	1,068	642	1,081	2,090	2,517	1,396	524	159	1,941
W.S.C	**66,711**	**2,457**	**12,362**	**8,469**	**22,046**	**23,833**	**36,374**	**14,754**	**11,062**	**3,067**	**22,152**
AR	4,687	1,975	1,169	621	1,032	1,866	2,223	1,342	636	347	1,860
LA	13,168	3,095	1,950	1,318	5,410	4,490	7,595	2,149	2,209	354	3,755
OK	5,996	1,888	1,442	945	1,089	2,520	2,944	1,778	1,263	384	2,267
TX	42,861	2,471	7,802	5,586	14,515	14,958	23,613	9,485	6,954	1,981	14,271
West	**90,154**	**1,868**	**19,434**	**17,349**	**15,433**	**37,938**	**43,981**	**25,053**	**12,515**	**2,774**	**35,114**
Mountain	**25,204**	**1,796**	**5,476**	**4,728**	**4,628**	**10,372**	**12,804**	**7,347**	**2,957**	**2,408**	**9,594**
MT	1,695	2,096	322	232	419	723	972	493	169	127	546
ID	1,910	1,837	392	298	470	750	1,019	556	174	23	694
WY	1,493	3,245	194	184	539	575	777	318	180	388	488
CO	5,415	1,603	1,215	1,173	739	2,289	2,693	1,730	854	355	1,858
NM	2,985	1,927	545	578	569	1,292	1,694	915	353	322	987
AZ	6,432	1,716	1,694	1,448	837	2,454	2,739	1,827	469	498	3,249
UT	2,868	1,621	621	438	596	1,214	1,420	795	513	441	857
NV	2,405	1,875	493	378	459	1,075	1,289	712	245	254	914
Pacific	**64,950**	**1,823**	**13,958**	**12,620**	**10,805**	**27,566**	**31,376**	**17,706**	**9,559**	**366**	**25,521**
WA	8,591	1,714	1,660	1,122	1,433	4,356	4,914	2,804	590	147	3,069
OR	5,008	1,714	1,014	756	904	2,334	2,693	1,542	472	39	1,855
CA	47,460	1,562	10,643	10,114	7,941	18,762	21,023	12,830	8,243	127	19,413
AK	1,852	3,249	349	329	185	988	1,247	241	212	51	415
HI	2,039	1,793	273	298	341	1,127	1,499	490	41	2	769

- Represents zero. [1] Includes sources not shown separately. Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel. [2] Based on estimated resident population as of July 1. [3] Includes net imports of coal coke not shown separately by State.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

No. 927. Residential Energy Consumption, Expenditures, and Average Price, 1980 to 1990, and by Region, 1990

[For period April to March for 1980-1985; January to December for 1987 and 1990. Excludes Alaska and Hawaii in 1980. Covers occupied units only. Excludes household usage of gasoline for transportation and the use of wood or coal. Based on Residential Energy Consumption Survey; see Appendix III. For composition of regions, see table 26. Btu=British thermal unit; see text, section 19]

TYPE OF FUEL	Unit	1980	1982	1983	1985	1987	1990				
							Total	Northeast	Midwest	South	West
CONSUMPTION											
Total	Quad. Btu.	9.74	9.51	8.62	9.04	9.13	9.22	2.30	2.81	2.60	1.51
Avg. per household	Mil. Btu	126	114	103	105	101	98	120	122	81	78
Natural gas	Quad. Btu.	5.31	5.39	4.77	4.98	4.83	4.86	1.03	1.88	1.03	0.92
Electricity	Quad. Btu.	2.42	2.48	2.42	2.48	2.76	3.03	0.47	0.66	1.36	0.54
Fuel oil, kerosene	Quad. Btu.	1.71	1.33	1.14	1.26	1.22	1.04	0.78	0.13	0.11	0.02
Liquid petroleum gas	Quad. Btu.	0.31	0.31	0.29	0.31	0.32	0.28	0.02	0.13	0.10	0.03
EXPENDITURES											
Total	Bil. dol.	63.2	85.0	87.8	97.0	97.7	110.2	28.3	26.9	37.2	17.9
Avg. per household	Dollars	815	1,022	1,048	1,123	1,080	1,172	1,471	1,166	1,151	920
Natural gas	Bil. dol.	17.8	24.5	27.1	29.8	26.1	27.3	7.3	9.2	5.9	4.8
Electricity	Bil. dol.	32.6	45.9	48.4	54.5	61.6	71.5	14.6	15.4	29.1	12.5
Fuel oil, kerosene	Bil. dol.	10.7	11.8	9.6	9.6	7.2	8.3	6.1	1.0	1.0	0.2
Liquid petroleum gas	Bil. dol.	2.1	2.7	2.7	3.1	2.8	3.1	0.3	1.3	1.2	0.4
AVERAGE PRICE											
Total	Dol./mil. Btu	6.49	8.93	10.18	10.73	10.71	12.0	12.3	9.6	14.3	11.8
Natural gas	Dol./mil. Btu	3.36	4.55	5.67	5.97	5.41	5.6	7.1	4.9	5.7	5.2
Electricity	Dol./mil. Btu	13.46	18.51	19.98	21.94	22.34	23.6	31.2	23.2	21.4	23.2
Fuel oil, kerosene	Dol./mil. Btu	6.29	8.89	8.42	7.64	5.89	7.9	7.9	7.8	8.4	7.9
Liquid petroleum gas	Dol./mil. Btu	6.71	8.74	9.42	9.91	8.91	11.2	14.3	9.7	12.2	12.2

Source: U.S. Energy Information Administration, *Household Energy Consumption and Expenditures, 1990* and prior reports. Survey not conducted in 1984, 1986, 1988 and 1989.

No. 928. Residential Energy Consumption and Expenditures, by Type of Fuel and Selected Household Characteristic: 1990

[For period January through December 1990. Quad.=quadrillion. See headnote, table 927]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total [1] (quad.)	Avg. per household [1] (mil.)	Natural gas (quad.)	Electricity (quad.)	Fuel oil [2] (quad.)	Total [1] (bil. dol.)	Avg. per household [1] (dol.)	Natural gas (bil. dol.)	Electricity (bil. dol.)	Fuel oil [2] (bil. dol.)
Total households	**9.22**	**98**	**4.86**	**3.03**	**1.05**	**110.2**	**1,172**	**27.3**	**71.5**	**8.3**
Single family detached	6.61	113	3.45	2.20	0.74	78.2	1,340	18.8	51.0	5.9
Single family attached	0.52	87	0.28	0.19	0.06	6.8	1,129	1.7	4.6	0.5
Two-to-four unit building	0.94	95	0.62	0.20	0.11	10.2	1,015	3.8	5.3	0.9
Five-or-more unit building	0.73	51	0.36	0.28	0.08	9.8	677	2.2	7.1	0.5
Mobile home	0.41	78	0.15	0.16	0.04	5.3	1,011	0.8	3.5	0.4
Year house built:										
1939 or earlier	2.57	120	1.57	0.51	0.42	26.1	1,216	9.0	13.0	3.3
1940 to 1949	0.74	105	0.45	0.19	0.07	7.9	1,130	2.5	4.5	0.6
1950 to 1959	1.47	110	0.81	0.41	0.22	16.8	1,254	4.6	10.2	1.7
1960 to 1969	1.41	95	0.77	0.48	0.13	17.1	1,155	4.4	11.4	1.0
1970 to 1979	1.82	85	0.78	0.82	0.17	24.5	1,143	4.2	18.3	1.3
1980 to 1984	0.58	72	0.21	0.32	0.01	9.0	1,120	1.2	7.4	0.1
1985 to 1990	0.63	80	0.28	0.30	(B)	8.8	1,117	1.4	6.8	(B)
Heating and cooling degree day zones: [3]										
Less than 2,000 CDD and —										
More than 7,000 HDD	1.12	111	0.53	0.29	0.21	11.5	1,132	2.7	6.3	1.6
5,500 to 7,000 HDD	3.29	123	2.04	0.75	0.43	33.4	1,251	10.8	18.4	3.5
4,000 to 5,499 HDD	2.12	102	1.06	0.67	0.34	25.6	1,222	6.6	15.6	2.7
Less than 4,000 HDD	1.41	73	0.72	0.59	0.04	19.4	1,008	4.2	14.3	0.3
More than 2,000 CDD and less than 4,000 HDD	1.28	75	0.50	0.74	(B)	20.4	1,197	3.0	16.9	(B)
1990 family income:										
Less than $10,000	1.27	80	0.70	0.36	0.15	14.1	888	4.0	8.2	1.2
$10,000 to $19,999	1.66	84	0.88	0.53	0.17	19.4	978	5.0	12.3	1.4
$20,000 to $34,999	2.27	93	1.17	0.77	0.25	27.1	1,115	6.4	17.9	2.1
$35,000 to $49,999	1.75	105	0.90	0.62	0.19	21.7	1,296	5.1	14.6	1.5
$50,000 or more	2.27	132	1.21	0.75	0.27	27.9	1,618	6.8	18.6	2.2

B Base figure too small to meet statistical standards for reliability of derived figure. [1] Includes liquid petroleum gas not shown separately. [2] Includes kerosene. [3] CDD=Cooling degree day; HDD=Heating degree day.

Source: U.S. Energy Information Administration, *Household Energy Consumption and Expenditures, 1990.*

No. 929. Manufacturing Primary Energy Consumption for all Purposes, by Type of Fuel and Major Industry Group: 1991

[**In trillions of Btu.** Estimates represented in this table are for the primary consumption of energy for heat and power and as feedstocks or raw material inputs. Primary consumption is defined as the consumption of the energy that was originally produced offsite or was produced onsite from input materials not classified as energy. Examples of the latter are hydrogen produced from the electrolysis of brine; the output of captive (onsite) mines or wells; woodchips, bark, and woodwaste from wood purchased as a raw material input; and waste materials such as wastepaper and packing materials. Primary consumption excludes quantities of energy that are produced from other energy inputs and, therefore, avoids double counting. Based on the 1991 Manufacturing Energy Consumption Survey and subject to sampling variability]

INDUSTRY	SIC [1] code	Total	Net electricity [2]	Residual fuel oil	Distillate fuel oil [3]	Natural gas [4]	LPG	Coal	Coke and breeze	Other [5]
All industries	(X)	**20,257**	**2,370**	**454**	**146**	**6,095**	**1,574**	**2,006**	**308**	**7,304**
Food and kindred products	20	956	169	27	17	(D)	5	154	(D)	(D)
Tobacco products	21	24	3	1	(Z)	4	(Z)	15	-	(Z)
Textile mill products	22	274	101	12	6	108	2	31	-	13
Apparel and other textile products	23	44	19	(S)	1	19	1	2	-	1
Lumber and wood products	24	451	61	2	16	41	4	2	-	325
Furniture and fixtures	25	68	17	1	1	19	1	4	-	26
Paper and allied products	26	2,506	201	156	9	(D)	5	296	(D)	(D)
Printing and publishing	27	108	53	(Z)	2	48	1	-	-	4
Chemicals and allied products	28	5,051	440	(D)	14	2,227	(D)	(D)	10	526
Petroleum and coal products	29	5,967	105	65	21	838	(D)	(D)	(D)	4,864
Rubber and misc. plastic products	30	238	116	8	3	96	3	7	-	6
Leather and leather products	31	12	3	1	1	5	(Z)	(S)	-	1
Stone, clay, and glass products	32	880	105	9	20	381	(D)	293	(D)	(D)
Primary metal industries	33	2,467	499	(D)	11	708	(D)	853	278	72
Fabricated metal products	34	307	102	3	6	175	4	5	(D)	(D)
Industrial machinery & equipment	35	237	101	3	4	109	2	11	1	5
Electric and electronic equipment	36	212	102	4	2	79	1	(D)	(D)	(D)
Transportation equipment	37	323	118	12	7	133	2	(D)	(D)	17
Instruments and related products	38	98	42	3	(D)	26	(S)	(D)	-	(D)
Misc. manufacturing industries	39	32	12	1	(D)	15	(Z)	1	-	(S)

- Represents or rounds to zero. D Withheld to avoid disclosing data for individual establishments. S Withheld because Relative Standard Error is greater than 50 percent. X Not applicable. Z Less than 0.5 trillion Btu. [1] Standard Industrial Classification Code; see text, section 13. [2] Net electricity is obtained by aggregating purchases, transfers in, and generation from noncombustible renewable resources minus quantities sold and transferred out. Excludes electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal). [3] Includes Nos.1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels. [4] Includes natural gas obtained from utilities, transmission pipelines, and any other supplier such as brokers and producers. [5] Includes net steam, and other energy that respondents indicated was used to produce heat and power or as feedstock/raw material inputs.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption 1991*, forthcoming.

No. 930. Manufacturing Energy Consumption for Fuel Purposes, by Type of Fuel and End-Use: 1991

[**In trillions of Btu.** See headnote, table 929]

END-USE CATEGORIES [1]	Total	Net electricity [2]	Residual fuel oil	Distillate fuel oil and diesel fuel [3]	Natural gas [4]	LPG	Coal (excluding coal coke and breeze)	Other [5]
Total inputs	15,027	2,370	414	139	5,506	105	1,184	5,309
Boiler fuel	(X)	(D)	296	40	2,098	18	859	(X)
Direct process uses	(X)	1,864	109	34	2,578	64	314	(X)
Process heating	(X)	235	107	19	2,382	49	314	(X)
Process cooling and refrigeration	(X)	124	(Z)	(Z)	13	(Z)	-	(X)
Machine drive	(X)	1,187	2	14	127	15	-	(X)
Electro-chemical processes	(X)	304	(X)	(X)	(X)	(X)	(X)	(X)
Other process use	(X)	15	(Z)	1	56	(Z)	(Z)	(X)
Direct nonprocess uses	(X)	396	7	53	702	19	(D)	(X)
Facility heating, ventilation, and air conditioning [6]	(X)	192	4	8	283	3	(Z)	(X)
Facility lighting	(X)	161	(X)	(X)	(X)	(X)	(X)	(X)
Facility support	(X)	36	(D)	(Z)	23	(Z)	-	(X)
Onsite transportation	(X)	4	(X)	38	(Z)	16	(X)	(X)
Conventional electricity generation	(X)	(X)	2	4	347	(Z)	(D)	(X)
Other nonprocess use	(X)	4	(D)	2	49	(Z)	-	(X)
End-use not reported	5,547	(D)	2	12	128	4	(D)	5,309

- Represents or rounds to zero. D Withheld to avoid disclosing data for individual establishments. X Not applicable. Z Less that 0.5 trillion. [1] Allocations to specific end-uses are made on the basis of reasonable approximations by respondents. [2] "Net electricity" is obtained by summing purchases, transfers in, and generation from noncombustible renewable resources, from resources, minus quantities sold and transferred out. It does not include electricity inputs from onsite cogeneration or generation from combustible fuels because that energy has already been included as generating fuel (for example, coal). [3] Includes Nos. 1, 2, and 4 fuel oils and Nos. 1, 2, and 4 diesel fuels. [4] Includes natural gas obtained from utilities, transmission pipelines, and any other supplier(s) such as brokers and producers. [5] Includes net steam (the sum of purchases, generation from renewables, and net transfers) and other energy that respondents indicated was used to produce heat and power. [6] Excludes steam and hot water.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption 1991*, forthcoming.

No. 931. Commercial Buildings—Energy Consumption and Expenditures, by Major Fuel Type Used: 1989

[Covers buildings using one or more major fuel. Excludes industrial buildings predominantly residential buildings, and buildings of less than 1,000 sq. ft. Based on a sample survey of building representatives and energy suppliers; therefore, subject to sampling variability. For characteristics of commercial buildings, see tables in section 25. Tril.=trillion]

ITEM	Unit	All major fuels	Electricity	Natural gas	Fuel oil	Propane	District Heat
Number of buildings using the fuel	1,000	4,528	4,294	2,420	581	348	98
Square footage of floorspace	Million	63,184	61,563	41,143	12,600	4,695	6,578
Square footage per building	1,000	14.0	14.3	17.0	21.7	13.5	67.0
Energy consumed, total	Tril. Btu	5,788	2,773	2,073	357	-	585
Energy consumed per building	Mil. Btu	1,278	1,346	1,792	2,735	1,300	12,302
Energy consumed per square foot of floorspace	1,000 Btu	92	94	105	126	96	183
Energy consumed per employee	Mil. Btu	82	82	90	94	95	117
Expenditures, total	Mil. dol.	70,826	70,801	48,225	17,356	5,069	12,689
Expenditures per building	$1,000	15.6	16.5	19.9	29.9	14.6	129.3
Expenditures per square foot of floorspace	Dollars	1.12	1.15	1.17	1.38	1.08	2.03
Expenditures per million Btu of energy consumed	Dollars	12.24	12.25	11.12	10.93	11.20	10.51

- Represents zero.

Source: U.S. Energy Information Administration, *Commercial Buildings Energy Consumption and Expenditures, 1989.*

No. 932. Commercial Buildings—Energy Consumption and Expenditures: 1989

[Covers buildings using one or more major fuel. Excludes industrial buildings, predominantly residential buildings, and buildings of less than 1,000 sq. ft. Based on a sample survey of building representatives and energy suppliers; therefore, subject to sampling variability. For characteristics of commercial buildings, see tables in section 25. For composition of regions, see table 26]

BUILDING CHARACTERISTIC	ALL BUILDINGS USING ANY MAJOR FUEL		CONSUMPTION (tril. Btu)			EXPENDITURES (mil. dol.)		
	Number (1,000)	Square feet (mil.)	Major fuel, total [1]	Electricity	Natural gas	Major fuel, total [1]	Electricity	Natural gas
All buildings	**4,528**	**63,184**	**5,788**	**2,773**	**2,073**	**70,826**	**55,943**	**9,204**
Region:								
Northeast	783	13,569	1,354	586	353	17,505	13,188	1,807
Midwest	1,046	15,955	1,659	609	831	16,468	11,697	3,381
South	1,847	22,039	1,648	975	498	21,759	18,409	2,293
West	851	11,620	1,126	604	391	15,093	12,649	1,724
Year constructed:								
1900 or before	172	1,654	128	25	53	1,214	603	270
1901 to 1920	242	4,245	239	75	123	2,448	1,676	527
1921 to 1945	680	8,098	636	211	244	7,033	4,772	1,135
1946 to 1960	868	10,511	988	379	411	10,334	7,333	1,809
1961 to 1970	821	12,167	1,275	589	458	14,894	11,667	1,975
1974 to 1979	884	13,329	1,342	730	441	17,807	14,815	1,939
1980 to 1983	317	4,274	432	295	117	6,194	5,570	502
1984 to 1986	329	5,670	464	303	141	7,184	6,363	665
1987 to 1989	215	3,235	284	167	85	3,718	3,143	382
Principal activity within building:								
Assembly	617	6,909	441	186	174	5,986	4,648	809
Education	282	8,076	704	217	323	6,589	4,391	1,309
Food sales/services	343	1,959	394	218	155	5,445	4,512	812
Health care	80	2,054	449	154	186	4,052	2,670	712
Lodging	140	3,476	425	138	187	4,014	2,593	818
Mercantile/services	1,278	12,365	1,048	550	417	13,527	11,116	1,931
Office	679	11,802	1,230	781	238	18,323	15,757	1,128
Public order and safety	50	616	78	29	25	875	582	120
Warehouse	618	9,253	536	243	206	6,085	4,836	853
Other	62	1,529	344	201	102	4,224	3,558	420
Vacant	333	4,161	98	39	49	1,216	924	237
Square footage:								
1,001 to 5,000	2,529	6,790	692	326	302	9,601	7,592	1,620
5,001 to 10,000	890	6,532	567	246	265	7,870	6,232	1,304
10,001 to 25,000	644	10,393	791	381	278	9,869	7,809	1,348
25,001 to 50,000	247	8,801	756	331	309	8,950	6,919	1,318
50,001 to 100,000	127	9,130	855	433	249	10,124	8,042	1,094
100,001 to 200,000	61	8,277	777	387	238	9,265	7,410	1,016
200,000 to 500,000	23	7,022	698	366	228	7,853	6,326	836
500,000 and over	7	6,239	652	303	203	7,293	5,613	668

[1] Includes fuel oil, propane, and purchased steam not shown separately.

Source: U.S. Energy Information Administration, *Commercial Buildings Energy Consumption and Expenditures, 1989.*

No. 933. Fossil Fuel Prices in Current and Constant (1987) Dollars: 1970 to 1992

[**In cents per million British thermal units (Btu), except as indicated.** All fuel prices taken as close to the point of production as possible. See text, section 19, for explanation of Btu conversions from mineral fuels]

FUEL	1970	1973	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
CURRENT DOLLARS													
Composite [1]	31.7	39.8	82.1	204.2	264.6	251.2	165.3	170.0	153.3	167.1	184.3	167.0	170.1
Crude oil	54.8	67.1	132.2	372.2	446.2	415.3	215.7	265.5	216.9	273.4	345.3	285.2	275.5
Natural gas	15.4	20.1	40.2	144.8	239.9	225.7	174.8	150.2	152.4	152.7	154.6	148.0	167.9
Bituminous coal [2]	26.2	36.5	83.9	109.4	115.9	114.8	108.2	104.9	100.8	100.0	99.5	98.9	97.7
Anthracite coal	48.8	61.7	149.5	185.9	208.7	204.2	191.1	188.9	189.8	183.6	174.5	161.0	175.2
CONSTANT (1987) DOLLARS													
Composite [1]	90.1	96.4	166.9	284.8	290.8	266.1	170.6	170.0	147.5	154.0	162.8	141.8	140.7
Crude oil	155.7	162.5	268.7	519.1	490.3	439.9	222.6	265.5	208.8	252.0	305.0	242.1	227.9
Natural gas	43.8	48.7	81.7	202.0	263.6	239.1	180.4	150.2	146.7	140.7	136.6	125.6	138.9
Bituminous coal [2]	74.4	88.4	170.5	152.6	127.4	121.6	111.7	104.9	97.0	92.2	88.1	84.0	80.8
Anthracite coal	138.6	149.4	303.9	259.3	229.3	216.3	197.2	188.9	182.7	169.2	154.2	136.7	144.9
GDP implicit price deflator [3] (1987=100)	35.2	41.3	49.2	71.7	91.0	94.4	96.9	100.0	103.9	108.5	113.2	117.8	120.9

[1] Weighted by relative importance of individual fuels in total fuels production. [2] Includes subbituminous and lignite. [3] GDP=Gross domestic product; see text, section 15.
Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 934. World Energy Consumption, by Region and Energy Source: 1970 to 1991

[**In tons of coal equivalent.** Metric ton=1.1023 short tons. Kilogram=2.205 pounds. See text, section 301, for general comment

REGION AND ENERGY SOURCE	CONSUMPTION (mil. metric tons)				PER CAPITA (kilograms)				PERCENT DISTRIBUTION			
	1970	1980	1990	1991	1970	1980	1990	1991	1970	1980	1990	1991
World, total	**6,412**	**8,783**	**10,825**	**10,950**	**1,208**	**1,626**	**2,003**	**2,026**	**100.0**	**100.0**	**100.0**	**100.0**
North America [1]	2,486	2,825	3,201	3,242	5,949	6,667	7,447	7,543	38.9	32.7	29.6	29.6
United States	2,205	2,391	2,680	2,727	8,910	9,566	10,653	10,798	34.4	27.7	24.9	24.9
South America	142	247	310	323	490	841	1,037	1,080	2.2	2.9	2.9	3.0
Europe	1,709	2,230	2,347	2,337	2,963	3,854	4,670	4,650	26.7	25.1	21.7	21.3
Asia	904	1,592	2,636	2,761	292	506	826	865	14.0	18.5	24.4	25.2
Japan	333	455	571	590	3,246	3,684	4,608	4,754	5.2	5.1	5.3	5.4
Soviet Union	999	1,592	1,919	1,867	3,476	5,502	6,592	6,415	15.5	17.2	17.7	17.1
Oceania	72	107	149	150	2,753	3,993	5,511	5,549	1.1	1.2	1.4	1.4
Energy source:												
Solid fuels	2,143	2,650	3,246	3,216	586	595	613	597	33.5	30.8	30.0	29.4
Liquid fuels	2,802	3,806	4,002	4,036	770	855	756	750	44.0	44.2	37.0	36.9
Natural gas	1,289	1,838	2,527	2,605	351	413	477	484	20.1	21.5	23.3	23.8
Electricity	178	489	1,049	1,093	48	110	198	203	2.4	3.5	9.7	10.0

[1] Includes Central America.
Source: Statistical Office of the United Nations, New York, NY, *Energy Statistics Yearbook,* annual (copyright).

No. 935. World Primary Energy Production, by Region and Type: 1973 to 1992

[**In quadrillion Btu.** Btu=British thermal units. For Btu conversion factors, see source]

REGION AND TYPE	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
World total	**244.8**	**245.0**	**286.6**	**302.1**	**312.1**	**319.6**	**332.1**	**339.6**	**344.0**	**340.8**	**343.1**
North America	73.3	71.1	80.5	84.1	82.7	84.1	86.2	86.2	88.2	89.1	88.8
United States	62.0	59.8	64.7	64.6	64.1	64.6	65.8	65.8	67.7	67.4	66.7
Central and South America	12.9	10.6	12.1	13.5	14.3	14.3	15.2	15.7	16.6	17.4	17.6
Western Europe	19.6	21.4	28.7	36.4	37.4	37.9	38.4	37.9	37.8	39.0	39.3
Eastern Europe and Soviet Union	51.4	55.9	69.3	74.5	77.4	79.4	81.8	81.5	79.1	70.8	67.0
Middle East	46.6	43.5	42.2	25.7	30.6	32.1	36.0	39.6	41.0	40.2	43.9
Africa	14.8	13.3	17.3	18.4	18.1	18.5	19.5	20.5	21.5	23.4	23.7
Far East and Oceania	26.2	29.3	36.5	49.5	51.6	53.2	54.9	58.3	59.9	60.9	62.8
Crude oil	117.8	111.6	127.6	115.4	120.2	121.0	125.8	127.8	129.3	128.6	129.2
Natural gas	43.2	43.9	52.8	60.6	61.9	64.9	68.1	70.6	72.0	74.0	74.3
Natural gas liquids	4.2	4.4	5.5	5.7	6.0	6.3	6.6	6.7	7.0	7.3	7.6
Coal	63.8	66.3	75.0	84.2	86.5	88.2	90.3	92.9	92.8	86.7	87.6
Hydroelectric power	13.5	15.0	18.2	20.7	21.1	21.3	22.0	21.8	22.5	22.9	22.9
Nuclear electric power	2.2	3.9	7.6	15.4	16.3	17.8	19.3	19.8	20.3	21.3	21.5

Source: U.S. Energy Information Administration, *International Energy Annual.*

No. 936. U.S. Foreign Trade in Selected Mineral Fuels: 1970 to 1991

[Btu=British thermal units. For Btu conversion factors, see text, section 19. Minus sign (-) indicates an excess of imports over exports. See also *Historical Statistics, Colonial Times to 1970*, series M 100, 101, 127, 128, 140, 141, 178, and 181]

MINERAL FUEL	1970	1973	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991
NATURAL GAS												
Imports:												
Billion cubic feet	821	1,033	953	985	843	950	750	993	1,294	1,362	1,532	1,693
Trillion Btu	846	1,060	978	1,006	847	952	748	992	1,296	1,367	1,550	1,713
Exports:												
Billion cubic feet	70	77	73	49	55	55	61	54	74	107	86	122
Trillion Btu	72	79	74	49	55	56	62	55	75	109	88	124
Net trade:												
Billion cubic feet	-751	-956	-880	-936	-788	-894	-689	-939	-1,220	-1,275	-1,446	-1,571
Trillion Btu	-774	-981	-904	-957	-792	-896	-686	-937	-1,221	-1,278	-1,462	-1,589
CRUDE OIL												
Imports: [1]												
Million barrels	483	1,184	1,498	1,926	1,254	1,168	1,525	1,706	1,869	2,133	2,151	2,110
Trillion Btu	2,814	6,887	8,721	11,195	7,302	6,814	9,002	10,067	11,027	12,597	12,764	12,550
Exports:												
Million barrels	5	1	2	105	66	75	56	55	57	52	40	42
Trillion Btu	29	4	12	609	384	432	326	319	329	301	232	244
Net trade:												
Million barrels	-478	-1,183	-1,496	-1,821	-1,188	-1,094	-1,469	-1,651	-1,812	-2,081	-2,111	-2,068
Trillion Btu	-2,785	-6,883	-8,708	-10,586	-6,918	-6,381	-8,676	-9,748	-10,698	-12,296	-12,532	-12,306
PETROLEUM PRODUCTS												
Imports:												
Million barrels	765	1,099	712	603	736	681	747	731	840	809	775	655
Trillion Btu	4,656	6,578	4,227	3,463	4,131	3,796	4,199	4,095	4,720	4,564	4,351	3,702
Exports:												
Million barrels	89	84	74	94	198	211	230	224	242	262	273	323
Trillion Btu	520	482	427	551	1,161	1,225	1,344	1,311	1,412	1,538	1,594	1,882
Net trade:												
Million barrels	-675	-1,015	-638	-509	-538	-471	-516	-508	-598	-548	-502	-332
Trillion Btu	-4,136	-6,097	-3,800	-2,912	-2,970	-2,570	-2,855	-2,784	-3,308	-3,026	-2,757	-1,820
COAL												
Imports:												
Thousand short tons	36	127	940	1,194	1,286	1,952	2,212	1,747	2,134	2,851	2,699	3,390
Trillion Btu	1	3	24	30	32	49	55	44	53	71	67	85
Exports:												
Thousand short tons	71,733	53,587	66,309	91,742	81,482	92,680	85,518	79,607	95,023	100,815	105,804	108,969
Trillion Btu	1,936	1,425	1,761	2,421	2,151	2,438	2,248	2,093	2,499	2,637	2,772	2,854
Net trade:												
Thousand short tons	71,697	53,460	65,369	90,548	80,196	90,728	83,306	77,860	92,889	97,964	103,105	105,579
Trillion Btu	1,935	1,422	1,738	2,391	2,119	2,389	2,193	2,049	2,446	2,566	2,705	2,769

[1] Beginning 1980, includes strategic petroleum reserve imports.

Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 937. Daily International Flow of Crude Oil, by Area: 1990

[In thousands of barrels per day]

EXPORTING AREA	Total [1]	IMPORTING AREA							
		North America		Central and South America	Western Europe	Eastern Europe	Middle East and Africa	Japan	Other Far East and Oceania
		U.S.	Canada						
World total	**28,077**	**5,894**	**546**	**1,709**	**9,702**	**1,662**	**1,175**	**3,828**	**3,560**
United States	109	(X)	11	[2]97	-	-	-	-	1
North America, except U.S.	1,920	1,332	12	66	325	-	29	146	10
Central and South America	1,738	934	29	492	170	87	4	8	14
Western Europe	2,655	252	339	61	1,990	7	5	-	(Z)
Eastern Europe and U.S.S.R.	2,170	1	-	34	942	1,052	13	1	97
Middle East	12,521	1,858	80	751	3,411	414	761	2,712	2,533
Africa	4,857	1,235	75	192	2,858	102	333	17	45
Far East and Oceania	2,107	282	-	16	6	-	-	944	859

- Represents zero. X Not applicable. Z Less than 50,000 barrels. [1] Includes stocks at sea, exchanges, transshipments, and other statistical discrepancies not shown separately. [2] Includes shipments to Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, *International Energy Annual.*

No. 938. Crude Oil Imports Into the United States, by Country of Origin: 1970 to 1993

[In millions of barrels. Barrels contain 42 gallons]

COUNTRY OF ORIGIN	1970	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total	**483**	**1,184**	**1,498**	**1,921**	**1,168**	**1,525**	**1,706**	**1,864**	**2,133**	**2,151**	**2,110**	**2,226**	**2,457**
Canada	245	365	219	73	171	208	222	249	230	235	271	292	330
Mexico	-	(Z)	26	185	261	227	220	246	261	251	277	288	316
Norway	-	-	4	53	11	19	26	23	46	35	27	43	43
Trinidad-Tobago	(Z)	22	42	42	36	34	27	26	27	28	26	26	20
United Kingdom	-	-	(Z)	63	101	116	111	93	58	57	39	73	111
OPEC [1]	222	765	1,172	1,410	479	771	876	984	1,232	1,283	1,233	1,247	1,339
Algeria	2	44	96	166	31	28	42	21	22	23	16	9	9
Ecuador	-	17	21	6	20	23	8	12	29	14	19	23	28
Gabon	-	-	10	9	19	9	13	5	18	23	31	45	55
Indonesia	26	73	138	115	107	108	96	68	58	36	37	26	24
Iran	12	79	101	3	10	7	36	(Z)	-	-	12	-	-
Iraq	-	1	1	10	17	30	30	125	161	188	-	-	-
Kuwait	12	15	1	10	1	10	26	29	57	29	2	14	125
Libya	17	49	81	200	-	-	-	-	-	-	-	-	-
Nigeria	17	164	272	307	102	160	193	222	292	286	249	243	263
Qatar	-	3	7	8	-	4	-	-	1	1	-	-	-
Saudi Arabia	15	169	256	456	48	226	234	333	407	436	622	585	466
United Arab Emirates	23	26	43	63	13	14	20	8	8	3	1	-	4
Venezuela	98	126	144	57	112	152	178	160	181	243	244	302	365
Other	16	32	34	95	108	150	225	244	279	264	237	258	298

- Represents zero. Z Less than 500,000 barrels. [1] Organization of Petroleum Exporting Countries.

Source: 1970, U.S. Bureau of Mines, *Minerals Yearbooks, vol. I;* thereafter, U.S. Energy Information Administration, *Petroleum Supply Annual,* vol. I.

No. 939. Crude Oil and Refined Products—Summary: 1973 to 1993

[Barrels of 42 gallons. Data are averages]

YEAR	CRUDE OIL (1,000 bbl. per day)					REFINED OIL PRODUCTS (1,000 bbl. per day)			Total oil imports[2] (1,000 bbl. per day)	CRUDE OIL STOCKS [3] (mil. bbl.)	
	Input to refineries	Domestic production	Imports		Exports	Domestic demand	Imports	Exports		Total	Strategic reserve
			Total [1]	Strategic reserve							
1973	12,431	9,208	3,244	(X)	2	17,308	3,012	229	6,256	242	(X)
1974	12,133	8,774	3,477	(X)	3	16,653	2,635	218	6,112	265	(X)
1975	12,442	8,375	4,105	(X)	6	16,322	1,951	204	6,056	271	(X)
1976	13,416	8,132	5,287	(X)	8	17,461	2,026	215	7,313	285	(X)
1977	14,602	8,245	6,615	21	50	18,431	2,193	193	8,807	348	7
1978	14,739	8,707	6,356	162	158	18,847	2,008	204	8,363	376	67
1979	14,648	8,552	6,519	67	235	18,513	1,937	236	8,456	430	91
1980	13,481	8,597	5,263	44	287	17,056	1,646	258	6,909	466	108
1981	12,470	8,572	4,396	256	228	16,058	1,599	367	5,996	594	230
1982	11,774	8,649	3,488	165	236	15,296	1,625	579	5,113	644	294
1983	11,685	8,688	3,329	234	164	15,231	1,722	575	5,051	723	379
1984	12,044	8,879	3,428	197	181	15,726	2,011	541	5,437	796	451
1985	12,002	8,971	3,201	118	204	15,726	1,866	577	5,067	814	493
1986	12,716	8,680	4,178	48	154	16,281	2,045	631	6,224	843	512
1987	12,854	8,349	4,674	73	151	16,665	2,004	613	6,678	890	541
1988	13,246	8,140	5,107	51	155	17,283	2,295	661	7,402	890	560
1989	13,401	7,613	5,843	56	142	17,325	2,217	717	8,061	921	580
1990	13,409	7,355	5,894	27	109	16,988	2,123	748	8,018	908	586
1991	13,301	7,417	5,782	-	116	16,714	1,844	885	7,627	893	569
1992, prel.	13,411	7,171	6,083	10	89	17,033	1,805	861	7,888	893	575
1993, prel.	13,610	6,838	6,731	15	98	17,193	1,795	905	8,526	922	587

- Represents zero. X Not applicable. [1] Includes Strategic Petroleum Reserve. [2] Crude oil (including Strategic Petroleum Reserve imports) plus refined products. [3] End of year.

Source: U.S. Energy Information Administration, *Monthly Energy Review,* March 1994.

No. 940. Strategic Petroleum Reserve: 1977 to 1992

[**Million barrels, except as noted.** The Strategic Petroleum Reserve is a stock of petroleum maintained by the Federal Government for use during periods of major supply interruption]

YEAR	Crude oil imports	Domestic crude oil deliveries	STOCKS AT YEAR-END			Days of net petroleum imports [3]
			Quantity [1]	Percent of crude oil stocks [2]	Percent of total petroleum stocks	
1977	7.54	[4]0.37	7.46	2.1	0.7	1
1980	16.07	1.30	107.80	23.1	7.8	17
1985	43.12	0.17	493.32	60.6	32.5	115
1986	17.56	1.21	511.57	60.8	32.1	94
1987	26.52	2.69	540.65	60.9	33.6	91
1988	18.76	0.01	559.52	63.0	35.0	85
1989	20.35	-	579.86	63.0	36.8	81
1990	9.77	-	585.69	64.5	36.1	82
1991	-	-	568.51	63.8	35.2	86
1992	3.59	2.60	574.72	64.5	36.1	83

- Represents zero. [1] Stocks do not include imported quantities in transit to Strategic Petroleum Reserve terminals, pipeline fill, and above ground storage. [2] Including lease condensate stocks. [3] Derived by dividing end-of-year strategic petroleum reserve stocks by annual average daily net imports of all petroleum. Calculated prior to rounding. [4] The quantity of domestic fuel oil which was in storage prior to injection of foreign crude oil.

Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 941. World Petroleum Consumption, by Major Consuming Country: 1983 to 1992

[**Million barrels per day**]

REGION AND COUNTRY	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
World, total	**58.74**	**59.84**	**60.10**	**61.76**	**63.01**	**64.83**	**66.03**	**66.16**	**66.71**	**66.74**
North America, total	18.03	18.66	18.70	19.28	19.74	20.53	20.73	20.41	20.14	20.53
Canada	1.45	1.47	1.50	1.51	1.55	1.69	1.73	1.69	1.62	1.64
Mexico	1.35	1.45	1.47	1.49	1.52	1.55	1.66	1.73	1.80	1.85
United States	15.23	15.73	15.73	16.28	16.67	17.28	17.33	16.99	16.71	17.03
Central & South America, total	3.19	3.22	3.19	3.41	3.52	3.57	3.58	3.60	3.65	3.68
Brazil	0.98	1.03	1.08	1.24	1.26	1.30	1.32	1.34	1.35	1.41
Western Europe, total	12.38	12.41	12.39	12.79	12.93	13.08	13.16	13.25	13.66	13.78
France	1.84	1.75	1.78	1.77	1.79	1.80	1.86	1.82	1.94	1.93
Germany	2.66	2.66	2.70	2.86	2.77	2.74	2.58	2.66	2.83	2.84
Italy	1.75	1.65	1.72	1.74	1.86	1.84	1.93	1.87	1.86	1.94
United Kingdom	1.53	1.85	1.63	1.65	1.60	1.70	1.74	1.75	1.80	1.80
Eastern Europe and former U.S.S.R.	10.47	10.42	10.46	10.46	10.51	10.38	10.19	9.73	9.43	7.63
Middle East, total	2.61	2.67	2.85	2.98	3.06	3.15	3.36	3.47	3.40	3.71
Africa, total	1.70	1.76	1.83	1.83	1.84	1.91	1.99	2.10	2.15	2.24
Far East & Oceania, total	10.36	10.70	10.69	11.03	11.42	12.21	13.03	13.61	14.28	15.18
China	1.73	1.74	1.89	2.00	2.12	2.28	2.38	2.30	2.50	2.63
India	0.77	0.82	0.90	0.95	0.99	1.08	1.15	1.17	1.19	1.25
Japan	4.40	4.58	4.38	4.44	4.48	4.75	4.98	5.14	5.28	5.45

Source: U.S. Energy Information Administration, *Annual Energy Review* and *Monthly Energy Review*, monthly

No. 942. Energy Producing Companies—Selected Financial and Investment Indicators: 1980 to 1992

[Based on data from major publicly-owned domestic crude oil producing companies which either had at least 1 percent of domestic production or reserves of oil, natural gas, coal, or uranium, or at least 1 percent of refining capacity or petroleum product sales. There were 26 companies in 1980; 25 in 1983; 22 during 1984 through 1987; and 23 in 1988 to 1992]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
INCOME STATEMENT (bil. dol.)											
Operating revenues	518.6	511.0	517.4	492.5	378.5	417.4	419.8	433.6	510.4	469.3	472.8
Operating expenses	455.9	462.8	467.3	444.2	354.4	383.7	381.6	397.7	470.1	443.3	449.5
Operating income	62.7	48.2	50.1	48.3	24.0	33.7	38.2	35.9	40.2	26.0	23.3
Pretax income	66.9	47.4	47.6	43.6	20.6	25.0	34.3	32.3	37.5	25.1	22.5
Net income	31.0	21.9	21.3	17.4	9.2	11.3	22.3	19.8	21.6	14.7	1.8
Funds from operations [1]	59.0	60.7	63.6	63.5	53.1	51.6	57.8	48.3	54.9	47.8	44.8
BALANCE SHEET (bil. dol.)											
Net property, plant, and equipment	188.9	278.4	292.4	297.7	291.1	297.6	293.6	293.2	302.5	305.5	309.7
Net investment in place [2]	202.6	296.3	309.1	315.4	310.0	316.4	309.6	309.9	319.7	325.6	331.5
Total assets	333.0	421.8	442.9	438.4	427.0	443.6	437.8	434.5	457.2	447.1	453.6
RATIOS (percent)											
Net income to operating revenues	6.0	4.3	4.1	3.5	2.4	2.7	5.3	4.6	4.2	3.1	[3]0.4
Net income to total assets	9.3	5.2	5.0	4.0	2.2	2.5	5.1	4.6	4.7	3.3	0.4
Net income to stockholders' equity	21.1	11.4	12.1	10.5	5.6	6.8	13.5	12.3	12.9	8.8	1.1
Long-term debt to stockholders' equity [4]	31.5	34.8	49.5	54.3	56.0	57.6	56.6	56.4	53.0	54.3	59.4
Long-term debt to total assets [4]	13.9	15.9	20.6	20.5	21.6	21.5	21.3	20.9	19.4	20.3	20.6

[1] The sum of net income, depreciation, depletion and amortization, deferred taxes, dry hole expenses, etc. [2] Composed of net property, plant and equipment plus investment, and advances to unconsolidated subsidiaries. [3] The implementation of the new "Financial Accounting Standard No. 106" greatly reduced the reported profitability of large publicly traded corporations. Net income without these accounting changes would have been $12.5 billion. [4] Long-term debt includes amounts applicable to capitalized leases.

Source: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers*, annual.

No. 943. Petroleum and Coal Products Corporations—Sales, Net Profit, and Profit Per Dollar of Sales: 1980 to 1992

[Represents SIC group 29. Profit rates are averages of quarterly figures at annual rates. Beginning 1986, excludes estimates for corporations with less than $250,000 in assets]

ITEM	Unit	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Sales	Bil. dol.	333.2	357.1	312.7	338.4	320.9	226.5	248.3	252.2	265.3	318.5	282.2	278.0
Net profit:													
Before income taxes	Bil. dol.	39.1	27.8	27.1	24.5	17.7	9.8	14.2	27.3	23.7	23.3	12.2	2.0
After income taxes	Bil. dol.	25.5	19.7	19.3	17.2	12.7	8.8	10.9	21.2	19.5	18.0	10.9	3.2
Depreciation[1]	Bil. dol.	11.6	16.3	17.5	20.7	22.1	21.9	20.3	20.0	18.5	18.7	18.0	18.3
Profits per dollar of sales:													
Before income taxes	Cents	11.7	7.8	8.7	7.2	5.5	4.1	5.8	10.8	9.0	7.4	4.3	0.4
After income taxes	Cents	7.7	5.5	6.2	5.1	4.0	3.8	4.5	8.5	7.4	5.7	3.9	0.9
Profits on stockholders' equity:													
Before income taxes	Percent	30.7	18.7	17.8	14.3	11.7	6.8	10.1	19.2	17.8	16.6	8.6	1.5
After income taxes	Percent	20.0	13.2	12.7	10.0	8.5	6.1	7.7	14.9	14.6	12.8	7.7	2.4

[1] Includes depletion and accelerated amortization of emergency facilities.

Source: 1980, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.*

No. 944. Major Petroleum Companies—Financial Data Summary: 1973 to 1992

[Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated, total company basis]

ITEM	1973	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
FINANCIAL DATA (bil. dol.)											
Net income	11.8	11.6	32.9	19.4	10.8	15.0	24.6	24.7	26.8	18.7	12.3
Depreciation, depletion, etc	10.5	11.3	32.5	53.0	43.7	45.0	34.3	33.7	38.7	36.5	41.1
Cash flow[1]	22.3	22.8	65.4	72.4	54.5	60.0	58.9	58.4	65.5	55.2	53.4
Dividends paid	4.0	4.7	9.3	12.0	12.1	12.4	14.0	16.0	15.9	16.3	16.6
Net internal funds available for investment or debt repayment[2]	18.3	18.1	56.1	60.4	42.4	47.6	44.9	42.4	49.6	38.9	36.8
Capital and exploratory expenditures	16.3	26.9	62.1	58.3	38.3	50.1	62.4	55.1	59.6	61.5	55.0
Long-term capitalization	102.9	121.1	211.4	272.1	279.9	262.2	267.8	290.0	300.0	307.4	292.6
Long-term debt	22.5	28.9	49.8	93.5	95.5	88.4	88.5	91.4	90.4	95.9	93.9
Preferred stock	0.4	0.4	2.0	3.3	3.7	4.1	4.5	6.4	5.2	4.1	5.2
Common stock and retained earnings[3]	80.0	91.9	159.6	175.3	180.7	189.7	194.8	192.2	204.4	207.4	193.5
Excess of expenditures over cash income[4]	−2.0	8.9	6.0	−2.1	3.0	−2.5	17.5	12.7	10.0	22.6	18.2
RATIOS[5] (percent)											
Long-term debt to long-term capitalization	22.0	23.8	23.6	34.4	34.1	31.3	30.8	31.5	30.1	31.2	32.1
Net income to total average capital	12.0	10.0	17.0	7.0	4.0	4.6	8.6	8.3	9.1	6.2	4.1
Net income to average common equity	15.6	13.1	22.5	10.8	6.2	7.3	12.8	12.4	13.5	9.1	6.1

[1] Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. [2] Cash flow minus dividends paid. [3] Includes common stock, capital surplus, and earned surplus accounts after adjustments. [4] Capital and exploratory expenditures plus dividends paid minus cash flow. [5] Represents approximate year-to-year comparisons because of changes in the makeup of the group due to mergers and other corporate changes.

Source: Carl H. Pforzheimer & Co., New York, NY, *Comparative Oil Company Statements, 1992-1991,* and earlier reports.

No. 945. Electric Utility Sales and Average Prices, by End-Use Sector: 1970 to 1992

[Prior to 1980, covers Class A and B privately-owned electric utilities; thereafter, Class A utilities whose electric operating revenues were $100 million or more during the previous year]

YEAR	SALES (bil. kWh)				AVERAGE PRICE OF ELECTRICITY SOLD (cents per kWh)							
					Current dollars				Constant (1987) dollars[2]			
	Total[1]	Residential	Commercial	Industrial	Total[1]	Residential	Commercial	Industrial	Total[1]	Residential	Commercial	Industrial
1970	1,392	466	307	571	1.7	2.2	2.1	1.0	4.8	6.3	6.0	2.8
1973	1,713	579	388	686	2.0	2.5	2.4	1.3	4.8	6.1	5.8	3.1
1975	1,747	588	403	688	2.9	3.5	3.5	2.1	5.9	7.1	7.1	4.3
1980	2,094	717	488	815	4.7	5.4	5.5	3.7	6.6	7.5	7.7	5.2
1981	2,147	722	514	826	5.5	6.2	6.3	4.3	7.0	7.9	8.0	5.4
1982	2,086	730	526	745	6.1	6.9	6.9	5.0	7.3	8.2	8.2	6.0
1983	2,151	751	544	776	6.3	7.2	7.0	5.0	7.2	8.3	8.0	5.7
1984	2,286	780	583	838	6.3	7.2	7.1	4.8	6.9	7.9	7.8	5.3
1985	2,324	794	606	837	6.4	7.4	7.3	5.0	6.8	7.8	7.7	5.3
1986	2,369	819	631	831	6.4	7.4	7.2	4.9	6.6	7.6	7.4	5.1
1987	2,457	850	660	858	6.4	7.4	7.1	4.8	6.4	7.4	7.1	4.8
1988	2,578	893	699	896	6.4	7.5	7.0	4.7	6.2	7.2	6.7	4.5
1989	2,647	906	726	926	6.5	7.6	7.2	4.7	6.0	7.0	6.6	4.3
1990	2,713	924	751	946	6.6	7.8	7.3	4.7	5.8	6.9	6.4	4.2
1991	2,762	955	766	947	6.7	8.0	7.5	4.8	5.7	6.8	6.4	4.1
1992	2,756	934	763	965	6.8	8.2	7.6	4.8	5.6	6.8	6.3	4.0

[1] Includes other sectors not shown separately. [2] Based on the GNP implicit price deflator.

Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 946. Electric Utility Industry—Net Generation, Net Summer Capability, Generating Units, and Consumption of Fuels: 1970 to 1992

[Net Generation for **calendar years**; other data as of **December 31**. See also *Historical Statistics, Colonial Times to 1970*, series S 32-52, S 78-82, and S 86-107]

ITEM	Unit	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
NET GENERATION											
Total	**Bil. kWh**	**1,532**	**1,918**	**2,286**	**2,470**	**2,572**	**2,704**	**2,784**	**2,808**	**2,825**	**2,797**
Average annual change [1]	Percent	7.3	4.5	3.5	0.4	2.0	5.0	2.9	0.9	0.6	−1.0
Net generation, kWh per kW of net summer capability [2]	Rate	4,560	3,904	3,951	3,770	3,815	3,990	4,064	4,064	4,076	4,024
Investor owned	Bil. kWh	1,183	1,487	1,783	1,918	2,022	2,146	2,192	2,203	2,213	2,214
Percent of total utilities	Percent	77.2	77.5	78.0	77.7	78.6	79.4	78.7	78.4	78.4	79.2
Publicly owned	Bil. kWh	349	431	503	552	550	559	592	606	610	582
Municipal	Bil. kWh	71	82	87	74	86	97	100	98	97	94
Federal	Bil. kWh	186	221	235	233	205	201	224	235	241	225
Cooperatives and other	Bil. kWh	91	128	182	245	258	261	269	273	272	263
Source of energy:											
Coal [3]	Percent	46.0	44.6	51.0	57.2	57.4	57.4	56.2	55.5	54.9	56.3
Nuclear	Percent	1.4	9.0	11.0	15.5	17.7	19.5	19.0	20.5	21.7	22.1
Oil	Percent	12.0	15.1	10.8	4.1	4.6	5.5	5.7	4.2	3.9	3.2
Gas	Percent	24.3	15.6	15.1	11.8	10.6	9.3	9.6	9.4	9.4	9.4
Hydro	Percent	16.2	15.6	12.1	11.4	9.7	8.2	9.5	10.0	9.8	8.6
Type of prime mover: [4]											
Hydro	Bil. kWh	248	300	276	281	250	223	265	280	276	239
Steam conventional [5]	Bil. kWh	1,240	1,414	1,726	1,778	1,837	1,921	1,950	1,919	1,905	1,906
Gas turbine and internal combustion	Bil. kWh	22	28	28	16	18	22	29	22	22	21
Steam nuclear	Bil. kWh	22	173	251	384	455	527	529	577	613	619
Other	Bil. kWh	1	3	6	11	12	12	11	11	10	10
NET SUMMER CAPABILITY											
Total [6]	**Mil. kW**	**336**	**491**	**579**	**655**	**674**	**678**	**685**	**691**	**693**	**695**
Average annual change [1]	Percent	7.2	7.6	3.3	0.6	1.4	0.5	1.1	0.9	0.3	0.3
Hydro	Mil. kW	64	78	82	89	90	90	91	91	92	93
Steam conventional [7]	Mil. kW	246	333	397	437	440	442	444	448	447	447
Gas turbine	Mil. kW	13	37	43	44	44	44	45	46	48	50
Steam nuclear	Mil. kW	7	37	52	79	94	95	98	100	100	99
Internal combustion	Mil. kW	4	5	5	5	5	5	5	5	5	5
Geothermal and other	Mil. kW	(Z)	1	1	2	2	2	2	2	2	2
NUMBER OF GENERATING UNITS											
Total [8]	**Number**	**9,717**	**(NA)**	**11,084**	**(NA)**	**10,406**	**10,305**	**10,325**	**10,296**	**10,260**	**10,221**
Hydro	Number	3,108	(NA)	3,275	(NA)	3,488	3,496	3,479	3,479	3,476	3,497
Steam conventional	Number	2,813	(NA)	2,862	(NA)	2,437	2,383	2,363	2,354	2,284	2,307
Gas turbine	Number	658	(NA)	1,447	(NA)	1,408	1,397	1,438	1,460	1,485	1,501
Steam nuclear	Number	16	(NA)	74	(NA)	109	108	110	111	111	109
Internal combustion	Number	3,118	(NA)	3,410	(NA)	2,917	2,872	2,889	2,847	2,803	2,807
CONSUMPTION OF FUELS											
Net generation by fuel [9]	**Bil. kWh**	**1,284**	**1,618**	**2,010**	**2,189**	**2,322**	**2,481**	**2,519**	**2,525**	**(NA)**	**(NA)**
Average annual change [1]	Percent	(NA)	3.2	2.1	4.3	5.4	6.4	1.4	0.2	(NA)	(NA)
Coal	Bil. kWh	704	853	1,162	1,402	1,464	1,541	1,554	1,560	1,551	1,576
Percent of total	Percent	54.8	52.7	57.8	64.0	63.0	62.1	61.7	61.7	(NA)	(NA)
Petroleum	Bil. kWh	184	289	246	100	118	149	158	117	111	89
Gas	Bil. kWh	373	300	346	292	273	253	267	264	264	264
Nuclear	Bil. kWh	22	173	251	384	455	527	529	577	613	619
Fuel consumed:											
Total energy equivalent	Quad. Btu	13.40	15.19	18.57	18.79	19.37	20.12	20.54	20.32	20.06	19.96
Coal	Mil. sh. tons	320	406	569	694	718	758	767	774	772	780
Oil	Mil. bbl.	339	507	421	175	201	250	270	200	189	152
Gas	Bil cu. ft.	3,932	3,158	3,682	3,044	2,844	2,636	2,787	2,787	2,789	2,765

NA Not available. Z Less than 0.5 million kW. [1] Change from immediate prior year except for 1970, change from 1960. For explanation of average annual percent change, see Guide to Tabular Presentation. [2] Net summer capability is the steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power as demonstrated by test at the time of summer peak demand. [3] Includes small percentage (.5 percent) from wood and waste, geothermal, and petroleum coke. [4] A prime mover is the engine, turbine, water wheel, or similar machine which drives an electric generator. [5] Fossil fuels only. [6] Includes wind, solar thermal, and photovoltaic, not shown separately. [7] Includes fossil steam, wood, and waste. [8] Each prime mover type in combination plants counted separately. Includes geothermal, wind, and solar, not shown separately. [9] Includes small amounts of wood, waste, wind, geothermal, solar thermal, and photovoltaic.

Source: 1970, U.S. Federal Power Commission, *Electric Power Statistics*, and press releases; thereafter, U.S. Energy Information Administration, 1975 and 1980, *Power Production, Fuel Consumption, and Installed Capacity Data-Annual*, and unpublished data; thereafter, *Electric Power Annual, Annual Energy Review*, and unpublished data.

No. 947. Electric Utility Industry—Capability, Peak Load, and Capacity Margin: 1970 to 1992

[Excludes Alaska and Hawaii. Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions, allowing for maintenance, emergency outages, and system operating requirements. Capacity margin is the difference between capability and peak load]

YEAR	CAPABILITY AT THE TIME OF—				NON-COINCIDENT PEAK LOAD		CAPACITY MARGIN			
	Summer peak load (1,000 kW)		Winter peak load[1] (1,000 kW)				Summer		Winter[1]	
	Amount	Change from prior year[2]	Amount	Change from prior year[2]	Summer	Winter[1]	Amount (1,000 kW)	Percent of capability	Amount (1,000 kW)	Percent of capability
1970	326,900	26,600	339,050	27,600	274,650	248,550	52,250	16.0	90,500	26.7
1975	479,300	34,900	492,450	25,050	356,800	331,100	122,500	25.6	161,350	32.8
1978	545,700	29,700	561,550	23,950	408,050	383,100	137,650	25.2	178,450	31.8
1979 [3]	544,506	(X)	554,525	(X)	398,424	368,876	146,082	26.8	185,649	33.5
1980	558,237	13,731	572,195	17,670	427,058	364,567	131,179	23.5	187,628	32.8
1981	572,219	13,982	586,569	14,374	429,349	397,800	142,870	25.0	188,769	32.2
1982	586,142	13,923	598,066	11,497	415,618	373,985	170,524	29.1	224,081	37.5
1983	596,449	10,307	612,453	14,387	447,526	410,779	148,923	25.0	201,674	32.9
1984	604,240	7,791	622,125	9,672	451,150	436,374	153,090	25.3	185,751	29.9
1985	621,597	17,357	636,475	14,350	460,503	423,660	161,094	25.9	212,815	33.4
1986	633,291	11,694	646,721	10,246	476,320	422,857	156,971	24.8	223,864	34.6
1987	648,118	14,827	662,977	16,256	496,185	448,277	151,933	23.4	214,700	32.4
1988	661,580	13,462	676,940	13,963	529,460	466,533	132,120	20.0	210,407	31.1
1989	673,316	11,736	685,249	8,309	523,432	496,378	149,884	22.3	188,871	27.6
1990	685,091	11,775	696,757	11,508	545,537	484,014	139,554	20.4	212,743	30.5
1991	690,915	5,824	703,212	6,455	551,320	485,435	139,595	20.2	217,777	31.0
1992	695,436	4,521	707,752	4,540	548,707	492,983	146,729	21.1	214,769	30.3

X Not applicable. [1] 1970 is for the month of December. [2] For 1970 and 1975, change from 1969 and 1974, respectively. [3] Beginning 1979, data are not entirely comparable with prior years due to change in data source.

Source: Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry*, annual.

No. 948. Electric Energy Sales, by Class of Service, 1970 to 1992, and by State, 1992

[In billions of kilowatt-hours]

REGION, DIVISION, AND STATE	Total[1]	Residential	Commercial	Industrial
1970	1,392.3	466.3	306.7	570.9
1973	1,712.9	579.2	388.3	686.1
1975	1,747.1	588.1	403.0	687.7
1980	2,094.4	717.5	488.2	815.1
1985	2,309.5	791.0	609.0	824.5
1987	2,457.3	850.4	660.4	858.2
1988	2,578.1	892.9	699.1	896.5
1989	2,646.8	905.5	725.9	925.7
1990	2,712.6	924.0	751.0	945.5
1991	2,762.0	955.4	765.7	946.6
1992, total [2]	**2,763.3**	**935.9**	**761.3**	**972.7**
Northeast	**411.8**	**136.1**	**142.7**	**116.9**
New England	**103.9**	**37.6**	**37.9**	**26.3**
Maine	11.5	3.8	2.7	4.8
New Hampshire	9.0	3.4	2.1	3.3
Vermont	4.9	1.9	1.5	1.4
Massachusetts	45.0	15.6	18.6	9.7
Rhode Island	6.4	2.4	2.5	1.4
Connecticut	27.1	10.5	10.5	5.8
Middle Atlantic	**307.9**	**98.5**	**104.8**	**90.6**
New York	128.5	38.7	46.6	31.0
New Jersey	63.1	20.5	27.4	14.7
Pennsylvania	116.3	39.2	30.8	44.9
Midwest	**659.8**	**204.3**	**165.8**	**269.9**
East North Central	**469.3**	**136.6**	**113.8**	**204.0**
Ohio	145.0	39.1	31.8	69.7
Indiana	77.0	22.8	16.1	37.4
Illinois	112.5	32.4	31.5	40.9
Michigan	83.8	25.7	21.2	35.7
Wisconsin	50.9	16.6	13.2	20.4
West North Central	**190.5**	**67.7**	**52.0**	**65.9**
Minnesota	47.4	14.8	8.3	23.6
Iowa	30.2	10.3	7.0	12.1
Missouri	54.4	21.3	18.8	13.4
North Dakota	7.1	3.0	1.8	1.8
South Dakota	6.5	2.8	1.5	1.8
Nebraska	17.8	6.6	5.3	4.8
Kansas	27.1	8.9	9.4	8.5
South	**1,165.0**	**428.0**	**284.8**	**414.0**
South Atlantic	**552.8**	**219.4**	**159.1**	**156.6**
Delaware	8.5	2.8	2.4	3.2
Maryland	51.0	19.8	10.8	19.8
Dist. of Columbia	10.0	1.5	5.2	3.0
Virginia	76.4	29.8	21.6	16.7
West Virginia	23.8	8.1	5.2	10.4
North Carolina	94.2	34.8	25.1	32.5
South Carolina	58.4	18.9	12.4	26.3
Georgia	83.4	30.5	23.7	28.2
Florida	147.0	73.2	52.6	16.5
East South Central	**241.0**	**80.8**	**33.7**	**121.7**
Kentucky	67.1	17.8	9.8	37.1
Tennessee	78.6	29.5	6.5	41.7
Alabama	62.2	21.1	10.9	29.5
Mississippi	33.2	12.4	6.7	13.5
West South Central	**371.2**	**127.8**	**92.0**	**135.7**
Arkansas	28.5	10.4	6.2	11.3
Louisiana	65.1	21.2	13.8	27.5
Oklahoma	38.3	14.3	10.3	11.6
Texas	239.4	81.9	61.7	85.4
West	**513.7**	**163.4**	**163.5**	**187.4**
Mountain	**168.0**	**51.6**	**52.7**	**56.9**
Montana	13.1	3.3	2.8	6.4
Idaho	19.0	5.7	5.3	7.6
Wyoming	11.7	1.8	2.4	7.4
Colorado	31.8	10.2	13.9	6.8
New Mexico	14.4	3.8	4.6	4.6
Arizona	43.7	16.2	14.5	11.0
Utah	16.6	4.5	5.0	6.2
Nevada	17.7	6.1	4.2	6.7
Pacific	**345.7**	**111.8**	**110.8**	**110.5**
Washington	89.3	28.4	18.7	38.3
Oregon	42.9	15.2	11.8	15.1
California	213.4	68.1	80.2	57.1
Alaska	4.3	1.6	2.0	0.5
Hawaii	8.7	2.4	2.4	3.8

[1] Includes other service not shown separately. [2] Preliminary.

Source: U.S. Energy Information Administration, *Electric Power Annual*.

No. 949. Electric Energy—Net Generation and Net Summer Capability, by State: 1990 to 1992

[Capacity as of **Dec. 31.** Covers utilities for public use]

DIVISION AND STATE	NET GENERATION (bil. kWh)				NET SUMMER CAPA-BILITY (mil. kW)	
	1990	1991	1992 Total	1992 Percent from coal	1990	1992
U.S	**2,808.2**	**2,825.0**	**2,797.2**	**56.3**	**690.5**	**695.1**
N.E	**94.1**	**87.0**	**84.6**	**19.3**	**23.4**	**22.6**
ME	9.1	9.5	8.3	-	2.4	2.4
NH	10.8	12.7	13.5	23.7	2.6	2.5
VT	5.0	5.3	4.7	-	1.1	1.1
MA	36.5	35.8	32.8	33.3	9.9	9.5
RI	0.6	0.2	0.1	-	0.3	0.2
CT	32.2	29.6	25.2	8.5	7.1	7.0
M.A	**330.8**	**325.5**	**309.4**	**42.8**	**78.4**	**78.4**
NY	128.7	126.1	112.2	22.2	31.2	31.1
NJ	36.5	37.0	31.2	17.4	13.7	13.8
PA	165.7	162.4	166.0	61.6	33.4	33.4
E.N.C	**485.8**	**500.5**	**487.6**	**73.9**	**113.1**	**113.5**
OH	126.5	132.7	136.3	88.4	27.0	27.1
IN	97.7	98.2	97.3	98.4	20.6	20.8
IL	127.0	127.9	124.8	39.9	32.6	32.6
MI	89.1	94.6	82.7	74.3	22.3	22.4
WI	45.6	47.1	46.5	70.5	10.6	10.5
W.N.C	**218.4**	**221.2**	**212.8**	**75.3**	**54.2**	**54.7**
MN	41.6	40.4	37.8	64.7	8.8	8.9
IA	29.0	31.2	29.4	84.4	8.0	8.1
MO	59.0	60.1	56.6	82.7	15.2	15.4
ND	26.8	27.5	28.6	94.0	4.5	4.5
SD	6.4	6.6	6.2	42.0	2.7	2.7
NE	21.6	23.0	22.4	55.4	5.5	5.5
KS	33.9	32.3	31.8	69.7	9.6	9.7
S.A	**533.8**	**541.1**	**547.5**	**58.2**	**129.2**	**133.2**
DE	7.1	7.6	6.3	60.9	2.0	2.1
MD	31.5	38.2	39.6	59.7	9.8	10.9
DC	0.4	0.2	0.1	-	0.8	0.8
VA	47.2	48.9	49.0	46.3	13.7	13.8
WV	77.4	71.3	72.3	99.1	14.4	14.4
NC	79.8	83.5	83.0	65.1	20.2	20.1
SC	69.3	69.8	71.5	32.2	14.9	16.3
GA	97.6	90.8	91.8	63.5	20.7	21.4
FL	123.6	130.7	134.0	46.0	32.7	33.4
E.S.C	**246.9**	**257.8**	**264.0**	**72.7**	**59.5**	**58.6**
KY	73.8	75.5	77.4	95.0	15.5	15.3
TN	73.9	73.9	75.4	66.3	17.0	16.3
AL	76.2	85.1	90.8	66.8	20.0	19.9
MS	22.9	23.3	20.5	38.1	7.0	7.0
W.S.C	**374.3**	**378.7**	**378.5**	**49.2**	**101.2**	**101.9**
AR	37.1	38.4	37.4	53.6	9.6	9.6
LA	58.2	57.2	55.2	35.9	16.8	16.7
OK	45.1	44.9	45.9	60.2	12.8	12.9
TX	234.0	238.3	240.0	49.5	62.0	62.7
Mountain	**247.4**	**249.1**	**257.2**	**76.3**	**49.3**	**49.7**
MT	25.7	28.2	25.5	67.2	4.9	4.9
ID	8.6	8.3	6.3	-	2.3	2.4
WY	39.4	38.7	41.9	98.3	5.8	5.8
CO	31.3	31.0	31.9	94.1	6.6	6.6
NM	28.5	25.1	27.7	91.5	5.0	5.1
AZ	62.3	66.8	70.1	49.4	14.9	15.0
UT	32.3	30.2	32.9	95.8	4.8	4.8
NV	19.3	20.9	21.0	78.4	4.9	5.1
Pacific	**276.7**	**264.2**	**255.7**	**5.3**	**82.1**	**82.5**
WA	100.5	101.4	84.1	11.4	24.2	24.2
OR	49.2	46.3	41.2	8.9	11.2	11.2
CA	114.5	105.0	119.3	-	43.7	43.8
AK	4.5	4.3	4.2	7.0	1.5	1.7
HI	8.0	7.3	6.9	-	1.5	1.6

- Represents zero.

Source: U.S. Energy Information Administration, 1980, *Power Production, Fuel Consumption, and Installed Capacity Data*, annual; thereafter, *Electric Power Annual, Electric Power Monthly*, December issues, and *Inventory of Power Plants in the United States*, annual.

No. 950. Nuclear Power Plants—Number of Units, Net Generation, and Net Summer Capability, by State: 1992

REGION, DIVISION, AND STATE	Number of units	NET GENERATION Total (mil. kWh)	NET GENERATION Percent of total[1]	NET SUMMER CAPABILITY Total (mil. kW)	NET SUMMER CAPABILITY Percent of total[1]
U.S.	**109**	**618,776**	**22.1**	**99.0**	**14.2**
Northeast	**27**	**144,357**	**36.6**	**23.8**	**23.6**
N.E	**8**	**38,474**	**45.5**	**6.4**	**28.2**
ME	1	5,358	64.3	0.9	36.2
NH	1	7,869	58.5	1.2	45.9
VT	1	3,735	79.5	0.5	45.3
MA	1	4,742	14.4	0.7	7.0
CT	4	16,771	66.7	3.2	46.0
M.A	**19**	**105,883**	**34.2**	**17.4**	**22.2**
NY	6	24,155	21.5	4.8	15.5
NJ	4	21,595	69.3	3.9	27.9
PA	9	60,133	36.2	8.7	26.1
Midwest	**31**	**158,499**	**22.6**	**25.7**	**15.3**
E.N.C	**23**	**118,604**	**24.3**	**20.1**	**17.7**
OH	2	14,805	10.9	2.0	7.5
IL	13	73,742	59.1	12.6	38.6
MI	5	18,849	22.8	3.9	17.6
WI	3	11,207	24.1	1.5	14.3
W.N.C	**8**	**39,895**	**18.7**	**5.6**	**10.2**
MN	3	11,166	29.6	1.5	17.4
IA	1	3,405	11.6	0.5	6.4
MO	1	8,084	14.3	1.1	7.3
NE	2	8,748	39.1	1.3	23.0
KS	1	8,491	26.7	1.2	12.0
South	**42**	**244,804**	**20.6**	**39.2**	**13.3**
S.A	**27**	**155,401**	**28.4**	**23.5**	**17.7**
MD	2	10,664	26.9	1.7	15.2
VA	4	23,334	47.7	3.3	24.1
NC	5	22,754	27.4	4.6	23.0
SC	7	45,537	63.7	6.4	39.0
GA	4	27,996	30.5	3.7	17.5
FL	5	25,116	18.7	3.8	11.5
E.S.C	**8**	**43,225**	**16.4**	**8.3**	**14.1**
TN	2	15,654	20.8	2.3	14.1
AL	5	19,397	21.4	4.8	24.3
MS	1	8,174	39.9	1.1	16.3
W.S.C	**7**	**46,178**	**12.2**	**7.3**	**7.2**
AR	2	11,326	30.3	1.7	17.6
LA	2	10,356	18.8	2.0	12.0
TX	3	24,496	10.2	3.6	5.8
West	**9**	**71,118**	**13.9**	**10.3**	**7.8**
Mt	**3**	**25,609**	**10.0**	**3.8**	**7.7**
AZ	3	25,609	36.5	3.8	25.4
Pac	**6**	**45,509**	**17.8**	**6.5**	**7.9**
WA	1	5,692	6.8	1.1	4.5
OR	1	4,573	11.1	1.1	9.8
CA	4	35,244	29.5	4.3	9.8

[1] For total capability and generation, see table 949.

Source: U.S. Energy Information Administration, *Electric Power Annual* and *Electric Power Monthly*, December issues.

No. 951. Nuclear Power Plants—Number, Capacity, and Generation: 1965 to 1992

ITEM	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
Operable generating units[1]	6	18	54	70	95	100	107	108	110	111	111	109
Net summer capability[1] [2] (mil. kW)	0.8	7.0	37.3	51.8	79.4	85.2	93.6	94.7	98.2	99.6	99.6	99.0
Net generation (bil. kWh)	3.7	21.8	172.5	251.1	383.7	414.0	455.3	527.0	529.4	576.9	612.6	618.8
Percent of total electric utility generation	0.3	1.4	9.0	11.0	15.5	16.6	17.7	19.5	19.0	20.5	21.7	22.1
Capacity factor[3]	(NA)	(NA)	55.9	56.3	58.0	56.9	57.4	63.5	62.2	66.0	70.2	70.9

NA Not available. [1] As of year-end. [2] Net summer capability is the peak steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary and other powerplant, as demonstrated by test at the time of summer peak demand. [3] Weighted average of monthly capacity factors. Monthly factors are derived by dividing actual monthly generation by the maximum possible generation for the month (hours in month times net maximum dependable capacity).
Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 952. Commercial Nuclear Power Generation, by Country: 1970 to 1993

[Generation for **calendar years;** other data as of **December**]

COUNTRY	REACTORS				GROSS ELECTRICITY GENERATED (bil. kWh)				GROSS CAPACITY (1,000 kW)			
	1970	1980	1990	1993	1970	1980	1990	1993	1970	1980	1990	1993
Total	**64**	**208**	**368**	**421**	**73.9**	**617.8**	**1,743.9**	**2,134.6**	**15,186**	**128,847**	**301,745**	**349,171**
United States	15	74	112	110	23.2	265.2	606.4	641.2	5,211	56,529	105,998	105,276
Argentina	-	1	2	2	-	2.3	7.0	7.7	-	357	1,005	1,005
Belgium	1	3	7	7	0.3	12.5	42.7	41.9	11	1,744	5,740	5,843
Brazil	-	-	1	1	-	-	2.0	4.4	-	-	657	657
Bulgaria	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)	14.0	(NA)	(NA)	(NA)	3,760
Canada	1	9	19	22	0.9	40.4	74.0	97.5	220	5,588	13,855	16,709
China: Taiwan	-	2	6	6	-	8.2	32.9	34.3	-	1,272	5,146	5,146
Czech Republic	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)	3.6	(NA)	(NA)	(NA)	1,782
Finland	-	4	4	4	-	7.0	18.9	19.6	-	2,296	2,400	2,400
France	4	22	58	56	5.7	61.2	314.1	365.8	1,606	15,412	58,862	59,751
Germany	4	11	22	22	5.3	43.7	147.2	153.5	907	8,996	23,973	24,143
Great Britain	27	33	42	37	26.5	37.2	68.8	90.5	4,783	9,012	15,274	14,832
Hungary	-	-	4	4	-	-	13.6	13.8	-	-	1,760	1,840
India	2	4	6	9	2.2	2.9	6.0	6.2	400	860	1,330	2,020
Italy	3	4	2	-	3.3	2.2	-	-	631	1,490	1,132	-
Japan	3	22	40	46	3.3	81.0	191.9	243.5	828	15,117	31,645	37,351
Mexico	-	-	1	1	-	-	2.1	4.9	-	-	675	675
Netherlands	1	2	2	2	0.4	4.2	3.4	3.9	55	529	540	540
Pakistan	-	1	1	1	-	0.1	0.4	0.4	-	137	137	137
Russia	(NA)	(NA)	(NA)	29	(NA)	(NA)	(NA)	120.4	(NA)	(NA)	(NA)	21,316
Slovenia[1]	-	-	1	1	-	-	4.6	4.0	-	-	664	664
South Africa	-	-	2	2	-	-	8.9	7.7	-	-	1,930	1,930
South Korea	-	1	9	9	-	3.5	52.8	58.1	-	587	7,616	7,616
Spain	1	3	10	9	0.9	5.2	54.3	56.0	160	1,117	7,984	7,405
Sweden	1	8	12	12	(Z)	26.7	68.2	61.4	12	5,770	10,344	10,394
Switzerland	1	4	5	5	1.9	14.3	23.6	23.3	364	2,034	3,079	3,099
Ukraine	(NA)	(NA)	(NA)	14	(NA)	(NA)	(NA)	57.0	(NA)	(NA)	(NA)	12,880

- Represents zero. NA Not available. Z Less than 50 million kWh. [1] Formerly Yugoslavia.
Source: McGraw-Hill, Inc., New York, NY, *Nucleonics Week,* March issues (copyright).

No. 953. Uranium Supply, Enrichment, and Discharged Commercial Reactor Fuel: 1970 to 1992

[Years ending **Dec. 31,** except as noted. For additional data on uranium, see section 25 on mining. For explanation of kilogram, see weights and measures]

ITEM	Unit	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
URANIUM CONCENTRATE											
Production	Mil. lb	25.81	23.20	43.70	11.31	12.99	13.13	13.84	8.89	7.95	5.69
Exports	Mil. lb	4.20	1.00	5.80	5.30	1.00	3.30	2.10	2.00	3.50	3.00
Imports	Mil. lb	-	1.40	3.60	11.70	15.10	15.80	13.10	23.70	16.30	16.10
Delivered price	Dol./lb.	(NA)	10.50	26.00	31.43	27.37	26.15	19.56	15.70	13.66	13.45
ENRICHMENT[1]											
Enriched product[2]	Mil. Swu[3]	5.10	9.92	10.69	10.2	8.1	9.9	11.9	10.2	10.3	(NA)
For domestic customers	Mil. Swu[3]	3.74	4.36	6.89	6.0	3.4	6.3	7.6	6.8	6.7	(NA)
For foreign customers	Mil. Swu[3]	1.36	5.56	3.80	4.2	4.7	3.6	4.3	3.4	3.6	(NA)
Sales	Mil. dol	(NA)	376	1,379	1,403	921	1,094	1,320	1,148	1,156	(NA)
DISCHARGED COMMERCIAL REACTOR FUEL[4]											
Annual discharge	Metric tons.	82	499	1,193	1,330	1,625	1,672	1,914	2,028	1,794	2,255
Inventory, year-end[5]	Metric tons.	118	1,538	6,434	12,461	15,506	17,178	19,092	21,120	22,914	25,169

- Represents zero. NA Not available. [1] Beginning 1985, represents fiscal years. [2] Based on sales. [3] Separative work units. The standard measure of enrichment services is based on operating tails assay in effect at the time the enriched product was placed in inventory. [4] Uranium content. Source: Nuclear Assurance Corporation, Atlanta, GA. [5] Reprocessed fuel not included as inventory.
Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review, Uranium Industry Annual* and unpublished data.

No. 954. Electric Utilities—Generation, Sales, Revenue, and Customers: 1970 to 1992

[Sales and revenue are to and from ultimate customers]

CLASS	Unit	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992, prel.
Generation [1]	Bil. kWh	1,532	1,918	2,286	2,470	2,572	2,704	2,784	2,808	2,825	2,797
Sales [2]	**Bil. kWh**	**1,391**	**1,733**	**2,126**	**2,306**	**2,435**	**2,554**	**2,621**	**2,684**	**2,737**	**2,730**
Residential or domestic	Bil. kWh	448	586	734	793	846	886	899	916	949	927
Percent of total	Percent	32.2	33.8	34.5	34.4	34.8	34.7	34.3	34.1	34.7	34.0
Commercial [3]	Bil. kWh	313	418	524	606	658	698	716	739	753	756
Industrial [4]	Bil. kWh	573	662	794	820	844	882	913	932	935	946
Revenue [2]	**Bil. dol**	**22.1**	**46.9**	**95.5**	**149.2**	**155.7**	**162.4**	**169.6**	**176.5**	**185.1**	**186.7**
Residential or domestic	Bil. dol	9.4	18.8	37.6	58.6	63.0	66.4	68.8	71.7	76.4	76.1
Percent of total	Percent	42.7	40.1	39.4	39.3	40.5	40.9	40.5	40.6	41.2	40.7
Commercial [3]	Bil. dol	6.3	13.5	27.4	44.1	46.7	49.1	51.6	54.2	56.8	58.0
Industrial [4]	Bil. dol	5.4	12.7	27.3	41.4	40.6	41.6	43.7	44.9	45.9	46.5
Ultimate customers, Dec. 31 [2]	**Million**	**72.5**	**81.8**	**92.7**	**101.6**	**104.6**	**106.4**	**108.5**	**110.1**	**111.4**	**112.8**
Residential or domestic	Million	64.0	72.6	82.2	89.8	92.4	93.9	95.6	97.0	98.2	99.4
Commercial [3]	Million	7.9	8.6	9.7	10.9	11.4	11.6	12.0	12.1	12.3	12.4
Industrial [4]	Million	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Avg. kWh used per customer	**1,000**	**19.4**	**21.4**	**23.2**	**22.9**	**23.5**	**24.2**	**24.4**	**24.6**	**24.7**	**24.3**
Residential	1,000	7.1	8.2	9.0	8.9	9.2	9.5	9.5	9.5	9.7	9.4
Commercial [3]	1,000	40.0	49.0	54.5	56.1	58.4	60.4	60.6	61.3	61.6	61.1
Avg. annual bill per customer	**Dollar**	**307**	**579**	**1,040**	**1,462**	**1,501**	**1,536**	**1,576**	**1,614**	**1,670**	**1,664**
Residential	Dollar	149	262	462	658	688	712	725	744	782	770
Commercial [3]	Dollar	804	1,580	2,848	4,080	4,147	4,256	4,363	4,494	4,646	4,682
Avg. revenue per kWh sold	**Cents**	**1.59**	**2.70**	**4.49**	**6.47**	**6.39**	**6.36**	**6.47**	**6.57**	**6.76**	**6.84**
Residential	Cents	2.10	3.21	5.12	7.39	7.45	7.49	7.65	7.83	8.05	8.20
Commercial [3]	Cents	2.01	3.23	5.22	7.27	7.10	7.04	7.20	7.33	7.55	7.67
Industrial [4]	Cents	0.95	1.92	3.44	5.04	4.82	4.71	4.79	4.81	4.91	4.92

[1] Source: 1970 and 1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, monthly. [2] Includes other types not shown separately. [3] Small light and power. [4] Large light and power.
Source: Except as noted, Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry, annual.*

No. 955. Major Investor-Owned Electric Utilities—Balance Sheet and Income Account of Privately Owned Companies: 1982 to 1992

[**In billions of dollars.** As of **Dec. 31.** As of 1990, covers approximately 180 investor-owned electric utilities that during each of the last 3 years met any one or more of the following conditions — 1 mil. megawatthours of total sales; 100 megawatthours of sales for resale, 500 megawatthours of gross interchange out, and 500 megawatthours of wheeling for other. See also *Historical Statistics, Colonial Times to 1970*, series S 133-146 and V 197-212]

ITEM	1982	1984	1985	1986	1987	1988	1989	1990	1991	1992
COMPOSITE BALANCE SHEET										
Assets and other debits	**315.0**	**375.6**	**404.7**	**426.1**	**446.3**	**454.3**	**465.7**	**477.9**	**487.5**	**506.4**
Electric utility plant [1]	321.2	364.7	396.9	419.5	434.6	449.4	462.4	480.6	497.9	518.8
Depreciation and amortization	*67.6*	*77.1*	*85.1*	*93.9*	*103.2*	*113.5*	*125.0*	*135.7*	*148.3*	*160.5*
Net electric utility plant	253.6	287.5	311.8	325.6	331.4	335.9	337.5	344.9	349.6	358.3
Other utility plant	16.7	17.6	19.9	21.2	23.1	24.6	26.3	28.5	31.0	33.4
Depreciation and amortization	*5.3*	*6.1*	*6.5*	*7.2*	*7.8*	*8.5*	*9.2*	*9.9*	*10.8*	*11.7*
Net other utility plant	11.4	12.1	13.4	14.0	15.2	16.1	17.1	18.6	20.2	21.7
Total utility plant	337.9	395.3	431.1	455.9	475.7	493.0	507.9	528.7	548.4	571.9
Depreciation and amortization	*72.9*	*88.0*	*97.4*	*107.7*	*118.7*	*131.3*	*144.6*	*157.4*	*171.7*	*185.1*
Net total utility plant	265.0	307.3	333.8	348.2	357.0	361.6	363.2	371.3	376.8	386.9
Other property and investments	9.1	10.8	12.1	13.5	15.6	15.2	16.1	17.7	17.4	18.0
Current and accrued assets	31.7	37.9	39.4	38.4	40.9	39.1	41.5	41.5	43.4	43.4
Deferred debits	9.3	19.3	19.4	26.1	32.9	38.3	44.8	47.3	50.0	58.0
Liabilities and other credits [2]	**315.0**	**375.3**	**404.7**	**426.1**	**446.3**	**454.3**	**465.7**	**477.9**	**487.5**	**506.4**
Capital stock	70.3	79.0	82.8	81.6	79.9	80.7	82.9	83.2	83.6	86.1
Other paid-in capital	27.7	34.0	36.3	38.4	40.3	40.4	39.1	40.5	42.9	44.7
Retained earnings	27.9	37.1	41.1	46.0	48.0	47.1	47.7	48.1	49.0	49.7
Subsidiary earnings [3]	1.6	1.9	2.2	2.3	2.6	2.5	2.8	2.9	3.0	2.7
Long-term debt	124.0	140.6	152.7	157.2	158.4	160.7	162.9	167.9	171.9	174.1
Current and accrued liabilities	28.6	32.0	32.0	34.0	39.3	38.4	42.0	44.3	43.4	45.6
Deferred credits and operating reserves	15.1	19.0	20.9	22.4	25.6	28.1	28.5	28.8	29.2	31.1
Deferred income taxes [4]	19.4	28.1	32.7	39.8	45.9	50.2	53.3	56.5	59.2	65.0
COMPOSITE INCOME ACCOUNTS										
Electric operating revenues	109.3	128.3	135.3	136.3	138.5	143.9	150.9	157.3	166.8	169.5
Electric operating expenses	*91.1*	*105.5*	*111.1*	*110.2*	*111.6*	*115.3*	*121.6*	*127.9*	*135.9*	*139.0*
Net electric operating revenues	18.1	22.8	24.1	26.1	27.0	28.6	29.4	29.4	30.9	30.5
Other utility operating income	0.9	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2	1.3
Total utility operating income	19.1	24.0	25.3	27.2	28.1	29.8	30.6	30.5	32.1	31.8
Other income	5.3	6.8	7.4	7.2	6.6	5.0	5.2	4.1	3.9	2.9
Total income	24.4	30.8	32.7	34.4	34.6	34.8	35.8	34.6	36.0	34.7
Income deductions	*9.4*	*11.1*	*14.0*	*14.0*	*15.6*	*18.8*	*18.5*	*17.7*	*18.1*	*16.3*
Net income [5]	15.0	19.7	18.7	20.4	19.0	16.0	17.3	16.9	16.9	18.4

[1] Includes construction work in progress. [2] Includes contributions in aid of construction through 1970. [3] Unappropriated undistributed. [4] Cumulative. [5] Includes net extraordinary income.

Source: U.S. Energy Information Administration, 1981-84, *Financial Statistics of Selected Electric Utilities*, annual; thereafter, *Financial Statistics of Major U.S.Investor-Owned Electric Utilities*, annual.

No. 956. Water Power—Developed and Undeveloped Capacity, by Division: 1950 to 1992

[**In millions of kilowatts.** As of **Dec. 31.** Excludes Alaska and Hawaii for 1950 and all capacity of reversible equipment at pumped storage projects. Also excludes capacity precluded from development due to wild and scenic river legislation. For composition of division, see table 26. See also *Historical Statistics, Colonial Times to 1970,* series S 160-175]

DIVISION	DEVELOPED INSTALLED CAPACITY							ESTIMATED UNDEVELOPED CAPACITY						
	1950	1960	1970	1980	1990	1991	1992	1950	1960	1970	1980	1990	1991	1992
United States	**18.7**	**33.2**	**52.0**	**64.4**	**73.0**	**73.6**	**74.1**	**87.6**	**114.2**	**128.0**	**129.9**	**73.9**	**73.3**	**73.6**
New England	1.2	1.5	1.5	1.5	1.9	1.9	1.9	3.3	2.9	3.3	4.7	4.4	4.4	4.4
Middle Atlantic	1.7	2.5	4.3	4.3	4.9	4.9	4.9	6.6	7.6	4.5	5.1	5.1	4.9	4.9
East North Central	0.9	0.9	0.9	0.9	1.1	1.2	1.2	2.3	3.0	1.6	2.0	1.7	1.7	1.7
West North Central	0.6	1.6	2.7	2.8	3.1	3.1	3.1	5.8	6.4	4.4	3.4	3.1	3.1	3.1
South Atlantic	2.8	3.8	5.3	5.9	6.7	6.7	6.7	8.2	8.4	9.6	9.6	7.0	7.1	7.2
East South Central	2.7	3.8	5.2	5.6	5.9	5.9	5.9	4.7	4.6	3.8	3.3	2.4	2.4	2.4
West South Central	0.5	0.9	1.9	2.3	2.7	2.7	2.7	3.6	3.9	3.3	4.7	4.6	4.6	4.6
Mountain	2.3	4.6	6.2	7.4	9.2	9.4	9.5	23.4	23.6	26.7	34.2	19.4	19.1	19.1
Pacific	6.0	13.6	23.9	33.7	37.5	37.6	38.2	29.8	53.8	70.9	62.9	26.2	26.0	26.2

Source: U.S. Federal Energy Regulatory Commission (formerly U.S. Federal Power Commission), *Hydroelectric Power Resources of the United States, Developed and Undeveloped,* January 1, 1988; and unpublished data.

No. 957. Solar Collector Shipments, by Type, End Use, and Market Sector: 1975 to 1992

[**In thousands of square feet, except number of manufacturers.** Solar collector is a device for intercepting sunlight, converting the light to heat, and carrying the heat to where it will be either used or stored. 1985 data are not available]

YEAR	Number of manufacturers	Total shipments [1]	COLLECTOR TYPE		END USE			MARKET SECTOR		
			Low temperature	Medium temperature, special, other	Pool heating	Hot water	Space heating	Residential	Commercial	Industrial
1975	131	3,743	3,026	717	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1980	233	19,398	12,233	7,165	12,029	4,790	1,688	16,077	2,417	488
1981	203	20,133	8,677	11,456	9,781	7,204	2,017	15,773	2,561	1,518
1982	265	18,621	7,476	11,145	7,035	7,444	2,367	13,729	3,789	560
1983	203	16,828	4,853	11,975	4,839	9,323	2,082	11,780	3,039	1,665
1984 [2]	225	17,191	4,479	11,939	4,427	8,930	2,370	13,980	2,091	289
1986 [2]	98	9,360	3,751	1,111	3,494	1,181	127	4,131	703	13
1987 [2]	59	7,269	3,157	957	3,111	964	23	3,775	305	11
1988 [2]	51	8,174	3,326	732	3,304	726	7	3,796	255	7
1989 [2]	44	11,482	4,283	1,989	4,688	1,374	205	5,804	424	42
1990	51	11,409	3,645	2,527	5,016	1,091	2	5,835	294	22
1991	48	6,574	5,585	989	5,535	989	24	6,322	225	13
1992	45	7,086	6,187	897	6,210	801	35	6,832	204	27

NA Not available. [1] Includes other end uses and market sectors not shown separately. [2] Declines between 1984 and 1989 are primarily due to the expiration of the Federal energy tax credit and industry consolidation.
Source: U.S. Energy Information Administration, *Solar Collector Manufacturing Activity,* annual.

No. 958. Wood Energy Consumption, by Region and Sector: 1980 to 1990

[**In trillions of Btu, except percent.** For composition of regions, see table 26]

YEAR	Total	Percent of total energy consumption	REGION				SECTOR			
			Northeast	Midwest	South	West	Residential	Industrial	Commercial	Electric utilities
1980	2,483	3.3	386	329	1,380	388	859	1,600	21	4
1981	2,412	3.3	389	331	1,291	402	869	1,519	21	3
1982	2,395	3.4	351	339	1,334	372	937	1,434	22	2
1983	2,556	3.6	369	318	1,471	396	925	1,606	22	3
1984	2,633	3.6	349	341	1,482	461	923	1,679	22	9
1987	2,437	3.2	350	474	1,147	467	852	1,576	(1)	9
1989	2,604	3.2	432	552	1,161	459	918	1,673	(1)	13
1990	2,267	2.8	256	330	1,176	505	581	1,674	(1)	12

[1] Commercial wood energy is not included because there are no accurate data sources to provide reliable estimates.

No. 959. Households That Burn Wood: 1980 to 1990

[Based on Residential Energy Consumption Survey; see Appendix III]

ITEM	Unit	HOUSEHOLDS THAT BURN WOOD					HOUSEHOLDS THAT BURN WOOD AS MAIN HEATING FUEL				
		1980	1982	1984	1987	1990	1980	1982	1984	1987	1990
Number of households	Millions	21.6	21.4	22.9	22.5	22.9	4.7	5.6	6.4	5.0	3.9
Percent of all households	Percent	26.4	25.6	26.6	24.8	24.3	5.8	6.7	7.5	5.6	4.1
Number of cords burned	Millions	42.7	48.6	49.0	42.6	29.1	22.4	28.7	29.4	23.5	15.0
Average number per household	Number	2.0	2.3	2.1	1.9	1.3	4.7	5.1	4.6	4.7	3.9
Median number per household	Number	0.7	1.0	1.0	0.7	0.5	3.3	4.0	4.0	4.0	3.3
Wood energy consumption	Tril. Btu	854	971	981	853	582	448	574	589	470	300

Source of tables 956 and 959: U.S. Energy Information Administration, *Annual Energy Review.*

No. 960. Renewable Energy Consumption Estimates, by Type: 1990 to 1992

[Renewable energy is obtained from sources that are essentially inexhaustible unlike fossil fuels of which there is a finite supply]

SOURCE AND SECTOR	QUANTITY (quadrillion Btu)			PERCENT CHANGE	
	1990	1991	1992	1990-1991	1991-1992
SOURCES					
Total	**6.01**	**6.20**	**6.04**	**3.2**	**-2.6**
Consumption for electricity	3.77	4.01	3.77	6.4	-6.0
Electric utilities	3.13	3.09	2.70	-1.3	-12.6
Hydroelectric power	2.93	2.90	2.51	-1.0	-13.4
Geothermal energy	0.18	0.17	0.17	-5.6	0.0
Biofuels [1]	0.02	0.02	0.02	0.0	0.0
Wind energy [2]	(Z)	(Z)	(Z)	(X)	(X)
Nonutility power generators	0.62	0.69	0.78	11.3	13.0
Hydroelectric power	0.08	0.08	0.10	1.2	19.0
Geothermal, solar, and wind energy	0.10	0.11	0.13	10.0	18.2
Biofuels [1]	0.44	0.49	0.55	13.0	11.3
Net imported electricity	0.02	0.23	0.29	1,050.0	26.1
Consumption for other uses [3]	2.23	2.19	2.27	-1.8	3.7
Biofuels [1]	2.17	2.13	2.21	-1.8	3.8
Solar and photovoltaic energy	0.06	0.06	0.06	0.0	0.0
SECTORS					
Total	**6.01**	**6.20**	**6.04**	**3.2**	**-2.6**
Residential and commercial	0.64	0.67	0.71	4.7	6.0
Industrial	2.13	2.14	2.26	0.5	5.6
Transportation	0.08	0.07	0.08	-12.5	14.3
Electric utilities	3.15	3.32	3.00	5.4	-9.6

Z Less than 0.005 quadrillion Btu. X Not applicable. [1] Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels. [2] Also includes photovoltaic and solar thermal energy. [3] Included are nonutility thermal energy uses, such as space heating and industrial process heat production. Excluded are estimates for mechanical energy, such as shaft power from dams, wind machines, and solar-powered motors and activators.

Source: U.S. Energy Information Administration, *Annual Energy Review.*

No. 961. Privately Owned Gas Utility Industry—Balance Sheet and Income Account: 1980 to 1992

[**In millions of dollars.** The gas utility industry consists of pipeline and distribution companies. Excludes operations of companies distributing gas in bottles or tanks. See also *Historical Statistics, Colonial Times to 1970,* series S 205-218]

ITEM	1980	1985	1986	1987	1988	1989	1990	1991	1992
COMPOSITE BALANCE SHEET									
Assets, total [1]	**75,851**	**104,478**	**104,008**	**109,390**	**121,667**	**123,820**	**121,686**	**124,120**	**129,400**
Total utility plant	67,071	88,121	91,606	93,540	99,933	106,017	112,863	119,772	129,272
Depreciation and amortization	*26,162*	*36,377*	*36,776*	*41,162*	*44,423*	*47,054*	*49,483*	*52,400*	*57,005*
Utility plant (net)	40,909	51,744	54,830	52,378	55,510	58,963	63,380	67,372	72,267
Investment and fund accounts [1]	15,530	23,871	21,850	25,660	31,552	28,111	23,872	22,883	21,883
Current and accrued assets	17,243	24,771	21,477	21,025	23,402	24,836	23,268	23,023	23,783
Deferred debits [2]	2,169	4,092	5,851	8,633	9,658	10,364	9,576	9,277	9,776
Liabilities, total [1]	**75,851**	**104,478**	**104,008**	**109,390**	**121,667**	**123,820**	**121,686**	**124,120**	**129,400**
Capitalization, total [1]	51,382	65,799	66,660	66,312	69,875	74,753	74,958	75,463	81,183
Capital stock [1]	29,315	39,517	39,902	38,212	39,898	43,889	43,810	43,435	46,318
Long-term debts	22,067	26,282	26,758	28,100	29,977	30,864	31,148	32,028	34,865
Current and accrued liabilities	18,119	26,125	23,855	26,664	33,735	31,005	29,550	28,128	26,438
Deferred income taxes [3]	4,149	7,769	8,363	9,901	10,685	11,292	11,360	10,527	10,952
Other liabilities and credits	2,201	4,785	5,130	6,513	7,372	6,770	5,818	10,002	10,827
COMPOSITE INCOME ACCOUNT									
Operating revenues, total	**85,918**	**103,945**	**80,978**	**69,566**	**69,754**	**70,363**	**66,027**	**63,922**	**66,289**
Operating expenses [4]	*81,789*	*98,320*	*75,470*	*64,409*	*64,696*	*64,262*	*60,137*	*59,165*	*59,936*
Operation and maintenance	74,508	88,572	66,032	56,054	57,032	55,990	51,627	50,867	50,028
Federal, State, and local taxes	4,847	6,590	6,133	5,179	4,241	4,843	4,957	4,446	6,020
Operating income	4,129	5,625	5,508	5,157	5,058	6,101	5,890	4,756	6,352
Utility operating income	4,471	6,030	5,943	5,452	5,202	6,274	6,077	4,962	6,562
Income before interest charges [1]	6,929	7,636	7,085	6,845	7,472	8,764	8,081	5,530	7,197
Net income [1]	4,194	3,785	3,390	2,971	3,352	4,641	4,410	1,894	3,677
Dividends	2,564	4,060	3,882	3,453	3,151	3,113	3,191	4,341	3,894

[1] Beginning 1980, not comparable with earlier years due to Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries. [2] Includes capital stock discount and expense and reacquired securities. [3] Includes reserves for deferred income taxes. [4] Includes expenses not shown separately.

Source: American Gas Association, Arlington, VA, *Gas Facts,* annual, (copyright).

No. 962. Gas Utility Industry—Summary: 1970 to 1992

[Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately and municipally owned gas utilities in United States, except those with annual revenues less than $25,000. See also *Historical Statistics, Colonial Times to 1970*, series S 190-204]

ITEM	Unit	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Customers [1]	**1,000**	**41,482**	**44,555**	**47,223**	**49,971**	**51,576**	**52,422**	**53,356**	**54,261**	**55,174**	**56,132**
Residential	1,000	38,097	40,950	43,489	45,929	47,362	48,133	48,980	49,802	50,634	51,525
Commercial	1,000	3,131	3,367	3,498	3,816	3,980	4,069	4,161	4,246	4,322	4,397
Industrial and other	1,000	199	184	187	179	180	168	168	166	168	210
Sales [2]	**Tril. Btu**	**16,044**	**14,863**	**15,413**	**12,616**	**10,543**	**10,705**	**10,551**	**9,842**	**9,605**	**9,906**
Residential	Tril. Btu	4,923	4,991	4,826	4,513	4,385	4,695	4,798	4,468	4,550	4,694
Percent of total	Percent	30.7	33.6	31.3	35.8	41.6	43.9	45.5	45.4	47.4	47.4
Commercial	Tril. Btu	2,007	2,387	2,453	2,338	2,156	2,306	2,322	2,192	2,198	2,209
Industrial	Tril. Btu	8,439	6,837	7,957	5,635	3,848	3,544	3,243	3,010	2,631	2,772
Other	Tril. Btu	674	648	177	130	155	160	188	171	226	231
Revenues [2]	**Mil. dol**	**10,283**	**19,101**	**48,303**	**63,293**	**45,492**	**46,162**	**47,493**	**45,153**	**44,647**	**46,178**
Residential	Mil. dol	5,207	8,445	17,432	26,864	23,622	24,828	26,172	25,000	25,729	26,702
Percent of total	Percent	50.6	44.2	36.1	42.4	51.9	53.8	55.1	55.4	57.6	57.8
Commercial	Mil. dol	1,620	3,303	8,183	12,722	10,271	10,681	11,074	10,604	10,669	10,865
Industrial	Mil. dol	3,181	6,745	22,215	23,086	11,069	10,113	9,666	8,996	7,576	7,913
Other	Mil. dol	274	608	473	621	530	538	581	553	674	698
Prices per mil. Btu [3]	**Dollars**	**0.64**	**1.29**	**3.13**	**5.02**	**4.32**	**4.31**	**4.50**	**4.59**	**4.65**	**4.66**
Residential	Dollars	1.06	1.69	3.61	5.95	5.39	5.29	5.45	5.60	5.66	5.69
Commercial	Dollars	0.81	1.38	3.34	5.44	4.77	4.63	4.77	4.84	4.85	4.92
Industrial	Dollars	0.38	0.99	2.79	4.10	2.88	2.85	2.98	2.99	2.88	2.85
Gas mains mileage	**1,000**	**913**	**980**	**1,052**	**1,119**	**1,151**	**1,169**	**1,185**	**1,207**	**1,225**	**1,254**
Field and gathering	1,000	66	69	84	94	94	92	91	90	86	86
Transmission	1,000	252	263	266	271	274	276	276	280	282	285
Distribution	1,000	595	648	702	754	784	801	818	837	857	883
Construction expenditures [4]	**Mil. dol**	**2,507**	**2,466**	**5,350**	**5,671**	**5,328**	**6,166**	**7,341**	**7,899**	**9,036**	**11,068**
Transmission	Mil. dol	1,019	590	1,583	1,562	1,295	1,568	2,081	2,886	3,656	5,739
Distribution	Mil. dol	913	910	1,869	2,577	3,055	3,389	3,980	3,714	3,842	3,867
Production and storage	Mil. dol	203	555	1,150	790	251	268	276	309	430	349

[1] Annual average. [2] Excludes sales for resale. [3] For definition, see text, section 19. [4] Includes general.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual (copyright).

No. 963. Gas Utility Industry—Customers, Sales, and Revenues, by State: 1992

[See headnote, table 962. For definition of Btu, see text, section 19]

REGION, DIVISION, AND STATE	CUSTOMERS[1] (1,000)		SALES[3] (tril. Btu)		REVENUES[3] (mil. dol.)	
	Total[2]	Residential	Total[2]	Residential	Total[2]	Residential
U.S.	**56,132**	**51,525**	**9,906**	**4,694**	**46,178**	**26,702**
Northeast	**11,132**	**10,196**	**1,885**	**1,035**	**11,528**	**7,326**
N.E	**2,069**	**1,869**	**403**	**185**	**2,626**	**1,479**
ME	18	13	5	1	28	6
NH	80	68	17	6	103	46
VT	27	24	8	3	41	19
MA	1,248	1,136	239	113	1,515	879
RI	216	197	37	20	240	150
CT	480	431	96	42	699	379
M.A.	**9,063**	**8,327**	**1,482**	**850**	**8,902**	**5,847**
NY	4,272	3,952	594	378	3,916	2,762
NJ	2,248	2,025	448	200	2,419	1,348
PA	2,543	2,350	440	272	2,567	1,737
Midwest	**17,195**	**15,685**	**3,001**	**1,883**	**13,891**	**9,319**
E.N.C	**12,342**	**11,330**	**2,187**	**1,438**	**10,292**	**7,136**
OH	3,060	2,818	532	354	2,560	1,773
IN	1,506	1,372	284	155	1,326	823
IL	3,625	3,321	616	441	2,853	2,123
MI	2,852	2,640	510	362	2,332	1,695
WI	1,299	1,179	245	125	1,217	722
W.N.C	**4,853**	**4,355**	**814**	**445**	**3,599**	**2,183**
MN	1,118	1,013	237	115	1,007	557
IA	812	726	139	76	641	388
MO	1,349	1,221	186	118	883	595
ND	102	90	18	10	83	48
SD	125	110	22	11	97	54
NE	494	431	86	42	362	201
KS	853	764	125	73	526	340
South	**14,043**	**12,793**	**3,272**	**941**	**12,661**	**5,479**
S.A	**5,332**	**4,850**	**970**	**378**	**4,810**	**2,429**
DE	102	94	22	9	105	51
MD	857	789	135	70	729	436
DC	148	133	32	13	195	89
VA	727	653	127	57	692	379
WV	385	352	65	39	330	223
NC	651	575	157	44	688	274
SC	408	364	110	23	466	161
GA	1,489	1,376	215	107	1,119	673
FL	565	516	106	18	486	143
E.S.C.	**2,645**	**2,382**	**491**	**195**	**2,122**	**1,044**
KY	712	643	124	65	533	308
TN	754	661	161	53	702	279
AL	757	698	115	50	577	329
MS	422	380	91	27	310	128
W.S.C	**6,066**	**5,561**	**1,811**	**368**	**5,729**	**2,006**
AR	569	505	82	40	357	203
LA	990	928	438	56	1,124	307
OK	922	833	153	67	564	327
TX	3,585	3,296	1,139	205	3,684	1,169
West	**13,761**	**12,852**	**1,749**	**836**	**8,096**	**4,576**
Mt.	**3,525**	**3,203**	**484**	**267**	**2,144**	**1,322**
MT	207	183	35	20	143	83
ID	155	134	18	10	85	49
WY	128	114	22	11	92	52
CO	1,138	1,022	165	97	703	435
NM	424	385	73	33	257	155
AZ	649	601	65	29	359	201
UT	505	468	71	48	337	244
NV	319	296	35	19	168	103
Pac.	**10,236**	**9,649**	**1,265**	**569**	**5,952**	**3,254**
WA	590	523	132	43	452	208
OR	403	352	56	24	274	143
CA	9,122	8,668	1,043	487	5,076	2,839
AK	86	74	31	14	105	54
HI	35	32	3	1	45	10

[1] Averages for the year. [2] Includes other service, not shown separately. [3] Excludes sales for resale.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual (copyright).

Science and Technology

This section presents statistics on scientific, engineering, and technological resources, with emphasis on patterns of research and development (R&D) funding and on scientific, engineering, and technical personnel, education, and employment. Also included are statistics on space program outlays and accomplishments. Principal sources of these data are the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA).

NSF gathers data chiefly through recurring surveys. Current NSF publications containing data on funds for research and development and on scientific and engineering personnel include the *Science Resources Studies Highlights* summaries series; Detailed Statistical Tables; and annual, biennial, triennial, and special reports. Titles or the areas of coverage of these reports include the following: *Science and Engineering Indicators; National Patterns of R&D Resources; Science and Engineering Personnel-A National Overview; Women and Minorities in Science and Engineering;* science and technology data presented in chart and tabular form in a pocket-size publication; *International Science and Technology Data Update;* profiles on human resources and funding in individual fields of science and engineering; *Federal Funds for Research and Development; Federal R&D Funding by Budget Function; Federal Support to Universities, Colleges, and Selected Nonprofit Institutions; Scientific and Engineering Facilities at Universities and Colleges; Geographic Distribution of Industrial R&D Expenditures; Research and Development in Industry;* R&D funds and graduate enrollment and support in academic science and engineering; characteristics of doctoral scientists and engineers and of recent graduates in the United States; *U.S. Scientists and Engineers;* and scientists, engineers, and technicians in manufacturing, nonmanufacturing, and trade and regulated industries. Statistical surveys in these areas pose problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. See sources for details.

In Brief

R&D expenditures in constant (1987) dollars:

1970	*74.6 bil.*
1980	*87.7 bil.*
1993	*130.1 bil.*

Nondefense R&D spending as percent of GNP: 1991

Japan	*3.0*
Former West Germany	*2.7*
United States	*1.9*
France	*1.9*
Italy	*1.3*

The National Science Board's biennial *Science and Engineering Indicators* contains data and analyses of international and domestic science and technology, including measures of inputs and outputs. *The Budget of the United States Government,* published by the U.S. Office of Management and Budget, contains summary financial data on Federal R&D programs.

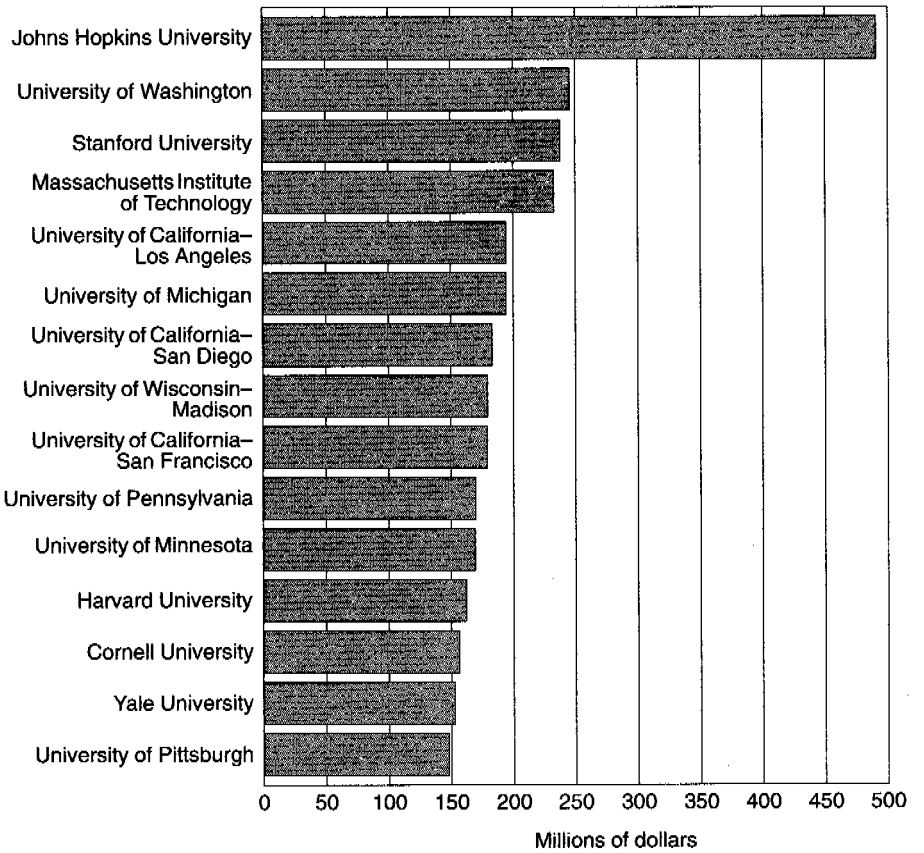
Research and development outlays.—NSF defines research as a "systematic and intensive study directed toward a fuller knowledge of the subject studied" and development as "the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, methods, or processes." National coverage of R&D expenditures is developed primarily from periodic surveys in four principal economic sectors: (1) *Government,* made up primarily of Federal executive agencies; (2) *industry,* consisting of manufacturing and nonmanufacturing firms and the federally funded research and development centers (FFRDC's) they administer; (3) *universities and colleges,* composed of universities, colleges, and their affiliated institutions, agricultural experiment stations, and associated schools of agriculture, and FFRDC's administered by educational institutions; and (4) *other nonprofit institutions,* consisting of such

organizations as private philanthropic foundations, nonprofit research institutes, voluntary health agencies, and FFRDC's administered by nonprofit organizations. The R&D funds reported consist of current operating costs, including planning and administration costs, except as otherwise noted. They exclude funds for routine testing, mapping and surveying, collection of general-purpose data, dissemination of scientific information, and training of scientific personnel.

Scientists, engineers, and technicians.—Scientists and engineers are defined as persons engaged in scientific and engineering work at a level requiring a knowledge of sciences equivalent at least to that acquired through completion of a 4-year college course. Technicians are defined as persons engaged in technical work at a level requiring knowledge acquired through a technical institute, junior college, or other type of training less extensive than 4-year college training. Craftsmen and skilled workers are excluded.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970.* See Appendix IV.

Figure 20.1
Top 15 Universities—Federal Research and Development Obligations: 1991



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 973.

No. 964. R&D Expenditures: 1960 to 1993

[Includes basic research, applied research, and development. Defense-related outlays comprise all research and development spending by Dept. of Defense, including space activities, and a portion of Department of Energy funds. Space-related outlays are those of the National Aeronautics and Space Administration; they exclude space activities of other Federal agencies, estimated at less than 5 percent of all space research and development spending. Minus sign (-) indicates decrease]

YEAR	CURRENT DOLLARS (bil. dol.)			CONSTANT (1987) DOLLARS [1]		ANNUAL PERCENT CHANGE [3]		PERCENT OF TOTAL R&D OUTLAYS				
								Federally funded defense/space-related			Other outlays	
	Total	Defense space related	Other	Total (bil. dol.)	Percent of GDP [2]	Current dollars	Constant dollars	Total	Defense	Space	Non-Federal	Federal
1960	13.5	7.5	6.0	52.0	2.6	9.4	7.5	55	52	3	35	9
1965	20.0	10.8	9.3	70.6	2.9	6.3	3.7	54	33	21	35	11
1970	26.1	11.4	14.7	74.6	2.6	2.0	-3.2	44	33	10	43	13
1971	26.7	11.2	15.5	72.3	2.4	2.1	-3.0	42	33	10	44	14
1972	28.5	11.6	16.9	73.7	2.4	6.7	1.9	41	33	8	44	15
1973	30.7	11.9	18.9	74.9	2.3	7.9	1.7	39	32	7	47	15
1974	32.9	11.8	21.1	73.9	2.3	7.0	-1.4	36	29	7	49	15
1975	35.2	12.3	23.0	72.2	2.2	7.2	-2.3	35	27	7	49	17
1976	39.0	13.4	25.6	75.0	2.2	10.8	3.9	34	27	8	49	17
1977	42.8	14.3	28.5	76.7	2.2	9.6	2.2	33	27	7	50	17
1978	48.1	15.3	32.8	80.1	2.2	12.5	4.4	32	26	6	50	18
1979	55.0	16.6	38.4	84.1	2.2	14.2	5.0	30	25	6	51	19
1980	62.6	18.4	44.2	87.7	2.3	13.9	4.3	29	24	5	53	18
1981	71.9	21.2	50.6	91.4	2.4	14.8	4.3	30	24	5	54	17
1982	80.0	24.6	55.4	95.5	2.5	11.3	4.5	31	26	5	54	15
1983	89.1	28.3	60.9	102.3	2.6	11.4	7.1	32	27	4	54	14
1984	101.1	31.8	69.3	111.2	2.7	13.5	8.7	31	28	3	55	14
1985	113.8	37.5	76.3	120.6	2.8	12.5	8.5	33	30	3	54	13
1986	119.5	40.6	78.9	123.3	2.8	5.0	2.2	34	31	3	55	11
1987	125.4	43.2	82.2	125.4	2.8	4.9	1.7	34	31	3	54	12
1988	133.7	45.1	88.6	128.8	2.7	6.7	2.8	34	30	3	54	12
1989	140.8	45.6	95.2	129.8	2.7	5.3	0.8	32	28	4	56	12
1990	146.4	46.6	99.9	129.5	2.7	4.0	-0.3	32	27	4	56	12
1991	145.4	42.7	102.6	123.7	2.6	-0.7	-4.5	29	24	5	59	11
1992	154.5	46.2	108.3	128.0	2.6	6.3	3.5	30	25	5	58	12
1993	160.8	48.2	112.6	130.1	2.6	4.0	1.6	30	25	5	58	12

[1] Based on GDP implicit price deflator. [2] GDP = Gross Domestic Product. [3] Change from immediate prior year.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources*, annual.

No. 965. R&D, Source of Funds and Performance Sector: 1970 to 1993

[In millions of dollars. See headnote, table 966]

YEAR	Total	SOURCE OF FUNDS				PERFORMANCE SECTOR				
		Federal Govt.	Industry	Univ., colleges	Other [1]	Federal Govt.	Industry	Univ., colleges	Associated FFRDC's [2]	Other [1]
Current dollars:										
1970	26,134	14,891	10,444	462	337	4,079	18,067	2,335	737	916
1975	35,213	18,109	15,820	749	535	5,354	24,187	3,409	987	1,276
1980	62,610	29,461	30,912	1,334	903	7,632	44,505	6,077	2,246	2,150
1985	113,818	52,127	57,978	2,369	1,344	12,945	84,239	9,686	3,523	3,425
1986	119,531	54,281	61,057	2,784	1,409	13,535	87,823	10,928	3,895	3,350
1987	125,353	57,912	62,643	3,192	1,606	13,413	92,155	12,154	4,206	3,425
1988	133,742	61,320	67,144	3,462	1,816	14,281	97,889	13,466	4,531	3,575
1989	140,771	62,634	72,110	3,947	2,080	15,121	101,854	15,016	4,730	4,050
1990	146,434	63,996	75,714	4,356	2,368	16,002	104,606	16,344	4,832	4,650
1991	145,383	59,146	78,804	4,850	2,583	15,238	102,246	17,620	5,079	5,200
1992	154,500	65,150	81,050	5,400	2,900	16,600	107,800	19,050	5,300	5,750
1993	160,750	68,000	83,550	6,000	3,200	16,600	112,300	20,550	5,300	6,000
Constant (1987) dollars: [3]										
1970	74,597	42,622	29,673	1,335	966	11,789	51,327	6,749	2,130	2,602
1975	72,237	37,396	32,162	1,574	1,105	11,248	49,161	7,162	2,074	2,593
1980	87,669	41,393	43,118	1,890	1,268	10,810	62,071	8,608	3,181	2,999
1985	120,599	55,245	61,418	2,512	1,425	13,727	89,236	10,271	3,736	3,628
1986	123,295	55,966	63,009	2,867	1,453	13,939	90,633	11,254	4,011	3,457
1987	125,353	57,912	62,643	3,192	1,606	13,413	92,155	12,154	4,206	3,425
1988	128,812	59,094	64,626	3,342	1,750	13,785	94,215	12,998	4,374	3,441
1989	129,832	57,801	66,463	3,648	1,920	13,975	93,875	13,878	4,372	3,733
1990	129,504	56,653	66,890	3,865	2,097	14,199	92,408	14,502	4,287	4,108
1991	123,691	50,431	66,905	4,152	2,202	13,046	86,796	15,086	4,348	4,414
1992	128,017	54,068	67,046	4,496	2,407	13,822	89,165	15,862	4,413	4,756
1993	130,070	55,102	67,496	4,878	2,593	13,496	90,711	16,707	4,309	4,847

[1] Nonprofit institutions. [2] University associated federally-funded R&D centers. [3] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources*, annual.

No. 966. R&D Funds, by Performance Sector: 1980 to 1993

[**In millions of dollars, except percent.** Data primarily on calendar year basis—calendar year data for industry and other nonprofit institutions combined with Federal and university fiscal year data. Data refer, in general, to natural sciences including engineering, and to social sciences in all but industry sector. Excludes capital expenditures data. Expenditures at associated federally funded research and development centers administered by industry and other nonprofit institutions included in totals of respective sectors. See also *Historical Statistics, Colonial Times to 1970*, series W 109-125]

PERFORMANCE SECTOR	1980	1985	1988	1989	1990	1991	1992	1993
Total R&D [1]	**62,610**	**113,818**	**133,742**	**140,771**	**146,434**	**145,383**	**154,500**	**160,750**
In 1987 dollars [2]	87,669	120,599	128,812	129,832	129,504	123,691	128,017	130,070
Percent Federal as source	47.1	45.8	45.8	44.5	43.7	40.7	42.2	42.3
Percent of gross domestic product	2.3	2.8	2.7	2.7	2.7	2.6	2.6	2.6
Federal Government	7,632	12,945	14,281	15,121	16,002	15,238	16,600	16,600
Industry	44,505	84,239	97,889	101,854	104,606	102,246	107,800	112,300
Federal funds	14,029	27,196	32,117	31,292	30,626	25,308	26,800	31,000
Industry funds	30,476	57,043	65,772	70,562	73,980	76,938	79,000	81,300
Universities and colleges	6,077	9,686	13,466	15,016	16,344	17,620	19,050	20,550
Federal funds	4,104	6,063	8,191	8,991	9,636	10,221	10,800	11,400
Industry funds	236	560	872	998	1,134	1,216	1,350	1,500
University and college funds [3]	1,334	2,369	3,462	3,947	4,356	4,850	5,400	6,000
Other nonprofit institutions funds [3]	403	694	941	1,080	1,218	1,333	1,500	1,650
Universities and colleges, associated federally funded R&D centers	2,246	3,523	4,531	4,730	4,832	5,079	5,300	5,300
Other nonprofit institutions	2,150	3,425	3,575	4,050	4,650	5,200	5,750	6,000
Federal funds	1,450	2,400	2,200	2,500	2,900	3,300	3,650	3,700
Industry funds	200	375	500	550	600	650	700	750
Other [4]	500	650	875	1,000	1,150	1,250	1,400	1,550
Total research, basic and applied	**22,052**	**39,526**	**47,851**	**52,632**	**55,766**	**58,179**	**61,990**	**65,900**
In 1987 dollars [2]	30,990	41,889	46,112	48,567	49,357	49,578	51,429	53,391
Percent Federal as source	54.8	50.8	46.5	47.5	47.0	47.2	47.7	48.4
Federal Government	3,666	5,056	5,338	5,982	5,953	6,539	7,150	7,800
Industry	9,775	21,117	24,875	27,034	28,537	28,457	29,900	31,200
Federal funds	2,190	5,836	5,246	6,190	6,589	6,066	6,800	7,500
Industry funds	7,585	15,281	19,629	20,844	21,948	22,391	23,100	23,700
Universities and colleges	5,578	8,973	12,412	13,881	15,044	16,108	17,320	18,860
Federal funds	3,743	5,604	7,506	8,278	8,805	9,227	9,850	10,350
Industry funds	219	521	811	928	1,055	1,131	1,260	1,400
University and college funds [3]	1,241	2,203	3,220	3,671	4,051	4,510	5,020	5,580
Other nonprofit institutions funds [3]	375	645	875	1,004	1,133	1,240	1,390	1,530
Universities and colleges, associated federally funded R&D centers	1,548	2,340	2,756	2,935	3,032	3,505	3,700	3,850
Other nonprofit institutions	1,485	2,040	2,470	2,800	3,200	3,570	3,920	4,190
Federal funds	930	1,250	1,400	1,600	1,850	2,100	2,300	2,400
Industry funds	160	300	400	440	480	520	560	610
Other [4]	395	490	670	760	870	950	1,060	1,180
Total basic research	**8,433**	**14,192**	**18,775**	**20,648**	**22,099**	**22,829**	**24,380**	**26,220**
In 1987 dollars [2]	11,899	15,045	18,107	19,067	19,583	19,500	20,263	21,280
Percent of total R&D	13.5	12.5	14.0	14.7	15.1	15.7	15.8	16.3
Percent Federal as source	70.1	64.7	61.8	62.8	62.0	62.9	63.0	62.7
Federal Government	1,182	1,923	2,050	2,371	2,366	2,446	2,700	2,900
Industry	1,325	2,862	4,280	4,646	4,909	4,373	4,500	4,700
Federal funds	290	489	908	1,225	1,284	1,148	1,200	1,300
Industry funds	1,035	2,373	3,372	3,421	3,625	3,225	3,300	3,400
Universities and colleges	4,042	6,553	8,893	9,801	10,681	11,538	12,400	13,500
Federal funds	2,863	4,340	5,674	6,191	6,652	7,085	7,550	8,100
Industry funds	141	342	532	598	681	732	790	890
University and college funds [3]	797	1,447	2,113	2,365	2,616	2,919	3,180	3,540
Other nonprofit institutions funds [3]	241	424	574	647	732	802	880	970
Universities and colleges, associated federally funded R&D centers	1,124	1,749	2,222	2,330	2,403	2,572	2,700	2,850
Other nonprofit institutions	760	1,105	1,330	1,500	1,740	1,900	2,080	2,270
Federal funds	450	675	750	850	1,000	1,100	1,200	1,300
Industry funds	95	170	230	250	280	300	320	350
Other [4]	215	260	350	400	460	500	560	620
Total development	**40,558**	**74,292**	**85,891**	**88,139**	**90,668**	**87,204**	**92,510**	**94,850**
In 1987 dollars [2]	56,678	78,710	82,700	81,265	80,147	74,113	76,588	76,678
Percent of total R&D	64.8	65.3	64.2	62.6	61.9	60.0	59.9	59.0
Percent Federal as source	42.9	43.1	45.5	42.7	41.7	36.4	38.4	38.1

[1] Basic research, applied research, and development. [2] Based on gross domestic product implicit price deflator. [3] Includes State and local government funds received by these institutions and used for research and development. [4] Includes estimates for independent nonprofit hospitals and voluntary health agencies.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources*, annual.

No. 967. Funds for R&D—Performance Sector, by State: 1991

[In millions of dollars. See headnote, table 966]

STATE	Total	Federal government [1]	Industry	Universities and colleges [2]	Other nonprofit [3]	STATE	Total	Federal government [1]	Industry	Universities and colleges [2]	Other nonprofit [3]
U.S.	**145,385**	**15,238**	**102,246**	**22,701**	**5,200**	MO	(NA)	71	(7)	306	22
						MT	(NA)	26	(8)	38	1
AL	1,503	701	521	245	36	NE	211	22	59	124	6
AK	146	59	18	67	2	NV	261	109	83	67	3
AZ	1,399	132	944	311	11	NH	(NA)	88	(9)	79	-
AR	198	35	106	55	2	NJ	8,768	513	7,810	433	12
CA	28,337	1,885	21,279	4,700	473	NM	2,582	393	1,064	1,111	15
CO	(NA)	275	(4)	340	106	NY	10,363	174	8,268	1,751	170
CT	1,913	47	1,535	317	15	NC	1,965	151	1,285	502	27
DE	(NA)	9	(5)	45	3	ND	(NA)	24	(7)	31	1
DC	1,737	1,433	40	118	145	OH	5,975	689	4,726	504	57
FL	3,700	658	2,599	438	5	OK	604	41	392	153	18
GA	1,479	121	868	484	6	OR	600	47	349	179	24
HI	145	45	11	78	11	PA	7,621	315	6,262	906	138
ID	(NA)	37	(6)	42	1	RI	485	226	152	88	18
IL	6,417	68	5,027	1,275	47	SC	595	14	419	151	10
IN	2,347	92	1,988	262	4	SD	32	9	5	16	2
IA	777	27	461	286	3	TN	1,139	124	737	251	28
KS	(NA)	12	(7)	124	5	TX	6,635	405	4,755	1,218	257
KY	317	62	154	98	2	UT	665	103	356	202	4
LA	457	43	172	240	2	VT	(NA)	5	(8)	47	5
ME	(NA)	14	(8)	27	16	VA	2,771	1,107	1,115	366	182
MD	5,864	3,432	1,203	1,078	151	WA	3,890	133	3,215	350	193
MA	8,561	278	6,335	1,338	610	WV	(NA)	76	(10)	73	5
MI	8,851	92	8,116	601	42	WI	1,573	32	1,140	388	13
MN	2,228	41	1,810	332	46	WY	41	9	2	23	7
MS	299	157	41	97	4	Other [11]	3,835	577	675	349	2,234

- Represents or rounds to zero. NA Not available. [1] Total funds used by Federal government from Federal sources. [2] Distribution by States includes R&D performed in only doctoral degree granting institutions; U.S. total includes R&D performed in all institutions. [3] For other sector, funds distributed by State include only Federal obligations to organizations in the nonprofit sector. Nonprofit R&D performance using non-Federal funds are undistributed. [4] Between $1,751 and $2,593 million. [5] Between $863 and $995 million. [6] Under $95 million. [7] Under $1,963 million. [8] Under $284 million. [9] Between $102 and $120 million. [10] Between $69 and $201 million. [11] Includes unknown.

Source: U.S. National Science Foundation, *Science and Engineering Indicators*, 1993.

No. 968. Federal Obligations for R&D, by Agency: 1975 to 1993

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Includes those agencies with obligations of $1 billion or more in 1993. See *Historical Statistics, Colonial Times to 1970*, series W 142, for total R&D expenditures]

AGENCY	1975	1980	1985	1988	1989	1990	1991	1992	1993
CURRENT DOLLARS									
Obligations, total [1]	**19,039**	**29,830**	**48,360**	**56,769**	**61,407**	**63,668**	**61,295**	**70,368**	**69,754**
Dept. of Defense	9,013	13,981	29,792	35,249	37,577	37,268	32,135	38,309	36,155
Dept. of Health and Human Services	2,281	3,780	5,451	7,158	7,903	8,406	9,756	10,678	11,143
National Aeronautics and Space Administration	3,064	3,234	3,327	4,330	5,394	6,533	7,280	7,860	8,629
Dept. of Energy	2,047	4,754	4,966	5,036	5,193	5,631	5,983	6,766	6,731
National Science Foundation	595	882	1,346	1,533	1,670	1,690	1,785	1,937	2,247
Dept. of Agriculture	420	688	943	1,017	1,038	1,108	1,237	1,337	1,337
CONSTANT (1987) DOLLARS [2]									
Obligations, total [1]	**39,998**	**42,253**	**51,283**	**54,796**	**56,753**	**56,493**	**52,479**	**58,591**	**56,711**
Dept. of Defense	18,935	19,803	31,592	34,024	34,729	33,068	27,513	31,898	29,394
Dept. of Health and Human Services	4,792	5,354	5,780	6,909	7,304	7,459	8,353	8,891	9,059
National Aeronautics and Space Administration	6,437	4,581	3,528	4,180	4,985	5,797	6,233	6,545	7,015
Dept. of Energy	4,300	6,733	5,266	4,861	4,799	4,996	5,122	5,634	5,472
National Science Foundation	1,250	1,249	1,427	1,480	1,543	1,500	1,528	1,613	1,827
Dept. of Agriculture	882	974	1,000	981	959	983	1,059	1,113	1,087

[1] Includes other agencies, not shown separately. [2] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

No. 969. Federal Funding for R&D, by Selected Budget Functions: 1970 to 1994

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Excludes R&D plant. Represents budget authority. Functions shown are those for which $1 billion or more was authorized for 1994. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1970	1980	1985	1989	1990	1991	1992	1993	1994, est.
CURRENT DOLLARS									
Total [1]	**15,339**	**29,739**	**49,887**	**62,115**	**63,781**	**65,898**	**68,398**	**70,175**	**71,648**
Eight functions, percent of total	96.6	96.5	98.3	98.2	98.0	97.9	98.0	97.9	97.9
National defense	7,981	14,946	33,698	40,665	39,925	39,328	40,083	41,539	41,978
Health	1,084	3,694	5,418	7,773	8,308	9,226	10,055	10,279	10,636
Space research and technology	3,606	2,738	2,725	4,555	5,765	6,511	6,744	6,880	6,724
Energy	574	3,603	2,389	2,419	2,715	2,943	3,099	2,648	2,855
General science	452	1,233	1,862	2,373	2,410	2,635	2,659	2,715	2,990
Natural resources and environment	340	999	1,059	1,255	1,386	1,582	1,688	1,708	1,790
Transportation	535	887	1,030	1,064	1,045	1,231	1,523	1,784	1,970
Agriculture	238	585	836	907	950	1,052	1,155	1,153	1,170
CONSTANT (1987) DOLLARS [2]									
Total [1]	**44,332**	**42,123**	**52,902**	**57,408**	**56,594**	**56,420**	**56,951**	**57,053**	**56,863**
National defense	23,066	21,170	35,735	37,583	35,426	33,671	33,375	33,772	33,316
Health	3,133	5,232	5,745	7,184	7,372	7,899	8,372	8,357	8,441
Space research and technology	10,422	3,878	2,890	4,210	5,115	5,574	5,615	5,593	5,337
Energy	1,659	5,103	2,533	2,236	2,409	2,520	2,580	2,153	2,266
General science	1,306	1,746	1,975	2,193	2,138	2,256	2,214	2,207	2,373
Natural resources and environment	983	1,415	1,123	1,160	1,230	1,354	1,405	1,389	1,421
Transportation	1,546	1,256	1,092	983	927	1,054	1,268	1,450	1,563
Agriculture	688	829	887	838	843	901	962	937	929

[1] Includes other functions, not shown separately. [2] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Federal R&D Funding by Budget Function*, annual.

No. 970. National R&D Expenditures as a Percent of Gross Domestic Product, by Country: 1975 to 1992

YEAR	TOTAL R&D						NON DEFENSE R&D [1]					
	United States	Japan	Germany [2]	France	United Kingdom	Italy	United States	Japan	Germany [2]	France	United Kingdom	Italy
1975	2.2	2.1	2.2	1.8	2.0	0.8	1.6	2.1	2.1	1.4	1.4	0.8
1980	2.3	2.2	2.4	1.8	(NA)	0.7	1.8	2.2	2.3	1.4	(NA)	0.7
1985	2.8	2.7	2.7	2.3	2.3	1.1	2.0	2.8	2.6	1.8	1.7	1.1
1989	2.7	3.0	2.9	2.3	2.2	1.2	1.9	3.0	2.7	1.8	1.8	1.2
1990	2.7	3.1	2.7	2.4	2.2	1.3	1.9	3.0	2.6	1.9	1.8	1.3
1991	2.7	3.0	2.8	2.4	2.1	1.4	1.9	3.0	2.7	1.9	1.7	1.3
1992	2.6	(NA)	(NA)	(NA)	(NA)	(NA)	1.9	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. [1] Estimated. [2] Former West Germany.

Source: National Science Foundation, *National Patterns of R&D Resources*, annual; and Organization for Economic Co-operation and Development.

No. 971. R&D Expenditures in Science and Engineering at Universities and Colleges: 1981 to 1992

[In millions of dollars]

CHARACTERISTIC	1981	1990	1992	CHARACTERISTIC	1981	1990	1992
CURRENT DOLLARS				CONSTANT (1987) DOLLARS [1]			
Total	**6,846**	**16,334**	**18,880**	**Total**	**8,799**	**14,493**	**15,720**
Basic research	4,593	10,680	12,468	Basic research	5,904	9,476	10,381
Applied R&D	2,253	5,654	6,412	Applied R&D	2,896	5,017	5,339
Source of funds:				Source of funds:			
All governments	5,115	10,976	12,593	All governments	6,575	9,739	10,485
Institutions' own funds	1,004	3,033	3,576	Institutions' own funds	1,290	2,691	2,978
Industry	292	1,130	1,302	Industry	375	1,003	1,084
Other	435	1,195	1,409	Other	559	1,060	1,173
Fields:				Fields:			
Physical sciences	765	1,809	2,058	Physical sciences	983	1,605	1,714
Environmental sciences	550	1,080	1,249	Environmental sciences	707	958	1,040
Mathematical sciences	87	221	247	Mathematical sciences	112	196	206
Computer sciences	144	514	556	Computer sciences	185	456	463
Life sciences	3,695	8,748	10,228	Life sciences	4,749	7,762	8,516
Psychology	127	258	336	Psychology	163	229	280
Social sciences	366	706	817	Social sciences	470	626	680
Other sciences	145	335	307	Other sciences	186	297	256
Engineering	967	2,663	3,082	Engineering	1,243	2,363	2,566

[1] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Expenditures at Universities and Colleges*, annual.

No. 972. Federal Obligations to Universities and Colleges: 1970 to 1991

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. Minus sign (-) indicates decrease]

ITEM	1970	1980	1985	1987	1988	1989	1990	1991
CURRENT DOLLARS								
Federal obligations, total	**3,237**	**8,299**	**10,972**	**13,434**	**14,066**	**15,504**	**15,198**	**17,415**
Annual percent change [1]	-6.5	9.1	9.3	15.6	4.7	10.2	-2.0	14.6
Academic science/engineering obligations	2,188	4,791	7,258	8,567	9,136	10,075	10,443	11,815
Percent of total	67.6	57.7	66.2	63.8	65.0	65.0	68.7	67.8
Research and development	1,447	4,161	6,246	7,241	7,719	8,523	9,006	10,014
Research and development plant	45	38	114	230	203	237	125	152
Other science/engineering activities	696	593	898	1,096	1,214	1,315	1,312	1,649
Nonscience/engineering activities	1,049	3,508	3,714	4,866	4,930	5,429	4,754	5,600
CONSTANT (1987) DOLLARS [2]								
Federal obligations, total	**9,355**	**11,755**	**11,635**	**13,434**	**13,577**	**14,329**	**13,485**	**14,910**
Annual percent change [1]	-11.4	0.0	5.4	12.3	1.1	5.5	-5.9	10.6
Academic science/engineering obligations	6,324	6,786	7,697	8,567	8,819	9,311	9,266	10,116
Percent of total	67.6	57.7	66.2	63.8	65.0	65.0	68.7	67.9
Research and development	4,182	5,894	6,624	7,241	7,451	7,877	7,991	8,574
Research and development plant	130	54	121	230	196	219	111	130
Other science/engineering activities	2,012	840	952	1,096	1,172	1,215	1,164	1,412
Nonscience/engineering activities	3,032	4,969	3,938	4,866	4,759	5,018	4,218	4,795

[1] Percent change from immediate prior year. [2] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Survey of Federal Support to Universities, Colleges, and Nonprofit Institutions*, annual.

No. 973. Federal R&D Obligations to Selected Universities and Colleges: 1981 to 1991

[For fiscal years ending in year shown; see text, section 9. For the top 40 institutions receiving Federal R&D funds in 1991. Awards to the administrative offices of university systems are excluded from totals for individual institutions because that allocation of funds is unknown, but those awards are included in "total all institutions"]

MAJOR INSTITUTION RANKED BY TOTAL 1991 FEDERAL R&D OBLIGATIONS	OBLIGATIONS ($1,000)			RANK		
	1981	1985	1991	1981	1985	1991
Total, all institutions [1]	**4,410,931**	**6,246,181**	**10,014,322**	(X)	(X)	(X)
40 institutions, percent of total	59.1	57.9	56.0	(X)	(X)	(X)
Johns Hopkins University	363,429	297,374	490,893	1	1	1
University of Washington	99,965	146,179	245,288	4	4	2
Stanford University	106,073	174,961	237,842	3	3	3
Massachusetts Institute of Technology	146,035	189,558	232,619	2	2	4
University of California—Los Angeles	94,945	128,211	194,217	5	5	5
University of Michigan	73,999	108,035	193,954	11	11	6
University of California—San Diego	91,403	103,633	182,815	6	13	7
University of Wisconsin—Madison	86,918	124,604	179,079	8	7	8
University of California—San Francisco	64,814	98,536	178,698	15	16	9
University of Pennsylvania	76,136	103,119	169,352	10	15	10
University of Minnesota	72,001	103,272	168,962	14	14	11
Harvard University	87,830	109,414	161,719	7	9	12
Cornell University	72,671	119,966	156,151	13	8	13
Yale University	73,526	109,227	152,513	12	10	14
University of Pittsburgh	38,512	58,620	147,757	29	28	15
Pennsylvania State University	47,099	76,726	144,400	21	19	16
University of California—Berkeley	64,065	106,710	136,020	16	12	17
Columbia University—Main Division	83,659	127,331	134,329	9	6	18
University of Southern California	49,221	89,706	133,074	20	17	19
Duke University	44,287	69,169	128,098	23	26	20
University of Colorado	46,146	71,424	126,090	22	23	21
Washington University	54,170	71,978	125,282	17	22	22
University of North Carolina at Chapel Hill	38,447	63,105	111,501	30	27	23
University of Illinois—Urbana	53,583	83,122	110,509	19	18	24
University of Rochester	42,983	70,379	103,510	25	25	25
University of Chicago	53,992	71,194	97,949	18	24	26
University of Arizona	36,308	49,740	95,206	33	37	27
University of Texas at Austin	43,756	72,379	95,063	24	21	28
University of Alabama—Birmingham	29,970	44,093	90,355	44	46	29
Case Western Reserve University	33,744	47,994	87,747	38	40	30
New York University	40,636	74,577	86,150	28	20	31
University of Iowa	35,300	55,117	85,113	34	31	32
Baylor College of Medicine	35,062	45,837	82,849	35	45	33
Ohio State University	42,899	56,065	82,106	26	30	34
California Institute of Technology	32,959	55,083	80,585	40	32	35
University of California—Davis	31,757	43,156	79,671	42	47	36
University of Massachusetts	22,418	46,046	76,630	55	44	37
Vanderbilt University	27,426	39,909	76,437	49	48	38
University of Maryland—College Park	27,313	51,073	72,115	50	35	39
Yeshiva University	42,590	56,988	72,115	27	29	40

X Not applicable. [1] Includes other institutions, not shown separately.

Source: U.S. National Science Foundation, *Federal Support to Universities and Colleges and Nonprofit Institutions*, annual.

No. 974. Funds for Performance of Industrial R&D, by Source of Funds and Selected Industries: 1970 to 1991

[**In millions of dollars. For calendar years.** Covers basic research, applied research, and development. See also *Historical Statistics, Colonial Times to 1970*, series W 144-160]

INDUSTRY	1972 SIC [1] code	1970	1975	1980	1985	1990	1991
CURRENT DOLLARS							
Total funds	(X)	**18,067**	**24,187**	**44,505**	**84,239**	**104,606**	**102,246**
Chemicals and allied products	28	1,773	2,727	4,636	8,540	12,344	13,183
Petroleum refining and extraction	13,29	515	693	1,552	(D)	2,129	2,245
Machinery	35	1,729	3,196	5,901	12,216	(D)	(D)
Electrical equipment	36	4,220	5,105	9,175	14,432	17,723	17,279
Motor vehicles and motor vehicles equipment	371	1,591	2,340	4,955	6,984	(D)	(D)
Aircraft and missiles	372,376	5,219	5,713	9,198	22,231	25,356	21,692
Professional and scientific instruments	38	744	1,173	3,029	5,013	6,194	6,621
All other [2]	(X)	2,276	3,240	6,059	(D)	(D)	(D)
Company funds	(X)	**10,288**	**15,582**	**30,476**	**57,043**	**73,980**	**76,938**
Chemicals and allied products	28	1,593	2,490	4,264	8,310	12,277	13,094
Petroleum refining and extraction	13,29	493	(D)	1,401	2,194	2,113	2,235
Machinery	35	1,469	2687	5,254	10,701	13,780	14,034
Electrical equipment	36	2,008	2,798	5,431	9,271	12,131	12,455
Motor vehicles and motor vehicles equipment	371	1,278	2,022	4,300	6,164	8,548	8,998
Aircraft and missiles	372,376	1,213	1,285	2,570	5,649	6,140	6,588
Professional and scientific instruments	38	550	1,001	2,456	4,622	6,095	6,521
All other [2]	(X)	1,684	(D)	4,800	10,132	12,896	13,013
CONSTANT (1987) DOLLARS [3]							
Total funds	(X)	**51,327**	**49,161**	**62,071**	**89,236**	**92,408**	**86,796**
Chemicals and allied products	28	5,037	5,543	6,466	9,047	10,905	11,191
Petroleum refining and extraction	13,29	1,463	1,409	2,165	(D)	1,881	1,906
Machinery	35	4,912	6,496	8,230	12,941	(D)	(D)
Electrical equipment	36	11,989	10,376	12,796	15,288	15,656	14,668
Motor vehicles and motor vehicles equipment	371	4,520	4,756	6,911	7,398	(D)	(D)
Aircraft and missiles	372,376	14,827	11,612	12,828	23,550	22,399	18,414
Professional and scientific instruments	38	2,114	2,384	4,225	5,310	5,472	5,621
All other [2]	(X)	6,466	6,585	8,450	(D)	(D)	(D)
Company funds	(X)	**29,227**	**31,671**	**42,505**	**60,427**	**65,353**	**65,312**
Chemicals and allied products	28	4,526	5,061	5,947	8,803	10,845	11,115
Petroleum refining and extraction	13,29	1,401	(D)	1,954	2,324	1,867	1,897
Machinery	35	4,173	5,461	7,328	11,336	12,173	11,913
Electrical equipment	36	5,705	5,687	7,575	9,821	10,716	10,573
Motor vehicles and motor vehicles equipment	371	3,631	4,110	5,997	6,530	7,551	7,638
Aircraft and missiles	372,376	3,446	2,612	3,584	5,984	5,424	5,593
Professional and scientific instruments	38	1,563	2,035	3,425	4,896	5,384	5,536
All other [2]	(X)	4,784	(D)	6,695	10,733	11,392	11,047

D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual. X Not applicable. [1] 1972 Standard Industrial Classification; see text, section 13. [2] All other manufacturing and nonmanufacturing. [3] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

No. 975. R&D Funds in R&D-Performing Manufacturing Companies, by Industry: 1970 to 1991

INDUSTRY	1972 SIC [1] code	TOTAL R&D FUNDS AS A PERCENT OF NET SALES					COMPANY R&D FUNDS AS A PERCENT OF NET SALES				
		1970	1980	1985	1990	1991	1970	1980	1985	1990	1991
Total [2]	(X)	**3.7**	**3.0**	**4.4**	**4.7**	**4.7**	**2.2**	**2.1**	**3.0**	**3.3**	**3.5**
Food and kindred products [3]	20	0.5	0.4	(D)	(D)	0.5	0.5	(D)	0.6	0.5	0.5
Paper and allied products	26	0.9	1.0	(D)	0.8	0.8	(D)	1.0	0.8	0.8	0.8
Chemicals and allied products	28	3.9	3.6	5.0	5.6	5.7	3.5	3.3	4.9	5.6	5.7
Petroleum refining and extraction	13,29	1.0	0.6	(D)	1.0	1.1	0.9	0.5	0.9	1.0	1.1
Rubber products	30	2.3	2.2	(D)	(D)	(D)	1.7	(D)	1.8	1.7	1.8
Stone, clay, and glass products	32	1.8	1.4	(D)	(D)	(D)	1.7	1.3	2.3	2.4	2.6
Primary metals	33	0.8	0.7	(D)	(D)	1.1	0.8	0.5	0.9	1.0	1.1
Fabricated metal products	34	1.2	1.4	1.5	1.2	1.2	1.1	1.2	1.4	1.0	1.0
Machinery	35	4.0	5.0	7.6	8.9	9.9	3.4	4.5	6.7	8.3	9.2
Electrical equipment	36	7.3	6.6	7.6	6.9	6.6	3.4	3.9	4.8	4.7	4.7
Motor vehicles and motor vehicle equipment	371	3.5	4.9	3.8	(D)	(D)	2.8	4.2	3.1	3.9	4.5
Aircraft and missiles	372,376	16.2	13.7	14.9	14.3	12.5	3.8	3.8	3.9	3.5	3.8
Professional and scientific instruments	38	5.7	7.5	8.9	7.8	7.9	4.2	6.1	8.3	7.6	7.8

D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual. X Not applicable. [1] 1972 Standard Industrial Classification; see text, section 13. [2] Includes all manufacturing industries. [3] Includes tobacco products (SIC 21) beginning 1985.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

No. 976. Federal Obligations for Research, by Field of Science: 1980 to 1993

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Excludes R&D plant]

FIELD	1980	1985	1987	1988	1989	1990	1991	1992, est.	1993, est.
CURRENT DOLLARS									
Research, total	**11,597**	**16,133**	**17,941**	**18,650**	**20,766**	**21,731**	**23,968**	**26,196**	**27,899**
Basic	4,674	7,819	8,942	9,474	10,602	11,286	12,171	13,254	14,184
Applied	6,923	8,315	8,998	9,177	10,164	10,446	11,798	12,941	13,715
Life sciences	4,192	6,363	7,341	7,725	8,495	8,830	9,622	10,589	11,338
Psychology	199	327	370	390	422	449	482	521	571
Physical sciences	2,001	3,046	3,253	3,317	3,705	3,809	4,235	4,534	4,790
Environmental sciences	1,261	1,404	1,512	1,607	1,773	2,174	2,150	2,360	2,503
Mathematics and computer sciences	241	575	641	643	735	841	904	1,154	1,212
Engineering	2,830	3,618	3,906	3,956	4,442	4,335	4,945	5,488	5,935
Social sciences	524	460	480	486	551	630	727	790	718
Other sciences, n.e.c. [1]	350	342	438	527	642	664	903	760	832
CONSTANT (1987) DOLLARS [2]									
Research, total	**16,427**	**17,109**	**17,941**	**18,002**	**19,192**	**19,262**	**20,521**	**21,812**	**22,682**
Basic	6,621	8,291	8,942	9,144	9,799	10,014	10,420	11,036	11,532
Applied	9,806	8,817	8,998	8,858	9,394	9,269	10,101	10,775	11,150
Life sciences	5,938	6,747	7,341	7,457	7,851	7,835	8,238	8,817	9,218
Psychology	282	347	370	376	390	398	413	434	464
Physical sciences	2,834	3,230	3,253	3,202	3,424	3,380	3,626	3,775	3,894
Environmental sciences	1,786	1,489	1,512	1,551	1,639	1,929	1,841	1,965	2,035
Mathematics and computer sciences	341	610	641	621	679	746	774	961	985
Engineering	4,009	3,836	3,906	3,819	4,105	3,846	4,234	4,570	4,825
Social sciences	742	488	480	469	509	559	622	658	584
Other sciences, n.e.c. [1]	495	362	438	508	593	589	773	633	676

[1] N.e.c. = Not elsewhere classified. [2] Based on gross domestic product implicit price deflator.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

No. 977. R&D Scientists and Engineers— Employment and Cost, by Industry: 1975 to 1991

[Data are estimates; on average full-time-equivalent (FTE) basis. See *Historical Statistics, Colonial Times to 1970*, series W 167, for total cost per scientist or engineer]

INDUSTRY	1972 SIC [1] code	1975	1980	1985	1986	1987	1988	1989	1990	1991
EMPLOYED SCIENTISTS										
Average FTE of scientists and engineers (1,000) [2] [3]	(X)	**363.9**	**469.2**	**646.8**	**684.2**	**702.2**	**714.4**	**726.0**	**717.5**	**693.9**
Chemicals [4]	28	44.8	53.1	73.5	74.4	75.5	76.7	78.3	78.9	80.5
Machinery	35	54.3	65.7	85.7	93.1	97.1	99.1	106.1	109.8	101.3
Electrical equipment [5]	36	81.5	100.7	115.6	123.1	131.5	136.6	139.3	137.9	141.2
Motor vehicles	371	25.7	36.7	31.3	42.1	46.9	46.6	47.8	47.6	45.2
Aircraft and missiles	372,376	67.2	90.6	137.5	137.5	136.4	139.4	135.4	123.2	116.7
CONSTANT (1987) DOLLARS [6]										
Cost per scientist or engineer ($1,000) [3] [7]	(X)	**135.2**	**132.3**	**138.0**	**132.6**	**131.2**	**131.9**	**129.7**	**128.8**	**125.1**
Chemicals [4]	28	123.8	121.9	123.2	120.8	127.6	135.2	135.2	138.3	139.0
Machinery	35	119.7	125.4	151.0	(D)	(D)	(D)	127.7	118.4	126.5
Electrical equipment [5]	36	127.5	127.0	132.4	124.5	120.6	114.5	112.2	113.5	104.0
Motor vehicles	371	185.2	188.5	236.4	(D)	(D)	(D)	(D)	(D)	(D)
Aircraft and missiles	372,376	173.0	141.7	171.3	154.6	179.4	179.0	174.7	181.9	157.8

D Withheld to avoid disclosure. X Not applicable. [1] 1972 Standard Industrial Classification; see text, section 13. [2] The mean number of FTE R&D scientists and engineers employed in January of the year shown and the following January. [3] Includes industries not shown separately. [4] Includes allied products. [5] Includes communication. [6] Based on gross domestic product implicit price deflator. [7] Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in 2 consecutive years divided into total R&D expenditures in each industry.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

No. 978. Scientists and Engineers Employed in R&D: 1970 to 1989

[**For full-time equivalent employees.** Data are estimates. Yearly averages for industry sector only. Excludes those employed by State and local government agencies]

SECTOR	1970	1980	1983	1984	1985	1986	1987	1988	1989
Total (1,000)	**543.8**	**651.1**	**751.6**	**797.6**	**841.6**	**882.3**	**910.2**	**927.3**	**949.3**
PERCENT DISTRIBUTION									
Industry (excl. social scientists)	69.1	72.1	74.8	75.6	76.9	77.5	77.1	77.0	76.5
Federal Government	12.4	9.0	8.2	7.8	6.5	6.2	6.3	6.2	6.3
Other [1]	18.5	18.9	17.0	16.6	16.6	16.4	16.5	16.7	17.2

[1] Includes professional R&D personnel employed at universities and colleges, other nonprofit institutions, and federally funded R&D centers administered by organizations in these sectors and graduate students engaged in R&D at universities and colleges.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources*, annual.

No. 979. Civilian Employment of Scientists, Engineers, and Technicians, by Occupation and Industry: 1992

[**In thousands.** Based on sample and subject to sampling error. For details, see source]

OCCUPATION	Total [1]	WAGE AND SALARY WORKERS								Self employed
		Mining [2]	Construction	Manufacturing	Transportation [3]	Trade	FIRE [4]	Services	Government	
Scientists and engineers	**2,673.7**	**41.6**	**27.1**	**913.5**	**108.4**	**86.8**	**99.3**	**761.1**	**461.6**	**163.0**
Scientists	1,319.8	19.5	1.2	272.8	33.1	30.8	88.0	458.9	271.7	134.0
Physical scientists	197.5	14.8	0.1	59.4	3.2	2.5	0.6	65.3	45.2	6.0
Life scientists	182.1	0.1	-	27.6	0.9	1.7	(NA)	57.7	72.9	12.0
Mathematical scientists	16.3	-	-	1.5	0.7	-	1.6	7.4	5.1	-
Social scientists	257.8	0.3	-	-	1.3	-	7.7	99.0	65.1	84.0
Computer systems analysts, engineers and scientists	666.2	4.2	1.1	184.4	26.9	26.5	78.1	229.5	83.3	32.0
Engineers [5]	1,353.8	22.2	25.9	640.7	75.4	56.0	11.3	302.2	189.9	29.0
Civil engineers	172.8	1.1	10.9	8.3	6.2	0.5	0.9	66.2	73.7	5.0
Electrical/electronics	369.9	0.9	5.8	167.6	34.5	35.5	1.1	78.7	39.8	6.0
Mechanical engineers	227.0	1.7	4.0	136.6	5.1	7.1	1.3	52.3	13.8	5.0
Engineering and science technicians	1,253.1	19.2	25.5	449.5	74.0	84.4	5.1	400.3	160.8	26.0
Electrical/electronics technicians	322.8	1.6	5.1	128.0	26.0	62.1	1.8	67.3	26.7	4.0
Engineering technicians	372.1	5.4	4.5	132.0	26.6	11.4	0.3	94.7	90.4	6.0
Drafters	314.2	2.7	15.9	100.1	17.5	6.6	1.1	144.9	11.3	12.0
Science technicians	244.1	9.5	-	89.3	3.9	4.3	1.9	93.4	32.4	4.0
Surveyors	99.3	2.6	3.3	-	3.3	-	0.6	55.9	23.0	10.0
Computer programmers	554.7	3.4	1.3	80.8	24.1	57.0	75.4	246.1	50.1	16.0

- Represents or rounds to zero. NA Not available. [1] Includes agriculture, forestry, and fishing not shown separately. [2] Includes oil and gas extraction. [3] Includes communications and public utilities. [4] Finance, insurance, and real estate. [5] Includes kinds of engineers and technicians not shown separately.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, November 1993. (Data collected biennially.)

No. 980. Graduate Science/Engineering Students in Doctorate-Granting Colleges: 1985 to 1992

[As of **fall.** Includes outlying areas]

FIELD OF SCIENCE OR ENGINEERING	TOTAL (1,000)			PERCENT—							
				Female			Foreign		Part-time		
	1985	1990	1992	1985	1990	1992	1990	1992	1985	1990	1992
Total, all surveyed fields	**353.8**	**394.8**	**427.8**	**34.5**	**37.5**	**38.6**	**25.6**	**25.1**	**32.2**	**30.7**	**29.9**
Science/engineering	314.8	347.4	374.8	29.4	32.2	33.2	27.9	27.5	30.4	28.5	27.7
Engineering, total	89.7	99.1	108.3	11.5	13.6	14.4	36.7	36.3	39.5	35.6	33.7
Sciences, total	225.1	248.2	266.5	36.6	39.6	40.8	24.3	23.9	26.8	25.6	25.3
Physical sciences	29.4	32.4	33.6	20.5	23.4	24.5	37.1	36.8	11.7	11.2	10.7
Environmental	14.3	13.0	14.0	25.4	29.2	31.0	20.1	21.0	23.9	23.6	24.3
Mathematical sciences	15.2	17.2	17.9	29.1	30.4	31.2	36.1	33.9	26.9	23.4	22.4
Computer sciences	23.4	27.4	29.0	24.9	22.8	21.8	33.2	35.0	48.0	46.6	46.4
Agricultural sciences	10.7	10.4	10.9	25.6	29.2	31.5	29.1	27.8	18.2	17.7	18.2
Biological sciences	42.1	46.2	50.2	42.4	45.5	46.3	24.2	24.9	16.0	14.6	14.8
Psychology	30.4	34.7	37.7	59.7	65.5	67.3	4.6	4.7	30.1	28.4	27.9
Social sciences	59.6	66.8	73.2	39.7	42.9	44.1	21.9	20.4	34.1	32.4	31.3
Health fields, total	39.0	47.4	53.0	75.5	76.6	76.4	8.6	8.1	46.2	47.1	45.7

Source: U.S. National Science Foundation, *Survey of Graduate Science Engineering Students and Postdocturates*, annual.

No. 981. Science and Engineering Degree Recipients in 1988 and 1989: 1990

[Based on survey and subject to sampling error; see source for details]

DEGREE AND FIELD	Graduates 1988 and 1989 (1,000)	1990—PERCENT DISTRIBUTION				Median salary ($1,000)
		In school [1]	Employed		Not employed	
			In S&E [2]	In other		
Bachelor's recipients	**643.2**	**20**	**44**	**32**	**5**	**26.0**
All science fields	494.5	22	35	38	5	23.8
Physical sciences	29.4	39	38	18	5	25.1
Math/statistics	35.2	18	50	26	6	23.6
Computer science	69.3	6	77	13	4	30.1
Environmental science	7.3	30	49	15	5	23.7
Life sciences	111.2	32	34	28	6	21.0
Psychology	85.7	21	20	54	5	18.6
Social sciences	156.4	20	19	55	5	21.9
All engineering fields [3]	148.7	11	73	12	3	33.0
Civil	15.2	10	78	9	3	30.1
Electrical/electronics	55.5	11	76	10	3	34.0
Industrial	12.3	5	72	18	5	31.1
Mechanical	30.0	11	76	10	4	34.0
Master's recipients	**136.6**	**23**	**61**	**13**	**4**	**37.0**
All science fields	93.7	25	55	16	4	33.8
Physical sciences	9.2	41	49	8	2	34.9
Math/statistics	10.6	18	67	13	2	32.8
Computer science	22.2	9	78	10	3	42.1
Environmental science	5.2	21	71	6	2	33.8
Life sciences	19.3	35	47	15	4	26.9
Psychology	7.3	34	36	26	4	32.0
Social sciences	19.9	26	37	30	7	31.0
All engineering fields [3]	42.9	17	73	6	3	41.4
Civil	4.7	11	85	4	-	35.2
Electrical/electronics	13.8	19	72	4	5	46.5
Industrial	2.6	8	62	23	8	40.3
Mechanical	8.0	15	79	5	1	42.1

[1] Full-time graduate students. [2] In science and engineering. [3] Includes other fields, not shown separately.

Source: National Science Foundation/SRS, *Characteristics of Recent Science and Engineering Graduates: 1990.* (Data are biennial.)

No. 982. Doctorates Conferred, by Recipients' Characteristics: 1980 and 1992

[In percent, except as indicated]

CHARACTERISTIC	1980, total	1992									
		All fields [1]	Engineering	Physical sciences [2]	Earth sciences	Mathematics	Computer sciences	Biological sciences [3]	Agricultural	Social sciences [4]	Psychology
Total conferred (number)	**31,020**	**38,814**	**5,437**	**3,749**	**824**	**1,058**	**867**	**4,794**	**1,063**	**3,338**	**3,253**
Male	69.7	63.0	90.7	79.6	76.7	80.6	86.2	61.9	78.1	64.6	41.1
Female	30.3	37.0	9.3	20.4	23.3	19.4	13.8	38.1	21.9	35.4	58.9
Median age [5]	32.2	34.1	31.5	29.9	32.7	31.4	32.0	31.5	34.1	35.3	34.1
CITIZENSHIP [6]											
Total conferred (number)	30,156	37,605	5,245	3,654	801	1,016	850	4,683	1,036	3,256	3,096
U.S. citizen	83.6	68.5	40.1	58.2	65.3	44.5	49.2	70.4	49.1	60.7	92.4
Foreign citizen	16.4	31.5	59.1	41.8	34.7	55.5	50.8	29.6	50.9	39.3	7.6
RACE/ETHNICITY [7]											
Total conferred (number)	**26,512**	**27,717**	**2,510**	**2,325**	**558**	**505**	**486**	**3,535**	**570**	**2,192**	**2,939**
White [8]	84.7	84.5	74.7	83.6	89.6	83.8	77.4	86.1	86.1	82.6	88.8
Black [8]	4.2	3.9	1.9	1.0	1.3	0.8	1.0	1.7	2.1	5.5	3.4
Asian/Pacific [8]	4.2	6.2	17.8	9.6	4.8	10.1	17.7	7.4	6.3	5.9	1.9
Indian/Alaskan [8]	0.3	0.5	0.4	0.5	0.2	0.4	0.4	0.4	0.0	0.6	0.5
Hispanic	1.8	3.1	2.9	3.1	2.9	2.4	1.6	2.8	3.3	3.4	4.0
Other/unknown	4.9	1.6	2.3	2.1	1.3	2.6	1.9	1.6	2.1	2.0	1.3

[1] Includes other fields, not shown separately. [2] Astronomy, physics, and chemistry. [3] Biochemistry, botany, microbiology, physiology, zoology, and related fields. [4] Anthropology, sociology, political science, economics, and international relations and related fields. [5] For definition of median, see Guide to Tabular Presentation. [6] For those with known citizenship. Includes those with temporary visas. [7] Excludes those with temporary visas. [8] Non-Hispanic.

Source: U.S. National Science Foundation, Division of Science Resources Studies, Survey of Earned Doctorates, *Selected Data on Science and Engineering Doctorate Awards: 1992,* annual.

No. 983. Space Vehicle Systems—Net Sales and Backlog Orders: 1965 to 1992

[In millions of dollars. Backlog orders as of Dec. 31. Based on data from major companies engaged in manufacture of aerospace products. Includes parts but excludes engines and propulsion units]

YEAR	NET SALES			BACKLOG ORDERS			YEAR	NET SALES			BACKLOG ORDERS		
	Total	Military	Non-military	Total	Military	Non-military		Total	Military	Non-military	Total	Military	Non-military
1965. .	2,449	602	1,847	2,203	503	1,700	1985. .	6,300	4,241	2,059	6,707	4,941	1,766
1970. .	1,956	1,025	931	1,184	786	398	1986. .	6,304	4,579	[1]1,725	8,063	6,028	[1]2,035
1975. .	2,119	1,096	1,023	1,304	1,019	285	1987. .	8,051	5,248	[1]2,803	12,393	9,460	[1]2,933
1980. .	3,483	1,461	2,022	1,814	951	863	1988. .	8,622	6,190	[1]2,432	10,838	7,880	[1]2,958
1981. .	3,856	1,736	2,120	3,174	2,164	1,010	1989. .	9,758	6,457	[1]3,301	13,356	9,192	[1]4,164
1982. .	4,749	2,606	2,143	4,337	2,403	1,934	1990. .	9,691	6,556	[1]3,135	12,462	8,130	[1]4,332
1983. .	4,940	2,420	2,520	4,865	2,733	2,132	1991. .	10,515	6,770	[1]3,745	11,664	6,221	[1]5,443
1984. .	5,225	3,019	2,206	4,624	3,099	1,525	1992. .	10,029	5,887	[1]4,142	13,483	7,726	[1]5,757

[1] Includes data for nonmilitary missile systems and parts.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA-37D, *Aerospace Industry (Orders, Sales, and Backlog).*

No. 984. Federal Space Program—Budget Authority, by Agency: 1960 to 1991

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. NASA=National Aeronautics and Space Administration]

YEAR	Total	NASA [1]		DEFENSE		Other	YEAR	Total	NASA [1]		DEFENSE		Other
		Total	Percent of total	Total	Percent of total				Total	Percent of total	Total	Percent of total	
1960 . . .	1,066	462	43.3	561	52.6	43	1980 . . .	8,689	4,680	53.9	3,848	44.3	160
1965 . . .	6,956	5,138	73.9	1,574	22.6	244	1981 . . .	9,978	4,992	50.0	4,828	48.4	158
1970 . . .	5,341	3,547	66.4	1,678	31.4	115	1982 . . .	12,441	5,528	44.4	6,679	53.7	234
1971 . . .	4,741	3,101	65.4	1,512	31.9	127	1983 . . .	15,589	6,328	40.6	9,019	57.9	242
1972 . . .	4,575	3,071	67.1	1,407	30.8	97	1984 . . .	17,136	6,648	38.8	10,195	59.5	293
1973 . . .	4,825	3,093	64.1	1,623	33.6	109	1985 . . .	20,167	6,925	34.3	12,768	63.3	474
1974 . . .	4,640	2,759	59.4	1,766	38.1	116	1986 . . .	21,659	7,165	33.1	14,126	65.2	368
1975 . . .	4,914	2,915	59.3	1,892	38.5	107	1987 . . .	26,448	[3]9,809	37.1	16,287	61.6	352
1976 [2] . .	6,660	4,075	61.2	2,444	36.7	142	1988 . . .	26,607	8,302	31.2	17,679	66.4	626
1977 . . .	5,983	3,440	57.5	2,412	40.3	131	1989 . . .	28,443	10,098	35.5	17,906	63.0	440
1978 . . .	6,518	3,623	55.6	2,738	42.0	157	1990 . . .	28,089	12,142	43.2	15,616	55.6	330
1979 . . .	7,244	4,030	55.6	3,036	41.9	178	1991 . . .	27,592	13,036	47.2	14,181	51.4	375

[1] Includes budget authority for the space transportation system of $3.1 billion in 1982; $4.1 billion in 1983; and $4.0 billion in 1984. [2] Includes transition quarter, July 1 to Sept. 30, 1976. [3] Includes $2.1 billion for replacement of shuttle orbiter Challenger.

Source: U.S. National Aeronautics and Space Administration, *Aeronautics and Space Report of the President*, annual. Data from U.S. Office of Management and Budget.

No. 985. NASA Financial Summary: 1970 to 1994

[In millions of dollars. For fiscal year ending in year shown; see text, section 9]

YEAR	TOTAL		R&D		COMMUNICATIONS [1]		FACILITIES CONSTRUCTION		RESEARCH AND PROGRAM DEVELOPMENT	
	Appropriations	Outlays	Appropriations	Outlays	Appropriations	Outlays	Appropriations	Outlays	Appropriations	Outlays
1970	3,749	3,753	3,006	2,992	-	-	53	54	690	707
1975	3,231	3,267	2,331	2,420	-	-	140	85	760	761
1980	5,243	4,852	4,091	3,701	-	-	156	140	996	1,010
1985	7,552	7,318	2,468	2,118	3,602	3,707	150	170	1,332	1,323
1986	7,764	7,404	2,638	2,615	3,689	3,267	133	189	1,303	1,332
1987	10,621	7,592	3,166	2,436	5,561	3,597	469	149	1,425	1,409
1988	9,002	9,092	3,414	2,916	3,908	4,362	178	166	1,501	1,648
1989	10,898	11,051	4,267	3,922	4,464	5,030	305	190	1,862	1,908
1990 [2]	12,296	12,428	5,221	5,094	4,555	5,117	588	218	1,923	1,991
1991 [2]	15,078	13,877	6,024	5,766	6,334	5,590	498	326	2,212	2,185
1992 [2]	14,302	13,818	6,396	6,261	5,124	5,311	525	448	2,242	1,784
1993, est. [2] .	14,330	(NA)	7,089	(NA)	5,086	(NA)	525	(NA)	1,615	(NA)
1994, est. [2] .	14,551	(NA)	7,529	(NA)	4,854	(NA)	518	(NA)	1,636	(NA)

- Represents zero. NA Not available. [1] Space flight, control, and data communications. [2] Include appropriations and outlays for the Inspector General, not shown separately.

Source: U.S. National Aeronautics and Space Administration, *1995 Budget Summary.*

No. 986. National Aeronautics and Space Administration—Budget Summary: 1993 to 1995

[**In millions of dollars**. Data represent budget authority for fiscal years]

ITEM	1993	1994	1995
Total	**14,322.5**	**14,551.4**	**14,300.0**
Human space flight	6,672.0	6,069.7	5,719.9
Space station	2,162.0	1,937.0	1,889.6
Russian cooperation	79.5	170.8	150.1
Space shuttle	3,988.2	3,549.3	3,324.0
Payload and utilization operations	442.3	412.6	356.2
Science, aeronautics and technology	4,908.7	5,847.3	5,901.2
Space science	1,510.4	1,721.9	1,766.0
Life and microgravity sciences and applications	407.5	515.3	470.9
Mission to planet earth	936.3	1,024.5	1,238.1
Aeronautical research and technology	769.4	1,102.2	898.5
Advanced concepts and technology	464.9	495.3	608.4
Launch services	180.8	313.5	340.9
Mission communication services	546.5	589.1	481.2
Academic programs	92.9	85.5	97.2
Mission support	2,727.2	2,619.0	2,662.9
Safety, reliability and quality assurance	32.7	34.3	38.7
Space communication services	333.7	214.4	268.9
Research and program management	2,171.4	2,148.2	2,220.3
Construction of facilities	189.4	222.1	135.0
Inspector General	14.6	15.4	16.0

Source: U.S. National Aeronautics and Space Administration, *1995 Budget Summary*.

No. 987. U.S. Commercial Space Revenues: 1990 to 1994

[**In millions of dollars. For calendar years**]

INDUSTRY	1990	1991	1992	1993	1994 [1]
Total	**3,385**	**4,370**	**4,860**	**5,295**	**6,490**
Commercial satellites delivered	1,000	1,300	1,300	1,100	1,400
Satellite services	800	1,200	1,500	1,850	2,300
Fixed	735	1,115	1,275	1,600	1,950
Mobile	65	85	225	250	350
Satellite ground equipment	860	1,300	1,400	1,600	1,850
Mobile-equipment	145	280	350	420	480
Commercial launches	570	380	450	465	580
Remote sensing data and services	155	190	210	250	300
Commercial R&D infrastructure	-	-	-	30	60

- Represents zero. [1] Forecast.

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1994*.

No. 988. NASA Space Shuttle Operations Expenditures: 1993 to 1995

[**In millions of dollars.** Data are funding requirements fiscal years shown]

OPERATION	1993	1994	1995
Total	**2,857.2**	**2,570.6**	**2,420.1**
Orbiter	477.0	364.1	292.8
System integration	200.6	211.2	190.5
External tank	300.2	305.3	379.6
Space shuttle main engine	239.9	191.8	144.4
Redesigned solid rocket	409.4	368.9	373.1
Solid rocket booster	172.0	156.4	144.9
Launch and landing operations	697.1	650.1	596.4
Mission and crew operations	361.0	322.8	298.4

Source: U.S. National Aeronautics and Space Administration, *1995 Budget Summary*.

No. 989. Space Shuttle Flights—Summary: 1981 to June 1994

FLIGHT NUMBER	Date	Mission/ Orbiter name	Days duration	FLIGHT NUMBER	Date	Mission/ Orbiter name	Days duration
1	4/12/81	Columbia	2	33	11/22/89	Discovery	5
4	6/27/81	Columbia	7	32	1/9/90	Columbia	10
2	11/12/81	Columbia	2	36	2/28/90	Atlantis	5
3	3/22/82	Columbia	8	31	4/24/90	Discovery	6
5	11/11/82	Columbia	5	41	10/6/90	Discovery	4
6	4/4/83	Challenger	5	38	11/15/90	Atlantis	4
7	6/18/83	Challenger	6	35	12/2/90	Columbia	9
8	8/30/83	Challenger	6	39	4/28/91	Discovery	8
9	11/28/83	Columbia	10	37	4/5/91	Atlantis	6
10	2/3/84	Challenger	8	40	6/5/91	Columbia	9
11	4/6/84	Challenger	7	43	8/2/91	Atlantis	9
12	8/30/84	Discovery	6	44	11/24/91	Atlantis	7
13	10/5/84	Challenger	8	42	1/22/92	Discovery	8
14	11/8/84	Discovery	8	45	3/24/92	Atlantis	8
15	1/24/85	Discovery	3	49	5/7/92	Endeavour	8
16	4/12/85	Discovery	7	50	6/25/92	Columbia	13
17	4/29/85	Challenger	7	46	7/31/92	Atlantis	7
18	6/17/85	Discovery	7	47	9/12/92	Endeavour	7
19	7/29/85	Challenger	8	52	10/22/92	Columbia	9
20	8/27/85	Discovery	7	53	12/2/92	Discovery	7
21	10/3/85	Atlantis	4	54	1/13/93	Endeavour	6
22	10/30/85	Challenger	7	56	4/8/93	Discovery	9
23	11/26/85	Atlantis	7	55	4/26/93	Columbia	10
24	1/12/86	Columbia	6	57	6/21/93	Endeavour	10
25	1/28/86	Challenger	-	51	9/12/93	Discovery	10
26	9/29/88	Discovery	4	58	10/18/93	Columbia	14
27	12/2/88	Atlantis	4	61	12/2/93	Endeavour	11
29	3/13/89	Discovery	5	60	2/3/94	Discovery	8
30	5/4/89	Atlantis	4	62	3/4/94	Columbia	14
28	8/8/89	Columbia	5	59	4/9/94	Endeavour	11
34	10/18/89	Atlantis	5				

- Represents zero.

Source: U.S. National Aeronautics and Space Administration, *Payload Flight Assignments NASA Mixed Fleets*, January 1992, and "Space Shuttle Flights as of June 1994".

No. 990. World-Wide Successful Space Launches: 1957 to 1993

[Criterion of success is attainment of Earth orbit or Earth escape]

COUNTRY	Total	1957-1964	1965-1969	1970-1974	1975-1979	1980-1984	1985-1989	1989	1990	1991	1992	1993
Total	**3,569**	**289**	**586**	**555**	**607**	**605**	**550**	**101**	**116**	**88**	**94**	**79**
Soviet Union/CIS [1]	2,415	82	302	405	461	483	447	74	75	59	54	47
United States	1,001	207	279	139	126	93	61	18	27	18	28	23
Japan	45	-	-	5	10	12	11	2	3	2	1	1
ESA [2]	57	-	-	-	1	8	21	7	5	8	7	7
China: Mainland	33	-	-	2	6	6	9	-	5	1	3	1
France	10	-	4	3	3	-	-	-	-	-	-	-
India	4	-	-	-	-	3	-	-	-	-	1	-
Israel	2	-	-	-	-	-	1	-	1	-	-	-
Australia	1	-	1	-	-	-	-	-	-	-	-	-
United Kingdom	1	-	-	1	-	-	-	-	-	-	-	-

- Represents zero. [1] Commonwealth of Independent States. [2] European Space Agency.

Source: Library of Congress, Congressional Research Service, Science Policy Research Division, *Space Activities of the United States, CIS, and Other Launching Countries/Organizations 1957-1993*, March 29, 1994.

No. 991. Nobel Prize Laureates in Chemistry, Physics, and Physiology/ Medicine—Selected Countries: 1901 to 1992

[Presented by location of award-winning research and by date of award]

COUNTRY	1901-1992				1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1992
	Total	Physics	Chemistry	Physiology/ Medicine						
Total	**414**	**142**	**117**	**155**	**52**	**41**	**49**	**74**	**92**	**106**
United States	165	57	37	71	3	3	14	38	41	66
United Kingdom	69	21	24	24	7	8	11	14	20	9
Germany [1]	59	17	28	14	15	12	11	4	8	9
France	24	10	7	7	10	3	2	-	5	4
Soviet Union	10	7	1	2	2	-	-	4	3	1
Japan	4	3	1	-	-	-	-	1	2	1
Other countries	83	27	19	37	15	15	11	13	13	16

- Represents zero. [1] Between 1946 and 1991, data are for the former West Germany only.

Source: U.S. National Science Foundation, unpublished data.

Transportation—Land

This section presents statistics on revenues, passenger and freight traffic volume, and employment in various revenue-producing modes of the transportation industry, including motor vehicles, trains, and pipelines. Data are also presented on commuting travel, highway mileage and finances, motor vehicle travel, accidents, sales, and registrations, automobile operating costs, and characteristics of public transit, railroads, and pipelines.

In Brief

Transportation outlays reached $996 billion in 1992

State gasoline tax rates for 1993—
Lowest rate, 7.5 percent in Georgia
Highest rate, 29 percent in Connecticut

The principal compiler of data on public roads and on operation of motor vehicles is the U.S. Department of Transportation's (DOT) Federal Highway Administration (FHWA). These data appear in FHWA's annual *Highway Statistics* and other publications. The U.S. Interstate Commerce Commission (ICC) presents data on interstate land transport in its publications, the *Annual Report to Congress* and the *Transport Statistics in the United States,* which contain data on railroads and motor carriers subject to ICC regulations.

The U.S. National Highway Traffic Safety Administration issues data on traffic accident deaths and death rates in two annual reports: the *Fact Book* and the *Fatal Accident Reporting System Annual Report.* DOT's Federal Railroad Administration presents data on accidents involving railroads in its annual *Accident/Incident Bulletin,* and the *Rail-Highway Crossing Accident/Incident and Inventory Bulletin.*

Various censuses and surveys conducted by the U.S. Bureau of the Census also provide data. Results of the censuses of transportation are presented in the *Truck Inventory and Use Survey.* The *Annual Survey of Manufactures* and reports of the censuses of manufactures, wholesale and retail trade, and service industries contain statistics on the motor vehicle and equipment industry and on retail, wholesale, and services aspects of this industry. Data on persons commuting to work were collected as part of the 1980 census and are in various census reports.

Data are also presented in many nongovernment publications. Among them are the weekly and annual *Cars of Revenue Freight Loaded* and the annual *Yearbook of Railroad Facts,* both published by the Association of American Railroads, Washington, DC; and the *Transit Fact Book,* containing electric railway and motorbus statistics, published annually by the American Public Transit Association, Washington, DC. Useful annual handbooks in the field of transportation are *Motor Vehicle Facts and Figures* and *World Motor Vehicle Data,* issued by the American Automobile Manufacturers Association (AAMA), Detroit, MI; *Accident Facts,* issued by the National Safety Council, Chicago, IL; and *Transportation in America,* issued by the ENO Foundation for Transportation, Westport, Connecticut.

Urban and rural highway mileage.—Beginning in 1980, mileage is classified in urban and rural categories, rather than municipal and rural. Urban denotes the Federal-aid legislation definition of an area. Such areas include, as a minimum, a census place with a population of 5,000 to 49,999 or a designated urbanized area with a population of 50,000 or more. These Federal-aid urban areas may extend beyond corporate and census boundaries, and thus are not necessarily coextensive with municipal boundaries. Rural in 1980 refers to non-Federal-aid urban area mileage. Prior to 1980, municipal referred to roads within incorporated places, densely populated New England towns, and certain of the

more populous unincorporated areas and rural to non-municipal roads.

Federal-aid Highway Systems.—The Intermodal Surface Transportation Efficiency Act (ISTEA of 1991 eliminated the historical Federal-aid Systems and created the National Highway System (NHS) and other Federal-aid highway categories. The final NHS has not been approved by Congress. In the interim, a system consisting of the Interstate, Other Freeways and Expressways, and Other Principal Arterial functional systems, serves as the NHS.

Functional Systems.—Roads and streets are assigned to groups according to the character of service they are intended to provide. The functional systems are: (1) arterial highways that generally handle the long trips, (2) collector facilities that collect and disperse traffiC between the arterials and the lower systems, and (3) local roads and streets that primarily serve direct access to residential areas.

Regulatory bodies.—The ICC, created by the U.S. Congress to regulate transportation in interstate commerce, has jurisdiction over railroads, trucking companies, bus lines, freight forwarders, water carriers, coal slurry pipelines, and transportation brokers. The Federal Energy Regulatory Commission is responsible for setting rates and charges for transportation and sale of natural gas and for establishing rates or charges for transportation.

Motor carriers.—For 1960-73, class I for-hire motor carriers of freight were classified by the ICC as those with $1 million or more of gross annual operating revenue; 1974-79, the class I minimum was $3 million. Effective January 1, 1980, class I carriers are those with $5 million or more in revenue. For 1960-68, class I motor carriers of passengers were classified by the ICC as those with $200,000 or more of gross annual operating revenue; for 1969-76, as those with revenues of $1 million or more; and since 1977, as those with $3 million or more. Effective January 1, 1988, class I motor carriers of passengers are those with $5 million or more in operating revenues; class II less than $5 million in operating revenues.

Railroads.—Railroad companies reporting to the ICC are divided into specific groups as follows: (1) Regular line-haul (interstate) railroads (and their non-operating subsidiaries); (2) switching and terminal railroads; (3) private railroads prior to 1964 (identified by ICC as "circular" because they reported on brief circulars); and (4) unofficial railroads, so designated when their reports are received too late for tabulation. For the most part, the last three groups are not included in the statistics shown here.

For years prior to 1978, class I railroads were those with annual revenues of $1 million or more for 1950-55; $3 million or more for 1956-64; $5 million or more for 1965-75; and $10 million or more for 1976-77. In 1978, the classification became class I, those having more than $50 million gross annual operating revenue; class II, from $10 million to $50 million; and class III, less than $10 million. Effective January 1, 1982, the ICC adopted a procedure to adjust the threshold for inflation by restating current revenues in constant 1978 dollars. In 1990, the criteria for class I and class II railroads were $94.4 million and $18.9 million, respectively. Also effective January 1, 1982, the ICC adopted a *Carrier Classification Index Survey Form* for carriers not filing annual report form R-1 with the commission. Effective January 1, 1992, the ICC adopted new revenue classification levels as follows: Class I–$250 million or more; Class II–less than $250 million but in excess of $20 million; Class III–$20 million or less. The inflation adjustment index still applies. Class II and class III railroads are currently exempted from filing any financial report with the Commission. The form is used for reclassifying carriers.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970.* See Appendix IV.

No. 992. Passenger and Freight Transportation Outlays, by Type of Transport: 1975 to 1992

[In billions of dollars. Freight data include outlays for mail and express. ICC=Interstate Commerce Commission]

TYPE OF TRANSPORT	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total outlays [1]	**298**	**492**	**543**	**593**	**591**	**643**	**716**	**753**	**761**	**808**	**869**	**916**	**965**	**952**	**996**
Passenger, total	187	308	338	374	379	411	460	492	493	528	572	604	630	613	638
Private transportation	161	264	285	317	321	348	387	418	415	445	481	508	528	509	532
Automobiles [2]	157	257	277	307	313	340	379	410	407	436	472	498	517	499	522
New and used cars	46	77	73	83	86	105	126	139	157	151	164	164	166	153	164
Tires, tubes, accessories	12	20	22	25	25	26	27	30	29	21	23	24	25	26	26
Gasoline and oil	54	78	100	111	105	106	106	107	82	94	97	107	121	114	115
Insurance less claims	5	10	12	11	11	12	12	12	14	17	19	19	20	25	27
Interest on debt	7	15	18	21	22	20	25	27	27	29	34	37	36	32	26
Registration and operator's permit fees	2	3	3	4	4	4	5	5	6	6	6	7	7	7	7
Repair, greasing, washing, parking, tolls [3]	22	37	39	42	45	47	52	60	60	75	84	90	94	94	102
Air	5	7	8	9	8	7	8	8	8	9	10	10	10	10	10
For-hire transportation	26	43	53	57	59	63	72	74	77	84	91	96	103	104	107
Local [4]	11	15	20	22	23	24	27	27	30	31	32	33	34	36	36
Bus and transit [5]	5	8	9	10	11	12	13	14	15	15	16	16	17	18	18
School bus	2	3	4	5	5	5	6	6	6	7	7	7	8	8	8
Taxi	3	5	5	5	6	5	6	6	6	6	7	7	8	8	8
Intercity	13	23	28	30	30	33	39	40	40	44	48	51	53	53	53
Air	11	20	25	27	27	30	34	36	36	40	44	47	50	49	49
Rail [6]	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Bus	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
International	3	5	5	5	5	6	7	7	7	9	11	12	15	14	16
Freight, total [4]	116	193	214	228	222	243	268	274	281	294	313	329	352	355	375
Highway	85	143	155	165	163	182	200	206	213	225	239	254	271	274	293
Truck, intercity	47	90	95	97	100	111	121	123	158	135	143	151	162	165	177
Truck, local	37	52	61	68	63	71	79	82	85	90	96	103	108	110	116
Rail	17	25	26	31	27	27	31	29	28	29	30	30	30	30	31
Water	8	13	16	17	16	16	18	18	19	19	20	20	21	20	20
Oil pipeline	2	6	8	8	9	9	9	9	9	9	8	8	8	8	9
Air carrier	2	3	4	4	4	5	6	7	8	9	10	12	14	14	15
Percent change, total	5.4	8.6	10.3	9.1	−0.2	8.8	11.3	5.2	1.0	6.1	7.6	5.4	5.4	−1.4	4.7
Passenger, total	9.4	7.0	9.9	10.6	1.4	8.3	11.9	7.1	0.1	7.2	8.3	5.6	4.4	−2.7	4.1
Private transportation	9.2	5.6	7.9	11.2	1.3	8.4	11.4	8.0	−0.7	7.0	8.2	5.6	4.0	−3.5	4.5
Automobiles [2]	9.3	5.2	7.7	11.1	1.7	8.8	11.4	8.3	−0.8	7.1	8.1	5.6	3.9	−3.5	4.5
Air	6.8	22.4	14.1	16.0	−12.8	−9.8	10.8	−3.7	3.8	3.7	11.8	0.0	9.5	−2.9	1.0
For-hire transportation	11.0	15.2	23.3	7.3	2.1	8.0	14.2	2.4	4.6	8.2	8.7	5.8	6.7	1.3	2.5
Freight	−0.4	11.6	10.8	6.9	−2.8	9.5	10.2	2.1	2.7	4.7	6.4	5.1	6.9	1.0	5.6

[1] Total outlays less than sum of passenger and freight totals, as estimated freight costs included in costs of new cars, gasoline, oil, tires, and tubes have been excluded to prevent duplication. [2] Includes business-owned vehicles. [3] Includes storage and rental. [4] Includes items not shown separately. [5] Includes Federal, State, and local government operating subsidies and capital grants. [6] Includes Federal operating subsidies and capital grants for Amtrak.

Source: Eno Transportation Foundation, Inc., Lansdowne, VA, *Transportation in America*, annual (copyright).

No. 993. Employment and Earnings in Transportation, by Industry: 1980 to 1993

[Annual averages of monthly figures. Based on Current Employment Statistics program; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Q36-42]

INDUSTRY	SIC [1] code	1980	1985	1987	1988	1989	1990	1991	1992	1993
NUMBER (1,000)										
Total transportation	(X)	**2,960**	**2,997**	**3,156**	**3,303**	**3,415**	**3,527**	**3,502**	**3,486**	**3,511**
Railroads	40	532	359	309	298	293	279	262	254	250
Class I railroads	4011	482	323	271	259	252	241	231	222	218
Local and interurban passengers	41	265	277	294	309	326	336	354	359	367
Trucking and warehousing	42	1,280	1,361	1,465	1,548	1,596	1,625	1,606	1,606	1,629
Water transportation	44	211	185	172	171	172	177	184	173	167
Air transportation	45	453	522	603	646	683	745	733	729	733
Pipelines, exc. natural gas	46	21	19	19	19	19	19	19	19	18
Transportation services	47	198	275	294	311	329	345	344	346	347
AVERAGE WEEKLY EARNINGS (dol.)										
Class I railroads	4011	427	595	627	674	693	727	707	736	782
Local and interurban passengers	41	217	261	281	293	305	310	323	333	337
Trucking and warehousing	42	358	405	414	419	437	451	455	468	479
Pipelines, exc. natural gas	46	441	629	644	662	671	711	733	772	817

X Not applicable. [1] 1987 Standard Industrial Classification, see text, section 13.

Source: U.S. Bureau of Labor Statistics, Bulletin 2370 and, 2429 *Employment and Earnings*, March and June issues.

No. 994. Volume of Domestic Intercity Freight and Passenger Traffic, by Type of Transport: 1970 to 1992

[Freight traffic in bil. ton-miles; passenger traffic in bil. passenger-miles. A ton-mile is the movement of 1 ton (2,000 pounds) of freight for the distance of 1 mile. A passenger-mile is the movement of 1 passenger for the distance of 1 mile. Comprises public and private traffic, both revenue and nonrevenue. See also *Historical Statistics, Colonial Times to 1970*, series Q1-22]

TYPE OF TRANSPORT	TRAFFIC VOLUME						PERCENT DISTRIBUTION					
	1970	1980	1985	1990	1991	1992	1970	1980	1985	1990	1991	1992
Freight traffic, total	**1,936**	**2,487**	**2,458**	**2,860**	**2,866**	**2,958**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Railroads	771	932	895	1,071	1,077	1,107	39.8	37.5	36.4	37.4	37.6	37.4
Truck:												
ICC truck	167	242	250	311	320	342	8.6	9.7	10.2	10.9	11.2	11.6
Non-ICC truck	245	313	360	424	438	473	12.7	12.6	14.6	14.8	15.3	16.0
Water:												
Rivers/canals	205	311	306	373	359	370	10.6	12.5	12.4	13.0	12.5	12.5
Great Lakes	114	96	76	87	84	84	5.9	3.9	3.1	3.0	2.9	2.8
Oil pipelines	431	588	564	584	578	571	22.3	23.6	23.0	20.4	20.2	19.3
Domestic airways [1]	3	5	7	10	10	11	0.2	0.2	0.3	0.4	0.3	0.4
Passenger traffic, total	**1,181**	**1,467**	**1,635**	**1,993**	**2,011**	**2,066**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Private automobiles	1,026	1,210	1,310	1,598	1,623	1,663	86.9	82.5	80.1	80.2	80.7	80.5
Domestic airways [2]	119	219	290	359	351	367	10.1	14.9	17.7	18.1	17.4	17.7
Bus [3]	25	27	24	23	24	24	2.1	1.8	1.5	1.2	1.2	1.1
Railroads [4]	11	11	11	13	14	14	0.9	0.8	0.7	0.7	0.7	0.7

[1] Revenue service only for scheduled and nonscheduled carriers, with small section 418 all-cargo carriers included from 1980. Includes express mail, and excess baggage. [2] Includes general aviation (mostly private business) flying. [3] Excludes school and urban transit buses. [4] Includes intercity (Amtrak) and rail commuter service.

Source: Eno Transportation Foundation, Inc., Lansdowne VA, *Transportation in America*, annual (copyright).

No. 995. Passenger Transportation Arrangement: 1990 to 1992

[In millions of dollars, except percent. Represents SIC 4722]

SOURCE OF RECEIPTS	1990	1991	1992	OPERATING EXPENSES	1990	1991	1992
Receipts, total [1]	**9,036**	**8,547**	**8,968**	**Expenses, total [1]**	**8,262**	**8,039**	**8,278**
Air carriers	5,106	4,909	5,234	Payroll, annual	3,696	3,580	3,747
Water carriers	362	384	396	Employer contributions [2]	487	489	500
Hotels and motels	627	577	595	Lease and rental payments	676	666	671
Motor coaches	279	288	282	Advertising and promotion	516	467	487
Railroads	79	83	78	Taxes and licenses	125	107	106
Rental cars	151	152	167	Utilities	268	267	289
Package tours	1,872	1,623	1,720	Depreciation	293	282	262
Other	560	531	496	Office Supplies	254	236	234
				Repair Services	99	93	89

[1] Receipts for firms primarily engaged in arranging passenger transportation. These estimates exclude receipts of transportation companies (airlines, railroads, etc.). [2] Includes contributions to Social Security and other supplemental benefits.

Source: U.S. Bureau of the Census, *Service Annual Survey*.

No. 996. Transportation Accidents, Deaths, and Injuries: 1975 to 1992

[For related data, see also tables 1014 and 1036]

YEAR AND CASUALTY	Total (1,000)	TYPE OF TRANSPORT											Hazardous materials [11]
		Motor vehicle [1] (1,000)	Railroad [2]	Air carriers				General aviation [6]	Recreational boating [7]	Gas pipelines [8]	Liquid pipelines [9]	Waterborne [10]	
				Total	Airlines [3]	Commuter air carriers [4]	On demand air carriers [5]						
Accidents:													
1975	16,534	16,500	8,041	237	37	48	152	3,995	6,308	1,373	254	3,310	10,951
1980	17,940	17,900	8,451	228	19	38	171	3,590	5,513	1,996	219	4,624	15,737
1985	19,322	19,300	3,275	195	22	21	152	2,738	6,237	331	183	3,439	6,019
1990	11,524	11,500	2,879	149	26	15	108	2,218	6,411	199	177	3,613	8,853
1991	11,323	11,300	2,659	137	27	22	88	2,143	6,573	233	216	2,222	9,093
1992	10,020	10,000	2,339	116	19	23	74	1,956	6,048	192	224	(NA)	9,294
Deaths:													
1975	48.3	44.5	575	219	122	28	69	1,252	1,466	14	7	243	27
1980	54.5	51.1	584	143	1	37	105	1,239	1,360	11	3	206	19
1985	47.3	43.8	454	639	526	37	76	955	1,116	26	5	131	8
1990	47.0	44.6	599	94	39	6	49	763	865	5	3	85	8
1991	43.8	41.5	586	200	50	77	73	746	924	14	-	30	10
1992	(NA)	39.2	592	120	33	21	66	812	816	15	5	(NA)	16
Injuries:													
1975	1,855	1,800	50,138	109	71	6	32	728	2,136	819	17	97	648
1980	2,063	2,000	58,356	74	17	14	43	675	2,650	45	3	176	626
1985	1,736	1,700	31,617	89	30	16	43	517	2,757	106	18	172	253
1990	1,728	1,700	22,736	86	39	11	36	391	3,822	67	7	175	423
1991	1,626	1,600	20,707	83	26	30	27	420	3,967	89	8	110	438
1992	16,232	1,600	18,388	37	13	5	19	418	3,683	87	38	(NA)	587

- Represents or rounds to zero. NA Not available. [1] Data on deaths are from U.S. National Highway Traffic Safety Administration and are based on 30 day definition; see table 1014. Other data are from National Safety Council. [2] Accidents which result in damages to railroad property. Grade crossing accidents are also included when classified as a train accident. Deaths exclude fatalities in railroad-highway grade crossing accidents. [3] Includes scheduled and nonscheduled (charter) air carriers. Represents serious injuries. [4] All scheduled service. Represents serious injuries. [5] All nonscheduled service. Represents serious injuries. [6] 1975 excludes commuter and on-demand air taxis. [7] Accidents resulting in death; injury or requiring medical treatment beyond first aid; damages exceeding $200; or a person's disappearance. [8] Pipeline accidents/incidents are credited to year of occurrence. Beginning 1985, prior data are credited to the year filed. Fatalities and injuries as reported in annual report. [9] Pipelines carrying hazardous materials, petroleum, and liquid petroleum products. [10] Covers accidents involving commercial vessels which must be reported to U.S. Coast Guard if there is property damage exceeding $1,500; material damage affecting the seaworthiness or efficiency of a vessel; stranding or grounding; loss of life; or injury causing a person's incapacity for more than 3 days. [11] Accidents, deaths, and injuries involving hazardous materials cover all types of transport.

Source: U.S. Dept. of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics Annual, Historical Compendium Information Report, 1960-1992.*

No. 997. Highway Mileage—Urban and Rural, by Type and Control, and Federal-Aid Highway System: 1980 to 1992

[**In thousands, except percent. As of Dec. 31.** Data for urban and rural mileage are not comparable to years prior to 1980 because of classification changes; see text, section 21. See also *Historical Statistics, Colonial Times to 1970,* series Q 50, 51, and 55]

TYPE AND CONTROL	1980	1985	1986	1987	1988	1989	1990	1991	1992
Total mileage [1]	**[2]3,955**	**3,862**	**3,880**	**3,874**	**3,871**	**3,877**	**3,380**	**3,889**	**3,902**
Urban mileage	624	691	701	710	739	754	757	750	785
Under State control	79	111	94	95	96	97	96	96	104
Under local control	543	578	606	614	642	656	661	653	680
Rural mileage	[2]3,331	3,171	3,178	3,164	3,132	3,123	3,123	3,139	3,117
Percent surfaced [3]	77.5	88.1	88.4	88.4	88.1	88.4	88.6	89.7	88.9
Under State control	702	773	704	704	704	706	703	703	697
Under local control	2,270	2,173	2,243	2,249	2,244	2,238	2,242	2,255	2,239
Under Federal control	262	225	231	212	183	178	178	182	181

[1] Beginning 1985, includes only public road mileage as defined 23 USC 402. [2] Includes 98,000 miles of nonpublic road mileage previously contained in other rural categories. [3] Covers soil-surfaced roads and roads with slag, gravel, stone, bituminous, or concrete surfaces.

Source: U.S. Federal Highway Administration, *Highway Statistics,* annual.

No. 998. Highway Mileage—Functional Systems and Urban/Rural: 1992

[As of Dec. 31. For definition of urban, rural, see text, section 21]

STATE	FUNCTIONAL SYSTEMS					Urban	Rural
	Total	Inter-state	Other arterial	Collector	Local		
U.S.	**3,901,715**	**45,493**	**373,433**	**801,538**	**2,681,251**	**785,160**	**3,116,555**
AL	92,201	900	8,714	20,315	62,272	19,366	72,835
AK	13,634	1,088	1,487	2,415	8,644	1,648	11,986
AZ	55,969	1,169	5,334	8,084	41,382	15,123	40,846
AR	77,162	542	6,838	20,051	49,731	7,691	69,471
CA	168,378	2,402	27,627	31,483	106,666	79,986	88,392
CO	78,043	951	8,281	16,336	52,475	12,777	65,266
CT	20,280	341	2,961	3,171	13,807	11,496	8,784
DE	5,524	41	604	938	3,941	1,855	3,669
DC	1,104	12	279	157	656	1,104	-
FL	110,640	1,474	10,732	14,679	83,755	48,637	62,003
GA	110,790	1,243	13,031	23,069	73,447	26,147	84,643
HI	4,106	44	666	749	2,647	1,799	2,307
ID	58,588	612	3,537	9,608	44,831	3,314	55,274
IL	136,402	2,053	13,451	21,099	99,799	32,266	104,136
IN	92,054	1,140	8,028	22,592	60,294	19,109	72,945
IA	112,586	783	9,377	31,515	70,911	9,096	103,490
KS	133,655	872	9,282	33,128	90,373	9,508	124,147
KY	71,765	763	5,099	17,623	48,280	10,008	61,757
LA	58,629	869	4,906	12,764	40,090	12,319	46,310
ME	22,481	366	2,359	5,923	13,833	2,479	20,002
MD	29,172	481	3,778	4,969	19,944	13,574	15,598
MA	34,323	567	5,548	6,684	21,524	21,017	13,306
MI	117,520	1,240	12,214	25,920	78,146	28,012	89,508
MN	129,622	913	12,379	28,971	87,359	14,523	115,099
MS	72,795	685	7,006	15,511	49,593	7,888	64,907
MO	121,424	1,178	9,472	24,998	85,776	15,398	106,026
MT	70,357	1,191	5,795	16,026	47,345	2,348	68,009
NE	92,686	481	7,887	20,738	63,580	5,030	87,656
NV	45,657	545	2,763	4,854	37,495	4,513	41,144
NH	14,913	224	1,565	2,609	10,315	2,440	12,473
NJ	34,286	396	5,437	4,927	23,526	22,503	11,783
NM	61,195	998	4,492	6,857	48,848	5,828	55,367
NY	111,686	1,497	14,085	20,814	75,290	39,063	72,623
NC	95,582	970	9,099	17,889	67,624	21,451	74,131
ND	86,648	570	5,868	18,778	61,432	1,825	84,823
OH	113,823	1,573	10,323	23,062	78,865	31,568	82,255
OK	112,432	929	7,931	25,633	77,939	12,281	100,151
OR	95,237	727	6,376	17,946	70,188	9,494	85,743
PA	116,788	1,587	13,726	19,727	81,748	30,823	85,965
RI	6,120	70	869	855	4,326	4,597	1,523
SC	64,129	810	6,850	13,411	43,058	10,517	53,612
SD	83,299	678	6,084	19,288	57,249	1,858	81,441
TN	85,144	1,062	8,035	18,567	57,480	16,314	68,830
TX	293,317	3,230	25,302	63,816	200,969	76,143	217,174
UT	43,270	937	3,309	7,704	31,320	6,084	37,186
VT	14,145	320	1,312	3,113	9,400	1,314	12,831
VA	68,429	1,106	7,895	14,008	45,420	15,581	52,848
WA	79,413	762	7,308	16,678	54,665	17,025	62,388
WV	34,919	550	2,829	8,929	22,611	3,090	31,829
WI	110,371	638	11,653	21,525	76,555	14,841	95,530
WY	39,022	913	3,450	10,832	23,827	2,489	36,533

- Represents zero.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual.

No. 999. Highway Pavement Condition, by Type of Road System: 1980 to 1992

[Highway pavement condition is classified by the Present Serviceability Rating (PSR) system (5.0 - 0.1). The reported ranges are defined as: PSR 5.0-3.5, pavements give a first class ride and exhibit few, if any, visible signs of surface wear. Of the quality of new or nearly new pavements. PSR 3.4-2.0, pavements have a riding quality somewhat inferior to that of new pavements or may even be barely tolerable at high speeds. Surfaces may show signs of cracking, substantial patching, and rutting. PSR 1.9-0.1, pavements show extensive wear to the point of needing resurfacing or may even need complete reconstruction]

PAVEMENT CONDITION	INTERSTATE ROAD				ARTERIAL ROAD				COLLECTOR ROAD			
	1980	1990	1991	1992	1980	1990	1991	1992	1980	1990	1991	1992
URBAN AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4) [1]	6	6	5	4	7	4	4	4	9	13	9	6
PSR 2.0-3.4 (2.5-3.4) [1]	26	35	35	33	42	52	53	50	50	55	54	56
PSR 3.5-5.0	68	59	60	63	51	44	43	46	41	32	37	38
RURAL AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4) [1]	5	6	6	4	6	2	2	2	16	8	7	6
PSR 2.0-3.4 (2.5-3.4) [1]	26	35	34	33	46	48	48	44	55	54	55	54
PSR 3.5-5.0	69	59	60	63	48	50	50	54	29	38	38	40

[1] PSR range shown in parentheses applies to Interstate roads only.

No. 1000. Receipts and Disbursements for Highways, by Type: 1980 to 1994

[**In millions of dollars.** Data compiled from reports of State and local authorities. For Federal highway trust fund receipts, disbursements, and balances, see table 506. State data include District of Columbia]

TYPE	1980	1985	1990	1991	1992	1993, prel.	1994, proj.		
							Total [1]	Federal	State
Total receipts	**39,715**	**61,506**	**75,294**	**82,379**	**87,523**	**89,542**	**91,803**	**18,349**	**48,744**
Current income	37,604	54,957	69,730	75,452	78,116	79,578	82,677	18,349	43,442
Imposts on highway users [2]	22,559	35,599	44,264	50,349	51,896	52,668	54,343	16,146	36,611
Other taxes and fees	11,808	15,127	19,827	19,077	19,854	20,222	21,327	1,388	3,562
Investment income, other receipts	3,237	4,231	5,639	6,026	6,366	6,688	7,007	815	3,269
Bond issue proceeds [3]	2,111	6,549	5,564	6,927	9,407	9,964	9,126	-	5,302
Intergovernmental payments [4]	(X)	(X)	(X)	(X)	(X)	(X)	(X)	-18,266	6,916
Funds from (+) or to (-) reserves [4]	2,080	-4,058	114	-3,768	-3,281	-2,043	123	780	-501
Total funds available	41,795	57,448	75,408	78,611	84,242	87,499	91,926	863	55,159
Total disbursements	**41,795**	**57,448**	**75,408**	**78,611**	**84,242**	**87,499**	**91,926**	**863**	**55,159**
Current disbursements	40,084	54,725	72,457	74,895	79,944	83,271	87,570	863	52,645
Capital outlay	20,337	27,138	35,151	36,638	38,700	40,200	42,325	268	31,356
Maintenance and traffic services	11,445	16,032	20,365	21,222	22,755	23,804	24,885	67	9,520
Administration and research	3,022	4,033	6,501	6,856	7,702	8,013	8,596	528	5,101
Law enforcement and safety	3,824	5,334	7,235	7,040	7,182	7,522	7,819	-	4,339
Interest on debt	1,456	2,188	3,205	3,139	3,605	3,732	3,945	-	2,329
Debt retirement [3]	1,711	2,723	2,951	3,716	4,298	4,228	4,356	-	2,514

- Represents zero. X Not applicable. [1] Includes other levels of government not shown separately. [2] Excludes amounts later allocated for nonhighway purposes. [3] Excludes issue and redemption of short-term notes or refunding bonds. [4] Plus sign (+) indicates net receipt of funds from other levels of government; minus sign (-) indicates net disbursement of funds to other levels.

No. 1001. Disbursements of State Highway Funds, by State: 1980 to to 1992

[**In millions of dollars.** Comprises disbursements from current revenues or loans for construction, maintenance, interest and principal payments on highway bonds, transfers to local units, and miscellaneous. Includes transactions by State toll authorities. Excludes amounts allocated for collection and nonhighway purposes, and bonds redeemed by refunding. See also *Historical Statistics, Colonial Times to 1970*, series Q 90-94]

STATE	1980	1990	1992	STATE	1980	1990	1992	STATE	1980	1990	1992
U.S	**30,049**	**53,560**	**59,458**	KS	440	697	858	ND	143	189	212
				KY	913	1,008	1,411	OH	1,032	2,271	2,424
AL	517	866	820	LA	682	923	1,014	OK	461	827	858
AK	274	336	398	ME	164	332	341	OR	482	765	830
AZ	365	1,525	1,172	MD	663	1,464	1,212	PA	1,557	2,885	2,988
AR	425	456	616	MA	704	1,055	1,832	RI	72	214	211
CA	1,930	4,294	5,002	MI	997	1,526	1,718	SC	309	585	622
CO	411	714	745	MN	611	1,228	1,367	SD	151	232	259
CT	393	1,204	1,202	MS	468	529	650	TN	609	1,174	1,177
DE	152	315	401	MO	555	937	1,056	TX	1,882	3,001	2,926
DC	57	273	268	MT	224	302	312	UT	241	355	368
FL	1,261	1,677	2,627	NE	274	449	544	VT	87	165	194
GA	762	1,278	1,334	NV	169	309	321	VA	894	1,874	1,688
HI	134	297	426	NH	152	299	328	WA	787	1,251	1,377
ID	153	300	292	NJ	662	1,831	2,657	WV	672	650	627
IL	1,652	2,645	2,820	NM	197	409	428	WI	468	979	1,228
IN	688	1,218	1,318	NY	1,650	2,874	3,268	WY	192	297	246
IA	504	869	1,010	NC	807	1,428	1,457				

Source of tables 999-1001: U.S. Federal Highway Administration, *Highway Statistics*, annual.

No. 1002. Federal Grants to State and Local Governments for Highway Trust Fund and Federal Transit Administration (FTA), by State: 1993

[Year ending Sept. 30]

STATE	HIGHWAY TRUST FUND		FTA [2]		STATE	HIGHWAY TRUST FUND		FTA [2]		STATE	HIGHWAY TRUST FUND		FTA [2]	
	Total (mil. dol.)	Per capita [1]	Total (mil. dol.)	Per capita [1]		Total (mil. dol.)	Per capita [1]	Total (mil. dol.)	Per capita [1]		Total (mil. dol.)	Per capita [1]	Total (mil. dol.)	Per capita [1]
U.S.	**16,060**	**62.3**	**3,494**	**13.5**	KS	162	64.1	8	3.2	ND	109	171.1	3	4.6
					KY	215	56.8	18	4.7	OH	529	47.7	81	7.3
AL	307	73.4	16	3.8	LA	292	68.0	29	6.7	OK	159	49.3	9	2.9
AK	223	371.7	2	3.7	ME	87	70.3	5	4.0	OR	170	55.9	68	22.6
AZ	245	62.1	18	4.5	MD	258	51.9	80	16.1	PA	659	54.7	243	20.2
AR	204	84.1	9	3.6	MA	773	128.6	125	20.8	RI	132	131.5	16	16.2
CA	1,380	44.2	488	15.6	MI	437	46.1	80	8.5	SC	214	58.6	9	2.6
CO	246	68.9	31	8.7	MN	317	70.2	19	4.3	SD	121	168.5	3	3.5
CT	329	100.3	58	17.6	MS	190	71.9	9	3.3	TN	244	47.9	30	5.9
DE	57	81.9	3	3.9	MO	339	64.8	124	23.8	TX	1,061	58.8	120	6.6
DC	52	89.5	251	434.4	MT	161	191.9	2	2.7	UT	154	82.8	28	15.1
FL	630	46.1	125	9.1	NE	137	85.3	9	5.8	VT	116	201.6	4	6.7
GA	410	59.2	58	8.4	NV	100	72.0	4	3.1	VA	226	34.8	28	4.3
HI	193	164.5	23	19.6	NH	98	86.8	3	2.9	WA	367	69.7	30	5.7
ID	104	94.7	2	2.3	NJ	440	55.9	158	20.1	WV	141	77.7	6	3.2
IL	544	46.5	369	31.6	NM	218	135.0	5	2.9	WI	348	69.0	33	6.6
IN	383	67.0	27	4.7	NY	855	47.0	577	31.7	WY	119	252.2	2	3.7
IA	216	76.8	14	4.9	NC	425	61.2	24	3.5					

[1] Based on Bureau of the Census resident population as of July 1, 1993. [2] Federal Transit Administration.

Source: U.S. Bureau of the Census, *Federal Expenditures by State for Fiscal Year*, annual.

No. 1003. State Gasoline Tax Rates, 1992 and 1993, and Motor Fuel Tax Receipts, 1992

[See also *Historical Statistics, Colonial Times to 1970*, series Q 233-234]

STATE	RATE [1] (cents/gal.)		Receipts, [2] 1992 (mil. dol.)	STATE	RATE [1] (cents/gal.)		Receipts, [2] 1992 (mil. dol.)	STATE	RATE [1] (cents/gal.)		Receipts, [2] 1992 (mil. dol.)
	1992	1993			1992	1993			1992	1993	
Federal	14.1	18.4	(NA)	KS	18	18	260	ND	17	17	72
State	**(NA)**	**(NA)**	**(NA)**	KY [3]	15.4	15.4	369	OH	21	22	1,142
AL	18	18	434	LA	20	20	460	OK [4]	17	17	335
AK	8	8	22	ME	19	19	134	OR	22	24	299
AZ	18	18	377	MD	23.5	23.5	506	PA	22.35	22.35	1,275
AR	18.7	18.7	302	MA	21	21	540	RI	26	28	106
CA	16	17	2,167	MI	15	15	674	SC	16	16	333
CO	22	22	371	MN	20	20	451	SD	18	18	81
CT	26	29	366	MS	18.2	18.4	296	TN [5]	20	20	607
DE	19	22	75	MO	13.03	13.03	405	TX	20	20	2,039
DC	20	20	32	MT	21.4	24	113	UT	19	19	175
FL	11.6	11.8	1,042	NE	24.6	24.4	217	VT	16	16	61
GA	7.5	7.5	338	NV	24	24	177	VA [3]	17.5	17.5	634
HI	16	16	64	NH	18.6	18.7	101	WA	23	23	612
ID	21	21	128	NJ	10.5	10.5	400	WV	20.35	25.35	219
IL	19	19	1,026	NM	17	23	169	WI	22.2	23.2	566
IN	15	15	581	NY	22.89	22.89	1,462	WY	9	9	42
IA	20	20	322	NC	21.9	22	849				

NA Not available. [1] In effect Dec. 31. [2] Represents net gallonage receipts. [3] Trucks or combinations with more than two axles pay tax of 2 cents per gallon more in Kentucky, and 3.5 cents per gallon more in Virginia. [4] .08 cents per gallon is for inspection fee. [5] Includes 1 cent per gallon inspection fee.

No. 1004. Public Highway Debt—State and Local Governments: 1970 to 1992

[**In millions of dollars.** Long-term obligations. Data are for varying calendar and fiscal years. Excludes duplicated and interunit obligations. See also *Historical Statistics, Colonial Times to 1970*, series Q 136-147]

ITEM	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992 [1]
Total debt issued	1,892	2,357	8,194	9,803	6,898	4,594	5,900	5,838	9,517	13,026
State	1,306	1,135	5,397	5,873	4,395	2,702	3,775	3,277	6,252	9,460
Local	586	1,222	2,797	3,930	2,503	1,892	2,125	2,561	3,265	3,568
Total debt redeemed	1,270	1,982	4,606	5,313	4,924	2,774	3,729	5,158	4,858	7,218
State	800	1,109	3,835	3,755	3,211	1,547	2,813	2,041	3,071	5,389
Local	470	873	771	1,558	1,713	1,227	916	3,117	1,787	1,829
Total debt outstanding	19,124	27,519	33,379	37,869	39,843	41,663	43,834	44,514	49,173	54,983
Local	5,104	7,427	12,100	14,472	15,262	15,927	17,136	16,580	18,058	19,797

[1] Local debt estimated.

Source of tables 1003 and 1004: U.S. Federal Highway Administration, *Highway Statistics*, annual.

No. 1005. Transportation to Work: 1990

[In thousands, except as indicated. Based on workers 16 years old or older]

REGION, DIVISION, AND STATE	MEANS OF TRANSPORTATION TO WORK			Worked at home	Average travel time to work [1] (minutes)	HOUSEHOLDS WITH VEHICLES AVAILABLE		
	Car, truck, van		Percent using public transportation			None	One vehicle	Two or more vehicles
	Drove alone	Car-pooled						
United States	**84,215**	**15,378**	**5.3**	**3,406**	**22.4**	**10,602**	**31,039**	**50,306**
Northeast	15,902	2,771	12.8	630	24.5	3,603	6,408	8,862
New England	4,892	749	5.1	191	21.5	568	1,699	2,676
Maine	424	80	0.9	24	19.0	40	159	266
New Hampshire	443	70	0.7	20	21.9	26	132	254
Vermont	200	36	0.7	17	18.0	17	72	122
Massachusetts	2,148	318	8.3	75	22.7	321	819	1,107
Rhode Island	376	58	2.5	10	19.2	40	132	206
Connecticut	1,301	187	3.9	45	21.1	124	386	721
Middle Atlantic	11,010	2,023	15.7	438	25.7	3,035	4,709	6,186
New York	4,461	861	24.8	213	28.6	1,994	2,153	2,492
New Jersey	2,731	472	8.8	80	25.3	360	966	1,468
Pennsylvania	3,818	690	6.4	145	21.6	681	1,589	2,226
Midwest	21,091	3,207	3.5	987	20.7	2,238	7,365	12,714
East North Central	14,749	2,206	4.3	551	21.7	1,693	5,230	8,674
Ohio	3,889	521	2.5	119	20.7	416	1,351	2,320
Indiana	2,040	332	1.3	73	20.4	175	670	1,221
Illinois	3,742	653	10.1	144	25.1	588	1,476	2,138
Michigan	3,328	429	1.6	100	21.2	344	1,133	1,943
Wisconsin	1,751	270	2.5	114	18.3	170	600	1,052
West North Central	6,342	1,002	1.9	436	18.4	545	2,135	4,040
Minnesota	1,593	247	3.6	116	19.1	142	517	988
Iowa	971	157	1.2	89	16.2	75	332	657
Missouri	1,816	312	2.0	84	21.6	191	652	1,118
North Dakota	210	31	0.6	24	13.0	16	73	152
South Dakota	233	33	0.3	31	13.8	17	76	166
Nebraska	590	87	1.2	44	15.8	43	182	377
Kansas	929	136	0.7	49	17.2	60	302	583
South	29,495	5,886	2.6	936	22.0	3,208	10,987	17,627
South Atlantic	15,481	3,156	3.4	501	22.5	1,725	5,725	9,053
Delaware	258	43	2.4	8	20.0	20	80	147
Maryland	1,733	376	8.1	65	27.0	216	554	979
District of Columbia	107	37	36.6	9	27.1	93	103	53
Virginia	2,281	500	4.0	103	24.0	205	717	1,370
West Virginia	493	107	1.1	16	21.0	94	247	347
North Carolina	2,528	530	1.0	71	19.8	242	786	1,489
South Carolina	1,235	277	1.1	31	20.5	137	402	720
Georgia	2,379	468	2.8	65	22.7	244	730	1,393
Florida	4,468	819	2.0	132	21.8	474	2,106	2,555
East South Central	5,110	1,005	1.2	149	21.1	607	1,814	3,231
Kentucky	1,195	229	1.6	47	20.7	159	447	773
Tennessee	1,763	324	1.3	52	21.5	181	593	1,079
Alabama	1,374	267	0.8	31	21.2	156	466	885
Mississippi	777	184	0.8	19	20.6	111	307	494
West South Central	8,904	1,725	2.0	286	21.6	876	3,448	5,343
Arkansas	765	153	0.5	28	19.0	88	303	501
Louisiana	1,239	247	3.0	31	22.3	209	542	749
Oklahoma	1,079	191	0.6	41	19.3	91	414	701
Texas	5,821	1,134	2.2	185	22.2	489	2,190	3,392
West	17,727	3,513	4.1	854	22.7	1,553	6,279	11,103
Mountain	4,586	873	2.1	229	19.7	343	1,697	2,993
Montana	250	41	0.6	22	14.8	20	91	194
Idaho	330	53	1.9	21	17.3	17	101	243
Wyoming	154	28	1.4	9	15.4	8	48	113
Colorado	1,217	210	2.9	67	20.7	89	412	781
New Mexico	472	96	1.0	24	19.1	38	185	320
Arizona	1,178	239	2.1	48	21.6	107	532	730
Utah	541	111	2.3	26	18.9	29	153	355
Nevada	444	94	2.7	12	19.8	36	174	256
Pacific	13,141	2,640	4.8	625	23.8	1,210	4,582	8,111
Washington	1,701	282	4.5	86	22.0	141	582	1,149
Oregon	949	165	3.4	56	19.6	88	355	660
California	9,982	2,036	4.9	453	24.6	923	3,452	6,006
Alaska	165	40	2.4	11	16.7	23	64	102
Hawaii	344	116	7.4	19	23.8	35	129	193

[1] Excludes persons who worked at home.

Source: U.S. Bureau of the Census, *Census of Population and Housing, 1990.*

No. 1006. Motor Vehicle Registrations, 1980 to 1992, Vehicle Miles of Travel, 1992, and Drivers Licenses, 1992, by State

[**In thousands, except as indicated.** Motor vehicle registrations cover publicly, privately, and commercially owned vehicles. For uniformity, data have been adjusted to a calendar-year basis as registration years in States differ; figures represent net numbers where possible, excluding re-registrations and nonresident registrations]

STATE	AUTOMOBILES, TRUCKS, AND BUSES [1]					1992				
	1980	1990	1991	1992		Motorcycle [1] registration (incl. official)	Public road and street mileage (1,000 mi.)	Vehicle miles of travel		Drivers licenses
				Total	Automobiles (incl. taxis)			Total (bil. mi.)	Per mile of road (1,000)	
U.S.	**155,796**	**188,798**	**188,136**	**190,362**	**144,213**	**4,065**	**3,902**	**2,240**	**574**	**173,125**
AL	2,938	3,744	3,484	3,304	2,196	41	92	45.8	498	2,977
AK	262	477	471	486	308	11	14	3.8	271	405
AZ	1,917	2,825	2,849	2,801	1,994	71	56	35.0	625	2,506
AR	1,574	1,448	1,480	1,501	974	14	77	23.0	299	1,712
CA	16,873	21,926	22,253	22,202	17,219	623	168	262.5	1,563	20,111
CO	2,342	3,155	3,045	2,915	2,165	89	78	28.9	371	2,392
CT	2,147	2,623	2,589	2,569	2,429	50	20	26.5	1,325	2,358
DE	397	526	534	545	419	10	6	6.9	1,150	501
DC	268	262	246	256	238	2	1	3.6	3,600	352
FL	7,614	10,950	9,980	10,232	8,131	194	111	114.3	1,030	10,538
GA	3,818	5,489	5,714	5,899	4,121	80	111	77.9	702	4,600
HI	570	771	785	774	668	23	4	8.0	2,000	717
ID	834	1,054	1,055	1,034	610	33	59	10.8	183	721
IL	7,477	7,673	8,193	7,982	6,622	201	136	87.6	644	7,411
IN	3,826	4,366	4,414	4,516	3,301	95	92	57.0	620	3,800
IA	2,329	2,632	2,668	2,706	1,931	157	113	23.9	212	1,859
KS	2,007	2,012	1,879	1,921	1,258	56	134	24.2	181	1,692
KY	2,593	2,909	2,942	2,983	1,939	35	72	38.1	529	2,457
LA	2,779	2,995	3,046	3,094	2,006	35	59	33.9	575	2,617
ME	724	977	979	978	754	30	22	12.2	555	918
MD	2,803	3,607	3,630	3,689	3,075	52	29	41.9	1,445	3,234
MA	3,749	3,726	3,664	3,663	3,156	63	34	47.3	1,391	4,170
MI	6,486	7,209	7,245	7,311	5,680	154	118	84.2	714	6,481
MN	3,091	3,508	3,273	3,484	2,736	106	130	41.2	317	2,625
MS	1,577	1,875	1,887	1,954	1,496	27	73	26.2	359	1,628
MO	3,271	3,905	3,950	4,004	2,821	60	121	53.3	440	3,454
MT	680	783	766	907	541	23	70	8.5	121	597
NE	1,254	1,384	1,404	1,355	893	19	93	14.6	157	1,129
NV	655	853	881	921	621	20	46	10.9	237	957
NH	704	946	906	894	694	34	15	10.1	673	850
NJ	4,761	5,652	5,519	5,591	5,136	100	34	59.4	1,747	5,285
NM	1,068	1,301	1,320	1,352	838	31	61	18.5	303	1,126
NY	8,002	10,196	9,771	9,780	8,467	194	112	109.9	981	10,360
NC	4,532	5,162	5,216	5,307	3,778	59	96	67.5	703	4,655
ND	627	630	629	655	394	18	87	6.1	70	433
OH	7,771	8,410	8,685	9,030	7,304	230	114	95.2	835	9,169
OK	2,583	2,649	2,669	2,737	1,758	57	112	35.1	313	2,287
OR	2,081	2,445	2,507	2,583	1,955	62	95	27.9	294	2,426
PA	6,926	7,971	8,038	8,179	6,535	167	117	89.2	762	8,019
RI	623	672	628	622	517	21	6	7.7	1,283	685
SC	1,996	2,521	2,471	2,601	1,948	33	64	35.0	547	2,400
SD	601	704	702	720	427	23	83	7.2	87	498
TN	3,271	4,444	4,542	4,645	3,726	75	85	50.0	588	3,486
TX	10,475	12,800	12,897	12,767	8,689	164	293	163.3	557	11,438
UT	992	1,206	1,230	1,252	810	24	43	16.3	379	1,143
VT	347	462	447	465	346	17	14	6.0	429	423
VA	3,626	4,938	5,022	5,239	3,961	59	68	63.4	932	4,697
WA	3,225	4,257	4,404	4,466	3,140	112	79	49.4	625	3,627
WV	1,320	1,225	1,273	1,273	778	18	35	16.5	471	1,314
WI	2,941	3,815	3,685	3,735	2,463	176	110	47.6	433	3,543
WY	467	528	469	483	249	16	39	6.2	159	343

[1] Excludes vehicles owned by military services.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual; and *Selected Highway Statistics and Charts*, annual.

No. 1007. Motor Vehicle Production and Trade: 1980 to 1992

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992
Production:									
Passenger car production	1,000	6,376	8,185	7,100	7,137	6,825	6,078	5,439	5,663
Truck and bus production	1,000	1,634	3,468	3,826	4,101	4,051	3,706	3,372	4,038
Imports:									
Passenger cars (new) [1 2]	1,000	3,116	4,398	4,589	4,450	4,043	3,945	3,736	3,615
Canada	1,000	595	1,145	927	1,191	1,151	1,220	1,196	1,200
Germany, Federal Republic of	1,000	339	473	378	264	217	245	172	206
Japan	1,000	1,992	2,527	2,418	2,123	2,052	1,868	1,789	1,678
Trucks and buses (new) [2]	1,000	747	1,253	1,177	938	953	766	716	777
Japan	1,000	483	800	772	542	420	302	263	197
All-terrain vehicles	1,000	(NA)	683	320	210	121	100	(NA)	(NA)
Motorcycles, total [3]	1,000	1,120	733	318	287	253	169	(NA)	(NA)
Import value:									
Passenger cars (new) [1]	Mil. dol.	16,675	36,474	47,858	47,005	44,417	45,716	45,564	46,729
Trucks and buses, (new) [1]	Mil. dol.	1,985	7,734	8,729	8,089	8,591	8,155	8,221	10,000
Motorcycles [3 4]	Mil. dol.	1,142	783	463	512	542	361	(NA)	(NA)
Exports:									
Passenger cars (new) [1]	1,000	617	704	633	781	778	794	755	851
Trucks and buses (new) exports	1,000	186	183	222	230	189	159	208	161
Export value [1 5]	Mil. dol.	16,015	22,620	24,812	29,519	31,574	38,086	(NA)	(NA)
Passenger cars (new) [5]	Mil. dol.	3,932	6,027	6,695	8,318	8,695	9,708	9,886	11,893
Trucks and buses (new) [5]	Mil. dol.	2,977	2,789	3,375	3,683	3,471	2,845	3,388	3,073
Parts and accessories [6]	Mil. dol.	9,106	14,004	14,742	17,518	19,208	24,996	(NA)	(NA)
Factory sales:									
Passenger cars	1,000	6,400	8,002	7,065	7,105	6,807	6,050	5,407	5,684
Trucks and buses	1,000	1,667	3,357	3,821	4,121	4,062	3,719	3,375	4,042
Retail sales:									
Passenger cars (new) [1]	1,000	8,979	11,042	10,277	10,530	9,772	9,300	8,175	8,214
Domestics [7]	1,000	6,581	8,205	7,081	7,526	7,073	6,897	6,137	6,277
Imports [8]	1,000	2,398	2,838	3,196	3,004	2,699	2,403	2,038	1,938
Trucks and buses [9]	1,000	2,232	3,984	4,174	4,608	4,483	4,261	3,842	4,513
Light duty (up to 14,000 GVW) [10]	1,000	1,964	3,700	3,885	4,273	4,171	3,984	3,621	4,264
Med. duty (14,001-26,000 GVW) [10]	1,000	92	53	55	83	73	71	50	57
Heavy duty (over 26,000 GVW) [10]	1,000	176	231	234	251	239	207	171	192
Under 6,000 pounds	1,000	985	2,408	2,696	2,926	2,854	2,866	2,724	3,217
Utility	1,000	51	429	403	445	447	490	549	666
Van	1,000	79	115	89	47	43	31	17	21
Minivan (cargo)	1,000	(X)	103	101	105	97	83	66	63
Station wagon (truck chassis)	1,000	(X)	86	108	138	138	112	110	201
Minipassenger carrier	1,000	(X)	301	546	692	668	750	706	840
6,000 to 10,000 pounds [11]	1,000	975	1,280	1,175	1,333	1,297	1,097	876	1,021
Utility	1,000	108	108	91	90	93	68	37	51
Van	1,000	172	261	254	302	289	254	203	241
Pickup, conventional	1,000	546	628	569	666	663	568	476	524
Station wagon (truck chassis)	1,000	39	95	91	104	100	85	55	80
10,001 pounds and over	1,000	271	295	302	349	331	298	242	275

NA Not available. X Not applicable. [1] Based on data from U.S. Dept. of Commerce. [2] Includes other countries, not shown separately. [3] Source: Motorcycle Industry Council, Inc., Irvine, CA. Data from U.S. Dept. of Commerce. Excludes mopeds/motorized bicycles and all-terrain vehicles. Excludes moped imports (motorcycle imports less than 51 cc's) from all countries (except Japan). [4] Represents c.i.f. value. [5] Covers assembled and unassembled vehicles. [6] Includes rubber tires and tubes and used vehicles. [7] Includes domestic models produced in Canada and Mexico. [8] Excludes domestic models produced in Canada. [9] Excludes motorcoaches and light-duty imports from foreign manufactures. Includes imports sold by franchised dealers of U.S. manufacturers. Starting in 1987, includes sales of trucks over 10,000 lbs. GVW by foreign manufacturers. [10] Gross vehicle weight (fully loaded vehicle). [11] Includes vehicles, not shown separately.

No. 1008. Motor Vehicles in Use: 1980 to 1992

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992
Cars in use, total	**Million**	**104.6**	**114.7**	**121.5**	**122.8**	**123.3**	**123.3**	**120.3**
Under 5 years	Million	52.3	48.7	55.5	57.6	56.5	54.6	50.4
6-8 years	Million	25.2	27.8	21.6	20.7	22.6	25.5	27.5
9-11 years	Million	14.6	17.2	22.4	21.1	19.1	16.7	16.0
12 years and over	Million	12.5	21.0	22.0	23.4	25.1	26.6	26.4
Average age	Years	6.6	7.6	7.6	7.6	7.8	7.9	8.1
Cars retired from use [1]	1,000	8,405	7,729	8,754	8,981	8,897	8,565	11,194
Trucks in use, total	**Million**	**35.2**	**42.4**	**50.2**	**53.2**	**56.0**	**58.2**	**61.2**
Under 3 years	Million	8.8	9.0	12.5	12.5	12.8	12.0	11.3
3-5 years	Million	8.1	6.3	10.3	12.6	13.2	14.0	14.0
6-8 years	Million	7.4	10.2	5.9	6.3	8.0	9.9	11.9
9-11 years	Million	4.4	6.2	8.9	7.9	6.6	5.3	5.6
12 years and over	Million	6.5	10.7	12.6	14.0	15.5	17.0	18.3
Average age	Years	7.1	8.1	7.9	7.9	8.0	8.1	8.4
Trucks retired from use [1]	1,000	1,732	2,100	2,251	2,189	2,177	2,284	1,587

[1] For years ending June 30. Represents vehicles failing to re-register.

Source of tables 1007 and 1008: Except as noted, American Automobile Manufacturers Association Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual (copyright); and *World Motor Vehicle Data*, annual (copyright).

No. 1009. Motor Vehicle Registrations: 1980 to 1992

[In thousands]

ITEM	1980	1985	1987	1988	1989	1990	1991	1992
Total [1]	**155,796**	**171,654**	**179,044**	**184,397**	**187,261**	**188,798**	**188,136**	**190,362**
Automobiles	121,601	131,864	137,324	141,252	143,081	143,550	142,569	144,213
Buses	529	593	602	616	625	627	631	645
Private and commercial:								
Commercial	107	109	111	112	113	114	114	144
School and other	147	157	160	160	162	161	161	161
Publicly owned:								
Federal	4	4	5	5	4	5	5	5
School	271	323	327	339	346	347	352	365
Private and commercial trailers, total	14,372	15,008	15,322	15,707	16,115	16,098	16,269	16,715
Motorcycles	5,694	5,444	4,917	4,584	4,434	4,259	4,177	4,065
Truck tractors	1,402	1,150	1,135	1,183	1,237	1,240	1,236	1,279
Light trucks [2]	(NA)	32,146	34,286	35,320	36,530	37,380	37,728	38,257

NA Not available. [1] Components may not add to total because of double counting. [2] Excludes farm trucks.

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual.

No. 1010. Motor Vehicle Tires and Batteries: 1980 to 1992

[In millions]

ITEM	1980	1985	1987	1988	1989	1990	1991	1992
Tires, passenger car, total [1]	145.9	200.9	210.8	218.8	214.8	213.6	214.5	228.6
Radials	83.5	164.7	187.3	200.2	200.4	202.1	205.7	221.4
Replacement	106.9	141.5	151.9	155.3	151.2	152.3	155.4	165.8
Tires, truck and bus, total [1]	31.1	41.1	44.4	46.0	46.9	46.9	42.4	45.0
Radials	3.8	19.7	26.0	29.4	30.6	32.5	32.4	36.1
Replacement	24.4	32.1	34.5	33.9	35.2	36.6	32.9	33.7
Batteries, total [2]	61.7	74.4	75.7	80.1	80.3	79.7	79.8	(NA)
Replacement automobile batteries	50.1	58.7	59.9	63.5	64.4	65.2	66.6	(NA)

NA Not available. [1] Includes original equipment. Also includes exports, not shown separately. [2] Source: Battery Council International, Chicago, IL, and U.S. Bureau of the Census.

Source: Except as noted, The Rubber Manufacturers Association, Inc., Washington, DC, *RMA Monthly Tire Report*.

No. 1011. Automobile Output and Trade in National Income Accounts: 1980 to 1993

[**In billions of dollars.** Vehicle output equals final dollar sales value of new vehicles, plus net dollar value of used vehicle sales adjusted for changes in inventories and net balance of vehicle exports and imports]

ITEM	CURRENT DOLLARS					CONSTANT (1982) DOLLARS				
	1980	1990	1991	1992	1993	1980	1990	1991	1992	1993
Auto output, total	**59.2**	**129.2**	**121.1**	**133.2**	**142.5**	**79.1**	**121.4**	**109.5**	**117.4**	**121.1**
Final sales	60.1	132.3	121.1	133.5	137.6	80.5	125.3	109.9	117.8	117.7
Personal consumption expenditures	57.2	129.8	116.2	126.7	134.3	80.9	124.5	107.7	113.9	115.5
Producers' durable equipment	14.3	35.6	37.1	37.6	39.1	16.8	33.4	32.8	32.8	34.7
Net exports	−12.8	−35.4	−33.9	−32.8	−37.7	−19.2	−34.7	−32.1	−30.5	−34.1
Government purchases	1.4	2.3	1.8	2.0	1.9	2.0	2.1	1.6	1.7	1.6
Change in business inventories	−0.9	−3.1	−0.1	−0.3	4.9	−1.5	−3.9	−0.4	−0.4	3.4
New	−0.1	−2.3	−0.1	0.3	3.4	−0.1	−3.2	−0.4	0.1	2.2
Used	−0.8	−0.8	-	−0.6	1.4	−1.3	−0.8	-	−0.6	1.2

- Represents or rounds to zero.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States: Volume 2, 1959-88*, and *Survey of Current Business*, July 1992, August 1993, and March 1994.

No. 1012. Recreational Vehicles—Number and Retail Value of Shipments: 1970 to 1992

ITEM	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
NUMBER (1,000)												
Total	**380.3**	**339.6**	**181.4**	**398.2**	**359.2**	**379.5**	**400.2**	**427.3**	**395.7**	**354.5**	**300.5**	**389.8**
Motorized homes	30.3	96.6	99.9	257.3	233.5	249.6	255.7	277.1	261.6	226.5	172.6	226.3
Travel trailers	138.0	150.6	52.0	92.4	82.9	86.0	92.8	96.9	90.3	87.6	84.4	109.6
Folding camping trailers	116.1	48.1	24.5	40.9	35.9	36.5	41.6	42.3	33.9	30.7	33.9	43.3
Truck campers	95.9	44.3	5.0	7.6	6.9	7.4	10.1	11.0	9.9	9.7	9.6	10.6
RETAIL VALUE (mil. dol.)												
Total	**1,122**	**2,320**	**1,952**	**7,610**	**7,029**	**7,564**	**8,400**	**9,188**	**9,027**	**8,223**	**6,739**	**8,903**
Motorized homes	318	1,251	1,381	6,262	5,724	6,155	6,826	7,543	7,420	6,660	5,284	6,963
Travel trailers	445	856	485	1,157	1,122	1,213	1,331	1,381	1,378	1,342	1,250	1,653
Folding camping trailers	175	101	69	145	137	144	167	175	147	134	146	189
Truck campers	183	112	17	46	46	53	76	88	81	86	87	99

Source: Recreation Vehicle Industry Association, Reston, VA, *RV's ... A Year-End Report/1989*. Data also in American Automobile Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual.

No. 1013. Roadway Congestion: 1990

[Various Federal, State, and local information sources were used to develop the data base with the primary source being the Federal Highway Administration's Highway Performance Monitoring System]

URBANIZED AREAS	DAILY VEHICLE MILES OF TRAVEL		VEHICLE HOURS OF DELAY		CONGESTION COST		Delay and fuel cost (mil. dol.)
	Total miles (1,000)	Per lane-mile of freeway	Total hours	Per 1,000 persons	Per reg. vehicle (dol.)	Per capita (dol.)	
Total, Average	15,780	12,520	200,120	80	480	340	860
Northeastern cities	25,490	12,660	421,600	90	710	380	1,820
Baltimore, MD	15,800	12,640	127,010	60	530	270	550
Boston, MA	21,610	14,220	337,070	110	880	490	1,460
Hartford, CT	6,230	10,730	30,470	50	250	220	130
New York, NY	82,920	14,050	1,508,760	90	1,090	390	6,560
Philadelphia, PA	18,330	12,140	275,870	70	420	270	1,160
Pittsburgh, PA	8,200	8,200	119,040	60	400	270	500
Washington, DC	25,340	16,610	552,990	180	1,420	770	2,370
Midwestern cities	14,370	11,720	115,850	40	290	190	500
Chicago, IL	38,030	15,680	528,770	70	570	300	2,280
Cincinnati, OH	11,380	12,570	42,060	40	200	160	190
Cleveland, OH	13,700	12,450	48,220	30	140	120	210
Columbus, OH	8,350	10,440	40,430	50	230	200	170
Detroit, MI	22,650	13,320	360,540	90	530	380	1,530
Indianapolis, IN	8,050	10,590	17,420	20	130	80	80
Kansas City, MO	12,560	9,230	28,160	20	160	100	120
Louisville, KY	6,200	10,500	20,610	30	190	110	90
Milwaukee, WI	7,690	12,920	46,410	40	370	160	200
Minneapolis-St. Paul, MN	17,790	12,020	102,620	50	270	220	440
Oklahoma City, OK	6,940	9,630	21,310	30	190	120	90
St. Louis, MO	19,120	11,280	133,630	70	540	290	560
Southern cities	7,000	11,710	86,290	80	390	330	370
Atlanta, GA	24,260	14,190	233,830	120	640	530	1,000
Charlotte, NC	2,300	7,670	34,020	80	390	320	150
Ft. Lauderdale, FL	7,110	11,840	70,740	60	290	240	300
Jacksonville, FL	5,380	11,960	55,790	80	400	330	240
Memphis, TN	4,340	11,130	20,580	20	140	100	90
Miami, FL	8,570	14,170	230,700	120	680	520	970
Nashville, TN	5,000	10,200	40,640	70	340	310	170
New Orleans, LA	4,970	13,810	68,860	60	340	270	300
Norfolk, VA	5,450	11,720	74,680	80	390	350	320
Orlando, FL	5,950	10,080	71,790	80	420	360	310
Tampa, FL	3,630	12,100	47,540	70	310	290	200
Southwestern cities	10,000	11,640	109,560	70	380	300	470
Albuquerque, NM	2,400	11,160	20,680	40	210	170	90
Austin, TX	5,440	12,090	47,410	90	410	410	210
Corpus Christi, TX	1,560	8,430	2,690	10	50	40	10
Dallas, TX	23,680	13,850	257,570	130	750	570	1,120
Denver, CO	11,270	12,730	135,400	90	420	370	580
El Paso, TX	3,330	9,510	9,320	20	120	80	40
Fort Worth, TX	11,840	11,610	97,240	80	420	350	420
Houston, TX	28,230	14,700	383,250	130	750	570	1,650
Phoenix, AZ	7,670	12,270	177,570	90	630	400	750
Salt Lake City, UT	5,330	10,450	15,070	20	90	80	70
San Antonio, TX	9,280	11,250	58,990	50	290	220	260
Western cities	27,920	15,540	390,040	130	760	550	1,690
Honolulu, HI	4,620	13,590	53,180	80	470	360	240
Los Angeles, CA	110,350	21,100	1,780,170	160	980	670	7,670
Portland, OR	7,470	13,460	77,700	80	500	330	340
Sacramento, CA	9,260	12,350	81,400	70	280	320	350
San Bernardino-River, CA	14,580	16,290	236,880	200	1,320	880	1,030
San Diego, CA	27,690	16,050	152,600	70	480	290	670
San Francisco-Oakland, CA	42,590	17,820	644,570	180	930	780	2,810
San Jose, CA	15,780	13,600	223,170	160	960	690	970
Seattle-Everett, WA	18,920	15,640	260,710	150	880	660	1,140

Source: Texas Transportation Institute, College Station, Texas; *Roadway Congestion in Major Urban Areas*, annual (copyright).

No. 1014. Motor Vehicle Accidents—Number and Deaths: 1972 to 1992

[See also *Historical Statistics, Colonial Times to 1970*, series Q 208 and Q 224-232]

ITEM	Unit	1972 [1]	1980	1985	1987	1988	1989	1990	1991	1992
Motor vehicle accidents [2]	Million	17.0	17.9	19.3	20.8	20.6	12.8	11.5	11.3	10.0
Cars	Million	24.5	22.8	25.6	25.9	28.2	15.3	14.3	13.7	14.2
Trucks	Million	3.5	5.5	6.1	6.0	6.8	6.5	4.4	4.7	5.3
Motorcycles	1,000	343	560	480	380	370	211	180	239	208
Motor vehicle deaths within 1 yr. [3]	1,000	56.3	53.2	45.9	48.3	49.1	47.6	46.8	43.5	40.3
Noncollision accidents	1,000	15.8	14.7	12.6	5.2	5.3	4.9	4.9	4.6	4.2
Collision accidents:										
With other motor vehicles	1,000	23.9	23.0	19.9	20.7	20.9	20.3	19.9	18.6	17.4
With pedestrians	1,000	10.3	9.7	8.5	7.5	7.7	7.8	7.3	6.7	6.5
With fixed objects	1,000	3.9	3.7	3.2	13.2	13.4	12.9	13.1	12.0	10.9
Deaths within 30 days [4]	1,000	54.6	51.1	43.8	46.4	47.1	45.6	44.6	41.5	39.2
Vehicle occupants	1,000	41.4	36.8	31.5	34.5	35.5	34.9	33.9	31.9	30.5
Pedestrians	1,000	9.2	8.1	6.8	6.7	6.9	6.6	6.5	5.8	5.5
Motorcyclists [5]	1,000	3.0	5.1	4.6	4.0	3.7	3.1	3.2	2.8	2.4
Bicyclists	1,000	1.0	1.0	0.9	0.9	0.9	0.8	0.9	0.8	0.7
Traffic death rates: [4 6]										
Per 100,000 resident population	Rate	26.2	22.6	18.4	19.1	19.2	18.4	17.9	16.5	15.4
Per 100,000 registered vehicles	Rate	44.5	31.6	24.8	25.2	24.9	23.6	23.1	21.6	20.2
Per 100 million vehicle miles	Rate	4.3	3.3	2.5	2.4	2.3	2.2	2.1	1.9	1.8
Per 100,000 licensed drivers	Rate	46.1	35.2	27.9	28.7	28.9	27.6	26.7	24.6	22.7
Motor vehicle accidents [7]	Million	24.9	24.1	32.5	33.9	34.2	34.4	33.4	31.3	31.8
Injuries [7]	1,000	5,190	5,230	5,044	5,400	5,500	5,560	5,560	5,285	5,445
Economic loss [7 8]	Bil. dol.	28.7	57.1	76.0	85.0	89.0	93.9	95.9	93.8	98.1

[1] Represents peak year for deaths from motor vehicle accidents. [2] Covers only accidents occurring on the road. [3] Deaths that occur within 1 year of accident. Includes collision categories not shown separately. [4] Within 30 days of accident. Source: U.S. National Highway Traffic Safety Administration, unpublished data from Fatal Accident Reporting System. [5] Includes motor scooters and motorized bicycles (mopeds). [6] Based on 30-day definition of traffic deaths. [7] Source: Insurance Information Institute, New York, NY, *Insurance Facts*. Estimates based on official reports from a representative cross-section of States. Includes all motor vehicle accidents on and off the road and all injuries regardless of length of disability. [8] Wage loss; legal, medical, hospital, and funeral expenses; insurance administrative costs; and property damage.

Source: Except as noted, National Safety Council, Chicago, IL, *Accident Facts*, annual (copyright).

No. 1015. Motor Vehicle Deaths, by State: 1985 to 1992

[Includes both traffic and nontraffic motor vehicle deaths. See source for definitions]

REGION DIVISION STATE	1985	1990	1991	1992	MILEAGE RATE [1] 1985	MILEAGE RATE [1] 1992	REGION DIVISION STATE	1985	1990	1991	1992	MILEAGE RATE [1] 1985	MILEAGE RATE [1] 1992
U.S.	**45,901**	**47,151**	**43,500**	**40,300**	**2.6**	**1.8**	DC	96	91	63	(NA)	3.0	(NA)
							VA	1,021	1,091	937	839	2.1	1.3
Northeast	**6,797**	**6,610**	**5,819**	**5,403**	**(NA)**	**(NA)**	WV	461	502	414	420	3.6	2.5
N.E	**1,873**	**1,617**	**1,400**	**1,292**	**(NA)**	**(NA)**	NC	1,553	1,489	1,365	1,262	3.1	2.4
ME	224	215	202	213	2.4	1.7	SC	943	987	890	807	3.5	2.3
NH	198	154	144	123	2.6	1.2	GA	1,462	1,659	1,393	1,323	2.7	1.8
VT	117	94	106	96	2.5	1.6	FL	2,968	3,049	2,519	2,480	3.4	2.1
MA	761	655	550	485	1.9	1.0	**E.S.C.**	**3,664**	**4,259**	**3,749**	**3,579**	**(NA)**	**(NA)**
RI	124	104	88	79	2.1	1.1	KY	749	850	828	819	2.6	2.3
CT	449	395	310	296	2.0	1.1	TN	1,219	1,312	1,112	1,155	3.4	2.4
M.A.	**4,924**	**4,993**	**4,419**	**4,111**	**(NA)**	**(NA)**	AL	1,005	1,234	1,108	1,001	2.9	2.3
NY	2,121	2,318	1,973	1,800	2.3	1.6	MS	691	863	701	604	3.6	2.4
NJ	986	908	795	766	1.9	1.3	**W.S.C**	**6,197**	**5,713**	**5,154**	**5,134**	**(NA)**	**(NA)**
PA	1,817	1,767	1,661	1,545	2.4	1.7	AR	580	625	608	587	3.4	2.6
Midwest	**9,760**	**10,248**	**9,169**	**8,565**	**(NA)**	**(NA)**	LA	1,011	1,023	824	871	3.0	2.4
E.N.C	**6,602**	**6,913**	**6,218**	**5,656**	**(NA)**	**(NA)**	OK	781	684	643	619	2.5	1.8
OH	1,581	1,708	1,544	1,440	2.1	1.5	TX	3,825	3,381	3,079	3,057	2.7	1.9
IN	1,045	1,097	1,020	902	2.6	1.6	**West**	**10,352**	**10,561**	**9,031**	**8,026**	**(NA)**	**(NA)**
IL	1,594	1,650	1,451	1,375	2.3	1.6	**Mt.**	**3,409**	**3,379**	**2,982**	**2,861**	**(NA)**	**(NA)**
MI	1,605	1,633	1,409	1,295	2.4	1.5	MT	233	225	200	190	3.1	2.2
WI	777	825	794	644	2.1	1.4	ID	268	259	263	243	3.5	2.3
W.N.C	**3,158**	**3,335**	**2,951**	**2,909**	**(NA)**	**(NA)**	WY	145	130	122	118	2.7	1.9
MN	657	644	534	581	2.0	1.4	CO	628	583	542	519	2.4	1.8
IA	478	481	491	437	2.4	1.8	NM	561	534	469	461	4.2	2.7
MO	1,005	1,174	1,010	985	2.6	1.9	AZ	942	947	816	810	4.4	2.3
ND	117	128	94	88	2.2	1.4	UT	335	296	273	269	2.8	1.7
SD	142	166	143	161	2.3	2.3	NV	297	405	297	251	3.9	2.3
NE	259	289	275	270	2.1	1.9	**Pac.**	**6,943**	**7,182**	**6,049**	**5,165**	**(NA)**	**(NA)**
KS	500	453	404	387	2.6	1.6	WA	786	875	682	651	2.3	1.4
South.	**19,250**	**19,732**	**17,295**	**16,648**	**(NA)**	**(NA)**	OR	605	608	483	464	2.8	1.7
S.A	**9,389**	**9,760**	**8,392**	**7,935**	**(NA)**	**(NA)**	CA	5,294	5,411	4,649	3,816	2.6	1.4
DE	119	151	103	140	2.2	2.1	AK	124	102	100	106	3.2	2.6
MD	766	741	708	664	2.3	1.6	HI	134	186	135	128	2.0	1.5

NA Not available. [1] Deaths per 100 million vehicle miles.

Source: 1985: National Center for Health Statistics; thereafter, National Safety Council, Itasca, IL, *Accident Facts*, annual (copyright).

No. 1016. Fatal Motor Vehicle Accidents—National Summary: 1980 to 1992

[Based on data from the Fatal Accident Reporting System (FARS). FARS gathers data on accidents that result in loss of human life. FARS is operated and maintained by National Highway Traffic Safety Administration's (NHTSA) National Center for Statistics and Analysis (NCSA). FARS data are gathered on motor vehicle accidents that occurred on a roadway customarily open to the public, resulting in the death of a person within 30 days of the accident. Collection of these data depend on the use of police, hospital, medical examiner/coroner, and Emergency Medical Services reports; State vehicle registration, driver licensing, and highway department files; and vital statistics documents and death certificates. See source for further detail]

ITEM	1980	1985	1987	1988	1989	1990	1991	1992
Fatal accidents, total	**45,284**	**39,196**	**41,438**	**42,130**	**40,741**	**39,836**	**36,937**	**34,928**
One vehicle involved	28,306	22,875	24,154	24,716	23,742	23,445	21,910	20,378
Two or more vehicles involved	16,978	16,321	17,284	17,414	16,999	16,391	15,027	14,550
Persons killed in fatal accidents	**51,091**	**43,825**	**46,390**	**47,087**	**45,582**	**44,599**	**41,508**	**39,235**
Occupants	41,927	36,043	38,565	39,170	38,087	37,134	34,740	32,869
Drivers	28,816	25,337	26,833	27,253	26,389	25,750	23,930	22,583
Passengers	12,972	10,619	11,623	11,805	11,624	11,276	10,688	10,201
Other	139	87	109	112	74	108	122	85
Nonmotorists	9,164	7,782	7,825	7,917	7,495	7,465	6,768	6,366
Pedestrians	8,070	6,808	6,745	6,870	6,556	6,482	5,801	5,546
Pedalcyclists	965	890	948	911	832	859	843	722
Other	129	84	132	136	107	124	124	98
Occupant fatalities by type of vehicle, total	**41,927**	**36,043**	**38,565**	**39,170**	**38,087**	**37,134**	**34,740**	**32,869**
Passenger cars	27,449	23,212	25,132	25,808	25,063	24,092	22,385	21,366
Mini-compact	3,141	3,571	3,815	3,813	3,812	3,556	3,039	2,705
Subcompact	4,158	4,422	5,007	4,975	4,928	4,753	4,655	4,323
Compact	927	2,635	3,943	4,764	5,099	5,310	5,338	5,349
Intermediate	3,878	4,391	4,917	5,016	5,055	4,849	4,681	4,416
Full size	4,831	2,974	2,937	2,840	2,641	2,386	2,073	2,119
Largest size	6,746	3,612	3,160	2,904	2,610	2,249	1,967	1,674
Unknown	3,768	1,607	1,353	1,496	929	989	632	780
Motorcycles	4,961	4,417	3,834	3,492	3,036	3,129	2,703	2,293
Other motorized cycles	183	147	202	170	105	115	103	101
Multipurpose vehicles	895	855	1,050	1,040	1,135	1,214	1,476	1,331
Light trucks	6,591	5,834	7,008	7,266	7,416	7,387	6,915	6,751
Pickup	5,483	4,640	5,502	5,880	5,870	5,979	5,671	5,376
Van	1,000	791	1,025	1,001	1,214	1,154	1,154	1,285
Medium trucks	285	157	125	125	128	134	115	98
Heavy trucks	977	820	727	786	730	571	546	486
Buses	46	57	51	54	50	32	31	28
Other vehicles	257	333	293	310	277	296	328	415
Unknown	283	211	143	119	147	164	138	96
Persons involved in fatal accidents	**113,289**	**104,045**	**111,457**	**112,958**	**109,866**	**107,777**	**99,369**	**95,628**
Occupants	103,049	95,482	102,644	104,086	101,401	99,297	91,707	88,308
Drivers	62,957	57,883	61,442	62,253	6,435	58,893	54,391	51,881
Passengers	39,892	37,477	41,013	41,656	40,816	40,229	37,108	36,290
Other	200	122	189	177	150	175	208	137
Nonoccupants	10,240	8,563	8,813	8,872	8,465	8,480	7,662	7,320
Vehicle miles traveled (VMT) (100 million)	15,273	17,742	19,212	20,256	21,070	21,444	21,721	22,398
Licensed drivers (1,000)	145,295	156,868	161,818	162,853	165,555	167,015	168,995	173,125
Registered vehicles (1,000)	161,490	177,098	183,872	188,981	191,694	192,915	192,314	194,427
Fatalities by road type	(NA)	(NA)	46,390	47,087	45,582	44,599	41,508	39,235
Interstate	4,427	4,148	4,634	5,142	4,971	4,993	4,574	4,324
Federal-aid primary	(NA)	14,526	15,561	15,185	14,732	14,203	13,158	12,035
Federal-aid secondary	(NA)	6,429	6,597	6,919	6,769	6,892	6,249	5,844
Federal-aid urban	(NA)	8,116	8,432	8,534	8,398	8,432	7,511	6,573
Non-Federal-aid	(NA)	10,408	11,004	10,844	10,579	10,039	9,924	8,808
Unknown	(NA)	198	162	463	133	40	92	1,651
Fatality rate by age group:								
Under 5 years old	6.9	5.2	5.4	5.4	5.4	4.9	4.6	4.3
5 years to 15 years old	8.7	7.4	7.8	7.4	7.0	6.4	6.1	5.8
16 years to 24 years old	46.0	37.1	38.8	40.0	36.7	35.2	33.0	29.5
25 years to 44 years old	24.6	19.6	20.6	20.3	20.0	19.7	17.7	16.6
45 years to 64 years old	17.2	14.5	14.9	15.0	15.0	14.9	13.5	13.1
65 years to 79 years old	19.6	18.0	18.8	19.5	19.1	18.8	18.0	17.9
80 years old and over	25.3	25.1	27.1	29.1	28.8	26.8	26.9	25.9
Fatal accidents by the highest blood alcohol concentration (BAC) in accident:								
0.00 percent	(NA)	48.5	49.3	50.1	51.1	50.6	52.1	54.8
0.01 to 0.09 percent	(NA)	10.3	10.7	10.2	9.8	9.7	9.4	9.0
0.10 percent and over	(NA)	41.2	40	39.7	39.1	39.7	38.5	36.1
National rates:								
Fatalities per 100 million VMT	3.3	2.5	2.4	2.3	2.2	2.1	1.9	1.8
Fatalities per 100,000 licensed drivers	35.2	27.9	28.7	28.9	27.5	26.7	24.6	22.7
VMT per registered vehicle	9,458	10,018	10,445	10,718	10,936	11,107	11,294	11,520
Fatal accidents per 100 million VMT	2.9	2.2	2.2	2.1	1.9	1.9	1.7	1.6
Involved vehicles per fatal crash	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.5

NA Not available.

Source: National Highway Traffic Safety Administration, *Fatal Accident Reporting System*, annual.

No. 1017. Highway Mileage, Vehicle Miles of Travel, Accidents, and Fatalities, 1975 to 1992, and by Type of Highway System, 1992

YEAR AND TYPE OF SYSTEM	Highway mileage (1,000)	Vehicle miles of travel (bil.)	Daily vehicle miles per mile	FATAL ACCIDENTS		NONFATAL INJURY ACCIDENTS		FATALITIES [2]	
				Number	Rate [1]	Number (1,000)	Rate [1]	Number	Rate [1]
1975	3,638	1,328	948	39,993	3.01	1,861	140	44,525	3.43
1980	3,857	1,527	1,082	45,284	2.96	2,008	131	51,091	3.35
1985	3,862	1,774	1,259	39,168	2.21	2,219	125	43,825	2.47
1986	3,880	1,835	1,298	41,062	2.23	2,254	123	46,087	2.51
1987	3,874	1,921	1,361	41,434	2.15	2,294	119	46,390	2.41
1988	3,871	2,026	1,430	42,119	2.08	2,302	114	47,087	2.32
1989	3,877	2,096	1,489	40,718	1.93	2,384	113	45,582	2.16
1990	3,880	2,148	1,516	39,779	1.85	2,501	116	44,529	2.07
1991	3,889	2,172	1,530	36,895	1.70	2,210	102	41,462	
1992, total	**3,902**	**2,240**	**1,568**	**34,928**	**1.56**	**2,216**	**98.93**	**39,235**	**1.75**
Urban	785	1,359	4,730	15,202	1.12	1,586	116.70	16,486	1.21
Rural	3,117	881	772	19,726	2.24	630	71.51	22,749	2.58
Interstate	45	507	30,783	3,746	0.74	160	31.56	4,339	0.86
Urban	12	302	68,761	1,670	0.55	118	39.07	1,865	0.62
Rural	33	205	16,973	2,076	1.01	42	20.49	2,474	1.21
Noninterstate	3,857	1,733	1,228	31,182	1.80	2,056	118.64	34,896	2.01
Urban	772	1,057	3,741	13,532	1.28	1,468	138.88	14,621	1.38
Rural	3,084	676	599	17,650	2.61	588	86.98	20,275	3.00

[1] Rate per 100 million vehicle miles of travel. [2] Represents fatalities occurring within 30 days of accident. Excludes nontraffic accidents which, for example, occur outside the rights-of-way or other boundaries of roads that are open for public use.

Source: U.S. Federal Highway Administration, *Fatal and Injury Accident Rates on Public Roads in the United States*, annual.

No. 1018. Motor Vehicle Safety Defect Recalls, by Domestic and Foreign Manufacturers: 1980 to 1993

[Covers manufacturers reporting to U.S. National Highway Traffic Administration under section 151 of National Traffic and Motor Vehicle Safety Act of 1966, as amended]

MANUFACTURER	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Motor vehicles:											
Total recall campaigns [1]	**Number**	**167**	**173**	**173**	**199**	**197**	**237**	**208**	**220**	**187**	**221**
Domestic	Number	129	137	138	150	152	182	159	169	142	178
Foreign	Number	38	36	35	49	45	55	49	51	45	43
Total vehicles recalled	**1,000**	**4,868**	**5,629**	**2,879**	**9,091**	**4,486**	**7,137**	**5,985**	**8,279**	**10,122**	**10,938**
Domestic	1,000	3,943	4,995	1,730	7,298	3,171	6,173	4,070	6,646	6,545	7,671
Vehicles recalled by four leading auto manufacturers	1,000	3,735	4,811	1,382	6,946	[2]2,900	5,855	3,926	6,303	5,880	7,345
Foreign	1,000	925	634	1,149	1,793	1,315	964	1,915	1,633	3,577	3,267
Motor vehicle tires:											
Recall campaigns [1]	Number	24	19	14	16	12	11	13	12	7	5
Tires recalled	1,000	7,070	28	164	42	215	115	172	153	8	6

[1] A recall campaign is the notification to the Secretary of the U.S. Dept. of Transportation and to owners, purchasers, and dealers of motor vehicles and motor vehicle equipment. [2] Three leading automobile manufacturers.

Source: U.S. National Highway Traffic Safety Administration, *Motor Vehicles Recall Campaigns*, annual.

No. 1019. Cost of Owning and Operating an Automobile: 1980 to 1992

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992
Cost per mile [1]	Cents	27.95	27.20	32.64	33.40	38.20	40.96	43.64	45.77
Cost per 10,000 miles [1]	Dollars	2,795	2,720	3,264	3,341	3,820	4,096	4,364	4,577
Variable cost	Cents/mile	7.62	8.04	7.20	7.60	7.90	8.40	9.80	9.10
Gas and oil	Cents/mile	5.86	6.16	4.80	5.20	5.20	5.40	6.70	6.00
Maintenance	Cents/mile	1.12	1.23	1.60	1.60	1.90	2.10	2.20	2.20
Tires	Cents/mile	0.64	0.65	0.80	0.80	0.80	0.90	0.90	0.90
Fixed cost	Dollars	2,033	2,441	2,782	3,061	3,534	3,877	4,217	4,538
Insurance	Dollars	490	503	535	573	663	675	726	747
License and registration	Dollars	82	115	140	139	151	165	169	179
Depreciation	Dollars	1,038	1,253	1,506	1,784	2,094	2,357	2,543	2,780
Finance charge	Dollars	423	570	601	565	626	680	779	832

[1] Beginning 1985, not comparable to previous data.

Source: American Automobile Manufacturers Association Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual (copyright).

No. 1020. State Legislation—Alcohol and Road Safety Laws: Various Years

REGION, DIVISION, AND STATE	ALCOHOL LEGISLATION			MANDATORY BELT USE LAW			Child safety seat law date [5]	Motorcycle helmet law [6]	65 SPEED LIMIT	
	21 year drinking age since [1]	Open container law [2]	BAC limit [3]	Effective date	Enforcement [4]	Seating positions			Effective date [7]	Applicable vehicles
Northeast:										
N.E:										
ME	1985	no	0.08	none	(X)	(X)	9/83	[8 9]15	6/87	all
NH	1985	yes	0.10	none	(X)	(X)	7/89	18	4/87	all
VT	1986	no	0.08	none	(X)	(X)	7/84	yes	4/87	all
MA	1985	yes	0.10	repealed	(X)	(X)	1/82	yes	12/91	all
RI	1984	no	[10]0.10	7/91	2	all	7/87	([11])	none	(X)
CT	1985	no	0.10	1/86	1	front	1982	18	none	(X)
M.A:										
NY	1985	no	0.10	12/84	1	front	4/82	yes	none	(X)
NJ	1982	yes	0.10	3/85	2	front	4/83	yes	none	(X)
PA	1935	no	0.10	11/87	2	front	11/83	yes	none	(X)
Midwest:										
E.N.C:										
OH	1987	yes	[10]0.10	5/86	2	front	6/83	[9]18	7/87	some
IN	1935	no	0.10	7/87	2	front	1/84	18	6/87	some
IL	1980	yes	0.10	7/85	2	front	7/83	no	4/87	some
MI	1978	yes	0.10	7/85	2	all	3/82	yes	12/87	some
WI	1986	yes	[10]0.10	12/87	1	front	4/84	[8]18	6/87	all
W.N.C:										
MN	1986	yes	0.10	8/86	2	front	8/83	[8]18	6/87	all
IA	1986	yes	0.10	7/86	1	front	1/85	no	5/87	all
MO	1945	no	0.10	9/85	2	front	1/84	yes	4/87	some
ND	1936	yes	0.10	none	(X)	(X)	1/84	18	4/87	all
SD	1987	yes	0.10	none	(X)	(X)	7/84	18	4/87	all
NE	1985	no	0.10	1/93	2	front	8/83	yes	4/87	all
KS	1985	yes	0.10	7/86	2	front	7/81	18	5/87	some
South:										
S.A:										
DE	1983	yes	0.10	1/92	2	front	6/82	[8 12]19	none	(X)
MD	1982	no	0.10	7/86	2	[13]front	1/84	yes	none	(X)
DC	1986	no	0.10	12/85	2	[13]front	7/83	yes	none	(X)
VA	1986	no	0.10	1/88	2	front	1/83	yes	7/88	some
WV	1986	no	0.10	none	(X)	(X)	7/81	yes	5/87	all
NC	1986	yes	0.10	10/85	1	front	7/85	yes	4/87	all
SC	1986	yes	0.10	7/89	2	front	1/89	21	7/87	all
GA	1986	yes	0.10	9/88	2	front	7/84	yes	2/88	all
FL	1985	yes	0.10	7/86	2	front	7/83	yes	4/87	all
E.S.C:										
KY	1936	no	0.10	none	(X)	(X)	7/82	yes	6/87	all
TN	1984	no	0.10	4/86	2	front	1/78	yes	5/87	all
AL	1985	no	0.10	7/92	2	front	1982	yes	1987	all
MS	1986	no	0.10	3/90	1	front	7/83	yes	4/87	all
W.S.C:										
AR	1957	no	0.10	7/91	2	front	8/83	yes	4/87	all
LA	1987	no	0.10	7/86	2	front	1/85	yes	4/87	all
OK	1983	yes	0.10	2/87	2	front	11/83	18	4/87	all
TX	1985	no	0.10	9/85	1	front	1/85	yes	5/87	some
West:										
Mountain:										
MT	1987	no	0.10	10/87	2	all	10/83	18	4/87	all
ID	1987	[14]Yes	0.10	7/86	2	front	1/85	18	5/87	all
WY	1988	no	0.10	6/89	2	front	4/85	18	5/87	all
CO	1987	no	0.10	7/87	2	front	1/84	no	4/87	all
NM	1934	yes	0.10	1/86	1	front	5/83	18	4/87	all
AZ	1984	no	0.10	1/91	2	front	1984	18	4/87	all
UT	1935	yes	0.08	4/86	2	front	4/83	18	5/87	all
NV	1933	yes	0.10	7/87	2	all	7/83	yes	4/87	all
Pacific:										
WA	1934	yes	0.10	6/86	2	all	1/84	yes	4/87	some
OR	1935	yes	[10]0.08	12/90	1	all	1/84	yes	10/87	some
CA	1933	yes	0.08	1/86	1	all	1/83	yes	5/87	some
AK	1983	yes	0.10	9/90	2	all	6/85	18	8/92	all
HI	1986	Yes	0.10	12/85	1	front	1983	18	none	(X)

X Not applicable. [1] Year in which original law became effective, not when grandfather clauses expired. [2] Law prohibiting open liquor containers in motor vehicles. [3] Percent blood alcohol concentration (BAC) which constitutes the threshold of legal intoxication. [4] "1" indicates primary enforcement (law can be enforced on its own), "2" indicates secondary enforcement. (Law enforced only if vehicle stopped for a separate offense.) [5] Effective data of original law, not of subsequent revisions. [6] Presence of law or age below which riders are required to wear helmet. [7] Includes administrative action as well as legislation. [8] Plus instruction permit holders. [9] Plus novice license holders. [10] Different legal limit for minors. [11] Passengers only. [12] Possession of helmet required by all. [13] Excluding front center seat. [14] Does not include beer.

Source: National Safety Council, Itasca, IL, *Accident Facts*, annual.

No. 1021. Estimated Arrests for Driving Under the Influence, by Age: 1980 and 1989

[Total drivers and arrests in thousands. Represents licensed drivers and arrests for those 16 years old and over]

AGE	1980			1989			Percent change in rate, 1980-89
	Drivers	Arrests	Arrests per 100,000 drivers	Drivers	Arrests	Arrests per 100,000 drivers	
Total	**145,207**	**1,425**	**981**	**165,518**	**1,735**	**1,048**	**6.9**
Percent distribution	100.0	100.0	(X)	100.0	100.0	(X)	(X)
16 to 17 years old	3.2	2.2	668	2.3	1.1	503	−24.7
18 to 24 years old	7.2	12.9	1,757	5.4	8.3	1,607	−8.5
25 to 29 years old	13.0	17.9	1,347	12.4	22.2	1,869	38.8
30 to 34 years old	12.0	13.1	1,076	12.4	17.6	1,486	38.1
35 to 39 years old	9.4	9.6	996	11.2	12.0	1,123	12.8
40 to 44 years old	7.7	7.4	944	9.7	8.1	872	−7.6
45 to 49 years old	6.9	5.9	837	7.6	5.3	725	−13.4
50 to 54 years old	6.9	4.9	686	6.2	3.3	558	−18.7
55 to 59 years old	6.7	3.5	509	5.7	2.2	400	−21.4
60 to 64 years old	5.7	1.9	335	5.6	1.4	262	−21.8
65 years old and over	10.7	1.5	140	13.0	1.2	100	−28.6

X Not applicable.

Source: U.S. Bureau of Justice Statistics, *Drunk Driving, Special Report.*

No. 1022. Licensed Drivers, Fatal Motor Vehicle Accidents, and Alcohol Involvement, by Age of Driver: 1991

ITEM	Unit	Total	AGE OF DRIVER							
			16-17 years	18-21 years	22-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Licensed drivers (estimated) [1]	1,000	168,995	3,463	11,809	10,191	40,322	36,987	24,514	18,705	22,939
Percent distribution	Percent	100.0	2.0	7.0	6.0	23.9	21.9	14.5	11.1	13.6
Licensed drivers involved in fatal accidents	Number	58,893	2,651	8,112	5,253	15,764	10,177	5,867	4,068	5,501
Percent distribution	Percent	100.0	4.5	13.8	8.9	26.8	17.3	10.0	6.9	9.3
Drinking drivers involved in fatal accidents	Number	14,060	355	2,483	1,774	4,805	2,509	1,084	492	452
Percent distribution	Percent	100.0	2.5	17.7	12.6	34.2	17.8	7.7	3.5	3.2

[1] Source: U.S. Federal Highway Administration, *Selected Highway Statistics and Charts,* annual.

No. 1023. Police-Reported Traffic Accidents, by Age Group: 1992

[Based on probability sample of police-reported accidents. See source for details]

ITEM	Total	15 yrs. and under	16 to 20 yrs.	21 to 24 yrs.	25 to 34 yrs.	35 to 44 yrs.	45 to 54 yrs.	55 to 64 yrs.	65 yrs. and older
Accident-involved	10,484,000	45,000	1,788,000	1,336,000	2,665,000	1,950,000	1,212,000	701,000	787,000
Percent male	62	63	63	62	61	60	63	64	63
Percent female	38	37	37	38	39	40	37	36	37
Percent alcohol-involved	5	2	3	4	5	4	3	2	1
Passengers injured or killed	972,000	279,000	191,000	94,000	149,000	87,000	56,000	46,000	70,000
Percent male	42	47	51	46	41	37	29	26	23
Percent female	58	53	49	54	59	63	71	74	77
Pedestrians injured or killed	85,000	32,000	7,000	6,000	12,000	11,000	7,000	3,000	7,000
Percent during day	67	78	57	67	50	55	57	67	86
Percent at night	33	22	43	33	50	45	43	33	14
Pedalcyclists injured or killed	62,000	29,000	7,000	7,000	9,000	5,000	2,000	2,000	1,000

Source of tables 1022 and 1023: Except as noted, U.S. National Highway Traffic Safety Administration, *General Estimates System,* annual; and unpublished data.

No. 1024. Domestic Motor Fuel Consumption, by Type of Vehicle: 1970 to 1992

[Comprises all fuel types used for propulsion of vehicles under State motor fuels laws. Excludes Federal purchases for military use. Minus sign (-) indicates decrease. See also *Historical Statistics, Colonial Times to 1970*, series Q 156-162]

YEAR	FUEL CONSUMPTION					AVG. FUEL CONSUMPTION PER VEHICLE (gal.)			AVG. MILES PER GALLON		
	All vehicles (bil. gal.)	Avg. annual percent change [1]	Cars [2] (bil. gal.)	Buses [3] (bil. gal.)	Trucks [4] (bil. gal.)	Cars [2]	Buses [3]	Trucks [4]	Cars [2]	Buses [3]	Trucks [4]
1970	92.3	5.4	67.8	0.8	23.6	760	2,172	1,257	13.52	5.54	7.85
1975	109.0	2.5	76.4	1.1	31.4	716	2,279	1,217	13.52	5.75	8.99
1980	115.0	-5.9	71.9	1.0	41.9	591	1,926	1,243	15.46	5.95	9.54
1981	114.5	-0.4	71.0	1.1	42.2	576	1,938	1,219	15.94	5.92	9.59
1982	113.4	-0.9	70.1	1.0	42.1	566	1,756	1,191	16.65	5.93	9.80
1983	116.1	2.4	69.9	0.9	45.1	553	1,507	1,229	17.14	5.92	9.77
1984	118.7	2.3	68.7	0.8	49.0	536	1,359	1,308	17.83	5.85	9.83
1985	121.3	2.2	69.3	0.8	51.0	525	1,407	1,302	18.20	5.84	9.79
1986	125.2	3.2	71.4	0.9	52.9	526	1,463	1,320	18.27	5.84	9.81
1987	127.5	1.8	70.6	0.9	55.8	514	1,500	1,357	19.20	5.89	9.87
1988	130.1	2.0	71.9	0.9	57.2	509	1,496	1,345	19.95	5.93	10.16
1989	131.8	1.3	72.7	0.9	57.9	509	1,518	1,328	20.40	5.96	10.41
1990	130.8	-0.8	72.0	0.9	57.7	502	1,428	1,290	21.02	6.39	10.67
1991	128.6	-1.7	70.7	0.9	56.8	496	1,369	1,264	21.69	6.65	10.97
1992	132.9	3.2	73.9	0.9	58.0	512	1,360	1,275	21.60	6.54	10.84

[1] From prior year, except 1970, change from 1965. [2] Includes taxicabs. [3] Includes school buses. [4] Includes combinations.

Source: U.S. Federal Highway Administration, *Highway Statistics Summary to 1985*, and *Highway Statistics, annual.*

No. 1025. U.S. Vehicle, by Model Year and Vehicle Fuel Efficiency: 1991

[For composition of regions, see table 26]

1990 HOUSEHOLD CHARACTERISTICS	U.S. VEHICLES (mil.)					U.S. VEHICLE FUEL EFFICIENCY (mpg)				
	All model years	Model year				All model years	Model year			
		1991 to 1992	1990	1989	1986 to 1988		1991 to 1992	1990	1989	1986 to 1988
Total	151.2	5.5	10.5	12.5	39.0	19.3	21.8	21.5	21.8	22.0
Regions:										
Northeast	27.0	1.0	2.3	2.8	8.8	20.9	23.0	22.2	22.4	22.7
Midwest	38.4	1.3	2.7	3.0	9.6	19.0	21.0	21.2	21.0	22.2
South	52.7	2.0	3.8	4.4	12.7	19.2	21.5	21.0	22.4	21.9
West	33.2	1.2	1.9	2.3	7.8	18.9	22.1	21.8	21.0	21.3
Urban	114.3	4.5	8.5	10.2	30.8	19.8	21.8	21.9	22.1	22.2
Rural	36.9	1.0	2.0	2.4	8.2	18.0	21.6	19.6	20.6	21.5
Household size:										
1 person	22.1	0.7	1.4	1.5	4.9	19.1	(S)	21.0	21.7	23.4
2 persons	49.9	1.9	3.7	4.0	13.1	19.3	20.9	21.1	22.1	21.3
3 persons	30.3	1.1	2.0	2.8	8.5	20.1	22.5	22.3	21.8	22.9
4 persons	29.3	1.3	2.0	2.9	7.7	19.4	21.7	21.7	21.6	22.2
5 persons	13.6	0.4	0.9	0.9	3.5	18.9	(S)	21.4	21.8	21.4
6 persons or more	6.0	(S)	(S)	(S)	1.2	17.6	(S)	(S)	(S)	19.3
Households with children	65.1	2.5	4.5	5.5	16.8	19.4	21.9	21.8	22.0	22.0
Under 7 years old	19.0	0.6	1.4	1.7	5.0	20.0	(S)	22.8	21.2	23.7
7 to 15 years old	32.3	1.3	2.4	2.8	8.6	19.2	21.6	21.2	22.6	21.8
16 or 17 years old	13.8	0.6	0.8	1.1	3.2	19.1	(S)	(S)	21.6	20.2
Households without children	86.2	3.0	6.0	7.0	22.2	19.3	21.7	21.2	21.7	22.0
One adult	22.1	0.7	1.4	1.5	4.9	19.1	(S)	21.0	21.7	23.4
Under 35 years old	5.0	(S)	(S)	(S)	1.4	20.7	(S)	(S)	(S)	25.0
35 to 59 years old	7.6	(S)	0.6	(S)	1.9	19.4	(S)	(S)	(S)	23.0
60 years old or older	9.6	(S)	(S)	(S)	1.6	17.5	(S)	(S)	(S)	21.6
Two or more adults	64.0	2.3	4.5	5.5	17.2	19.4	21.3	21.2	21.7	21.7
Under 35 years old	13.2	0.7	0.7	1.4	3.3	21.1	(S)	(S)	23.9	24.3
35 to 59 years old	27.8	1.0	2.2	2.3	7.9	19.3	21.4	20.7	21.8	21.4
60 years old or older	23.1	0.6	1.6	1.7	6.0	18.3	(S)	21.4	19.8	20.4
White	135.3	5.1	9.4	11.1	35.8	19.3	21.8	21.4	21.6	21.9
Black	12.8	(S)	0.7	1.1	2.5	19.4	(S)	(S)	24.3	23.5
Other	3.1	(S)	(S)	(S)	0.6	19.3	(S)	(S)	(S)	(S)
Hispanic descent:										
Yes	9.4	(S)	(S)	(S)	2.3	18.3	(S)	(S)	(S)	20.1
No	141.8	5.3	10.0	12.0	36.6	19.4	21.8	21.4	21.8	22.1

S Figure does not meet publications standards.

Source: U.S. Energy Information Administration, *Household Vehicles Energy Consumption, 1991.*

No. 1026. Household Vehicles—Annual Mileage, Fuel Consumption, and Fuel Expenditures: 1991

1990 HOUSEHOLD CHARACTERISTICS	VEHICLES		VEHICLE MILES TRAVELED		CONSUMPTION			EXPENDITURES	
	Total (mil.)	Percent	Total (bil.)	Percent	Total (bil. gal.)	Gallon (per-cent	Btu. (quadril-lion)	Total (bil. dol.)	Percent
Total	151.2	100.0	1,602	100.0	82.8	100.0	10.3	98.2	100.0
Urban	114.3	75.6	1,219	76.1	61.5	74.3	7.6	73.3	74.6
Rural	36.9	24.4	383	23.9	21.3	25.7	2.6	25.0	25.4
Household size:									
1 person	22.1	14.6	198	12.4	10.4	12.5	1.3	12.3	12.5
2 persons	49.9	33.0	494	30.8	25.6	30.9	3.2	30.3	30.8
3 persons	30.3	20.0	339	21.2	16.9	20.4	2.1	20.1	20.5
4 persons	29.3	19.4	349	21.8	18.0	21.7	2.2	21.4	21.7
5 persons	13.6	9.0	152	9.5	8.0	9.7	1.0	9.5	9.7
6 persons or more	6.0	3.9	70	4.4	4.0	4.8	0.5	4.7	4.8
Households with children	65.1	43.0	753	47.0	38.9	46.9	4.8	46.1	46.9
Under 7 years old	19.0	12.6	214	13.4	10.7	12.9	1.3	12.7	13.0
7 to 15 years old	32.3	21.3	378	23.6	19.7	23.8	2.4	23.4	23.8
16 or 17 years old	13.8	9.1	161	10.1	8.4	10.2	1.0	10.0	10.2
Households without children	86.2	57.0	849	53.0	44.0	53.1	5.5	52.2	53.1
One adult	22.1	14.6	198	12.4	10.4	12.5	1.3	12.3	12.5
Under 35 years old	5.0	3.3	59	3.7	2.9	3.5	0.4	3.4	3.5
35 to 59 years old	7.6	5.0	81	5.1	4.2	5.0	0.5	5.0	5.0
60 years old or older	9.6	6.3	58	3.6	3.3	4.0	0.4	3.9	4.0
Two or more adults	64.0	42.3	651	40.6	33.6	40.6	4.2	39.9	40.6
Under 35 years old	13.2	8.7	156	9.8	7.4	8.9	0.9	8.8	8.9
35 to 59 years old	27.8	18.4	298	18.6	15.4	18.7	1.9	18.3	18.7
60 years old or older	23.1	15.2	197	12.3	10.7	13.0	1.3	12.8	13.0
White	135.3	89.5	1,429	89.2	73.9	89.2	9.1	87.5	89.1
Black	12.8	8.4	143	8.9	7.4	8.9	0.9	8.9	9.0
Other	3.1	2.1	30	1.9	1.6	1.9	0.2	1.8	1.9
Hispanic descent:									
Yes	9.4	6.2	95	5.9	5.2	6.3	0.6	6.1	6.3
No	141.8	93.8	1,507	94.1	77.6	93.7	9.6	92.1	93.7
1990 family income:									
Less than $10,000	12.7	8.4	110	6.8	6.1	7.3	0.7	7.2	7.2
$10,000 to $14,999	13.5	8.9	120	7.5	6.6	7.9	0.8	7.7	7.9
$15,000 to $19,999	10.9	7.2	106	6.6	5.7	6.9	0.7	6.7	6.8
$20,000 to $24,999	15.6	10.3	153	9.5	8.5	10.3	1.1	10.1	10.2
$25,000 to $34,999	27.5	18.2	284	17.7	14.9	18.0	1.8	17.7	18.0
$35,000 to $49,999	32.1	21.2	361	22.6	17.8	21.5	2.2	21.1	21.5
$50,000 to $74,999	22.9	15.1	273	17.0	13.5	16.4	1.7	16.1	16.4
$75,000 or more	16.0	10.6	196	12.3	9.7	11.7	1.2	11.7	11.9
Below poverty line:									
100 percent	11.5	7.6	110	6.9	6.1	7.4	0.8	7.2	7.3
125 percent	17.6	11.6	163	10.2	9.3	11.2	1.2	10.9	11.1
Eligible for Federal assistance	29.8	19.7	279	17.4	15.6	18.8	1.9	18.3	18.6
Number of drivers (fall 1990):									
1	34.6	22.9	321	20.0	16.8	20.3	2.1	20.0	20.3
2	86.7	57.3	934	58.3	48.5	58.6	6.0	57.5	58.6
3	22.0	14.5	258	16.1	13.0	15.7	1.6	15.5	15.8
4 or more	7.2	4.7	84	5.2	4.2	5.1	0.5	4.9	5.0
Age of primary driver:									
16 to 17 years old	0.7	0.5	8	0.5	0.4	0.4	(Z)	0.4	0.4
18 to 22 years old	4.5	3.0	50	3.1	2.3	2.8	0.3	2.7	2.7
23 to 29 years old	9.6	6.3	117	7.3	5.6	6.8	0.7	6.7	6.8
30 to 39 years old	23.5	15.5	284	17.7	13.8	16.6	1.7	16.3	16.6
40 to 49 years old	18.1	12.0	219	13.7	11.3	13.6	1.4	13.4	13.7
50 to 59 years old	14.0	9.2	151	9.4	8.1	9.7	1.0	9.6	9.8
60 to 69 years old	12.2	8.0	100	6.3	5.4	6.6	0.7	6.5	6.6
70 to 79 years old	8.0	5.3	58	3.6	3.3	4.0	0.4	3.9	4.0
80 years old and over	2.2	1.5	12	0.7	0.7	0.8	0.1	0.8	0.8
No answer	58.5	38.7	604	37.7	32.0	38.7	4.0	37.9	38.6
Sex of primary driver:									
Female	44.0	29.1	483	30.1	22.9	27.6	2.8	27.2	27.7
Male	49.6	32.8	526	32.8	28.5	34.4	3.5	33.7	34.3
No answer	57.6	38.1	594	37.1	31.5	38.0	3.9	37.3	38.0
Average number of vehicles per household during the year:									
Part-year vehicle	2.1	1.4	21	1.3	1.1	1.3	0.1	1.3	1.4
Only 1	27.5	18.2	269	16.8	13.4	16.2	1.7	16.0	16.3
Between 1 and 2	14.1	9.3	152	9.5	7.9	9.5	1.0	9.4	9.5
Only 2	49.4	32.6	534	33.3	27.1	32.7	3.4	32.3	32.9
Between 2 and 3	19.3	12.8	219	13.7	11.6	14.1	1.4	13.7	14.0
Only 3	17.6	11.6	187	11.7	9.8	11.8	1.2	11.6	11.8
Between 3 and 4	10.6	7.0	112	7.0	6.0	7.2	0.7	7.0	7.1
4 or more	10.8	7.2	108	6.8	5.9	7.1	0.7	7.0	7.1

Source: U.S. Energy Information Administration, *Household Vehicles Energy Consumption, 1991.*

No. 1027. Motor Vehicle Travel, by Type of Vehicle and by Speed: 1970 to 1992

[**Travel in billions of vehicle-miles, except as indicated.** Travel estimates based on automatic traffic recorder data. Speed trend data for 1970-1975 were collected by several State highway agencies, normally during summer months; beginning Oct. 1975 all States have monitored speeds at locations on several highway systems Monitoring Program. See also *Historical Statistics, Colonial Times to 1970*, series Q 199-207]

YEAR	VEHICLE-MILES OF TRAVEL (bil.)				AVG. MILES PER VEHICLE (1,000)			MOTOR VEHICLE SPEED ON RURAL INTERSTATE				
	Total	Cars [1]	Buses	Trucks	Passenger vehicles		Trucks	Citations recorded (1,000) [2]	Avg. speed (miles per hour)	Percent of vehicles exceeding—		
					Cars [1]	Buses				55 mph	60 mph	65 mph
1970	1,110	920	4.5	166	10.0	12.0	9.9	200	63.8	87	69	44
1980	1,527	1,122	6.1	399	8.8	11.5	11.9	667	57.5	66	25	7
1984	1,720	1,234	4.6	482	9.2	8.0	12.8	8,067	59.3	75	43	16
1985	1,774	1,270	4.9	500	9.2	8.2	12.7	8,449	59.5	75	44	17
1986	1,834	1,311	5.1	519	9.3	8.5	13.0	8,549	59.7	76	46	18
1987	1,921	1,365	5.3	551	9.6	8.8	13.4	7,992	59.7	74	46	19
1988	2,025	1,439	5.5	581	9.9	8.9	13.6	7,566	59.5	74	46	19
1989	2,096	1,488	5.7	603	10.1	9.0	13.8	7,488	60.1	77	49	22
1990	2,144	1,513	5.7	616	10.5	9.1	13.8	7,511	60.3	78	50	23
1991	2,172	1,534	5.7	624	10.8	9.1	13.9	7,594	59.6	75	48	22
1992	2,240	1,595	5.7	629	11.1	8.9	13.8	7,004	53.5	81	56	28

[1] Includes motorcycles. [2] Citations issued for 55 mph violations.

Source: U.S. Federal Highway Administration, *Highway Statistics Summary, annual.*

No. 1028. Passenger Transit Industry—Summary: 1980 to 1992

[Includes Puerto Rico. Includes aggregate information for all transit systems in the United States. Except as noted, 1980 data exclude commuter railroad, automated guideway, urban ferry boat, and demand response, as well as most transit systems outside of urbanized areas. Excludes nontransit services such as taxicab, school bus, unregulated jitney, sightseeing bus, intercity bus, and special application mass transportation systems (e.g., amusement parks, airports, island, and urban park ferries) Includes active vehicles only]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992, prel.
Operating systems	Number	1,044	4,972	5,036	5,046	5,078	5,084	5,086
Motor bus systems [1]	Number	1,040	2,631	2,671	2,665	2,688	2,689	2,691
Publicly owned systems [1]	Number	576	1,435	(NA)	(NA)	1,580	(NA)	(NA)
Passenger vehicles owned [2]	Number	75,388	94,368	97,209	92,293	92,961	96,399	100,274
Motor bus	Number	59,411	64,258	62,572	58,919	58,714	60,377	61,959
Trolley bus	Number	823	676	710	725	832	752	907
Heavy rail	Number	9,641	9,326	10,539	10,506	10,419	10,331	10,245
Light rail	Number	1,013	717	831	755	913	1,095	1,058
Commuter rail	Number	4,500	4,035	4,649	4,472	4,415	4,370	4,413
Demand response	Number	(NA)	14,490	16,812	15,856	16,471	17,879	19,566
Total revenue	Mil. dol	6,510	12,195	14,537	14,985	16,053	16,533	16,473
Passenger revenue	Mil. dol	2,557	4,575	5,225	5,420	5,891	6,037	6,179
Other operating revenue [3]	Mil. dol	248	702	841	837	895	767	806
Operating assistance	Mil. dol	3,705	6,918	8,471	8,728	9,267	9,729	9,488
Federal	Mil. dol	1,094	940	901	937	970	956	964
Local [4]	Mil. dol	2,611	5,979	4,893	4,995	5,327	5,573	4,748
State [4]	Mil. dol	(NA)	(NA)	2,677	2,796	2,970	3,200	3,776
Total expense	Mil. dol	6,711	14,077	16,442	17,169	17,979	19,332	19,872
Operating expense	Mil. dol	6,247	12,381	14,287	14,972	15,742	16,541	16,646
Transportation	Mil. dol	3,248	5,655	6,052	6,275	6,654	6,727	7,547
Maintenance	Mil. dol	1,774	3,672	4,313	4,493	4,631	4,597	4,857
Administration	Mil. dol	1,224	2,505	3,078	3,251	3,450	3,585	2,767
Reconciling expense	Mil. dol	464	1,696	2,155	2,196	2,237	2,791	3,226
Capital expenditure, Federal	Mil. dol	2,787	2,510	2,521	2,590	2,380	2,396	2,613
Vehicle-miles operated [2]	Million	2,287	2,791	3,157	3,203	3,242	3,306	3,384
Motor bus	Million	1,677	1,863	2,097	2,109	2,130	2,167	2,185
Trolley bus	Million	13	16	15	15	14	14	14
Heavy rail	Million	385	451	517	532	537	527	525
Light rail	Million	18	17	21	21	24	28	29
Commuter rail	Million	179	183	202	210	213	215	219
Demand response	Million	(NA)	247	289	300	306	335	382
Passengers carried [2]	Million	8,567	8,636	8,666	8,931	8,799	8,575	8,519
Motor bus	Million	5,837	5,675	5,590	5,620	5,677	5,624	5,525
Trolley bus	Million	142	142	136	130	126	125	127
Heavy rail	Million	2,108	2,290	2,308	2,542	2,346	2,172	2,207
Light rail	Million	133	132	154	162	175	184	189
Commuter rail	Million	280	275	325	330	328	318	314
Demand response	Million	(NA)	59	73	70	68	71	79
Avg. revenue per passenger	Cents	29.8	53.0	60.3	60.7	66.9	70.4	72.5
Employees, number (avg.)	1,000	187	270	276	272	273	276	276
Payroll, employee	Mil. dol	3,281	5,843	6,675	6,898	7,226	7,395	7,778
Fringe benefits, employee	Mil. dol	1,353	2,868	3,529	3,737	3,986	3,998	4,405

NA Not available. [1] Includes systems with combined services including motor buses, heavy rail cars, light rail cars, trolley coaches, cable cars, and inclined plane cars. Combined services also include commuter rail cars, urban ferry boats, vanpools, aerial tramways, automated guideways, and demand response vehicles. [2] Includes other not shown separately. [3] Includes other operating revenue, nonoperating revenue, and auxiliary income. [4] Prior to 1986, State and local combined.

Source: American Public Transit Association, Washington, DC, *Transit Fact Book*, annual.

No. 1029. Class I Intercity Motor Carriers of Passengers: 1980 to 1991

[Carriers subject to ICC regulations. See text, section 21. Minus sign (-) indicates deficit. See also *Historical Statistics, Colonial Times to 1970*, series Q 69-75]

ITEM	Unit	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Carriers reporting [1]	Number.	48	50	45	43	43	29	32	21	20	21	21
Number of employees, average	1,000	31	30	25	25	24	20	(NA)	(NA)	(NA)	(NA)	(NA)
Compensation of employees	Mil. dol.	599	646	570	551	518	443	(NA)	(NA)	(NA)	(NA)	(NA)
Operating revenue	Mil. dol.	1,397	1,447	1,276	1,255	1,233	1,117	1,079	1,122	1,205	943	980
Passenger revenue [2]	Mil. dol.	947	969	876	861	836	765	751	825	890	738	793
Special bus revenue and other	Mil. dol.	215	229	180	180	184	155	165	155	165	90	187
Operating expenses	*Mil. dol.*	*1,318*	*1,416*	*1,283*	*1,254*	*1,168*	*1,082*	*1,081*	*1,059*	*1,133*	*1,015*	*967*
Net operating revenue	Mil. dol.	79	30	−7	1	65	35	−2	63	72	−72	13
Ordinary income:												
Before income taxes	Mil. dol.	107	35	16	53	65	50	−11	(NA)	(NA)	(NA)	(NA)
After income taxes	Mil. dol.	90	37	26	43	53	36	−21	(NA)	12	−180	162
Passenger vehicles in service [2]	1,000	8.6	8.1	7.3	7.0	8.4	8.3	(NA)	(NA)	(NA)	(NA)	(NA)
Vehicle-miles, passenger	Million.	781	717	591	585	567	495	(NA)	(NA)	(NA)	(NA)	(NA)
Revenue passengers carried	Million.	134	112	94	89	88	74	62	55	54	43	42
Expense per vehicle-mile	Dollar	1.69	1.98	2.17	2.14	2.06	2.18	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. [1] Excludes carriers preponderantly in local or suburban service and carriers engaged in transportation of both property and passengers. [2] Regular route, intercity, and local.

Source: U.S. Interstate Commerce Commission, *Transport Statistics in the United States*, part 2, annual.

No. 1030. Intercity Bus Lines—Summary of Operations: 1970 to 1991

ITEM	Unit	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
Operating companies	Number.	1,000	950	1,330	(NA)	(NA)	3,550	(NA)	3,628	(NA)	(NA)
Buses	1,000	22.0	20.5	21.4	20.1	19.1	18.4	(NA)	(NA)	23.5	20.6
Miles of highway served (Dec. 31) [1]	1,000	267	274	279	263	257	249	(NA)	(NA)	(NA)	(NA)
Employees (Dec. 31) [2]	1,000	50	47	49	43	41	39	42	45	41	41
Operating revenue, all services	Mil. dol.	901	1,172	1,943	1,898	1,838	1,717	(NA)	(NA)	(NA)	929
Operating expenses	Mil. dol.	812	1,103	1,811	1,839	1,781	1,669	(NA)	(NA)	(NA)	885
Net operating revenue [3]	Mil. dol.	89	69	132	59	57	48	(NA)	(NA)	(NA)	44

NA Not available. [1] Includes duplication between carriers. [2] Operating companies only. [3] Before income taxes.

Source: American Bus Association, Washington, DC, *Bus Facts*, annual; and *Annual Report*.

No. 1031. Warehousing Services—Revenues, Expenses, and Payroll: 1991 and 1992

[In millions of dollars]

KIND OF BUSINESS	SIC [1] code	OPERATING REVENUE		OPERATING EXPENSES		ANNUAL PAYROLL	
		1991	1992	1991	1992	1991	1992
Motor frgt. transport. and warehousing services [2]	42	123,724	132,231	114,934	123,230	38,969	41,019
Trucking and courier services, except by air [3]	421	117,048	124,742	109,220	116,887	37,179	39,009
Public warehousing and storage	422	6,516	7,256	5,559	6,121	1,757	1,963
Local trucking without storage	4212	27,297	29,318	24,000	26,363	7,328	7,837
Trucking, except local	4213	68,516	72,618	65,642	69,601	20,724	21,726
Local trucking with storage	4214	3,992	4,159	3,805	3,900	1,349	1,372
Courier services, except by air	4215	17,243	18,647	15,773	17,023	7,778	8,074
Farm product warehousing and storage	4211	500	567	440	490	131	142
Refrigerated warehousing	4222	1,490	1,657	1,264	1,412	441	484
General warehousing and storage	4225	3,248	3,567	2,750	2,951	816	906
Special warehousing and storage [4]	4226	1,278	1,465	1,105	1,268	369	431

[1] Standard Industrial Classification. [2] Includes terminal and joint terminal maintenance facilities for motor carrier transportation (SIC 4231) not shown separately. [3] Excludes private motor carriers that operate as auxiliary establishments to nontransportation companies and independent owner-operators with no paid employees. [4] Includes household goods warehousing.

Source: U.S. Bureau of the Census, *Current Business Reports, 1992 Motor Freight Transportation and Warehousing Survey*.

No. 1032. Trucking and Courier Services—Operating Revenue, Operating Expenses, and Equipment, by Type of Carrier: 1990 to 1992

[**In millions of dollars, except as indicated.** Data cover SIC group 421. Excludes private motor carriers that operate as auxiliary establishments to nontransportation companies and independent owner-operators with no paid employees. Some unpublished estimates can be derived from this table by subtracting published data from their respective totals. However, the figures obtained by such subtraction are subject to these same limitations. These unpublished data are for internal use only]

ITEM	ALL CARRIERS			SPECIALTY CARRIERS			GENERAL CARRIERS		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
Operating revenues:									
Total [1]	117,511	117,048	124,742	32,835	31,918	33,324	84,676	85,130	91,418
Motor carrier	107,997	108,604	116,974	28,302	27,905	29,616	79,695	80,699	87,358
Local trucking	25,246	24,582	27,803	13,183	13,077	14,345	12,063	11,505	13,458
Long-distance trucking	82,751	84,022	89,171	15,119	14,828	15,271	67,632	69,194	73,900
Operating expenses:									
Total	109,074	109,220	116,887	28,977	28,507	29,991	80,097	80,713	86,896
Annual payroll	36,490	37,179	39,009	8,242	8,123	8,397	28,248	29,056	30,612
Employer contrib. to Soc. Sec. and other benefits	9,365	9,721	10,486	1,937	1,881	1,980	7,428	7,840	8,506
Purchased fuels	8,647	8,719	9,712	1,653	1,667	1,855	6,994	7,052	7,857
Purchased transportation	19,630	19,321	21,054	5,701	5,384	5,797	13,929	13,937	15,257
Lease and rental	2,168	2,161	2,168	631	631	623	1,537	1,530	1,545
Insurance	3,898	3,998	4,152	1,108	1,161	1,220	2,790	2,837	2,932
Maintenance and repair	6,133	6,133	6,861	1,667	1,843	2,006	4,266	4,290	4,855
Depreciation	5,603	5,632	5,987	1,623	1,596	1,648	3,980	4,036	4,339
Taxes and licenses	2,325	2,439	2,762	518	510	584	1,807	1,929	2,178
Drug and alcohol testing and rehabilitation programs	27	35	46	7	10	13	20	25	33
Other operating expenses	14,788	13,882	14,650	5,690	5,701	5,868	9,098	8,181	8,782
Equipment (1,000 units): [2]									
Trucks	226	231	242	100	100	109	126	131	133
Truck-tractors	525	524	562	111	108	110	414	416	452
Trailers (full and semi)	1,179	1,191	1,244	214	205	203	965	986	1,041

[1] Includes other revenue not shown separately. [2] Represents revenue generating equipment as of December 31. Includes owned and leased equipment.

Source: U.S. Bureau of the Census, *Current Business Reports, 1992 Motor Freight Transportation and Warehousing Survey.*

No. 1033. Class I Intercity Motor Carriers of Property, by Carrier: 1980 to 1991

[See headnote, table 1029. Common carriers are carriers offering regular scheduled service. Contract carriers provide service at request of user. Minus sign (-) indicates loss]

ITEM	Unit	1980	1985	1990	1991	1980	1985	1990	1991
		COMMON CARRIER, GENERAL FREIGHT				COMMON CARRIER OTHER THAN GENERAL FREIGHT			
Carriers reporting	Number	298	237	191	201	441	397	322	295
Number of employees, average	1,000	413	376	465	474	101	76	87	74
Compensation of employees	Mil. dol.	9,803	10,217	13,556	14,032	1,931	1,783	2,236	1,920
Operating revenues	Mil. dol.	19,725	22,314	29,682	31,619	8,792	7,962	9,042	7,761
Intercity freight	Mil. dol.	19,480	22,080	29,517	19,698	8,339	7,664	8,762	7,480
Operating expenses	Mil. dol.	18,870	21,037	28,340	30,269	8,426	7,752	8,702	7,509
Ordinary income before taxes	Mil. dol.	701	1,198	1,146	1,180	230	123	198	122
Net income	Mil. dol.	−72	658	746	749	14	94	153	85
Total power units, intercity service	1,000	102	108	(NA)	(NA)	95	77	(NA)	(NA)
Trucks, tractors owned in operation, avg	1,000	73	82	(NA)	(NA)	33	29	(NA)	(NA)
Intercity vehicle-miles	Million	6,547	5,760	6,804	7,615	6,889	5,714	6,566	5,372
Tons of intercity revenue freight carried	Million	178	136	157	169	324	303	302	253
		CONTRACT CARRIER OTHER THAN GENERAL FREIGHT				CARRIERS OF HOUSEHOLD GOODS			
Carriers reporting	Number	69	64	87	83	28	40	36	36
Number of employees, average	1,000	14	22	34	34	10	11	13	12
Compensation of employees	Mil. dol.	336	630	1,082	989	157	240	296	298
Operating revenues	Mil. dol.	1,272	1,942	3,486	3,644	1,824	2,684	3,152	3,026
Intercity freight	Mil. dol.	1,172	1,792	3,209	3,449	1,676	2,388	2,702	2,318
Operating expenses	Mil. dol.	1,207	1,807	3,422	3,547	1,781	2,635	3,129	2,973
Ordinary income before taxes	Mil. dol.	48	103	3	53	74	79	12	27
Net income	Mil. dol.	28	69	−13	20	42	54	8	17
Total power units, intercity service	1,000	13	16	(NA)	(NA)	25	35	(NA)	(NA)
Trucks, tractors owned in operation, avg	1,000	7	11	(NA)	(NA)	1	1	(NA)	(NA)
Intercity vehicle-miles	Million	934	1,227	2,044	2,339	969	1,171	1,366	1,086
Tons of intercity revenue freight carried	Million	37	41	80	76	5	7	8	7

NA Not available.

Source: U.S. Interstate Commerce Commission, *Transport Statistics in the United States,* part 2, annual.

No. 1034. Trucks—Percent Distribution, Operational Characteristics: 1977 to 1987

[See headnote, table 1035]

CHARACTERISTIC	1977	1982	1987
Total	**100.0**	**100.0**	**100.0**
Major use:			
Agriculture [1]	17.0	12.2	8.5
Construction	6.7	11.2	10.0
Manufacturing	1.4	1.6	1.3
Wholesale and retail trade	7.6	6.8	5.6
Personal transportation	54.4	56.7	65.7
All other	13.0	11.4	8.8
Body type:			
Pickup and panel [2]	83.3	85.8	89.0
Platform and cattlerack	6.8	5.1	3.7
Van [3]	4.5	3.8	3.2
All other	5.5	5.2	4.0
Vehicle size: [4] Light	85.4	89.3	91.9
Medium	6.0	3.5	2.3
Light-heavy	3.1	2.4	1.7
Heavy-heavy	5.5	4.8	4.1
Year model:			
1 to 2 years old	17.1	8.9	17.2
3 to 4 years old	17.5	16.5	16.5
4 years or more	65.4	74.6	66.3
Vehicle acquisition:			
Purchased new	47.6	45.7	47.3
Purchased used	50.0	51.5	50.1
Leased [5]	2.4	2.8	2.6
Fleet size: [6] 1	71.6	77.8	65.1
2 to 5	16.3	10.9	24.9
6 to 19	6.6	5.3	5.4
20 or more	5.5	6.0	4.6
Truck-type:			
Single-unit	96.8	95.7	96.3
Combination	3.2	4.3	3.7
Annual miles:			
Less than 5,000	23.9	26.0	25.3
5,000 to 9,999	24.0	25.5	23.4
10,000 to 19,999	37.0	35.0	34.5
20,000 to 29,999	9.2	8.4	10.7
30,000 miles or more	5.9	5.0	6.1
Range of operation: [7]			
Local	84.8	76.6	75.6
Short-range	8.4	10.3	14.8
Long-range	2.1	3.1	4.5
Off-the-road [8]	4.7	10.0	5.1
Fuel type:			
Gasoline	96.0	94.3	93.7
Diesel and LPG	3.9	5.5	6.2
Not reported	-	0.2	0.1

- Represents zero. [1] Includes forestry and lumbering. [2] Also includes walk-in, minivan, station wagon, and utility trucks. [3] Includes multi-stop or walk-in. [4] See footnote 6, table 1035. [5] Includes not reported. [6] See footnote 8, table 1035. [7] See footnote 9, table 1035.

No. 1035. Trucks and Truck-Miles, by Vehicle and Operational Characteristics: 1987

[Data are based on a stratified probability sample of trucks drawn from current registrations on file with motor vehicle departments in the 50 States and DC]

ITEM	TRUCKS (1,000)		TRUCK-MILES (bil.)
	Total	Excl. pickups, panels [1]	
Total	44,572	4,886	529.3
Major use:			
Agriculture [2]	3,819	1,114	39.0
Construction	4,479	997	63.7
Manufacturing	581	241	12.5
Wholesale and retail trade	2,507	830	43.3
Personal transportation	29,292	250	287.0
All other	3,894	1,455	83.8
Body type:			
Pickup and panel [3]	39,686	(X)	427
Platform [4]	1,668	1,668	25.0
Van [3]	1,424	1,424	48.8
All other	1,794	1,794	28.5
Vehicle size: [5] Light	40,947	1,356	439.3
Medium	1,030	939	10.8
Light-heavy	766	764	7.6
Heavy-heavy	1,829	1,828	71.6
Year model:			
1 to 2 years old	7,678	473	123.6
3 to 4 years old	7,338	549	120.5
4 years or more	29,543	3,864	285.2
Vehicle acquisition:			
Purchased new	21,087	2,138	292.3
Purchased used	22,325	2,511	215.2
Leased [7]	1,160	237	21.8
Fleet size: [7] [6] 1	29,026	1,170	308.7
2 to 5	11,094	1,547	122.9
6 to 19	2,397	1,007	40.1
20 or more	2,054	1,163	57.5
Truck type:			
Single-unit	42,917	3,587	462.0
Combination	1,656	1,300	67.3
Range of operation: [9]			
Local	33,685	3,027	350.9
Short-range	6,612	920	108.3
Long-range	1,997	490	56.0
Off-the-road [7]	2,278	449	14.1
Products carried:			
Farm products	1,558	769	16.2
Building materials	1,141	640	18.6
Mixed cargoes	686	325	21.1
Craftsman's equipment	2,476	319	34.5
Personal transportation	29,290	251	286.9
All other	9,422	2,583	152.0
Hazardous materials carried:			
Less than 10 percent of time	114	107	7.2
10-25 percent of time	28	19	1.2
26-49 percent of time	18	15	0.7
50-74 percent of time	25	24	1.0
75-100 percent of time	94	89	2.8
Not reported	61	25	1.7
Types of hazardous material: [10]			
Flammable liquids	198	175	9.3
Combustible liquids	95	95	5.8
Corrosive liquids	70	66	4.6
Flammable solids	29	28	2.3
Oxidizers	28	28	2.3
Flammable gas	26	26	2.2
Nonflammable gas	26	26	2.2
Corrosive solids	21	21	1.9
Not reported	139	101	5.1

X Not applicable. [1] Also excludes minivans, utilities, and station wagons. [2] Includes forestry and lumbering. [3] Also includes multi-stop, minivans, station wagon, and utilities, and station wagon. [4] Includes livestock truck. [5] Includes multi-stop or walk-in. [6] Average vehicle weight (empty-weight of the vehicle plus the average weight of load carried). Light=10,000 lbs. or less; medium=10,001-19,500 lbs.; light-heavy=19,501-26,000 lbs.; and heavy-heavy=26,001 lbs. or more. [7] Includes not reported. [8] A fleet size of one truck was assumed when no response was obtained. [9] Area in which usually operated. Local=less than 50 miles; short-range=50 to 200 miles; long-range=more than 200 miles. [10] Detail does not add to totals because items were not applicable or multiple responses were possible.

Source of tables 1034 and 1035: U.S. Bureau of the Census, *1987 Census of Transportation, TC87-T-52.*

No. 1036. Railroads, Class I—Summary: 1980 to 1992

[As of **Dec. 31**, or **calendar year** data, except as noted. Compiled from annual reports of class I railroads only except where noted. Beginning 1985, financial data are not comparable with earlier years due to change in method of accounting for track and related structures. Minus sign (-) indicates deficit. See also *Historical Statistics, Colonial Times to 1970*, series Q 284-312, Q 319, Q 330, Q 356-378, and Q 400-401]

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992
Class I line-hauling companies [1]	Number.	40	23	22	18	17	15	14	14	13
Employees [2]	1,000	458	302	276	249	236	228	216	206	197
Compensation	Mil. dol.	11,318	10,563	9,900	9,373	9,301	9,043	8,654	8,695	8,753
Average per hour	Dollars	10.2	14.3	14.8	15.1	15.6	15.8	15.8	16.8	17.8
Average per year	Dollars	24,695	34,991	35,894	37,716	39,431	39,742	39,987	42,131	44,336
Mileage:										
Railroad line owned [3]	1,000	179	155	154	152	150	149	144	140	136
Railroad track owned [4]	1,000	290	257	256	254	251	249	239	234	227
Equipment:										
Locomotives in service	Number.	28,094	22,548	20,790	19,647	19,364	19,015	18,835	18,344	18,004
Average horsepower	1,000 lb	2,302	2,469	2,531	2,549	2,579	2,624	2,665	2,714	2,750
Cars in service:										
Passenger train	Number.	4,347	2,502	2,307	2,350	2,332	(NA)	(NA)	(NA)	(NA)
Freight train [5]	1,000	1,711	1,422	1,339	1,288	1,239	1,224	1,212	1,190	1,173
Freight cars [6]	1,000	1,168	867	799	749	725	682	659	633	605
Income and expenses:										
Operating revenues	Mil. dol.	28,258	27,586	26,204	26,622	27,934	27,956	28,370	27,845	28,349
Operating expenses	Mil. dol.	26,355	25,225	24,896	23,878	24,811	25,038	24,652	28,061	25,325
Net revenue from operations	*Mil. dol.*	*1,902*	*2,361*	*1,308*	*2,744*	*3,123*	*2,918*	*3,718*	*-216*	*3,024*
Income before fixed charges	Mil. dol.	2,897	3,393	2,480	3,932	4,460	4,162	4,627	928	4,127
Provision for taxes [7]	Mil. dol.	592	660	163	1,051	1,162	1,040	1,088	-156	1,092
Ordinary income	Mil. dol.	1,129	1,788	747	1,965	2,286	2,009	1,961	-91	2,055
Net income	Mil. dol.	1,129	1,882	544	2,055	2,382	2,203	1,977	-281	1,800
Net railway operating income	Mil. dol.	1,339	1,746	507	1,756	1,980	1,894	2,648	-37	1,955
Total taxes [8]	Mil. dol.	2,585	3,169	2,728	3,553	3,871	3,742	3,780	2,649	3,732
Indus. return on net investment	Percent.	4.2	4.6	1.3	4.8	6.7	6.3	8.1	1.3	6.3
Gross capital expenditures	Mil. dol.	3,238	4,485	3,645	3,076	3,546	3,865	3,591	3,439	3,680
Equipment	Mil. dol.	2,280	965	693	657	1,027	1,171	996	1,068	874
Roadway and structures	Mil. dol.	953	3,458	2,908	2,314	2,654	2,538	2,644	2,369	2,736
Other	Mil. dol.	5	62	44	105	-135	156	-49	2	69
Balance sheet:										
Total property investment	Mil. dol.	43,923	64,241	64,781	66,760	68,550	67,661	70,348	71,622	72,677
Accrued depreciation and amortization	Mil. dol.	10,706	19,756	20,940	21,070	21,497	21,481	22,222	23,057	23,378
Net investment	Mil. dol.	33,419	46,237	45,344	45,690	47,053	47,370	48,126	48,565	49,299
Shareholder's equity	Mil. dol.	19,860	27,605	25,442	25,616	26,467	25,753	23,662	22,603	23,115
Net working capital	Mil. dol.	922	1,084	743	34	-190	-2119	-3505	-3,988	-4,372
Cash dividends	Mil. dol.	610	1,444	1,376	1,252	1,814	1,910	2,074	915	830
AMTRAK passenger traffic:										
Passenger revenue	Mil. dol.	(NA)	604.9	633.6	681.1	784.2	893.0	941.9	962.3	933.2
Revenue passengers carried	1,000	21,303	20,945	20,165	20,727	21,490	21,394	22,382	21,693	21,678
Revenue passenger miles	Million.	4,645	4,977	5,015	5,368	5,686	5,912	6,125	6,249	6,181
Averages:										
Revenue per passenger	Dollars	(NA)	28.9	31.4	32.9	36.5	41.8	42.1	44.4	43.0
Revenue per passenger mile	Cents	(NA)	12.2	12.6	12.7	13.8	15.1	15.4	15.4	15.1
Trip per passenger	Miles	218.1	237.6	248.7	259.0	264.6	276.3	273.7	288.0	285.1
Freight service:										
Freight revenue	Mil. dol.	26,200	26,688	25,344	25,797	27,092	27,059	24,471	26,949	27,508
Per ton-mile	Cents	2.8	3.0	2.9	2.7	2.7	2.7	2.7	2.6	2.6
Per ton originated	Dollar	17.7	20.2	19.4	18.8	19.0	19.3	19.3	19.5	19.7
Revenue-tons originated	Million.	1,492	1,320	1,305	1,372	1,430	1,402	1,425	1,383	1,399
Revenue-tons carried	Million.	2,434	1,985	1,938	1,984	2,045	1,988	2,024	1,987	2,022
Tons carried one mile	Billion	919	877	868	944	996	1,014	1,034	1,039	1,067
Average miles of road operated	1,000	179	161	155	147	141	138	133	130	126
Revenue ton-miles per mile of road	1,000	5,133	5,446	5,587	6,395	7,052	7,373	7,763	8,001	8,451
Revenue per ton-mile	Cents	3	3	3	3	3	3	3	3	3
Train miles	Million.	428	347	347	361	379	383	380	375	390
Net ton-miles per train-mile [9]	Number.	2,175	2,574	2,552	2,644	2,662	2,683	2,755	2,796	2,759
Net ton-miles per loaded car-mile [9]	Number.	63.5	62.7	63.2	64.0	65.5	67.0	69.1	71.6	70.9
Train-miles per train-hour	Miles	18.2	21.9	22.5	22.2	21.5	23.0	23.7	23.7	23.7
Haul per ton, U.S. as a system	Miles	616	664	664	688	697	723	726	751	763
Accident: [10]										
Persons killed	Number.	1,417	1,036	1,091	1,165	1,199	1,324	1,297	1,194	1,170
Persons injured	Number.	62,246	34,304	26,923	26,033	27,054	26,715	25,143	23,468	21,383

NA Not available. [1] See text, section 21, for definition of Class I. [2] Average midmonth count. [3] Represents the aggregate length of roadway of all line-haul railroads. Excludes yard tracks, sidings, and parallel lines. (Includes estimate for class II and III railroads). [4] Includes multiple main tracks, yard tracks, and sidings owned by both line-haul and switching and terminal. (Includes estimate for class II and III railroads). [5] Includes cars owned by all railroads, private car companies, and shippers. [6] Class I railroads only. [7] Includes State income taxes. [8] Includes payroll, income, and other taxes. [9] Revenue and nonrevenue freight. [10] Includes highway grade crossing casualties.

Source: Association of American Railroads, Washington, DC, *Railroad Facts, Statistics of Railroads of Class I*, annual, and *Analysis of Class I Railroads*, annual. Accident data: U.S. Federal Railroad Administration, *Accident Bulletin*, annual.

No. 1037. Railroads, Class I-Cars of Revenue Freight Loaded, 1970 to 1992, and by Commodity Group, 1991 and 1992

[In thousands. Figures are 52-week totals. N.e.c.= Not elsewhere classified]

YEAR	CARLOADS		COMMODITY GROUP	CARLOADS		COMMODITY GROUP	CARLOADS	
	Total	Piggy-back		1991	1992		1991	1992
1970	27,160	1,450	Coal	6,138	5,959	Metals and products	442	457
1975	23,217	1,308	Metallic ores	490	491	Stone, clay, and glass products	446	454
1980	22,598	1,661	Chemicals, allied products	1,390	1,431	Crushed stone, gravel, sand	616	573
1985	19,574	2,863	Grain	1,375	1,425	Nonmetalic minerals, n.e.c	441	428
1988	16,422	(NA)	Motor vehicles and equipment	798	912	Waste and scrap materials	394	417
1989	16,030	(NA)	Pulp, paper, allied products	472	481	Lumber, wood products, n.e.c. [1]	268	276
1990	16,177	(NA)	Primary forest products	373	380	Coke	244	269
1991	15,533	(NA)	Food and kindred prod., n.e.c.	456	462	Petroleum product	251	266
1992	15,592	(NA)	Grain mill products	513	515	All other carloads	424	396

NA Not available. [1] Excludes furniture.

Source: Association of American Railroads, Washington, DC, *Weekly Railroad Traffic*, annual.

No. 1038. Railroads, Class I Line-Haul-Revenue Freight Originated, by Commodity Group: 1980 to 1992

[See *Historical Statistics, Colonial Times to 1970*, series Q 332, for total carloads originated]

COMMODITY GROUP	1980	1985	1986	1987	1988	1989	1990	1991	1992
Carloads (1,000) [1]	**22,223**	**19,501**	**19,587**	**20,602**	**21,600**	**21,226**	**21,401**	**20,868**	**21,205**
Coal	5,789	5,684	5,433	5,430	5,621	5,672	5,912	5,683	5,572
Farm products	1,866	1,494	1,602	1,907	1,977	1,781	1,689	1,605	1,646
Chemicals, allied products	1,322	1,296	1,287	1,410	1,497	1,486	1,531	1,556	1,568
Food and kindred products	1,767	1,224	1,276	1,326	1,318	1,284	1,307	1,316	1,352
Nonmetallic minerals [2]	1,474	1,196	1,113	1,188	1,290	1,254	1,202	1,075	1,029
Transportation equipment	1,004	1,202	1,148	1,085	1,160	1,141	1,091	1,068	1,181
Lumber and wood products [3]	1,384	948	965	986	910	843	780	716	726
Pulp, paper, allied products	954	703	672	561	646	615	611	616	618
Petroleum and coal products	596	491	477	520	566	561	573	533	583
Stone, clay, and glass products	776	551	530	559	577	565	539	479	483
Metallic ores	1,258	511	508	494	582	523	508	499	489
Primary metal products	756	449	389	428	479	452	477	469	481
Waste and scrap materials	632	429	402	440	471	444	439	433	487
Machinery, exc. electrical	77	35	31	33	40	38	39	39	39
Fabricated metal products [4]	72	31	26	24	26	27	31	34	32
Tons (mil.) [1]	**1,492**	**1,320**	**1,306**	**1,372**	**1,429**	**1,403**	**1,425**	**1,383**	**1,399**
Coal	522	538	518	523	543	551	579	560	554
Farm products	156	127	136	163	170	154	147	144	149
Chemicals, allied products	108	106	106	116	123	123	126	127	130
Nonmetallic minerals [2]	125	108	101	109	115	111	109	99	94
Food and kindred products	92	74	78	81	81	79	81	83	86
Lumber and wood products [3]	86	63	65	67	62	57	53	48	50
Metallic ores	105	47	46	45	52	47	47	45	45
Stone, clay, and glass products	54	44	42	44	46	47	44	39	40
Petroleum and coal products	38	33	33	35	39	39	40	37	41
Primary metal products	53	34	30	33	38	36	38	37	39
Pulp, paper, allied products	42	36	36	36	35	34	33	33	34
Waste and scrap materials	34	26	25	28	30	28	28	27	30
Transportation equipment	24	27	26	24	25	24	23	22	25
Machinery, exc. electrical	2	1	1	1	1	1	1	1	1
Fabricated metal products [4]	2	1	1	1	1	1	1	1	1
Gross revenue (mil. dol.) [1]	**26,938**	**28,225**	**27,186**	**27,657**	**29,529**	**29,328**	**29,775**	**29,319**	**29,777**
Coal	4,956	6,556	6,089	6,097	6,430	6,581	6,954	6,903	6,717
Chemicals, allied products	2,946	3,342	3,342	3,477	3,795	3,788	3,933	4,043	4,123
Transportation equipment	1,917	3,110	2,997	2,866	3,218	3,269	3,100	2,633	2,753
Farm products	2,801	1,977	2,007	2,246	2,534	2,444	2,422	2,332	2,454
Food and kindred products	2,837	2,256	2,192	2,171	2,198	2,128	2,188	2,254	2,308
Pulp, paper, allied products	1,652	1,641	1,572	1,542	1,540	1,514	1,486	1,502	1,508
Lumber and wood products [3]	1,543	1,525	1,563	1,660	1,626	1,500	1,390	1,282	1,342
Primary metal products	1,332	872	787	863	1,013	972	979	977	970
Stone, clay, and glass products	1,025	960	907	914	965	960	931	878	911
Petroleum and coal products	865	861	800	809	903	917	918	888	943
Nonmetallic minerals [2]	948	949	839	854	890	868	885	824	812
Waste and scrap materials	513	446	425	474	526	492	504	515	558
Metallic ores	597	403	375	348	415	397	408	400	409
Machinery, exc. electrical	176	72	58	57	63	66	67	62	61
Fabricated metal products [4]	110	48	40	37	38	38	42	48	45

[1] Includes commodity groups and small packaged freight shipments, not shown separately. [2] Except fuels. [3] Except furniture. [4] Except ordnance, machinery, and transport.

Source: Association of American Railroads, Washington, DC, *Freight Commodity Statistics*, annual.

No. 1039. Railroad Freight—Producer Price Indexes: 1980 to 1993

[Dec. 1984=100. Reflects prices for shipping a fixed set of commodities under specified and unchanging conditions]

COMMODITY	1980	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total railroad freight	**75.9**	**99.9**	**100.7**	**100.1**	**104.8**	**106.4**	**107.5**	**109.3**	**109.9**	**110.8**
Coal	75.8	100.0	100.7	100.1	104.3	105.3	104.2	105.2	105.9	106.6
Farm products	75.6	99.0	99.6	99.3	105.5	108.5	110.4	111.4	111.1	113.8
Food products	75.2	100.0	99.9	98.6	103.1	103.9	105.4	108.1	108.7	108.8
Metallic ores	74.5	100.2	100.5	99.0	103.9	105.8	106.5	106.7	106.6	106.7
Chemicals or allied products	75.6	100.1	101.2	100.8	106.9	110.0	111.7	113.5	115.6	116.2
Nonmetallic minerals	72.2	100.1	101.6	101.1	106.1	108.3	111.7	115.9	117.6	119.3
Wood or lumber products	72.7	100.0	100.9	100.4	105.3	105.9	107.5	108.6	108.8	109.7
Transportation equipment	81.7	100.0	100.8	99.3	103.4	106.4	107.5	109.7	110.8	112.8
Pulp, paper, or allied products	76.7	100.0	101.0	100.6	104.0	105.1	108.0	111.5	111.8	112.6
Primary metal products	77.8	99.7	100.2	99.7	108.8	112.3	113.1	116.1	117.5	116.3
Clay, concrete, glass, or stone products	74.2	100.0	102.2	102.2	107.5	110.5	114.1	117.1	116.5	117.8

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

No. 1040. Petroleum Pipeline Companies—Characteristics: 1980 to 1992

[Covers pipeline companies operating in interstate commerce and subject to jurisdiction of Federal Energy Regulatory Commission]

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992
Miles of pipeline, total	1,000	173	171	170	168	171	169	168	172	162
Gathering lines	1,000	36	35	34	35	34	33	32	31	29
Trunk lines	1,000	136	136	136	133	136	135	136	141	136
Total deliveries	Mil. bbl.	10,600	10,745	11,002	11,194	11,484	11,281	11,378	11,496	11,447
Crude oil	Mil. bbl.	6,405	6,239	6,286	6,278	6,509	6,435	6,563	6,685	6,541
Products	Mil. bbl.	4,195	4,506	4,716	4,917	4,974	4,847	4,816	4,811	4,906
Total trunk line traffic	Bil. bbl-miles	3,405	3,342	3,467	3,524	3,619	3,505	3,500	3,470	3,428
Crude oil	Bil. bbl-miles	1,948	1,842	1,893	1,932	1,970	1,918	1,891	1,899	1,853
Products	Bil. bbl-miles	1,458	1,500	1,573	1,592	1,649	1,587	1,609	1,571	1,575
Carrier property value	Mil. dol.	19,752	21,605	22,384	21,353	24,332	24,638	25,828	26,943	27,106
Operating revenues	Mil. dol.	6,356	7,461	7,287	7,057	6,861	6,512	7,149	6,798	7,154
Net income	Mil. dol.	1,912	2,431	2,051	2,475	2,505	2,227	2,340	1,788	2,061

Source: PennWell Publishing Co., Tulsa, OK, *Oil & Gas Journal*, November 22, 1993, and earlier issues (copyright).

No. 1041. Major Interstate Natural Gas Pipeline Companies—Summary: 1985 to 1991

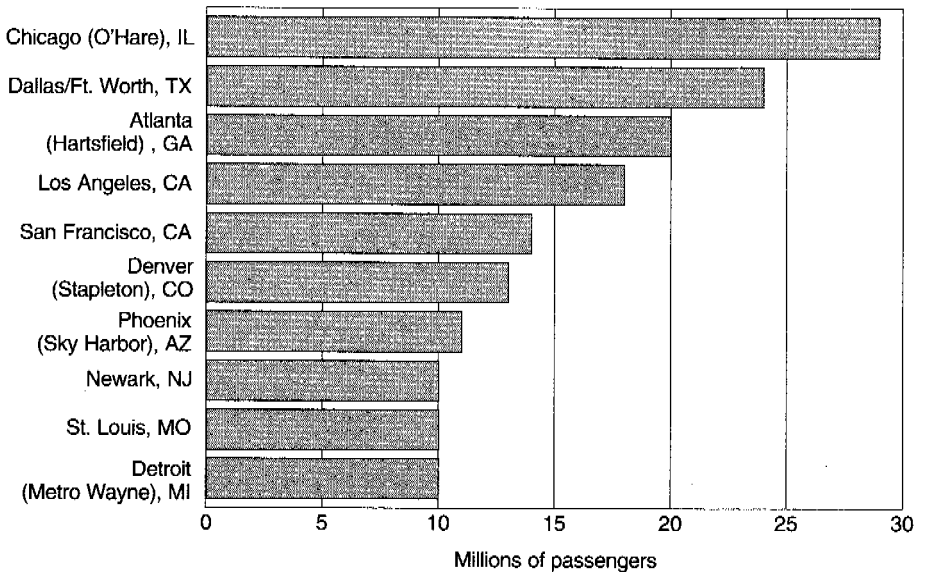
[The classification of A and B interstate natural gas pipeline companies changed to major companies and nonmajor companies. Major natural gas pipeline companies are those whose combined sales for resale and natural gas transported or stored for a fee exceed 50 billion cubic feet. They account for more than 85 percent of all interstate natural gas]

ITEM	Unit	1985	1986	1987	1988	1989	1990	1991
Sales	Tril. cu. ft.	11.3	7.8	6.5	6.4	5.6	4.5	3.9
Residential	Tril. cu. ft.	0.3	0.2	0.2	0.3	0.1	0.2	0.2
Commercial, industrial	Tril. cu. ft.	1.1	0.5	0.4	0.5	0.5	0.4	0.3
For resale	Tril. cu. ft.	9.9	7.1	5.8	5.6	4.9	3.9	3.3
Operating revenues	Mil. dol	49,106	33,859	27,565	27,501	25,695	22,574	21,420
From sales [1]	Mil. dol	44,996	29,508	22,942	22,512	19,786	15,981	14,135
Residential	Mil. dol	1,879	1,122	1,094	1,553	819	912	1,081
Commercial, industrial	Mil. dol	4,466	1,909	1,464	1,544	1,452	1,272	1,086
For resale	Mil. dol	38,545	26,413	20,351	19,420	17,505	13,791	11,967
From transportation of gas of others	Mil. dol	2,272	3,027	3,622	4,059	4,959	5,505	6,117
Other	Mil. dol	1,838	1,325	1,002	929	950	1,088	1,167
Operation, maintenance expenses	Mil. dol	42,528	27,460	21,794	22,742	20,829	17,446	17,335
Production	Mil. dol	36,739	22,208	16,955	17,625	15,257	12,124	11,663
Storage	Mil. dol	418	420	409	436	458	417	460
Transmission	Mil. dol	3,409	2,984	2,598	2,589	2,589	2,720	2,880
Distribution	Mil. dol	132	80	80	127	94	112	133
Administrative, general, and other	Mil. dol	1,830	1,768	1,752	1,966	2,430	2,074	2,048
Pipeline mileage	1,000	230.2	217.3	249.5	246.9	253.2	230.2	249.5
Transmission lines	1,000	189.7	184.6	181.2	191.6	194.1	195.5	146.8
Field lines	1,000	69.6	64.5	62.9	55.5	55.1	54.0	50.7
Storage	1,000	4.8	4.6	4.3	4.8	4.8	5.0	4.7

[1] Includes other ultimate customers not shown separately.

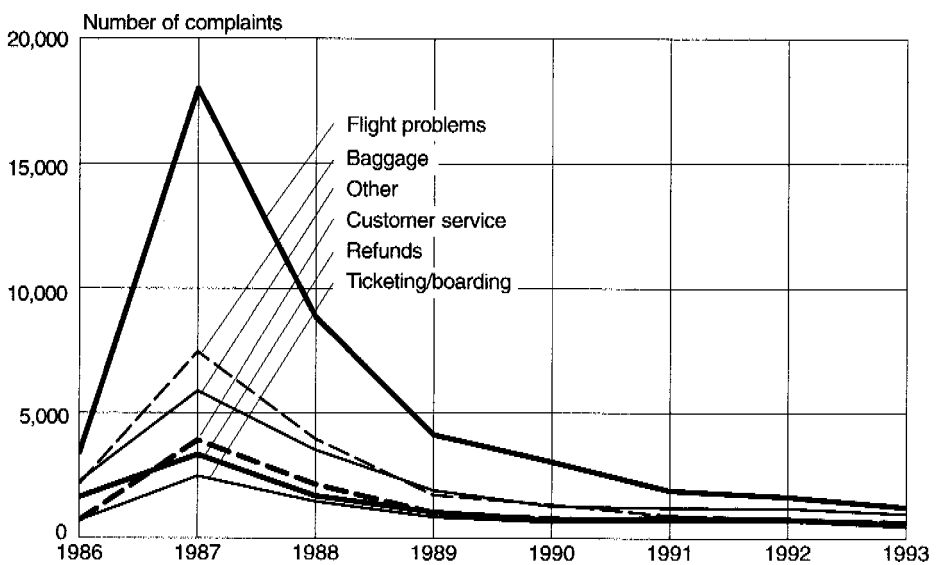
Source: U.S. Energy Information Administration, *Statistics of Interstate Natural Gas Pipeline Companies*, annual.

Figure 22.1
Revenue Passengers Enplaned—Top 10 Airports: 1992



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1045.

Figure 22.2
Consumer Complaints Against U.S. Airlines: 1986 to 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1051.

Transportation—Air and Water

This section presents data on civil air transportation, both passenger and cargo, and on water transportation, including inland waterways, oceanborne commerce, the merchant marine, cargo and vessel tonnages, and shipbuilding. Comparative data on various types of transportation carriers are presented in section 21.

Principal sources of these data are the annual *FAA Statistical Handbook of Aviation* issued by the Federal Aviation Administration (FAA); the annual *Waterborne Commerce of the United States* issued by the Corps of Engineers of the Department of the Army; the monthly and annual issues of *U.S. Waterborne Exports and General Imports,* and the annual *Vessel Entrances and Clearances,* and the monthly *Highlights of U.S. Export and Import Trade,* issued by the Bureau of the Census. In addition, the Bureau of the Census in its commodity transportation survey (part of the census of transportation, taken every 5 years, for years ending in "2" and "7") provides data on the type, weight, and value of commodities shipped by manufacturing establishments in the United States, by means of transportation, origin, and destination.

Air transportation data are also presented annually by the Air Transport Association of America, Washington, DC in *Air Transport Facts and Figures.* Additional sources of data on water transportation include *Merchant Fleets of the World* issued periodically by the U.S. Maritime Administration; *The Bulletin,* issued monthly by the American Bureau of Shipping, New York, NY; and the *Annual Summary of Merchant Ships Completed in the World* and the *Register Book,* published by Lloyd's Register of Shipping, London, England.

Civil aviation.—Federal promotion and regulation of civil aviation have been carried out by the FAA and the Civil Aeronautics Board (CAB). The CAB promoted and regulated the civil air transportation industry within the United States and between the United States and foreign countries. The Board granted licenses to provide air transportation service, approved or disapproved proposed rates and fares, and approved or disapproved proposed agreements and corporate relationships involving air carriers. In December 1984, the CAB ceased to exist as an agency. Some of its functions were transferred to the Department of Transportation (DOT), as outlined below. The responsibility for investigation of aviation accidents resides with the National Transportation Safety Board.

In Brief

SCHEDULED AIR CARRIERS

Revenue passengers enplaned:	
1985	*382 million*
1992	*473 million*
Net profit:	
1985	*+$863 million*
1992	*-$4,029 million*

The Office of the Secretary, DOT aviation activities include the following: negotiation of international air transportation rights, selection of U.S. air carriers to serve capacity controlled international markets, oversight of international rates and fares, maintenance of essential air service to small communities, and consumer affairs. DOT's Research and Special Programs Administration (RSPA) handles aviation information functions formerly assigned to CAB.

The principal activities of the FAA include the promotion of air safety, controlling the use of navigable airspace, prescribing regulations dealing with the competency of airmen, airworthiness of aircraft, and air traffic control, operation of air route traffic control centers, airport traffic control towers, and flight service stations, the design, construction, maintenance, and inspection of navigation, traffic control,

and communications equipment, and the development of general aviation.

The CAB published monthly and quarterly financial and traffic statistical data for the certificated route air carriers. RSPA continues these publications, including both certificated and noncertificated (commuter) air carriers. The FAA publishes data annually on the use of airway facilities; data related to the location of airmen, aircraft, and airports; the volume of activity in the field of nonair carrier (general aviation) flying; and aircraft production and registration.

General aviation comprises all civil flying (including such commercial operations as small demand air taxis, agriculture application, powerline patrol, etc.) but excludes certificated route air carriers, supplemental operators, large-aircraft commercial operators and commuter airlines.

Air carriers and service.—The CAB previously issued "certificates of public convenience and necessity" under Section 401 of the Federal Aviation Act of 1958 for scheduled and nonscheduled (charter) passenger services and cargo services. It also issued certificates under Section 418 of the Act to cargo air carriers for domestic all-cargo service only. The DOT Office of the Secretary now issues the certificates under a "fit, willing, and able" test of air carrier operations. Carriers operating only 60 seat or less aircraft are given exemption authority to carry passengers, cargo, and mail in scheduled and nonscheduled service under Part 298 of the DOT (formerly CAB) regulations. Exemption authority carriers who offer scheduled passenger service to an essential air service point must meet the "fit, willing, and able" test.

Vessel shipments, entrances, and clearances.—Shipments by dry cargo vessels comprise shipments on all types of watercraft, except tanker vessels; shipments by tanker vessels comprise all types of cargo, liquid and dry, carried by tanker vessels.

A vessel is reported as entered only at the first port which it enters in the United States, whether or not cargo is unloaded at that port. A vessel is reported as cleared only at the last port at which clearance is made to a foreign port, whether or not it takes on cargo. Army and Navy vessels entering or clearing without commercial cargo are not included in the figures.

Units of measurement.—Cargo (or freight) tonnage and shipping weight both represent the gross weight of the cargo including the weight of containers, wrappings, crates, etc. However, shipping weight excludes lift and cargo vans and similar substantial outer containers. Other tonnage figures generally refer to stowing capacity of vessels, 100 cubic feet being called 1 ton. Gross tonnage comprises the space within the frames and the ceiling of the hull, together with those closed-in spaces above deck available for cargo, stores, passengers, or crew, with certain minor exceptions. Net or registered tonnage is the gross tonnage less the spaces occupied by the propelling machinery, fuel, crew quarters, master's cabin, and navigation spaces. Substantially, it represents space available for cargo and passengers. The net tonnage capacity of a ship may bear little relation to weight of cargo. Deadweight tonnage is the weight in long tons required to depress a vessel from light water line (that is, with only the machinery and equipment on board) to load line. It is, therefore, the weight of the cargo, fuel, etc., which a vessel is designed to carry with safety.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970.* See Appendix IV.

No. 1042. U. S. Scheduled Airline Industry—Summary: 1985 to 1992

[For calendar years or Dec. 31. For domestic and international operations. Covers carriers certificated under Section 401 of the Federal Aviation Act. Minus sign (-) indicates loss]

ITEM	Unit	1985	1986	1987	1988	1989	1990	1991	1992
SCHEDULED SERVICE									
Revenue passengers enplaned	Mil.	382.0	418.9	447.7	454.6	453.7	465.6	452.3	473.3
Revenue passenger miles	Bil.	336.4	366.5	404.5	423.3	432.7	457.9	448.0	478.1
Available seat miles	Bil.	547.8	607.4	648.7	676.8	684.4	733.4	715.2	751.8
Revenue passenger load factor	Percent	61.4	60.3	62.3	62.5	63.2	62.4	62.6	63.6
Mean passenger trip length [1]	Miles	881	875	903	931	954	984	990	1,010
Freight and express ton miles	Mil.	6,030.5	7,344.1	8,260.3	9,632.2	10,275.0	10,546.3	10,225.2	10,989.3
Aircraft departures	1,000	5,835.5	6,427.0	6,581.3	6,699.6	6,622.1	6,923.6	6,782.8	6,866.3
FINANCES									
Total operating revenue [2]	Mil. dol.	46,664	50,525	56,986	63,749	69,316	76,142	75,159	77,950
Passenger revenue	Mil. dol.	39,236	40,056	44,940	50,296	53,802	58,453	57,092	59,748
Freight and express revenue	Mil. dol.	2,681	5,628	6,398	7,478	6,893	5,432	5,509	5,891
Mail revenue	Mil. dol.	890	838	923	972	955	970	957	1,174
Charter revenue	Mil. dol.	1,280	1,269	1,612	1,698	2,052	2,877	3,717	2,736
Total operating expense	Mil. dol.	45,238	49,202	54,517	60,312	67,505	78,054	76,943	80,333
Operating profit	Mil. dol.	1,426	1,323	2,469	3,437	1,811	-1,912	-1,785	-2,384
Interest expense	Mil. dol.	1,588	1,693	1,695	1,846	1,944	1,978	1,177	1,726
Net profit	Mil. dol.	863	-235	593	1,686	128	-3,921	-1,940	-4,029
Revenue per passenger mile	Cents	11.7	10.9	11.1	11.9	12.4	12.8	12.7	12.5
Rate of return on investment	Percent	9.6	4.9	7.2	10.8	6.3	-6.0	-0.5	-6.4
Operating profit margin	Percent	3.1	2.6	4.3	5.4	2.6	-2.5	-2.3	-3.1
Net profit margin	Percent	1.8	-0.5	1.0	2.6	0.2	-5.1	-2.6	-5.2
EMPLOYEES									
Total	1,000	355	422	457	481	507	546	534	540
Pilots, copilots, and other flight personnel	1,000	40	46	51	52	52	56	56	58
Flight attendants	1,000	63	68	73	76	78	83	82	84
Mechanics	1,000	43	48	51	55	57	61	59	59
Aircraft and traffic servicing personnel	1,000	101	180	199	212	225	252	237	241
Other	1,000	108	80	84	86	95	94	98	99

[1] For definition of mean, see Guide to Tabular Presentation. [2] Includes other types of revenues, not shown separately.

Source: Air Transport Association of America, Washington, DC, *Air Transport*, annual, and *Air Transport, Facts and Figures*, annual.

No. 1043. Airline Cost Indexes: 1980 to 1992

[Covers U.S. major and national service carriers. Major carriers have operating revenues of $1 billion or more; nationals have operating revenues from $75 million to $1 billion. Minus sign (-) indicates decrease]

ITEM	INDEX (1982=100)								PERCENT DISTRIBUTION OF CASH OPERATING EXPENSES [1]			
	1980	1985	1987	1988	1989	1990	1991	1992	1980	1985	1990	1992
INDEX												
Composite	86.3	103.1	98.4	102.4	109.0	117.0	119.8	121.9	100.0	100.0	100.0	100.0
Labor	84.8	111.1	110.2	115.0	118.4	121.1	127.6	134.1	35.1	34.9	32.6	34.2
Interest [2]	88.7	105.5	97.5	99.6	111.5	107.3	88.3	84.8	2.9	3.5	2.5	2.2
Fuel	91.6	81.4	56.8	54.2	61.2	78.7	68.9	64.1	29.7	22.3	17.6	13.5
Passenger food	94.3	102.0	105.6	111.9	122.8	132.6	141.4	144.1	2.9	3.2	3.6	4.0
Advertising and promotion	69.5	99.8	90.9	96.9	105.0	107.6	97.9	89.8	1.7	2.3	2.1	1.8
Landing fees	90.0	101.2	121.5	129.1	137.1	148.1	161.9	179.4	1.7	1.7	1.9	2.2
Passenger traffic commissions	77.3	117.6	128.9	148.3	163.4	176.8	193.5	192.2	4.8	7.4	9.8	10.9
All other	85.6	112.7	119.3	123.9	129.4	134.7	140.6	144.3	21.3	24.6	29.9	31.3
PERCENT CHANGE [3]												
Composite	23.3	0.3	1.9	4.1	6.4	7.3	2.4	1.8	(X)	(X)	(X)	(X)
Labor	10.0	2.9	1.3	4.4	3.0	2.3	5.4	5.1	(X)	(X)	(X)	(X)
Interest [2]	16.9	-3.2	-3.3	2.2	11.9	-3.8	-17.7	-4.0	(X)	(X)	(X)	(X)
Fuel	55.8	-5.7	0.7	-4.6	12.9	28.6	-12.5	-7.0	(X)	(X)	(X)	(X)
Passenger food	11.9	-4.2	3.1	6.0	9.7	8.0	6.6	1.9	(X)	(X)	(X)	(X)
Advertising and promotion	24.3	-0.2	-12.1	6.6	8.4	2.5	-9.0	-8.3	(X)	(X)	(X)	(X)
Landing fees	9.6	-0.2	7.9	6.3	6.2	8.0	9.3	10.8	(X)	(X)	(X)	(X)
Passenger traffic commissions	40.0	0.8	7.9	15.1	10.2	8.2	9.4	-0.7	(X)	(X)	(X)	(X)
All other	9.3	3.7	3.1	3.9	4.4	4.1	4.4	2.6	(X)	(X)	(X)	(X)

X Not applicable. [1] Total operating expenses plus interest on long term debt, less depreciation and amortization. [2] Interest on debt. [3] Change from immediate prior year.

Source: Air Transport Association of America, Washington, DC, *Air Transport*, annual; and unpublished data.

No. 1044. Net New Firm Orders Booked for U.S. Civil Jet Transport Aircraft: 1985 to 1992

[**Value in millions of dollars.** Minus sign (-) indicates net cancellations]

TYPE OF AIRCRAFT AND CUSTOMER	1985	1987	1988	1989	1990	1991	1992
Total number [1]	**468**	**519**	**956**	**1,015**	**670**	**280**	**231**
U.S. customers	242	217	404	507	259	36	82
Foreign customers	226	302	552	508	411	244	149
Boeing 737, total	253	234	311	397	189	75	91
U.S. customers	146	105	173	216	38	-8	43
Foreign customers	107	129	138	181	151	83	48
Boeing 747, total	37	61	57	57	153	48	41
U.S. customers	13	15	22	4	24	-5	-
Foreign customers	24	46	35	53	129	53	41
Boeing 757, total	51	44	186	190	66	80	7
U.S. customers	39	18	101	137	33	42	29
Foreign customers	12	26	85	53	33	38	-22
Boeing 767, total	10	42	87	138	60	58	20
U.S. customers	4	11	32	40	23	28	10
Foreign customers	6	31	55	98	37	30	10
Boeing 777, total	-	-	-	-	34	52	36
U.S. customers	-	-	-	-	34	-	-
Foreign customers	-	-	-	-	-	52	36
McDonnell Douglas MD-11, total	-	29	59	38	52	-31	1
U.S. customers	-	2	11	17	16	-26	4
Foreign customers	-	27	48	21	36	-5	-3
McDonnell Douglas MD-80/90, total	114	105	254	195	116	-2	35
U.S. customers	37	65	65	93	91	5	-4
Foreign customers	77	40	189	102	25	-7	39
Total value	**14,811**	**18,737**	**39,806**	**47,470**	**45,485**	**23,351**	**16,640**
U.S. customers	7,869	6,999	16,308	20,304	14,828	2,144	3,200
Foreign customers	6,942	11,738	23,498	27,166	30,657	21,207	13,440

- Represents zero. [1] Includes types of aircraft not shown separately.
Source: Aerospace Industries Association of America, Washington, DC, Research Center, Statistical Series 23.

No. 1045. Top 10 Airports—Traffic Summary: 1992

[**In thousands, except percent change.** For **calendar year.** Airports ranked by revenue passengers enplaned. For scheduled carriers only; excludes charter-only carriers]

AIRPORT	Rank	AIRCRAFT DEPARTURES		REVENUE PASSENGERS ENPLANED		ENPLANED REVENUE TONS		
		Total [1]	Completed scheduled	Total	Percent change, 1980-1992	Total	Freight	U.S. mail
All airports [2]	**(X)**	**6,607**	**6,578**	**447,626**	**60.5**	**6,736**	**5,054**	**1,682**
Atlanta, Hartsfield International	3	217	216	19,660	-1.7	260	158	102
Chicago, O'Hare	1	378	377	28,667	49.1	451	309	142
Dallas/Ft. Worth International	2	281	280	24,428	134.1	249	152	97
Denver, Stapleton International	6	161	161	13,426	39.6	121	79	42
Detroit, Metro Wayne	10	137	136	10,124	101.5	98	58	40
Los Angeles International	4	197	194	18,305	29.3	429	361	68
Newark International	8	134	133	10,442	148.3	218	177	41
Phoenix, Sky Harbor International	7	144	143	10,713	217.0	72	46	26
San Francisco International	5	169	169	14,193	51.0	238	205	33
St. Louis International	9	178	177	10,230	92.3	91	51	40

X Not applicable. [1] Includes completed scheduled and unscheduled. [2] Includes other airports, not shown separately.
Source: U.S. Federal Aviation Administration and Research and Special Programs Administration, *Airport Activity Statistics*, annual.

No. 1046. Domestic Airline Markets: 1992

[**For calendar year.** Data are for the 30 top markets and include all commercial airports in each metro area. Data do not include connecting passengers]

MARKET	Passengers	MARKET	Passengers
New York to—from Los Angeles	2,904,060	Honolulu to—from Lihue, Kauai	1,273,460
New York to—from Boston	2,350,240	Los Angeles to —from Las Vegas	1,217,420
New York to—from Chicago	2,330,750	Chicago to—from Los Angeles	1,188,980
New York to—from Washington	2,282,480	New York to—from West Palm Beach	1,187,110
Los Angeles to—from San Francisco	2,153,360	Los Angeles to—from Honolulu	1,165,470
New York to—from Miami	2,142,690	San Francisco to—from San Diego	1,058,870
Dallas/Ft. Worth to—from Houston	2,090,390	Honolulu to—from Kona, Hawaii	1,055,760
Honolulu to—from Kahului, Maui	2,035,100	Los Angeles to—from Oakland	1,042,880
New York to—from San Francisco	2,010,350	New York to—from Dallas/Ft. Worth	1,029,860
New York to—from Orlando	1,727,260	Honolulu to—from Hilo, Hawaii	1,019,250
New York to—from Ft. Lauderdale	1,547,970	Chicago to—from St. Louis	973,580
New York to—from San Juan	1,524,400	Boston to—from Washington	952,450
Los Angeles to—from Phoenix	1,402,160	Los Angeles to—from Washington	925,220
Chicago to—from Detroit	1,339,600	San Francisco to—from Honolulu	880,390
New York to—from Atlanta	1,330,730	Chicago to—from Washington	875,740

Source: Air Transport Association of America, Washington, DC, *Air Transport 1993.*

No. 1047. Worldwide Airline Fatalities: 1970 to 1992

[For scheduled air transport operations]

YEAR	Fatal accidents	Passenger deaths	Death rate [1]	YEAR	Fatal accidents	Passenger deaths	Death rate [1]
1970	29	700	0.29	1985	22	1,066	0.15
1975	20	467	0.13	1986 [2]	22	546	0.06
1979	31	877	0.16	1987 [2]	26	901	0.09
1980	22	814	0.14	1988 [2]	28	729	0.07
1981	21	362	0.06	1989 [2]	27	817	0.05
1982	26	764	0.13	1990 [2]	25	495	0.03
1983	20	809	0.13	1991 [2]	30	653	0.04
1984	16	223	0.03	1992 [2 3]	29	1,097	0.06

[1] Rate per 100 million passenger miles flown. [2] Includes former USSR which began reporting in 1986. [3] Preliminary.

Source: International Civil Aviation Organization, Montreal, Canada, *Civil Aviation Statistics of the World*, annual.

No. 1048. Airline Passenger Screening Results: 1977 to 1991

[Calendar year data]

YEAR	Passengers screened (mil.)	WEAPONS DETECTED					PERSONS ARRESTED	
		Firearms				Explosive/ incendiary devices	Carrying firearms/ explosives	Giving false information
		Total	Handguns	Long guns	Other			
1977	509	2,034	1,730	64	240	5	810	44
1978	580	2,058	1,827	67	164	3	896	64
1979	593	2,161	1,962	55	144	3	1,060	47
1980	585	2,022	1,878	36	108	8	1,031	32
1981	599	2,255	2,124	44	87	11	1,187	49
1982	630	2,676	2,559	57	60	1	1,314	27
1983	709	2,784	2,634	67	83	4	1,282	34
1984	776	2,957	2,766	98	91	6	1,285	27
1985	993	2,987	2,823	90	74	12	1,310	42
1986	1,055	3,241	2,981	146	114	11	1,415	89
1987	1,096	3,252	3,012	99	141	14	1,581	81
1988	1,055	2,773	2,591	74	108	11	1,493	222
1989	1,113	2,879	2,397	92	390	26	1,436	83
1990	1,145	2,853	2,490	59	304	15	1,337	18
1991	1,015	1,919	1,597	47	275	94	893	28

Source: U.S. Federal Aviation Administration, *Annual Report to Congress on Civil Aviation Security.*

No. 1049. Aircraft Accidents and Hijackings: 1975 to 1992

[For years ending December 31]

ITEM	Unit	1975	1980	1985	1989	1990	1991	1992
Aircraft accidents: [1] General aviation [2]	Number	3,995	3,590	2,738	2,233	2,218	2,143	1,956
Fatal	Number	633	618	498	432	445	414	408
Rate per 100,000 aircraft hours flown	Rate	2.20	1.69	1.75	1.53	1.56	1.52	1.50
Fatalities	Number	1,252	1,239	944	765	758	740	810
Air carrier, all services [3]	Number	(NA)	19	22	28	26	27	19
Fatal	Number	(NA)	1	7	11	6	4	4
Rate per 1,000,000 aircraft miles flown	Rate	(X)	-	0.002	0.002	0.001	0.001	0.001
Fatalities	Number	(NA)	1	526	278	39	62	33
Air carrier, scheduled services	Number	29	15	17	24	24	26	17
Fatal	Number	2	-	4	8	6	4	4
Rate per 1,000,000 aircraft miles flown	Rate	0.001	0.000	0.001	0.002	0.001	0.001	0.001
Fatalities	Number	122	-	197	131	39	62	33
Commuter air carriers [4]	Number	48	38	21	18	15	22	23
Fatal	Number	12	8	7	5	3	8	7
Rate per 1,000,000 aircraft miles flown	Rate	0.07	0.04	0.02	0.01	0.01	0.02	0.02
Fatalities	Number	28	37	37	31	6	99	21
Air taxis [5]	Number	152	171	154	111	108	88	74
Fatal	Number	24	46	35	25	29	26	24
Rate per 100,000 aircraft hours flown	Rate	0.95	1.27	1.36	0.83	1.25	1.16	1.08
Fatalities	Number	69	105	76	83	49	73	66
Hijacking incidents, worldwide	Number	25	39	35	24	46	26	14
U.S. registered aircraft	Number	12	21	4	6	4	3	2
Successful [6]	Number	4	13	2	-	(NA)	(NA)	(NA)
Foreign-registered aircraft	Number	13	18	31	18	42	23	12
Successful [6]	Number	3	9	18	-	(NA)	(NA)	(NA)
Bomb threats:								
U.S. airports	Number	449	268	256	487	448	498	188
Explosions	Number	4	1	-	-	-	-	-
U.S. worldwide and foreign aircraft in U.S	Number	1,853	1,179	372	479	338	388	215
Explosions	Number	2	1	1	2	-	-	-

- Represents or rounds to zero. NA Not available. X Not applicable. [1] Data from National Transportation Safety Board. [2] See text, section 22. [3] U.S. air carriers operating under 14 CFR 121. [4] All scheduled service of U.S. air carriers operating under 14 CFR 135. [5] All nonscheduled service of U.S. air carriers operating under 14 CFR 135. [6] Hijacker controls flight and reaches destination or objective.

Source: U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual; and unpublished data. Includes data from U.S. Department of Transportation, Research and Special Programs Administration.

No. 1050. On-Time Flight Arrivals and Departures at Major U.S. Airports: 1993

[**In percent.** Quarterly, based on gate arrival and departure times for domestic scheduled operations in the 48 contiguous States of major U.S. airlines, per DOT reporting rule effective September 1987. All U.S. airlines with 1 percent or more of total U.S. domestic scheduled airline passenger revenues are required to report on-time data. A flight is considered on time if it operated less than 15 minutes after the scheduled time shown in the carrier's computerized reservation system. Cancelled and diverted flights are considered late. Excludes flight operations delayed/cancelled due to aircraft mechanical problems reported on FAA maintenance records (4-5 percent of the reporting airlines' scheduled operations). See source for data on individual airlines]

AIRPORT	ON-TIME ARRIVALS				ON-TIME DEPARTURES			
	1st qtr.	2d qtr.	3d qtr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.
Total, all airports	76.0	84.4	84.9	80.9	81.5	89.9	90.1	86.1
Total 30 major airports	74.3	83.6	84.1	79.9	79.8	88.9	88.9	84.7
Atlanta, Hartsfield International	65.7	79.2	80.8	79.9	76.9	86.6	86.4	85.9
Baltimore/Washington International	75.9	86.5	85.5	84.9	78.7	90.0	90.2	86.0
Boston, Logan International	64.1	76.8	77.2	75.1	72.4	84.9	84.3	81.4
Charlotte, Douglas	82.8	91.2	90.5	86.7	81.4	89.2	89.4	86.1
Chicago, O'Hare	71.8	80.2	81.9	80.2	76.7	86.1	86.6	84.6
Cincinnati International	77.1	84.6	83.0	83.6	79.8	89.0	86.5	86.1
Dallas/Ft. Worth International	76.0	83.3	87.3	75.2	78.4	87.7	91.5	80.1
Denver, Stapleton International	68.6	80.1	78.0	73.7	77.6	87.1	86.4	80.9
Detroit, Metro Wayne	78.9	88.9	88.2	88.3	81.2	91.1	90.1	88.6
Dulles International	76.1	83.5	83.4	84.3	83.7	90.2	89.3	87.9
Houston Intercontinental	80.9	84.6	89.8	81.0	85.2	88.7	92.9	86.2
Las Vegas, McCarran International	80.1	87.9	88.8	83.2	83.8	91.5	90.8	86.7
Los Angeles International	71.9	83.9	83.9	77.5	80.9	91.2	91.0	86.4
Miami International	76.6	82.3	81.4	79.6	84.0	90.7	88.5	87.4
Minneapolis/St. Paul International	79.6	85.5	86.3	85.6	83.8	90.7	90.2	88.7
Newark International	64.6	74.4	73.6	66.4	74.6	83.0	83.2	77.8
New York, Kennedy International	70.9	82.0	80.5	75.1	79.8	87.4	85.1	80.6
New York, LaGuardia	74.5	83.2	83.7	81.1	80.1	89.5	90.2	86.8
Orlando International	76.5	85.5	84.2	80.9	82.3	90.8	90.2	89.2
Philadelphia International	71.4	85.2	85.4	81.9	76.8	87.8	88.8	84.0
Phoenix, Sky Harbor International	80.6	88.8	90.1	82.9	81.5	90.2	90.2	85.0
Pittsburgh, Greater International	73.2	84.2	83.6	78.6	75.5	86.1	84.7	79.0
Raleigh/Durham	83.0	88.1	88.8	87.0	83.3	90.7	91.4	88.0
St. Louis, Lambert	78.4	87.1	86.2	83.7	81.1	90.0	89.0	85.6
Salt Lake City International	72.7	85.3	83.9	82.7	76.7	91.0	87.7	85.7
San Diego International, Lindbergh	72.4	86.1	87.4	80.7	81.8	92.8	92.9	87.8
San Francisco International	69.0	82.6	82.3	74.2	81.1	92.4	91.2	83.2
Seattle-Tacoma International	81.1	82.6	80.7	74.5	88.3	92.7	90.6	84.8
Tampa International	76.5	84.5	83.7	80.4	84.0	92.8	92.5	89.0
Washington National	76.1	84.1	84.7	82.3	82.4	89.3	90.7	87.3

Source: U.S. Dept. of Transportation, Office of Consumer Affairs, *Air Travel Consumer Report,* monthly.

No. 1051. Consumer Complaints Against U.S. Airlines: 1986 to 1993

[**Calendar year data.** See source for data on individual airlines]

COMPLAINT CATEGORY	1986	1987	1988	1989	1990	1991	1992	1993
Total	**10,802**	**40,985**	**21,493**	**10,553**	**7,703**	**6,106**	**5,639**	**4,438**
Flight problems [1]	3,390	18,019	8,831	4,111	3,034	1,877	1,624	1,211
Baggage	2,149	7,438	3,938	1,702	1,329	883	752	627
Customer service [2]	702	3,888	2,120	1,002	758	714	695	599
Ticketing/boarding [3]	687	2,458	1,445	821	624	659	680	577
Refunds	1,627	3,313	1,667	1,023	701	783	721	482
Fares [4]	468	937	455	341	312	388	573	398
Oversales [5]	849	2,122	1,353	607	399	301	265	257
Advertising	122	344	141	89	96	96	54	51
Smoking	311	888	546	232	74	30	25	30
Tours	33	90	37	22	29	23	12	16
Credit	40	101	35	19	5	10	10	4
Other	424	1,387	925	584	342	342	228	186

[1] Cancellations, delays, etc. from schedule. [2] Unhelpful employees, inadequate meals or cabin service, treatment of delayed passengers. [3] Errors in reservations and ticketing; problems in making reservations and obtaining tickets. [4] Incorrect or incomplete information about fares, discount fare conditions, and availability, etc. [5] All bumping problems, whether or not airline complied with DOT regulations.

Source: U.S. Dept. of Transportation, Office of Consumer Affairs, *Air Travel Consumer Report,* monthly.

No. 1052. Commuter/Regional Airline Operations—Summary: 1980 to 1992

[**Calendar year data.** Commuter/regional airlines operate primarily aircraft of predominately 75 passengers or less and 18,000 pounds of payload capacity serving short haul and small community markets. Represents operations within all North America by U.S. Regional Carriers. Averages are means. For definition of mean, see Guide to Tabular Presentation]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992
Passenger carriers operating	Number	214	179	169	163	151	150	144	127
Passengers enplaned	Millions	14.8	[1]26.0	31.8	35.2	37.4	42.1	42.0	48.9
Average passengers enplaned per carrier	1,000	69.2	152.4	187.7	213.9	247.4	277.5	291.4	385.0
Revenue passenger miles (RPM)	Billions	1.92	[1]4.41	5.0	6.04	6.77	7.61	7.80	9.46
Average RPM's per carrier	Millions	8.97	[1]24.64	29.60	37.05	44.84	50.75	54.18	74.50
Airports served	Number	732	854	834	861	817	811	811	802
Average trip length	Miles	129	173	158	173	181	183	186	194
Passenger aircraft operated	Number	1,339	1,745	1,841	1,801	1,907	1,917	1,992	2,103
Average seating capacity (seats)	Number	13.9	19.2	19.7	20.5	21.8	22.1	22.8	23.4
Fleet flying hours	1,000	1,740	2,854	2,942	3,078	3,266	3,447	3,671	4,259
Average annual utilization aircraft	Hours	1,299	1,635	1,598	1,709	1,712	1,798	1,843	2,025

[1] Adjusted to exclude a merger in 1986.

Source: Regional Airline Association, Washington, DC, Annual Report of the Regional Airline Industry (copyright).

No. 1053. Civil Flying—Summary: 1970 to 1992

[As of **Dec. 31** or for years ending **Dec. 31**, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series Q 604-623]

ITEM	Unit	1970	1980	1985	1989	1990	1991	1992
Airports in operation [1]	Number	11,261	15,161	16,318	17,446	17,490	17,581	17,846
Heliports	Number	790	2,336	3,120	4,016	4,085	4,199	4,323
Public	Number	4,260	4,814	5,861	5,084	5,078	5,090	5,116
Private	Number	7,001	10,347	10,457	12,362	12,412	12,491	12,730
Airports with runway lights	Number	3,554	4,738	4,941	4,443	4,822	4,811	4,831
Airports with paved runways	Number	3,805	5,833	6,721	7,612	7,694	7,822	7,936
Airport Improvement Program [2]	Mil. dol	50.5	639.0	842.1	1,271.2	1,244.7	1,621.6	1,765.0
Total civil aircraft	1,000	154.5	259.4	274.9	274.8	275.9	275.5	277
Active aircraft [3]	1,000	134.5	214.8	215.4	225.4	218.9	204.6	191.7
Air carriers, total [4]	1,000	2.8	3.8	4.7	5.7	6.7	6.1	7.3
General aviation aircraft [5]	1,000	131.7	211.0	210.7	219.7	212.2	198.5	184.4
Fixed-wing aircraft: Multi-engine	1,000	18.4	31.7	33.6	34.1	32.7	30.5	27.3
Single-engine	1,000	109.5	168.4	164.4	170.4	165.1	154.2	143.5
Rotorcraft [6]	1,000	2.2	6.0	6.4	7.5	7.4	6.3	5.8
Balloons, blimps, gliders, etc	1,000	1.6	5.0	6.3	7.7	7.0	7.6	7.8
Airman certificates held	1,000	1,002	1,195	1,105	1,168	1,195	1,210	1,224
Pilot [7]	1,000	733	827	710	700	703	692	683
Held by women	Percent	4.0	6.4	6.1	6.1	5.8	5.9	5.9
Airline transport	1,000	34	70	83	102	108	112	116
Commercial	1,000	187	183	152	145	149	148	146
Private	1,000	304	357	311	293	299	293	288
Student	1,000	196	200	147	143	128	120	115
Nonpilot [8]	1,000	269	368	395	468	492	517	541
Ground technicians [9]	1,000	241	321	341	401	421	444	478
FAA employees: Total	Number	53,125	55,340	47,245	50,977	51,269	54,119	53,871
Air traffic control specialists [10]	Number	(NA)	27,190	23,580	24,368	24,339	25,741	24,983
Full performance [11]	Number	(NA)	16,317	11,672	12,640	12,985	13,480	14,377
Developmental [11]	Number	(NA)	4,387	4,304	5,574	5,042	5,080	3,759
Assistants [11]	Number	(X)	(X)	1,465	1,316	1,153	928	792
Traffic management coordinators [12]	Number	(X)	(X)	(X)	350	370	448	471
Electronic technicians	Number	(NA)	8,871	6,856	6,508	6,458	6,641	6,572
Aviation safety inspectors	Number	(NA)	2,038	1,897	2,766	2,984	3,101	3,017
Engineers	Number	(NA)	2,436	2,457	2,657	2,745	3,073	3,208
Other	Number	(NA)	14,805	12,455	14,678	14,743	15,563	16,091
General aviation: [5]								
Hours flown [13]	Million	26.0	41.0	34.1	35.0	34.8	30.1	26.5
Fuel consumed:								
Gasoline	Mil. gal	362	520	420	343	353	354	314
Jet fuel [14]	Mil. gal	415	766	691	888	663	577	494

NA Not available. X Not applicable. [1] Existing airports, heliports, seaplane bases, etc. recorded with FAA. Includes military airports with joint civil and military use. Includes U.S. outlying areas. Airport-type definitions: Public—publicly owned and under control of a public agency; private—owned by a private individual or corporation. May or may not be open for public use. [2] Fiscal year data. Does not include System Planning Grants. Includes U.S. outlying areas. 1970-1980 data are obligated Federal funds for the Airport Development Aid Program. Thereafter, data are appropriated Federal funds under the Airport and Airway Improvement Act of 1982. [3] Registered aircraft that flew 1 or more hours during the year. [4] Includes helicopters. [5] See text, section 22. [6] Includes autogyros; excludes air carrier helicopters. [7] Includes all active pilots. An active pilot is one with a pilot certificate and a valid medical certificate. Also includes pilots who hold only a helicopter, glider, or lighter than air certificate, not shown separately. [8] Includes dispatchers, flight navigators and engineers, and ground technicians—mechanics, parachute riggers, and ground instructors. [9] No medical examinations are required, therefore, data represent all certificates on record and include retired or otherwise inactive technicians. [10] Includes all air traffic control specialists (staff positions, managers, supervisors, and for 1970-1985 traffic management coordinators, not shown separately) and air traffic assistants. [11] Serving in-flight service stations, towers, and centers. [12] Prior to 1988, included in total air traffic control specialists. [13] Source: 1970, U.S. Bureau of Mines; thereafter, FAA General Aviation Activity and Avionics Survey. [14] Includes kerosene-type and naphtha-type jet fuels.

Source: Except as noted, U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual; and unpublished data. Includes data from U.S. Department of Transportation, Research and Special Programs Administration.

No. 1054. U.S. Aircraft Shipments With Projections: 1970 to 1994

[Value in millions of dollars]

YEAR	TOTAL		CIVIL						MILITARY	
			Large transports		General Aviation [1]		Helicopters			
	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value
1970	11,632	7,511	311	3,158	7,292	337	495	49	3,534	3,967
1975	16,958	9,355	285	4,006	14,056	1,033	838	266	1,779	4,050
1980	14,660	18,845	383	9,793	11,877	2,486	1,353	674	1,047	5,892
1985	3,597	29,312	273	9,375	2,029	1,431	376	505	919	18,001
1986	3,261	35,622	329	11,120	1,495	1,262	330	288	1,107	22,952
1987	2,995	37,317	255	11,900	1,160	1,320	270	320	1,210	23,777
1988	3,285	33,840	380	13,000	1,270	1,420	330	400	1,305	19,020
1989	3,675	34,228	398	15,074	1,535	1,803	515	251	1,227	17,100
1990	3,486	39,206	521	22,215	1,144	2,007	603	254	1,218	14,730
1991	2,934	40,776	589	26,856	1,021	1,968	571	211	753	11,741
1992	2,507	41,832	610	30,268	941	1,840	324	142	632	9,582
1993 [2]	2,282	37,108	408	26,456	964	2,144	260	122	650	8,386
1994 [3]	2,146	30,589	306	20,437	960	2,150	260	82	620	7,920

[1] Excludes off-the-shelf military aircraft. [2] Estimated. [3] Forecast.

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1994;* and unpublished data.

No. 1055. Employment and Earnings in Aircraft Industries: 1980 to 1993

[Annual averages of monthly figures. See headnote, table 654]

ITEM	1987 SIC [1] code	Unit	1980	1985	1990	1992	1993
Employment: Total	(X)	1,000	744	794	898	756	661
Aircraft	3721	1,000	349	326	381	332	301
Aircraft engines and engine parts	3724	1,000	163	148	152	127	111
Aircraft equipment, n.e.c. [2]	3728	1,000	121	143	180	152	129
Guided missiles, space vehicles, and parts	376	1,000	111	177	185	145	120
Average weekly earnings: [3]	(X)	.....					
Aircraft	3721	Dollars	404	(NA)	(NA)	(NA)	(NA)
Aircraft engines and parts	3724	Dollars	394	542	637	689	715
Guided missiles, space vehicles, and parts	376	Dollars	378	515	612	652	696
Average hourly earnings: [3]	(X)	.....					
Aircraft [4]	3721	Dollars	9.66	13.18	15.66	17.70	18.42
Aircraft engines and parts	3724	Dollars	9.42	12.85	14.84	16.28	16.70
Guided missiles, space vehicles, and parts	376	Dollars	9.22	12.14	14.39	15.99	16.81

NA Not available. X Not applicable. [1] 1987 Standard Industrial Classification; see text, section 13. [2] N.e.c.=Not elsewhere classified. [3] For production workers. [4] Excludes lump-sum payments. Earnings which include proration of lump-sum payments were: $13.40 in 1985; $16.32 in 1990; $17.16 in 1991; $18.18 in 1992; and $19.00 in 1993.

Source: U.S. Bureau of Labor Statistics, Bulletins 2370 and 2429; and *Employment and Earnings,* monthly, March and June issues.

No. 1056. Aerospace Industry—Summary With Projections: 1980 to 1994

[For calendar year, except employment and earnings annual averages of monthly figures. Includes Standard Industrial Classification Codes 372 and 376. Industry shipments refer to the total value of all products shipped by establishments classified in that industry. Product shipments refer to the total value of specific products shipped irrespective of how the establishments which made them are classified]

ITEM	Unit	1980	1985	1988	1989	1990	1991	1992 [1]	1993 [1]	1994 [2]
INDUSTRY DATA										
Value of shipments	Mil. dol.	58,483	90,795	107,746	113,477	125,194	131,345	133,613	120,742	101,962
In 1987 dollars	Mil. dol.	(NA)	(NA)	106,681	109,736	116,815	116,911	116,287	103,510	92,313
Employment, total	1,000	721	746	820	823	816	746	674	587	542
Production workers	1,000	387	372	399	400	396	362	323	279	267
Average hourly earnings	Dol	9.90	13.88	15.35	15.84	16.36	16.73	17.56	18.37	(NA)
Capital expenditures	Mil. dol.	1,923	3,784	3,388	3,921	3,490	3,407	(NA)	(NA)	(NA)
PRODUCT DATA										
Value of shipments	Mil. dol.	53,296	80,625	102,242	106,320	118,141	124,109	126,800	112,244	93,921
In 1987 dollars	Mil. dol.	(NA)	(NA)	100,875	102,103	109,258	109,742	110,349	96,230	80,760

NA Not available. [1] Estimated. [2] Forecast.

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1994.*

No. 1057. Aerospace—Sales, New Orders, and Backlog: 1980 to 1992

[**In billions of dollars, except as indicated.** Reported by establishments in which the principal business is the development and/or production of aerospace products]

ITEM	1980	1984	1985	1986	1987	1988	1989 [1]	1990 [1]	1991 [1]	1992 [1]
Net sales	58.4	88.9	100.5	105.6	110.3	113.5	122.1	136.6	123.9	121.9
Percent of U.S. Government	45.6	62.7	63.2	61.9	62.2	60.0	58.0	54.0	48.9	46.0
Complete aircraft and parts [2]	22.6	28.3	34.2	38.0	37.0	35.7	38.4	49.9	52.9	54.0
Aircraft engines and parts	6.9	9.1	9.7	9.8	12.0	15.0	15.4	16.4	15.6	13.9
Missiles and space vehicles, parts	8.4	13.6	16.7	17.5	20.7	21.5	22.6	22.0	23.3	22.6
Other products, services	20.5	38.0	39.8	40.3	40.5	41.3	45.7	48.3	32.0	31.4
Net, new orders	70.4	104.9	111.0	110.8	121.2	147.1	173.6	146.0	122.5	103.5
Backlog, Dec. 31	90.5	132.5	143.0	148.2	158.7	191.5	252.4	250.1	245.2	225.7

[1] Data beginning 1989 are not comparable with earlier years. Data are being reported which were previously not available. The extent of this noncomparability is not known. [2] Except engines sold separately.

Source: U.S. Bureau of the Census, *Current Industrial Reports,* series MA-37D.

No. 1058. Aerospace Industry Sales, by Product Group and Customer: 1985 to 1994

[**In billions of dollars.** Due to reporting practices and tabulating methods, figures may differ from those in table 1057]

ITEM	CURRENT DOLLARS					CONSTANT (1987) DOLLARS [3]				
	1985	1990	1992	1993 [1]	1994 [2]	1985	1990	1992	1993 [1]	1994 [2]
Total sales	**96.6**	**134.4**	**137.9**	**123.7**	**115.6**	**97.8**	**121.6**	**117.5**	**102.3**	**92.8**
PRODUCT GROUP										
Aircraft, total	50.5	71.4	73.6	65.3	59.3	51.1	64.6	62.7	54.0	47.6
Civil [4]	13.7	31.4	39.9	32.9	27.1	13.9	28.4	34.0	27.2	21.7
Military	36.8	40.1	33.7	32.4	32.2	37.2	36.3	28.7	26.8	25.9
Missiles	11.4	14.2	11.6	8.6	7.1	11.6	12.8	9.8	7.1	5.7
Space	18.6	26.4	29.8	29.2	29.9	18.8	23.9	25.3	24.1	24.0
Related products and services [5]	16.1	22.4	23.0	20.6	19.3	16.3	20.3	19.6	17.1	15.5
CUSTOMER GROUP										
Aerospace, total	80.5	112.0	115.0	103.1	96.3	81.5	101.3	97.9	85.3	77.3
DOD [6]	53.2	60.5	51.8	48.2	45.6	53.9	54.8	44.1	39.9	36.6
NASA [7] and other agencies	6.3	11.1	12.3	12.1	12.5	6.3	10.0	10.5	10.0	10.0
Other customers [8]	21.0	40.4	50.9	42.8	38.2	21.3	36.5	43.3	35.4	30.7
Related products and services [5]	16.1	22.4	23.0	20.6	19.3	16.3	20.3	19.6	17.1	15.5

[1] Preliminary. [2] Estimate. [3] Based on AIA's aerospace composite price deflator. [4] All civil sales of aircraft (domestic and export sales of jet transports, commuters, business, and personal aircraft and helicopters). [5] Electronics, software, and ground support equipment, plus sales of non-aerospace products which are produced by aerospace-manufacturing use technology, processes, and materials derived from aerospace products. [6] Department of Defense. [7] National Aeronautics and Space Administration. [8] Includes civil aircraft sales (see footnote 4), commercial space sales, all exports of military aircraft and missiles and related propulsion and parts.

Source: Aerospace Industries Association of America, Inc., Washington, DC, *1993 Year-end Review and Forecast.*

No. 1059. Aerospace Industry—Net Profits After Taxes: 1980 to 1993

[**For calendar year.** Minus sign (-) indicates loss]

YEAR	AEROSPACE INDUSTRY PROFITS				MANUFACTURING CORPORATIONS PROFITS			
	Total (mil. dol.)	As percent of—			Total (mil. dol.)	As percent of—		
		Sales	Assets	Equity		Sales	Assests	Equity
1980	2,588	4.3	5.2	16.0	93,149	4.8	6.9	13.9
1981	2,966	4.4	5.2	16.0	101,330	4.7	6.7	13.6
1982	2,193	3.3	3.7	12.0	70,966	3.5	4.5	9.2
1983	2,829	3.5	4.1	12.1	85,737	4.1	5.1	10.5
1984	3,639	4.1	4.7	14.1	107,657	4.6	6.0	12.5
1985	3,274	3.1	3.6	11.1	87,809	3.8	4.6	10.1
1986	3,093	2.8	3.1	9.4	82,762	3.7	4.2	9.5
1987	4,582	4.1	4.4	14.6	115,472	4.9	5.6	12.8
1988	4,883	4.3	4.4	14.9	154,647	6.0	6.9	16.2
1989	3,866	3.3	3.3	10.7	136,412	5.0	5.6	13.7
1990	4,487	3.4	3.4	11.5	110,737	4.0	4.3	10.7
1991	[1]2,484	1.8	1.9	6.1	66,379	2.5	2.6	6.4
1992	[1]-1,836	-1.4	-1.2	-5.2	25,206	0.9	0.9	2.3
1993, prel.	5,463	5.1	4.2	16.2	84,105	2.9	3.0	8.3

[1] Reflects unusually large nonoperating expenses totalling $3.4 billion in 1991 and $8.7 billion in 1992 due to the initial implementation of a change in accounting for future retirement benefit costs and defense-downsizing restructuring charges. Many large aerospace corporations chose to write off against first quarter earnings amounts required to comply with FASB 106.

Source: Aerospace Industries Association of America, Washington, DC, *1993 Year-end Review and Forecast.*

No. 1060. U.S. Exports of Aerospace Vehicles and Equipment: 1990 to 1993

ITEM	NUMBER OF UNITS				VALUE (mil. dol.)			
	1990	1991	1992	1993 [1]	1990	1991	1992	1993 [1]
Aerospace vehicles and equipment	(NA)	(NA)	(NA)	(NA)	39,083	43,796	45,030	39,426
Civilian aircraft	3,779	3,329	2,066	1,758	18,146	22,388	24,337	19,845
Under 4,536 kg. unladen weight, new	1,134	911	586	555	324	311	297	234
4,536-15,000 kg. unladen weight, new	79	69	60	58	245	279	295	324
Over 15,000 kg. unladen weight, new	306	385	387	276	16,691	20,881	22,379	18,146
Rotocraft, new	349	318	212	175	161	168	118	120
Nonpowered aircraft, new	(NA)	(NA)	(NA)	(NA)	15	15	7	9
Used or rebuilt	1,911	1,646	841	694	712	734	1,241	1,012
Military aircraft, new and used	445	490	428	632	1,481	1,784	2,083	1,460
Aircraft engines and parts	(NA)	(NA)	(NA)	(NA)	6,883	7,049	6,699	6,278
Propellers, rotors, and parts	(NA)	(NA)	(NA)	(NA)	343	317	289	308
Landing gear and parts	(NA)	(NA)	(NA)	(NA)	276	333	362	338
Aircraft parts and accessories, n.e.c. [2]	(NA)	(NA)	(NA)	(NA)	8,982	9,386	8,496	8,574
Guided missiles and parts	(NA)	(NA)	(NA)	(NA)	1,306	1,204	1,428	1,231
Flight simulators	(NA)	(NA)	(NA)	(NA)	255	245	205	197
Space launch equipment	(NA)	(NA)	(NA)	(NA)	660	308	336	548
Avionics	(NA)	(NA)	(NA)	(NA)	747	780	795	646

NA Not available. [1] Estimated. [2] N.e.c. = Not elsewhere classified.

Source: U.S. Dept. of Commerce, International Trade Administration, *U.S. Industrial Outlook*, 1994; and unpublished data.

No. 1061. International Transportation Transactions of the United States, by Type: 1980 to 1992

[**In millions of dollars.** Data are international transportation transactions recorded for balance of payment purposes (see table 1306). Receipts include freight on exports carried by U.S.-operated carriers and foreign carrier expenditures in U.S. ports. Payments include freight on imports carried by foreign carriers and U.S. carrier port expenditures abroad. Freight on exports carried by foreign carriers is excluded since such payments are directly or indirectly for foreign account. Similarly, freight on U.S. imports carried by U.S. carriers is a domestic rather than an international transaction. Minus sign (-) indicates excess of payments over receipts. See *Historical Statistics, Colonial Times to 1970*, series U 3 and U 10, for totals]

ITEM	1980	1985	1986	1987	1988	1989	1990	1991	1992
Total receipts	**14,208**	**19,085**	**21,366**	**24,337**	**28,430**	**31,147**	**37,252**	**38,180**	**40,126**
Ocean passenger fares	(Z)	60	90	102	128	132	154	156	173
Other ocean transportation	7,757	8,846	9,169	10,060	11,218	11,704	12,141	12,260	12,431
Freight	3,229	3,440	3,186	3,401	3,750	3,896	4,104	4,000	3,904
Port expenditures	4,435	5,274	5,843	6,514	7,315	7,609	7,815	8,020	8,268
Charter hire	93	132	140	145	153	199	222	240	259
Air passenger fares [1]	2,591	4,351	5,492	6,901	8,847	10,482	15,144	15,698	17,180
Other air transportation	3,355	5,347	5,420	5,943	6,792	7,310	8,174	8,556	8,618
Freight	742	706	783	982	1,385	1,719	2,432	2,722	2,589
Port expenditures	2,613	4,641	4,637	4,961	5,407	5,591	5,742	5,834	6,029
Miscellaneous receipts	505	481	1,195	1,331	1,445	1,519	1,639	1,510	1,724
Total payments	**15,397**	**22,087**	**23,220**	**25,072**	**27,263**	**28,907**	**33,931**	**33,309**	**34,397**
Ocean passenger fares	268	154	208	235	164	193	248	279	301
Other ocean transportation	8,179	10,698	11,299	11,030	12,180	12,227	13,078	12,303	11,920
Import freight	5,809	8,114	8,636	8,365	9,372	9,391	10,290	9,593	9,269
Port expenditures	1,905	2,048	2,125	2,115	2,244	2,228	2,174	2,093	2,028
Charter hire	465	536	538	550	564	608	614	617	623
Air passenger fares [1]	3,339	6,290	6,297	7,048	7,565	8,055	10,262	9,733	10,642
Other air transportation	3,366	4,719	5,127	6,432	6,981	8,080	9,881	10,513	11,027
Import freight	562	1,666	2,051	2,242	2,226	2,197	2,207	2,257	2,370
Port expenditures	2,804	3,053	3,076	4,190	4,755	5,883	7,674	8,256	8,657
Miscellaneous payments	245	226	289	327	373	352	442	481	507
Balance	**-1,189**	**-3,002**	**-1,854**	**-735**	**1,167**	**2,240**	**3,321**	**4,871**	**5,729**

Z Less than $500,000. [1] Beginning 1990, includes interairline settlements.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, June issues; and unpublished data.

No. 1062. Exports and Imports, by Method of Transport: 1980 to 1993

[Exports are free alongside ship (f.a.s.) value (see text, section 29) for all years; imports are f.a.s. value for 1980 and customs value for other years. Export data include both domestic and foreign; import data for general imports only. For details, see source]

ITEM	Unit	EXPORTS					IMPORTS				
		1980	1985	1990	1992	1993	1980	1985	1990	1992	1993
All methods [1]	Bil. dol.	220.7	213.1	393.0	447.5	464.9	240.8	345.3	495.3	532.4	580.5
Vessel	Bil. dol.	120.9	91.7	150.8	169.8	166.6	165.1	208.4	283.4	293.1	310.4
Air	Bil. dol.	46.1	52.3	110.5	121	135.1	28.0	51.3	90.9	105.3	119.7
Shipping weight: Vessel	Bil. kg.	363.7	317.7	372.4	379.3	349.5	443.1	361.5	496.3	476.0	531.0
Air	Bil. kg.	1.0	0.8	1.5	1.7	1.7	0.6	1.3	1.7	1.7	1.9

[1] Includes types other than vessel and air and revisions that are not distributed by method of transport.

Source: U.S. Bureau of the Census, *Highlights of U.S. Export and Import Trade*, through 1985, FT 990, monthly; thereafter, *U.S. Merchandise Trade: Selected Highlights*, FT-920, monthly.

No. 1063. Federal Expenditures for Civil Functions of the Corps of Engineers, United States Army: 1965 to 1991

[**In millions of dollars. For fiscal years ending in year shown,** see text, section 9. These expenditures represent the work of the Corps of Engineers to plan, design, construct, operate, and maintain civil works projects and activities, particularly in the management and improvement of rivers, harbors, and waterways for navigation, flood control, and multiple purposes. The amounts listed below do not include the expenditure of funds contributed, advanced, or reimbursed by other government agencies or local interests. Includes Puerto Rico and outlying areas]

FISCAL YEAR	Total program [1]	Navigation	Flood control	Multiple purpose	FISCAL YEAR	Total program [1]	Navigation	Flood control	Multiple purpose
1965.	1,169	426	447	283	1985.	2,956	1,234	1,187	419
1970.	1,128	398	379	331	1986.	3,163	1,345	1,300	402
1975.	2,070	694	904	439	1987.	2,937	1,135	1,272	411
1980.	3,061	1,225	1,228	551	1988.	3,086	1,271	1,271	423
1981.	3,198	1,339	1,273	527	1989.	3,252	1,395	1,253	462
1982.	2,940	1,331	1,083	453	1990.	3,297	1,391	1,397	375
1983.	2,959	1,290	1,088	482	1991.	3,511	1,473	1,447	443
1984.	3,085	1,383	1,154	445					

[1] Includes expenditures which are not associated with a specific purpose (e.g., headquarters staff supervision, management, and administration activities, and some research and development activities).

Source: U.S. Army Corps of Engineers, *Report of Civil Works Expenditures by State and Fiscal Year,* annual.

No. 1064. Freight Carried on Inland Waterways, by System: 1960 to 1989

[**In billions of ton-miles.** Excludes Alaska and Hawaii, except as noted. Includes waterways, canals, and connecting channels]

ITEM	1960	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
Total	**220.3**	**318.6**	**406.9**	**351.2**	**359.0**	**399.0**	**381.7**	**392.6**	**410.7**	**438.2**	**448.7**
Atlantic coast waterways	28.6	28.6	30.4	25.4	22.5	24.7	24.8	25.7	25.9	28.1	28.2
Gulf coast waterways	16.9	28.6	36.6	31.8	32.4	36.7	36.5	39.0	37.9	44.6	42.5
Pacific coast waterways [1]	6.0	8.4	14.9	12.8	13.2	20.5	19.9	20.8	22.8	24.5	24.0
Mississippi River system [2]	69.3	138.5	228.9	218.0	223.0	234.6	224.7	239.3	251.6	257.8	268.1
Great Lakes System [3]	99.5	114.5	96.0	63.2	67.9	82.5	75.8	67.9	72.5	83.1	85.8

[1] Includes Alaskan waterways. [2] Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers. [3] Does not include traffic between foreign ports.

Source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States,* annual.

No. 1065. Waterborne Commerce, by Type of Commodity: 1980 to 1989

[**In millions of short tons.** Domestic trade includes all commercial movements between United States ports and on inland rivers, Great Lakes, canals, and connecting channels of the United States, Puerto Rico, and Virgin Islands. Figures may differ from those shown in table 1080 due to minor differences in basic concepts]

COMMODITY	1980		1985		1989			
	Total	Domestic	Total	Domestic	Total	Domestic	Foreign	
							Imports	Exports
Net total	**1,998.9**	**1,077.5**	**1,788.4**	**1,014.1**	**2,140.4**	**1,102.5**	**589.5**	**448.4**
Petroleum products [1] . . .	423.2	339.2	368.8	259.0	441.9	289.2	108.8	43.9
Gasoline	87.3	81.0	94.0	78.0	107.9	86.2	19.8	1.9
Distillate fuel oil	74.6	72.1	70.0	55.0	75.2	58.1	12.9	4.2
Residual fuel oil	188.0	141.3	130.0	83.7	147.5	91.4	42.8	13.3
Crude petroleum	480.2	174.2	357.7	194.7	480.8	181.9	298.8	0.1
Coal and lignite	256.4	164.1	273.9	179.9	304.8	203.8	2.4	98.6
Nonmetallic minerals [1 2] .	157.1	111.6	150.7	108.5	158.7	111.6	25.7	21.4
Sand and gravel [3]	65.1	60.8	66.4	62.0	58.8	54.9	2.1	1.8
Limestone	34.2	23.9	24.5	21.9	41.3	35.5	2.3	3.5
Phosphate rock.	23.7	9.5	19.4	8.4	15.8	6.1	0.8	8.9
Iron and concentrates . . .	98.4	64.9	72.7	50.0	86.5	59.6	21.4	5.5
Farm products [1]	216.8	63.4	172.8	60.0	216.3	70.5	8.7	137.1
Corn	98.6	30.8	76.3	29.0	96.4	35.8	0.1	60.5
Wheat.	53.4	14.3	38.0	10.6	55.8	16.5	0.2	39.1
Soybeans	39.6	16.1	32.9	14.9	28.8	12.8	(Z)	16.0
Chemicals and allied products	91.9	49.4	108.5	53.3	123.3	61.9	15.9	45.5
Food and kindred products	54.8	20.4	52.5	17.6	54.3	20.6	11.5	22.2
Lumber and wood products [4]	52.0	22.7	47.2	18.8	56.9	21.0	4.7	31.2
Primary metal products . .	28.9	9.0	33.4	8.5	31.5	8.7	17.9	4.9
Waste and scrap	31.1	18.8	37.4	23.9	54.6	37.3	0.9	16.4
Other	108.1	39.8	112.8	40.0	130.8	36.4	72.8	21.6

Z Less than 50,000. [1] Includes categories not shown separately. [2] Excludes fuels. [3] Includes crushed rock. [4] Excludes furniture.

Source: U.S. Army Corps of Engineers, *Waterborne Commerce of the United States,* annual.

No. 1066. Waterborne Imports and Exports, by Coastal District: 1980 to 1992

[Exports are free alongside ship (f.a.s.) value for all years; imports are f.a.s. value for 1980 and customs value for other years, see text, section 28. Includes commodities classified for security reasons as "Special Category" (exports only) and exports by Dept. of Defense (grant-aid shipments), and merchandise shipped in transit through the United States. See Appendix III]

DISTRICT	CARGO TONNAGE (mil. sh. tons)						VALUE (bil. dol.)					
	1980	1985	1989	1990	1991	1992	1980	1985	1989	1990	1991	1992
Imports:												
Atlantic	183	190	211	207	176	185	71.5	94.4	109.3	110.8	101.1	108.2
Gulf	243	141	217	225	217	232	56.4	32.8	36.1	41.0	36.4	36.3
Pacific	56	51	55	55	49	55	45.0	90.4	140.9	143.3	143.7	156.6
Great Lakes	16	17	16	16	13	14	1.9	2.8	3.7	7.6	8.4	9.2
Exports:												
Atlantic	117	93	94	101	107	102	51.0	35.2	56.3	62.4	70.1	78.2
Gulf	163	144	152	148	167	165	41.5	31.8	40.9	41.2	44.2	45.0
Pacific	78	81	103	100	102	101	25.2	25.8	50.1	53.7	56.6	60.4
Great Lakes	45	34	34	26	18	24	4.6	2.4	3.6	1.7	1.2	1.6

Source: U.S. Bureau of the Census, *U.S. Waterborne Exports and General Imports*, through 1988, FT 985, annual; thereafter TM 985, monthly.

No. 1067. Vessels Entered and Cleared in Foreign Trade, Net Registered Tonnage: 1966 to 1992

[**In millions of net registered tons, except as indicated.** Includes Puerto Rico and Virgin Islands. Seaports comprise all ports except Great Lakes ports. See also *Historical Statistics, Colonial Times to 1970*, series Q 507-517]

YEARLY AVERAGE OR YEAR	ALL PORTS				SEAPORTS					
	Number of vessels	Tonnage, all vessels			Tonnage, all vessels			Tonnage, with cargo		
		Total	U.S.	Foreign	Total	U.S.	Foreign	Total	U.S.	Foreign
Entered:										
1966-70	53,459	232	29	203	206	27	180	157	18	139
1971-75	53,760	319	30	290	292	28	264	220	24	196
1976-80	53,700	458	40	418	425	38	387	316	30	286
1981-85	50,124	452	57	395	424	55	369	277	36	241
1986-90	61,978	548	46	502	521	45	476	346	30	315
1970	53,293	254	26	226	227	24	202	171	19	152
1975	51,443	355	32	323	326	30	297	240	26	215
1980	53,645	492	52	440	460	50	410	310	34	276
1985	53,531	451	53	398	426	52	374	283	34	249
1988	62,097	556	47	509	527	46	481	352	30	322
1989	64,946	587	44	543	558	42	516	367	31	335
1990	66,424	589	41	548	564	40	524	367	30	337
1991	57,254	516	39	476	494	38	455	311	28	283
1992	55,056	515	37	478	493	36	457	312	28	284
Cleared:										
1966-70	52,415	232	30	202	206	27	179	122	23	99
1971-75	53,039	324	31	293	296	29	267	149	21	127
1976-80	52,931	453	41	412	420	38	382	203	26	177
1981-85	50,291	460	57	403	432	55	377	251	34	217
1986-90	60,249	551	47	504	524	46	478	284	31	253
1970	52,195	253	27	226	226	25	201	132	20	112
1975	51,017	363	34	329	334	31	303	168	23	144
1980	52,928	487	54	433	456	51	405	246	33	213
1985	53,095	461	55	406	435	53	382	253	36	217
1988	60,540	561	49	512	531	47	484	295	31	264
1989	63,042	590	45	545	561	44	517	304	30	274
1990	63,648	592	43	550	566	41	525	304	29	275
1991	55,100	521	40	480	498	39	459	282	28	253
1992	54,127	519	38	481	496	37	460	276	28	248

Source: U.S. Bureau of the Census, *Vessel Entrances and Clearances*, through 1988, FT 975, annual; thereafter TA 987, annual.

No. 1068. Domestic Merchant Vessels Completed by U.S. Shipyards: 1970 to 1992

[**Vessels of 1,000 gross tons and over.** See also *Historical Statistics, Colonial Times to 1970*, series Q 438-48]

TYPE	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988	1992
Merchant vessels	Number	13	15	10	13	5	8	5	4	4	1
Gross tons	1,000	342	452	375	376	118	172	215	153	153	32
Cargo	Number	6	3	6	6	-	4	2	3	3	1
Gross tons	1,000	120	65	105	228	-	113	66	58	58	32
Deadweight tons	1,000	134	71	114	219	-	97	53	63	63	29
Tankers	Number	7	12	4	7	5	4	3	1	1	-
Gross tons	1,000	222	387	270	148	118	59	149	95	95	-
Deadweight tons	1,000	427	742	354	277	210	92	271	209	209	-

- Represents zero.

Source: U.S. Maritime Administration, *New Ship Construction*, annual.

No. 1069. United States Flag Merchant Vessels: 1993

[As of **January**;. Covers ocean-going vessels of 1,000 gross tons and over engaged in foreign and domestic trade, and inactive vessels. Excludes vessels operating exclusively on Great Lakes, inland waterways, and those owned by the United States Army and Navy, and special types such as cable ships, tugs, etc. See also *Historical Statistics, Colonial Times to 1970*, series Q 487-502]

VESSEL TYPE	NUMBER						DEADWEIGHT TONNAGE (1,000)					
	Total	Passenger [1]	Cargo [2]	Intermodal	Bulk carrier [3]	Tanker [4]	Total	Passenger [1]	Cargo [2]	Intermodal	Bulk carrier [3]	Tanker [4]
Total	**603**	**11**	**154**	**195**	**23**	**220**	**22,461**	**97**	**2,085**	**5,126**	**991**	**14,162**
Active vessels	365	7	21	145	16	176	16,765	56	353	4,112	756	11,488
Privately owned	351	2	17	141	16	175	16,606	14	304	4,061	756	11,471
U.S. foreign trade	131	-	10	80	12	29	5,487	-	149	2,547	651	2,140
Foreign-to-foreign	27	-	1	9	-	17	1,880	-	22	291	-	1,567
Domestic trade	143	2	-	24	4	113	7,965	14	-	497	105	7,349
Coastal	77	-	-	2	4	71	2,983	-	-	30	105	2,848
Noncontiguous	66	2	-	22	-	42	4,982	14	-	467	-	4,501
Military Sea Lift Command	50	-	6	28	-	16	1,274	-	133	726	-	415
Government owned	14	5	4	4	-	1	159	42	49	51	-	17
Ready reserve force	3	1	2	-	-	-	39	10	29	-	-	-
Inactive vessels	238	4	133	50	7	44	5,696	41	1,732	1,014	235	2,674
Privately owned	33	1	3	6	5	18	2,147	13	28	99	173	1,834
Temporarily inactive	5	-	-	1	2	2	273	-	-	26	84	163
Laid-up	23	1	3	5	1	13	1,695	13	28	73	16	1,565
Laid-up (MARAD Custody) [5]	5	-	-	-	2	3	179	-	-	-	73	106
Government owned (MARAD Custody) [5]	205	3	130	44	2	26	3,549	28	1,704	915	62	840
National defense reserve fleet	159	-	92	44	-	23	2,952	-	1,282	915	-	755
Ready reserve fleet	93	-	56	24	-	13	1,832	-	787	642	-	403
Other reserve	66	-	36	20	-	10	1,120	-	495	273	-	352
Nonretention [6]	44	3	38	-	-	3	535	28	422	-	-	85
Other Government owned	2	-	-	-	2	-	62	-	-	-	62	-

- Represents zero. [1] Includes combination passenger and cargo vessels. [2] General cargo. [3] Includes tug barges. [4] Includes tanker barges and liquified natural gas vessels. [5] In the custody of the Maritime Administration. [6] Vessels not actively maintained.

Source: U.S. Maritime Administration, *Employment Report of the United States Flag Merchant Fleet Ocean-Going Vessels 1,000 Gross Tons and Over*, annual.

No. 1070. Private Shipyards—Summary: 1980 to 1993

[**For calendar year, unless noted.** See also *Historical Statistics, Colonial Times to 1970*, series Q 449-458 and series Q 467-472]

ITEM	Unit	1980	1985	1987	1988	1989	1990	1991	1992	1993
Employment [1]	1,000	177.3	130.3	120.4	121.0	123.4	121.8	127.2	123.5	111.0
Production workers	1,000	141.8	99.0	90.8	90.9	88.6	86.4	95.5	93.3	84.3
Value of work done	Mil. dol.	9,269	9,358	8,531	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
On ships only	Mil. dol.	8,889	9,483	8,377	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Value added	Mil. dol.	5,338	5,740	5,227	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Building activity:										
Merchant vessels: [2]										
Under construction [3]	Number	69	10	6	-	-	-	3	3	1
Ordered	Number	7	-	-	-	-	3	-	1	-
Delivered	Number	23	3	4	-	-	-	-	3	-
Cancelled	Number	4	-	2	-	-	-	-	-	-
Under contract [4]	Number	49	7	-	-	-	3	3	1	1
Naval vessels: [2]										
Under construction [3]	Number	99	100	79	83	105	98	91	90	82
Ordered	Number	11	11	20	32	16	8	13	10	12
Delivered	Number	19	26	16	10	23	15	14	18	19
Under contract [4,5]	Number	91	85	83	105	98	91	90	82	73
Repairs/conversions:										
Commercial ships	Mil. dol.	1,335	852	806	202	279	373	380	226	292
Naval ships	Mil. dol.	1,134	2,311	1,930	1,238	1,091	1,119	993	526	573
Unfinished work: [3]										
Commercial ships	Mil. dol.	2,070	450	53	-	-	-	99	32	42
Naval ships	Mil. dol.	7,107	12,091	8,265	10,500	16,010	15,450	14,151	12,286	(NA)

- Represents zero. NA Not available. [1] Annual average of monthly data. [2] Vessels of 1,000 tons or larger. [3] As of Jan. 1. [4] As of Dec. 31. [5] Two ships were cancelled in August 1993.

Source: Shipbuilders Council of America, Arlington, VA., *Annual Report*, through 1980; thereafter, unpublished data.

No. 1071. Employees in Government and Private Shipyards: 1960 to 1993

[**In thousands.** Annual average employment in establishments primarily engaged in building and repairing all types of ships, barges, canal boats, and lighters of 5 gross tons and over, whether propelled by sail or motor power or towed by other craft. Includes all full- and part-time employees]

YEAR	Total	Private yards	Navy yards	YEAR	Total	Private yards	Navy yards	YEAR	Total	Private yards	Navy yards
1960	208	112	96	1984	229	146	83	1989	196	126	71
1970	216	134	83	1985	219	138	80	1990	198	130	68
1975	217	154	65	1986	206	131	75	1991	193	131	62
1980	250	178	72	1987	200	124	75	1992	183	124	59
1983	226	143	84	1988	197	124	73	1993	163	111	52

Source: U.S. Bureau of Labor Statistics, Bulletins 2370 and 2429; *Employment and Earnings*, monthly, March and June issues; and unpublished data.

No. 1072. Employment on U.S. Flag Merchant Vessels, 1970 to 1993, and Basic Monthly (January) Wage Scale for Able-Bodied Seamen, 1970 to 1994

[**Employment in thousands.** See also *Historical Statistics, Colonial Times to 1970*, series Q 414-416]

YEAR	Employment [1]	YEAR	Employment [1]	YEAR	East coast wage rate [2]	West coast wage rate [2]	YEAR	East coast wage rate [2]	West coast wage rate [2]
1970	37.6	1988	10.7	1970	$470	$652	1989	$1,448	$2,218
1975	20.5	1989	9.9	1975	612	900	1990	1,505	2,218
1980	19.6	1990	11.1	1980	967	1,414	1991	1,581	2,329
1985	13.1	1991	11.7	1985	1,419	2,069	1992	1,655	2,438
1986	11.5	1992	9.2	1987	1,419	2,132	1993	1,721	2,438
1987	10.4	1993	9.3	1988	1,419	2,175	1994	1,790	2,536

[1] As of June 30, except beginning 1980, as of Sept. 30. Estimates of personnel employed on merchant ships, 1,000 gross tons and over. Excludes vessels on inland waterways, Great Lakes, and those owned by, or operated for, U.S. Army and Navy, and special types such as cable ships, tugs, etc. [2] Basic monthly wage, over and above subsistence (board and room); excludes overtime and fringe pay benefits. West coast incorporates extra pay for Saturdays and Sundays at sea into base wages but east coast does not.

Source: U.S. Maritime Administration, *U.S. Merchant Marine Data Sheet*, monthly; and unpublished data.

No. 1073. Worldwide Tanker Casualties: 1975 to 1993

[Data for **1975** and **1980** covers tankers, ore/oil carriers and bulk/oil vessels of 6,000 deadweight tons and over; beginning **1987**, 10,000 deadweight tons and over; excludes liquid gas carriers. Incident is counted in the year it is reported. Based on data from "Lloyd's List" published by Lloyd's of London. "Casualties" include weather damage, strandings, collisions and other contact, fires and explosions, machinery damage, and other mishaps]

ITEM	Unit	1975	1980	1985	1987	1988	1989	1990	1991	1992	1993
Casualties	Number	906	(NA)	340	408	456	528	541	507	396	314
Total losses [1]	Number	22	15	12	5	3	8	10	10	11	9
Deaths	Number	90	132	53	12	63	74	119	205	86	26
Oil spills	Number	45	32	9	12	13	31	31	26	17	24
Amount	1,000 tons	188	136	80	9	178	188	61	439	152	120
Amount	Mil. gallons	58	42	25	3	55	58	19	136	47	37

NA Not available. [1] Excludes losses due to hostilities.

Source: Tanker Advisory Center, Inc., New York, NY, "Worldwide Tanker Casualty Returns," quarterly.

No. 1074. Merchant Vessels—World and United States: 1960 to 1992

[**Vessels of 100 gross tonnage and above.** Excludes sailing ships, nonpropelled craft, and all ships built of wood. See also *Historical Statistics, Colonial Times to 1970*, series Q 473-480]

YEAR	WORLD: COMPLETED		WORLD: OWNED		U.S.: COMPLETED		U.S.: REGISTERED	
	Number	Gross tonnage (1,000)	Number	Gross tonnage (1,000)	Number	Gross tonnage (1,000)	Number	Gross tonnage (1,000)
1960	2,005	8,382	36,311	129,770	49	379	4,059	24,837
1970	2,814	20,980	52,444	227,490	156	375	2,983	18,463
1980	2,412	13,101	73,832	419,911	205	555	5,579	18,464
1985	1,964	18,157	76,395	416,269	66	180	6,447	19,518
1987	1,528	12,259	75,240	403,498	29	164	6,427	20,178
1988	1,575	10,909	75,680	403,406	60	11	6,442	20,832
1989	1,593	13,236	76,100	410,481	10	4	6,375	20,588
1990	1,672	15,885	78,336	423,627	16	15	6,348	21,328
1991	1,574	16,095	80,030	436,027	17	9	6,222	20,291
1992	1,506	18,633	79,845	444,305	27	54	5,737	18,228

Source: Lloyd's Register of Shipping, London, England, *Statistical Tables*, annual; and *Annual Summary of Merchant Ships Completed in the World*.

No. 1075. Merchant Vessels—Ships and Tonnage Lost Worldwide: 1980 to 1992

[**For merchant vessels of 100 gross tonnage and above.** Excludes ships which have been declared constructive losses but have undergone repair during the year. Loss counted in the year the casualty occurred, providing that information was available at time of relevant publication]

TYPE OF SHIP	SHIPS LOST					GROSS TONNAGE LOST (1,000)				
	1980	1985	1990	1991	1992	1980	1985	1990	1991	1992
Total [1]	**387**	**307**	**188**	**258**	**213**	**1,804**	**1,651**	**1,126**	**1,548**	**1,223**
Tankers	24	19	8	13	7	707	776	138	571	332
Ore/bulk carriers [2]	21	22	15	20	13	458	405	687	574	576
General cargo	211	155	87	116	81	478	363	202	300	174
Container ships	2	5	-	1	4	6	41	-	2	40
Passenger [3]	9	-	-	2	1	112	-	-	14	13
Fishing	96	66	50	69	77	30	26	20	33	31

- Represents zero. [1] Includes types not shown separately. [2] Includes ore/bulk/oil carriers. [3] Includes passenger cargo ships.

Source: Lloyd's Register of Shipping, London, England, *Casualty Return*, annual.

No. 1076. Merchant Fleets of the World: 1980 to 1992

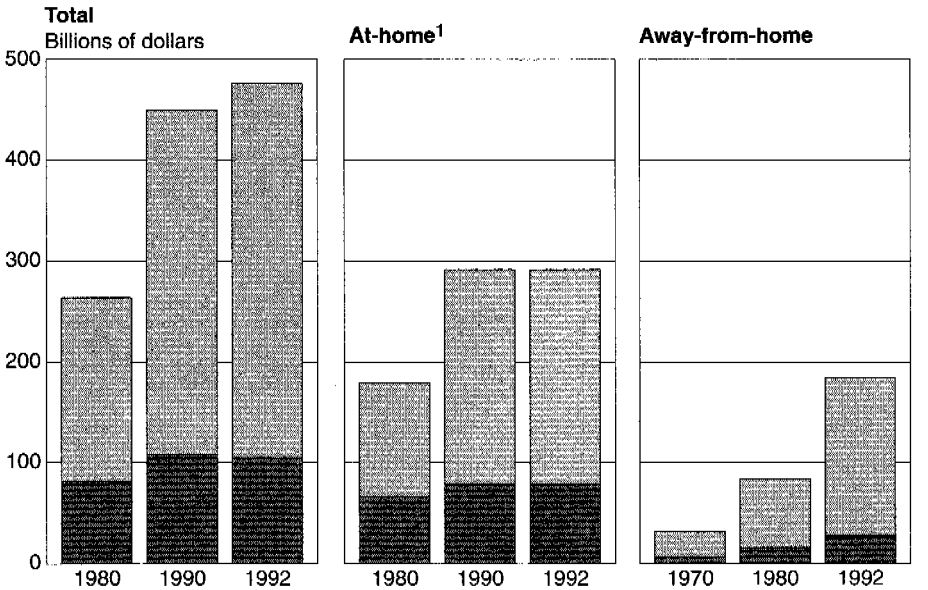
[**Vessels of 1,000 gross tons and over.** As of **Jan. 1** of the following year. Specified countries have 100 or more ships]

YEAR AND COUNTRY OF REGISTRY, 1992	TOTAL		PASSENGER/ CARGO COMB.		FREIGHTERS		BULK CARRIERS [1]		TANKERS	
	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)	Number	Average age (yr.)
1980, world total	**24,867**	**13**	**468**	**24**	**14,242**	**14**	**4,798**	**10**	**5,359**	**12**
United States	864	23	65	34	471	23	20	22	308	20
Foreign	24,003	13	403	22	13,771	13	4,778	10	5,051	11
1985, world total	**25,555**	**14**	**375**	**25**	**13,937**	**15**	**5,787**	**11**	**5,456**	**13**
United States	737	23	37	38	417	25	25	9	258	19
Foreign	24,818	14	338	23	13,520	15	5,762	11	5,198	13
1992, world total	**23,753**	**16**	**352**	**22**	**12,339**	**16**	**5,420**	**14**	**5,642**	**15**
United States	603	25	11	44	349	26	23	17	220	22
Privately-owned	384	19	3	42	167	16	21	17	193	21
Government-owned	219	35	8	45	182	35	2	14	27	35
Foreign	23,150	16	341	21	11,990	16	5,397	14	5,422	15
Antigua and Barbuda	148	12	-	-	121	12	4	19	23	15
Bahamas	818	14	49	21	380	13	147	13	242	13
Brazil	220	15	1	31	59	18	77	13	83	16
Bulgaria	117	18	2	24	59	20	37	15	19	13
China: Mainland	1,231	17	24	21	752	18	285	17	170	16
Taiwan	215	12	-	-	134	13	60	10	21	10
Cyprus	1,251	16	7	33	616	15	488	17	140	15
Denmark (DIS) [2]	281	8	-	-	189	8	14	7	78	9
Egypt	128	19	3	32	100	19	14	9	11	23
France	106	15	7	14	45	13	6	12	48	16
Germany	419	9	7	11	351	9	22	12	39	9
Greece	904	18	22	34	193	20	458	16	231	18
Honduras	189	26	3	31	176	26	10	25	-	-
Hong Kong	200	12	1	31	64	13	104	11	31	15
India	296	14	3	16	97	15	119	14	77	12
Indonesia	365	18	7	18	247	19	19	13	92	18
Iran	124	17	-	-	38	19	50	13	36	19
Italy	468	17	19	16	172	16	60	14	217	18
Japan	913	9	15	12	351	9	251	11	296	9
Latvia	118	17	-	-	75	18	-	-	43	15
Liberia	1,568	13	22	18	367	12	540	13	639	12
Malaysia	185	16	-	-	107	20	24	12	54	11
Malta	752	19	7	41	343	19	255	18	147	20
Netherlands	367	10	5	18	285	10	19	13	58	10
Norway (NIS) [2]	737	13	14	12	193	14	219	13	311	13
Panama	3,171	14	31	30	1,719	15	717	14	704	13
Philippines	534	14	5	34	239	17	251	9	39	24
Poland	212	15	3	13	119	15	85	14	5	19
Romania	255	14	-	-	193	14	50	17	12	12
Russia	1,363	18	11	26	1,006	19	135	14	211	16
Saint Vincent	431	21	2	36	285	21	97	19	47	22
Singapore	411	13	-	-	227	15	-	-	184	13
South Korea	422	15	-	-	225	15	130	14	67	15
Spain	222	16	1	19	130	15	30	16	61	17
Sweden	172	15	5	7	90	15	10	19	67	15
Thailand	169	23	1	31	110	23	5	21	53	22
Turkey	339	17	3	35	189	15	93	17	54	19
United Kingdom	154	16	18	16	58	15	19	13	59	17
Vanuatu	119	13	1	40	55	13	52	13	11	14
All others	3,056	12	42	12	1,831	13	441	9	742	13

- Represents zero. [1] Includes bulk/oil, ore/oil, and ore/bulk/oil carriers. [2] International Shipping Registry which is an open registry under which the ship flies the flag of the specified nation but is exempt from certain taxation and other regulations.

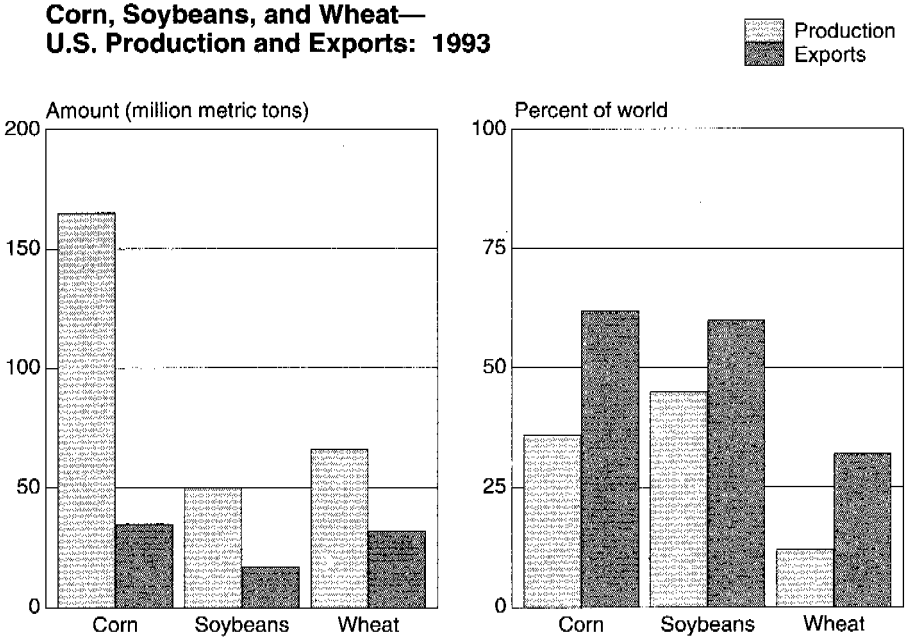
Source: U.S. Maritime Administration, *Merchant Fleets of the World*, summary report, annual; and unpublished data.

Figure 23.1
Consumer Expenditures for Farm Foods: 1970, 1980, and 1992



[1]Food purchased from retail food stores for use at home.
Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1099.

Figure 23.2
Corn, Soybeans, and Wheat— U.S. Production and Exports: 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1104.

Agriculture

This section presents statistics on farms and farm acreage; land use and irrigation; farm income, expenditures, and debt; farm output, productivity, and marketings; foreign trade in agricultural products; specific crops; and livestock, poultry, and their products.

In Brief

Number of farms, 1993: 2.1 million
Leading States—

Texas	*185,000*
Missouri	*106,000*
Iowa	*100,000*

Farm marketings cash receipts, 1992: $171 billion
Leading commodities—

Cattle, calves	*$38 billion*
Dairy products	*$20 billion*
Corn	*$15 billion*

The principal sources are the reports issued by the U.S. Bureau of the Census and by the National Agricultural Statistics Service (NASS) and the Economic Research Service (ERS) of the U.S. Department of Agriculture. The Bureau of the Census has taken a census of agriculture every 10 years from 1840 to 1920 and every 5 years from 1925 through 1974. Two 4-year censuses, taken for 1978 and 1982, adjusted the data reference year to coincide with the economic censuses. A few State reports from the 1992 Census of Agriculture are presently available. The Department of Agriculture publishes annually *Agricultural Statistics,* a general reference book on agricultural production, supplies, consumption, facilities, costs, and returns. The Economic Research Service publishes a series of annual reports, *Economic Indicators of the Farm Sector.* This series comprises five reports: *National Financial Summary, State Financial Summary, Production and Efficiency Statistics, Costs of Production—Livestock and Dairy,* and *Costs of Production—Major Field Crops.* Sources of current data on agricultural exports and imports include *Foreign Agricultural Trade of the United States,* published by the ERS, and the reports of the Bureau of the Census, particularly *U.S. Imports for Consumption and General Imports—HTSUSA Commodity by Country of Origin* (FT247), *U.S. Exports, Harmonized Schedule B, Commodity by Country* (FT447), and *U.S. Merchandise Trade: Exports, General Imports, and Imports for Consumption* (FT925).

The 45 field offices of the NASS collect data on crops, livestock and products, agricultural prices, farm employment, and other related subjects mainly through sample surveys. Information is obtained on some 75 crops and 50 livestock items as well as scores of items pertaining to agricultural production and marketing. State estimates and supporting information are sent to the Agricultural Statistics Board of NASS which reviews the estimates and issues reports containing State and national data. Among these reports are annual summaries such as *Crop Production, Crop Values, Agricultural Prices,* and *Livestock Production, Disposition and Income.* For more information about concepts and methods underlying USDA's statistical series, see *Major Statistical Series of the U.S. Department of Agriculture* (Agricultural Handbook No. 671), a 12-volume set of publications.

Farms and farmland.—The Bureau of the Census has used varying definitions of a farm. Data from the census of agriculture reflect the definition of farm used for the census year. For the 1974 Census of Agriculture and each subsequent one, a farm was defined as any place from which $1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. Control may have been exercised through ownership or management, or through a lease, rental, or cropping arrangement. In the case of landowners who had one or more tenants or renters, the land operated by each was counted as a separate farm. The effect of the change in definition must be considered when comparing

farms in the 1974 and subsequent censuses with those in previous censuses.

The definition of a farm applicable to data originated by the Department of Agriculture is the one used by the Bureau of the Census for the agriculture census immediately preceding the year or years for which the data are shown. Farmland refers to all land under the control of a farm operator, including land not actually under cultivation or not used for pasture or grazing. Land used for pasture or grazing on a per head basis that was neither owned nor leased by a farm operator is not included except for grazing lands controlled by grazing associations leased on a per acre basis. Coverage estimates for 1978, 1982, and 1987 indicate about 3.4, 9.1, and 7.2 percent of all farms, respectively, were not included in census totals. Farms undercounted in these censuses were usually small and accounted for approximately 1 percent of the total value of agricultural products sold and approximately 2 percent of the land in farms. For more explanation about mail list compilation and census coverage, see Appendixes A and C, *1987 Census of Agriculture,* volume 1 reports, and *Coverage Evaluation, Volume 2, Part 2.*

Farm income.—Gross farm income comprises cash receipts from farm marketings of crops and livestock, Federal government payments made directly to farmers for farm-related activities, rental value of farm homes, value of farm products consumed in farm homes, and other farm-related income such as machine hire and custom work. Farm marketings represent quantities of agricultural products sold by farmers multiplied by prices received per unit of production at the local market. Information on prices received for farm products is generally obtained by the NASS Agricultural Statistics Board from surveys of firms (such as grain elevators, packers, and processors) purchasing agricultural commodities directly from producers. In some cases, the price information is obtained directly from the producers.

Crops.—Estimates of crop acreage and production by the NASS are based on current sample survey data obtained from individual producers and objective yield counts, reports of carlot shipments, market records, personal field observations by field statisticians, and reports from other sources. Prices received by farmers are marketing year averages. These averages are based on U.S. monthly prices weighted by monthly marketings during specific periods. U.S. monthly prices are State average prices weighted by marketings during the month. Marketing year average prices do not include allowances for outstanding loans, government purchases, deficiency payments or disaster payments.

All State prices are based on individual State marketing years, while U.S. marketing year averages are based on standard marketing years for each crop. For a listing of the crop marketing years and the participating States in the monthly program, see *Crop Values,* January 1992. Value of production is computed by multiplying State prices by each State's production. The U.S. value of production is the sum of State values for all States. Value of production figures shown in tables 1113-1116, 1118, and 1119 should not be confused with cash receipts from farm marketings which relate to sales during a calendar year, irrespective of the year of production.

Livestock.—Annual inventory numbers of livestock and estimates of livestock, dairy, and poultry production prepared by the Department of Agriculture are based on information from farmers and ranchers obtained by probability survey sampling methods.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability pertaining to Census Bureau and Department of Agriculture data, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970.* See Appendix IV.

No. 1077. Food and Fiber Sector of Domestic Economy—Employment and Value Added: 1980 to 1992

[Employment in millions; value added in billions of dollars, except as indicated]

SECTOR	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
EMPLOYMENT										
Food and fiber sector, total	**23.4**	**22.6**	**22.3**	**22.4**	**22.4**	**22.7**	**23.4**	**23.5**	**23.2**	**22.8**
Percent of domestic economy [1]	21.9	19.9	19.3	19.0	18.7	18.6	18.9	18.8	18.5	18.0
Farm sector	2.7	2.3	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0
Nonfarm sector	20.8	20.3	20.2	20.3	20.5	20.6	21.4	21.4	21.2	20.8
Food processing	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5
Manufacturing	3.8	3.4	3.3	3.2	3.1	3.0	3.2	3.1	3.1	3.0
Transportation, trade, and retailing	7.2	7.3	7.4	7.5	7.5	7.6	7.9	8.0	7.9	7.8
Eating establishments	4.6	4.7	4.7	4.8	5.0	5.2	5.3	5.4	5.3	5.2
Other	3.4	3.2	3.2	3.2	3.2	3.3	3.5	3.5	3.5	3.4
VALUE ADDED [2]										
Food and fiber sector, total	**560.6**	**672.1**	**697.8**	**716.6**	**744.7**	**784.5**	**850.3**	**889.8**	**913.8**	**950.2**
Percent of domestic economy	20.7	17.8	17.3	16.8	16.4	16.0	16.2	16.0	16.0	15.7
Farm sector	49.3	55.5	58.5	52.6	53.0	49.7	65.2	68.1	63.4	67.0
Nonfarm sector	511.2	616.6	639.3	664.0	691.7	734.9	785.0	821.7	850.4	883.2
Food processing	63.6	80.5	82.3	87.4	86.2	91.8	96.1	99.8	103.4	106.2
Manufacturing	94.7	109.9	109.8	113.2	111.5	115.2	124.5	125.6	130.8	135.7
Transportation, trade, and retailing	179.1	201.2	208.9	212.0	222.5	235.7	247.2	257.4	265.6	277.5
Eating establishments	54.6	62.9	64.5	66.0	73.0	78.5	80.7	85.6	88.3	90.9
Other	119.0	162.1	173.8	185.3	198.4	213.8	236.6	253.2	262.3	272.9

[1] Based on civilian labor force. [2] Value added equals profits, rent, interest, wages, indirect business taxes, and depreciation.

Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

No. 1078. Farms—Number, 1974 to 1987, and Acreage, 1978 to 1987, by Size of Farm

[See also *Historical Statistics, Colonial Times to 1970*, series K 162-173]

SIZE OF FARM	NUMBER OF FARMS (1,000)				LAND IN FARMS (mil. acres)			CROPLAND HARVESTED (mil. acres)			PERCENT DISTRIBUTION, 1987		
	1974	1978	1982	1987	1978	1982	1987	1978	1982	1987	Number of farms	All land in farms	Cropland harvested
Total	**2,314**	**2,258**	**2,241**	**2,088**	**1,014.8**	**986.8**	**964.5**	**317.1**	**326.3**	**282.2**	**100.0**	**100.0**	**100.0**
Under 10 acres	128	151	188	183	0.6	0.7	0.7	0.2	0.3	0.2	8.8	0.1	0.1
10 to 49 acres	380	392	449	412	10.9	12.1	11.1	4.5	4.5	3.9	19.8	1.2	1.4
50 to 99 acres	385	356	344	311	25.9	24.8	22.5	10.2	9.5	7.9	14.9	2.3	2.8
100 to 179 acres	443	403	368	334	55.0	49.9	45.3	23.3	21.2	17.1	16.0	4.7	6.1
180 to 259 acres	253	234	211	192	50.6	45.7	41.5	23.7	21.7	17.2	9.2	4.3	6.1
260 to 499 acres	363	348	315	286	124.6	113.0	103.0	64.5	60.5	47.3	13.7	10.7	16.8
500 to 999 acres	207	213	204	200	146.7	140.5	138.5	75.2	77.6	67.4	9.6	14.4	23.9
1,000 to 1,999 acres	93	98	97	102	133.0	132.4	138.8	58.2	64.5	61.1	4.9	14.4	21.7
2,000 acres and over	62	63	65	67	467.4	467.5	463.2	57.3	66.6	60.2	3.2	48.0	21.3

Source: U.S. Bureau of the Census, *Census of Agriculture: 1974*, vol. 1; and *1987*, vol. 1.

No. 1079. Farms—Number, Acreage, and Value, by Type of Organization: 1982 and 1987

[Data for 1982 exclude abnormal farms (institutional farms, experimental and research farms, Indian reservations, etc.)]

ITEM	Unit	Total [1]	Individual or family	Partnership	Corporation	PERCENT DISTRIBUTION			
						Total [1]	Individual or family	Partnership	Corporation
ALL FARMS									
Number of farms: 1982	1,000	2,239	1,946	223	60	100.0	86.9	10.0	2.7
1987	1,000	2,088	1,809	200	67	100.0	86.7	9.6	3.2
Land in farms: 1982	Mil. acres.	932	642	152	127	100.0	68.9	16.3	13.6
1987	Mil. acres.	964	628	153	119	100.0	65.1	15.9	12.4
Value of land and buildings: [2] 1982	Bil. dol.	763	547	119	90	100.0	71.7	15.6	11.8
1987	Bil. dol.	604	424	95	69	100.0	70.1	15.7	11.4
Value of farm products sold: 1982	Bil. dol.	132	78	22	31	100.0	59.2	16.4	23.9
1987	Bil. dol.	136	77	23	35	100.0	56.3	17.1	25.6
FARMS WITH SALES OF $10,000 AND OVER									
Number of farms: 1982	1,000	1,143	934	152	52	100.0	81.7	13.3	4.6
1987	1,000	1,060	861	136	56	100.0	81.3	12.8	5.3
Land in farms: 1982	Mil. acres.	811	536	141	124	100.0	66.1	17.4	15.3
1987	Mil. acres.	829	525	143	116	100.0	63.3	17.3	14.0

[1] Includes other types, not shown separately. [2] Based on a sample of farms.

Source: U.S. Bureau of the Census, *1987 Census of Agriculture*, vol. 1.

No. 1080. Farms—Number and Acreage, by Tenure of Operator: 1974 to 1987

[*Full owners* own all the land they operate. *Part owners* own a part and rent from others the rest of the land they operate. See also *Historical Statistics, Colonial Times to 1970*, series K 109-113 and 142-146]

ITEM AND YEAR	Unit	Total	Full owner	Part owner	Tenant	PERCENT DISTRIBUTION			
						Total	Full owner	Part owner	Tenant
Number of farms:									
1974	1,000	2,314	1,424	628	262	100.0	61.5	27.2	11.3
1978	1,000	2,258	1,298	681	279	100.0	57.5	30.1	12.4
1982	1,000	2,241	1,326	656	259	100.0	59.2	29.3	11.5
1987	1,000	2,088	1,239	609	240	100.0	59.3	29.2	11.5
Under 50 acres	1,000	596	483	59	53	100.0	81.1	9.9	9.0
50 to 179 acres	1,000	645	449	130	66	100.0	69.6	20.1	10.3
180 to 499 acres	1,000	478	217	195	67	100.0	45.3	40.8	13.9
500 to 999 acres	1,000	200	53	117	31	100.0	26.3	58.3	15.4
1,000 acres or more	1,000	169	37	108	23	100.0	22.1	64.2	13.7
Land in farms:									
1974	Mil. acres	1,017	359	535	122	100.0	35.4	52.6	12.0
1978	Mil. acres	1,015	332	561	122	100.0	32.7	55.3	12.0
1982	Mil. acres	987	342	531	114	100.0	34.7	53.8	11.6
1987	Mil. acres	964	318	520	127	100.0	32.9	53.9	13.2

No. 1081. Farm Operators—Tenure and Characteristics: 1982 and 1987

[**In thousands, except as indicated.** See also *Historical Statistics, Colonial Times to 1970*, series K 82-113]

CHARACTERISTIC	ALL FARMS		FARMS WITH SALES OF $10,000 AND OVER	
	1982	1987	1982	1987
Total operators	**2,241**	**2,088**	**1,143**	**1,060**
White	2,187	2,043	1,127	1,046
Black	33	23	7	4
American Indian, Eskimos, and Aleuts	7	7	2	2
Asian or Pacific Islander	8	8	5	5
Other	6	7	2	2
Operators of Hispanic origin [1]	16	17	6	6
Female	122	132	37	42
Under 25 years old	62	36	39	21
25 to 34 years old	294	243	173	147
35 to 44 years old	443	411	223	212
45 to 54 years old	505	455	264	228
55 to 64 years old	536	496	288	263
65 years old and over	400	447	156	188
Average age (years)	50.5	52.0	49.1	50.6
Full owner	1,326	1,239	482	445
Part owner	656	609	491	454
Tenant	259	240	170	161
Principal occupation:				
Farming	1,235	1,138	901	811
Other	1,006	950	242	248
Place of residence: [2]				
On farm operated	1,581	1,488	833	776
Not on farm operated	429	443	202	215
Years on present farm: [2]				
2 years or less	127	114	53	49
3 to 4 years	193	135	83	56
5 to 9 years	360	304	167	138
10 years or more	1,098	1,163	638	653
Days worked off farm: [2]				
None	862	844	591	561
Less than 100 days	224	200	141	124
100 to 199 days	189	178	77	80
200 days or more	775	737	213	219

[1] Operators of Hispanic origin may be of any race. [2] Excludes not reported.

No. 1082. Irrigated Farms and Acreage, by State: 1982 and 1987

[See also *Historical Statistics, Colonial Times to 1970*, series J 85-91]

STATE	IRRIGATED FARMS				LAND IN IRRIGATED FARMS				IRRIGATED LAND			
	Number (1,000)		Percent of all farms		Acreage (1,000)		Percent of all land in farms		Acreage (1,000)		Percent of all land in farms	
	1982	1987	1982	1987	1982	1987	1982	1987	1982	1987	1982	1987
U.S. [1]	**278.3**	**291.6**	**12.4**	**13.9**	**246,603**	**241,069**	**24.9**	**24.9**	**49,002**	**46,386**	**5.0**	**4.8**
Arizona	4.4	4.2	60.4	55.3	18,871	17,167	49.9	47.3	1,098	914	2.9	2.5
California	58.4	58.9	70.8	70.7	18,402	17,567	57.2	57.4	8,461	7,596	26.3	24.8
Colorado	15.2	14.9	56.1	54.6	17,351	16,729	51.7	49.1	3,201	3,014	9.5	8.9
Florida	10.6	12.0	29.0	32.7	5,529	4,670	43.1	41.7	1,585	1,623	12.4	14.5
Idaho	17.4	16.6	70.2	68.8	9,168	9,053	65.8	64.9	3,450	3,219	24.8	23.1
Kansas	7.3	7.4	9.8	10.7	10,345	10,654	21.9	22.8	2,675	2,463	5.7	5.3
Montana	9.2	9.5	39.1	38.7	24,171	23,259	39.9	38.6	2,023	1,997	3.3	3.3
Nebraska	22.2	22.6	36.8	37.3	22,679	22,499	50.4	49.6	6,039	5,682	13.4	12.5
Oregon	15.3	14.4	44.9	45.0	11,382	11,340	64.1	63.6	1,808	1,648	10.2	9.3
Texas	19.8	19.8	10.6	10.4	22,161	20,270	16.8	15.5	5,576	4,271	4.2	3.3
Utah	11.2	11.1	79.9	79.2	7,598	7,594	77.7	76.0	1,082	1,161	11.1	11.6
Washington	16.3	15.4	45.0	45.9	6,003	5,468	36.4	33.9	1,638	1,519	9.9	9.4
Wyoming	5.3	5.2	59.6	56.7	18,132	18,207	54.1	54.1	1,565	1,518	4.7	4.5

[1] Includes other States not shown separately.

Source of tables 1080-82: U.S. Bureau of the Census, *Census of Agriculture: 1974*, vol. II; *1982*, vol. 1; and *1987*, vol. 1.

No. 1083. Farms—Number, Acreage, and Value, by State: 1987

[See also *Historical Statistics, Colonial Times to 1970*, series K 17-18]

REGION, DIVISION, AND STATE	ALL FARMS			FARMS WITH SALES OF $10,000 OR MORE		
	Number of farms (1,000)	Land in farms (mil. acres)	Average size of farm (acres)	Number of farms (1,000)	Land in farms (mil. acres)	Average size of farm (acres)
U.S.	**2,088**	**964.5**	**462**	**1,060**	**829.0**	**782**
Northeast	**123**	**21.4**	**174**	**61**	**16.0**	**261**
N.E.	**25**	**4.2**	**169**	**11**	**2.8**	**260**
ME	6	1.3	214	3	0.9	332
NH	2	0.4	169	1	0.2	283
VT	6	1.4	240	3	1.1	325
MA	6	0.6	99	2	0.4	153
RI	1	0.1	84	(Z)	(Z)	116
CT	4	0.4	111	1	0.3	179
M.A.	**98**	**17.2**	**175**	**50**	**13.1**	**262**
NY	38	8.4	223	21	6.7	327
NJ	9	0.9	99	3	0.7	191
PA	51	7.9	153	26	5.7	221
Midwest	**862**	**350.5**	**407**	**556**	**314.5**	**565**
E.N.C.	**365**	**86.6**	**237**	**219**	**76.3**	**348**
OH	79	15.0	189	40	12.1	305
IN	70	16.2	229	40	14.4	355
IL	89	28.5	321	63	27.0	431
MI	51	10.3	202	24	8.2	340
WI	75	16.6	221	52	14.5	280
W.N.C.	**497**	**263.8**	**531**	**337**	**238.3**	**707**
MN	85	26.6	312	58	23.8	407
IA	105	31.6	301	83	30.2	365
MO	106	29.2	275	50	22.7	457
ND	35	40.3	1,143	28	37.9	1,339
SD	36	44.2	1,214	28	37.9	1,339
NE	60	45.3	749	47	43.0	918
KS	69	46.6	680	43	42.8	1,002
South	**824**	**281.2**	**341**	**304**	**221.0**	**727**
S.A.	**240**	**51.2**	**214**	**93**	**37.4**	**403**
DE	3	0.6	205	2	0.5	291
MD	15	2.4	162	7	1.9	278
VA	45	8.7	194	16	5.9	377
WV	17	3.4	196	3	1.4	431
NC	59	9.4	159	26	7.1	276
SC	20	4.8	232	7	3.3	491
GA	44	10.7	247	18	7.9	439
FL	37	11.2	306	15	9.4	638
E.S.C.	**250**	**45.6**	**183**	**82**	**30.4**	**372**
KY	92	14.0	152	34	9.4	276
TN	80	11.7	147	22	7.2	329
AL	43	9.1	211	14	5.9	424
MS	34	10.7	315	12	7.9	662
W.S.C.	**335**	**184.4**	**551**	**129**	**153.3**	**1,184**
AR	48	14.4	298	21	11.2	522
LA	27	8.0	293	11	6.4	607
OK	70	31.5	449	29	25.1	878
TX	189	130.5	691	69	110.5	1,606
West	**278**	**311.3**	**1,118**	**139**	**277.5**	**1,999**
Mt.	**124**	**244.1**	**1,965**	**67**	**218.3**	**3,271**
MT	25	60.2	2,451	16	54.4	3,427
ID	24	13.9	577	14	12.0	881
WY	9	33.6	3,650	5	28.4	5,183
CO	27	34.0	1,248	15	30.6	2,030
NM	14	46.0	3,230	6	41.3	7,319
AZ	8	36.3	4,732	4	33.7	9,411
UT	14	10.0	710	6	8.6	1,452
NV	3	10.0	3,300	1	9.3	6,288
Pac.	**154**	**67.3**	**466**	**72**	**59.2**	**821**
WA	34	16.1	480	15	13.8	901
OR	32	17.8	556	12	15.4	1,319
CA	83	30.6	368	43	27.7	647
AK	1	1.0	1,789	(Z)	0.6	3,411
HI	5	1.7	353	2	1.6	798

Z Less than 500 farms or 50,000 acres.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1987*, vol. 1.

No. 1084. Farms—Number and Acreage, by State: 1990 and 1993

[As of June 1. Based on 1974 census definition of farms and farmland; see text, section 23. See also *Historical Statistics, Colonial Times to 1970*, series K 4-7]

STATE	FARMS (1,000)		ACREAGE (mil.)		ACREAGE PER FARM	
	1990	1993	1990	1993	1990	1993
U.S.	**2,140**	**2,068**	**987**	**978**	**461**	**473**
Alabama	47	47	10	10	215	213
Alaska	1	1	1	1	1,724	1,759
Arizona	8	8	36	36	4,615	4,557
Arkansas	47	46	16	15	330	335
California	85	76	31	30	362	391
Colorado	27	26	33	33	1,249	1,286
Connecticut	4	4	(Z)	(Z)	108	103
Delaware	3	3	1	1	197	220
Florida	41	39	11	10	266	264
Georgia	48	45	13	12	260	269
Hawaii	5	4	2	2	372	389
Idaho	22	21	14	14	628	659
Illinois	83	80	29	28	343	354
Indiana	68	63	16	16	240	254
Iowa	104	100	34	33	322	333
Kansas	69	65	48	48	694	735
Kentucky	93	91	14	14	152	155
Louisiana	32	29	9	9	278	297
Maine	7	7	1	1	201	200
Maryland	15	15	2	2	148	147
Massachusetts	7	7	1	1	99	98
Michigan	54	52	11	11	200	206
Minnesota	89	87	30	30	337	341
Mississippi	40	39	13	13	325	333
Missouri	108	106	30	30	281	285
Montana	25	25	61	60	2,449	2,445
Nebraska	57	55	47	47	826	856
Nevada	3	2	9	9	3,560	3,708
New Hampshire	3	3	(Z)	(Z)	169	174
New Jersey	8	8	1	1	107	104
New Mexico	14	14	45	44	3,296	3,274
New York	39	38	8	8	218	216
North Carolina	62	59	10	9	156	159
North Dakota	34	33	41	40	1,191	1,224
Ohio	84	76	16	15	187	200
Oklahoma	70	71	33	34	471	479
Oregon	37	37	18	18	488	473
Pennsylvania	53	51	8	8	153	155
Rhode Island	1	1	(Z)	(Z)	95	90
South Carolina	25	24	5	5	208	212
South Dakota	35	35	44	44	1,266	1,281
Tennessee	89	86	12	12	139	144
Texas	186	185	132	130	710	703
Utah	13	13	11	11	856	862
Vermont	7	7	2	2	216	219
Virginia	46	43	9	9	193	200
Washington	37	36	16	16	432	444
West Virginia	21	20	4	4	180	185
Wisconsin	80	79	18	17	220	216
Wyoming	9	9	35	35	3,910	3,742

Z Less than 500,000 acres.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Farm Numbers and Land in Farms* (July release).

No. 1085. Farms—Number and Acreage: 1975 to 1993

[Based on 1974 census definition; for definition of farms and farmland, see text, section 23. Data for census years (indicated by italics) have been adjusted for underenumeration and are used as reference points along with data from acreage and livestock surveys in estimating data for other years. Minus sign (-) indicates decrease. See also *Historical Statistics, Colonial Times to 1970*, series K 4-7]

YEAR	FARMS		LAND IN FARMS		YEAR	FARMS		LAND IN FARMS	
	Number (1,000)	Annual change [1] (1,000)	Total (mil. acres)	Average per farm (acres)		Number (1,000)	Annual change [1] (1,000)	Total (mil. acres)	Average per farm (acres)
1975	2,521	(X)	1,059	420	1985	2,293	-41	1,012	441
1976	2,497	-24	1,054	422	1986	2,250	-43	1,005	447
1977	2,456	-41	1,048	427	*1987*	*2,213*	*-37*	*999*	*451*
1978	*2,436*	*-20*	*1,045*	*429*	1988	2,197	-16	995	453
1979	2,437	1	1,042	428	1989	2,171	-26	991	457
1980	2,440	3	1,039	426					
1981	2,440	-	1,034	424	1990	2,140	-31	987	461
1982	*2,407*	*-33*	*1,028*	*427*	1991	2,105	-35	983	467
1983	2,379	-28	1,023	430	1992	2,094	-11	980	468
1984	2,334	-45	1,018	436	1993	2,068	-26	978	473

- Represents zero. X Not applicable. [1] Annual change from preceding year shown.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Farm Numbers, 1975-80; Farms and Land in Farms, Final Estimates by States, 1979-1987*; and *Farm Numbers and Land in Farms*, July release.

No. 1086. Farm Real Estate—Summary: 1980 to 1993

[**1980** and **1986-89**, value data as of **Feb. 1**; **1984** and **1985**, as of **April 1**; **1990-93**, as of **January 1**. Excludes Alaska and Hawaii. Total value of land and buildings is estimated by multiplying the number of acres of farmland by the average value per acre of land and buildings. Per acre values are based on data from the census of agriculture. For intercensal years, estimates are based on surveys conducted by the U.S. Dept. of Agriculture]

ITEM	Unit	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Total value	**Bil. dol**	**763.3**	**812.9**	**719.4**	**641.1**	**597.1**	**626.9**	**653.5**	**658.2**	**667.7**	**668.1**	**684.6**
Average value per acre	Dollars	737	801	713	640	599	632	661	668	681	684	700
Average value, operating unit	$1,000	313.5	349.1	314.5	285.6	270.5	286.0	301.8	308.2	318.0	319.6	327.4

Source: U.S. Dept. of Agriculture, Economic Research Service, 1980-84, *Farm Real Estate Market Developments*, annual; thereafter, *Agricultural Resources, Agricultural Land Values and Markets, Situation and Outlook Report*, annual.

No. 1087. Farm Real Estate—Value of Land and Buildings, by State: 1990 to 1993

[See headnote, table 1086. See also *Historical Statistics, Colonial Times to 1970*, series K 16]

STATE	VALUE OF LAND AND BUILDINGS (mil. dol.)			AVERAGE VALUE OF LAND AND BUILDINGS, PER ACRE			STATE	VALUE OF LAND AND BUILDINGS (mil. dol.)			AVERAGE VALUE OF LAND AND BUILDINGS, PER ACRE		
	1990	1992	1993	1990	1992	1993		1990	1992	1993	1990	1992	1993
U.S.	**658,187**	**668,145**	**684,554**	**$668**	**$684**	**$700**	MT	14,399	15,127	16,216	238	252	270
							NE	25,905	26,790	27,326	550	569	580
AL	8,474	8,153	8,455	839	832	863	NV	1,727	2,057	1,917	194	231	215
AZ	9,468	10,879	10,966	263	302	305	NH	1,096	961	1,024	2,237	2,045	2,178
AR	11,625	11,219	11,769	750	724	759	NJ	4,032	4,201	3,991	4,634	4,774	4,536
CA	52,483	52,587	51,325	1,704	1,765	1,722	NM	8,722	10,558	9,925	196	239	225
CO	11,850	12,043	12,548	358	367	383	NY	8,182	8,618	9,178	974	1,051	1,119
CT	1,655	1,655	1,763	4,417	4,036	4,299	NC	12,251	12,010	12,526	1,263	1,264	1,319
DE	1,288	1,191	1,323	2,259	2,126	2,362	ND	13,770	14,477	15,679	340	358	388
FL	22,727	21,648	21,778	2,085	2,062	2,074	OH	18,903	19,241	19,510	1,204	1,249	1,267
GA	12,650	10,917	11,660	1,012	902	964	OK	16,401	16,790	17,411	497	494	512
ID	9,056	9,272	9,328	661	687	691	OR	10,164	10,557	11,496	571	603	657
IL	39,587	42,760	42,846	1,389	1,500	1,503	PA	14,637	14,562	13,979	1,807	1,820	1,747
IN	20,277	20,843	21,864	1,244	1,303	1,366	RI	352	290	308	5,028	4,595	4,894
IA	36,917	39,355	41,598	1,102	1,178	1,245	SC	4,727	4,840	4,530	909	931	871
KS	22,130	23,131	23,616	462	484	494	SD	14,543	16,113	16,339	328	365	370
KY	13,832	13,998	15,286	981	993	1,084	TN	12,350	12,416	13,223	996	985	1,049
LA	8,144	7,870	8,225	915	905	945	TX	65,340	60,600	61,266	495	466	471
ME	1,478	1,322	1,408	1,019	931	992	UT	4,396	4,801	5,248	389	425	464
MD	5,445	4,960	5,545	2,420	2,255	2,521	VT	1,797	1,642	1,748	1,190	1,087	1,158
MA	2,559	2,338	2,490	3,763	3,439	3,662	VA	13,492	11,861	11,268	1,516	1,363	1,295
MI	10,854	11,937	12,200	1,005	1,105	1,130	WA	12,464	12,672	12,507	779	792	782
MN	24,150	26,028	26,705	805	873	896	WV	2,268	2,659	2,576	613	719	696
MS	9,464	9,441	9,686	728	738	757	WI	14,133	15,047	16,115	803	870	932
MO	20,642	20,889	21,662	679	689	715	WY	5,185	4,819	5,200	149	138	149

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Resources, Agricultural Land Values and Markets, Situation and Outlook Report*, annual.

No. 1088. Balance Sheet of the Farming Sector: 1980 to 1992

[**In billions of dollars, except as indicated.** As of **December 31.** See *Historical Statistics, Colonial Times to 1970*, series K 204-219, for data before revisions]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CURRENT DOLLARS											
Assets	**983.2**	**943.3**	**857.0**	**772.7**	**724.4**	**772.6**	**801.1**	**829.7**	**848.3**	**842.2**	**861.5**
Physical assets:											
Real estate	782.8	753.4	661.8	586.2	542.3	578.9	595.5	615.7	628.2	623.2	633.1
Nonreal estate	173.6	158.9	162.6	153.3	147.7	158.7	170.2	177.3	181.9	178.5	184.9
Livestock and poultry [1]	60.6	49.5	49.5	46.3	47.8	58.0	62.2	66.2	70.9	68.1	71.3
Machinery, motor vehicles	80.3	85.8	85.0	82.9	81.5	80.0	81.2	85.1	85.4	85.8	85.6
Crops stored	32.7	23.6	26.1	22.9	16.3	17.5	23.3	23.4	22.8	22.0	24.1
Purchased inputs	(NA)	(NA)	2.0	1.2	2.1	3.2	3.5	2.6	2.8	2.6	3.9
Financial assets	26.7	30.9	32.6	33.3	34.4	35.2	35.4	36.8	38.4	40.5	43.3
Investment in cooperatives	19.3	22.8	24.3	24.3	24.4	25.3	25.1	26.3	27.5	28.7	29.7
Other financial assets	7.4	8.1	8.3	9.0	10.0	9.9	10.3	10.5	10.9	11.8	13.6
Claims	**983.2**	**943.3**	**857.0**	**772.7**	**724.4**	**772.6**	**801.1**	**829.7**	**848.3**	**842.2**	**861.5**
Debt	166.8	191.1	193.8	177.6	157.0	144.4	139.4	137.2	137.4	138.8	138.6
Real estate debt	89.7	103.2	106.7	100.1	90.4	82.4	77.6	75.4	74.1	74.5	75.0
Nonreal estate debt	77.1	87.9	87.1	77.5	66.6	62.0	61.7	61.9	63.2	64.3	63.6
Equity	816.4	752.2	663.3	595.1	567.5	628.2	661.7	692.4	710.9	703.5	722.9
Farm debt/asset ratio (percent)	**17.0**	**20.3**	**22.6**	**23.0**	**21.7**	**18.7**	**17.4**	**16.5**	**16.2**	**16.5**	**16.1**
CONSTANT (1987) DOLLARS [2]											
Assets	1,371.2	1,061.7	941.8	818.6	747.6	772.6	771.0	764.7	748.7	715.6	711.4
Debt	232.7	219.1	213.0	188.1	162.0	144.4	134.1	126.5	121.2	117.9	114.5
Equity	1,138.6	862.6	728.9	630.4	585.6	628.2	636.9	638.2	627.5	597.7	596.9

NA Not available. [1] Excludes horses and mules. [2] Constant dollar figures are based on gross domestic product implicit price deflators for year.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary, 1992.*

No. 1089. Gross Farm Product—Summary: 1980 to 1992

[**In billions of dollars.** For definition of gross product, see text, section 14. Minus sign (-) indicates decrease]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CURRENT DOLLARS											
Farm output, total [1]	**142.9**	**135.1**	**160.0**	**152.7**	**144.0**	**152.1**	**158.2**	**178.7**	**186.4**	**182.0**	**187.2**
Cash receipts from farm marketings	140.3	140.2	144.6	136.3	135.2	147.7	159.3	166.5	172.6	171.2	171.8
Farm housing	5.1	5.1	5.1	5.0	4.9	4.9	4.9	5.0	5.2	5.3	5.3
Other farm income	2.4	4.1	3.5	4.6	4.4	5.1	4.6	5.0	4.9	5.0	4.4
Change in farm inventories	−6.1	−15.4	5.7	5.8	−1.5	−6.4	−11.3	1.5	3.1	-	5.0
Less: Intermediate goods and services purchased [2]	86.8	85.9	91.4	85.6	81.1	86.1	90.6	97.6	101.3	103.1	102.7
Equals: **Gross farm product**	**56.1**	**49.2**	**68.5**	**67.1**	**62.9**	**66.0**	**67.6**	**81.1**	**85.1**	**78.8**	**84.4**
Less: Consumption of fixed capital	19.4	23.2	23.2	22.9	22.5	22.0	21.6	21.9	21.6	21.4	21.6
Indirect business tax [3]	3.0	3.2	3.1	3.3	3.3	3.6	3.6	3.8	4.2	4.2	4.4
Plus: Subsidies to operators	1.0	7.5	7.0	6.3	9.5	13.9	11.8	9.3	8.1	7.6	8.4
Equals: **Farm national income**	**34.7**	**30.3**	**49.2**	**47.2**	**46.6**	**54.3**	**54.2**	**64.7**	**67.4**	**60.8**	**66.8**
CONSTANT (1987) DOLLARS											
Farm output, total [1]	**137.1**	**133.2**	**139.0**	**146.0**	**146.4**	**152.1**	**146.5**	**151.1**	**158.7**	**158.7**	**168.3**
Cash receipts from farm marketings	130.7	131.2	127.8	133.1	137.9	147.7	143.9	141.9	146.8	149.1	155.6
Farm housing	6.3	5.4	5.4	5.3	5.1	4.9	4.7	4.6	4.5	4.5	4.4
Other farm income	2.3	3.8	3.1	4.3	4.6	5.1	4.1	4.2	4.4	4.4	4.0
Change in farm inventories	−3.4	−8.3	1.7	2.4	−2.1	−6.4	−7.0	−0.1	2.5	0.2	3.8
Less: Intermediate goods and services purchased [2]	86.1	79.5	83.9	81.8	82.2	86.1	83.3	84.9	87.1	88.3	88.8
Equals: **Gross farm product**	**51.0**	**53.7**	**55.1**	**64.2**	**64.3**	**66.0**	**63.2**	**66.2**	**71.6**	**70.4**	**79.6**
Less: Consumption of fixed capital	26.7	25.8	25.1	24.3	23.1	22.0	21.1	20.5	19.5	18.8	18.6
Indirect business tax [3]	2.8	2.9	3.0	3.5	3.5	3.6	3.5	3.6	3.9	3.9	4.4
Plus: Subsidies to operators	11.9	11.6	10.7	11.4	12.3	13.9	12.9	12.7	13.5	13.6	14.5
Equals: **Farm national income**	**33.4**	**36.5**	**37.7**	**47.8**	**49.9**	**54.3**	**51.6**	**54.8**	**61.8**	**61.3**	**71.1**

- Represents zero. [1] Includes farm products consumed in farm households where raised, not shown separately. [2] Includes rent paid to nonoperator landlords. [3] Includes nontax liability.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, July 1992 and August 1993; and *National Income and Product Accounts of the United States: Volume 2, 1959-88.*

No. 1090. Farms, Farm Income, Assets, and Debt, by Value of Sales: 1992

[In billions of dollars, except as indicated]

ITEM	Total	Less than $20,000	$20,000 to $39,999	$40,000 to $99,999	$100,000 to $249,999	$250,000 to $499,999	$500,000 to $999,999	$1 million and over
Number of farms [1] (1,000)	2,094	1,132	254	338	247	76	32	15
Gross cash income [2]	187.9	9.4	9.4	29.1	46.0	29.9	24.5	39.5
Cash receipts	171.2	8.2	8.2	25.5	40.8	27.4	22.9	38.1
Government payments	9.2	0.4	0.7	2.0	3.2	1.6	0.8	0.5
Net cash income [2]	57.7	−2.6	1.9	9.0	14.7	10.1	9.1	15.5
Assets [3]	861.5	202.4	93.2	158.7	194.3	101.2	55.4	56.3
Debt [3]	138.6	24.6	10.4	24.5	33.0	17.7	14.3	14.2
Debt/asset ratio [3] (percent)	16.1	12.1	11.1	15.4	17.0	17.5	25.9	25.2
PERCENT DISTRIBUTION								
Number of farms [1]	100	54	12	16	12	4	2	1
Gross cash income [2]	100	5	5	16	25	16	13	21
Assets [3]	100	24	11	18	23	12	6	7

[1] Based on 1974 census definition. See text, section 23. [2] For components of income, see table 1093. Minus sign (-) indicates loss. [3] Data as of December 31.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual.

No. 1091. Net Cash Income and Net Cash Flow From Farming: 1980 to 1992

[**In billions of dollars**. Net cash income measures the cash income from a farm operator's farm business and net cash flow measures the cash flow within the agricultural sector. Minus sign (-) indicates net loan redemption or decrease]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Net cash income	34.2	38.1	38.4	37.4	47.1	47.9	55.8	54.5	54.7	55.9	53.3	57.7
Gross cash income	143.3	151.3	151.1	156.1	157.9	152.9	165.2	172.9	179.8	186.8	184.7	187.9
Cash expenses	109.1	113.2	112.8	118.7	110.7	105.0	109.4	118.4	125.1	130.9	131.4	130.2
Change in loans outstanding	15.3	6.4	2.3	2.7	−16.2	−20.6	−12.6	−5.0	−2.1	0.1	1.4	−0.1
Real estate loans	10.0	3.0	1.4	3.5	−6.6	−9.7	−8.0	−4.8	−2.3	−1.2	0.4	0.5
Nonreal estate loans [1]	5.3	3.4	0.9	−0.8	−9.6	−11.0	−4.6	−0.3	0.1	1.3	1.0	−0.6
Net change in other financial assets	0.1	0.2	0.3	0.2	0.7	1.1	−0.2	0.5	0.1	0.4	1.0	1.8
Net rent received by nonoperator landlords	6.1	5.5	5.2	8.2	7.7	6.1	7.1	9.0	10.1	10.5	10.5	10.9
Capital expenditures	18.0	13.3	12.7	12.5	9.2	8.5	11.2	11.5	13.1	14.1	13.2	12.7
Net cash flow [2]	37.6	37.0	33.4	36.0	30.1	26.0	39.0	47.4	49.7	52.8	53.0	57.7

[1] Excludes Commodity Credit Corporation loans. [2] Net cash income plus change in loans outstanding plus net change in other financial assets plus net rent received by nonoperator landlords minus capital expenditures.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual.

No. 1092. Average Income to Farm Operator Households: 1988 to 1992

[**In dollars per operator household.** Data for 1988-90 are expanded to represent only the farm operator households surveyed in USDA's Farm Costs and Returns Survey; beginning 1991 data represent the total number of U.S. farms and ranches]

ITEM	1988	1989	1990	1991	1992
Farm income to household [1]	4,201	5,796	5,742	4,397	4,882
Self-employment farm income	3,837	4,723	4,973	2,283	2,874
Other farm income to household	364	1,073	768	2,114	2,008
Plus: Total off-farm income	28,829	26,223	33,265	31,638	35,731
Income from wages, salaries, and nonfarm businesses	22,220	19,467	24,778	23,551	27,022
Income from interest, dividends, transfer payments, etc.	6,610	6,756	8,487	8,087	8,709
Equals: Farm operator household income	33,030	32,019	39,007	36,035	40,613

[1] Farm income to the household equals self-employment income plus amounts that operators pay themselves and family members to work on the farm, income from renting out acreage, and net income from a farm business other than the one being surveyed.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Income and Finance Situation and Outlook*, Sept. 1993.

No. 1093. Farm Income and Expenses: 1980 to 1992

[**In billions of dollars.** See also *Historical Statistics, Colonial Times to 1970*, series K 192, K 259-260, K 264-265, and K 326]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Gross farm income	**149.3**	**164.1**	**153.9**	**168.0**	**161.2**	**156.1**	**168.5**	**175.8**	**190.9**	**196.4**	**190.3**	**197.7**
Cash income	143.3	151.3	151.1	156.1	157.9	152.9	165.2	172.9	179.8	186.8	184.7	187.9
Farm marketings	139.7	142.6	136.8	142.8	144.1	135.4	141.8	151.2	161.2	170.0	168.7	171.2
Crops	71.7	72.3	67.2	69.9	74.3	63.8	65.9	71.7	77.0	80.1	81.9	84.8
Livestock and products	68.0	70.3	69.6	72.9	69.8	71.6	76.0	79.4	84.1	89.8	86.8	86.4
Government payments	1.3	3.5	9.3	8.4	7.7	11.8	16.7	14.5	10.9	9.3	8.2	9.2
Other farm income [1]	2.3	5.2	5.1	4.9	6.0	5.7	6.6	7.3	7.8	7.6	7.6	7.6
Value of home consumption	1.2	1.1	1.0	1.0	0.9	0.9	0.7	0.7	0.7	0.7	0.6	0.6
Rental value of dwellings [2]	11.0	13.1	12.6	4.9	4.7	4.6	4.9	5.6	5.7	5.5	5.3	5.5
Value of inventory adjustment [3]	−6.3	−1.4	−10.9	6.0	−2.3	−2.2	−2.3	−3.4	4.8	3.4	−0.3	3.8
Expenses of farm production	**133.1**	**140.3**	**139.6**	**141.9**	**132.4**	**125.1**	**128.8**	**137.0**	**144.0**	**149.9**	**150.3**	**149.1**
Intermediate products	76.1	75.4	75.8	78.0	72.3	70.6	74.8	81.8	86.4	90.2	91.9	90.4
Farm origin	34.9	31.4	32.1	32.3	29.3	30.4	32.6	37.1	38.3	39.7	38.7	38.5
Feed purchased	21.0	18.6	20.6	19.4	17.0	17.5	17.5	20.2	20.7	20.4	19.3	19.8
Livestock, poultry purchased	10.7	9.7	8.8	9.5	9.2	9.8	11.8	12.8	13.1	14.8	14.3	13.8
Seed purchased [4]	3.2	3.2	2.7	3.4	3.1	3.2	3.3	4.1	4.4	4.5	5.1	4.9
Manufactured inputs	22.4	22.1	20.1	22.4	20.2	18.2	18.1	19.0	20.6	22.0	23.2	22.7
Fertilizer and lime	9.5	8.0	7.1	8.4	7.5	6.8	6.5	7.7	8.2	8.2	8.7	8.3
Pesticides	3.5	4.3	3.9	4.7	4.3	4.3	4.5	4.1	5.0	5.4	6.3	6.5
Fuel and oil	7.9	7.7	7.2	7.3	6.4	5.3	5.0	4.8	4.8	5.8	5.6	5.3
Electricity	1.5	2.0	2.0	2.1	1.9	1.8	2.2	2.4	2.7	2.6	2.6	2.6
Repairs and maintenance [5]	7.1	6.4	6.5	6.4	6.4	6.4	6.8	7.7	8.4	8.6	8.6	8.5
Other [6]	11.8	15.5	17.1	16.9	16.5	15.5	17.4	18.0	19.1	19.9	21.3	20.7
Interest	16.3	21.8	21.4	21.1	18.6	16.5	15.0	14.3	13.9	13.3	12.1	11.4
Real estate	7.5	10.5	10.8	10.7	9.9	9.1	8.2	7.6	7.2	6.7	6.0	5.6
Nonreal estate	8.7	11.3	10.6	10.4	8.7	7.4	6.8	6.7	6.7	6.5	6.1	5.8
Contract, hired labor expenses [7]	9.3	9.4	8.9	9.4	10.0	9.5	10.0	11.0	11.9	14.0	13.9	14.1
Net rent to nonoperator landlords [8]	6.1	5.5	5.2	6.2	7.7	6.1	7.1	7.7	8.7	9.2	9.1	9.6
Capital consumption [9]	21.5	24.2	23.8	20.8	19.3	17.8	17.1	17.4	17.9	17.7	17.7	17.8
Property taxes	3.9	4.0	4.5	4.3	4.5	4.6	4.9	5.0	5.2	5.7	5.6	5.8
Net farm income	**16.1**	**23.8**	**14.2**	**26.1**	**28.8**	**31.1**	**39.7**	**38.8**	**46.9**	**46.5**	**40.0**	**48.6**

[1] Includes forest product sales. [2] Data for 1980 to 1983 are not comparable with later data. [3] Minus sign (-) indicates decrease in inventories. [4] Includes bulbs, plants, and trees. [5] Expenditures for repairs and maintenance of farm buildings, motor vehicles, and machinery. [6] Includes machine hire and customwork expenses; marketing, storage, and transportation expenses and miscellaneous expenses. [7] Includes Social Security payments and perquisites. [8] Data for years 1980-83, and 1984 and later are based on different sources, creating potential inconsistencies in estimates among these periods. [9] Depreciation and accidental damage.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual.

No. 1094. Commodity Credit Corporation—Net Outlays, by Commodity and Function: 1990 to 1993

[**In millions of dollars. For fiscal year ending in year shown**; see text, section 9. Excludes value of commodity certificates which may also be issued to farmers in lieu of cash under certain programs. Minus sign (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds)]

COMMODITY	1990	1991	1992	1993	FUNCTION	1990	1991	1992	1993
Total	**6,471**	**10,110**	**9,738**	**16,047**	**Total**	**6,471**	**10,110**	**9,738**	**16,047**
Feed grains	2,721	2,722	2,510	5,764	Price support loans [4]	−399	418	584	2,062
Wheat	806	2,958	1,719	2,185	Direct payments [5]	4,370	6,341	5,847	9,143
Cotton, upland	−79	382	1,443	2,240	Deficiency payments	4,178	6,224	5,491	8,607
Dairy	505	839	232	262					
Rice	667	867	715	887					
Wool	104	172	191	179	1988/93 crop disaster	[3]5	6	960	872
Honey	47	19	17	22	Emergency livestock/forage				
Peanuts	1	48	41	−13	assistance	156	115	94	72
Sugar	15	−20	−19	−35	Purchases [6]	−48	646	321	534
Tobacco	−307	−143	29	235	Producer storage payments	185	1	14	9
Soybeans	5	40	−29	115	Processing, storage and				
Operating expense [1]	618	625	6	6	transportation	317	394	185	136
Interest expenditure	632	745	532	129	Operating expense [1]	618	625	6	6
Export programs [2]	−34	733	1,459	2,194	Interest expenditure	632	745	532	129
1988/93 disaster/livestock					Export programs [2]	−34	733	1,459	2,194
assistance	[3]161	121	1,054	944	Other	669	86	−264	890
Other	609	2	−162	933					

[1] Excludes CCC transfers to the general sales manager. [2] Covers the direct export credit sales program, the export guarantee program, transfers to the general sales manager, market promotion program (beginning 1991), and beginning 1992, the export guarantee program-credit reform, export enhancement program, dairy export incentive program, and technical assistance to emerging democracies. [3] Approximately $1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates and were not recorded directly as disaster assistance outlays. [4] Price support loans made less loans repaid. [5] Includes dairy termination program and loan deficiency payments. Cash payments only. Excludes generic certificates. [6] Purchases less sales proceeds.

Source: U.S. Agricultural Stabilization and Conservation Service, *Commodity Credit Corporation Report of Financial Condition and Operations*, annual, and *Agricultural Outlook*, monthly.

No. 1095. Farm Income—Cash Receipts From Farm Marketings: 1980 to 1992

[Represents gross receipts from commercial market sales as well as net Commodity Credit Corporation loans. See also *Historical Statistics, Colonial Times to 1970*, series K 286-302]

COMMODITY	FARM MARKETINGS (mil. dol.)								PERCENT		
	1980	1985	1987	1988	1989	1990	1991	1992	1980	1990	1992
Total	**139,737**	**144,114**	**141,844**	**151,154**	**161,164**	**169,973**	**168,721**	**171,168**	**100.0**	**100.0**	**100.0**
All crops [1]	71,746	74,293	65,851	71,720	77,042	80,130	81,942	84,810	51.3	47.1	49.5
Barley	736	1,039	754	862	765	823	813	852	0.5	0.5	0.5
Corn	13,959	16,880	9,983	8,923	11,388	13,340	14,405	14,742	10.0	7.8	8.6
Cotton lint, seed	4,447	3,687	4,189	4,546	5,033	5,489	5,236	5,207	3.2	3.2	3.0
Hay	1,917	2,390	2,533	3,119	3,388	3,281	2,973	2,913	1.4	1.9	1.7
Oats	(NA)	298	260	305	268	221	142	165	(NA)	0.1	0.1
Peanuts	607	1,005	1,027	1,116	1,117	1,258	1,392	1,286	0.4	0.7	0.8
Rice	1,519	1,042	720	1,086	942	1,076	1,092	1,232	1.1	0.6	0.7
Sorghum	1,392	1,981	1,100	1,071	1,240	1,002	1,152	1,397	1.0	0.6	0.8
Soybean	14,241	11,161	10,017	12,138	10,524	10,756	10,975	11,343	10.2	6.3	6.6
Sunflower/safflower	(NA)	242	211	224	213	217	288	327	(NA)	0.1	0.2
Tobacco	2,672	2,699	1,816	2,083	2,415	2,741	2,886	2,961	1.9	1.6	1.7
Wheat	8,854	7,909	5,044	6,361	7,286	6,426	6,303	7,641	6.3	3.8	4.5
Vegetables [2]	7,307	8,572	9,898	9,818	11,598	11,449	11,552	11,436	5.2	6.7	6.7
Dry beans	(NA)	439	444	421	688	692	519	487	(NA)	0.4	0.3
Snap beans	(NA)	167	171	166	228	205	205	217	(NA)	0.1	0.1
Broccoli	(NA)	239	240	292	276	268	242	280	(NA)	0.2	0.2
Carrots	(NA)	206	248	268	297	273	309	338	(NA)	0.2	0.2
Celery	(NA)	190	199	231	268	215	206	229	(NA)	0.1	0.1
Sweet corn	(NA)	368	372	360	468	468	497	447	(NA)	0.3	0.3
Cucumbers	(NA)	181	188	196	203	231	231	275	(NA)	0.1	0.2
Lettuce	(NA)	675	1,003	1,040	950	844	818	1,108	(NA)	0.5	0.6
Onions	(NA)	372	536	500	538	535	602	665	(NA)	0.3	0.4
Green peppers	(NA)	(NA)	182	103	121	150	207	368	(NA)	0.1	0.2
Potatoes	(NA)	1,601	1,707	1,630	2,336	2,448	2,141	2,033	(NA)	1.4	1.2
Tomatoes	(NA)	1,198	1,466	1,415	1,841	1,626	1,801	1,819	(NA)	1.0	1.1
Cantaloups	(NA)	(NA)	187	203	209	195	100	291	(NA)	0.1	0.2
Fruits, tree nuts [2]	6,557	6,946	8,065	9,027	9,173	9,440	9,888	10,183	4.7	5.6	5.9
Apples	(NA)	892	1,060	926	994	1,086	1,651	1,684	(NA)	0.6	1.0
Avocados	(NA)	139	120	212	224	245	204	187	(NA)	0.1	0.1
Cherries	(NA)	(NA)	181	189	173	156	229	235	(NA)	0.1	0.1
Grapefruit	(NA)	319	408	471	436	365	417	403	(NA)	0.2	0.2
Grapes	(NA)	961	1,362	1,600	1,867	1,677	1,736	1,713	(NA)	1.0	1.0
Lemons	(NA)	237	226	188	223	306	271	235	(NA)	0.2	0.1
Oranges	(NA)	1,404	1,363	1,825	1,786	1,728	1,393	1,616	(NA)	1.0	0.9
Peaches	(NA)	295	311	382	359	372	394	373	(NA)	0.2	0.2
Pears	(NA)	193	196	218	259	261	272	276	(NA)	0.2	0.2
Plums and prunes	(NA)	196	207	255	252	295	256	245	(NA)	0.2	0.1
Strawberries	(NA)	451	554	544	538	590	634	685	(NA)	0.3	0.4
Almonds	(NA)	361	648	600	481	598	564	670	(NA)	0.4	0.4
Pecans	(NA)	163	140	167	179	248	307	241	(NA)	0.1	0.1
Walnuts	(NA)	175	243	194	245	236	280	268	(NA)	0.1	0.2
Sugar beets	(NA)	774	1,028	1,022	1,057	1,178	1,084	1,109	(NA)	0.7	0.6
Sugarcane	(NA)	717	803	854	870	820	868	922	(NA)	0.5	0.5
Mushrooms	(NA)	491	519	573	630	667	661	659	(NA)	0.4	0.4
Greenhouse, nursery	(NA)	5,407	6,767	7,302	7,838	8,510	8,828	8,999	(NA)	5.0	5.3
All livestock and products [1]	67,991	69,822	75,993	79,434	84,122	89,843	86,780	86,358	48.7	52.9	50.5
Cattle and calves	31,819	29,002	33,583	36,810	36,894	39,945	39,644	37,882	22.8	23.5	22.1
Dairy products	16,365	18,055	17,727	17,641	19,396	20,149	18,037	19,848	11.7	11.9	11.6
Hogs	8,942	9,033	10,337	9,207	9,475	11,552	11,045	10,088	6.4	6.8	5.9
Broilers	4,303	5,668	6,177	7,435	8,778	8,365	8,383	9,156	3.1	4.9	5.3
Eggs	3,247	3,262	3,208	3,067	3,862	4,010	3,909	3,389	2.3	2.4	2.0
Turkeys	1,273	1,820	1,703	1,951	2,234	2,379	2,345	2,387	0.9	1.4	1.4
Sheep and lambs	471	514	558	476	487	414	400	456	(NA)	0.2	0.3
Horses and mules	(NA)	560	540	540	524	490	466	433	(NA)	0.3	0.3
Aquaculture	(NA)	205	290	323	407	541	469	502	(NA)	0.3	0.3

NA Not available. [1] Includes other commodities not shown separately. [2] Melons included with vegetables.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual.

No. 1096. Farm Assets, Debt, and Income, by State: 1991 and 1992

[**Assets and debt**, as of **December 31**. Farm income data are after inventory adjustment and include income and expenses related to the farm operator's dwelling]

DIVISION AND STATE	ASSETS (mil. dol.)		DEBT (mil. dol.)		DEBT/ASSET RATIO (percent)		GROSS FARM INCOME (mil. dol.)		NET FARM INCOME (mil. dol.)	
	1991	1992	1991	1992	1991	1992	1991	1992	1991	1992
United States	**842,238**	**861,497**	**138,785**	**138,645**	**16.5**	**16.1**	**190,329**	**197,741**	**40,022**	**48,647**
New England:										
Maine	1,776	1,904	273	287	15.4	15.1	535	550	122	138
New Hampshire	1,164	1,227	66	67	5.7	5.5	174	184	36	45
Vermont	2,185	2,342	341	317	15.6	13.5	472	529	75	133
Massachusetts	3,424	3,650	296	299	8.6	8.2	537	556	179	200
Rhode Island	380	389	36	38	9.3	9.7	77	80	32	36
Connecticut	2,822	2,947	203	199	7.2	6.7	503	527	171	190
Middle Atlantic:										
New York	11,844	12,455	2,003	2,085	16.9	16.7	3,087	3,174	543	622
New Jersey	7,589	7,297	435	455	5.7	6.2	751	770	187	213
Pennsylvania	17,864	17,459	2,358	2,378	13.2	13.6	3,689	4,009	477	832
East North Central:										
Ohio	23,876	24,056	3,149	3,138	13.2	13.0	4,654	5,096	804	1,214
Indiana	25,016	26,447	4,547	4,521	18.2	17.1	4,759	5,469	159	729
Illinois	50,243	50,818	7,291	7,363	14.5	14.5	8,100	9,268	708	1,699
Michigan	15,161	15,567	2,555	2,602	16.8	16.7	3,756	3,787	517	581
Wisconsin	23,394	23,972	4,687	4,688	20.0	19.6	5,989	5,971	787	811
West North Central:										
Minnesota	35,021	35,484	6,583	6,708	18.8	18.9	7,885	7,976	1,271	1,481
Iowa	51,300	54,087	9,835	9,949	19.2	18.4	11,172	12,111	1,685	2,465
Missouri	26,725	27,756	4,558	4,565	17.1	16.4	4,700	5,127	582	875
North Dakota	20,116	21,595	3,326	3,262	16.5	15.1	3,342	3,809	693	1,091
South Dakota	21,136	21,840	3,410	3,424	16.1	15.7	3,903	3,953	1,324	1,395
Nebraska	35,070	36,115	6,594	6,856	18.8	19.0	9,802	9,970	2,423	2,692
Kansas	29,847	30,693	5,501	5,566	18.4	18.1	7,953	8,384	1,281	1,723
South Atlantic:										
Delaware	1,369	1,472	300	327	21.9	22.2	698	696	134	135
Maryland	5,759	6,244	940	962	16.3	15.4	1,533	1,596	327	388
Virginia	13,733	13,126	1,921	1,910	14.0	14.5	2,449	2,495	617	627
West Virginia	3,011	2,950	395	404	13.1	13.7	434	440	69	79
North Carolina	14,238	14,809	2,699	2,623	19.0	17.7	5,975	6,088	2,461	2,453
South Carolina	6,038	5,804	905	876	15.0	15.1	1,421	1,362	362	338
Georgia	13,639	14,338	2,752	2,779	20.2	19.4	4,599	4,716	1,496	1,681
Florida	24,305	24,458	3,546	3,622	14.6	14.8	6,360	6,372	2,744	2,777
East South Central:										
Kentucky	17,156	18,041	2,733	2,676	15.9	14.8	3,597	3,821	1,070	1,307
Tennessee	14,696	15,648	1,988	1,977	13.5	12.6	2,393	2,606	423	608
Alabama	9,907	10,073	1,401	1,466	14.1	14.6	3,518	3,369	1,224	1,141
Mississippi	11,272	11,639	2,459	2,413	21.8	20.7	2,996	3,211	373	674
West South Central:										
Arkansas	14,058	14,691	3,104	3,106	22.1	21.1	5,118	5,398	874	1,405
Louisiana	8,325	8,343	1,707	1,704	20.5	20.4	2,139	2,259	295	491
Oklahoma	20,693	21,969	3,679	3,588	17.8	16.3	4,372	4,350	863	1,083
Texas	73,129	74,387	9,648	9,300	13.2	12.5	14,184	14,236	2,970	3,464
Mountain:										
Montana	18,505	19,355	2,469	2,448	13.3	12.6	2,208	2,085	577	463
Idaho	11,582	11,788	2,463	2,467	21.3	20.9	2,953	3,025	865	939
Wyoming	6,130	6,562	862	832	14.1	12.7	1,032	922	231	239
Colorado	15,276	15,824	2,830	2,785	18.5	17.6	4,336	4,426	845	947
New Mexico	11,806	11,184	1,063	1,048	9.0	9.4	1,642	1,674	427	491
Arizona	11,223	11,316	1,286	1,172	11.5	10.4	2,027	1,954	668	595
Utah	5,428	5,858	659	651	12.1	11.1	830	893	224	281
Nevada	2,951	2,783	245	238	8.3	8.5	299	268	81	56
Pacific:										
Washington	15,282	15,224	2,858	2,805	18.7	18.4	4,691	5,007	1,044	1,337
Oregon	12,462	13,326	2,471	2,298	19.8	17.2	2,952	3,019	627	696
California	70,232	68,110	13,047	13,063	18.6	19.2	19,120	19,539	4,052	4,756
Alaska	582	597	23	48	4.0	8.0	33	33	7	6
Hawaii	3,496	3,475	288	295	8.2	8.5	581	581	21	27

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Financial Summary, 1992*; and unpublished data.

No. 1097. Farm Income—Farm Marketings, 1991 and 1992, Government Payments, 1992, and Principal Commodities, 1992, by State

[In millions of dollars. Cattle include calves; sheep include lambs; and greenhouse includes nursery]

DIVISION AND STATE	1991			1992				
	Farm marketings			Farm marketings			Government payments	State rank for total farm marketings and four principal commodities in order of marketing receipts
	Total	Crops	Livestock and products	Total	Crops	Livestock and products		
U.S.	**168,721**	**81,942**	**86,780**	**171,168**	**84,810**	**86,358**	**9,169**	**Cattle, dairy products, corn, soybeans**
N.E.	**2,087**	**1,013**	**1,074**	**2,161**	**1,020**	**1,141**	**25**	(X)
ME	484	192	292	513	213	301	10	42-Potatoes, dairy products, eggs, aquaculture
NH	142	79	63	144	79	65	2	48-Dairy products, greenhouse, apples, hay
VT	434	64	370	452	63	389	6	45-Dairy products, cattle, greenhouse, hay
MA	485	356	129	491	356	135	5	43-Greenhouse, cranberries, dairy products, eggs
RI	69	57	12	72	60	13	(Z)	49-Greenhouse, dairy products, eggs, potatoes
CT	472	264	208	489	249	240	2	44-Greenhouse, dairy products, eggs, tobacco
M.A	**6,934**	**2,543**	**4,391**	**7,221**	**2,561**	**4,661**	**107**	(X)
NY	2,874	1,081	1,793	2,946	1,032	1,914	48	24-Dairy products, greenhouse, cattle, apples
NJ	658	465	193	657	465	192	11	39-Greenhouse, dairy products, eggs, peaches
PA	3,402	997	2,405	3,618	1,064	2,554	49	19-Dairy products, cattle, greenhouse, mushrooms
E.N.C	**24,826**	**13,396**	**11,430**	**25,092**	**13,850**	**11,242**	**1,188**	(X)
OH	4,165	2,484	1,681	4,167	2,587	1,580	166	14-Soybeans, corn, dairy products, greenhouse
IN	4,500	2,583	1,917	4,505	2,684	1,821	233	12-Corn, soybeans, hogs, cattle
IL	7,534	5,181	2,353	7,634	5,431	2,202	481	5-Corn, soybeans, hogs, cattle
MI	3,210	1,922	1,288	3,286	1,962	1,325	143	20-Dairy products, corn, greenhouse, cattle
WI	5,417	1,225	4,191	5,499	1,186	4,313	166	9-Dairy products, cattle, corn, hogs
W.N.C	**43,520**	**18,410**	**25,110**	**43,641**	**19,264**	**24,378**	**3,164**	(X)
MN	7,378	3,786	3,593	7,082	3,460	3,622	422	6-Dairy products, corn, soybeans, cattle
IA	10,250	4,529	5,720	10,330	4,716	5,614	662	3-Hogs, corn, cattle, soybeans
MO	3,911	1,642	2,268	4,123	1,935	2,188	294	15-Cattle, soybeans, hogs, corn
ND	2,547	1,877	670	3,094	2,339	755	443	23-Wheat, cattle, barley, sunflowers
SD	3,314	1,188	2,125	3,229	1,263	1,966	272	21-Cattle, wheat, hogs, corn
NE	9,044	3,111	5,933	8,783	3,109	5,674	479	4-Cattle, corn, hogs, soybeans
KS	7,076	2,276	4,800	7,000	2,442	4,558	592	7-Cattle, wheat, corn, sorghum grain
S.A.	**20,654**	**11,312**	**9,342**	**21,079**	**11,395**	**9,684**	**438**	(X)
DE	622	184	438	636	184	451	3	40-Broilers, soybeans, corn, greenhouse
MD	1,352	564	788	1,391	587	804	16	35-Broilers, greenhouse, dairy products, soybeans
VA	2,116	753	1,363	2,134	781	1,353	29	29-Cattle, broilers, dairy products, tobacco
WV	324	71	253	343	75	267	7	46-Cattle, broilers, dairy products, turkeys
NC	4,956	2,339	2,617	5,181	2,386	2,795	75	10-Tobacco, broilers, hogs, turkeys
SC	1,226	677	549	1,177	632	545	73	36-Tobacco, broilers, cattle, soybeans
GA	3,934	1,772	2,162	4,073	1,764	2,309	182	16-Broilers, peanuts, cattle, eggs
FL	6,125	4,953	1,172	6,145	4,985	1,160	53	8-Oranges, greenhouse, tomatoes, cane/sugar
E.S.C	**10,523**	**4,261**	**6,262**	**10,757**	**4,637**	**6,120**	**587**	(X)
KY	3,196	1,491	1,705	3,221	1,580	1,641	72	22-Tobacco, cattle, horses, dairy products
TN	1,936	893	1,044	2,103	1,042	1,061	116	30-Cattle, dairy products, cotton, tobacco
AL	3,007	770	2,237	2,830	768	2,063	119	25-Broilers, cattle, greenhouse, peanuts
MS	2,383	1,108	1,276	2,602	1,247	1,355	280	27-Cotton, broilers, soybeans, cattle
W.S.C	**22,043**	**8,074**	**13,969**	**21,703**	**8,393**	**13,310**	**2,091**	(X)
AR	4,242	1,578	2,664	4,602	1,901	2,702	410	11-Broilers, soybeans, rice, cotton
LA	1,728	1,092	636	1,846	1,259	587	271	31-Cotton, cane/sugar, soybeans, rice
OK	3,856	1,068	2,788	3,635	1,137	2,498	248	18-Cattle, wheat, greenhouse, broilers
TX	12,217	4,336	7,881	11,620	4,097	7,523	1,162	2-Cattle, cotton, dairy products, greenhouse
Mt	**13,102**	**5,373**	**7,729**	**13,746**	**5,400**	**8,346**	**859**	(X)
MT	1,514	704	810	1,742	821	921	299	33-Cattle, wheat, barley, hay
ID	2,651	1,586	1,065	2,816	1,643	1,173	137	26-Cattle, potatoes, dairy products, wheat
WY	837	169	668	773	167	606	37	37-Cattle, sugar beets, hay, sheep
CO	3,762	1,099	2,663	4,038	1,083	2,955	203	17-Cattle, corn, wheat, dairy products
NM	1,452	474	978	1,530	490	1,040	60	34-Cattle, dairy products, hay, chili peppers
AZ	1,867	1,081	786	1,835	943	892	76	32-Cattle, cotton, dairy products, hay
UT	721	171	550	738	182	556	36	38-Cattle, dairy products, hay, turkeys
NV	297	88	209	273	71	202	11	47-Cattle, dairy products, hay, potatoes
Pac	**25,033**	**17,560**	**7,473**	**25,768**	**18,291**	**7,476**	**710**	(X)
WA	4,143	2,844	1,299	4,454	2,922	1,532	189	13-Apples, cattle, dairy products, wheat
OR	2,525	1,699	826	2,490	1,695	795	87	28-Cattle, greenhouse, dairy products, wheat
CA	17,777	12,523	5,254	18,234	13,179	5,055	430	1-Dairy products, greenhouse, grapes, cattle
AK	27	20	6	25	20	6	2	50-Greenhouse, dairy products, potatoes, hay
HI	562	474	88	564	476	88	2	41-Cane/sugar, pineapples, greenhouse, nuts

X Not applicable. Z Less than $500,000.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Financial Summary, 1992.*

No. 1098. Indexes of Prices Received and Paid by Farmers: 1990 to 1993

[1977=100, **except as noted**. See also *Historical Statistics, Colonial Times to 1970*, series K 344-353]

ITEM	1990	1991	1992	1993, prel.	ITEM	1990	1991	1992	1993, prel.
Prices received, all products	**149**	**146**	**139**	**143**	**Prices paid, total** [3]	**184**	**187**	**189**	**195**
Crops [1]	127	129	121	123	Production [1]	171	172	173	178
Food grains	123	115	139	129	Feed	128	123	123	124
Feed grains and hay	123	117	116	115	Feeder livestock	213	214	202	218
Cotton	107	108	88	89	Seed	165	163	162	169
Tobacco	152	161	154	154	Fertilizer	131	134	131	128
Oil-bearing crops	94	91	86	95	Agricultural chemicals	139	151	159	165
Fruits	186	265	175	174	Fuels and energy	204	203	199	201
Commercial vegetables [2]	142	135	156	159	Farm and motor supplies	154	157	160	160
Livestock and products	170	161	157	162	Interest payable per acre	(NA)	137	129	123
Meat animals	193	186	176	183	Taxes payable per acre	158	164	171	180
Dairy products	141	126	135	132	Wage rates [4]	193	200	209	217
Poultry and eggs	131	124	117	127	**Parity ratio (1910-14=100)** [5]	**54**	**51**	**49**	**49**

NA Not available. [1] Includes other items not shown separately. [2] Excludes potatoes and dry beans. [3] Includes production items, interest, taxes, wage rates, and a family living component. The family living component is the Consumer Price Index for all urban consumers from the Bureau of Labor Statistics. See text, section 15, and table 747. [4] Straight average of seasonally adjusted indexes. [5] Ratio of prices received by farmers to prices paid.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Agricultural Prices: Annual Summary*.

No. 1099. Civilian Consumer Expenditures for Farm Foods—Farm Value and Marketing Bill: 1980 to 1992

[**In billions of dollars, except percent**. Excludes imported and nonfarm foods, such as coffee and seafood, as well as food consumed by the military, or exported. See *Historical Statistics, Colonial Times to 1970*, series K 358-360 for data before revisions]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Consumer expenditures, total	**264.4**	**315.0**	**332.0**	**345.4**	**359.6**	**375.5**	**398.8**	**419.4**	**449.8**	**465.1**	**476.8**
Farm value, total	81.7	85.3	89.8	86.4	88.8	90.4	96.8	103.8	106.2	101.6	105.3
Marketing bill, total [1]	182.7	229.7	242.2	259.0	270.8	285.1	301.9	315.6	343.6	363.5	371.5
Percent of total consumer expenditures	69.1	72.9	73.0	75.0	75.3	75.9	75.7	75.3	76.4	78.2	77.9
At-home expenditures [2]	180.1	204.6	213.1	220.8	226.0	230.2	242.1	255.5	276.2	286.1	291.5
Farm value	65.9	66.5	69.5	66.6	67.6	67.5	72.5	77.9	80.2	76.7	77.4
Marketing bill [1]	114.2	138.1	143.6	154.2	158.4	162.7	169.6	177.6	196.0	209.4	214.1
Percent of at-home expenditures	63.4	67.5	67.4	69.8	70.1	70.7	70.1	69.5	71.0	73.2	73.4
Away-from-home expenditures	84.3	110.4	118.9	124.6	133.6	145.3	156.7	163.9	173.6	179.0	185.3
Farm value	15.8	18.8	20.3	19.8	21.2	22.9	24.3	25.9	26.0	24.9	27.9
Marketing bill [1]	68.5	91.6	98.6	104.8	112.4	122.4	132.4	138.0	147.6	154.1	157.4
Percent of away-from-home expenditures	81.3	83.0	82.9	84.1	84.1	84.2	84.5	84.2	85.0	86.1	84.9
Marketing bill cost components:											
Labor cost [3]	81.5	102.4	109.3	115.6	122.9	130.0	137.9	145.1	154.0	160.9	167.8
Packaging materials	21.0	24.7	26.2	26.9	27.7	29.9	32.6	35.2	36.5	38.1	39.2
Rail and truck transport [4]	13.0	15.4	15.9	16.5	16.8	17.2	17.8	18.6	19.8	20.4	20.6
Corporate profits before taxes	9.9	9.6	9.6	10.4	10.3	11.1	11.6	12.2	15.0	16.1	15.9
Fuels and electricity	9.0	11.7	12.5	13.1	13.2	13.6	14.1	14.8	15.2	16.3	16.8
Other [5]	48.3	65.9	68.7	76.5	79.9	83.3	87.9	89.7	103.1	111.7	111.2
Processing	66.3	77.8	80.8	88.4	91.0	93.9	99.7	103.8	113.4	120.1	123.3
Wholesaling	20.4	27.1	28.6	29.8	30.5	31.8	33.8	35.2	39.0	40.5	40.7
Transportation	13.0	15.4	16.0	16.6	16.8	17.6	17.7	18.6	19.6	20.4	20.6
Retailing and food service	83.0	109.4	116.8	124.2	132.5	141.8	150.8	158.0	171.6	182.5	186.9
SELECTED FOOD COMMODITY GROUPS											
Meat products:											
Total expenditures	83.3	97.9	101.7	103.2	106.3	110.0	117.6	121.5	128.4	133.4	137.1
Farm value	30.8	31.4	32.4	30.5	30.9	32.7	33.5	34.0	36.9	34.7	34.4
Percent of total	37.0	32.1	31.9	29.6	29.1	29.7	28.5	28.0	28.7	26.0	25.1
Marketing bill [1]	52.5	66.5	69.3	72.7	75.4	77.3	84.1	87.5	91.5	98.7	102.7
Poultry and eggs:											
Total expenditures	18.3	21.7	24.2	26.0	27.6	29.4	31.3	33.9	36.6	37.7	38.4
Farm value	8.4	9.3	11.0	10.2	11.5	10.3	12.1	14.2	13.9	13.9	14.3
Percent of total	45.9	42.9	45.5	39.2	41.7	35.0	38.7	41.9	38.0	36.9	37.2
Marketing bill [1]	9.9	12.4	13.2	15.8	16.1	19.1	19.2	19.7	22.7	23.8	24.1
Dairy products:											
Total expenditures	37.8	45.0	47.4	49.4	51.4	54.0	55.8	58.1	62.5	63.0	63.8
Farm value	16.0	18.0	18.1	17.7	17.8	18.2	17.9	19.6	20.5	18.4	20.1
Percent of total	42.3	40.0	38.2	35.8	34.6	33.7	32.1	33.7	32.8	29.2	31.5
Marketing bill [1]	21.8	27.0	29.3	31.7	33.6	35.8	37.9	38.5	42.0	44.6	43.7
Fruits and vegetables:											
Total expenditures	55.5	70.0	74.7	78.5	81.6	84.7	89.3	96.0	103.7	107.9	111.1
Farm value	11.7	12.9	13.5	13.3	14.6	14.3	16.2	17.8	16.5	17.0	17.7
Percent of total	21.1	18.4	18.1	16.9	17.9	16.9	18.1	18.5	15.9	15.8	15.9
Marketing bill [1]	43.8	57.1	61.2	65.2	67.0	70.4	73.1	78.2	87.2	90.9	93.4
Bakery, grain mill products:											
Total expenditures	35.2	40.6	43.3	45.5	48.3	49.9	54.7	57.7	63.3	66.0	67.4
Farm value	5.1	4.9	5.1	4.7	4.0	3.8	4.9	5.9	5.1	4.6	5.1
Percent of total	14.5	12.1	11.8	10.3	8.3	7.6	9.0	10.2	8.1	7.0	7.6
Marketing bill [1]	30.1	35.7	38.2	40.8	44.3	46.1	49.8	51.8	58.2	61.4	62.3

[1] The difference between expenditures for domestic farm-originated food products and the farm value or payment farmers received for the equivalent farm products. [2] Food primarily purchased from retail food stores for use at home. [3] Covers employee wages and salaries, and their health and welfare benefits. Also includes imputed earnings of proprietors, partners, and family workers not receiving stated remuneration. [4] Excludes local hauling. [5] Represents advertising, rent, depreciation, interest on borrowed capital, taxes other than income, and other costs.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Food Cost Review, 1992*, AER No. 672, September 1993; *FoodReview*, periodic; and *Agricultural Statistics*, annual.

No. 1100. Selected Indexes of Farm Inputs: 1970 to 1991

[1982=100. Inputs based on physical quantities of resources used in production. See *Historical Statistics, Colonial Times to 1970*, series K 486-495 for data before revisions]

INPUT	1970	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991, prel.
Total	**93**	**106**	**96**	**98**	**95**	**92**	**89**	**87**	**87**	**89**	**89**
Farm labor	119	108	95	97	89	87	84	86	82	87	88
Farm real estate	94	101	92	98	97	94	91	90	91	90	89
Durable equipment	78	102	95	91	86	80	74	70	66	64	63
Energy	92	110	97	100	90	84	93	93	91	90	89
Agricultural chemicals [1]	76	131	93	106	101	111	100	90	93	90	94
Feed, seed, and livestock purchases [2]	87	102	99	101	106	105	101	98	99	105	104
Other purchased inputs [3]	90	116	107	108	99	89	92	90	96	97	100

[1] Includes fertilizer, lime, and pesticides. [2] Includes nonfarm portion of feed, seed, and livestock purchases. [3] Includes purchased services and miscellaneous inputs.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Outlook*, monthly. Also published in the U.S. Council of Economic Advisers, *Economic Report of the President*, annual.

No. 1101. Farm Machinery and Equipment: 1980 to 1992

[See also *Historical Statistics, Colonial Times to 1970*, series K 184-191]

ITEM	Unit	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Value of farm implements and machinery [1]	Bil. dol.	80.3	86.0	85.8	85.0	82.9	81.5	80.0	81.2	85.1	85.4	85.8	85.6
Farmers' expenditures:													
Motor vehicles [2]	Mil. dol.	5,813	4,436	4,724	4,583	3,699	3,227	4,275	4,912	5,484	5,750	4,993	5,126
Tractors	Mil. dol.	3,683	2,597	2,606	2,539	1,937	1,513	2,104	2,540	2,903	3,119	2,593	2,826
Machinery, equipment	Mil. dol.	6,956	5,068	4,735	4,682	3,232	3,094	4,297	4,222	5,087	5,589	5,410	5,132
Repair and maintenance	Mil. dol.	5,205	4,635	4,793	4,908	4,834	4,825	5,017	5,869	6,607	6,311	6,414	5,966
Tractors, machinery and equipment	Mil. dol.	3,746	3,557	3,616	3,592	3,442	3,428	3,540	4,022	4,506	4,366	4,485	4,196
Autos and trucks	Mil. dol.	1,459	1,079	1,178	1,316	1,392	1,397	1,477	1,847	2,101	1,945	1,929	1,770
Retail sales: [3]													
Tractors, total [4]	1,000	119.3	77.2	71.3	66.7	58.5	47.1	48.3	52.0	59.7	66.3	59.1	52.8
Two-wheel drive	1,000	108.4	70.4	66.2	62.7	55.5	45.1	46.6	49.3	55.5	61.2	54.0	50.1
Four-wheel drive	1,000	10.9	6.8	5.1	4.0	3.0	2.0	1.7	2.7	4.2	5.1	4.1	2.7
Combines	1,000	25.7	16.2	12.8	11.4	8.4	7.7	7.2	6.0	9.1	10.4	9.7	7.7
Field forage harvesters	1,000	9.5	5.1	4.1	3.5	2.5	2.2	2.3	2.4	2.8	(NA)	(NA)	(NA)

NA Not available. [1] Farm inventory valuations as of December 31. [2] For farm business use. [3] Source: Equipment Manufacturers Institute, Chicago, IL, unpublished data. [4] Covers tractors over 40 hp. only.

Source: Except as noted, U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual. Also in *Agricultural Statistics*, annual.

No. 1102. Hired Farmworkers—Workers and Weekly Earnings: 1990 and 1992

[Represents average number of persons 15 years old and over in the civilian noninstitutional population who were employed at hired farmwork at any time during the year. Based on Current Population Survey; see text, section 1, and Appendix III. For definition of median, see Guide to Tabular Presentation]

CHARACTERISTIC	WORKERS (1,000)		MEDIAN WEEKLY EARNINGS [1]		CHARACTERISTIC	WORKERS (1,000)		MEDIAN WEEKLY EARNINGS [1]	
	1990	1992	1990	1992		1990	1992	1990	1992
All workers	**886**	**846**	**$200**	**$200**	White [2]	540	506	201	225
					Black and other races [2]	85	82	175	190
15 to 19 years old	144	122	100	100	Hispanic	260	260	213	200
20 to 24 years old	135	113	206	200					
25 to 34 years old	251	246	240	235	Educational attainment: [3]				
35 to 44 years old	170	175	250	250	Less than 5th grade	98	119	204	200
45 to 54 years old	90	96	200	250	5th to 8th grade	191	135	200	200
55 years old and over	95	96	200	200	9th to 12th grade (no diploma)	202	229	168	175
					High school diploma	278	228	240	240
Male	735	711	216	220	Beyond high school	116	136	260	275
Female	151	137	175	175					

[1] The weekly earnings the farmworker usually earns at his farmwork job before deductions and includes any overtime pay or commissions. [2] Excludes persons of Hispanic origin. [3] Prior to 1992, reflected years of school completed rather than degrees or diplomas received.

Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

No. 1103. Farm Output Indexes: 1970 to 1991

[1982=100. See also *Historical Statistics, Colonial Times to 1970*, series K 414-429]

ITEM	1970	1980	1981	1983	1984	1985	1986	1987	1988	1989	1990	1991, prel.
Farm output [1]	**71**	**87**	**98**	**82**	**98**	**104**	**100**	**102**	**95**	**105**	**112**	**110**
Per unit of total input	**77**	**82**	**95**	**86**	**100**	**110**	**109**	**114**	**109**	**120**	**126**	**124**
Gross production:												
Livestock and products [2]	90	99	101	102	100	103	103	105	108	110	112	114
Meat animals	100	104	104	102	100	99	99	100	102	102	102	105
Dairy products	86	95	98	103	99	105	106	105	107	106	109	109
Poultry and eggs	76	96	100	100	103	108	112	122	125	130	138	144
Crops [3]	58	78	96	67	95	104	95	97	83	99	111	106
Feed crops	49	64	102	31	108	125	119	101	63	117	114	114
Food grains	50	86	102	84	93	87	77	77	70	77	99	76
Oil crops	53	80	89	75	87	96	88	88	71	87	87	92
Cotton and cottonseed	92	95	135	69	112	114	83	128	134	104	139	141
Tobacco	98	90	106	75	89	77	58	61	69	71	83	85
Vegetables and melons	66	54	86	62	66	97	80	85	75	70	115	95
Fruits and nuts	71	103	101	100	100	99	95	109	117	111	113	105
Other crops	65	94	98	101	110	111	120	132	137	141	141	148

[1] Annual production available for eventual human use. [2] Includes livestock products not shown separately and excludes horses and mules. [3] Includes crops not shown separately.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Outlook*, monthly.

No. 1104. Selected Farm Products—United States and World Production and Exports: 1991 to 1993

[**In metric tons, except as indicated.** Metric ton=1.102 short tons or .984 long tons]

ITEM	Unit	AMOUNT						UNITED STATES AS PERCENT OF WORLD		
		United States			World					
		1991	1992	1993	1991	1992	1993	1991	1992	1993
PRODUCTION [1]										
Wheat	Million	54	67	66	542	561	560	10.0	11.9	11.8
Corn for grain	Million	190	241	165	487	529	454	39.0	45.6	36.3
Soybeans	Million	54	60	50	107	117	112	50.6	51.2	44.8
Rice, milled	Million	5.0	5.7	5.1	348	351	344	1.4	1.6	1.5
Tobacco, unmanufactured [2]	1,000	755	781	734	7,608	8,349	8,630	9.9	9.4	8.5
Cotton [3]	Million bales [4]	15.5	17.6	16.2	87.0	96.0	82.5	17.8	18.3	19.6
EXPORTS [5]										
Wheat [6]	Million	35.1	37.0	31.5	108.9	109.4	99.1	32.2	33.8	31.8
Corn	Million	40.6	41.8	34.5	61.6	60.1	55.8	65.9	69.6	61.8
Soybeans	Million	18.6	20.9	17.0	28.5	29.5	28.5	65.3	70.8	59.7
Rice, milled basis	Million	2.2	2.1	2.5	12.0	14.0	14.4	18.3	15.0	17.4
Tobacco, unmanufactured [7]	1,000	226	261	230	1,831	1,752	1,812	12.3	14.9	12.7
Cotton [3]	Million bales [4]	7.8	6.7	5.2	29.7	28.3	24.8	26.3	23.7	21.2

[1] Production years vary by commodity. In most cases, includes harvests from July 1 of the year shown through June 30 of the following year. [2] Farm sales weight basis. [3] For production and trade years ending in year shown. [4] Bales of 480 lb. net weight. [5] Trade years may vary by commodity. [6] Includes wheat flour on a grain equivalent. [7] Dried weight basis.

Source: U.S. Department of Agriculture, Foreign Agricultural Service, *Foreign Agricultural Commodity Circular Series*, periodic.

No. 1105. Agricultural Exports and Imports—Volume, by Principal Commodities: 1980 to 1992

[**In thousands of metric tons**]

EXPORTS	1980	1990	1991	1992	IMPORTS	1980	1990	1991	1992
Animal products [1]	2,575	2,737	3,006	3,627	Fruits, nuts, vegetables	2,325	4,573	4,731	4,502
Wheat and products [2]	37,130	28,286	31,946	34,655	Bananas	2,352	3,094	3,229	3,531
Feed grains and products	72,970	61,397	52,370	52,958	Green coffee	1,089	1,174	1,131	1,300
Rice	3,075	2,509	2,313	2,181	Cocoa and products	325	765	761	755
Feeds and fodders	6,888	10,979	10,864	11,336	Meat and products [5]	931	1,165	1,147	1,119
Protein meal	7,427	5,138	6,274	7,020					
Oilseeds and products [3]	23,631	15,778	18,163	20,511	Vegetable oils	704	1,183	1,207	1,420
Vegetable oils	1,837	1,204	1,154	1,722	Rubber, crude natural	931	840	798	931
Fruits, nuts, vegetables [4]	4,147	5,552	5,442	6,147	Sugar	3,744	1,856	1,613	1,648
Cotton and linters	1,880	1,733	1,543	1,449	Spices	86	129	140	155
Tobacco, unmanufactured	272	223	226	261	Tobacco, unmanufactured	392	187	227	398

[1] Includes meat and products, poultry meats, dairy products, and fats, oils and greases. Excludes live animals, hides, skins, and eggs. [2] Includes flour and bulgur. [3] Includes soybeans, sunflowerseeds, peanuts, cottonseed, safflowerseed, flaxseed, and nondefatted soybean flour. [4] Excludes fruit juices. [5] Excludes poultry.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, Jan./Feb. 1993, and calendar year supplements.

No. 1106. Agricultural Exports and Imports—Value: 1980 to 1992

[In billions of dollars, except percent. Includes Puerto Rico. Excludes forest products and distilled liquors; includes crude rubber and similar gums (now mainly plantation products). Includes shipments under foreign aid programs. See also *Historical Statistics, Colonial Times to 1970*, series K 251-255]

YEAR	Trade balance	Exports, domestic products	Percent of all exports	Imports for consumption	Percent of all imports	YEAR	Trade balance	Exports, domestic products	Percent of all exports	Imports for consumption	Percent of all imports
1980	23.9	41.2	18	17.4	7	1987	8.3	28.7	12	20.4	5
1982	21.2	36.6	17	15.4	6	1988	16.1	37.1	12	21.0	5
1983	19.5	36.1	18	16.6	7	1989	18.2	39.9	11	21.7	5
1984	18.5	37.8	17	19.3	6	1990	16.6	39.4	10	22.8	5
1985	9.1	29.0	13	20.0	6	1991	16.5	39.2	10	22.7	5
1986	4.8	26.2	13	21.5	6	1992	18.3	42.9	10	24.6	5

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, Jan.-Feb. issues, and calendar year supplements. Also in *Agricultural Statistics*, annual.

No. 1107. Agricultural Exports and Imports—Leading Trading Partners: 1992

[In billions of dollars. For year ending Sept. 30. Minus sign (-) denotes an excess of imports over exports]

TRADING PARTNER	Exports	Imports	Trade balance	MAJOR COMMODITIES	
				Exported by United States	Imported by United States
Japan	8.4	0.3	8.1	Corn, beef, soybeans	Processed vegetables, noodles, beer
Soviet Union (former)	2.7	(Z)	2.7	Corn, wheat, soybean meal	Casein, fur skins
European Union	7.7	5.2	2.5	Soybeans, corn gluten, tobacco	Wine, beer, dairy prod., processed vegetables
South Korea	2.2	0.1	2.1	Cattle hides, cotton, soybeans	Processed vegetables, noodles
China: Taiwan	1.9	0.1	1.8	Corn, soybeans, wheat	Processed vegetables, confectionery prod., noodles
Mexico	3.7	2.3	1.4	Sorghum, soybeans, beef	Fresh vegetables, cattle, fresh fruit
Canada	4.8	3.9	0.9	Fresh fruits & vegetables, beef	Cattle, pork, beef, canola
Hong Kong	0.8	0.1	0.7	Poultry, fresh fruit, cotton	Canned mushrooms, soy sauce
Egypt	0.7	(Z)	0.7	Wheat, cotton, corn	Spices
China: Mainland	0.7	0.4	0.3	Wheat, cotton	Canned mushrooms & water chestnuts, feathers & down
Turkey	0.3	0.7	−0.3	Tobacco, rice, vegetable oils	Tobacco
Thailand	0.3	0.7	−0.3	Cotton, wheat, soybeans	Processed fruits & vegetables, rice
Chile	0.1	0.5	−0.4	Corn, sugar, soybean meal	Fresh fruit, fruit juices
Costa Rica	0.1	0.5	−0.4	Corn, soybeans, wheat	Fresh fruit, coffee, beef
Indonesia	0.4	0.8	−0.4	Cotton, soybeans, fresh fruit	Rubber, cocoa
Colombia	0.1	0.9	−0.7	Corn, wheat, tallow	Coffee, cut flowers, bananas
New Zealand	0.1	0.8	−0.8	Processed fruits & vegetables, soybean meal, wheat	Beef, dairy products, fresh fruit
Australia	0.3	1.1	−0.8	Processed fruits & vegetables, tobacco	Beef, wool, sugar
Brazil	0.1	1.4	−1.2	Hops	Coffee, orange juice, cocoa

Z Less than $100 million.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Outlook*, August 1993.

No. 1108. Agricultural Imports—Value, by Selected Commodity, 1980 to 1992, and by Leading Countries of Origin, 1992

[In millions of dollars]

COMMODITY	1980	1985	1988	1989	1990	1991	1992	Leading countries of origin, 1992
Total	**17,366**	**19,968**	**20,951**	**21,749**	**22,770**	**22,719**	**24,624**	**Canada, Mexico, Brazil**
Competitive products	10,374	13,067	14,688	15,610	17,202	17,139	18,946	Canada, Mexico, Australia
Cattle, live	237	307	598	662	978	952	1,245	Canada, Mexico, Germany
Beef and veal	1,780	1,276	1,679	1,662	1,872	1,964	1,891	Australia, New Zealand, Canada
Pork	486	861	933	754	938	795	620	Canada, Denmark, Poland
Dairy products	488	765	875	828	867	772	857	Ireland, New Zealand, Italy
Fruits and preparations	564	1,738	1,866	1,820	2,219	2,131	2,216	Chile, Mexico, Brazil
Vegetables and preparations	864	1,385	1,615	2,047	2,266	2,211	2,184	Mexico, Canada, Spain
Wine	692	998	939	930	917	915	1,087	France, Italy, Spain
Malt beverages	367	633	918	855	923	825	864	Netherlands, Mexico, Canada
Grains and feeds	371	623	909	1,219	1,189	1,321	1,586	Canada, Thailand, Italy
Sugar and related products	2,205	1,190	690	956	1,172	1,065	1,139	Canada, Dominican Republic, Guatemala
Oilseeds and products	599	756	919	916	949	974	1,219	Canada, Philippines, Italy
Noncompetitive products	6,992	6,902	6,263	6,139	5,568	5,580	5,678	Indonesia, Colombia, Brazil
Coffee and products	4,186	3,322	2,470	2,432	1,915	1,859	1,706	Colombia, Brazil, Mexico
Rubber, crude natural	817	654	1,023	958	707	663	770	Indonesia, Thailand, Malaysia
Cocoa and products	920	1,351	1,003	991	1,094	1,092	1,080	Brazil, Canada, Ivory Coast
Bananas and plantains	430	763	832	872	939	1,006	1,097	Costa Rica, Ecuador, Colombia

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, calendar year supplement.

No. 1109. Spices—Imports, by Type of Spice: 1980 to 1992

[**In millions of pounds.** Data shown are **annual averages.** The United States produces only three major spices - capsicum (red pepper), paprika, and mustard - in any profitable degree. Unground or unprocessed spices enter duty-free. Most spices imported into the United States are unground or unprocessed, generally ensuring better quality]

SPICE	1980-84	1985-89	1990	1991	1992	SPICE	1980-84	1985-89	1990	1991	1992
Total [1]	**351.3**	**398.9**	**459.3**	**465.5**	**498.0**	Mace	0.6	0.6	0.7	0.4	0.5
						Mustard seed	79.5	94.5	122.6	121.9	122.8
Anise seed	1.4	2.2	2.2	2.4	2.3	Nutmeg	4.8	4.2	3.8	4.1	3.7
Capsicum	13.9	23.8	44.0	38.7	59.3	Paprika	10.5	13.1	9.1	8.6	6.8
Caraway seed	7.5	7.7	6.8	8.2	7.2	Pepper, black and white	72.5	79.4	86.9	98.0	102.8
Cassia and cinnamon	23.4	29.4	25.7	31.6	34.3	Pimento	1.7	1.9	2.2	2.3	1.9
Celery seed	4.7	5.4	4.9	5.9	7.2	Poppy seed	7.2	8.8	5.2	11.0	10.8
Cloves	2.1	2.5	4.1	2.5	2.5	Sage	3.7	4.4	3.7	5.0	5.3
Coriander seed	10.4	7.7	4.8	5.4	5.1	Sesame seed	80.4	81.1	94.5	80.4	77.1
Cumin seed	8.8	9.2	10.3	8.9	14.2	Turmeric	3.7	4.4	3.7	4.1	5.7
Fennel seed	3.4	4.8	6.4	5.5	7.0	Vanilla beans	1.6	2.4	2.2	2.9	2.8
Ginger root	9.5	11.4	15.8	18.0	18.5						

[1] The United States also imports limited amounts of other spices which are not included in the total.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, calendar year supplement, and U.S. Bureau of the Census, *U.S. Imports for Consumption*, series FT247, annual.

No. 1110. Agricultural Exports—Value, by Principal Commodities and Selected Countries of Destination: 1980 to 1992

[See headnote, table 1106. Data by country of destination for 1980 are not adjusted for transshipments]

COMMODITY AND COUNTRY	VALUE (mil. dol.)								PERCENT		
	1980	1985	1987	1988	1989	1990	1991	1992	1980	1990	1992
Total agricultural exports [1]	**41,234**	**29,041**	**28,709**	**37,080**	**39,909**	**39,363**	**39,192**	**42,930**	**100.0**	**100.0**	**100.0**
Grains and feeds [2]	19,126	11,882	9,423	13,994	17,187	14,403	12,733	14,174	46.4	36.6	33.0
Feed grains and products	9,852	6,112	3,917	5,973	7,870	7,151	5,862	5,881	23.9	18.2	13.7
Corn	8,492	5,206	3,209	5,043	6,580	6,027	4,916	4,706	20.6	15.4	11.0
Wheat and products	6,660	3,898	3,280	5,126	6,136	4,033	3,511	4,675	16.2	10.2	10.9
Rice	1,289	665	576	809	971	800	750	725	3.2	2.1	1.7
Oilseeds and products [2]	9,394	5,794	6,446	7,695	6,313	5,684	6,397	7,197	22.8	14.5	16.8
Soybeans	5,880	3,732	4,378	4,863	3,942	3,551	3,957	4,387	14.3	9.1	10.2
Soybean oilcake and meal	1,666	870	1,211	1,580	1,181	992	1,145	1,242	4.1	2.6	2.9
Vegetable oils and waxes	1,216	870	626	983	872	808	768	1,018	3.0	2.1	2.4
Animals and animal products [2]	3,768	4,150	5,156	6,422	6,378	6,712	7,006	7,925	9.2	17.1	18.5
Hides and skins, incl. furskins	1,046	1,295	1,731	1,829	1,717	1,747	1,373	1,346	2.6	4.4	3.1
Cattle hides	637	1,007	1,328	1,513	1,383	1,428	1,137	1,132	1.6	3.7	2.6
Meats and meat products	890	905	1,366	1,974	2,348	2,558	2,854	3,339	2.2	6.5	7.8
Beef and veal	249	467	771	1,109	1,420	1,579	1,757	2,043	0.6	4.1	4.8
Fats, oils, and greases	769	619	431	577	512	424	442	525	1.9	1.1	1.2
Poultry and poultry products	603	384	602	669	713	954	1,094	1,211	1.5	2.5	2.8
Cotton, excluding linters	2,864	1,633	1,631	1,975	2,250	2,783	2,480	1,999	7.0	7.1	4.7
Tobacco, unmanufactured	1,334	1,521	1,090	1,253	1,301	1,441	1,428	1,651	3.3	3.7	3.9
Fruits and preparations	1,335	1,186	1,484	1,762	1,836	2,359	2,498	2,732	3.3	6.0	6.4
Fresh fruits	739	743	939	1,093	1,133	1,486	1,561	1,683	1.8	3.8	3.9
Vegetables and preparations	1,188	930	1,158	1,361	1,601	2,302	2,615	2,872	2.9	5.9	6.7
Nuts and preparations	757	683	804	884	846	976	1,020	1,139	1.9	2.5	2.7
Other	1,468	1,262	1,517	1,734	2,197	2,703	3,014	3,241	3.6	6.9	7.6
Asia [1]	15,046	11,191	12,535	16,858	18,828	17,640	16,451	17,924	36.5	44.9	41.8
Japan	6,133	5,409	5,723	7,640	8,162	8,104	7,729	8,437	14.9	20.6	19.7
South Korea	1,797	1,413	1,833	2,274	2,593	2,644	2,104	2,222	4.4	6.8	5.2
China: Taiwan	1,095	1,231	1,285	1,661	1,754	1,661	1,899	1,900	2.7	4.3	4.4
Mainland	2,277	157	362	759	1,435	814	722	545	5.6	2.1	1.3
Hong Kong	437	389	466	489	611	701	771	862	1.1	1.8	2.0
Western Europe [1,3]	12,917	7,002	7,344	7,911	6,995	7,353	7,468	7,805	31.4	18.7	18.2
European Union [4]	12,177	6,542	6,914	7,370	6,503	6,850	6,916	7,291	29.6	17.4	17.0
Netherlands	3,476	1,869	1,985	2,059	1,722	1,581	1,698	1,853	8.5	4.1	4.3
Germany	2,373	1,009	1,320	1,248	1,075	1,158	1,076	1,163	5.8	3.0	2.7
Spain [5]	1,488	837	666	883	820	937	928	936	3.6	2.4	2.2
United Kingdom	996	604	661	835	703	829	831	910	2.5	2.1	2.1
Italy	1,203	669	697	699	637	710	674	670	3.0	1.8	1.6
France	765	403	524	534	458	528	581	595	1.9	1.4	1.4
Latin America [1]	6,154	4,224	3,678	4,935	5,337	5,092	5,684	6,668	15.0	13.0	15.5
Mexico	2,469	1,439	1,202	2,234	2,724	2,553	2,998	3,791	6.0	6.5	8.8
Canada	1,908	1,622	1,808	2,019	2,221	4,197	4,554	4,902	4.7	10.7	11.4
Soviet Union (former)	1,138	1,923	938	2,252	3,597	2,271	2,495	2,346	2.8	5.8	5.5
Eastern Europe	1,644	414	401	464	401	537	234	317	4.0	1.4	0.7
Africa [1]	2,237	2,488	1,766	2,387	2,260	1,935	1,909	2,570	5.5	5.0	6.0
Algeria	195	227	310	596	504	513	483	437	0.5	1.3	1.0
Egypt	774	891	679	841	989	693	687	766	1.9	1.8	1.8

[1] Includes areas not shown separately. [2] Includes commodities not shown separately. [3] Includes Canary Islands and Madeira Islands for all years. [4] Includes Belgium, Luxembourg, Denmark, Greece, Ireland, and Portugal, not shown separately. As of Jan. 1, 1981, Greece became a member of the European Union. As of Jan. 1, 1986, Spain and Portugal became members of the European Union. For consistency, data for all years are shown on same basis. [5] As of Jan. 1, 1984, includes Canary Islands and Spanish Africa, not elsewhere classified.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, Jan./Feb. 1993, and calendar year supplements. Also in *Agricultural Statistics*, annual.

No. 1111. Cropland Used for Crops and Acreages of Crops Harvested: 1980 to 1993

[See also *Historical Statistics, Colonial Times to 1970*, series K 496-501]

YEAR	CROPLAND USED FOR CROPS					Acres of crops harvested [2] (mil.)
	Number (mil. acres)				Index (1977 = 100)	
	Total	Cropland harvested [1]	Crop failure	Cultivated summer fallow		
1980	382	342	10	30	101	352
1985	372	334	7	31	98	342
1986	357	316	9	32	94	325
1987	331	293	6	32	88	302
1988	327	287	10	30	87	298
1989	341	306	8	27	90	318
1990	341	310	6	25	90	322
1991	337	306	7	24	89	318
1992 [3]	340	308	9	23	90	320
1993 [3]	332	299	11	22	88	309

[1] Land supporting one or more harvested crops. [2] Area in principal crops harvested as reported by Crop Reporting Board plus acreages in fruits, vegetables for sale, tree nuts, and farm gardens. [3] Preliminary.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Production and Efficiency Statistics*, annual. Also in *Agricultural Statistics*, annual. Beginning 1991 data from *Agricultural Resources: Cropland, Water, and Conservation Situation and Outlook Report*.

No. 1112. Crops—Acreage and Value, by State: 1990 to 1993

STATE	ACREAGE HARVESTED (1,000)				FARM VALUE (mil. dol.)				
	1990	1991	1992	1993, prel.	1990	1991	1992	1993, prel. Value	1993, prel. Rank
U.S. [1]	**306,318**	**[2]303,864**	**[2]307,171**	**[2]295,918**	**80,855**	**79,482**	**87,487**	**83,715**	**(X)**
AL	2,338	2,229	2,130	2,116	464	584	617	539	33
AZ	802	770	736	695	894	892	829	944	31
AR	8,080	7,863	8,110	8,165	1,648	1,762	1,945	1,809	18
CA	4,789	4,396	4,459	4,403	10,642	9,938	11,338	12,010	1
CO	5,862	5,591	5,395	5,625	1,194	1,127	1,126	1,380	21
CT	129	125	128	125	111	92	86	80	47
DE	496	556	515	499	139	142	135	121	46
FL	1,076	1,048	1,071	1,046	2,768	3,348	3,895	3,360	7
GA	3,788	3,777	3,693	3,523	1,273	1,593	1,614	1,370	23
HI	79	74	68	64	411	367	341	308	39
ID	4,175	4,079	4,006	4,322	1,735	1,665	1,815	1,871	16
IL	22,759	22,906	23,237	21,934	5,812	5,357	6,431	6,548	2
IN	11,485	11,527	11,709	11,767	3,023	2,564	3,303	3,649	5
IA	23,276	23,356	23,666	21,916	5,818	5,634	6,350	4,224	3
KS	20,978	20,712	20,266	20,454	2,610	2,485	2,955	2,968	9
KY	5,505	5,495	5,419	5,419	1,721	1,670	2,058	1,948	15
LA	4,346	3,665	4,029	3,729	1,184	1,126	1,181	1,096	26
ME	361	351	375	373	180	152	190	200	42
MD	1,551	1,562	1,619	1,569	386	374	422	362	36
MA	135	136	135	134	147	170	175	163	43
MI	6,510	6,733	6,817	6,751	1,839	1,938	1,914	2,220	13
MN	18,765	18,692	19,301	16,940	4,177	4,007	4,058	2,836	10
MS	4,719	4,478	4,855	4,708	1,149	1,194	1,274	1,020	28
MO	12,685	12,900	12,904	11,542	2,083	2,122	2,574	2,061	14
MT	8,926	8,687	8,369	8,891	881	1,052	1,022	1,300	24
NE	18,044	18,366	18,330	17,917	3,621	3,667	3,732	3,586	6
NV	520	495	403	527	154	102	103	146	45
NH	91	92	103	106	29	25	36	28	48
NJ	361	380	391	413	170	186	264	275	40
NM	880	1,042	1,051	995	395	395	395	383	35
NY	3,538	3,443	3,185	3,150	916	964	928	944	30
NC	4,336	4,397	4,519	4,127	1,981	2,144	2,081	1,851	17
ND	21,014	20,655	21,011	19,782	2,082	2,188	2,649	2,404	12
OH	10,132	9,972	10,087	10,037	2,597	2,278	2,698	2,663	11
OK	9,688	8,518	9,392	8,771	1,142	913	1,079	1,029	27
OR	2,290	2,260	2,147	2,260	1,035	1,032	1,100	1,176	25
PA	4,094	4,067	4,065	4,035	1,358	1,159	1,410	1,371	22
RI	10	10	11	12	5	5	7	6	49
SC	2,046	1,824	1,885	1,603	517	639	564	498	34
SD	15,528	15,606	15,858	14,223	1,638	1,611	1,825	1,638	19
TN	4,477	4,379	4,326	4,408	954	956	1,147	990	29
TX	18,544	17,714	18,769	18,524	4,023	3,707	3,840	4,100	4
UT	992	973	990	1,031	257	220	227	251	41
VT	441	434	463	434	77	156	215	159	44
VA	2,725	2,656	2,705	2,659	846	723	794	635	32
WA	3,999	3,861	3,957	4,227	2,529	2,625	2,577	3,096	8
WV	668	615	639	621	114	348	350	321	37
WI	8,550	8,449	8,096	7,498	1,830	1,785	1,529	1,462	20
WY	1,735	1,899	1,723	1,804	294	300	284	317	38

X Not applicable. [1] Excludes Alaska. [2] Includes sunflower and sugarbeet acreage unallocated by State.
Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production*, annual; and *Crop Values*, annual.

No. 1113. Principal Crops—Production, Supply, and Disappearance: 1989 to 1993

[Marketing year beginning May 1 for hay, June 1 for wheat, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum. Acreage, production, and yield of all crops periodically revised on basis of census data. See also *Historical Statistics, Colonial Times to 1970*, series K 506-563]

CROP AND YEAR	ACREAGE (mil.)— Set aside [1]	Planted	Harvested	Yield per acre	Production	Farm price [2]	Farm value (mil. dol.)	Total supply [3]	DISAPPEARANCE Total [4]	Exports	Ending stocks
Corn for grain:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1989	10.8	72.2	64.7	116.3	7,525	2.36	17,897	9,458	8,113	2,368	1,344
1990	10.7	74.2	67.0	118.5	7,934	2.28	18,192	9,282	7,761	1,725	1,521
1991	7.4	76.0	68.8	108.6	7,475	2.37	17,864	9,016	7,916	1,584	1,100
1992	5.2	79.3	72.2	131.4	9,482	2.07	19,735	10,589	8,476	1,663	2,113
1993, prel	10.4	73.3	63.0	100.7	6,344	2.60	16,597	8,477	7,675	1,300	802
Soybeans:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1989	-	60.8	59.5	32.3	1,924	5.69	10,732	2,109	1,870	623	239
1990	-	57.8	56.5	34.1	1,926	5.74	11,042	2,168	1,839	557	329
1991	-	59.2	58.0	34.2	1,987	5.58	11,092	2,319	2,041	684	278
1992	-	59.1	58.2	37.6	2,188	5.56	12,154	2,468	2,176	770	292
1993, prel	-	59.4	56.4	32.0	1,809	6.50	11,735	2,106	1,956	615	150
Hay:				Sh. tons	Mil. sh. tons	$/ton			Mil. sh. tons		
1989	-	(NA)	63.3	2.30	146	[5,6]87.40	11,514	163	136	(NA)	27
1990	-	(NA)	61.4	2.39	147	[5,6]80.60	10,462	174	147	(NA)	27
1991	-	(NA)	62.5	2.45	153	[5,6]71.20	10,006	180	152	(NA)	29
1992	-	(NA)	59.6	2.50	149	[5,6]74.30	10,573	178	157	(NA)	21
1993, prel	-	(NA)	60.4	2.26	149	[5,6]81.00	10,909	175	(NA)	(NA)	(NA)
Wheat:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1989	9.6	76.6	62.2	32.7	2,037	3.72	7,542	2,762	2,225	1,232	536
1990	7.5	77.2	69.3	39.5	2,736	2.61	7,184	3,309	2,443	1,068	866
1991	15.6	69.9	57.7	34.3	1,981	3.00	5,957	2,888	2,416	1,280	472
1992	7.3	72.3	62.4	39.4	2,459	3.24	7,984	3,001	2,472	1,354	529
1993, prel	5.3	72.2	62.6	38.3	2,402	3.20	7,713	3,021	2,423	1,225	598
Cotton:				Lb.	Mil. bales [7]	cents/lb.			Mil. bales [7]		
1989	3.5	10.6	9.5	614	[8]12.2	66.2	3,877	19.3	16.5	7.7	[9]3.0
1990	2.0	12.3	11.7	634	[8]15.5	67.1	5,076	18.5	16.4	7.8	[9]2.3
1991	1.2	14.1	13.0	652	[8]17.6	58.1	4,913	20.0	16.3	6.7	[9]3.7
1992	1.7	13.2	11.1	699	[8]16.2	54.9	4,274	19.9	15.4	5.2	[9]4.7
1993, prel	1.4	13.4	12.8	607	[8]16.2	[10]54.3	4,220	20.8	16.4	6.2	[9]4.5
Tobacco: [11]				Lb.	Mil. lb.	$/lb.			Mil. lb.		
1989	(NA)	(NA)	0.7	2,016	1,367	[6]1.71	2,338	4,081	1,677	582	[12]2,401
1990	(NA)	(NA)	0.7	2,218	1,626	[6]1.74	2,827	4,026	1,794	631	[12]2,232
1991	(NA)	(NA)	0.8	2,179	1,664	[6]1.77	2,951	3,896	1,616	640	[12]2,280
1992	(NA)	(NA)	0.8	2,195	1,722	[6]1.78	3,059	4,001	1,565	629	[12]2,436
1993, prel	(NA)	(NA)	0.7	2,162	1,615	[6]1.76	2,837	4,041	(NA)	(NA)	(NA)
Potatoes:				Cwt.	Mil. cwt.	$/cwt.			Mil. cwt.		
1989	(NA)	1.3	1.3	289	370	7.36	2,717	555	[13]315	[14]17	(NA)
1990	(NA)	1.4	1.4	293	402	6.08	2,431	582	[13]319	[14]17	(NA)
1991	(NA)	1.4	1.4	304	418	4.96	2,043	618	[13]330	[14]19	(NA)
1992	(NA)	1.3	1.3	323	425	5.52	2,336	640	[13]339	[14]23	(NA)
1993, prel	(NA)	1.4	1.3	318	419	6.22	2,599	642	[13]345	[14]24	(NA)
Rice, rough:				Lb.	Mil. cwt.	$/cwt.			Mil. cwt.		
1989	1.2	2.7	2.7	5,749	155	7.35	1,134	186	159	77	26
1990	1.0	2.9	2.8	5,529	156	6.70	1,047	187	163	71	25
1991	0.7	2.9	2.8	5,674	157	7.58	1,201	187	160	66	27
1992	0.4	3.2	3.1	5,736	180	5.89	1,057	213	174	77	39
1993, prel	0.7	2.9	2.8	5,510	156	9.00	1,429	202	182	83	21
Sorghum for grain:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1989	3.3	12.6	11.1	55.4	615	2.10	1,288	1,055	835	303	220
1990	3.3	10.5	9.1	63.1	573	2.12	1,221	793	650	232	143
1991	2.4	11.1	9.9	59.3	585	2.25	1,331	727	674	292	53
1992	2.0	13.3	12.2	72.8	884	1.89	1,684	937	762	277	175
1993, prel	2.2	10.5	9.5	59.9	568	2.40	1,316	743	658	175	85

- Represents zero. NA Not available. [1] Acreage set aside under diversion, PIK (payment-in-kind) and acreage reduction programs. [2] Except as noted, marketing year average price. U.S. prices are computed by weighting U.S. monthly prices by estimated monthly marketings and do not include an allowance for outstanding loans and government purchases and payments. [3] Comprises production, imports, and beginning stocks. [4] Includes feed, residual, and other domestic uses not shown separately. [5] Prices are for hay sold baled. [6] Season average prices received by farmers. U.S. prices are computed by weighting State prices by estimated sales and include an allowance for outstanding loans and government purchases, if any, for crops under government programs. [7] Bales of 480 pounds, net weight. [8] State production figures, which conform with U.S. Bureau of the Census annual ginning enumeration with allowance for cross-State ginnings, rounded to thousands and added for U.S. totals. [9] Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks. [10] Weighted average for August 1-December 1. [11] Flue-cured and cigar wrapper, crop year July-June; all other types October-September. Farm-sales-weight basis. [12] Includes tobacco carried over on farms. [13] Covers potatoes used for table use, frozen and canned products, chips, and dehydration. [14] Covers fresh potatoes, chips, frozen and dehydrated products.

Source: Production—U.S. Dept. of Agriculture, National Agricultural Statistics Service. In *Crop Production*, annual; and *Crop Values*, annual. Supply and disappearance—U.S. Dept. of Agriculture, Economic Research Service, *Feed Situation*, quarterly; *Fats and Oils Situation*, quarterly; *Wheat Situation*, quarterly; *Tobacco Situation*, quarterly; *Cotton and Wool Outlook Statistics*, periodic; and *Agricultural Supply and Demand Estimates*, periodic. All data are also in *Agricultural Statistics*, annual; and *Agricultural Outlook*, monthly.

No. 1114. Corn—Acreage, Production, and Value, by Leading States: 1991 to 1993

[One bushel of corn=56 pounds. See also *Historical Statistics, Colonial Times to 1970*, series K 502-508]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bu.)			PRODUCTION (mil. bu.)			PRICE ($/bu.)			FARM VALUE (mil. dol.)		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
U.S. [1]	**68,847**	**72,162**	**62,991**	**109**	**131**	**101**	**7,475**	**9,482**	**6,344**	**2.37**	**2.07**	**2.60**	**17,864**	**19,735**	**16,597**
IL	11,000	11,050	10,000	107	149	130	1,177	1,646	1,300	2.46	2.11	2.60	2,895	3,474	3,380
IA	12,200	12,950	11,000	117	147	80	1,427	1,904	880	2.30	2.00	2.50	3,283	3,807	2,200
NE	7,800	7,900	7,550	127	135	104	991	1,067	785	2.34	2.09	2.70	2,318	2,229	2,120
IN	5,550	5,970	5,400	92	147	132	511	878	713	2.45	2.09	2.60	1,251	1,834	1,853
OH	3,400	3,550	3,280	96	143	110	326	508	361	2.48	2.06	2.65	809	1,046	956
MN	6,000	6,500	4,600	120	114	70	720	741	322	2.22	1.91	2.45	1,598	1,415	789
MI	2,300	2,300	2,150	110	105	110	253	242	237	2.34	1.95	2.65	592	471	627
WI	3,200	2,950	2,350	119	104	92	381	307	216	2.30	2.12	2.65	876	650	573
KS	1,650	1,730	1,800	125	150	120	206	260	216	2.42	2.15	2.70	499	558	543
TX	1,500	1,620	1,850	110	125	115	165	203	213	2.68	2.41	2.70	442	488	574
MO	2,200	2,400	1,850	97	135	90	213	324	167	2.45	2.11	2.60	523	684	433
SD	3,250	3,300	2,550	74	84	63	241	277	161	2.16	1.84	2.40	519	510	386
KY	1,250	1,300	1,220	89	132	104	111	172	127	2.58	2.23	2.60	287	383	330
CO	840	835	825	153	148	120	129	124	99	2.43	2.23	2.75	312	276	272
PA	860	990	970	75	120	96	65	119	93	2.87	2.42	3.15	185	287	293
NY	660	670	580	98	92	105	65	62	61	2.70	2.30	2.60	175	142	158

[1] Includes other States, not shown separately.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production*, annual; and *Crop Values*, annual.

No. 1115. Soybeans—Acreage, Production, and Value, by Leading States: 1991 to 1993

[One bushel of soybeans=60 pounds. See also *Historical Statistics, Colonial Times to 1970*, series K 520-522]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bu.)			PRODUCTION (mil. bu.)			PRICE ($/bu.)			FARM VALUE (mil. dol.)		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
U.S. [1]	**58,011**	**58,183**	**56,447**	**34**	**38**	**32**	**1,987**	**2,188**	**1,809**	**5.58**	**5.56**	**6.50**	**11,092**	**12,154**	**11,735**
IL	9,100	9,430	8,700	38	43	43	341	405	374	5.70	5.69	6.60	1,945	2,307	2,469
IA	8,630	8,120	8,200	41	44	30	350	357	246	5.51	5.54	6.50	1,926	1,979	1,599
IN	4,400	4,520	4,850	39	43	44	172	194	213	5.68	5.61	6.40	975	1,090	1,366
OH	3,770	3,630	4,040	36	40	38	136	145	154	5.69	5.65	6.45	772	820	990
MO	4,430	4,250	3,550	31	38	33	135	162	117	5.59	5.45	6.40	755	880	750
MN	5,350	5,400	5,000	37	32	22	195	173	110	5.41	5.52	6.30	1,056	954	693
NE	2,460	2,460	2,500	34	42	35	82	103	88	5.47	5.37	6.35	451	555	556
AR	3,200	3,160	3,450	28	33	25	90	104	86	5.71	5.64	6.85	512	588	591
MI	1,390	1,440	1,440	38	33	38	53	48	55	5.52	5.53	6.50	292	263	356
KS	1,900	1,850	1,850	23	37	28	44	68	52	5.55	5.42	6.45	243	371	334
MS	1,600	1,750	1,950	26	34	22	47	60	43	5.74	5.69	6.75	269	339	290
KY	1,130	1,160	1,150	33	38	33	37	44	38	5.78	5.68	6.70	212	250	254
SD	2,160	2,250	1,700	27	28	21	58	63	36	5.33	5.18	6.05	311	326	216
TN	1,050	950	990	30	35	31	32	33	31	5.73	5.61	6.65	180	187	204

[1] Includes other States, not shown separately.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production*, annual; and *Crop Values*, annual.

No. 1116. Wheat—Acreage, Production, and Value, by Leading States: 1991 to 1993

[One bushel of wheat= 60 pounds. See also *Historical Statistics, Colonial Times to 1970*, series K 506-508]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bu.)			PRODUCTION (mil. bu.)			PRICE ($/bu.)			FARM VALUE (mil. dol.)		
	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993	1991	1992	1993
U.S. [1]	**57,703**	**62,411**	**62,647**	**34.3**	**39.4**	**38.3**	**1,981**	**2,459**	**2,402**	**3.00**	**3.24**	**3.20**	**5,957**	**7,984**	**7,713**
KS	11,000	10,700	11,100	33.0	34.0	35.0	363	364	389	2.81	3.13	3.05	1,020	1,139	1,185
ND	9,790	11,420	10,800	31.0	41.1	31.0	304	470	335	3.04	3.14	4.05	926	1,481	1,342
MT	4,379	4,707	5,214	36.4	29.7	39.2	160	140	204	3.17	3.42	3.55	506	476	712
WA	2,150	2,420	2,790	45.9	49.4	63.6	99	120	178	3.73	3.80	3.35	367	453	591
OK	5,000	5,900	5,400	28.0	29.0	30.0	140	171	162	2.85	3.19	2.90	399	546	470
TX	2,800	3,800	3,700	30.0	34.0	32.0	84	129	118	2.69	3.18	2.85	226	411	337
SD	3,117	3,733	3,488	30.9	32.0	32.0	96	120	112	3.06	3.21	3.40	295	385	384
ID	1,160	1,440	1,390	70.4	69.4	79.4	82	100	110	3.56	3.48	3.00	290	347	327
CO	2,336	2,347	2,583	31.7	30.9	37.5	74	73	97	3.07	3.15	3.15	227	228	305
NE	2,100	1,850	2,100	32.0	30.0	35.0	67	56	74	3.01	3.16	3.05	202	175	224
MN	2,155	2,805	2,298	31.1	49.9	31.0	67	140	71	3.21	3.17	3.35	215	443	242
IL	1,400	1,150	1,550	32.0	54.0	44.0	45	62	68	2.56	3.26	2.70	115	204	184
OR	846	925	925	51.9	51.7	70.2	44	48	65	3.65	3.81	3.25	160	183	211

[1] Includes other States, not shown separately.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production*, annual; and *Crop Values*, annual.

No. 1117. Greenhouse and Nursery Crops—Summary, by Type of Product: 1989 to 1993

[In millions of dollars, except per capita. Based on a survey of 36 commercial floriculture States and estimates by source]

ITEM	Total	Cut flowers	Potted flowering plants	Foliage plants	Bedding plants	Cut cultivated greens	Other [1]
Domestic production: [2]							
1989	7,617	542	682	575	996	111	4,711
1990	8,228	572	872	609	1,003	131	5,041
1991	8,828	580	952	576	1,146	135	5,439
1992	9,200	558	1,034	544	1,338	153	5,573
1993	9,700	545	1,139	529	1,500	169	5,818
Imports:							
1989	498	315	20	22	(NA)	13	128
1990	529	326	18	25	(NA)	14	146
1991	533	322	22	27	(NA)	13	149
1992	579	352	27	30	(NA)	15	155
1993	644	400	30	33	(NA)	16	165
RETAIL CONSUMER EXPENDITURES [3]							
Total:							
1989	30,456	5,082	1,547	1,297	2,241	608	19,681
1990	32,493	5,214	1,975	1,347	2,257	710	20,990
1991	34,539	5,209	2,157	1,278	2,578	742	22,575
1992	35,752	5,266	2,345	1,212	3,011	827	23,091
1993	37,569	5,472	2,585	1,179	3,375	906	24,052
Per capita (dol.): [4]							
1989	123	21	6	5	9	2	79
1990	130	21	8	5	9	3	84
1991	137	21	9	5	10	3	89
1992	140	21	9	5	12	3	90
1993	146	21	10	5	13	4	93

NA Not available. [1] Includes turfgrass (sod), bulbs, nursery stock, groundcovers, and other greenhouse and nursery products except the following: seeds, cut Christmas trees, and food crops grown under cover. [2] Equivalent wholesale values. [3] Excludes services such as landscaping, installation, and maintenance. [4] Based on U.S. Bureau of the Census estimated resident population as of July 1.

Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

No. 1118. Fruits and Nuts—Utilized Production and Value, 1990 to 1992, and Leading Producing States, 1992

FRUIT OR NUT	UTILIZED PRODUCTION [1]				FARM VALUE (mil. dol.)			Leading States in order of production, 1992
	Unit	1990	1991	1992	1990	1991	1992	
Apples (35 States) [2]	Mil. lb	9,658	9,659	10,614	1,457	1,733	1,422	WA, NY, MI
Apricots	1,000 tons	120	92	108	41	37	40	CA, WA, UT
Avocados	1,000 tons	156	185	267	206	196	166	CA, FL, HI
Bananas	Mil. lb	6	6	6	4	5	5	HI
Cherries, sweet	1,000 tons	132	142	195	118	137	178	WA, OR, CA
Cherries, tart	Mil. lb	203	190	314	37	88	55	MI, UT, NY
Cranberries	1,000 bbl. [3]	3,392	4,220	4,080	156	207	(NA)	MA, WI, NJ
Dates	1,000 tons	24	22	21	20	21	22	CA
Figs (fresh)	1,000 tons	50	45	42	17	17	17	CA
Grapefruit (4 States)	Mil. boxes [4]	56	55	69	395	431	294	FL, CA, AZ
Grapes (13 States)	1,000 tons	5,660	5,555	6,032	1,670	1,736	1,825	CA, WA, NY
Kiwifruit	1,000 tons	34	27	46	14	22	13	CA
Lemons (2 States)	Mil. boxes [5]	19	20	25	290	261	241	CA, AZ
Limes (FL)	Mil. boxes [6]	1	2	1	28	23	7	FL
Nectarines	1,000 tons	232	215	236	110	86	74	CA
Olives	1,000 tons	132	65	165	56	36	92	CA
Oranges and tangerines (4 States)	Mil. boxes [7]	179	209	258	1,585	1,543	1,314	FL, CA, AZ
Papayas	Mil. lb	69	56	72	15	16	14	HI
Peaches (32 States)	Mil. lb	2,140	2,506	2,479	372	394	373	CA, GA, SC
Pears	1,000 tons	963	904	924	269	274	273	CA, WA, OR
Pineapples	1,000 tons	575	555	550	106	108	102	HI
Plums and prunes (fresh)	1,000 tons	729	831	822	271	280	253	CA, WA, MI
Tangelos (FL)	Mil. boxes [6]	3	3	3	21	24	15	FL
Temples (FL)	Mil. boxes [6]	3	2	3	21	20	10	FL
Almonds (shelled basis)	Mil. lb	660	490	545	598	564	670	CA
Hazelnuts (in the shell)	1,000 tons	22	26	28	17	19	15	OR, WA
Macadamia nuts	Mil. lb	50	50	48	41	35	33	HI
Pecans (in the shell) (11 States)	Mil. lb	205	299	166	248	310	240	TX, GA, NM
Pistachios	Mil. lb	120	77	147	122	96	151	CA
Walnuts, English (in the shell)	1,000 tons	227	259	203	236	275	268	CA

NA Not available. [1] Excludes quantities not harvested or not marketed. [2] Production in commercial orchards with 100 or more bearing age trees. [3] Barrels of 100 pounds. [4] Approximate average, net weight, is 65 lb. in AZ and CA, 85 in FL, and 80 in TX. [5] About 76 lb. net. [6] Approximate net weight is 80 lb. [7] Net contents of box varies. In CA and AZ approximate average for oranges and tangerines is 75 lb.; FL oranges, 90 lb.; TX oranges, 85 lb.; and FL tangerines, 95 lb. [8] Approximate net weight is 90 lb.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Noncitrus Fruits and Nuts*, annual; and *Citrus Fruits*, annual.

No. 1119. Commercial Vegetable and Other Specified Crops—Area, Production, and Value, 1990 to 1992, and Leading Producing States, 1992

[Relates to commercial production for fresh market and processing combined. Includes market garden areas but excludes minor producing acreage in minor producing States. Excludes production for home use in farm and nonfarm gardens. Value is for season or crop year and should not be confused with calendar-year income]

CROP	AREA [1] (1,000 acres)			PRODUCTION [2] (1,000 short tons)			VALUE [3] (mil. dol.)			Leading States in order of production, 1992
	1990	1991	1992	1990	1991	1992	1990	1991	1992	
Asparagus	96	92	89	122	113	116	148	150	162	CA, WA, MI
Beans, snap [4]	246	232	192	796	768	646	146	135	112	WI, OR, MI
Beans, dry edible	2,084	1,913	1,497	1,619	1,688	1,102	599	528	467	ND, MI, NE
Broccoli	111	101	118	617	560	611	268	242	280	CA, AZ, TX
Carrots	94	98	105	1,462	1,394	1,582	272	309	338	CA, WA, MI
Cauliflower	66	56	56	393	352	359	190	188	204	CA, AZ, OR
Celery	38	33	33	991	955	945	215	206	229	CA, FL, MI
Corn, sweet	678	721	692	3,968	4,146	4,114	471	497	462	WI, MN, WA
Cucumbers [4]	115	104	155	653	623	1,045	136	131	277	MI, NC, WI
Honeydew melons	26	26	23	225	187	207	81	69	62	CA, TX, AZ
Lettuce	231	222	212	3,660	3,539	3,302	844	810	822	CA, AZ, FL
Peppermint	102	114	112	3.5	3.3	3.7	97	87	46	OR, WA, ID
Spearmint	34	42	41	1.3	1.6	1.8	38	43	46	WA, ID, IN
Mushrooms [5]	139	138	142	357	375	373	645	653	669	PA, CA, FL
Onions	138	134	139	2,639	2,535	2,711	489	583	614	OR, CA, CO
Peas, green [4]	341	333	333	528	491	569	131	128	136	MN, WI, WA
Potatoes	1,371	1,375	1,302	20,106	20,881	20,582	2,431	2,043	2,160	ID, WA, ND
Strawberries	46	47	49	627	684	656	590	634	684	CA, FL, OR
Sweet potatoes	90	78	78	630	560	588	122	149	155	NC, LA, CA
Tomatoes	489	488	404	12,041	12,567	10,583	1,626	1,780	1,819	CA, FL, OH

[1] Area of crops for harvest for fresh market, including any partially harvested or not harvested because of low prices or other factors, plus area harvested for processing. [2] Excludes some quantities not marketed. [3] Fresh market vegetables valued at f.o.b. shipping point. Processing vegetables are equivalent returns at packinghouse door. [4] Processing only. [5] Area is shown in million square feet. All data are for marketing year ending June 30.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Vegetables*, annual summary. Also in *Agricultural Statistics*, annual.

No. 1120. Fresh Fruits and Vegetables—Consumption and Imports: 1992

[Data for vegetables may include some vegetables for processing]

FRUIT	Total U.S. consumption (mil. lb.)	PERCENT OF CONSUMPTION		VEGETABLE	Total U.S. consumption (mil. lb.)	PERCENT OF CONSUMPTION	
		Imported	Imported from Mexico			Imported	Imported from Mexico
All fruits, total	**25,202**	**38.3**	**5.5**	**Fresh vegetables, all**	**49,519**	**6.7**	**4.2**
Excluding bananas	18,240	14.9	7.5				
				Asparagus	151	38.3	29.5
Citrus fruits	6,207	4.8	3.2	Beans, snap	325	7.2	6.8
Oranges	3,294	1.0	0.2	Beans, dry edible [1]	1,914	3.6	0.9
Grapefruit	1,511	1.6	(Z)	Broccoli	871	2.4	1.9
Tangerines, tangelos	494	8.5	3.7	Cabbage	1,807	2.2	0.8
Lemons	647	3.1	(Z)	Cantaloup	2,161	22.3	10.2
Limes	261	68.2	65.5	Carrots	2,065	6.5	1.5
				Cauliflower	513	3.4	1.7
Noncitrus fruits	18,995	49.3	6.2	Celery	1,667	2.0	1.2
Apples	4,948	4.7	-	Corn, sweet	1,637	0.7	0.6
Apricots	39	7.2	-	Cucumbers	1,261	34.3	30.0
Avocados	542	9.8	0.4	Eggplant	100	37.1	36.7
Bananas	6,962	99.8	12.5	Garlic, all uses	417	15.6	6.0
Cherries, sweet	128	3.6	-	Honeydew melons	415	30.3	26.5
Cherries, tart	9	5.2	-	Lettuce, head	6,149	0.3	0.2
Grapes	1,840	41.9	4.9	Lettuce, romaine & leaf	1,152	0.5	0.2
Kiwifruit	121	36.9	-	Mushrooms	496	0.8	-
Mangoes	173	97.1	87.3	Onions	4,129	10.1	8.1
Papayas	61	37.9	30.5	Peppers	1,349	14.5	12.5
Peaches, nectarines	1,517	7.0	(Z)	Potatoes	12,535	3.2	-
Pears	793	15.8	(Z)	Radishes	150	17.4	16.8
Pineapple	512	53.3	4.6	Sweet potatoes	1,091	5.7	-
Plums and prunes	449	12.4	-	Tomatoes	3,678	11.8	11.0
Strawberries	901	2.6	2.2	Watermelon	3,486	6.1	5.2

- Represents zero. Z Less than 0.05 percent. [1] Includes garbanzo beans.

Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

No. 1121. Red Meats—Slaughtering, Supply, and Use: 1980 to 1993

[**Quantities in millions of pounds** (carcass weight equivalent), except as noted. Carcass weight equivalent is the weight of the animal minus entrails, head, and hide; includes internal organs, fat, and bone. Covers inspected, noninspected, retail, and farm slaughter. See also *Historical Statistics, Colonial Times to 1970*, series K 583-594]

YEAR AND TYPE OF MEAT	Animals slaughtered (mil. head)	Production	Imports	Supply, [1] total	Consumption [2]	Exports	Ending stocks
All red meats:							
1980	139.7	38,978	2,668	42,480	41,170	429	881
1985	131.3	39,408	3,255	43,503	42,310	462	732
1990	126.3	38,787	3,313	42,760	40,806	1,247	707
1991	128.6	39,585	3,241	43,533	41,239	1,474	820
1992	135.3	40,978	3,135	44,933	42,436	1,739	758
1993 [3]	133.5	40,790	3,170	44,718	42,183	1,696	839
Beef:							
1980	34.1	21,643	2,064	24,166	23,561	173	432
1985	36.6	23,728	2,071	26,271	25,523	328	420
1990	33.4	22,743	2,356	25,434	24,031	1,006	397
1991	32.9	22,917	2,406	25,720	24,113	1,188	419
1992	33.1	23,086	2,440	25,945	24,261	1,324	360
1993 [3]	33.5	23,081	2,400	25,841	24,116	1,275	450
Pork:							
1980	97.2	16,617	550	17,521	16,838	252	431
1985	84.9	14,807	1,128	16,282	15,866	128	288
1990	85.4	15,354	898	16,565	16,031	238	296
1991	88.4	15,999	775	17,070	16,399	283	388
1992	95.2	17,234	645	18,267	17,475	407	385
1993 [3]	93.3	17,095	720	18,200	17,413	410	375
Veal:							
1980	2.7	400	21	431	420	2	9
1985	3.5	515	20	549	534	5	11
1990	1.8	327	(NA)	331	325	(NA)	6
1991	1.5	306	(NA)	312	305	(NA)	7
1992	1.4	310	(NA)	317	312	(NA)	5
1993 [3]	1.3	279	(NA)	284	280	(NA)	4
Lamb and mutton:							
1980	5.7	318	33	362	351	2	9
1985	6.3	358	36	401	387	1	13
1990	5.7	363	59	430	419	3	8
1991	5.8	363	60	431	422	3	6
1992	5.6	348	50	404	388	8	8
1993 [3]	5.4	335	50	393	374	9	10

NA Not available. [1] Total supply equals production plus imports plus ending stocks of previous year. [2] Includes shipments to territories. [3] Forecast.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Livestock and Meat Statistics*, quarterly. Also published in *Agricultural Outlook*, monthly.

No. 1122. Livestock Inventory and Production: 1980 to 1993

[**Production in live weight**; includes animals for slaughter market, younger animals shipped to other States for feeding or breeding purposes, farm slaughter and custom slaughter consumed on farms where produced, minus livestock shipped into States for feeding or breeding with an adjustment for changes in inventory. See also *Historical Statistics, Colonial Times to 1970*, series K 564-569 and 575-582]

TYPE OF LIVESTOCK	Unit	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
ALL CATTLE [1]												
Inventory: [2] Number on farms	Mil	111.2	113.4	109.6	105.4	102.1	99.6	98.1	98.2	98.9	99.6	100.9
Total value	Bil. dol.	55.8	44.8	44.0	41.2	41.6	52.1	56.9	60.3	64.7	63.0	65.5
Value per head	Dol	502	396	402	391	407	523	580	614	654	629	649
Production: Quantity	Bil. lb	40.3	40.1	40.1	40.6	40.5	40.6	40.2	40.4	41.1	40.9	(NA)
Beef, price per 100 lb	Dol	62.40	57.30	53.70	52.60	61.10	66.60	69.50	74.60	72.70	71.30	(NA)
Calves, price per 100 lb	Dol	76.80	59.90	62.10	61.10	78.50	89.20	90.80	95.60	98.00	89.00	(NA)
Value of production	Bil. dol.	25.5	22.1	21.2	21.0	24.8	27.2	28.0	30.2	30.3	29.1	(NA)
HOGS AND PIGS												
Inventory: [3] Number on farms	Mil	67.3	56.7	54.1	52.3	51.0	54.4	55.5	53.8	54.5	57.7	59.0
Total value	Bil. dol.	3.8	3.3	4.1	3.6	4.7	4.1	3.7	4.3	4.7	4.0	4.3
Value per head	Dol	56.00	58.80	75.00	69.60	91.90	76.00	66.30	79.10	85.40	68.90	71.60
Production: Quantity	Bil. lb	23.4	20.2	20.2	19.5	20.4	21.7	21.9	21.3	22.8	24.3	(NA)
Price per 100 lb	Dol	38.00	47.10	44.00	49.30	51.20	42.30	42.50	53.70	49.10	41.60	(NA)
Value of production	Bil. dol.	8.9	9.5	8.9	9.6	10.4	9.1	9.3	11.4	11.1	10.0	(NA)
SHEEP AND LAMBS												
Inventory: [2] Number on farms	Mil	12.7	11.6	10.7	10.1	10.6	10.9	10.9	11.4	11.2	10.8	10.2
Total value	Mil. dol	993	603	654	684	799	985	895	902	735	658	716
Value per head	Dol	78.20	52.10	61.10	67.40	75.70	90.00	82.40	79.30	65.60	61.20	70.20
Production: Quantity	Mil. lb	746	700	704	726	733	707	776	758	763	711	(NA)
Sheep, price per 100 lb	Dol	21.30	16.40	23.90	25.60	29.50	25.60	24.40	23.20	19.70	25.80	(NA)
Lambs, price per 100 lb	Dol	63.60	60.10	67.70	69.00	77.60	69.10	66.10	55.50	52.20	59.50	(NA)
Value of production	Mil. dol	403	378	434	445	503	420	446	362	342	339	(NA)

NA Not available. [1] Includes milk cows. [2] As of Jan. 1. [3] As of Dec. 1 of preceding year.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Meat Animals—Production, Disposition, and Income*, annual; and annual livestock summaries. Also in *Agricultural Statistics*, annual.

No. 1123. Cattle and Calves; and Hogs and Pigs—Number, Production, and Value, by State: 1990 to 1993

[See headnote, table 1122]

STATE	NUMBER ON FARMS [1] (1,000)			QUANTITY PRODUCED (mil. lb.)			VALUE OF PRODUCTION (mil. dol.)			COMMERCIAL SLAUGHTER [2] (mil. lb.)		
	1991	1992	1993	1990	1991	1992	1990	1991	1992	1990	1991	1992
CATTLE AND CALVES [3]												
U.S. [4]	**98,896**	**99,559**	**100,892**	**40,386**	**41,090**	**40,914**	**30,229**	**30,332**	**29,104**	**37,758**	**38,029**	**38,417**
CA	4,600	4,500	4,500	1,943	1,978	1,848	1,273	1,272	1,107	1,408	1,338	1,116
CO	2,750	2,900	2,850	1,905	1,944	2,043	1,498	1,468	1,520	2,363	2,634	2,938
IL	2,000	1,980	2,000	786	773	771	617	577	574	(5)	(5)	(5)
IA	4,700	4,400	4,400	1,899	1,975	2,070	1,446	1,416	1,444	2,134	1,952	1,952
KS	5,700	5,650	5,890	3,122	3,144	3,087	2,428	2,370	2,311	7,091	6,937	7,027
MN	2,760	2,800	2,850	1,115	1,155	1,206	798	789	805	1,264	1,344	1,262
MO	4,400	4,500	4,600	1,158	1,163	1,229	969	980	951	351	299	263
MT	2,330	2,500	2,450	974	999	988	719	728	686	30	21	22
NE	6,000	5,800	5,900	3,784	3,741	3,776	2,895	2,782	2,783	6,804	7,424	7,808
OK	5,550	5,400	5,400	1,928	1,904	1,816	1,437	1,490	1,346	62	44	46
SD	3,400	3,550	3,750	1,756	1,696	1,709	1,385	1,336	1,283	702	625	482
TX	13,300	13,600	14,300	5,900	6,591	6,387	4,544	4,964	4,719	6,100	6,158	6,264
WI	4,170	4,000	3,950	1,210	1,216	1,151	879	818	751	1,368	1,347	1,584
HOGS AND PIGS												
U.S. [4]	**54,477**	**57,684**	**59,016**	**21,347**	**22,809**	**24,278**	**11,376**	**11,104**	**9,991**	**21,230**	**22,200**	**23,952**
IL	5,700	5,900	5,900	2,225	2,435	2,493	1,192	1,174	1,028	2,250	2,221	2,239
IN	4,400	4,600	4,550	1,666	1,742	1,817	870	824	718	876	924	1,148
IA	13,800	15,000	15,800	5,394	5,863	6,481	2,913	2,942	2,731	6,571	7,121	7,635
MN	4,500	4,900	4,700	1,714	1,811	1,961	948	915	836	1,382	1,827	2,093
NE	4,300	4,500	4,600	1,624	1,763	1,831	882	863	762	1,299	1,355	1,443
NC	2,800	3,650	4,500	1,190	1,484	1,822	607	693	756	654	(5)	(5)

[1] Cattle and calves, as of January 1; hogs and pigs as of December 1 of preceding year. [2] Data for cattle and calves cover cattle only. Includes slaughter in federally inspected and other slaughter plants; excludes animals slaughtered on farms. [3] Includes milk cows. [4] Includes other States not shown separately. [5] Included in U.S. total. Not printed to avoid disclosing individual operation.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Meat Animals-Production, Disposition and Income*, annual.

No. 1124. Milk Production and Commercial Use: 1980 to 1993

[In billions of pounds milkfat basis]

YEAR	Production	Farm use	COMMERCIAL		Imports	Commercial supply, total	CCC net removals [1]	COMMERCIAL		Milk price per 100 lb. [2] (dol.)
			Farm marketings	Beginning stock				Ending stock	Disappearance	
1980	128.4	2.3	126.1	5.3	2.1	133.5	9.0	5.6	118.8	13.1
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.4	4.5	130.3	12.8
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	138.9	13.7
1991	148.5	2.0	146.5	5.1	2.6	154.2	10.4	4.5	139.3	12.2
1992	151.7	1.9	149.8	4.5	2.5	156.7	10.1	4.7	142.0	13.1
1993	153.3	1.9	151.4	4.7	2.6	158.7	6.2	4.6	147.9	12.8

[1] Removals from commercial supply by Commodity Credit Corporation. [2] Wholesale price received by farmers for all milk delivered to plants and dealers.

Source: U.S. Dept. of Agriculture, *Agricultural Outlook*, monthly.

No. 1125. Milk Cows—Number, Production, and Value, by State: 1990 to 1992

STATE	NUMBER ON FARMS [1] (1,000)			MILK PRODUCED ON FARMS (mil. lb.)			VALUE OF PRODUCTION [2] (mil. dol.)		
	1990	1991	1992	1990	1991	1992	1990	1991	1992
United States [3]	**10,127**	**9,992**	**9,839**	**148,313**	**148,477**	**151,747**	**20,495**	**18,349**	**20,105**
California	1,135	1,155	1,158	20,947	21,407	22,084	2,561	2,444	2,613
Iowa	305	303	305	4,233	4,151	4,276	563	494	556
Michigan	344	341	339	5,233	5,256	5,397	739	654	721
Minnesota	710	683	660	10,030	9,772	9,854	1,326	1,164	1,266
New York	768	756	749	11,067	11,179	11,582	1,621	1,425	1,557
Ohio	342	337	324	4,668	4,695	4,690	649	596	628
Pennsylvania	683	669	655	9,933	10,106	10,364	1,513	1,362	1,500
Texas	386	380	376	5,539	5,418	5,590	814	688	766
Washington	237	237	249	4,392	4,459	4,836	603	560	648
Wisconsin	1,753	1,714	1,646	24,400	24,065	24,103	3,287	2,891	3,175

[1] Average number during year. Represents cows and heifers that have calved, kept for milk; excluding heifers not yet fresh. [2] Valued at average returns per 100 pounds of milk in combined marketings of milk and cream. Includes value of milk fed to calves. [3] Includes other States not shown separately.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Dairy Products*, annual; and *Milk: Production, Disposition, and Income*, annual.

No. 1126. Milk Production and Manufactured Dairy Products: 1980 to 1992

[See also *Historical Statistics, Colonial Times to 1970*, series K 595-601]

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992
Number of farms with milk cows	1,000	334	269	249	228	217	204	194	181	172
Cows and heifers that have calved, kept for milk	Mil. head	10.8	11.0	10.8	10.3	10.3	10.1	10.1	10.0	9.8
Milk produced on farms	Bil. lb	126	143	143	143	145	144	148	148	152
Production per cow	1,000 lb	11.9	13.0	13.3	13.8	14.1	14.2	14.6	14.9	15.4
Whole milk sold from farms [1]	Bil. lb	126	141	141	140	143	142	146	146	150
Sales to plants and dealers	Bil. lb	125	139	140	139	142	141	145	145	149
Value of milk produced	Bil. dol.	16.9	18.4	18.0	18.0	17.9	19.7	20.5	18.3	20.1
Gross farm income, dairy products	Bil. dol.	16.7	18.1	17.8	17.8	17.7	19.5	20.3	18.2	19.9
Cash receipts from marketing of milk and cream [1]	Bil. dol.	16.6	18.1	17.7	17.7	17.6	19.4	20.2	18.1	19.8
Sales to plants and dealers	Bil. dol.	16.3	17.8	17.5	17.5	17.4	19.1	20.0	17.8	19.6
Number of dairy manufacturing plants	Number	2,257	2,061	1,998	1,933	1,846	1,754	1,723	1,680	1,603
Manufactured dairy products:										
Butter (incl. whey butter)	Mil. lb	1,145	1,248	1,202	1,104	1,208	1,295	1,302	1,336	1,365
Cheese, total [2]	Mil. lb	3,984	5,081	5,209	5,344	5,572	5,615	6,059	6,055	6,488
American (excl. full-skim American)	Mil. lb	2,376	2,855	2,798	2,717	2,757	2,674	2,894	2,769	2,937
Cream and Neufchatel	Mil. lb	229	294	322	342	376	401	431	447	517
All Italian varieties	Mil. lb	983	1,491	1,633	1,800	1,937	2,043	2,207	2,329	2,509
Cottage cheese: Creamed [3]	Mil. lb	825	716	705	675	647	572	531	498	457
Curd, pot, and bakers	Mil. lb	667	599	600	574	557	527	493	491	502
Condensed bulk milk	Mil. lb	952	1,232	1,362	1,383	1,364	1,417	1,426	1,530	1,624
Evaporated and condensed canned milk	Mil. lb	740	656	602	597	612	545	615	543	853
Nonfat dry milk [4]	Mil. lb	1,168	1,398	1,294	1,077	998	893	902	885	882
Dry whey [5]	Mil. lb	690	987	1,031	1,097	1,137	1,069	1,143	1,167	1,237
Ice cream of all kinds	Mil. gal	830	901	924	928	882	831	824	863	875
Ice milk	Mil. gal	293	301	315	328	355	377	352	345	329

[1] Comprises sales to plants and dealers, and retail sales by farmers direct to consumers. [2] Includes varieties not shown separately. [3] Includes partially creamed (low fat). [4] Includes dry skim milk for animal feed. [5] Includes animal but excludes modified whey production.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Dairy Products*, annual; and *Milk: Production, Disposition, and Income*, annual.

No. 1127. Broiler, Turkey, and Egg Production: 1980 to 1992

[**For year ending November 30**. See also *Historical Statistics, Colonial Times to 1970*, series K 614-623]

ITEM	Unit	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Broilers: [1] Number	Million	3,963	4,184	4,283	4,470	4,649	5,004	5,238	5,517	5,864	6,137	6,389
Weight	Bil. lb.	15.5	17.0	17.9	18.9	19.7	21.5	22.5	24.0	25.6	27.2	28.8
Price per lb	Cents	27.7	28.6	33.7	30.1	34.5	28.7	33.1	36.6	32.6	30.8	31.8
Production value	Mil. dol.	4,303	4,873	6,020	5,668	6,784	6,177	7,435	8,778	8,365	8,383	9,156
Turkeys: Number	Million	165	171	171	185	207	240	242	261	282	285	289
Weight	Bil. lb.	3.1	3.3	3.4	3.7	4.1	4.9	5.1	5.5	6.0	6.1	6.3
Price per lb	Cents	41.3	38.0	48.9	49.1	47.1	34.8	38.6	40.9	39.4	38.0	38.0
Gross income	Mil. dol.	1,272	1,269	1,655	1,819	1,948	1,703	1,951	2,234	2,379	2,345	2,387
Eggs: Number	Billion	69.7	68.2	68.2	68.4	69.1	70.4	69.7	67.2	67.9	69.0	71.0
Price per dozen	Cents	56.3	61.1	72.3	57.2	61.5	54.7	52.8	68.9	70.9	67.8	57.7
Production value	Mil. dol.	3,268	3,469	4,110	3,262	3,543	3,209	3,067	3,861	4,011	3,909	3,389

[1] Young chickens of the heavy breeds and other meat-type birds, to be marketed at 2-5 lbs. live weight and from which no pullets are kept for egg production.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Poultry—Production and Value*, annual; *Turkeys*, annual; and *Layers and Egg Production*, annual.

No. 1128. Poultry—Production, by State: 1990 to 1992

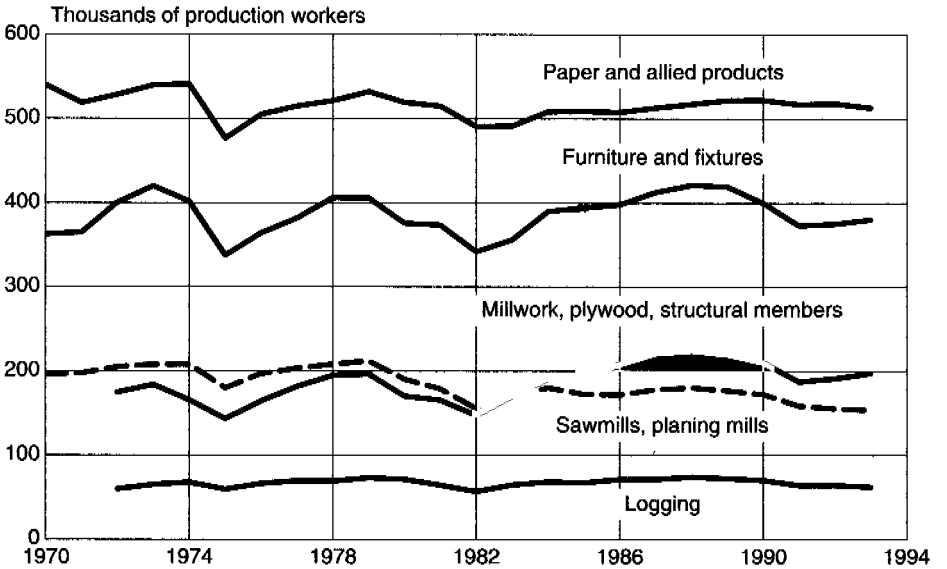
[**In millions of pounds, liveweight production**. See *Historical Statistics, Colonial Times to 1970*, series K 614 and 621 for U.S. totals]

STATE	BROILERS			TURKEYS			STATE	BROILERS			TURKEYS		
	1990	1991	1992	1990	1991	1992		1990	1991	1992	1990	1991	1992
U.S. [1]	**25,631**	**27,203**	**28,772**	**6,030**	**6,111**	**6,333**	MS	1,694	1,963	2,145	(NA)	(NA)	(NA)
AL	3,642	3,764	3,855	(NA)	(NA)	(NA)	MO	362	479	542	360	452	431
AR	3,995	4,215	4,499	453	490	518	NC	2,593	2,679	2,852	1,160	1,166	1,321
CA	1,109	1,153	1,188	712	653	498	OH	96	129	117	135	126	145
DE	1,159	1,206	1,256	(NA)	(NA)	(NA)	OK	540	592	600	(NA)	(NA)	(NA)
FL	490	506	541	(NA)	(NA)	(NA)	PA	520	544	572	169	168	178
GA	3,760	3,816	4,026	61	56	61	SC	343	395	447	168	178	196
IN	(NA)	(NA)	(NA)	288	320	350	TN	436	476	508	(NA)	(NA)	(NA)
IA	63	92	92	228	226	232	TX	1,454	1,497	1,582	(NA)	(NA)	(NA)
KY	6	89	173	(NA)	(NA)	(NA)	VA	882	984	1,048	316	324	363
MD	1,141	1,183	1,262	2	3	3	WA	157	167	169	(NA)	(NA)	(NA)
MN	198	225	231	852	805	809	WV	156	177	177	72	77	77

NA Not available. [1] Includes other States not shown separately.

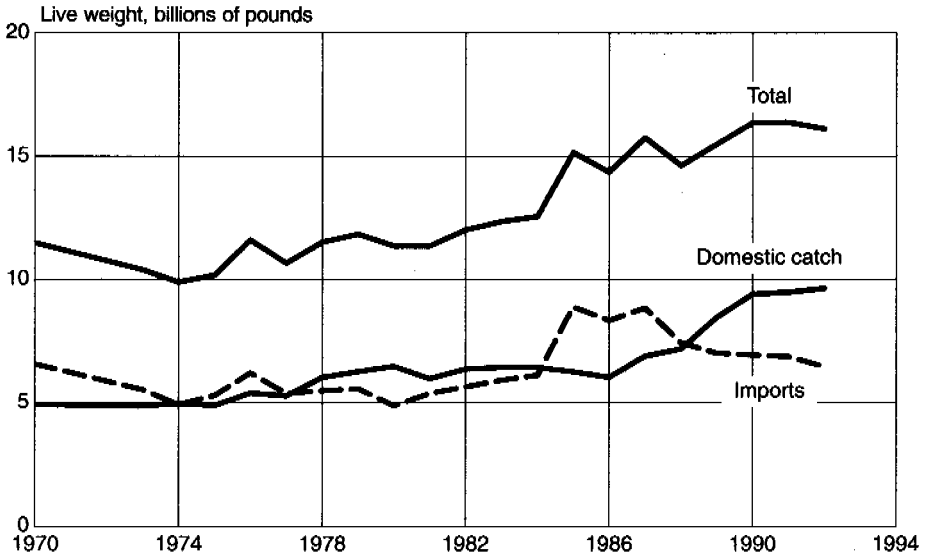
Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Poultry—Production and Value*, annual; and *Turkeys*, annual.

Figure 24.1
Employment in Timber-Based Industries: 1970 to 1993



Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 656 and 1133.

Figure 24.2
Fishery Products— Domestic Catch and Imports: 1970 to 1992



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1147.

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.

In Brief

	1993
Paper and board production	85.9 mil. sh. tns.
Recovered paper consumption	28.9 mil. sh. tns.
Petroleum balance, 1992:	
Products supplied	6.2 billion barrels
Net imports	2.2 billion barrels
Stocks	1.6 billion barrels

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: An Analysis of the Timber Situation in the United States, 1989—2040, 1990; Forest Resources of the United States, 1992, 1993; 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 census of manufactures (taken every 5 years) and the annual Current Industrial Reports, issued by the Bureau of the Census. 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 Bureau of the Census also collects data on foreign trade of forest products. The Bureau of Labor Statistics publishes monthly and annual statistics of producer prices for lumber.

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 (by species, region, State, and type of fishing gear), disposition of landings, number of fishermen, and number and kinds of fishing vessels and fishing gear. Reports for the fish-processing industry include annual output of canned, packaged, and industrial products and, for the wholesaling and fish processing establishments, annual and seasonal employment, and number of firms, by product and State. The Magnuson Fishery Conservation and Management Act of 1976 (Magnuson Act), Public Law 94-265 as amended, provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ), except highly migratory species of tuna, and gives the Federal Government exclusive authority over domestic and foreign fisheries within 200 nautical miles of U.S. shores and over certain living marine resources beyond the EEZ. Within the EEZ, the total allowable level of foreign fishing, if any, is that portion of the "optimum yield" not harvested by U.S. vessels. Adjustments in the "optimum yield" level may occur periodically. For details, see Fisheries of the United States, 1992.

The NMFS collects and disseminates data on catches by foreign fishing vessels in the EEZ.

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 26 and 30 of this Abstract; data on mining employment may be found in section 13.

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, published by the Bureau of Mines, Department of the Interior, and various monthly and annual publications of the Energy Information Administration, Department of Energy. See text, section 19 for list of Department of Energy publications. In addition, the Bureau of the Census conducts a census of mineral industries every 5 years. Non-government 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 Geological Survey or by the Bureau of Mines since 1880. Current data in Bureau of Mines publications include quantity and value of nonfuel minerals produced, sold or used by producers, or shipped; quantity of minerals stocked; crude materials treated and prepared minerals recovered; and consumption of mineral raw materials. The U.S. Mine Safety and Health Administration also collects and publishes data on workhours, employment, accidents, and injuries in the mineral industries, except petroleum and natural gas. In October 1977, mineral fuel data collection activities of the Bureau of Mines were transferred to the Energy Information Administration.

Censuses of mineral industries have been conducted by the Bureau of the Census at various intervals since 1840. Beginning with the 1967 census, legislation provides for a census to be conducted every 5th year for years ending in "2" and "7." 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 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 table 1166. 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.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970.* See Appendix IV.

No. 1129. National Forest System—Summary: 1970 to 1992

[For fiscal years ending in year shown; see text, section 9. Includes Alaska and Puerto Rico, except as noted. See *Historical Statistics, Colonial Times to 1970*, series J 33-34, for similar grazing data, and L 15-31]

ITEM	Unit	1970	1980	1985	1987	1988	1989	1990	1991	1992
Timber cut, total value	Mil. dol	309	737	725	1,019	1,243	1,313	1,191	1,012	938
Commercial and cost sales: [1]										
Volume	Mil. bd.	11,527	9,176	10,941	12,712	12,649	11,951	10,500	8,475	7,290
Value	Mil. dol	308	730	721	1,016	1,240	1,310	1,188	1,009	935
Free use:										
Volume	Mil. bd.	179	2,070	399	209	223	214	151	121	80
Value [2]	Mil. dol	0.3	5.7	2.2	1.1	1.2	1.2	1.0	1.0	0.8
Misc. forest products:										
Value	Mil. dol	0.7	1.1	1.7	1.9	2.0	2.2	2.6	2.7	2.7
Livestock grazing: [3]										
Cattle and horses [4]	1,000	1,607	1,521	1,565	1,410	1,313	1,526	1,236	1,265	(NA)
Sheep and goats	1,000	2,105	1,328	1,183	1,134	1,067	972	958	1,029	(NA)
Roads and trails:										
Road construction [5]	Miles	942	925	1,903	2,394	1,352	866	857	810	853
Trail construction [5 6]	Miles	278	2,419	987	1,046	1,834	1,944	1,635	1,921	1,976
Receipts, total	Mil. dol	300	703	636	898	980	1,051	971	772	614
Timber use	Mil. dol	284	625	515	808	888	910	849	667	520
Grazing use	Mil. dol	4	16	9	8	9	11	10	11	11
Special land use, etc	Mil. dol	11	62	112	82	83	130	112	93	84
Payments to local govt. [7]	Mil. dol	73	240	229	295	325	368	368	335	(NA)
25-percent fund [8]	Mil. dol	72	234	212	285	317	354	358	327	(NA)
Other [9]	Mil. dol	1	7	17	10	8	15	10	8	(NA)
Allotments to Forest Service [10]	Mil. dol	30	73	60	88	104	111	106	88	(NA)
Roads and trails	Mil. dol	29	65	55	84	92	96	91	73	(NA)
Other	Mil. dol	1	8	5	4	12	15	14	16	(NA)

NA Not available. [1] Includes land exchanges. [2] Includes some free use timber not reducible to board feet. [3] For 1970, data for livestock permitted to graze; thereafter for number actually grazed. Calendar-year data, prior to 1980. Excludes Puerto Rico. [4] Excludes animals under 6 months of age. 1970 includes swine. Includes burros beginning in 1980. [5] Includes reconstruction. [6] Beginning 1980, includes work accomplished by Human Resource Programs and volunteers. [7] Payments made in following year. [8] Includes Tongass Alaska suspense account. [9] Includes Arizona and New Mexico School Fund (through 1980), State of Minnesota, and receipts paid to counties under Bankhead-Jones Farm Tenant Act. [10] For use in following year.

Source: U.S. Forest Service. In *Agricultural Statistics*, annual; and unpublished data.

No. 1130. Forest and Timberland Area, Sawtimber and Stock: 1970 to 1992

[As of Jan. 1. See table 26 for composition of regions]

YEAR AND REGION	Total forest land (mil. acres)	TIMBERLAND, OWNERSHIP [1]				SAWTIMBER, NET VOLUME [3]		GROWING STOCK, NET VOLUME [4]	
		All ownerships (mil. acres)	Federally owned or managed [2] (mil. acres)	State, county, and municipal (mil. acres)	Private (mil. acres)	Total (bil. bd. ft.)	Softwood (bil. bd. ft.)	Total (bil. cu. ft.)	Softwood (bil. cu. ft.)
United States, 1970	754	504	116	29	360	2,587	2,035	694	458
North	(NA)	154	11	18	126	295	81	146	39
South	(NA)	203	15	3	185	569	302	191	87
Rocky Mountains	(NA)	65	42	2	20	398	384	101	95
Pacific Coast	(NA)	82	47	5	29	1,325	1,268	257	238
United States, 1987	731	485	97	34	354	2,853	2,040	766	453
North	165	154	11	19	124	459	126	190	48
South	203	197	16	4	177	781	388	245	106
Rocky Mountains	142	61	39	3	20	411	394	108	100
Pacific Coast	220	72	31	8	32	1,202	1,132	223	199
United States, 1992	737	490	97	35	358	2,992	2,047	786	450
North	168	158	11	19	127	540	137	207	51
South	212	199	16	4	179	842	389	251	103
Rocky Mountains	140	63	40	3	20	415	397	110	101
Pacific Coast	217	70	30	8	32	1,196	1,124	218	195

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

Source: U.S. Forest Service, *Forest Resources of the United States, 1992*.

No. 1131. National Forest System Land—States and Other Areas: 1990 and 1991

[In thousands of acres. As of Sept. 30. See also *Historical Statistics, Colonial Times to 1970*, series L 10-11]

STATE	GROSS AREA WITHIN UNIT BOUNDARIES [1]		NATIONAL FOREST SYSTEM LAND [2]		OTHER LANDS WITHIN UNIT BOUNDARIES	
	1990	1991	1990	1991	1990	1991
United States	**231,443**	**231,502**	**191,324**	**191,453**	**40,119**	**40,049**
Alabama	1,280	1,288	658	659	622	629
Alaska	24,345	24,345	22,220	22,193	2,126	2,152
Arizona	11,880	11,887	11,239	11,247	642	641
Arkansas	3,490	3,490	2,509	2,529	981	961
California	24,401	24,401	20,619	20,616	3,782	3,785
Colorado	16,039	16,037	14,462	14,467	1,577	1,570
Connecticut	-	(Z)	-	(Z)	-	-
Delaware	-	-	-	-	-	-
Florida	1,246	1,254	1,128	1,135	118	119
Georgia	1,846	1,846	859	860	987	986
Hawaii	-	(Z)	-	(Z)	-	-
Idaho	21,674	21,674	20,438	20,441	1,236	1,233
Illinois	840	840	266	268	573	572
Indiana	644	644	188	189	456	455
Iowa	-	-	-	-	-	-
Kansas	116	116	108	108	8	8
Kentucky	2,102	2,102	670	673	1,431	1,428
Louisiana	1,022	1,022	601	601	422	421
Maine	93	93	53	53	40	40
Maryland	-	-	-	-	-	-
Massachusetts	-	-	-	-	-	-
Michigan	4,885	4,895	2,816	2,849	2,069	2,046
Minnesota	5,467	5,467	2,810	2,815	2,657	2,652
Mississippi	2,310	2,310	1,150	1,153	1,160	1,157
Missouri	3,082	3,082	1,475	1,478	1,606	1,603
Montana	19,101	19,102	16,806	16,806	2,295	2,296
Nebraska	442	442	352	352	90	90
Nevada	6,275	6,275	5,797	5,801	478	474
New Hampshire	825	825	720	721	105	104
New Jersey	-	-	-	-	-	-
New Mexico	10,367	10,367	9,321	9,321	1,046	1,045
New York	13	13	13	13	-	-
North Carolina	3,165	3,165	1,232	1,234	1,934	1,932
North Dakota	1,106	1,106	1,106	1,106	-	(Z)
Ohio	833	833	203	212	630	622
Oklahoma	461	465	297	301	165	164
Oregon	17,502	17,504	15,651	15,655	1,851	1,849
Pennsylvania	744	744	513	513	231	231
Rhode Island	-	-	-	-	-	-
South Carolina	1,376	1,376	607	609	768	767
South Dakota	2,344	2,352	1,996	2,013	349	339
Tennessee	1,212	1,212	628	628	585	585
Texas	1,994	1,994	753	755	1,241	1,240
Utah	9,186	9,186	8,099	8,099	1,087	1,087
Vermont	815	816	340	345	475	471
Virginia	3,223	3,223	1,645	1,648	1,578	1,575
Washington	10,050	10,061	9,151	9,160	899	901
West Virginia	1,863	1,863	1,025	1,025	838	838
Wisconsin	2,023	2,023	1,517	1,518	506	505
Wyoming	9,704	9,704	9,255	9,255	449	449

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

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

No. 1132. Timber-Based Industries—Summary of Manufactures: 1990 and 1991

[Data based on *1987 Standard Industrial Classification Manual*, published by the Office of Management and Budget, see text, section 26. N.e.c. = Not elsewhere classified]

INDUSTRY	SIC [1] code	1990			1991		
		All employees		Value of shipments (bil. dol.)	All employees		Value of shipments (bil. dol.)
		Number (1,000)	Payroll (mil. dol.)		Number (1,000)	Payroll (mil. dol.)	
Logging and sawmills	241/242	254.2	5,076	32.2	207.6	4,307	28.9
Logging	2411	83.4	1,647	12.2	78.1	1,561	11.4
Sawmills and planing mills, general	2421	138.9	2,913	17.9	129.5	2,747	17.5
Hardwood dimension and flooring mills	2426	29.3	475	1.8	26.1	462	1.7
Special product sawmills, n.e.c	2429	2.5	41	0.2	2.0	36	0.2
Millwork and veneer [2]	243	229.4	4,823	23.2	209.9	4,487	21.4
Millwork	2431	90.5	1,961	9.5	84.9	1,836	9.0
Wood kitchen cabinets	2434	62.8	1,217	4.6	57.1	1,139	4.2
Hardwood veneer and plywood	2435	18.7	335	2.1	17.3	320	1.9
Softwood veneer and plywood	2436	35.6	881	5.0	31.7	810	4.6
Structural wood members, n.e.c	2439	21.8	429	2.0	18.9	382	1.8
Wood containers	244	41.5	636	2.9	39.8	634	2.9
Nailed and lock corner wood boxes	2441	6.0	98	0.4	6.2	100	0.4
Wood pallets and skids	2448	28.3	417	1.9	27.1	413	2.0
Wood containers, n.e.c	2449	7.2	122	0.5	6.5	120	0.4
Wood buildings, mobile homes	245	61.4	1,217	6.5	54.1	1,106	6.0
Mobile homes	2451	38.8	769	4.2	35.1	714	3.9
Prefabricated wood buildings and components	2452	22.6	448	2.3	19.0	392	2.0
Miscellaneous wood products	249	96.4	1,745	9.6	90.9	1,706	9.5
Wood preserving	2491	13.0	246	2.6	11.7	233	2.6
Reconstituted wood products	2493	22.3	554	3.0	21.0	537	3.0
Wood products, n.e.c	2499	61.1	945	3.9	58.1	936	3.8
Pulp mills	261	16.1	668	6.2	16.8	697	5.3
Paper mills	262	130.1	5,062	35.3	130.3	5,224	33.3
Paperboard mills	263	53.1	2,049	15.9	50.6	2,027	15.0
Paperboard containers and boxes	265	200.3	5,245	30.5	198.6	5,392	30.6
Setup paperboard boxes	2652	8.8	146	0.6	8.7	150	0.6
Corrugated and solid fiber boxes	2653	110.1	2,984	18.6	108.7	3,047	18.0
Fiber cans, tubes, drums, & similar prods.	2655	13.3	341	1.9	12.9	341	1.9
Sanitary food containers, except folding	2656	17.5	392	2.5	17.6	411	2.7
Folding paperboard boxes, incl. sanitary	2657	50.7	1,382	7.0	50.7	1,443	7.4
Converted paper and paperboard products [3]	267	228.5	5,923	43.5	224.3	6,043	44.6
Packaging paper & plastics film, coated & laminated	2671	16.4	489	3.0	15.4	492	3.1
Coated and laminated paper, n.e.c	2672	35.0	985	7.1	34.2	992	7.4
Plastics, foil, and coated paper bags	2673	37.4	870	5.5	35.4	875	5.1
Uncoated paper and multiwall bags	2674	16.9	374	2.8	17.9	398	2.7
Die-cut paper and paperboard and cardboard	2675	16.8	395	2.1	17.0	408	2.3
Sanitary paper products	2676	39.0	1,299	14.7	38.8	1,343	15.6
Envelopes	2677	26.1	648	2.8	24.5	616	2.7
Stationery, tablets, and related products	2678	10.1	203	1.3	10.1	209	1.4
Converted paper and paperboard products, n.e.c.	2679	30.7	659	4.1	30.9	711	4.3

[1] Standard Industrial Classification code; see text, section 13. [2] Includes plywood and structural members. [3] Except containers and boxes.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1987 Final Industry Series*, MC87-I-24A-D and MC87-I-26A-C, and *Annual Survey of Manufactures*.

No. 1133. Timber-Based Industries—Employment and Average Hourly Earnings: 1980 to 1992

[Data for production workers]

SIC [1] code	ITEM	EMPLOYEES (1,000)						EARNINGS (dollars)					
		1980	1985	1989	1990	1991	1992	1980	1985	1989	1990	1991	1992
24	Lumber and wood products [2]	587	593	628	605	556	563	6.57	8.25	8.84	9.08	9.24	9.43
241	Logging	71	67	72	70	64	76	8.64	10.92	11.13	11.22	11.08	11.24
242	Sawmills and planing mills	190	172	177	173	160	182	6.70	8.52	9.03	9.22	9.37	9.60
243	Millwork, plywood, and structural members	170	195	220	211	189	245	6.44	8.09	8.73	9.04	9.27	9.47
26	Paper and allied products	519	509	522	524	518	688	7.84	10.83	11.96	12.31	12.73	13.09
25	Furniture and fixtures	376	384	419	401	371	465	5.49	7.17	8.25	8.52	8.76	9.00

[1] 1987 Standard Industrial Classification; see text, section 27. [2] Includes other industries, not shown separately.

Source: U.S. Bureau of Labor Statistics, Bulletin 2370 Supplement to Employment and Earnings, July 1991, and *Employment and Earnings*, monthly.

No. 1134. Timber Products—Production, Foreign Trade, and Consumption, by Type of Product: 1970 to 1988

[**In millions of cubic feet, roundwood equivalent.** See also *Historical Statistics, Colonial Times to 1970*, series L 72-86]

ITEM	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988, prel.
Industrial roundwood:										
Domestic production [1]	11,105	10,575	12,120	10,910	12,065	12,725	12,515	13,845	14,670	14,985
Softwoods	8,635	8,380	9,290	8,450	9,285	9,790	9,690	10,595	11,390	11,430
Hardwoods	2,470	2,195	2,825	2,465	2,780	2,935	2,825	3,250	3,280	3,555
Imports	2,430	2,215	3,250	3,015	3,710	4,165	4,340	4,375	4,575	4,445
Exports	1,540	1,685	2,350	1,995	2,110	2,060	2,070	2,300	2,650	3,200
Consumption [2]	11,995	11,105	13,020	11,930	13,665	14,830	14,785	15,920	16,595	16,230
Softwoods	9,425	8,875	10,345	9,575	10,975	11,965	11,960	12,735	13,430	12,970
Hardwoods	2,565	2,230	2,675	2,355	2,690	2,865	2,825	3,180	3,165	3,260
Lumber:										
Domestic production	5,215	4,890	5,300	4,635	5,370	5,770	5,665	6,545	6,990	6,920
Imports	955	930	1,540	1,460	1,915	2,130	2,345	2,285	2,380	2,225
Exports	195	255	395	320	360	340	305	395	510	720
Consumption	5,970	5,565	6,450	5,780	6,925	7,560	7,700	8,445	8,860	8,425
Plywood and veneer:										
Domestic production	1,020	1,165	1,175	1,135	1,365	1,400	1,420	1,505	1,650	1,630
Imports	170	170	120	115	160	145	165	185	190	165
Exports	15	70	45	50	65	45	40	65	80	100
Consumption	1,170	1,265	1,250	1,200	1,460	1,500	1,550	1,625	1,760	1,695
Pulp products:										
Domestic production	3,835	3,485	4,390	3,980	4,165	4,355	4,165	4,545	4,670	4,885
Imports	1,280	1,105	1,565	1,415	1,605	1,860	1,810	1,895	1,985	2,045
Exports	720	715	1,070	900	965	930	920	1,080	1,195	1,345
Consumption	4,400	3,875	4,885	4,495	4,805	5,290	5,055	5,360	5,465	5,585
Logs:										
Imports	25	15	25	20	30	30	20	15	15	15
Exports	465	455	560	550	565	600	655	620	705	825
Pulpwood chips, exports	145	195	275	175	155	145	145	150	160	215
Other [3]	425	385	415	435	445	455	465	475	495	510
Fuelwood consumption	540	570	3,105	3,355	3,235	3,620	3,450	3,115	3,150	3,360

[1] Includes log exports. [2] Includes log imports. [3] Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, etc.

No. 1135. Timber Products—Per Capita Consumption: 1970 to 1988

[Based on total population estimated as of **July 1.** See also *Historical Statistics, Colonial Times to 1970*, series L 87-97]

PRODUCT	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988, prel.
All products	**Cu. ft**	**61.1**	**54.0**	**70.8**	**65.7**	**72.0**	**77.9**	**76.2**	**78.8**	**81.0**	**79.5**
Industrial roundwood	Cu. ft.	58.5	51.4	57.2	51.3	58.2	62.6	61.8	65.9	68.0	65.9
Lumber	Cu. ft.	29.1	25.8	28.3	24.9	29.5	31.9	32.2	35.0	36.3	34.2
Plywood and veneer	Cu. ft.	5.7	5.9	5.5	5.2	6.2	6.3	6.5	6.7	7.2	6.9
Pulp products	Cu. ft.	21.4	17.9	21.4	19.3	20.5	22.3	21.1	22.2	22.4	22.7
Other products	Cu. ft.	2.1	1.8	1.8	1.9	1.9	1.9	1.9	2.0	2.0	2.1
Fuelwood	Cu. ft.	2.6	2.6	13.6	14.4	13.8	15.3	14.4	12.9	12.9	13.6
Lumber	Bd. ft.	193.0	171.0	188.0	161.0	190.0	205.0	207.0	224.0	233.0	221.0
Plywood and veneer	Bd. ft.	34.0	32.0	30.0	28.0	34.0	34.0	35.0	37.0	39.0	37.0
Pulp products	Cords (128 cu. ft.)	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3

Source of tables 1134 and 1135: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics, 1960-88*, annual.

No. 1136. Lumber Consumption, by Species Group and End Use: 1970 to 1991

[In million board feet, except per capita in board feet. Per capita consumption based on estimated resident population as of July 1]

ITEM	1970	1976	1986	1991	END-USE	1970	1976	1986	1991
Total	39.9	44.7	57.0	54.8	New housing	13.3	17.0	19.3	15.0
Per capita	194	205	237	217	Residential upkeep and improvements	4.7	5.7	10.1	11.6
Species group:					New nonresidential construction [1]	4.7	4.5	5.3	5.4
Softwoods	32.0	36.6	48.0	44.0	Manufacturing	4.7	4.9	4.8	5.6
Hardwoods	7.9	8.0	9.0	10.8	Shipping	5.7	5.9	6.8	8.2
					Other [2]	6.8	6.7	10.9	8.8

[1] In addition to new construction, includes railroad ties laid as replacements in existing track and lumber used by railroads for railcar repair. [2] Includes upkeep and improvement of nonresidential buildings and structures; made-at-home projects, such as furniture, boats, and picnic tables; made-on-the-job items such as advertising and display structures; and miscellaneous products and uses.

Source: U.S. Forest Service. *The 1993 RPA Timber Assessment Update*, forthcoming.

No. 1137. Selected Timber Products—Producer Price Indexes: 1980 to 1992

[See also *Historical Statistics, Colonial Times to 1970*, series L 206-210]

PRODUCT	Unit	1980	1985	1989	1990	1991	1992
Lumber and wood products, except furniture	Dec. 1984=100	(NA)	100.3	115.3	117.0	119.4	129.6
Logging camps and logging contractors	Dec. 1981=100	(NA)	94.8	128.0	135.6	135.0	151.3
Sawmills and planing mills	Dec. 1984=100	(NA)	99.7	114.6	113.7	115.3	131.1
Millwork, veneer, and plywood [1]	Dec. 1984=100	(NA)	99.9	114.1	115.4	118.3	128.3
Softwood plywood	Dec. 1980=100	91.4	90.0	104.8	102.5	103.5	124.2
Wood containers	June 1985=100	(NA)	(NA)	109.7	113.9	115.8	123.4
Wood buildings and mobile homes	Dec. 1984=100	(NA)	100.6	112.1	115.5	118.9	121.4
Particleboard	Dec. 1982=100	92.1	110.0	127.8	117.1	117.0	121.0
Paper and allied products	Dec. 1984=100	(NA)	98.8	120.8	121.9	121.1	121.2
Pulp mills	Dec. 1982=100	105.5	100.9	161.3	153.8	121.8	119.3
Paper mill products; except building paper	June 1981=100	93.5	109.5	134.6	134.0	131.0	126.6
Paperboard mills	Dec. 1982=100	97.3	112.0	149.9	146.0	140.7	142.8
Converted paper and paperboard products [2]	June 1985=100	(NA)	(NA)	110.5	111.3	112.9	114.1
Paperboard containers and boxes	Dec. 1984=100	(NA)	98.4	117.2	117.7	116.6	118.6
Building paper and building board mills	Dec. 1985=100	(NA)	(NA)	114.4	(NA)	(NA)	(NA)

NA Not available. [1] Includes structural wood members. [2] Excludes containers and boxes.

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

No. 1138. Selected Species—Stumpage Prices in Current and Constant (1982) Dollars: 1980 to 1992

[In dollars per 1,000 board feet. Stumpage prices are based on sales of sawtimber from National Forests. See also *Historical Statistics, Colonial Times to 1970*, series L 199-205]

SPECIES	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
CURRENT DOLLARS												
Softwoods:												
Douglas fir [1]	432	118	162	133	126	161	190	256	390	466	395	477
Southern pine [2]	155	127	141	139	91	104	136	142	131	127	166	198
Sugar pine [3]	667	72	138	84	110	170	288	260	289	285	241	492
Ponderosa pine [3 4]	206	67	104	123	101	157	209	182	292	252	238	292
Western hemlock [5]	213	45	62	62	51	75	105	163	223	203	164	165
Hardwoods:												
All eastern hardwoods [6]	52	56	60	90	65	70	88	151	136	146	160	167
Oak, white, red, and black [6]	66	71	88	145	95	108	147	146	179	188	164	211
Maple, sugar [7]	70	71	55	81	70	66	81	108	129	135	121	145
CONSTANT (1982) DOLLARS [8]												
Softwoods:												
Douglas fir [1]	481	118	160	128	122	160	185	240	347	401	339	407
Southern pine [2]	173	127	139	134	88	103	132	133	117	109	143	169
Sugar pine [3]	742	72	136	81	106	169	280	244	258	245	207	419
Ponderosa pine [3 4]	230	67	103	118	98	156	204	170	260	217	204	249
Western hemlock [5]	237	45	61	60	49	75	103	152	199	175	141	140
Hardwoods:												
All eastern hardwoods [6]	58	56	59	87	63	70	86	142	121	126	137	142
Oak, white, red, and black [6]	73	71	87	140	92	108	143	137	159	162	140	180
Maple, sugar [7]	78	71	54	78	68	66	78	101	115	116	104	123

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

Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics*, annual.

No. 1139. Lumber Production and Consumption, by Kind of Wood: 1980 to 1991

[In millions of board feet, except as indicated. Based on sample survey; see source for sampling variability. See also *Historical Statistics, Colonial Times to 1970*, series L 98-112 and L 122-137]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989	1990 [1]	1991 [1]
Total production	**35,354**	**34,572**	**37,065**	**36,445**	**41,999**	**44,886**	**44,576**	**43,576**	**43,466**	**40,031**
Softwoods [2]	28,239	28,927	30,801	30,479	34,815	37,410	36,845	36,040	36,224	33,250
Cedar	722	744	752	759	860	924	863	828	959	863
Douglas fir	6,653	6,434	7,809	7,751	9,600	10,422	9,986	10,045	8,831	7,816
Hemlock	1,855	1,316	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ponderosa pine	3,269	2,869	3,679	3,773	3,967	4,125	3,940	3,914	3,645	3,304
Redwood	770	852	999	1,155	984	1,157	1,157	1,048	1,077	887
Southern yellow pine	8,217	10,181	10,648	10,230	11,443	12,043	12,474	12,031	12,989	12,436
White fir [3]	1,643	1,316	2,017	2,272	2,659	2,899	2,919	3,298	3,272	2,900
Hardwoods [2]	7,115	5,644	6,264	5,966	7,184	7,476	7,731	7,536	7,242	6,781
Ash	(S)	224	219	218	257	265	293	278	210	184
Beech	183	112	111	89	125	116	120	105	82	72
Cottonwood and aspen	303	197	133	216	247	235	234	217	167	154
Maple [4]	225	524	538	532	587	636	619	589	543	517
Oak	3,356	2,163	2,766	2,793	3,410	3,804	3,790	3,546	2,615	2,434
Sweet gum [5]	371	278	300	293	375	330	356	306	219	167
Yellow poplar	661	475	569	544	724	805	828	802	666	629
Domestic consumption	**44,536**	**48,674**	**52,661**	**53,468**	**57,448**	**61,754**	**58,834**	**58,847**	**54,482**	**51,134**
Percent net imports [6]	16.8	20.6	21.9	24.4	21.3	19.4	16.5	16.7	15.7	15.5
Softwoods	33,812	39,611	42,832	44,240	47,492	50,558	48,513	47,975	45,003	41,998
Mill stocks, year-end	4,228	4,606	4,594	4,765	4,905	4,840	4,999	4,888	4,854	4,669
Exports	1,956	1,745	1,599	1,515	1,877	2,423	3,264	3,319	2,970	3,090
Imports	9,540	11,977	13,270	14,608	14,238	14,680	13,806	13,638	12,148	11,742
Hardwoods	10,724	9,063	9,829	9,228	9,956	11,196	10,321	10,872	9,480	9,136
Mill stocks, year-end	1,572	1,334	1,561	1,719	1,636	(NA)	(NA)	(NA)	(NA)	(NA)
Exports	379	478	467	397	498	775	1,232	856	878	934
Imports	293	261	328	364	347	511	390	375	255	226

NA Not available. S Figure does not meet publication standards. [1] New sample, based on the new MA-24T sample. [2] Includes types not shown separately. [3] Beginning 1988, also includes hemfir, and other western true fir. [4] Includes both hard and soft maple, except data for 1980 excludes hard maple. [5] Includes black, tupelo, and sweet gum. [6] Imports minus exports.

Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA-24T, annual.

No. 1140. Lumber Production, by Geographic Area: 1970 to 1992

[In billion board feet. Data based in part on a sample of sawmills and are subject to sampling variability; see source. See *Historical Statistics, Colonial Times to 1970*, series L 113-121, for data by regions]

SECTION AND DIVISION	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
United States	**34.7**	**32.6**	[1]**35.4**	[1]**37.1**	**36.4**	**42.0**	**44.9**	**44.7**	**43.6**	**43.5**	**39.9**	**40.8**
North [2 3]	4.4	4.1	(NA)	4.5	4.2	4.9	5.3	5.2	5.0	5.4	5.3	5.4
Hardwood	3.4	3.0	(NA)	3.3	3.0	3.6	3.8	3.9	3.8	3.7	3.6	3.6
Softwood	1.0	1.1	(NA)	1.2	1.2	1.4	1.5	1.4	1.3	1.7	1.7	1.8
South [2]	10.8	9.7	(NA)	13.4	13.0	15.1	15.7	16.3	15.8	16.5	15.5	16.8
Hardwood	3.6	2.7	(NA)	2.8	2.7	3.4	3.4	3.6	3.4	3.2	2.8	3.0
Softwood	7.2	7.0	(NA)	10.7	10.2	11.7	12.3	12.7	12.4	13.3	12.7	13.8
West [2]	19.4	18.8	17.2	19.1	19.3	22.0	23.9	23.2	22.7	21.6	19.1	18.7
Hardwood	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4
Softwood	19.3	18.6	16.9	19.0	19.1	21.7	23.6	22.9	22.4	21.2	18.7	18.3

NA Not available. [1] Includes amounts not specified by division. [2] Source: U.S. Forest Service. Sections are as defined by the Forest Service. [3] Includes Kentucky.

Source: Except as noted, U.S. Bureau of the Census, *Current Industrial Reports*, series MA-24T, annual.

No. 1141. Wood Products—Production: 1980 to 1990

ITEM	Unit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990, prel.
Hardwood flooring	Mil. bd. ft	78	83	75	98	110	122	145	174	193	206	205
Softwood plywood	Bil. sq. ft., 3/8"	15.5	15.5	15.1	18.3	18.9	19.3	20.4	21.1	22.9	21.4	20.7
Insulation boards [1]	1,000 short tons	1,051	845	593	713	785	735	732	605	529	460	474
Hardboard [1]	Mil. sq. ft., 1/8"	6,140	6,104	5,587	7,303	6,837	6,300	5,822	5,458	5,118	5,196	5,025
Particleboard	Mil. sq. ft., 3/4"	2,950	2,869	2,393	3,009	3,196	3,331	3,603	3,706	3,829	3,858	3,806

[1] Beginning 1983, data are for shipments.

Source: U.S. Dept. of Commerce, International Trade Administration, *Forest Products Review*, monthly (discontinued April 1983); and unpublished data. Based on reports of U.S. Bureau of the Census, National Oak Flooring Manufacturers Association and National Particleboard Association.

No. 1142. Paper and Paperboard—Production and Consumption: 1980 to 1993

[In millions of short tons. See also *Historical Statistics, Colonial Times to 1970*, series L 172, L 174, and L 178-191]

ITEM	PRODUCTION						CONSUMPTION [1]					
	1980	1985	1990	1991	1992	1993	1980	1985	1990	1991	1992	1993
Total paper and paperboard	**63.6**	**68.7**	**80.3**	**81.1**	**84.5**	**85.9**	**67.2**	**76.1**	**86.7**	**84.9**	**88.1**	**90.9**
Paper: Newsprint	4.7	5.4	6.6	6.8	7.1	7.1	11.4	12.8	13.3	12.5	12.6	12.8
Coated printing, converting	4.6	5.9	7.5	7.4	8.1	8.2	4.6	6.3	8.3	7.8	8.6	9.0
Uncoated free sheet	8.0	9.7	11.5	11.5	12.2	12.4	8.0	10.0	12.0	11.8	12.5	12.9
Other printing, writing, etc.	2.9	2.9	3.3	3.2	3.1	3.3	3.5	4.4	5.2	5.0	4.9	5.5
Packaging and industrial converting	5.5	5.2	4.6	4.5	4.7	4.5	5.2	5.2	4.7	4.6	4.8	4.5
Tissue and other machine creped	4.4	4.9	5.8	5.7	5.8	6.0	4.4	5.0	5.9	5.7	5.8	6.0
Paperboard: Unbleached kraft	15.3	16.4	20.4	21.0	21.7	21.4	13.0	14.6	17.8	17.8	18.5	18.5
Bleached kraft	3.8	3.9	4.4	4.6	4.5	4.6	3.3	3.4	3.7	3.6	3.7	3.9
Semichemical	4.7	5.1	5.7	5.7	5.9	5.9	4.4	5.0	5.7	5.6	5.9	6.0
Recycled finish	7.1	7.6	8.9	9.2	9.9	10.9	7.0	7.6	9.3	9.6	10.5	11.4
Construction paper and board [2]	**2.6**	**1.7**	**1.6**	**1.6**	**1.6**	**1.6**	**3.0**	**2.0**	**1.7**	**1.6**	**1.7**	**1.7**

[1] Total consumption of paper and paperboard includes net imports of paper and paperboard converted products; not available by grade. [2] Beginning 1985, estimated. Source: 1980, U.S. Bureau of the Census, *Current Industrial Reports*. Includes wet machine board, approximately 100,000-160,000 tons per year.

Source: Except as noted, American Forest and Paper Association, Inc., New York, NY, *Statistics of Paper, Paperboard, and Woodpulp*, annual.

No. 1143. Newsprint—Production, Stocks, Consumption, Imports, and Price Index: 1970 to 1992

[In thousands of metric tons, except price index and imports (imports in short tons). See also *Historical Statistics, Colonial Times to 1970*, series L 192-198]

COUNTRY AND ITEM	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Canada: Production	7,808	6,966	8,625	8,890	9,630	9,840	9,640	9,068	8,977	8,931
Shipments from mills	7,795	7,010	8,622	8,899	9,718	9,740	9,606	9,074	8,728	9,143
Stocks at mills, end of year	236	86	165	288	189	288	321	315	564	351
United States:										
Consumption, estimate	6,468	8,395	10,088	11,507	12,303	12,245	12,241	12,125	11,381	11,634
Production	3,142	3,348	4,239	4,924	5,300	5,427	5,523	5,997	6,206	6,424
Shipments from mills	3,136	3,347	4,234	4,927	5,310	5,415	5,515	6,007	6,152	6,464
Stocks, end of year: At mills	33	19	21	57	36	48	56	46	98	59
At and in transit to publishers	749	666	732	910	900	932	749	801	932	938
Producer price index (1982=100)	34.1	58.3	[1]88.5	105.3	112.3	127.6	122.5	119.5	120.9	109.9

[1] Average for 11 months.

Source: Except as noted, U.S. Bureau of Economic Analysis, *Survey of Current Business*, monthly. Data from American Forest and Paper Association, Inc., New York, NY, and Canadian Pulp & Paper Association.

No. 1144. Recovered Paper Utilization and Recovery Rates: 1970 to 1993

[In millions of short tons, except percent. Recovery rate is ratio of total recovered paper to new supply. Recovered paper utilization is the ratio of recovered paper consumption at paper and board mills to paper and board production. See *Historical Statistics, Colonial Times to 1970*, series L 175, for U.S. wastepaper consumption]

ITEM	1970	1980	1985	1987	1988	1989	1990	1991	1992	1993
Paper and board, production [1]	51.7	63.6	68.7	75.9	78.1	78.4	80.3	81.1	84.5	85.9
Recovered paper consumption	11.8	14.9	16.4	18.7	19.7	20.2	21.7	23.7	26.2	28.9
Recovered paper utilization rate (percent)	22.8	23.5	23.8	24.6	25.2	25.8	27.1	29.2	29.7	31.8
Other recovered paper uses [2]	0.42	0.47	0.53	0.66	0.70	0.72	1.00	1.08	1.10	1.15
Recovered paper exports	0.41	2.64	3.56	4.81	5.95	6.31	6.51	6.60	6.40	5.90
Total paper recovered	12.6	17.9	20.4	24.0	26.2	27.1	29.1	31.2	33.6	35.7
Paper and board, new supply [3]	56.0	67.2	76.1	83.5	85.5	85.2	86.7	84.9	88.1	90.9
Recovery rate (percent)	22.4	26.7	26.8	28.8	30.6	31.8	33.6	36.8	38.1	39.3

[1] Excludes hard pressed board; includes construction paper and board, and wet machine board. [2] Estimated. [3] Excludes production of hard pressed board.

Source: American Forest and Paper Association, Inc., New York, NY, *Statistics of Paper, Paperboard, and Woodpulp*, annual; and unpublished data.

No. 1145. Selected Wood Products—Production and Consumption: 1970 to 1989

[See also *Historical Statistics, Colonial Times to 1970*, series L 151-170]

ITEM	Unit	1970	1975	1980	1984	1985	1986	1987	1988	1989
PULPWOOD										
Receipts, total	Mil. cords [1]	68.9	65.4	81.0	88.0	85.4	90.6	93.9	95.1	97.0
Softwood	Mil. cords [1]	52.4	49.3	60.2	62.9	60.2	63.3	65.3	65.6	67.1
Hardwood	Mil. cords [1]	16.5	16.2	20.8	25.2	25.1	27.3	28.6	29.3	29.9
Consumption, total	Mil. cords [1]	67.6	65.4	79.7	87.0	84.8	91.1	92.4	95.3	96.1
Softwood	Mil. cords [1]	51.3	48.9	58.8	62.0	59.7	63.1	64.2	65.9	66.3
Hardwood	Mil. cords [1]	16.3	16.5	20.9	24.9	25.1	28.1	28.2	29.4	29.7
Inventories [2]	Mil. cords [1]	6.6	6.6	6.7	5.2	5.1	4.7	5.6	5.3	5.8
WOODPULP										
Production	Mil. short tons	43.9	43.1	53.0	57.8	57.7	60.6	62.4	64.1	64.6
Consumption, [3] total	Mil. short tons	43.2	42.4	52.4	57.5	56.6	60.0	61.2	62.8	62.7
Own pulp	Mil. short tons	38.9	38.5	46.6	50.3	49.7	52.6	53.8	54.9	54.9
Purchased pulp	Mil. short tons	4.3	3.9	5.9	7.2	7.0	7.5	7.4	7.9	7.8
PLYWOOD										
Softwood:										
Production	Mil. sq. ft. [4]	14,149	15,706	15,483	18,865	19,341	20,363	22,312	22,233	20,919
Consumption, total	Mil. sq. ft. [4]	(NA)	(NA)	15,145	18,526	19,122	19,880	21,503	22,277	20,904
Value	Mil. dol.	949	(NA)	2,582	2,995	3,080	3,237	3,483	3,513	3,734
Hardwood:										
Production	Mil. sq. ft. [5]	1,904	1,280	1,311	1,185	1,016	1,088	1,256	1,217	1,213
Consumption, total	Mil. sq. ft. [5]	5,772	4,970	3,416	3,831	4,311	4,884	4,918	4,193	(NA)
Value	Mil. dol.	516	586	977	1,199	1,192	1,320	1,471	1,405	1,392

NA Not available. [1] Standard cords. 128 cubic feet roughwood bases. [2] As of Dec. 31. [3] In the manufacture of paper and board. [4] 3/8" basis. [5] Surface measure.
Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MA26-A, MA24-H, and MA24-F.

No. 1146. Selected Timber Products—Imports and Exports: 1970 to 1992

ITEM	Unit	1970	1980	1985	1987	1988	1989	1990	1991	1992, prel.
IMPORTS [1]										
Lumber, total [2]	Mil. bd. ft.	6,114	9,866	14,996	15,234	14,226	15,277	12,159	11,756	13,474
From Canada	Percent	96.0	97.5	97.6	96.9	97.5	91.3	98.5	98.3	98.3
Softwoods	Mil. bd. ft.	5,778	9,573	14,632	14,723	13,841	14,928	11,927	11,545	13,214
Value	Mil. dol	434	1,826	2,898	3,060	2,939	2,875	2,534	2,507	3,310
Hardwoods	Mil. bd. ft.	337	293	364	511	386	349	232	210	260
Value	Mil. dol	62	152	180	273	238	152	141	142	176
Logs, total	Mil. bd. ft.[3]	144	126	99	83	68	42	26	15	46
From Canada	Percent	79.6	97.4	81.8	91.6	91.9	61.5	67.5	74.5	88.9
Softwoods	Mil. bd. ft.[3]	107	114	71	69	56	24	18	9	40
Value	Mil. dol	9	17	17	19	15	12	7	6	20
Hardwoods	Mil. bd. ft.[3]	38	13	28	14	12	18	10	6	7
Value	Mil. dol	5	3	4	3	3	17	10	6	6
Paper and board [4]	1,000 tons	7,115	8,780	11,522	12,837	13,110	13,100	13,148	12,167	12,543
Value	Mil. dol	1,039	3,418	5,698	6,828	8,002	8,330	8,427	7,929	7,899
Woodpulp	1,000 tons	3,518	4,051	4,466	4,848	4,938	5,105	4,893	4,997	5,029
Value	Mil. dol	483	1,684	1,521	2,069	2,608	3,037	2,831	2,132	2,094
Plywood	Mil. sq. ft.[5]	2,049	1,235	1,817	2,083	1,698	1,955	1,687	1,457	1,776
Value	Mil. dol	208	409	463	638	577	516	537	457	574
EXPORTS										
Lumber, total [2]	Mil. bd. ft.	1,243	2,494	1,945	3,217	4,527	4,243	3,802	3,997	3,603
To: Canada	Percent	21.7	25.3	23.7	20.9	17.6	15.6	18.1	15.1	17.3
Japan	Percent	30.8	26.0	32.1	36.8	34.5	38.1	33.5	30.5	30.9
Europe	Percent	24.1	23.8	15.1	16.9	20.5	16.6	19.1	19.6	21.2
Softwoods	Mil. bd. ft.	1,115	2,007	1,518	2,424	3,266	3,379	2,941	3,055	2,613
Value	Mil. dol	163	789	497	856	1,143	1,404	1,336	1,358	1,363
Hardwoods	Mil. bd. ft.	128	487	427	793	1,261	863	861	942	990
Value	Mil. dol	31	272	263	493	683	659	818	879	988
Logs, total	Mil. bd. ft.[3]	2,741	3,261	3,843	4,110	4,798	4,745	4,262	3,816	3,316
To: Canada	Percent	10.6	9.7	11.6	10.3	7.9	5.8	9.3	11.2	12.6
Japan	Percent	86.3	78.0	49.4	58.3	50.3	63.5	62.5	56.7	62.1
China: Mainland	Percent	(NA)	2.7	27.8	14.1	23.4	9.6	8.5	9.7	7.1
Softwoods	Mil. bd. ft.[3]	2,672	3,109	3,732	3,960	4,594	4,532	4,044	3,532	3,092
Value	Mil. dol	320	1,452	1,169	1,526	2,090	2,176	2,170	1,870	1,925
Hardwoods	Mil. bd. ft.[3]	69	152	111	149	204	214	218	283	224
Value	Mil. dol	36	129	91	118	160	223	251	234	238
Paper and board [4]	1,000 tons	2,817	5,214	4,071	5,304	5,691	6,300	6,796	8,331	8,971
Value	Mil. dol	602	2,773	2,266	3,104	3,753	4,261	5,035	6,006	6,392
Woodpulp	1,000 tons	3,095	3,806	3,796	4,869	5,528	6,231	5,906	6,337	7,222
Value	Mil. dol	464	1,652	1,354	2,251	2,915	3,513	3,156	2,800	3,114
Plywood	Mil. sq. ft.[5]	172	413	358	846	1,093	1,562	1,767	1,552	1,759
Value	Mil. dol	16	108	86	194	247	292	338	295	366

NA Not available. [1] Customs value of imports; see text, section 29. [2] Includes railroad ties. [3] Log scale. [4] Includes paper and board products. Excludes hardboard. [5] 3/8 inch basis.
Source: U.S. Forest Service, *U.S. Timber Production, Trade, Consumption, and Price Statistics: 1960-89*, forthcoming.

No. 1147. Fishery Products—Domestic Catch and Imports, Summary: 1970 to 1992

[**Live weight, in millions of pounds, except percent.** 1979-1992 preliminary. For data on commercial catch for selected countries, see table 1398, section 30. See *Historical Statistics, Colonial Times to 1970*, series L 224-226, for domestic catch]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	**11,474**	**11,357**	**12,352**	**12,552**	**15,150**	**14,368**	**15,744**	**14,628**	**15,485**	**16,349**	**16,364**	**16,106**
For human food	6,213	8,006	8,413	8,498	9,337	9,620	10,561	10,505	12,268	12,662	13,020	13,242
Finfish	(NA)	6,139	6,356	6,303	6,991	7,087	7,919	7,786	9,735	10,120	10,186	10,297
Shellfish [1]	(NA)	1,867	2,055	2,195	2,346	2,533	2,642	2,719	2,533	2,542	2,834	2,945
For industrial use	5,261	3,351	3,939	4,054	5,813	4,748	5,183	4,123	3,217	3,687	3,344	2,864
Domestic catch	**4,917**	**6,482**	**6,439**	**6,438**	**6,258**	**6,031**	**6,896**	**7,192**	**8,463**	**9,404**	**9,484**	**9,637**
Percent of total	42.8	57.1	52.1	51.3	41.3	42.0	43.8	49.2	54.7	57.5	58.0	60.0
For human food	2,537	3,654	3,238	3,320	3,294	3,393	3,946	4,588	6,204	7,041	7,031	7,618
Finfish	(NA)	2,516	2,351	2,348	2,273	2,240	2,769	3,306	4,897	5,747	5,564	6,182
Shellfish [1]	(NA)	1,138	887	972	1,021	1,153	1,177	1,282	1,307	1,294	1,467	1,436
For industrial use	2,380	2,828	3,201	3,118	2,964	2,638	2,950	2,604	2,259	2,363	2,453	2,019
Imports [2]	**6,557**	**4,875**	**5,913**	**6,114**	**8,892**	**8,337**	**8,848**	**7,436**	**7,022**	**6,945**	**6,879**	**6,469**
Percent of total	57.2	42.9	47.9	48.7	58.7	58.0	56.2	50.8	45.3	42.5	42.0	40.0
For human food	3,676	4,352	5,175	5,178	6,043	6,227	6,615	5,917	6,064	5,621	5,989	5,624
Finfish	(NA)	3,623	4,007	3,955	4,718	4,847	5,150	4,480	4,838	4,373	4,622	4,115
Shellfish [1]	(NA)	729	1,168	1,223	1,325	1,380	1,465	1,437	1,226	1,248	1,367	1,509
For industrial use [3]	2,881	523	738	936	2,849	2,110	2,233	1,519	958	1,324	890	845

NA Not available. [1] For univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.), the weight of meats, excluding the shell, is reported. [2] Excludes imports of edible fishery products consumed in Puerto Rico; includes landings of tuna caught by foreign vessels in American Samoa. [3] Fish meal and sea herring.

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

No. 1148. Fisheries—Employment, Fishing Craft, and Establishments: 1970 to 1991

[**In thousands.** As of **Dec. 31.** 1979-91 preliminary. Data for employment and establishments exclude Alaska. See also *Historical Statistics, Colonial Times to 1970*, series L 254-261]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989 [1]	1990 [1]	1991 [1]
Persons employed in U.S.	**227**	**296**	**314**	**333**	**340**	**351**	**347**	**359**	**364**	**(NA)**	**(NA)**	**(NA)**
Fishermen	140	193	216	223	230	239	247	256	274	(NA)	(NA)	(NA)
Shore workers [2]	87	103	98	110	110	112	100	103	90	73	72	73
Craft used	**88**	**113**	**123**	**127**	**127**	**130**	**128**	**[3]93**	**[3]110**	**111**	**95**	**(NA)**
Vessels, 5 net tons and over	14	19	20	21	24	24	38	[3]23	[3]32	36	32	(NA)
Motorboats	72	93	102	105	102	104	88	[3]68	[3]78	75	63	(NA)
Other boats	2	1	1	1	1	2	2	[3]2	(NA)	(NA)	(NA)	(NA)
Fishery shore establishments	**3.7**	**3.6**	**3.6**	**3.9**	**4.0**	**4.0**	**4.0**	**4.2**	**4.6**	**4.5**	**4.6**	**4.6**

NA Not available. [1] Estimated and excludes Mississippi River. Maryland and Virginia represent only Federal collected data. [2] Seasonal average for processors and wholesaling plants. [3] Excludes Maryland and Virginia.

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

No. 1149. Fisheries—Quantity and Value of Domestic Catch: 1970 to 1992

[1979-1992 preliminary. See also *Historical Statistics, Colonial Times to 1970*, series L 224-226, L 229, and L 310]

YEAR	QUANTITY (mil. lb. [1])			Value (mil. dol.)	Average price per lb. (cents)	YEAR	QUANTITY (mil. lb. [1])			Value (mil. dol.)	Average price per lb. (cents)
	Total	For human food	For industrial products [2]				Total	For human food	For industrial products [2]		
1970	4,917	2,537	2,380	613	12.5	1982	6,367	3,285	3,082	2,390	37.5
1971	5,018	2,441	2,577	651	13.0	1983	6,439	3,238	3,201	2,355	36.6
1972	4,806	2,435	2,371	748	15.6	1984	6,438	3,320	3,118	2,350	36.5
1973	4,858	2,398	2,460	937	19.3	1985	6,258	3,294	2,964	2,326	37.2
1974	4,967	2,496	2,471	932	18.7	1986	6,031	3,393	2,638	2,763	45.8
1975	4,877	2,465	2,412	977	20.0	1987	6,896	3,946	2,950	3,115	45.2
1976	5,388	2,775	2,613	1,349	25.0	1988	7,192	4,588	2,604	3,520	48.9
1977	5,271	2,952	2,319	1,554	29.5	1989	8,463	6,204	2,259	3,238	38.30
1978	6,028	3,177	2,851	1,854	30.7	1990	9,404	7,041	2,363	3,522	37.50
1979	6,267	3,318	2,949	2,234	35.6	1991	9,484	7,031	2,453	3,308	34.90
1980	6,482	3,654	2,828	2,237	34.5	1992	9,637	7,618	2,019	3,678	38.19
1981	5,977	3,547	2,430	2,388	40.0						

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

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

No. 1150. Fisheries—Quantity and Value of Catch, by State, and Catch of Principal Species, by Area: 1980 to 1992

[**Catch in millions of pounds, live weight, value in millions of dollars.** Preliminary. See also *Historical Statistics, Colonial Times to 1970,* series L 262-293]

AREA, STATE, CATCH, AND VALUE	1980	1990	1991	1992
Total:				
Catch	6,482	9,403	9,484	9,637
Value	2,237	3,522	3,308	3,678
New England:				
Catch	768	649	646	647
Value	327	543	594	604
Maine:				
Catch	245	169	192	201
Value	93	130	155	163
New Hampshire:				
Catch	19	11	11	10
Value	5	10	13	12
Massachusetts:				
Catch	438	328	289	274
Value	178	303	296	280
Rhode Island:				
Catch	81	132	139	142
Value	46	73	85	86
Connecticut:				
Catch	5	9	15	20
Value	5	27	45	63
Catch for certain species:				
Clams	15	15	12	15
Cod	118	95	92	61
Crabs	7	9	9	7
Flounder	118	60	50	53
Haddock	55	5	4	5
Herring, sea	184	113	106	115
Lobster, American	36	55	56	52
Ocean perch, Atlantic	24	1	1	2
Pollock	40	21	17	16
Scallops, sea	17	25	24	21
Squid	6	36	42	46
Whiting	18	28	26	28
Middle Atlantic:				
Catch	244	207	234	261
Value	97	150	154	155
New York:				
Catch	39	49	51	50
Value	45	56	53	54
New Jersey:				
Catch	201	149	175	204
Value	50	89	97	97
Delaware:				
Catch	4	9	8	7
Value	2	4	4	4
Catch for certain species:				
Clams (meats)	40	93	97	110
Scup or porgy	8	4	7	6
Squid	3	6	26	35
Chesapeake Bay:				
Catch	717	867	770	688
Value	130	160	142	127
Maryland:				
Catch	80	81	89	57
Value	45	54	47	36
Virginia:				
Catch	637	787	681	631
Value	85	107	95	91
Catch for certain species:				
Crabs	65	91	98	54
Clams	36	27	21	13
Scallops, sea	6	9	9	7
Flounder	10	2	4	6
Oysters	21	4	3	2
South Atlantic:				
Catch	473	262	293	238
Value	148	170	169	152
North Carolina:				
Catch	356	176	213	154
Value	69	72	67	57
South Carolina:				
Catch	21	14	19	19
Value	20	24	28	26
Georgia:				
Catch	19	13	16	18
Value	20	20	24	23
Florida (east coast):				
Catch	77	58	45	47
Value	39	54	50	46
Catch for certain species:				
Menhaden	218	74	113	60
Shrimp	33	28	37	25
Crabs	55	54	57	64
Scallops	1	2	1	(Z)
Gulf States:				
Catch	1,979	1,625	1,679	1,426
Value	463	640	641	652
Florida (west coast):				
Catch	115	122	117	105
Value	86	116	112	109
Alabama:				
Catch	25	23	22	24
Value	25	36	37	36
Mississippi:				
Catch	334	320	239	188
Value	25	42	34	31
Louisiana:				
Catch	1,412	1,061	1,193	1,013
Value	174	263	244	295
Texas:				
Catch	94	99	108	96
Value	153	182	214	181
Catch for certain species:				
Crabs	45	51	65	71
Mullet	31	24	25	19
Oysters (meats)	17	11	13	18
Shrimp	208	247	229	222
Great Lakes: [1]				
Catch	44	45	39	31
Value	14	20	21	22
Mississippi River and tributaries:				
Catch	85	(NA)	(NA)	(NA)
Value	21	(NA)	(NA)	(NA)
Pacific Coast:				
Catch	2,140	5,722	5,795	6,319
Value	1,025	1,775	1,529	1,895
Washington:				
Catch	156	137	152	122
Value	86	118	110	105
Oregon:				
Catch	126	139	150	257
Value	56	70	63	76
California:				
Catch	804	347	348	302
Value	323	127	140	136
Alaska:				
Catch	1,054	5,099	5,145	5,638
Value	560	1,459	1,216	1,578
Catch for certain species:				
Anchovies	107	13	19	14
Bonito	14	8	1	2
Cod	20	526	554	551
Crabs	347	281	409	418
Flounder	60	182	330	574
Hake	12	21	56	124
Halibut	19	70	66	69
Herring, sea	107	108	123	159
Jack mackerel	44	9	4	3
Mackerel	65	84	63	42
Oysters	7	11	10	7
Pollock	3	3,108	2,855	2,952
Rockfish	106	132	97	125
Sablefish	22	90	84	75
Salmon	614	733	783	716
Shrimp	98	59	47	84
Tuna	387	34	13	35
Hawaii:				
Catch	11	26	28	28
Tuna catch	7	14	9	(NA)
Value	12	65	58	70

NA Not available. Z Less than 500,000. [1] Collected largely by State fishery agencies and compiled by State fishery agencies and National Marine Fisheries Service. Includes, in addition to the Great Lakes, small amounts for Lake St. Clair, Lake of the Woods, Namakan Lake, and Rainy Lake.

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

No. 1151. Domestic Fisheries—Catch, by Selected Ports: 1985 to 1992

[See *Historical Statistics, Colonial Times to 1970*, series L 236-253, for data on quantity and value of catch]

PORT	CATCH (mil. lb.)					VALUE (mil. dol.)				
	1985	1989	1990	1991	1992	1985	1989	1990	1991	1992
New Bedford, MA	90.6	90.4	114.8	106.4	103.3	103.2	141.0	160.4	157.7	151.8
Dutch Harbor-Unalaska, AK	106.3	504.3	509.9	731.7	736.0	21.3	107.0	126.2	130.6	194.0
Kodiak, AK	96.1	213.2	272.5	287.3	274.0	65.8	100.2	101.7	96.9	90.0
Dulac-Chauvin, LA	398.6	210.9	164.4	166.8	65.0	59.9	50.0	52.7	50.1	52.1
Empire-Venice, LA	224.5	272.7	244.2	309.4	269.1	34.3	49.2	46.3	50.2	50.1
Gloucester, MA	116.5	98.5	126.2	107.2	101.7	37.1	30.0	40.5	40.0	34.1
Petersburg, AK	(NA)	113.5	67.5	90.3	81.0	(NA)	61.4	39.4	34.6	33.0
Cordova, AK	(NA)	55.3	70.8	47.5	30.0	(NA)	35.3	36.8	19.5	17.0
Cape May-Wildwood, NJ	30.3	54.0	69.2	93.1	93.9	18.1	30.8	34.4	40.1	34.9
Point Judith, RI	56.8	48.3	58.7	64.7	66.7	28.0	23.6	32.2	37.5	36.6
Portland, ME	36.1	49.0	48.9	63.4	59.2	17.2	34.4	31.7	44.1	43.6
Ketchiken, AK	(NA)	91.6	52.6	68.5	70.0	(NA)	45.6	28.3	21.9	27.0
Beaufort-Morehead City, NC	133.2	95.0	102.0	137.0	78.7	22.7	25.0	23.0	23.0	16.2
Cameron, LA	673.6	352.7	232.6	288.4	246.0	29.9	20.5	20.8	26.3	26.5
Morgan City-Berwick, LA	7.7	68.1	146.5	112.3	130.8	(NA)	17.8	19.7	9.4	14.3
Pascagoula-Moss Point, MS	423.2	282.1	303.9	227.3	177.0	18.4	16.9	18.8	15.1	12.4
Los Angeles, CA	150.3	177.6	158.5	141.5	94.9	32.5	20.3	21.3	17.4	14.6
Astoria, OR	25.5	51.0	41.2	53.0	67.0	9.5	20.0	16.2	17.0	19.0
Port Hueneme-Oxnard-Ventura, CA	19.9	65.3	39.4	52.0	18.7	5.4	12.0	12.5	14.0	10.7
Intercoastal City, LA	(NA)	207.2	173.0	211.4	175.9	(NA)	9.5	7.6	12.0	10.4

NA Not available.

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

No. 1152. Domestic Fish and Shellfish Catch and Value, by Species: 1985 to 1992

SPECIES	QUANTITY (1,000 lb.)				VALUE ($1,000)		
	1986-90 5-year average	1985	1990	1992	1985	1990	1992
Total	(X)	**6,257,642**	**9,403,571**	**9,637,303**	**2326237**	**3,521,995**	**3,677,935**
Fish, total [1]	(X)	**5,214,363**	**8,091,068**	**8,174,183**	**1193427**	**1,900,097**	**2,012,605**
Anchovies	14,221	14,566	13,189	13,679	2704	2,723	5,228
Bluefish	13,908	13,743	13,802	11,595	2363	3,239	2,694
Butterfish	7,109	10,338	6,532	7,608	3537	3,334	3,701
Cod: Atlantic	80,423	82,823	95,881	61,283	35140	61,329	52,013
Pacific	378,013	120,275	526,396	550,528	18556	91,384	132,480
Croaker	8,283	11,088	6,720	5,077	3658	3,390	1,893
Flounder	258,060	195,718	254,519	645,829	129121	112,921	143,511
Haddock	5,281	14,416	5,440	5,111	13545	5,967	5,582
Halibut	73,935	61,032	70,454	68,579	38376	96,700	53,773
Herring, sea; Atlantic	96,950	57,133	113,095	122,993	2968	5,746	6,821
Herring, sea; Pacific	120,927	142,074	108,120	159,054	47025	32,178	35,907
Jack mackerel	18,043	20,852	8,959	2,624	1770	535	245
Mackerel, Pacific	85,964	75,453	83,721	41,879	6324	5,081	4,118
Menhaden	2,145,260	2,739,401	1,962,160	1,644,342	100680	93,896	82,973
Mullet	30,326	21,205	28,554	22,479	5720	12,738	9,730
Ocean perch, Atlantic	2,088	9,666	1,322	1,867	3179	703	790
Ocean perch, Pacific	29,040	9,034	60,972	45,484	1757	8,494	13,561
Pollock, Atlantic	28,066	43,477	21,042	15,843	6976	10,516	10,543
Pollock, Alaska	2,026,927	92,833	3,108,031	2,952,130	5409	268,344	324,735
Rockfish	120,908	82,109	131,545	125,069	23107	38,504	47,280
Sablefish	96,242	63,380	89,802	75,451	28692	58,865	79,634
Salmon	694,093	726,946	733,146	715,828	439795	612,367	582,850
Scup or porgy	13,186	15,996	11,452	14,014	9338	8,677	8,669
Sea trout, gray	14,239	16,400	9,880	7,467	7330	5,777	4,479
Shark, Dogfish	21,442	11,563	35,793	42,327	842	3,801	4,675
Snapper, red	3,462	5,181	3,101	3,471	10661	8,411	7,354
Swordfish	18,632	12,258	13,797	19,713	33191	40,851	60,320
Tuna	79,782	83,054	62,393	56,803	52515	105,040	90,822
Whiting	38,126	44,545	44,500	35,893	8274	11,281	10,990
Shellfish, total [1]	(X)	**1,043,279**	**1,312,503**	**1,463,120**	**1132810**	**1,621,898**	**1,665,330**
Clams	135,541	150,551	139,198	142,449	128349	130,194	127,329
Crabs	489,957	337,632	499,416	624,322	203044	483,837	471,323
Lobsters: American	54,296	46,152	61,017	55,841	114895	154,677	160,951
Oysters	32,535	44,173	29,193	36,156	70053	93,718	114,536
Scallops: Calico	5,605	12,513	1,135	25	12524	1,281	78
Sea	35,114	15,829	39,917	33,528	74562	153,696	162,229
Shrimp	342,422	333,691	346,494	337,765	472850	491,433	479,954
Squid: Atlantic	56,638	7,157	59,809	81,944	7256	21,178	33,925
Pacific	57,765	22,276	36,082	30,436	4047	2,636	2,698

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

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

No. 1153. Disposition of U.S. Domestic Catch: 1970 to 1992

[**Live weight catch in millions of pounds.** 1980-90 preliminary. In addition to whole fish, a large portion of waste (400-500 million lb.) derived from canning, filleting, and dressing fish and shellfish utilized in production of fish meal and oil in each year shown. See *Historical Statistics, Colonial Times to 1970*, series L 305-310, for similar but not entirely comparable data]

DISPOSITION	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
Total	**4,917**	**4,877**	**6,482**	**6,438**	**6,258**	**6,031**	**6,896**	**7,192**	**8,463**	**9,404**	**9,484**	**9,637**
Fresh and frozen	1,595	1,744	2,621	2,336	2,242	2,487	3,157	3,813	5,585	6,501	6,541	7,288
Canned	1,150	907	1,161	1,128	1,232	1,134	1,009	1,017	798	751	674	543
Cured	71	55	96	82	70	60	89	86	128	126	119	100
Reduced to meal, oil, etc.	2,101	2,171	2,604	2,892	2,714	2,350	2,641	2,276	1,952	2,026	2,150	1,696

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

No. 1154. U.S. Catch and Value of Fish and Shellfish, by Distance Caught Off U.S. Shores—Selected Species: 1992

[Preliminary. **Catch** is shown in **live weight**, except as indicated. Includes landings by U.S. flag vessels at Puerto Rico and other ports outside the 50 States and joint venture catches, therefore will not agree with other tables]

SPECIES	Total U.S. catch (mil. lb.)	BY DISTANCE FROM U.S. SHORES						Value of U.S. catch [1] (mil. dol.)
		Catch (mil. lb.)			Percent of U.S. catch			
		3 miles or less [1]	3 to 200 miles	International waters [2]	3 miles or less [1]	3 to 200 miles	International waters [2]	
Total	**10,235**	**3,505**	**6,176**	**554**	**34**	**60**	**6**	**3,883**
Fish [3]	**1,105**	**267**	**825**	**13**	**24**	**75**	**1**	**483**
Cod	612	34	578	-	6	94	-	184
Flounder	646	46	600	-	7	93	-	144
Halibut	70	4	66	-	6	94	-	55
Herring, sea	291	203	88	-	70	30	-	43
Mackerel	78	41	37	-	53	47	-	15
Menhaden	1,705	1,370	335	-	80	20	-	84
Pollock	2,968	177	2,791	-	6	94	-	335
Salmon, Pacific	716	710	6	-	99	1	-	582
Tuna	577	1	35	541	(Z)	6	94	280
Shellfish [3]	**153**	**145**	**8**	**(Z)**	**95**	**5**	**-**	**205**
Clams (meats)	142	43	99	-	30	70	-	127
Crabs	624	242	382	-	39	61	-	471
Lobsters	61	48	13	(Z)	79	21	-	181
Scallops (meats)	34	3	31	-	9	91	-	164
Shrimp	341	140	201	-	41	59	-	493
Squid	112	31	81	-	28	72	-	37

- Represents or rounds to zero. Z Less than 500,000 pounds or .05 percent. [1] Includes all landings in Great Lakes and other inland waters. [2] Greater than 200 nautical miles seaward from the U.S. shores except for two States. The boundaries for the Gulf Coast of Florida and Texas are 9 nautical miles. [3] Includes other species, not shown separately.

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

No. 1155. U.S. Private Aquaculture—Catfish Production and Value: 1980 to 1992

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992
Fish sold to processors	Mil. lb	46.5	191.6	213.8	280.5	295.1	341.9	360.4	390.9	457.4
Avg. price paid by processors	Cents/lb.	67.6	72.5	66.8	61.8	76.4	71.7	75.8	63.1	59.8
Value	Mil. dol.	31.4	138.9	142.8	173.3	225.5	245.1	273.2	246.7	273.5
Processor sales	Mil. lb	27.8	99.3	113.9	146.5	149.8	176.3	183.1	199.8	231.3
Avg. price received by processors	Cents/lb.	166.1	165.4	195.7	193.3	220.8	211.2	224.0	208.6	200.2
Value	Mil. dol.	46.2	164.2	222.9	283.2	330.3	372.3	410.1	416.8	463.1
Inventory (Jan. 1)	Mil. lb	1.0	4.7	5.0	4.2	5.3	8.8	8.1	9.4	9.6

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, USDA.

No. 1156. U.S. Private Aquaculture—Trout Production and Value: 1988 to 1993

[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	1988	1989	1990	1991	1992	1993
Number sold	Mil	70.5	67.4	67.8	67.7	64.5	60.9
Total weight	Mil. lb	56.0	55.5	56.8	58.9	55.2	54.6
Total value of sales	Mil. dol	57.9	60.0	64.6	58.3	51.0	54.3
Average price received	$/lb	1.03	1.08	1.14	0.99	0.92	0.99
Average weight	Lb	0.79	0.82	0.84	0.87	0.86	0.90

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, USDA.

No. 1157. Supply of Selected Fishery Items: 1980 to 1992

[**In millions of pounds.** Totals available for U.S. consumption are supply minus exports plus imports. Round weight is the complete or full weight as caught. Data are preliminary]

ITEM	Unit	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
Tuna, canned	Canned weight	666	777	759	873	866	843	1,028	858	933	923
Shrimp	Heads-off weight	425	584	633	706	773	767	743	734	744	820
Clams	Meat weight	102	144	164	162	151	145	150	152	144	155
Salmon, canned	Canned weight	126	150	113	87	76	59	159	148	131	75
American lobster	Round weight	69	100	106	113	116	121	85	95	107	95
Spiny lobster	Round weight	127	153	154	152	151	139	89	89	85	81
Scallops	Meat weight	51	87	72	70	79	74	79	74	62	69
Sardines, canned	Canned weight	69	58	76	68	77	63	61	61	52	41
Oysters	Meat weight	71	84	90	91	92	78	66	56	47	50
Crab meat, canned	Canned weight	9	7	8	9	8	8	8	9	11	9
Snow crab	Round weight	54	23	45	49	29	30	58	37	60	88
King crab	Round weight	133	13	11	19	14	10	18	19	20	15

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

No. 1158. Canned, Fresh, and Frozen Fishery Products: 1980 to 1992

[Fresh fishery products exclude Alaska and Hawaii. Canned fishery products data are for natural pack only. See also *Historical Statistics, Colonial Times to 1970,* series L 336-357 (production data in cases) and L 358]

PRODUCT	PRODUCTION (mil. lb.)						VALUE (mil. dol.)					
	1980	1985	1989	1990	1991	1992	1980	1985	1989	1990	1991	1992
Canned, [1]	**1,516**	**1,161**	**1,455**	**1,178**	**1,386**	**1,343**	**1,928**	**1,360**	**1,992**	**1,562**	**1,644**	**1569**
Tuna	602	545	686	581	593	609	1,144	821	1,058	902	877	888
Salmon	200	159	197	196	196	152	376	228	514	366	413	289
Clam products	77	117	135	110	129	126	66	109	91	76	84	84
Mackerel [2]	38	15	18	23	9	5	12	7	7	11	3	2
Sardines, Maine	20	20	13	13	14	17	32	38	17	17	19	25
Shrimp	16	4	3	1	1	1	80	19	9	3	4	4
Crabs	5	1	1	1	(Z)	(Z)	19	2	3	4	(Z)	1
Oysters [3]	(Z)	2	4	1	1	(NA)	(Z)	2	1	1	2	(NA)
Fish fillets and steaks [4]	**202**	**246**	**371**	**441**	**473**	**404**	**261**	**440**	**724**	**843**	**1,021**	**918**
Cod	31	57	73	65	71	62	43	89	136	132	180	157
Flounder	49	69	44	54	48	43	87	157	142	154	147	124
Haddock	17	8	7	7	8	5	29	19	26	24	30	19
Ocean perch, Atlantic	7	2	2	1	1	1	9	3	3	1	1	3
Rockfish	14	18	25	33	22	18	13	25	40	53	36	28
Pollock, Atlantic	9	15	11	12	8	9	9	17	18	21	18	19
Pollock, Alaska	(NA)	11	106	164	152	125	(NA)	24	98	174	206	161
Other	74	66	103	105	163	141	71	106	279	284	403	407

NA Not available. Z Less than 500,000 pounds or $500,000. [1] Includes other products, not shown separately. [2] Includes Jack and a small amount of Pacific mackerel. [3] Includes oyster specialties. [4] Fresh and frozen.

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

No. 1159. Processed Fishery Products—Production and Value: 1980 to 1992

[Includes Puerto Rico and American Samoa. See *Historical Statistics, Colonial Times to 1970,* series L 362-365, for meal, scrap, and oil]

PRODUCT	PRODUCTION (mil. lb.)						VALUE (mil. dol.)					
	1980	1988	1989	1990	1991	1992	1980	1988	1989	1990	1991	1992
Total [1]	(X)	(X)	(X)	(X)	(X)	(X)	**4,456**	**5,369**	(X)	(X)	(X)	(X)
Fresh and frozen [2]	(X)	(X)	(X)	(X)	(X)	(X)	2,110	3,562	(X)	(X)	(X)	(X)
Fillets	197	362	345	414	420	348	247	707	656	764	907	774
Steaks	5	22	26	26	53	56	14	70	86	80	114	144
Fish sticks	88	80	89	65	63	58	89	114	116	75	78	56
Fish portions	344	301	280	243	205	194	388	439	400	353	313	296
Breaded shrimp	83	99	121	111	116	122	254	293	404	353	335	349
Canned products [3]	1,516	1,130	1,455	1,178	1,386	1343	1,928	1,481	1,992	1,562	1,644	1,569
Fish and shellfish	1,009	907	1,110	957	981	936	1,782	1,388	1,754	1,415	1,439	1,322
Animal food	507	223	345	221	405	407	146	93	238	147	205	247
Industrial products	(X)	(X)	(X)	(X)	(X)	(X)	270	236	206	207	208	192
Meal and scrap	724	644	618	577	613	538	134	131	115	121	128	120
Oil (body & liver)	312	225	225	282	267	181	58	44	24	29	30	27
Solubles	267	223	233	186	170	93	14	15	18	14	12	8
Other	(X)	(X)	(X)	(X)	(X)	(X)	64	47	50	43	38	37

X Not applicable. [1] Includes cured fish. [2] Includes items not shown (dressed fish, shellfish not breaded, specialties). [3] Includes salmon eggs for bait.

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

No. 1160. Imports and Exports: 1970 to 1991

[Imports include landings of tuna by foreign vessels at American Samoa. See also *Historical Statistics, Colonial Times to 1970,* series L 227-235]

YEAR	IMPORTS					EXPORTS				
	Total U.S. value (mil. dol.)	Fishery products				Total U.S. value (mil. dol.)	Fishery products			
		Total value (mil. dol.)	Edible products		Nonedible, value (mil. dol.)		Total value (mil. dol.)	Edible products		Nonedible, value (mil. dol.)
			Quantity (mil. lb.)	Value (mil. dol.)				Quantity (mil. lb.)	Value (mil. dol.)	
1970	39,756	1,037	1,873	813	225	43,224	118	140	94	24
1980	244,007	3,648	2,145	2,687	962	220,783	1,006	574	904	102
1985	343,553	6,679	2,754	4,064	2,614	213,146	1,084	648	1,010	73
1986	368,657	7,626	2,979	4,813	2,813	217,304	1,356	735	1,290	66
1987	402,066	8,818	3,201	[1]5,711	3,106	252,866	1,660	783	1,577	83
1988	437,140	8,872	2,968	5,442	3,430	320,385	2,275	1,060	2,156	119
1989	472,977	9,604	3,243	5,498	4,107	(NA)	4,707	1,374	2,283	2,424
1990	490,554	9,048	2,885	5,233	3,815	(NA)	5,639	1,910	2,777	2,862
1991	483,028	9,435	3,015	5,672	3,763	(NA)	[1]6,162	[1]2,020	[1]3,037	3,125

NA Not available. [1] Record.

No. 1161. Selected Fishery Products—Imports and Exports: 1985 to 1992

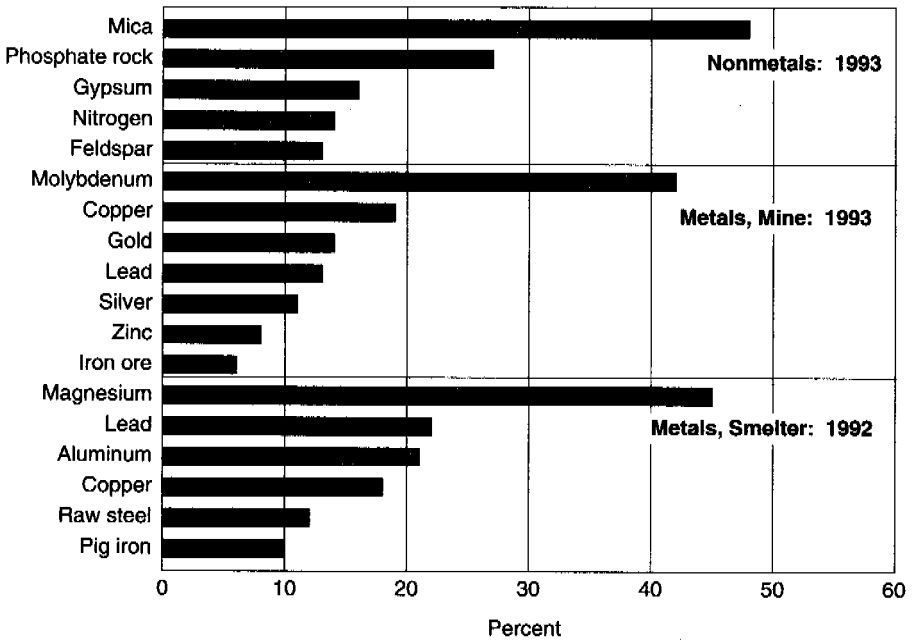
[See *Historical Statistics, Colonial Times to 1970,* series L 312-318, for selected imports]

PRODUCT	QUANTITY (mil. lb.)					VALUE (mil. dol.)				
	1985	1989	1990	1991	1992	1985	1989	1990	1991	1992
Imports, edible [1]	**2,754**	**3,243**	**2,885**	**3,015**	**2,894**	**4,064**	**5,498**	**5,233**	**5,672**	**5,706**
Fresh or frozen [1]	2,229	2,612	2,336	2,419	2,345	3,462	4,695	4,521	4,859	4,946
Salmon [2]	27	99	104	107	103	76	229	253	243	234
Tuna [3]	479	650	454	496	437	266	402	339	341	353
Groundfish fillets, blocks [4]	640	484	442	420	361	655	702	693	770	581
Other fillets and steaks	231	253	257	310	276	334	490	458	533	523
Scallops (meats)	42	41	40	30	39	147	139	131	111	160
Lobster, American, spiny	77	72	74	27	26	465	453	440	274	276
Shrimp and prawn	343	492	492	530	586	1,121	1,685	1,639	1,836	2,000
Canned [1]	414	533	458	513	469	466	642	543	642	580
Sardines and herring [5]	40	41	42	35	31	30	34	31	28	26
Tuna	214	348	285	352	323	209	376	294	359	309
Oysters	29	20	14	12	13	30	37	27	32	37
Pickled or salted	57	51	45	45	42	53	55	49	56	60
Cod, haddock, hake, pollock, cusk	35	17	11	11	10	41	25	18	22	23
Nonedible scrap and meal	**511**	**171**	**239**	**159**	**151**	**62**	**32**	**39**	**32**	**35**
Exports: Canned salmon	48	40	49	66	78	83	90	104	134	154
Fish oil, nonedible	**279**	**195**	**222**	**254**	**177**	**37**	**20**	**24**	**35**	**29**

[1] Includes products not shown separately. [2] Excludes fillets. [3] Includes landings of tuna by foreign vessels at American Samoa. [4] Includes cod, cusk, haddock, hake, pollock, Atlantic ocean perch, and whiting. [5] Not in oil.

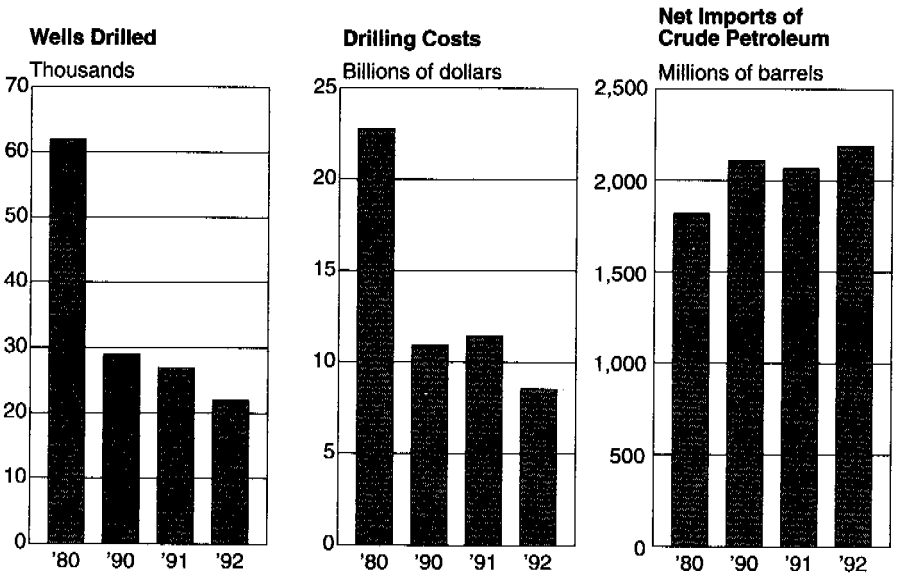
Source of tables 1160 and 1161: U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, *Fisheries of the United States,* annual. Compiled from U.S. Bureau of the Census data.

Figure 24.3
U.S. Mineral Production as a Percentage of World



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1172.

Figure 24.4
Wells Drilled and Drilling Costs for Crude Petroleum and Natural Gas: 1980 to 1992



Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 1180 and 1185.

No. 1162. Summary of Mineral Operations: 1958 to 1987

[Represents mineral operations only. Beginning 1967, excludes single unit establishments without paid employees. See also *Historical Statistics, Colonial Times to 1970*, series M 1-11]

ITEM	Unit	1958	1963	1967	1972	1977	1982	1987
Establishments	Number	36,392	38,651	28,579	25,269	31,359	42,241	33,617
With 20 or more employees	Number	6,045	5,499	5,682	5,312	6,632	(NA)	6,299
Including all operations in manufactures	Number	37,966	40,532	29,688	26,178	31,967	42,585	34,041
Excluding oil and gas extraction	Number	19,444	19,290	13,330	11,660	13,520	12,267	10,707
Employees, total	1,000	734	616	567	595	799	1,114	698
Production workers [1]	1,000	565	482	433	443	593	762	451
All other	1,000	169	134	134	152	206	352	247
Worker-hours, production workers [1]	Million	1,081	973	892	909	1,183	1,578	942
Worker-hours per production workers	1,000	1.9	2.0	2.1	2.1	2.0	2.1	2.1
Payroll, total	Mil. dol.	3,749	3,743	4,187	6,226	13,167	28,637	21,739
Wages, production workers [1]	Mil. dol.	2,623	2,680	2,688	4,250	9,082	18,030	12,443
Salaries, all other employees	Mil. dol.	1,126	1,063	1,299	1,976	4,085	10,607	9,296
Cost of supplies, etc. [2]	Mil. dol.	7,521	8,974	10,576	14,884	46,079	109,697	62,423
Value added in mining	Mil. dol.	13,385	15,910	19,330	26,471	68,013	188,056	110,959
Metal mining	Mil. dol.	1,180	1,418	1,557	2,382	3,504	3,215	4,610
Coal mining	Mil. dol.	1,780	1,727	2,091	3,754	11,266	18,631	17,068
Oil and gas extraction	Mil. dol.	9,033	11,020	13,394	17,612	48,587	159,937	80,049
Nonmetallic minerals mining	Mil. dol.	1,392	1,745	2,288	2,723	4,656	6,273	9,233
Value of shipments and receipts [3]	Mil. dol.	16,373	18,804	22,784	36,319	96,375	250,000	157,964
Capital expenditures	Mil. dol.	2,804	3,264	4,058	5,036	17,718	47,753	15,418

NA Not available. [1] See footnote 4, table 1165. [2] Includes purchased machinery installed. [3] See footnote 6, table 1165.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1972, 1977, 1982,* and *1987.*

No. 1163. Gross Domestic Product (GDP) in Mining: 1980 to 1991

[**In millions of dollars, except percent.** For definition of gross domestic product, see text, section 14. For 1947-86, based on 1972 Standard Industrial Classification (SIC); For 1987, estimates are shown first based on the 1972 SIC and then on the 1987 SIC. Estimates thereafter based on 1987 SIC]

MINING INDUSTRY	1980	1984	1985	1986	1987	1988	1989	1990	1991
Current dollars, total	**112.6**	**137.1**	**130.6**	**82.7**	**83.0**	**87.9**	**84.2**	**103.1**	**91.8**
Metal mining	4.4	3.2	2.5	2.5	2.6	4.8	5.2	6.2	5.7
Coal mining	13.6	14.6	13.8	14.0	12.5	12.5	12.9	12.7	12.2
Oil and gas extraction	89.1	113.0	108.4	59.5	60.8	63.2	58.8	76.9	66.7
Nonmetallic minerals, exc. fuels	5.5	6.2	5.9	6.7	7.2	7.3	7.4	7.2	7.2
Constant (1987) dollars, total	**79.9**	**82.0**	**83.3**	**83.0**	**83.0**	**94.2**	**83.3**	**91.8**	**91.5**
Metal mining	1.6	2.8	2.5	2.9	2.6	4.3	5.0	6.6	7.2
Coal mining	10.1	11.5	11.3	13.0	12.5	13.8	14.8	15.3	15.3
Oil and gas extraction	61.8	60.9	63.2	60.2	60.8	69.0	56.2	62.9	62.0
Nonmetallic minerals, exc. fuels	6.4	6.8	6.3	6.9	7.2	7.1	7.3	7.0	7.1

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business,* May and November 1993.

No. 1164. Mining and Primary Metal Production Indexes: 1970 to 1993

[**1987 = 100.** See also *Historical Statistics, Colonial Times to 1970,* series M 68-71]

INDUSTRY GROUP	1970	1975	1980	1985	1986	1988	1989	1990	1991	1992	1993
Mining	**100.4**	**96.0**	**110.0**	**109.0**	**101.0**	**101.8**	**100.5**	**102.6**	**101.1**	**98.7**	**97.2**
Coal	67.2	71.5	90.2	96.3	97.1	105.0	105.7	113.2	109.2	105.5	103.8
Anthracite	274.1	175.0	169.6	132.8	120.8	115.6	96.3	103.2	72.7	66.1	(NA)
Bituminous	66.0	71.0	89.7	96.1	98.9	105.0	105.8	113.3	109.4	105.8	(NA)
Oil and gas extraction	104.8	101.8	112.1	111.9	102.0	99.4	99.5	95.5	95.8	93.2	92.2
Crude oil and natural gas	122.3	107.5	108.4	105.0	101.7	99.2	95.6	93.7	95.5	94.0	(NA)
Oil and gas drilling	65.2	109.7	181.2	198.9	109.8	100.0	93.7	109.0	93.3	78.3	82.5
Metal mining	129.5	106.4	108.8	91.3	95.2	120.3	140.5	153.1	155.8	161.2	166.3
Iron ore	194.4	172.1	149.4	104.9	84.4	119.4	122.5	117.9	122.3	120.5	120.8
Nonferrous ores	111.5	88.7	95.0	86.4	99.1	123.3	145.1	160.5	156.9	(NA)	(NA)
Copper ore	123.2	101.5	93.1	86.9	91.2	113.7	120.0	126.8	130.9	146.3	142.7
Lead and zinc ores	192.2	189.9	166.7	120.1	103.3	117.7	129.4	196.6	199.0	187.5	176.2
Primary metals, manufacturing	**115.2**	**107.2**	**110.8**	**101.8**	**93.7**	**108.7**	**107.2**	**106.5**	**98.3**	**101.1**	**106.4**
Nonferrous metals	77.1	75.3	92.5	98.5	97.3	103.1	101.7	99.5	95.3	96.1	99.5
Copper	135.2	103.0	94.7	99.8	99.1	100.1	98.9	102.2	109.7	109.9	117.7
Aluminum	107.8	105.2	138.7	104.7	90.9	117.6	120.5	121.0	123.2	120.5	110.5
Iron and steel	148.2	133.5	126.0	104.5	90.8	112.7	111.2	111.5	100.5	104.7	111.5

NA Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin,* monthly.

No. 1165. Mineral Industries—Summary: 1977 to 1987

["N.e.c." means not elsewhere classified. See also *Historical Statistics, Colonial Times to 1970*, series M1-12]

MINERAL INDUSTRY	1977			1982					1987									
	Establishments	All employees, payroll [1] (mil. dol.)	Value added in mining [2] (mil. dol.)	Establishments		All employees		Value added in mining [2] (mil. dol.)	Establishments		All employees		Production workers [4]			Value added in mining [2] (mil. dol.)	Value of shipments and receipts [6] (mil. dol.)	Capital expenditures (mil. dol.)
				Total	With 20 or more employees	Number [3] (1,000)	Payroll [1] (mil. dol.)		Total	With 20 or more employees	Number [3] (1,000)	Payroll [1] (mil. dol.)	Number [3] (1,000)	Hours [5] (millions)	Wages (mil. dol.)			
All industries	**31,359**	**13,167**	**68,013**	**[7]42,241**	**(NA)**	**1,114**	**28,637**	**188,056**	**33,617**	**6,299**	**698**	**21,739**	**451**	**942**	**12,443**	**110,959**	**157,964**	**15,418**
Metal mining	**1,206**	**1,485**	**3,504**	**1,434**	**(NA)**	**68**	**1,860**	**3,215**	**1,027**	**260**	**44**	**1,354**	**34**	**68**	**952**	**4,610**	**6,852**	**899**
Iron ores	97	3	1,046	78	40	12	340	770	51	16	7	224	6	11	166	768	1,362	24
Copper ores	133	544	1,067	81	51	22	604	672	61	33	14	405	11	21	283	1,301	2,150	205
Lead and zinc ores	88	105	329	71	28	4	112	201	39	19	2	58	1	3	40	176	268	12
Gold and silver ores	175	71	161	371	80	10	263	650	372	101	13	423	10	21	305	1,814	2,261	555
Ferroalloy ores, except vanadium	56	107	256	69	16	5	150	146	58	10	1	46	1	2	24	61	110	8
Metal mining services	270	52	112	313	(NA)	3	61	90	268	42	3	81	2	5	60	176	251	26
Miscellaneous metal ores	387	234	533	451	91	12	332	686	178	42	4	116	3	5	75	313	449	70
Coal mining	**5,451**	**4,171**	**11,266**	**5,087**	**(NA)**	**251**	**6,805**	**18,631**	**3,905**	**1,418**	**163**	**5,567**	**129**	**259**	**4,251**	**17,068**	**25,955**	**1,665**
Bituminous coal and lignite mining	4,944	4,005	10,837	4,513	1,787	241	6,570	18,041	3,507	1,335	158	5,410	124	249	4,125	16,679	25347	1,614
Anthracite mining	156	48	116	152	40	3	67	172	107	26	2	41	2	3	32	109	206	12
Coal mining services	351	119	313	422	(NA)	7	168	418	291	57	4	116	3	7	94	280	402	39
Oil and gas extraction	**18,447**	**5,902**	**48,587**	**29,974**	**(NA)**	**685**	**17,693**	**159,937**	**22,910**	**3,167**	**378**	**11,961**	**206**	**437**	**5,283**	**80,049**	**112,363**	**11,717**
Crude petroleum and natural gas	8,573	2,738	38,327	[7]12,087	(NA)	264	8,084	126,035	10,203	1,171	199	7,510	69	142	2,154	67,955	76,518	10,549
Natural gas liquids	692	227	3,286	793	236	14	402	8,865	714	210	13	433	10	20	320	4,025	24,750	383
Oil and gas field services	9,182	2,936	6,974	[7]17,094	(NA)	406	9,207	25,037	11,993	1786	167	4,018	127	275	2,809	8,069	11,095	786
Drilling oil and gas wells	2,625	1,317	3,307	4,385	(NA)	166	4,007	11,316	2,591	620	55	1,318	46	93	1,012	2,549	3,626	321
Oil, gas exploration services	1,252	220	545	2,934	(NA)	42	810	2,307	1,917	143	17	452	13	27	311	771	1,096	69
Oil, gas field services, n.e.c.	5,305	1,399	3,122	9,775	(NA)	199	4,391	11,415	7,485	1,023	95	2,248	69	154	1,486	4,748	6,373	395
Nonmetallic mining	**6,255**	**1,609**	**4,656**	**5,746**	**(NA)**	**110**	**2,278**	**6,273**	**5,775**	**1,454**	**113**	**2,658**	**83**	**178**	**1,956**	**9,233**	**12,795**	**1,136**
Dimension stone [8]	209	19	39	154	22	2	21	50	149	19	1	25	1	2	18	65	86	4
Crushed and broken stone [9]	2,055	543	1,501	1,932	567	37	701	1,787	2,002	711	44	1,082	33	72	754	3,465	4,768	521
Sand and gravel [9]	2,807	418	1,017	2,758	343	28	520	1,336	2,750	436	33	772	24	51	551	2,320	3,139	238
Clay and related minerals [9]	255	136	358	224	97	11	212	510	197	100	10	272	7	15	165	827	1,249	111
Chemical and fertilizer minerals	205	372	1,433	196	114	26	681	2,237	148	79	16	501	12	24	336	1,999	2,772	192
Nonmetallic minerals, services	176	36	70	167	(NA)	2	35	70	177	23	2	45	1	3	32	119	165	25
Miscellaneous [9]	548	87	238	315	72	6	109	283	352	86	7	162	5	10	101	438	616	46

NA Not available. [1] Gross earnings paid to all employees on payroll. [2] Computed by subtracting cost of supplies, minerals received for preparation, purchased fuel and electric energy, contract work, and purchased machinery from the value of shipments and capital expenditures. [3] Excludes proprietors and firm members of unincorporated concerns. [4] Represents employees up through the working foreman level engaged in manual work. Includes development and exploration workers. [5] Excludes paid vacations, holidays, and sick leave; includes actual overtime hours (not straight-time equivalent). [6] Represents value of shipments of primary and secondary products of the industry and amount received for services performed for other establishments on a contract, fee, or other basis. [7] Redefined to conform to 1987 and pre-1982 definition of establishment; for detail, see source. [8] Excludes data for dimension stone quarries operated in conjunction with dressing plants. [9] Excludes data for mining included in establishments classified in manufacturing industries.

Source: U.S. Bureau of the Census, *Census of Mineral Industries: 1977, 1982,* and *1987,* final industry series reports.

No. 1166. Mineral Production and Value, 1990 to 1993,

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

	MINERAL	PRODUCTION QUANTITY				
		Unit	1990	1991	1992	1993
1	Total mineral production	(X)	(X)	(X)	(X)	(X)
2	**Mineral fuels**	(X)	(X)	(X)	(X)	(X)
3	Coal: Bituminous and lignite	Mil. sh. tons	1,026	993	998	(NA)
4	Pennsylvania anthracite	Mil. sh. tons	4	3	3	(NA)
5	Natural gas (wet)	Tril. cu. ft.	1,859	1,871	1,871	(NA)
6	Petroleum (crude)	Mil. bbl. [1]	2,685	2,707	2,625	(NA)
7	Uranium [2]	Mil. lb.	8.9	6.0	5.6	(NA)
8	**Industrial minerals**	(X)	(X)	(X)	(X)	(X)
9	Abrasive stone [3]	Metric tons	3,709	2,205	1,732	(NA)
10	Asbestos (sales)	1,000 metric tons	(D)	(D)	15.6	15.4
11	Asphalt and related bitumens (native) [4]	Mil. metric tons	25	26	25	(NA)
12	Barite, primary, sold/used by producers	1,000 metric tons	430	448	326	303
13	Boron minerals, (producers)	1,000 metric tons	1,094	1,240	1,009	526
14	Bromine (sold or used by producers)	1,000 metric tons	177	170	171	168
15	Calcium chloride	1,000 sh. tons	(D)	(D)	(D)	-
16	Carbon dioxide, natural (estimate)	Mil. cu. ft.	-	-	-	-
17	Cement: Portland	Mil. sh. tons	75.6	68.7	72.8	76.6
18	Masonry	Mil. sh. tons	3.3	2.6	2.9	3.0
19	Clays	1,000 metric tons	42,904	44,092	40,712	44,183
20	Diatomite	1,000 metric tons	631	610	595	622
21	Feldspar [6]	1,000 metric tons	630	580	726	760
22	Fluorspar, finished shipments	1,000 metric tons	64	58	51	50
23	Garnet (abrasive)	1,000 metric tons	47.0	50.9	54.1	46.1
24	Gem stones (estimate)	(X)	(NA)	(NA)	(NA)	(NA)
25	Gypsum, crude	Mil. sh. tons	16.4	15.5	16.3	17.0
26	Helium [7]	Mil. cu. meters	87	88	94	93
27	Lime, (sold or used by producers)	Mil. sh. tons	17.5	17.3	17.9	18.3
28	Mica, scrap & flake, (producers)	1,000 metric tons	109	103	85	89
29	Peat (sales by producers)	1,000 sh. tons	795	777	719	700
30	Perlite, processed (sold or used)	1,000 metric tons	576	514	541	548
31	Phosphate rock (marketable)	Mil. metric tons	46.3	48.1	47.0	35.0
32	Potassium salts sales, K_2O equivalent	1,000 metric tons	1,716	1,709	1,767	1,500
33	Pumice & pumicite, producer sales	1,000 metric tons	443	401	481	492
34	Pyrites	1,000 metric tons	(D)	(D)	(D)	(D)
35	Salt, common, sold/used by producers	Mil. metric tons	36.9	35.9	34.8	41.6
36	Sand & gravel, sold/used by producer	Mil. metric tons	852	852	858	884
37	Construction	Mil. metric tons	826	829	834	859
38	Industrial	Mil. metric tons	26	23	24	25
39	Sodium carbonate (natural) (soda ash)	1,000 metric tons	9,156	9,005	9,379	9,200
40	Sodium sulfate (natural)	1,000 metric tons	349	354	337	315
41	Stone [8]	Mil. metric tons	1,110	1,002	1,055	1,110
42	Crushed and broken	Mil. metric tons	826	829	834	859
43	Dimension	1,000 metric tons	26	23	24	25
44	Sulfur: Frasch mines (shipments)	1,000 metric tons	3,676	3,119	2,600	2,200
45	Talc, and pyrophyllite, crude [9]	1,000 metric tons	1,267	1,037	997	1,008
46	Tripoli	1,000 metric tons	94	89	85	(NA)
47	Vermiculite concentrate	1,000 metric tons	208	168	190	185
48	Industrial minerals, undistributed [10]	(X)	(X)	(X)	(X)	(X)
49	**Metals**	(X)	(X)	(X)	(X)	(X)
50	Antimony ore and concentrate [11]	Metric tons	(D)	(D)	(D)	(D)
51	Bauxite (dried) [13]	1,000 metric tons	(D)	(D)	(D)	(D)
52	Copper [2]	1,000 metric tons	1,588	1,631	1,765	1,773
53	Gold [2]	Metric tons	295	296	329	332
54	Iron ore, [14 16]	Mil. metric tons	57.0	56.8	55.6	55.2
55	Lead [2]	1,000 metric tons	484	466	398	379
56	Magnesium metal	1,000 metric tons	139	131	137	145
57	Manganiferous ore [15 16]	1,000 metric ton	(D)	(D)	(D)	(D)
58	Mercury [17]	Metric tons	562	58	64	70
59	Molybdenum [16]	1,000 metric tons	62	54	50	39
60	Nickel [19]	1,000 metric tons	0.3	5.5	6.7	2.5
61	Palladium metal	Kilograms	5,930	6,050	6,470	6,500
62	Platinum metal	Kilograms	1,810	1,730	1,840	1,800
63	Silver [2]	Metric tons	2,125	1,855	1,804	1,750
64	Titanium concentrate: Ilmenite [15]	1,000 metric tons	(D)	(D)	(D)	(D)
65	Tungsten ore and concentrate [19]	Metric tons	(D)	(D)	(D)	(D)
66	Vanadium [2]	Metric tons	(D)	(D)	(D)	(D)
67	Zinc mine production [2]	1,000 metric tons	515	518	523	505
68	Metals, undistributed	(X)	(X)	(X)	(X)	(X)

- Represents zero. D Withheld to avoid disclosing individual company data. NA Not available. X Not applicable. [1] 42 gal. bbl. [2] Recoverable content of ores, etc. [3] Includes grindstones, oilstones, whetstones, and deburring media. Excludes grinding pebbles, and tubemill liners. [4] Contains bituminous limestone and sandstone, and Gilsonite. Includes road oil, 1989-92. Value excluded from industrial minerals, 1989-92. [5] Value included in "Industrial minerals, undistributed." [6] Includes aplite, 1992-93. [7] Refined only. [8] Excludes abrasive stone, bituminous limestone and sandstone, and ground soapstone, all included elsewhere in table; 1993 excludes dimension stone. State ranks based on publishable data. Includes calcareous marl and slate.

and Principal Producing States, 1993

(including consumption by producers). See *Historical Statistics, Colonial Times to 1970*, series M 13-37 for selected values]

PRODUCTION VALUE (mil. dol.)				Principal producing States ranked by quantity, 1993	
1990	1991	1992	1993		
141,741	(NA)	(NA)	(NA)	(X)	1
108,422	**(NA)**	**(NA)**	**(NA)**	**(X)**	2
22,274	21,596	(NA)	(NA)		3
133	(NA)	(NA)	(NA)		4
31,658	30,327	32,571	(NA)		5
53,772	44,666	(NA)	(NA)		6
140	(NA)	(NA)	(NA)		7
21,022	**20,047**	**20,496**	**20,631**		8
(Z)	(Z)	(Z)	(NA)	(NA)	9
(5)	(5)	6	6	CA, VT	10
3,480	2,979	2,794	(NA)	(NA)	11
16	21	20	18	NV, GA, MO	12
436	443	339	324	CA	13
173	167	170	110	AR	14
(5)	(5)	(5)	(X)	(X)	15
-	-	-	(X)	(X)	16
3,683	3,343	3,500	3,666	IN, FL, AL	17
225	188	195	200	TX, CA, MI	18
1620	1,505	1,482	1,773	GA, CA, AL	19
138	140	120	115	CA, NV, OR	20
28	26	29	30	NC, VA, OK	21
(5)	(5)	(5)	(5)	IL	22
7	8	5	5	ID, NY	23
53	84	66	52	(X)	24
100	94	101	105	OK, IA, TX	25
113	175	187	185	KS, WY, TX	26
902	890	950	971	OH, AL, PA	27
6	6	5	5	NC, NM, GA	28
19	16	17	17	FL, MI, WI	29
17	15	16	17	NM, AZ, CA	30
1,075	1,031	1,058	753	FL, NC, ID	31
303	305	334	275	NM, UT, CA	32
11	9	15	15	OR, NM, ID	33
(5)	(5)	(5)	(5)	AZ	34
827	802	803	854	LA, TX, NY	35
3,686	3,658	3,766	3,897	CA, OH, MI	36
3,249	3,268	3,341	3,495	CA, OH, MI	37
436	390	425	402	IL, NJ, CA	38
836	836	836	718	WY, CA	39
34	31	26	26	CA, TX, UT	40
5,822	5,396	5,775	6,021	TX, IL, PA	41
5,591	5,187	5,594	6,021	TX, IL, PA	42
231	210	181	(5)	IN, GA, VT	43
335	272	159	70	TX, LA	44
31	32	31	27	MT, TX, NY	45
3	3	3	(NA)	(NA)	46
19	13	15	(D)	SC, VA	47
504	538	478	374	(NA)	48
12,442	**11,022**	**11,537**	**11,876**	**(NA)**	49
(12)	(12)	(12)	(12)	ID	50
(12)	(12)	(12)	(12)	AL	51
4,311	3,931	4,180	3,595	AZ, UT, NM	52
3,650	3,457	3,650	3,793	NV, CA, UT	53
1,741	1,674	1,732	1,700	MN, MI	54
491	344	308	267	MO, AK, ID	55
433	337	360	406	TX, WA, UT	56
(12)	(12)	(12)	(12)	SC	57
(12)	0.2	0.4	0.4	NV	58
348	250	209	165	AZ, CO, UT	59
(NA)	(NA)	(12)	(12)	OR	60
22	17	18	26	MT	61
27	21	21	21	MT	62
329	241	229	236	NV, AK, ID	63
(12)	(12)	(12)	(12)	FL, CA	64
(12)	(12)	(12)	(12)	CA	65
(12)	(12)	(12)	(12)	ID	66
847	802	674	512	AK, TN, NY	67
242	148	156	179	(NA)	68

[9] For 1991-92, production quantity, talc only; 1989-92 dollar value is for talc only. [10] Comprises value of items that cannot be disclosed. [11] Antimony content. [12] Included with "Metals, undistributed." [13] Dried equivalent. [14] Represents shipments; includes byproduct ores. [15] Gross weight. [16] 5 to 35 percent manganiferous ore. [17] 1990, both primary product and byproduct of gold production; thereafter, produced as a byproduct of gold ores only. [18] Content of concentrate. [19] Content of ore and concentrate.

Source: U.S. Bureau of Mines, *Minerals Yearbook* thru 1991; *Annual Reports* and *Mineral Commodities Summaries*, annual U. S. Energy Information Administration, *Annual Energy Review, Uranium Industry Annual; Petroleum Supply Annual*, vol. 1; *Natural Gas Annual;* and *Quarterly Coal Report*.

No. 1167. Nonfuel Mineral Commodities—Summary: 1993

[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 [1] (percent)	Consumption, apparent		
Aluminum	1,000 metric tons	5,300	1,200	16	6,300	[3]53	22,400
Antimony (contained)	Metric tons	[2]37,000	5,000	57	44,600	[3]60	110
Arsenic	Metric tons		[4]230	100	23,900	[3 4]54	
Asbestos	1,000 metric tons	15	32	95	33	(D)	70
Barite	1,000 metric tons	300	20	58	720	59.8	330
Bauxite and alumina	1,000 metric tons	(D)	1,305	100	4,500	[5]15-18	35
Beryllium (contained)	Metric tons	159	16	4	165	[5 6]295	425
Bismuth (contained)	Metric tons	(D)	70	(D)	[7]1,450	2.5	30
Boron (B_2O_3 content)	1,000 metric tons	526	[8]580	(9)	244	[10]276	900
Bromine (contained)	1,000 metric tons	168	25	(9)	157	656	1,600
Cadmium (contained)	Metric tons	[2]1,050	16	66	3,110	[6 11]45	190
Cement	1,000 short tons	79,600	710	7	84,708	[12]49	18,000
Chromium	1,000 metric tons	[13]88	18	82	488	[14]110	(NA)
Clays	1,000 metric tons	44,183	4,045	(9)	40,184	(NA)	11,000
Cobalt (contained)	Metric tons	[13]1,600	900	75	6,320	[6]13.8	(NA)
Columbium (contained)	Metric tons	-	100	100	3,400	[15]2.67	(NA)
Copper (Mine, contained)	1,000 metric tons	1,770	200	6	2,450	[3 16]92	14,000
Diamond (industrial)	Million carats	116	100	15	136	[17]2.12	(NA)
Diatomite	1,000 metric tons	622	167	(9)	457	185	1,000
Feldspar	1,000 metric tons	760	19	(9)	749	39.08	400
Fluorspar	1,000 metric tons	152	13	89	438	(NA)	180
Gallium (contained)	Kilograms	-	(NA)	(NA)	[8]11,000	[18]425	20
Garnet (industrial)	Metric tons	52,400	12,100	(9)	52,100	100-2,000	150
Gemstones	Million dollars	72	1,612	98	3,644	([19])	1,000
Germanium (contained)	Kilograms	[2]10,000	(NA)	(NA)	25,000	[18 20]1,060	100
Gold (contained)	Metric tons	[2]390	(NA)	(NA)	(NA)	355	14,500
Graphite (crude)	1,000 metric tons	-	18	100	34	[22]767	
Gypsum (crude)	1,000 short tons	17,000	50	29	25,000	[23]6	6,700
Indium	Metric tons	(NA)	(NA)	(NA)	[3]35	[18 24]180	(NA)
Iodine	Metric tons	1,900	1,700	51	3,900	[18 25]8	35
Iron ore (usable)	Million metric tons	55	4	12	63	[26]73-74	7,800
Iron and steel scrap (metal)	Million metric tons	75	11	(9)	67	[27]106	106,200
Iron and steel slag (metal)	1,000 metric tons	21,000	4	0.5	[8]20,961	6	3,000
Lead (contained)	1,000 metric tons	1,170	130	11	1,280	[3]32	3,900
Lime	1,000 short tons	18,300	66	(NA)	18,431	[12]53	5,500
Magnesium compounds	1,000 metric tons	420	50	26	570	(NA)	650
Magnesium metal	1,000 metric tons	202	42	(9)	153	[6 28]1	1,400
Manganese (gross weight)	1,000 metric tons	-	34	100	[29]650	[30]3	(NA)
Mercury	Metric tons	270	90	(NA)	(NA)	[31]190	(NA)
Mica, scrap and flake	1,000 metric tons	89	5	11	98	54	80
Molybdenum (contained)	Metric tons	45,400	34,000	(9)	16,300	[18]5	550
Nickel (contained)	Metric tons	4,878	33,210	64	152,000	[32]5.130	40
Nitrogen (fixed)-ammonia	1,000 metric tons	12,700	400	15	15,010	[12 33]110	2,500
Nonrenewable organics	Million metric tons	117	8	4	122	107	(NA)
Peat	1,000 short tons	600	10	56	1,370	[12 23]24	650
Perlite	1,000 metric tons	548	30	3	563	[23]30	110
Phosphate rock	1,000 metric tons	35,000	3,000	(9)	36,000	[23]22	5,000
Platinum-group metals	Kilograms	64,400	86,000	88	112,300	[21 34]370	400
Potash (K_2O equivalent)	1,000 metric tons	1,500	360	71	5,120	[23]124	1,705
Pumice and pumicite	1,000 metric tons	492	20	25	652	[23]30	55
Salt	1,000 metric tons	37,700	700	12	43,000	[35]111	4,150
Silicon (contained)	1,000 metric tons	370	31	34	560	[3 36]42	(NA)
Silver (contained)	Metric tons	2,200	1,700	(NA)	4,000	5	1,500
Sodium carbonate (soda ash)	1,000 metric tons	9,200	2,900	(9)	6,496	[12 37]98	2,800
Sodium sulfate	1,000 metric tons	615	100	9	677	[12 38]114	240
Stone (crushed)	Million short tons	1,223	4	-	1,227	[12]5	76,000
Sulfur (all forms)	1,000 metric tons	10,800	570	15	12,600	[39]32	3,100
Talc	1,000 metric tons	928	168	(9)	839	13-400	800
Thallium (contained)	Kilograms	-	(NA)	100	800	[18]230	(NA)
Tin (contained)	Metric tons	[13]8,500	2,300	81	45,914	[3]244	5
Titanium dioxide	1,000 metric tons	1,158	258	(9)	1,071	[6 40]1	4,600
Tungsten (contained)	Metric tons	(D)	20	84	[41]6,800	[42]44	33
Vermiculite	1,000 metric tons	185	5	16	220	(D)	230
Zinc (contained)	1,000 metric tons	380	510	26	1,360	[3 43]46	1,360
Zirconium (ZrO_2) content	Metric tons	(D)	25,950	(D)	(D)	[44]200	(NA)

- Represents or rounds to zero. D Withheld to avoid disclosure. NA Not available. [1] Calculated as a percent of apparent consumption. [2] Refinery production. [3] Cents per pound. [4] Metal price. [5] Metal, vacuum-cast ingot. [6] Dollars per pound. [7] Reported consumption. [8] Gross weight. [9] Net exporter. [10] Granulated pentahydrate borax in bulk, f.o.b. mine. [11] 1- to 5-short ton lots. [12] Dollars per short ton. [13] Secondary production. [14] Turkish. [15] Columbite price. [16] Domestic producer cathode. [17] Value of imports, dollars per carat. [18] Dollars per kilogram. [19] Variable, depending on size, type, and quality. [20] Zone refined, first reduction quality. [21] Dollars per troy ounce. [22] Price of flake imports. [23] F.o.b. mine (or mill). [24] 99.97% indium. [25] C.i.f. value, crude. [26] Lake Superior pellets. Cents per long ton unit of iron, delivered rail of vessel at lower lake ports. [27] Delivered, No. 1 Heavy Melting composite price. [28] Year-end price. [29] Estimated manganese content. [30] 46%-48% Mn metallurgical ore, per unit contained Mn, c.i.f. U.S. ports. [31] Price per 76-pound flask. [32] London Metal Exchange cash price. [33] F.o.b. gulf coast. [34] Dealer price of platinum. Per troy ounce, palladium price was $87 for 1992 and $120 for 1993; rhodium price was $2,365 for 1992 and $1,200 for 1993. [35] Vacuum and open pan, bulk, pellets and packaged, f.o.b. mine and plant. [36] Ferrosilicon, 50% Si. [37] Quoted year-end price, dense, bulk, f.o.b. Green River, WY. [38] Quoted price, bulk, f.o.b. works, East. [39] Elemental sulfur, f.o.b. mine and/or plant. [40] Rutile, list, year-end. [41] All forms. [42] Concentrate, unit WO3 (7.93 kilos of contained tungsten per unit). [43] Domestic producers price. [44] Price for imported zircon, f.o.b. U.S. east coast.

Source: U.S. Bureau of Mines, *Mineral Commodity Summaries*, annual.

No. 1168. Value of Domestic Nonfuel Mineral Production: 1980 to 1993

[In millions of dollars]

AREA	1980	1990	1991	1992	1993	Principal minerals in order of value
U.S. [1]	25,140	33,452	30,579	32,012	31,556	(X)
Northeast	**1,581**	**2,479**	**2,095**	**2,306**	**2,411**	**(X)**
N.E.	268	446	347	423	421	(X)
ME	37	55	41	56	61	Cement (portland), sand and gravel, and stone.
NH	25	36	30	42	36	Sand and gravel, stone, and gypsum.
VT	43	87	60	[2]60	45	Stone, sand and gravel, and talc.
MA	91	128	112	147	166	Stone, sand and gravel, and lime.
RI	6	18	13	21	[2]27	Sand and gravel (construction), stone, and sand and gravel (industrial).
CT	66	122	91	97	86	Stone, sand and gravel (construction), and sand and gravel (industrial).
M.A	1,313	2,033	1,748	1,885	1,990	(X)
NY	496	773	699	766	845	Stone, salt, and sand and gravel.
NJ	149	229	205	240	252	Stone, sand and gravel (construction), and sand and gravel (industrial).
PA	668	1,031	844	879	893	Stone, cement (portland), and lime.
Midwest	**6,810**	**7,163**	**6,755**	**7,261**	**6,958**	**(X)**
E.N.C	2,930	3,483	3,479	3,762	3,655	(X)
OH	562	733	684	742	814	Stone, sand and gravel, and salt.
IN	288	428	403	477	501	Stone, cement (portland), and sand and gravel.
IL	443	667	673	734	732	Stone, sand and gravel, and cement (portland).
MI	1,485	1,440	1,503	1,587	1,408	Iron ore, cement (portland), and sand and gravel.
WI	152	215	216	222	200	Stone, sand and gravel, and lime.
W.N.C	3,680	3,680	3,276	3,499	3,303	(X)
MN	1,782	1,482	1,289	1,364	1,323	Iron ore, sand and gravel, and stone.
IA	252	310	344	391	344	Stone, cement (portland), and sand and gravel.
MO	1,054	1,105	880	897	785	Lead, cement (portland), and stone.
ND	22	25	[2]17	26	[2]25	Sand and gravel (construction), lime, and sand and gravel (industrial).
SD	228	319	290	301	324	Gold, cement (portland), and sand and gravel.
NE	80	90	89	115	118	Sand and gravel (construction), cement (portland), and stone.
KS	262	349	367	405	384	Salt, helium, and stone.
South	**7,320**	**9,291**	**8,285**	**8,560**	**8,901**	**(X)**
S.A.	3,454	5,132	4,497	4,651	4,941	(X)
DE [2]	2	10	5	9	[2]11	Sand and gravel (construction).
MD	186	368	348	339	361	Stone, cement (portland), and sand and gravel.
VA	305	507	428	462	515	Stone, cement (portland), and sand and gravel.
WV	106	133	117	112	111	Stone, cement (portland), and sand and gravel.
NC	380	586	557	596	594	Stone, phosphate rock, and lithium minerals.
SC	195	450	340	247	361	Cement (portland), stone, and gold.
GA	771	1,504	1,306	1,346	1,691	Clays, stone, and cement (portland).
FL	1,509	1,574	1,396	1,440	1,297	Phosphate rock, stone, and cement (portland).
E.S.C	1,030	1,692	1,533	1,640	1,663	(X)
KY	204	359	343	401	416	Stone, lime, and cement (portland).
TN	394	663	548	576	538	Stone, zinc, and cement (portland).
AL	328	559	540	543	570	Stone, cement (portland), and lime.
MS	104	111	102	120	139	Sand and gravel, cement (portland), and clays (Fuller's earth).
W.S.C	2,836	2,467	2,255	2,269	2,297	(X)
AR	293	381	361	404	365	Stone, bromine, and cement (portland).
LA	584	368	352	309	256	Salt, sand and gravel, and sulphur.
OK	224	259	276	253	282	Stone, cement (portland), and sand and gravel.
TX	1,735	1,459	1,266	1,303	1,394	Cement (portland), stone, and magnesium metal.
West	**9,629**	**14,512**	**13,435**	**13,858**	**13,235**	**(X)**
Mountain	7,223	10,380	9,581	10,154	9,683	(X)
MT	280	573	534	539	496	Gold, copper, and cement (portland).
ID	522	375	298	306	283	Phosphate rock, gold, and sand and gravel.
WY	761	911	929	951	858	Soda ash, clays, and helium.
CO	1,265	377	338	385	432	Sand and gravel, cement (portland), and stone.
NM	766	1,103	986	871	788	Copper, potash, and sand and gravel.
AZ	2,471	3,085	2,877	3,166	2,742	Copper, sand and gravel, and cement (portland).
UT	764	1,335	1,190	1,348	1,350	Copper, gold, and magnesium.
NV	394	2,621	2,429	2,588	2,734	Gold, sand and gravel, and silver.
Pacfic	2,406	4,132	3,854	3,704	3,552	(X)
WA	207	483	483	469	480	Sand and gravel, magnesium metal, and gold.
OR	152	205	198	214	234	Stone, sand and gravel, and cement (portland).
CA	1,872	2,771	2,538	2,346	2,282	Sand and gravel, cement (portland), and gold.
AK	115	577	494	526	421	Zinc, gold, and sand and gravel.
HI	60	106	141	149	[2]135	Stone, cement (portland) & (masonry), & gemstones.

X Not applicable. [1] Includes undistributed not shown separately. [2] Partial data only.

Source: U.S. Bureau of Mines, *Annual Reports, and Mineral Commodities Summary,* annual.

No. 1169. Mineral Industries—Gross Assets and Capital Expenditures: 1972 to 1987

[In millions of dollars]

INDUSTRY AND YEAR	END OF YEAR GROSS VALUE OF DEPRECIABLE ASSETS					CAPITAL EXPENDITURES					
	Total [1]	Buildings and other structures	Machinery and equipment	Mineral exploration and development [1]	Mineral land and rights [1]	Total [1]	New buildings and other structures	New machinery and equipment	Used buildings and other structures	Used machinery and equipment	Mineral exploration and development [1]
Mineral industries: [2]											
1972	21,690	4,244	15,038	(3)	[3]2,409	2,802	317	1,407	(3)	[3]128	230
1977	44,664	6,099	33,068	2,625	2,871	6,802	785	5,068	30	399	520
1982	94,613	10,228	73,419	5,036	5,930	13,472	1,229	10,551	78	937	677
1987	84,286	9,314	64,143	5,034	5,795	4,869	349	3,234	88	797	401
Crude oil, nat. gas:											
1972	47,500	(NA)	(NA)	(NA)	(NA)	2,954	403	842	(3)	[3]44	1,666
1977	94,414	(NA)	(NA)	(NA)	(NA)	10,916	571	2,269	14	93	7,969
1982	233,052	(NA)	(NA)	(NA)	(NA)	34,281	1,967	5,550	20	215	26,529
1987	(NA)	(NA)	(NA)	(NA)	(NA)	10,549	590	3,176	18	218	6,548

NA Not available. [1] Excludes data for mineral exploration and development, and mineral land and rights portions for mining service industries and natural gas liquids industry. [2] Excludes crude petroleum and natural gas. [3] Not collected separately. Data for mineral exploration and development are combined with mineral land and rights. Data for used buildings and other structures are combined with used machinery and equipment.

Source: U.S. Bureau of the Census, *Census of Mineral Industries, 1987.*

No. 1170. Mineral Industries—Employment, Hours, and Earnings: 1991 to 1993

ITEM	Unit	1991	1992	1993	ITEM	Unit	1991	1992	1993
All mining:					Avg. weekly hours	No	44.5	43.8	43.8
All employees	1,000	689	631	599	Avg. weekly earnings	Dol	602	614	619
Production workers	1,000	489	445	423	Metal mining:				
Avg. weekly hours	No	44.4	43.9	44.2	All employees	1,000	56	53	51
Avg. weekly earnings	Dol	630	638	645	Production workers	1,000	44	42	41
Coal mining:					Avg. weekly hours	No	43.0	42.9	43.1
All employees	1,000	136	126	105	Avg. weekly earnings	Dol	639	655	660
Production workers	1,000	110	102	84	Nonmetallic minerals,				
Avg. weekly hours	No	44.6	44.0	44.4	except fuels:				
Avg. weekly earnings	Dol	761	755	766	All employees	1,000	105	102	100
Oil and gas extraction:					Production workers	1,000	78	76	75
All employees	1,000	393	350	343	Avg. weekly hours	No	44.5	44.9	46.1
Production workers	1,000	258	226	224	Avg. weekly earnings	Dol	531	551	585

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

No. 1171. Selected Mineral Products—Average Prices: 1970 to 1993

[Excludes Alaska and Hawaii, except as noted. See *Historical Statistics, Colonial Times to 1970,* series M 96, M 139, M 209, M 248, and M 262, for bituminous coal, crude petroleum, iron ore, lead, and aluminum, respectively]

YEAR	Tantalum (dol. per lb.) [1]	Copper, electrolytic [2] (cents per lb.)	Platinum [3] (dol./ troy oz.)	Gold (dol./ fine oz.)	Silver (dol./ fine oz.)	Lead [4] (cents per lb.)	Tin (New York) [5] (cents per lb.)	Zinc [6] (cents per lb.)	Sulfur, crude [7] (dol./ metric ton)	Bituminous coal [8] (dol./ short ton)	Crude petroleum [8] (dol./ bbl.)	Natural gas [8] (dol./ 1,000 cu. ft.)
1970	9.15	58	133	36	1.77	15.7	174.1	15.3	[9]22.41	6.26	3.18	0.17
1975	18.32	64	164	161	4.42	21.5	339.8	39.0	[9]44.20	19.23	7.67	0.44
1979	80.00	92	445	308	11.09	52.6	753.9	37.3	55.75	23.65	12.64	1.18
1980	126.37	101	677	613	20.63	42.5	846.0	37.4	89.06	24.52	21.59	1.59
1981	99.51	84	446	460	10.52	36.5	733.1	44.6	111.48	26.29	31.77	1.98
1982	49.95	73	327	376	7.95	25.5	653.9	38.5	108.27	27.14	28.52	2.46
1983	30.60	77	424	424	11.44	21.7	654.8	41.4	87.24	25.85	26.19	2.59
1984	37.44	67	357	361	8.14	25.6	623.8	48.6	94.31	25.51	25.88	2.66
1985	33.68	67	291	318	6.14	19.1	596.0	40.4	106.46	25.10	24.09	2.51
1986	23.74	66	461	368	5.47	22.1	383.2	38.0	105.22	23.70	12.51	1.94
1987	27.08	83	553	478	7.01	35.9	418.8	41.9	89.78	23.00	15.40	1.67
1988	47.37	121	523	438	6.53	37.1	441.4	60.2	85.95	22.00	12.58	1.69
1989	44.93	131	507	383	5.50	39.4	520.2	82.0	86.62	21.76	15.86	1.69
1990	38.06	123	467	385	4.82	46.0	386.3	74.6	80.14	21.71	20.03	1.71
1991	36.70	109	371	363	4.04	33.5	362.9	52.8	71.45	21.45	16.54	1.64
1992	34.42	107	356	345	3.94	35.1	402.4	58.4	48.14	21.17	15.99	1.74
1993, prel.	(NA)	92	370	355	4.20	32.0	385.0	46.0	32.00	(NA)	14.23	2.01

NA Not available. [1] Dollars per pound of tantalum content. [2] Domestic market prices for wirebar, 1970, 1975-77; prices for cathode thereafter. [3] Average annual dealer prices. [4] 1970, New York prices; beginning 1975, nationwide delivered basis. [5] Straits tin through 1975; thereafter, composite price. [6] Prime western. Beginning 1975, delivered price. [7] F.o.b. works. [8] Average value at the point of production. Source: U.S. Energy Information Administration, *Annual Energy Review.*

Source: Except as noted, U.S. Bureau of Mines, *Mineral Facts and Problems,* 1980 edition; and *Mineral Commodity Summaries,* annual.

No. 1172. Principal Fuels, Nonmetals, and Metals—U.S. Production, as Percent of World Production: 1980 to 1993

MINERAL	WORLD PRODUCTION					PERCENT U.S. OF WORLD			
	Unit	1980	1985	1990	1993, est.	1980	1985	1990	1993, est.
Fuels: [1]									
Coal	Bil. sh. ton	4.2	4.8	5.2	(NA)	20	18	20	(NA)
Petroleum (crude)	Bil. bbl	21.7	19.6	22	(NA)	14	17	12	(NA)
Natural gas (dry, marketable)	Tril. cu. ft	53.1	62	74.3	(NA)	37	26	24	(NA)
Natural gas plant liquids	Bil. bbl	1.4	1.5	1.8	(NA)	43	38	32	(NA)
Nonmetals:									
Asbestos	1,000 metric tons	4,699	4,249	4,003	3,110	2	1	(D)	(Z)
Barite	1,000 metric tons	7,495	6,067	5,633	5,200	27	11	8	8
Feldspar	1,000 metric tons	3,202	4,039	5,456	5,900	20	16	12	13
Fluorspar	1,000 metric tons	5,006	4,979	5,131	3,660	2	1	1	1
Gypsum	Mil. metric tons	78	87	100	98	14	15	15	16
Mica (incl. scrap)	1,000 metric tons	228	255	215	185	46	49	51	48
Nitrogen, (fixed) - ammonia	Mil. metric tons	74	91	97	93	20	14	13	14
Phosphate rock, gross wt.	Mil. metric tons	144	149	162	131	38	34	29	27
Potash (k_2O equivalent)	Mil. metric tons	28	29	28	22	8	4	6	6
Sulfur, elemental	Mil. metric tons	55	54	58	53	22	22	20	20
Metals, mine basis:									
Bauxite	Mil. metric tons	89	84	109	101	2	1	(D)	(D)
Columbian concentrates (Nb content)	1,000 metric tons	15	15	15	15	(NA)	-	(NA)	-
Copper	1,000 metric tons	7,405	7,988	9,017	9,300	16	14	18	19
Gold	Metric tons	1,219	1,532	2,133	2,290	2	5	14	14
Iron ore	Mil. metric tons	891	861	982	940	8	6	6	6
Lead [2]	1,000 metric tons	3,470	3,431	3,353	3,200	17	12	15	13
Mercury	Metric tons	6,806	6,136	4,523	2,900	16	9	12	2
Molybdenum	1,000 metric tons	111	98	128	108	62	50	48	42
Nickel [2]	1,000 metric tons	779	813	965	826	2	1	(Z)	(Z)
Silver	1,000 metric tons	11	13	16	15	9	9	13	11
Tantalum concentrates (ta content)	Metric tons	544	315	400	290	(NA)	-	(NA)	-
Titanium concentrates:									
Ilmenite	1,000 metric tons	3,726	3,457	4,072	3,300	14	(D)	(D)	(D)
Rutile	1,000 metric tons	436	373	461	430	(D)	(D)	(D)	(D)
Tungsten [2]	1,000 metric tons	52	47	43	26	5	2	14	(D)
Vanadium [2]	1,000 metric tons	37	30	31	28	12	(D)	(D)	(D)
Zinc [2]	1,000 metric tons	5,954	6,758	7,184	7,000	6	4	8	8
Metals, smelter basis:									
Aluminum	1,000 metric tons	15,383	15,398	19,292	(NA)	30	23	21	(NA)
Cadmium	1,000 metric tons	18	19	20	(NA)	9	8	8	(NA)
Copper	1,000 metric tons	7,649	8,630	9,472	(NA)	14	14	15	(NA)
Iron, pig	Mil. metric tons	514	499	532	(NA)	12	9	9	(NA)
Lead [3]	1,000 metric tons	5,430	5,641	5,763	(NA)	23	20	23	(NA)
Magnesium [4]	1,000 metric tons	316	325	354	(NA)	49	42	39	(NA)
Raw Steel	Mil. metric tons	717	718	771	(NA)	14	11	12	(NA)
Tin [5]	1,000 metric tons	251	193	223	(NA)	1	2		(NA)
Zinc	1,000 metric tons	6,049	6,786	7,060	(NA)	6	5	5	(NA)

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

Source: Except as noted, U.S. Bureau of Mines, *Annual Reports,* and *Mineral Commodity Summaries,* annual.

No. 1173. Federal Strategic and Critical Materials Inventory: 1980 to 1992

[As of **Dec. 31.** Covers strategic and critical materials essential to military and industrial requirements in time of national emergency. Market values are estimated current trade values of similar materials and not necessarily amounts that would be realized at time of sale]

MINERAL	QUANTITY [1]					VALUE (mil. dol.)			
	Unit	1980	1985	1990	1992	1980	1985	1990	1992
Tin	1,000 metric ton	200	185	169	156	3,158	2,324	962	1,034
Silver	1,000 troy oz	139,500	136,006	92,151	72,502	2,288	801	374	321
Cobalt	Mil. lb	41	53	53	53	1,020	590	443	798
Bauxite [2]	1,000 lg. ton	14,333	17,957	18,033	17,373	583	871	888	318
Manganese [3]	1,000 sh. ton	5,130	4,470	4,017	3,647	599	520	962	753
Tungsten [4]	Mil. lb	97	87	82	82	817	369	253	225
Zinc	1,000 sh. ton	380	378	379	379	317	268	483	388
Titanium	1,000 sh. ton	43	48	37	37	432	405	402	236
Platinum	1,000 troy oz	466	466	453	453	215	154	186	131
Chromium [5]	1,000 sh. ton	804	854	1,074	1,281	773	836	917	943
Diamonds: Stones	Carat 1,000	19,224	12,549	7,777	7,777	349	336	267	62
Industrial, bort.	Carat 1,000	23,693	22,001	17,353	5,077	73	39	16	11

[1] Consists of stockpile and nonstockpile grades and reflects uncommitted balances. [2] Consists of abrasive grade, metallic grade Jamaica, metallic grade Suriname, and refractory. [3] Consists of chemical grade, dioxide battery natural, dioxide battery synthetic, electrolytic, ferro-high carbon, ferro-med. carbon, ferro-silicon, and metal. [4] Consists of carbide powder, ferro, metal powder, and ores and concentrates. [5] Consists of ferro-high carbon, ferro-low carbon, ferro-silicon, and metal.

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

No. 1174. Federal Strategic and Critical Materials—Summary: 1990 to 1993

ITEM	Unit	Tin	Silver	Cobalt	Bauxite	Manganese	Tungsten	Zinc	Titanium	Platinum	Chromium	DIAMONDS Stones	DIAMONDS Industrial bort
Production:													
1990	1,000 metric tons.	[1]13.2	2.1	[1]1.2	(D)	-	(D)	263	24.7	[2]7,740	[1]94	-	[3 4]90.0
1991	1,000 metric tons.	[1]13.1	1.9	[1]1.6	(D)	-	(D)	253	13.4	[2]7,780	[1]90	-	[3 4]90.0
1992	1,000 metric tons.	[1]8.8	1.8	[1]1.6	(D)	-	(D)	272	(D)	[2]8,310	[1]95	-	[3 4]95.0
1993	1,000 metric tons.	[1]8.5	1.7	[1]1.6	(D)	-	(D)	255	(D)	[2]8,300	[1]88	-	[3 4]100.3
Imports:													
1990	1,000 metric tons.	33.8	3.4	6.4	12,987	307	6.4	723	1.1	[2]125,354	346	[4]11.0	[4]85.4
1991	1,000 metric tons.	29.1	4.2	6.9	12,305	234	7.8	637	0.6	[2]125,661	309	[4]7.6	[4]70.0
1992	1,000 metric tons.	27.3	5.0	5.8	11,372	247	2.5	740	0.7	[2]132,006	324	[4]9.8	[4]97.3
1993	1,000 metric tons.	33.0	4.5	5.7	11,860	185	2.0	682	1.0	[2]143,000	342	[4]5.5	[4]115.0
Export:													
1990	1,000 metric tons.	0.7	1.8	1.3	64	70	0.1	128	[5]15.8	[2]55,044	14	[4]1.7	[4]71.0
1991	1,000 metric tons.	1.0	1.7	1.5	58	66	(6)	112	[5]12.1	[2]39,624	31	[4]2.9	[4]78.8
1992	1,000 metric tons.	1.9	1.8	1.4	68	13	(6)	120	[5]8.0	[2]57,829	16	[4]5.6	[4]83.6
1993	1,000 metric tons.	2.3	1.7	0.9	90	14	(6)	130	[5]7.3	[2]86,000	18	[4]3.7	[4]96.1
Consumption:													
1990	1,000 metric tons.	45.5	[7]4.4	7.6	[8]4,570	497	8.4	992	[9]23.2	[2]117,043	439	[4]9.8	[4]112.7
1991	1,000 metric tons.	48.7	[7]3.8	7.8	[8]4,609	472	11.8	933	[9]13.6	[2]111,798	377	[4]5.0	[4]89.1
1992	1,000 metric tons.	43.6	[7]4.1	6.5	[8]4,863	438	7.5	1,035	[9]14.2	[2]109,469	416	[4]4.3	[4]121.9
1993	1,000 metric tons.	45.9	[7]4.0	6.3	[8]4,500	450	6.8	1,120	[9]15.8	[2]112,300	488	[4]1.8	[4]134.4
Net Import reliance:													
1990	Percent	71.0	([10])	84.0	98	100	81.0	41	([11])	88	79	95.0	13.0
1991	Percent	74.0	([10])	80.0	100	100	91.0	24	4.0	90	76	94.0	([11])
1992	Percent	80.0	([10])	75.0	100	100	86.0	30	(D)	87	77	98.0	19.0
1993	Percent	81.0	([10])	75.0	100	100	84.0	26	(D)	88	82	95.0	14.0
Stocks, end of year:													
1990	1,000 metric tons.	17.3	9.2	3.2	2,300	379	1.1	87	3.3	[2]30,324	125	(NA)	(NA)
1991	1,000 metric tons.	13.8	9.4	2.4	2,600	275	1.8	79	2.9	[2]24,313	118	(NA)	(NA)
1992	1,000 metric tons.	10.7	10.1	1.8	2,300	276	0.7	75	1.9	[2]26,946	118	(NA)	(NA)
1993	1,000 metric tons.	10.0	9.0	2.2	2,600	260	0.7	77	2.9	[2]24,000	117	(NA)	(NA)
World production:													
1990	1,000 metric tons.	221.7	16.2	35.9	108,609	25,252	51.8	7,184	100.8	[2]291,015	12,968	([12])	[4]58.8
1991	1,000 metric tons.	202.7	15.7	26.8	108,157	21,213	41.9	7,170	56.3	[2]288,338	13,445	([12])	[4]55.2
1992	1,000 metric tons.	179.5	15.3	21.9	103,625	19,929	31.6	7,137	38.6	[2]280,889	10,896	([12])	[4]55.7
1993	1,000 metric tons.	175.0	14.9	17.4	101,000	20,400	25.5	7,000	37.2	[2]273,000	10,000	([12])	[4]55.7

- Represents or rounds to zero. D Withheld to avoid disclosure of individual company data. NA Not available. [1] Production from scrap or secondary production. [2] Kilograms. [3] Manufactured diamond bort, grit, and powder and dust. [4] Million carats. [5] All metal forms. [6] Less than 50 metric tons. [7] Apparent demand. [8] Includes alumina. [9] Reported consumption. [10] Net importer; however, changes in unreported investor stocks preclude calculation of a meaningful net import reliance. [11] Net exporter. [12] Included with bort production; data not separable.

Source: U.S. Bureau of Mines, *Annual Reports*, and *Mineral Commodity Summaries*, annual.

No. 1175. Selected Mineral and Metal Products—Quantity and Value of Imports and Exports: 1989 to 1992

[Imports represent imports for consumption. Exports include shipments under foreign aid programs. Beginning 1989, import and export data are not necessarily comparable to prior data due to change in tariff schedule to Harmonized System]

PRODUCT	QUANTITY					VALUE (mil. dol.)			
	Unit	1989	1990	1991	1992	1989	1990	1991	1992
IMPORTS									
Petroleum (crude) [1]	Mil. bbls.	2,128	2,222	2,124	(NA)	35,041	43,833	37,123	(NA)
Gem stones: Diamonds	Mil. carats	10.1	7.5	8.5	9.4	4,358	3,955	3,992	4,144
Ores and concentrates:									
Chromium (Cr_2O_3 content)	1,000 metric tons	237	134	94	99	44	22	15	15
Copper	1,000 metric tons	46.5	91.5	60.8	102.1	51	131	69	125
Iron	Mil. metric tons	19.6	18.1	13.3	12.5	522	560	437	396
Tungsten	1,000 metric tons	7.9	6.4	7.8	2.5	45	31	43	16
Metals:									
Aluminum	1,000 metric tons	923	960	1,025	1156	1,898	1,597	1,428	1,501
Cobalt [2]	1,000 metric tons	5.4	6.0	6.4	5.3	92	107	158	246
Copper refined ingots, etc.	1,000 metric tons	300	262	289	289	854	675	685	660
Gold (refined bullion)	Metric tons	97	65	147	141	1,199	795	1,722	1,568
Iron and steel products (major)	Mil. metric tons	18.1	17.8	16.2	17.4	10,649	11,612	11,962	10,977
Platinum group [3]	Metric tons	113	125	126	132	1,382	1,906	1,743	1,484
Silver (refined bullion)	Metric tons	3,062	2,698	2,525	2,662	579	437	339	341
Zinc: Blocks, pigs, slabs	1,000 metric tons	712	632	549	(NA)	1,184	992	620	(NA)
EXPORTS									
Fuels: [1]									
Bituminous coal	Mil. sh. tons	90.8	95.3	98.4	(NA)	4,243	4,464	4,588	(NA)
Petroleum (crude)	Mil. bbls.	3.8	8.0	2.7	(NA)	62.1	198.6	54.1	(NA)
Nonmetallic minerals:									
Gem stones: Diamonds	Mil. carats	1.1	1.2	1.8	4	1,244	1,433	1,363	1,450
Nitrogen compounds (maj.)	Mil. metric tons	12.5	11.9	13.9	12.8	(NA)	(NA)	(NA)	(NA)
Phosphatic fertilizers [4]	Mil. metric tons	9.6	9.2	11.5	10.3	1,760	1,515	1,974	(NA)
Metals:									
Aluminum: Ingots, slabs, crude	1,000 metric tons	593	684	793	604	1,260	1,169	1,274	843
Plates, sheets, bars, etc	1,000 metric tons	416	419	489	534	1,196	1,278	1,384	1,416
Gold (refined bullion)	Metric tons	124	141	174	257	1,490	1,719	2,039	2,877
Iron and steel products (major)	Mil. metric tons	4.7	4.7	6.6	4.7	2,582	4,665	5,753	5,374
Magnesium [5]	1,000 metric tons	56.6	51.8	55.2	52	170	164	150	132
Molybdenum [6]	Metric tons	253	180	88	74	3	2	1	1
Silver (refined bullion)	Metric tons	430	736	787	911	78	120	115	126
Scrap exports:									
Aluminum	1,000 metric tons	575	537	461	295	769	719	542	300
Iron and steel	Mil. metric tons	11.3	11.7	9.5	9.4	1,785	1,653	1,253	1,113

NA Not available. [1] Source: U.S. Bureau of the Census, *U.S. Imports for Consumption* and *General Imports, TSUSA Commodity and Country*, FT 246, annual; and *U.S. Exports, Schedule B Commodity and Country*, FT 446, annual; 1989 and 1990, *U.S. Exports of Merchandise* and *U.S. Imports of Merchandise* compact discs, December issues. [2] Includes unwrought metal, waste and scrap. [3] Unwrought and semimanufactured. [4] Superphosphates and ammonium phosphates. [5] Metal and alloys, scrap, semimanufactured forms. [6] Metals and alloys, crude and scrap.

Source: Except as noted, U.S. Bureau of Mines, *Minerals Yearbook, 1984* and *1988-91*; and *Annual Reports, 1992*.

No. 1176. Mineral Industries—Lost Workday Injuries and Fatalities: 1985 to 1992

[Excludes office workers. Lost workday injuries are nonfatal occurrences that result in days away from work, days of restricted work activity or a permanent disability. Data for all years includes injuries to independent contractors at mine sites. Rates for the noncoal industries are based only on employment and hours worked by mine employees. See also *Historical Statistics, Colonial Times to 1970*, series M 271-286]

ITEM	COAL MINING			QUARRYING; RELATED INDUSTRY [1]			METAL; NONMETAL MINING [2]		
	1985	1990	1992	1985	1990	1992	1985	1990	1992
Injuries, total	9,073	12,226	9,256	2,545	3,794	2,964	2,212	3,778	2,847
Fatal	68	66	54	26	18	18	22	26	16
Rate per million work-hours:									
Fatal	0.20	0.22	0.21	0.19	0.13	0.14	0.17	0.17	0.11
Nonfatal	26.6	41.4	35.8	18.5	28.1	23.7	16.8	24.5	19.8
Fatalities per 1,000 employed [3]	0.36	0.41	0.38	0.37	0.27	0.28	0.31	0.34	0.22

[1] Includes cement. [2] Nonmetal mines exclude extraction of Frasch process sulfur. [3] Average number of persons at work each day mines were active.

Source: U.S. Mine Safety and Health Administration, Denver, CO, unpublished data.

No. 1177. Net U.S. Imports of Selected Minerals and Metals as Percent of Apparent Consumption, 1980 to 1993, and by Major Foreign Sources

[Percent, based on net imports which equal the difference between imports and exports plus or minus Government stockpile and industry stock changes]

MINERAL	1980	1990	1991	1992	1993, est.	Rank of major foreign sources, 1989-92
Columbium	100	100	100	100	100	Brazil, 68%; Canada, 24%; Germany 4%
Manganese	98	100	100	100	100	So. Africa, 25%; France, 14%; Brazil, 12%
Mica (sheet)	100	100	100	100	100	India, 63%; Belgium, 21%; Brazil, 3%
Strontium	100	100	100	100	100	Mexico, 91%; Germany, 7%
Bauxite [1]	94	98	100	100	100	Australia, 40%; Jamaica, 19%; Guinea, 18%
Asbestos	78	90	95	95	95	Canada, 98%; South Africa, 1%
Platinum group	87	88	90	87	88	So. Africa, 50%; U. K., 15%; Russia, 13%.
Tantalum	90	86	86	85	86	Germany, 37%; Australia, 14%; Canada, 8%
Cobalt	93	84	80	75	75	Zambia, 26%; Zaire, 21%; Canada, 18%
Chromium	91	79	76	77	82	So. Africa, 47%; Turkey, 14%; Zimbabwe, 10%
Tungsten	53	81	91	86	84	China, 49%; Bolivia, 8%; Peru, 7%
Nickel	76	69	67	61	64	Canada, 54%; Norway, 16%; Australia, 8%
Tin	79	71	74	80	81	Brazil, 24%; Bolivia, 22%; China, 16%
Barite	44	69	70	52	58	China, 76%; India, 19%; Mexico, 1%.
Potash	65	68	67	67	71	Canada, 92%; Israel, 3%; former U.S.S.R., 2%
Antimony	47	51	53	60	57	China, 60%; Mexico, 10%; So. Africa, 10%
Cadmium	55	62	48	49	66	Canada, 34%; Mexico, 17%; Australia, 8%
Selenium	59	46	50	48	46	Canada, 37%; Japan, 16%; Belgium, 14%
Petroleum [2,3]	37	42	40	(NA)	(NA)	(NA)
Zinc	60	[4]41	[4]24	[4]30	[4]26	Canada, 61%; Mexico, 11%; Peru, 6%
Gypsum	35	36	31	31	29	Canada, 70%; Mexico, 23%; Spain, 6%.
Iron ore	25	21	11	12	12	Canada, 52%; Brazil, 24%; Venezuela, 19%
Iron and steel	13	13	12	13	12	EEC [5], 30%; Canada, 19%; Japan, 18%
Sulfur	14	15	19	20	15	Canada, 60%; Mexico, 36%.
Natural gas [3]	5	8	8	(NA)	(NA)	(NA)
Copper	16	3	(6)	2	6	Canada, 49%; Chile, 18%; Mexico, 15%
Aluminum	(6)	(6)	(6)	1	16	Canada, 79%; Venezuela, 6%; Mexico, 2%
Silver	7	(NA)	(NA)	(NA)	(NA)	Mexico, 35%; Canada, 27%; United Kingdom, 9%
Mercury	27	(NA)	(NA)	(NA)	(NA)	Spain, 44%; Canada, 42%; Germany, 12%
Titanium	32	(D)	(D)	(D)	(D)	South Africa, 40%; Australia, 39%
Vanadium	35	(D)	(D)	(D)	(D)	So. Africa, 35%; EC, 11%; So. Amer.& Mexico, 21%

D Withheld to avoid disclosure. NA Not available. [1] Includes alumina. [2] Includes crude and products. [3] Source: Energy Information Administration, *Annual Energy Review*, and and *Monthly Energy Review*. [4] 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%; 1991, 61%; and 1992, 64%. [5] European Economic Community. [6] Net exports.

Source: Except as noted, U.S. Bureau of Mines, *Mineral Commodity Summaries;* import and export data from U.S. Bureau of the Census.

No. 1178. Federal Offshore Leasing, Exploration, Production, and Revenue: 1980 to 1992

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

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992
Tracts offered	Number	483	15,754	10,724	10,926	33,376	11,013	10,459	16,800	9,618
Tracts leased	Number	218	667	142	640	1,856	1,049	825	676	204
Acres offered	1,000	2,563	87,029	58,670	59,762	85,366	60,096	56,788	80,288	52,380
Acres leased	1,000	1,134	3,512	734	45,075	10,040	5,580	4,263	3,416	1,021
Bonus paid for leased tracts	Bil. dol.	4.2	1.5	0.2	0.5	1.2	0.6	0.6	0.4	0.1
New wells being drilled:										
Active	Number	191	195	95	142	116	123	120	64	104
Suspended	Number	739	348	279	265	289	361	266	249	180
Wells completed	Number	9,638	12,285	12,536	12,736	12,827	12,938	13,167	13,184	13,209
Wells plugged and abandoned	Number	8,057	10,487	11,909	12,373	13,164	13,846	14,677	15,430	16,348
Revenue, total [1]	Bil. dol.	6.4	5.2	2.8	2.9	3.4	2.8	3.3	2.8	2.5
Bonuses	Bil. dol.	4.2	1.5	0.2	0.5	1.2	0.6	0.6	0.4	0.1
Oil and gas royalties [1]	Bil. dol.	2.1	3.6	2.6	2.3	2.1	2.1	2.6	2.3	2.3
Rentals	Bil. dol.	(Z)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Production, value [2]	Bil. dol.	13.1	22.2	15.7	14.6	12.9	13.0	16.5	14.2	14.5
Crude oil	Bil. dol.	4.8	9.6	5.8	5.6	4.2	4.4	5.9	5.2	5.3
Condensate	Bil. dol.	0.4	1.0	0.7	0.7	0.7	0.8	1.1	1.1	1.0
Natural gas	Bil. dol.	7.9	11.5	9.3	8.1	7.9	7.8	9.5	7.9	8.2
Production: [2]										
Crude oil	Mil. bbls.	259	352	350	325	279	260	274	263	301
Condensate	Mil. bbls.	19	37	39	41	41	45	51	52	52
Natural gas	Bil. cu. ft	4,641	4,000	3,949	4,425	4,310	4,200	5,093	4,516	4,685

Z Less than $50 million. [1] Includes condensate royalties. [2] Production value is value at time of production, not current value.

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

No. 1179. Petroleum Industry—Summary: 1980 to 1992

ITEM	Unit	1980	1985	1986	1987	1988	1989	1990	1991	1992, est.
Crude oil producing wells (Dec. 31)	1,000	548	647	623	620	612	603	602	614	594
Daily output per well	Bbl.	15.9	13.9	13.9	13.5	13.5	12.6	12.2	12.1	12.0
Completed wells drilled, total	1,000	70	70	40	36	32	28	30	25	19
Crude oil	1,000	32	35	19	16	13	10	12	11	8
Gas	1,000	17	14	8	8	8	9	10	9	7
Dry	1,000	20	21	13	12	10	8	8	5	4
Crude oil production, total	Mil. bbl.	3,146	3,275	3,168	3,047	2,979	2,785	2,685	2,707	2,625
Value at wells	Bil. dol.	67.9	78.9	39.6	46.9	37.5	44.1	53.7	44.7	41.8
Average price per barrel	Dollars	21.59	24.09	12.51	15.40	12.58	15.86	20.03	16.54	15.98
Refinery input of crude oil	Mil. bbl.	4,934	4,381	4,641	4,692	4,848	4,891	4,895	4,855	4,909
Imports: Crude oil	Mil. bbl.	1,926	1,168	1,525	1,706	1,869	2,133	2,151	2,111	2,223
Refined petroleum products	Mil. bbl.	603	681	747	731	840	809	775	500	471
Import value	Mil. dol.	74,440	50,370	34,790	41,500	39,980	49,030	60,680	50,070	50,530
Export value	Mil. dol.	2,870	5,130	3,890	3,930	2,800	2,860	4,370	4,680	4,280
Operable refineries	Number	319	223	216	219	213	204	205	202	199
Capacity (Jan. 1)	Mil. bbl.	6,584	5,716	5,643	5,681	5,825	5,714	5,683	5,723	5,731
Output	Mil. bbl.	5,352	5,019	5,301	5,339	5,498	5,539	5,570	5,933	6,050
Utilization rate	Percent	75.4	77.6	82.9	83.1	84.7	86.6	87.1	86.0	86.6
Proved reserves	Bil. bbl.	29.8	28.4	26.9	27.3	26.8	26.5	26.3	24.7	23.7

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

No. 1180. Crude Petroleum and Natural Gas Wells Drilled—Summary: 1980 to 1992

[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	1985	1986	1987	1988	1989	1990	1991	1992
Wells drilled	Number	62,011	67,821	37,173	33,041	29,741	26,693	28,513	27,194	22,388
Offshore	Number	1,272	1,247	698	709	866	746	704	718	440
Footage drilled	Mil. ft.	296.0	314.5	176.3	157.4	150.2	131.5	143.8	138.7	121.9
Drilling cost	Mil. dol.	22,800	23,697	13,552	9,239	10,550	9,669	10,937	11,461	8,566
Average depth per well	Feet	4,773	4,637	4,742	4,762	5,051	4,925	5,043	5,100	5,445
Average cost per well	$1,000	368	349	365	280	355	362	384	421	383
Offshore	$1,000	3,024	4,073	4,004	2,896	3,112	3,197	3,112	3,550	3,223
Average cost per foot	Dollars	77.02	75.35	76.88	58.71	70.23	73.55	76.07	82.64	70.27

Source: American Petroleum Institute, *Joint Association Survey of Drilling Costs,* annual.

No. 1181. Domestic Motor Gasoline Supply: 1980 to 1993

[In 1,000 barrels per day, except as noted]

ITEM	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Supply [1]	6,579	6,693	6,831	7,034	7,206	7,336	7,328	7,235	7,188	7,268	7,483
Production	6,506	6,453	6,419	6,752	6,841	6,956	6,963	6,959	6,975	7,058	7,351
Net imports	140	299	381	326	384	405	369	342	297	294	249
Stocks (mil. bbl.) [2]	261	243	223	233	226	228	213	220	219	216	226

[1] Production plus net imports less net increase in primary stocks. [2] End of year, includes motor gasoline blending components.

Source: U.S. Energy Information Administration, *Monthly Energy Review.*

No. 1182. Natural Gas Plant Liquids—Production and Value: 1970 to 1992

[Barrels of 42 gallons. See also *Historical Statistics, Colonial Times to 1970,* series M 143-146]

ITEM	Unit	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Field production [1]	Mil. bbl	606	596	576	587	582	595	564	566	606	621
Pentanes plus	Mil. bbl	197	149	126	103	106	111	113	112	118	121
Liquefied petroleum gases	Mil. bbl	400	444	441	479	474	483	451	454	488	500
Natural gas processed	Tril. cu. ft.	19	18	15	13	13	13	13	15	16	16

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

Source: Through 1975, U.S. Bureau of Mines, *Minerals Yearbook;* thereafter, U.S. Energy Information Administration, *Energy Data Reports, Petroleum Statement Annual, Petroleum Supply Annual,* and *Natural Gas Annual.*

No. 1183. World Crude Oil Production: 1980 to 1992

[In thousands of barrels]

COUNTRY	1980	1985	1986	1987	1988	1989	1990	1991
Total	**59,599**	**53,981**	**56,601**	**58,662**	**59,773**	**60,471**	**60,105**	**60,255**
Algeria	1,106	1,037	1,048	1,040	1,095	1,175	1,230	1,217
Iraq	2,514	1,433	2,079	2,685	2,897	2,040	305	450
Kuwait	1,656	1,023	1,585	1,492	1,783	1,175	190	1,029
Libya	1,787	1,059	972	1,175	1,150	1,375	1,483	1,483
Qatar	472	301	293	346	380	406	395	396
Saudi Arabia	9,900	3,388	4,265	5,086	5,064	6,410	8,115	8,438
United Arab Emirates	1,709	1,193	1,541	1,565	1,860	2,117	2,386	2,325
Indonesia	1,577	1,325	1,343	1,342	1,409	1,462	1,592	1,566
Iran	1,662	2,250	2,298	2,240	2,810	3,088	3,312	3,429
Nigeria	2,055	1,495	1,341	1,450	1,716	1,810	1,892	1,982
Venezuela	2,168	1,677	1,752	1,903	1,907	2,137	2,375	2,334
Canada	1,435	1,471	1,535	1,616	1,560	1,553	1,548	1,598
Mexico	1,936	2,745	2,548	2,512	2,520	2,553	2,680	2,668
United Kingdom	1,622	2,530	2,406	2,232	1,802	1,820	1,797	1,825
United States	8,597	8,971	8,349	8,140	7,613	7,355	7,417	7,171
China	2,114	2,505	2,690	2,730	2,757	2,774	2,835	2,838
U.S.S.R (former)	11,706	11,585	11,985	11,978	11,625	10,880	9,887	8,388
Other	5,408	7,821	8,416	8,971	9,617	10,070	10,373	10,820
Arab OPEC	*19,144*	*9,434*	*11,783*	*13,389*	*14,229*	*14,698*	*14,104*	*15,338*
Total OPEC	*26,781*	*16,353*	*18,692*	*20,483*	*22,279*	*23,465*	*23,569*	*24,947*

Source: U. S. Energy Information Administration, *Monthly Energy Review.*

No. 1184. World Natural Gas Production: 1984 to 1992

[In quadrillion Btu's]

REGION AND COUNTRY	1984	1985	1986	1987	1988	1989	1990	1991	1992 [1]
World total	**58.33**	**60.62**	**61.89**	**64.93**	**68.07**	**70.56**	**72.00**	**73.96**	**74.27**
North America	21.54	20.80	20.13	20.88	21.87	22.34	22.99	23.37	23.76
Canada	2.61	2.98	2.77	3.00	3.47	3.67	3.72	4.18	4.56
Mexico	1.00	0.92	0.89	0.83	0.89	0.89	0.91	0.90	0.89
United States	17.93	16.91	16.47	17.05	17.52	17.78	18.36	18.28	18.31
Central and South America [2]	1.78	1.84	1.86	1.82	2.04	2.21	2.22	2.22	2.21
Argentina	0.46	0.47	0.51	0.49	0.62	0.67	0.59	0.60	0.57
Columbia	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.18	0.17
Trinidad and Tobago	0.20	0.23	0.16	0.15	0.16	0.17	0.19	0.21	0.20
Venezuela	0.69	0.70	0.77	0.75	0.79	0.88	0.98	0.94	0.96
Western Europe [2]	6.03	6.25	6.26	6.59	6.28	6.47	6.47	7.56	7.60
France	0.20	0.17	0.13	0.13	0.10	0.10	0.09	0.12	0.13
Germany	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	0.60	0.60
Italy	0.50	0.52	0.58	0.59	0.60	0.62	0.62	0.62	0.65
Netherlands	2.52	2.59	2.44	2.53	2.33	2.41	2.41	2.72	2.73
Norway	1.06	1.07	1.09	1.22	1.10	1.23	1.09	1.05	1.07
United Kingdom	1.51	1.61	1.70	1.79	1.72	1.68	1.86	2.01	1.98
Yugoslavia (former)	0.08	0.09	0.10	0.09	0.12	0.11	0.10	0.10	0.10
Eastern Europe [2]	21.31	23.11	24.54	25.61	27.08	27.96	28.34	28.04	26.85
Hungary	0.27	0.29	0.28	0.25	0.25	0.24	0.18	0.20	0.19
Poland	0.22	0.23	0.21	0.20	0.21	0.19	0.14	0.15	0.15
Romania	1.50	1.43	1.50	1.48	1.22	1.27	1.16	0.98	0.88
U.S.S.R. (former)	19.27	21.12	22.50	23.63	25.34	26.20	26.82	26.68	(X)
Russia	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	21.08
Turkmenistan	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	1.98
Ukraine	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	0.69
Uzbekistan	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	1.32
Middle East [2]	2.10	2.50	2.76	3.18	3.53	3.87	3.89	3.89	4.31
Bahrain	0.14	0.17	0.19	0.23	0.17	0.19	0.21	0.24	0.26
Iran	0.50	0.63	0.57	0.60	0.75	0.83	0.88	0.97	0.93
Kuwait	0.15	0.15	0.18	0.20	0.25	0.30	0.19	0.02	0.23
Qatar	0.22	0.20	0.20	0.21	0.24	0.23	0.29	0.22	0.22
Saudi Arabia	0.65	0.75	0.93	0.99	1.08	1.10	1.13	1.18	1.26
United Arab Emirates	0.36	0.51	0.56	0.71	0.72	0.85	0.82	0.96	1.03
Africa [2]	1.91	1.97	1.99	2.23	2.32	2.53	2.60	2.82	2.92
Algeria	1.44	1.44	1.41	1.62	1.68	1.81	1.90	2.05	2.09
Egypt	0.15	0.18	0.21	0.23	0.26	0.29	0.30	0.34	0.36
Libya	0.17	0.19	0.21	0.20	0.20	0.22	0.23	0.25	0.26
Nigeria	0.10	0.11	0.12	0.14	0.14	0.17	0.14	0.18	0.20
Far East and Oceania [2]	3.66	4.16	4.35	4.63	4.96	5.18	5.48	6.06	6.62
Australia	0.42	0.47	0.50	0.51	0.52	0.59	0.68	0.80	0.88
Bangladesh	0.09	0.10	0.11	0.13	0.16	0.16	0.16	0.17	0.19
Brunei	0.34	0.33	0.33	0.34	0.34	0.34	0.35	0.31	0.31
China	0.46	0.48	0.51	0.52	0.53	0.53	0.53	0.55	0.52
India	0.12	0.14	0.19	0.23	0.31	0.33	0.41	0.46	0.48
Indonesia	1.11	1.29	1.24	1.35	1.42	1.49	1.60	1.81	2.00
Japan	0.09	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Malaysia	0.34	0.45	0.55	0.57	0.60	0.63	0.68	0.77	0.95
New Zealand	0.11	0.13	0.16	0.15	0.19	0.18	0.14	0.19	0.20
Pakistan	0.34	0.36	0.38	0.41	0.43	0.46	0.40	0.52	0.56
Thailand	0.07	0.13	0.12	0.14	0.20	0.19	0.22	0.25	0.27

NA Not available. X Not applicable. [1] Preliminary. [2] Includes countries not shown separately.
Source: U. S. Energy Information Administration, *International Energy Annual.*

No. 1185. U.S. Petroleum Balance: 1980 to 1992

[In millions of barrels]

ITEM	1980	1985	1987	1988	1989	1990	1991	1992
Petroleum products supplied	**6,242**	**5,740**	**6,083**	**6,308**	**6,324**	**6,201**	**6,101**	**6,234**
New supply of products	6,249	5,676	6,053	6,290	6,270	6,259	6,110	6,206
Production of products	5,765	5,363	5,680	5,849	5,874	5,934	5,933	6,050
Crude input to refineries	4,934	4,381	4,692	4,835	4,891	4,894	4,855	4,909
Oil, field production	3,146	3,275	3,047	2,979	2,779	2,685	2,707	2,624
Alaska	592	666	716	738	684	647	656	627
Lower 48 States	2,555	2,608	2,331	2,241	2,095	2,037	2,050	1,997
Net imports	1,821	1,094	1,651	1,807	2,081	2,112	2,068	2,194
Imports (gross excluding SPR) [1]	1,910	1,125	1,679	1,845	2,112	2,142	2,111	2,223
SPR [1] Imports	16	43	27	19	20	10	-	4
Exports	−105	75	55	57	52	40	42	32
Other sources	33	12	7	57	32	98	80	90
Natural gas plant liquids (NGPL), supply	577	604	585	593	563	574	613	628
Other liquids	253	378	403	418	420	465	466	513
Net imports of refined products	484	313	373	441	396	326	177	156
Imports	578	523	596	681	656	598	500	471
Exports	94	210	223	240	260	272	323	315
Stock withdrawal, refined products	−7	64	30	17	53	−59	−10	28
Ending stocks, all oils	1,392	1,519	1,607	1,597	1,561	1,621	1,617	1,592
Crude oil and lease condensate	358	321	349	330	341	323	325	318
Strategic Petroleum Reserve (SPR) [1]	108	493	541	560	580	586	569	575
Unfinished oils	124	107	93	100	(NA)	(NA)	(NA)	(NA)
Gasoline blending components	17	33	38	39	(NA)	(NA)	(NA)	(NA)
Pentanes plus	(NA)	8	7	7	(NA)	(NA)	(NA)	(NA)
Finished refined products	785	557	580	562	580	712	724	(NA)
PRODUCT TYPE SUPPLIED								
Total products	**6,242**	**5,740**	**6,083**	**6,326**	**6,324**	**6,201**	**6,101**	**6,234**
Finished motor gasoline	2,407	2,493	2,630	2,678	2,675	2,641	2,623	2,660
Distillate fuel oil	1,049	1,047	1,086	1,140	1,152	1,103	1,066	1,090
Residual fuel oil	918	439	462	5,030	500	449	423	401
Liquified petroleum gases [2]	414	584	588	604	609	568	616	642
Pentanes plus, other liquids, etc	1,454	1,155	1,304	1,369	1,378	1,431	1,365	70
Crude oil	(NA)	22	12	15	10	9	7	5

-Represents zero. NA Not available. [1] SPR=Strategic petroleum reserve. (See table 940.) [2] Includes ethane.

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

No. 1186. Crude Petroleum and Natural Gas—Production, by State: 1985 to 1992

[See also *Historical Statistics, Colonial Times to 1970,* series M 138, M 142, and M 147-161]

STATE	CRUDE PETROLEUM						NATURAL GAS MARKETED PRODUCTION [1]					
	Quantity (mil. bbl.)			Value (mil. dol.)			Quantity (bil. cu. ft.)			Value (mil. dol.)		
	1985	1990	1992	1985	1990	1992	1985	1990	1992	1985	1990	1992
Total [2]	**3,274**	**2,685**	**2,625**	**78,684**	**53,772**	**41,968**	**17,270**	**18,594**	**18,712**	**43,343**	**31,658**	**32,571**
AL	22	18	19	579	387	347	107	135	355	398	373	814
AK	666	658	627	10,655	10,086	7,180	321	403	444	236	554	625
AR	19	10	10	443	222	178	155	175	202	393	360	435
CA	424	322	305	8,386	5,732	4,139	491	363	366	1,653	857	856
CO	30	31	30	758	722	567	178	243	323	517	377	443
FL	11	6	5	(NA)	(NA)	NA	11	6	7	26	15	17
IL	30	20	19	795	467	372	1	1	(Z)	4	1	1
IN	5	3	3	134	73	58	(Z)	(Z)	(Z)	1	1	(Z)
KS	75	59	54	1,939	1,359	992	528	574	658	671	893	1,013
KY	8	5	5	201	124	103	73	75	80	174	169	153
LA	506	148	143	5,387	3,409	2,718	5,014	5,242	4,914	13,355	9,587	8,502
MI	27	20	16	726	458	296	132	140	195	475	420	528
MS	31	30	25	796	630	421	144	95	92	456	167	150
MT	30	20	18	734	429	316	52	50	54	125	90	87
NE	7	5	5	163	119	96	2	1	1	6	2	2
NM	79	66	70	2,028	1,472	1,298	905	965	1,269	2,370	1,629	2,030
NY	1	(Z)	(Z)	25	9	8	32	25	24	106	55	53
ND	51	39	33	1,307	849	593	73	52	55	138	93	108
OH	15	8	9	361	196	174	182	155	145	560	393	340
OK	163	117	102	4,256	2,690	1,908	1,936	2,258	2,017	4,930	3,548	3,430
PA	5	2	2	114	54	41	150	178	139	474	417	270
TX	889	674	651	23	15,060	11,919	6,053	6,343	6,146	14,097	9,939	10,878
UT	41	23	23	773	524	441	83	146	171	293	249	279
WV	4	2	2	86	43	37	145	178	182	558	568	548
WY	129	103	97	3,061	2,169	1,586	417	736	843	1,252	856	952

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

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

No. 1187. Natural Gas—Supply, Consumption, Reserves, and Marketed Production: 1970 to 1992

[See also *Historical Statistics, Colonial Times to 1970,* series M 147-161]

ITEM	Unit	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
Producing wells (year-end)	1,000	117	130	182	243	242	249	257	262	270	277	276
Production value at wells	Bil. dol	3.7	8.9	32.1	43.2	32.6	29.0	30.3	30.6	31.8	30.3	32.6
Avg. per 1,000 cu. ft	Dollars	0.17	0.44	1.59	2.51	1.94	1.67	1.69	1.69	1.71	1.64	1.74
Proved reserves [1]	Tril. cu. ft	291	226	199	193	192	187	166	167	169	167	165
Marketed production [2]	Tril. cu. ft	21.9	20.1	20.2	17.3	16.9	17.4	17.9	18.1	18.6	18.6	(NA)
Drawn from storage	Tril. cu. ft	1.5	1.8	2.0	2.4	1.8	1.9	2.3	2.9	2.0	2.8	2.7
Imports [3]	Tril. cu. ft	0.8	1.0	1.0	1.0	0.8	1.0	1.3	1.4	1.5	1.8	2.1
Consumption, total	Tril. cu. ft	21.1	19.5	19.9	17.3	16.2	17.2	18.0	18.8	18.7	19.1	19.7
Residential	Tril. cu. ft	4.8	4.9	4.8	4.4	4.3	4.3	4.6	4.8	4.4	4.6	4.7
Commercial [4]	Tril. cu. ft	2.4	2.5	2.6	2.4	2.3	2.4	2.7	2.7	2.6	2.7	2.8
Industrial	Tril. cu. ft	9.3	8.4	8.2	6.9	6.5	7.1	7.5	7.9	8.3	8.4	8.8
Lease and plant fuel	Tril. cu. ft	1.4	1.4	1.0	1.0	0.9	1.2	1.1	1.1	1.2	1.2	1.2
Other industrial	Tril. cu. ft	7.9	7.0	7.2	5.9	5.6	6.0	6.4	6.8	7.0	7.2	7.6
Electric utilities	Tril. cu. ft	3.9	3.2	3.7	3.0	2.6	2.8	2.6	2.8	2.8	2.8	2.8
Transportation [5]	Tril. cu. ft	0.7	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.7
Extraction losses [6]	Tril. cu. ft	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	(NA)
Exports	Tril. cu. ft	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Additions to storage [7]	Tril. cu. ft	1.9	2.1	2.0	2.2	2.0	1.9	2.2	2.5	2.5	2.7	2.5
World production (dry)	Tril. cu. ft	(NA)	44.1	53.1	62.0	63.3	66.2	69.8	71.9	74.3	74.8	(NA)
U.S. production (dry)	Tril. cu. ft	21.0	19.2	19.4	16.4	16.0	16.5	17.0	17.3	17.8	17.8	17.7
Percent U.S. of world	Percent	56.0	43.6	36.5	26.4	25.3	25.0	24.4	24.0	24.0	23.7	(NA)

NA Not available. [1] Estimated, end of year. Source: 1970-1976; American Gas Association, Arlington, VA, (copyright); thereafter, U.S. Energy Information Administration, *U.S. Crude Oil, Natural Gas,* and *Natural Gas Liquids Reserves, annual.* [2] Marketed production includes gross withdrawals from reservoirs less quantities used for reservoir repressuring and quantities vented or flared. For 1980 and thereafter, it excludes the nonhydrocarbon gases subsequently removed. [3] Includes imports of liquefied natural gas. [4] Includes deliveries to municipalities and public authorities for institutional heating and other purposes. [5] Pipeline fuel and vehicle fuel. [6] Volumetric reduction in natural gas resulting from the extraction of natural gas constituents at natural gas processing plants. [7] Beginning with 1980, includes liquefied natural gas (LNG) storage in above ground tanks.

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. 1188. Liquefied Petroleum Gases—Summary: 1980 to 1992

[In millions of 42-gallon barrels. Includes ethane]

ITEM	1980	1990	1991	1992	ITEM	1980	1990	1991	1992
Production	**561**	**638**	**683**	**720**	**Consumption**	**538**	**568**	**616**	**629**
At natural gas plants	441	456	488	500	Ethane [1]	164	186	208	209
At refineries	121	182	196	222	Propane [1 2]	298	335	358	378
Imports	79	68	54	57	Butane (incl. isobutane) [2]	76	47	50	42
Refinery input	85	107	111	172	Stocks, Dec. 31	116	98	92	98
Exports	9	14	15	18					

[1] Reported consumption of ethane-propane mixtures have been allocated 70 percent ethane and 30 percent propane. [2] Reported consumption of butane-propane mixtures have been allocated 60 percent butane and 40 percent propane.

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

No. 1189. World Coal Trade: 1980 to 1990

[In millions of short tons]

COUNTRIES	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Exporting countries, total [1]	**277.2**	**288.4**	**292.0**	**284.5**	**332.9**	**370.2**	**376.3**	**383.0**	**415.0**	**423.5**	**440.2**
United States	88.7	106.5	106.5	78.2	82.0	93.2	85.5	79.6	94.9	100.8	105.8
Australia	46.6	54.3	48.8	62.3	82.2	96.6	101.3	111.9	109.8	108.5	116.9
South Africa	30.7	33.3	30.5	32.7	40.9	49.8	50.1	46.9	47.4	51.6	54.5
Soviet Union	26.2	22.5	23.0	22.8	22.8	26.5	36.9	39.1	46.0	43.9	42.7
Germany [2]	13.8	13.1	11.2	11.5	12.4	10.5	7.9	6.9	5.5	5.9	6.0
Canada	16.1	17.9	16.6	18.6	26.8	30.3	28.6	29.5	35.0	36.1	34.2
Poland	34.6	16.6	30.6	38.7	47.2	39.7	37.9	34.2	35.5	31.8	61.8
China: Mainland	4.2	4.1	5.1	6.8	7.7	8.6	10.9	14.4	16.2	16.9	19.1
Importing countries, total [1]	**277.2**	**288.4**	**292.0**	**284.5**	**332.9**	**370.2**	**376.3**	**383.0**	**415.0**	**423.5**	**440.2**
Western Europe/Mediterranean	126.9	129.4	126.5	112.9	132.4	152.3	149.0	145.8	146.2	154.7	172.1
Japan	75.6	86.0	86.5	82.8	96.2	103.0	99.6	100.2	111.6	111.7	113.9
Eastern Europe	34.8	30.1	37.0	39.7	39.9	39.1	45.4	44.9	45.1	39.6	30.6
Canada	17.4	16.3	17.3	16.7	20.3	16.1	14.7	15.8	19.3	15.1	15.7

[1] Includes areas not shown separately. [2] Represents United Germany beginning, 1990.

Source: U.S. Energy Information Administration, 1975-84, *Outlook for U.S. Coal Imports;* thereafter, *Annual Prospects for World Coal Trade.*

No. 1190. Coal and Coke—Summary: 1970 to 1992

[Includes coal consumed at mines. Demonstrated coal reserve base for United States on Jan. 1, 1992, was an estimated 476 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. See also *Historical Statistics, Colonial Times to 1970*, series M 93-126]

ITEM	Unit	1970	1980	1985	1988	1989	1990	1991	1992
Coal production, total [1]	**Mil. sh. tons**	**613**	**830**	**884**	**950**	**981**	**1,029**	**996**	**998**
Value	Mil. dol.	3,882	20,453	22,277	20,890	21,330	(NA)	(NA)	(NA)
Anthracite production	Mil. sh. tons	9.7	6.1	4.7	3.6	3.3	3.5	3.4	(NA)
Bituminous coal and lignite: [2]									
Number of mines	Number	5,601	5,598	4,547	3,462	3,429	3,243	2,846	2,746
Production	Mil. sh. tons	603	824	879	947	977	1,026	993	995
Value, total	Mil. dol.	3,774	20,196	22,061	20,828	21,260	22,274	21,598	(NA)
Average per ton	Dollars	6.26	24.52	25.10	22.00	21.76	21.71	21.75	21.03
Exports	Mil. sh. tons	71	90	93	95	101	106	109	103
Value	Mil. dol.	961	4,627	4,465	4,013	4,287	4,510	4,619	(NA)
Imports	1,000 sh. tons	36	1,194	1,952	2,134	2,851	2,699	3,390	3,803
Method of mining:									
Underground	Mil. sh. tons	339	337	350	382	394	425	407	407
Surface	Mil. sh. tons	264	487	529	568	587	605	589	590
Percent of total prod	Percent	43.8	59.1	60.2	59.8	59.8	58.7	59.1	59.1
Value	Mil. dol.	(Z)	30	70	(NA)	(NA)	(NA)	(NA)	(NA)
Consumption [3]	Mil. sh. tons	523	703	818	884	890	895	888	893
Electric power utilities	Mil. sh. tons	320	569	694	758	767	774	772	780
Industrial	Mil. sh. tons	184	126	116	118	118	116	109	107
Productivity average: [4]									
Daily employment	1,000	140	225	169	135	131	131	121	110
Days worked	Number	228	210	204	211	214	216	224	228
Tons per worker:									
Per day	Sh. tons	18.84	16.32	23.13	30.30	31.75	32.90	35.18	37.71
Per year	Sh. tons	4,296	3,427	4,719	6,393	6,795	7,106	7,880	(NA)
Production, by State:									
Alabama	Mil. sh. tons	21	26	28	27	28	29	27	26
Illinois	Mil. sh. tons	65	63	59	59	59	60	60	60
Indiana	Mil. sh. tons	22	31	33	31	34	36	32	31
Kentucky	Mil. sh. tons	125	150	152	158	167	173	159	161
Montana	Mil. sh. tons	3	30	33	39	38	38	38	39
Ohio	Mil. sh. tons	55	39	36	34	34	35	31	30
Pennsylvania	Mil. sh. tons	90	93	71	67	71	71	65	68
Virginia	Mil. sh. tons	35	41	41	46	43	47	42	43
West Virginia	Mil. sh. tons	144	122	128	145	154	169	167	162
Wyoming	Mil. sh. tons	7	95	141	164	172	184	194	190
Other States	Mil. sh. tons	44	140	161	178	182	187	181	189
World production	Mil. sh. tons	3,295	4,103	4,779	5,105	5,252	5,214	4,952	4,975
Coke production [5]	**Mil. sh. tons**	**66.5**	**46.1**	**28.7**	**32.4**	**33.0**	**27.6**	**24.0**	**23.0**
Oven coke [6]	Mil. sh. tons	65.7	46.1	28.7	32.4	33.0	27.6	24.0	23.0
Value of product at plant	Mil. dol.	2,193	6,029	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Coke and breeze	Mil. dol.	1,899	4,784	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Avg. market value per ton	Dollars	28	103	103	(NA)	(NA)	(NA)	(NA)	(NA)
Coal carbonized	Mil. sh. tons	96.5	66.7	41.1	41.9	41.4	38.9	33.9	32.4
Average value per ton	Dollars	12.47	56.26	54.30	47.70	47.50	47.73	48.88	47.9
Yield of coke from coal	Percent	69.1	69.2	69.8	77.3	79.8	71.0	71.0	(NA)

NA Not available. Z Less than $500,000. [1] Includes bituminous coal, lignite, and anthracite. [2] All domestic production data for 1970 are for mines producing 1,000 short tons or more per year; thereafter, data are for all mines. [3] Includes some categories not shown separately. [4] Data for 1970 are for mines producing 1,000 short tons or more per year; thereafter, for mines producing 10,000 short tons more. Beginning 1985, includes anthracite. [5] Includes beehive coke. [6] Prior to 1980, excludes screenings or breeze; thereafter, includes beehive and other nonrecoverable coke-oven operations.

Source: 1970, U.S. Bureau of Mines, *Minerals Yearbook;* thereafter, U.S. Energy Information Administration, *Coal Production*, annual; *Annual Energy Review*, and *Quarterly Coal Report*, and unpublished data.

No. 1191. Uranium Concentrate (U_3O_8) Industry—Summary: 1980 to 1992

[Middle demand case. See table 953. See also *Historical Statistics, Colonial Times to 1970*, series M 266-267]

ITEM	Unit	1980	1984	1985	1986	1987	1988	1989	1990	1991	1992
Production	1,000 sh. tons	21.9	7.4	5.6	6.8	6.5	6.50	6.90	4.4	4.0	2.8
Net imports (U_3O_8)	1,000 sh. tons	−1.1	5.2	3.2	6.4	7.5	6.40	5.60	12.1	9.80	12.3
Utility and Suppliers inventories (U_3O_8 equivalent)	1,000 sh. tons	54.4	[1]74.7	[1]68.3	[1]66.2	[1]64.5	[1]59.1	[1]54.9	45.6	36.70	(NA)
Price (1988 dol./lb. U_3O_8):											
Long-term contract price	Dollars	41.4	26.4	24.7	19.3	18.5	(NA)	(NA)	(NA)	(NA)	(NA)
Spot market price	Dollars	45.0	19.4	17.0	18.1	17.3	14.5	14.2	(NA)	(NA)	(NA)
Delivered price	Dollars	39.9	[2]36.5	[2]33.6	[2]31.9	[2]19.6	[2]25.7	[2]27.8	(NA)	(NA)	(NA)
Capital expenditures (1988 dollars)	Mil. dol.	1,107	43	37	29	63	36	35	(NA)	(NA)	(NA)
Employment	1,000	19.9	3.6	2.4	2.1	2.0	2.10	1.6	1.3	1.0	0.7

NA Not available. [1] Includes natural U_3O_8 (uranium oxide), natural UF_6 (uranium hexafluoride), natural UF_6 under usage agreement, UF_6 at enrichment suppliers, enriched UF_6 and fabricated fuel. [2] Average U.S. contract prices and market price settlements.

Source: U.S. Department of Energy, *Domestic Uranium Mining and Milling Industry*, annual, and *Uranium Industry*, annual.