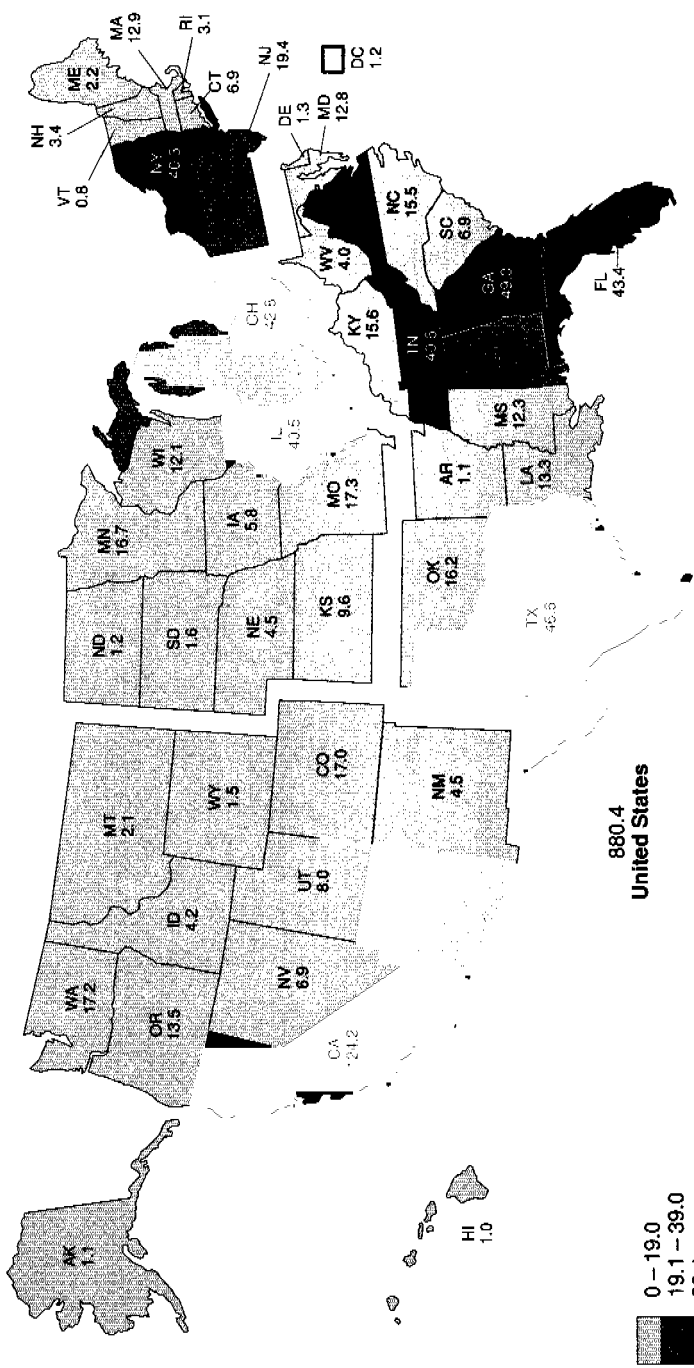
Figure 17.1
Bankruptcy Petitions Filed, by State: 1991
(Thousands)



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 848.

Business Enterprise

This section relates to the place and behavior of the business firm and to business initiative in the American economy. It includes data on the number, type, and size of businesses; financial data of domestic and multinational U.S. corporations and their foreign affiliates; business investment, expenditures, and profits; sales and inventories; and business failures. Additional business data may be found in other sections, particularly 27 and 28.

The principal sources of these data are the *Survey of Current Business,* published by the Bureau of Economic Analysis (BEA); the *Federal Reserve Bulletin,* issued by the Board of Governors of the Federal Reserve System; the annual *Statistics of Income* reports of the Internal Revenue Service (IRS); *The Business Failure Record* issued by The Dun & Bradstreet Corporation, New York; and *Fortune* and *The Fortune Directory,* issued by Time, Inc., New York.

Business firms.—A firm is generally defined as a business organization under a single management and may include one or more establishments (i.e., a single physical location at which business is conducted). The terms firm, business, company, and enterprise are used interchangeably throughout this section. Examples of series where the industrial distribution is based on data collected from establishments are those on capital stock (table 863), those on gross national product by industry (table 674), and those on employment and earnings (section 13). Examples of company-based series are those on business expenditures for new plant and equipment (table 862), those from IRS *Statistics of Income* (tables 835 and 836), and those on corporation profits by industry (tables 872 and 873). A firm doing business in more than one industry is classified by industry according to the major activity of the firm as a whole. The industrial classification is based on the *Standard Industrial Classification (SIC) Manual* (see text, section 13). The IRS concept of a business firm relates primarily to the legal entity used for tax reporting purposes. The IRS *Statistics of Income* reports present data, based on a sample of tax returns before audit, separately for

In Brief

Patents issued in 1990: 46,200
Percent issued to foreign country residents: 47%

Bankruptcies filed in 1991: 880,399
Business: 8%
Nonbusiness: 92%

sole proprietorships, partnerships, and corporations. Data presented are for active enterprises only. A *sole proprietorship* is an unincorporated business owned by one person including large enterprises with many employees and hired managers to the part-time operations in which the owner is the only person involved. A *partnership* is an unincorporated business owned by two or more persons, each of whom has a financial interest in the business. The "persons" could be individuals, estates, trusts, other partnerships or corporations. A *corporation* is a business that is legally incorporated under State laws. The IRS recognizes many types of businesses as corporations, including joint-stock companies, insurance companies, and unincorporated associations such as business trusts, etc. While many corporations file consolidated tax returns, most corporate tax returns represent individual corporations, some of which are affiliated through common ownership or control with other corporations filing separate returns.

Assets and liabilities.—In its annual report, *Statistics of Income, Corporation Income Tax Returns,* the IRS presents balance sheet and income estimates for all active U.S. corporations. The Bureau of the Census issues the *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations* (QFR), which presents quarterly income account and balance sheet data for manufacturing, mining, and trade industries. This report was prepared by the Federal Trade Commission until responsibilities for QFR were transferred to Census beginning with the fourth quarter 1982 report.

One of the most comprehensive measures of the investment position of the business sector (and the only measure adjusted to current replacement cost) is the BEA

capital stock series. See *Survey of Current Business,* January 1992.

Income, profits, dividends, and taxes.—Several agencies, among them IRS and BEA, compile corporate income account data. These data, however, are not comparable because of differing definitions and methods of compilation. A reconciliation of the two can be found in table 8.22 of *Survey of Current Business,* published by BEA. The IRS publishes financial data for all business enterprises. These data appear in *Statistics of Income, Corporation Income Tax Returns* and the *Statistics of Income Bulletin* (partnerships and sole proprietorships). Data on international income and taxes reported by U.S. corporations are also included in the *Statistics of Income Bulletin* and in the periodic *Compendium of Studies of International Income and Taxes.*

Corporate data issued by BEA are a part of its national income and product accounts (see text, section 14). The primary sources for BEA estimates of profits, taxes, dividends, and undistributed profits are the original corporate tax returns submitted to IRS. Various adjustments of IRS data are required by the national income treatment—particularly with respect to profits which would be disclosed if all tax returns were audited: depletion, capital gain or loss, treatment of bad debts, measurement of income received from abroad, and intercorporate dividends—to make the figures comparable with other entries in the national income accounts. For a discussion of two types of adjustments (inventory valuation and capital consumption), see text, section 14. The BEA's corporate profits data also include net earnings of Federal Reserve banks, credit unions, private noninsured pension funds, and several quasi-government credit agencies not included in IRS data.

Sources and uses of corporate funds.—These data (table 832, Federal Reserve Board) show capital requirements of corporations and the manner in which they are financed. Sources of funds should be equal to their uses. Certain discrepancies, however, interfere with this equality due to omission of (1) money accruing to corporations from an excess of sales over purchases of used plant and equipment, (2) transactions in securities held as permanent investments except public offerings, and (3) net purchases of land. Also, the balance sheet data upon which many of the financial flow estimates are based are not fully comparable with the tax-return based estimates of internal sources or the establishment series underlying the figures on inventory change.

Sales, assets, net income, stockholder's equity, and total returns to investors.—**Sales** include service and rental revenues but exclude dividends, interest, and other non-operating revenues. All companies must have derived more than 50 percent of their sales from manufacturing and/or mining. Sales of subsidiaries are included when they are consolidated. **Assets** are those shown at the company's year-end. **Net income** is shown after taxes and after extraordinary credits or charges when any are shown on the income statement. **Stockholder's equity** is the sum of capital stock, surplus, and retained earnings at the company's year-end. Redeemable preferred stock is excluded when its redemption is either mandatory or outside the control of the company, except in the case of cooperatives. **Total returns to investors** include both price appreciation and dividend yield. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur. For further discussion, see Time, Inc., New York, NY, *The Fortune Directories.*

Economic censuses.—The economic censuses constitute comprehensive and periodic canvasses of the Nation's industrial and business activities. The first economic census of the United States was conducted as part of the 1810 decennial census, when inquiries on manufacturing were included with the census of population. Minerals data were collected in 1840. The first censuses of construction and business were taken for 1929. An integrated economic census program was begun for 1954. In that year, the censuses covered the retail and wholesale trades, selected service industries, manufactures, and mineral industries. The economic censuses are taken at 5-year intervals covering years ending in "2" and "7." Special surveys are conducted every 5 years as part of the economic censuses to determine the extent of business ownership by specific minority groups and women.

No. 826. Number of Returns and Business Receipts, by Size of Receipts and Type of Business: 1970 to 1988

[Covers active enterprises only. Figures are estimates based on sample of unaudited tax returns; see Appendix III. The industrial distribution is based on data collected from companies; see text, section 17. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12]

SIZE-CLASS OF RECEIPTS	RETURNS (1,000)					BUSINESS RECEIPTS [1] (bil. dol.)				
	1970	1980	1985	1987	1988	1970	1980	1985	1987	1988
Corporate returns	**1,665**	**2,711**	**3,277**	**3,612**	**3,563**	**1,706**	**6,172**	**8,050**	**9,185**	**9,804**
Under $25,000 [2]	452	557	711	788	818	3	4	5	5	5
$25,000-$49,999	171	208	237	267	228	6	8	9	10	8
$50,000-$99,999	220	323	330	369	350	16	22	24	27	26
$100,000-$499,999	517	926	1,110	1,191	1,134	123	224	278	300	288
$500,000-$999,999	141	280	352	391	409	99	197	249	276	288
$1,000,000 or more	165	418	538	605	623	1,459	5,717	7,484	8,568	9,189
Partnership returns	**936**	**1,380**	**1,714**	**1,648**	**1,654**	**92**	**286**	**349**	**411**	**464**
Under $25,000 [2]	502	638	1,036	1,052	1,045	4	5	4	2	2
$25,000-$49,999	125	182	154	123	120	5	7	6	3	3
$50,000-$99,999	120	184	152	142	151	9	13	11	7	7
$100,000-$499,999	162	290	281	240	234	33	64	61	46	44
$500,000-$999,999	17	48	48	45	50	12	33	34	28	30
$1,000,000 or more	10	37	42	44	54	30	164	234	326	378
Non-farm proprietorship returns [3]	**6,494**	**9,730**	**11,929**	**13,091**	**13,679**	**199**	**411**	**540**	**611**	**672**
Under $25,000 [2]	4,738	6,916	8,250	8,984	9,347	30	44	54	60	64
$25,000-$49,999	746	1,079	1,394	1,559	1,601	27	39	50	55	57
$50,000-$99,999	562	836	1,094	1,172	1,226	40	59	77	83	88
$100,000-$499,999	420	796	1,060	1,232	1,337	76	159	213	251	277
$500,000-$999,999	21	74	89	102	118	14	50	61	69	82
$1,000,000 or more	7	29	41	43	50	12	60	85	93	105

[1] Excludes investment income except for partnerships (through 1985) and corporations in finance, insurance, and real estate. In 1987, partnerships and S corporations exclude gross income from rental real estate and other rental activities and portfolio income distributed directly to partners or shareholders. S corporations have no more than 35 shareholders (10 prior to 1983) most of which are individuals, electing to be taxed at the shareholder level. [2] Includes firms with no receipts. [3] Number of businesses for 1970 and 1980. Number of non-farm sole proprietorship returns is not available prior to 1981. However, the number of returns and the number of businesses are very closely related. Since 1970, the ratio of number of returns to the number of businesses has remained approximately 1 to 1.1.

Source: U.S. Internal Revenue Service, *Statistics of Income, Statistics of Income Bulletin*; and unpublished data.

No. 827. Number of Returns, Receipts, and Net Income, by Type of Business, 1970 to 1988, and by Industry, 1988

[Covers active enterprises only. Figures are based on sample of unaudited tax returns; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12 and V 42-53. Minus sign (-) indicates net loss]

YEAR AND INDUSTRY	NUMBER OF RETURNS (1,000)			BUSINESS RECEIPTS [2] (bil. dol.)			NET INCOME (less loss) [3] (bil. dol.)		
	Non-farm proprietorships [1]	Partnerships	Corporations	Non-farm proprietorships [1]	Partnerships	Corporations	Non-farm proprietorships [1]	Partnerships	Corporations
1970	5,770	936	1,665	198.6	91.8	1,706.1	30.5	9.8	65.9
1980	8,932	1,380	2,711	411.2	286.0	6,172.2	54.9	8.2	239.0
1985	11,929	1,714	3,277	540.0	349.2	8,049.6	78.8	-8.9	240.1
1986	12,394	1,703	3,429	559.4	378.7	8,281.9	90.4	-17.4	269.6
1987	13,091	1,648	3,612	610.8	411.4	9,185.5	105.5	-5.4	328.2
1988 [4]	**13,679**	**1,654**	**3,563**	**672.0**	**464.0**	**9,803.8**	**126.3**	**14.5**	**413.0**
Agriculture, forestry, and fishing [5]	351	122	120	15.4	9.0	80.5	2.1	1.0	1.6
Mining	140	48	41	7.0	16.0	87.3	(-Z)	0.9	4.1
Construction	1,696	75	381	96.8	31.0	485.7	16.5	3.2	11.3
Manufacturing	355	25	300	20.0	43.7	3,118.1	2.3	1.5	205.1
Transportation, public utilities	599	20	149	30.3	21.6	779.6	4.1	-2.3	46.9
Wholesale and retail trade [6]	2,414	179	985	230.0	83.6	2,891.3	13.2	3.4	42.8
Wholesale	335	11	315	39.0	25.7	1,396.3	4.3	0.8	22.9
Retail	2,022	167	666	189.1	57.7	1,491.4	8.4	2.5	19.9
Finance, insurance, real estate	1,233	868	572	46.1	115.4	1,714.4	16.4	-19.3	91.9
Services	6,457	296	995	212.0	141.9	643.7	68.3	25.6	9.3

Z Less than $50 million. [1] Through 1980, includes both individually owned business and farm returns; thereafter, includes only nonfarm business returns. [2] Excludes investment income except for partnerships (through 1986) and corporations in finance, insurance, and real estate. In 1987, partnerships and S corporations exclude gross income from rental real estate and other rental activities and portfolio income distributed directly to partners or shareholders. For definition of S corporation, see table 826, footnote 1. [3] Net income (less loss) is defined differently by form of organization, basically as follows: (a) Proprietorships: Total taxable receipts less total deductions, including cost of sales and operations (except charitable contributions and owners' salary), investment and other income are excluded; (b) Partnerships: Total taxable receipts less total deductions, including cost of sales and operations (except foreign taxes and oil depletion), investment and other income (except capital gains); (c) Corporations: Total taxable receipts less total deductions, including cost of sales and operations; investment and other income, such as capital gains and income from foreign corporations considered received for tax purposes only; net income is before income tax. [4] Includes business not specifically allocated to industries below. [5] Represents agricultural services only. [6] Includes trade business not identified as wholesale or retail.

Source: U.S. Internal Revenue Service, *Statistics of Income*, various publications.

No. 828. Number of Returns, Business Receipts, and Net Income, by Industry, Type of Business, and Size of Business Receipts: 1988

[**Number in thousands; receipts and net income in billions of dollars.** Covers active enterprises only. Figures are estimates based on a sample of unaudited tax returns; see appendix III. The industrial distribution is based on data collected from establishments; see text, section 17. See also *Historical Statistics, Colonial Times to 1970,* series V 42-53, for number of active corporations. Minus sign (-) indicates net loss]

INDUSTRY	Nonfarm proprietorships, total	Partnerships, total	CORPORATIONS				
			Under $1 mil. [1]	$1 mil.-$4.9 mil.	$5 mil.-$9.9 mil.	$10 mil.-$49.9 mil.	$50 mil. or more
All industrial divisions: [2]							
Number	13,679	1,654	2,940	469	75	65	14
Business receipts [3]	672.0	464.0	614.7	997.7	520.2	1,290.4	6,380.7
Net income (less loss)	126.3	14.5	-4.7	14.4	11.1	39.3	352.9
Agriculture, forestry, fishing: [4]							
Number	351	122	108	10	1	1	(Z)
Business receipts [3]	15.4	9.0	17.2	19.9	8.9	15.7	18.8
Mining:							
Number	140	48	36	4	(Z)	(Z)	(Z)
Business receipts [3]	7.0	16.0	4.4	8.4	3.0	9.0	62.6
Construction:							
Number	1,696	75	303	63	9	6	1
Business receipts [3]	96.8	31.0	82.2	134.5	63.9	106.0	99.1
Manufacturing:							
Number	355	26	197	69	15	14	4
Business receipts [3]	20.0	43.7	53.0	157.2	102.7	288.3	2,516.8
Transportation, public utilities:							
Number	599	20	119	24	3	2	1
Business receipts [3]	30.3	21.6	25.0	51.2	22.2	43.5	637.7
Wholesale and retail trade:							
Number	2,414	180	726	191	33	30	5
Business receipts [3]	230.0	83.6	201.0	407.8	228.9	598.2	1,455.5
Finance, insurance, real estate:							
Number	1,233	869	524	33	6	7	3
Business receipts [3]	46.1	115.4	61.2	72.1	41.6	140.1	1,399.4
Services:							
Number	6,457	296	909	73	7	5	1
Business receipts [3]	212.0	141.9	169.6	145.4	49.0	89.1	190.6

Z Less than 500 returns. [1] Includes businesses without receipts. [2] Includes businesses not allocable to individual industries. [3] Excludes investment income except for corporations (other than S corporations; see table 826, footnote 1) in finance, insurance and real estate. For partnerships, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. [4] Represents agricultural services only.

Source: U.S. Internal Revenue Service, *Statistics of Income,* various publications; and unpublished data.

No. 829. Nonfarm Sole Proprietorship Returns—Selected Income and Deduction Items: 1970 to 1989

[**In millions of dollars, except as indicated.** All figures are estimates based on sample. Tax law changes have affected the comparability of the data over time. See *Statistics of Income* reports for a description of appropriate years tax law changes; see Appendix III. See also *Historical Statistics, Colonial Times to 1970,* series V 4-6]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989
Number of returns, total (1,000) [1]	**5,770**	**8,932**	**10,704**	**11,262**	**11,929**	**12,394**	**13,091**	**13,679**	**14,298**
Businesses with net income (1,000)	(NA)	(NA)	7,390	8,003	8,641	9,248	9,884	10,492	11,017
Inventory, end of year	11,061	21,996	(NA)	23,233	24,970	24,477	26,333	27,313	30,060
Business receipts, total [2]	**198,582**	**411,206**	**465,169**	**516,037**	**540,045**	**559,384**	**610,823**	**671,970**	**692,811**
Income from sales and operations	(NA)	407,169	455,382	507,234	528,675	548,273	598,315	658,687	678,616
Business deductions, total [2]	**168,045**	**356,258**	**404,809**	**445,270**	**461,273**	**468,960**	**505,362**	**545,735**	**560,175**
Cost of goods sold/operations	109,149	209,890	212,631	229,906	232,294	232,135	255,045	277,880	283,709
Purchases	88,586	168,302	(NA)	(NA)	(NA)	(NA)	173,400	197,220	204,681
Labor costs	7,704	10,922	9,871	13,009	14,504	17,318	19,631	21,143	22,540
Materials and supplies	6,216	12,909	(NA)	(NA)	(NA)	(NA)	23,842	27,800	29,870
Commissions	1,274	3,333	(NA)	(NA)	(NA)	5,461	6,262	6,540	6,843
Salaries and wages (net)	15,107	26,561	31,666	34,686	38,266	38,691	42,330	43,007	45,469
Car and truck expenses	(NA)	13,378	14,758	17,524	17,044	16,381	17,470	19,640	20,789
Rent paid	4,637	9,636	11,831	14,278	15,259	15,654	16,358	19,470	17,976
Repairs	2,445	5,032	(NA)	(NA)	(NA)	(NA)	7,438	8,104	8,149
Taxes paid	3,776	7,672	(NA)	(NA)	(NA)	(NA)	8,449	9,495	9,948
Utilities	(NA)	4,790	(NA)	(NA)	(NA)	(NA)	13,362	14,618	13,601
Insurance	2,310	6,003	(NA)	(NA)	(NA)	10,783	11,719	12,528	12,879
Interest paid	1,784	7,190	9,926	11,025	11,914	11,504	11,616	12,071	13,280
Depreciation	5,452	13,953	22,070	23,900	26,291	26,418	25,557	26,078	24,479
Pension and profit sharing plans	73	141	123	258	311	638	548	450	539
Net income (less loss)	**30,537**	**54,947**	**60,359**	**70,767**	**78,773**	**90,423**	**105,461**	**126,323**	**132,738**
Businesses with net income	33,736	68,010	78,618	89,849	98,776	110,497	123,783	145,518	152,416

NA Not available. [1] Through 1980, includes both individually owned business and farm returns; thereafter, includes only nonfarm business returns. [2] Includes other amounts not shown separately.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin.*

No. 830. Partnerships—Selected Items, by Industry: 1980 to 1989

[In millions of dollars, except partners and partnerships in thousands. Covers active partnerships only. Includes partnerships not allocable by nature of business. Figures are estimates based on samples. See Appendix III]

INDUSTRY AND YEAR	NUMBER OF PARTNERSHIPS			Number of partners	Total assets	Business receipts [1 2]	Total deductions [2]	Net income less loss [2]	Net income	Net loss
	Total	With net income	With net loss							
All industries:										
1980	1,380	774	605	8,420	597,504	285,967	283,749	8,249	45,062	36,813
1985	1,714	876	838	13,245	1,269,434	349,169	376,001	−8,884	77,045	85,928
1986	1,703	851	851	15,229	1,403,750	378,703	414,673	−17,371	80,215	97,586
1987	1,648	865	783	16,963	1,381,297	411,457	423,499	−5,419	87,654	93,073
1988	1,654	901	753	17,291	1,580,194	463,956	464,991	14,493	111,384	96,892
1989	1,635	898	737	18,432	1,791,027	464,952	475,434	14,099	113,886	99,787
Agriculture, forestry, and fishing:										
1980	126	72	54	381	24,595	21,611	22,859	472	2,539	2,067
1985	136	76	60	585	27,027	6,529	10,495	−1,049	2,797	3,846
1986	148	78	69	642	24,749	6,085	9,825	−938	2,746	3,684
1987	149	97	52	592	26,402	6,756	9,146	2,015	4,488	2,472
1988	122	80	42	555	24,106	8,988	11,602	1,079	3,827	2,748
1989	131	83	48	591	25,219	7,708	10,133	1,380	3,679	2,299
Mining:										
1980	35	15	20	722	24,742	13,201	18,248	−4,208	3,920	8,128
1985	62	33	30	2,207	66,930	19,922	21,920	1,482	7,884	6,402
1986	53	23	30	2,351	66,969	14,749	21,290	−3,458	5,214	8,672
1987	60	24	36	2,742	71,492	15,332	19,424	−1,360	5,698	7,058
1988	48	31	17	2,467	65,652	15,977	18,759	934	6,641	5,707
1989	46	26	20	3,771	62,073	19,701	20,751	1,965	7,027	5,062
Construction:										
1980	67	51	16	160	9,811	18,407	17,202	1,560	2,119	559
1985	57	41	16	134	15,008	21,476	20,080	2,207	2,743	536
1986	61	41	20	137	16,556	26,823	25,123	2,498	3,206	708
1987	62	48	14	153	17,077	26,295	24,293	2,766	3,350	584
1988	74	60	14	179	20,070	30,978	28,712	3,284	3,929	645
1989	62	46	16	165	21,150	30,052	28,397	2,647	3,313	666
Transportation and public utilities:										
1980	20	11	10	73	9,291	5,868	5,821	248	1,092	844
1985	25	15	10	186	26,468	11,253	14,814	−3,066	1,360	4,426
1986	21	7	14	223	33,567	12,599	16,276	−3,029	1,682	4,712
1987	30	13	17	429	42,015	19,795	24,228	3,781	2,028	5,809
1988	20	12	8	433	45,003	21,639	25,389	−2,292	2,951	5,244
1989	22	10	12	435	54,171	26,727	30,319	−1,977	3,695	5,671
Manufacturing:										
1980	30	20	10	92	11,252	15,327	16,142	−472	1,199	1,671
1985	30	12	18	105	24,838	22,588	24,225	−1,085	1,228	2,314
1986	28	17	11	108	25,299	22,227	23,187	−458	1,512	1,970
1987	35	18	17	178	30,965	32,356	32,576	806	2,504	1,698
1988	26	12	14	173	41,714	43,724	43,345	1,540	3,598	2,058
1989	26	14	12	185	56,601	55,336	55,816	1,398	4,154	2,756
Wholesale and retail trade:										
1980	200	123	77	487	17,727	65,793	63,988	2,475	3,374	900
1985	201	113	88	493	20,568	69,079	68,119	1,977	3,467	1,490
1986	174	105	69	409	23,007	68,495	67,216	2,272	3,717	1,445
1987	185	100	85	476	26,105	70,560	69,277	2,697	4,215	1,518
1988	180	104	76	490	26,512	83,640	56,375	3,351	4,742	1,391
1989	173	98	75	496	27,294	90,306	89,418	2,529	4,550	2,021
Finance, insurance, and real estate:										
1980	637	313	325	5,566	454,531	87,133	91,382	−4,249	15,169	19,418
1985	844	369	475	7,755	979,787	92,309	118,237	−25,929	30,383	56,311
1986	853	350	503	9,459	1,068,220	112,594	145,574	−32,980	32,477	65,457
1987	828	365	463	10,327	1,040,671	123,239	139,480	−26,777	36,061	62,837
1988	869	398	471	10,880	1,200,673	115,415	127,356	−19,258	47,842	67,100
1989	853	419	434	11,327	1,394,319	71,243	91,965	−20,824	47,753	68,576
Services:										
1980	263	169	94	938	45,510	58,627	48,106	12,424	15,649	3,224
1985	341	207	134	1,713	106,597	104,197	96,202	16,541	26,942	10,400
1986	325	208	117	1,744	123,461	111,701	102,362	18,563	29,021	10,458
1987	291	194	97	2,042	125,134	116,379	104,296	18,092	29,118	11,025
1988	296	197	99	2,060	154,548	141,909	126,505	25,639	37,527	11,888
1989	299	189	110	2,370	148,688	162,325	147,280	26,652	39,296	12,643

[1] Business plus investment receipts for partnerships in finance, insurance, and real estate, and business receipts for all other industries through 1986. Beginning 1987, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. [2] Beginning 1985, the agriculture, forestry, and fishing industries are based on revised collection procedures. See source for detail.

Source: U.S. Internal Revenue Service, *Statistics of Income, Partnership Returns—1978-1982*, and *Statistics of Income Bulletin*.

No. 831. Partnership Returns—Selected Income Statement and Balance Sheet Items: 1980 to 1989

[**In billions of dollars, except as indicated.** Covers active partnerships only. All figures are estimates based on samples. See headnote, table 829. See also Appendix III and *Historical Statistics, Colonial Times to 1970*, series V 7-9]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988	1989
Partnerships, number (1,000)	**1,380**	**1,514**	**1,542**	**1,644**	**1,714**	**1,703**	**1,648**	**1,654**	**1,635**
Number with net income (1,000)	774	791	784	845	876	851	865	901	898
Number with balance sheets (1,000)	1,194	1,223	1,191	1,215	1,227	1,203	1,129	1,155	1,149
Number of partners (1,000)	**8,420**	**9,765**	**10,589**	**12,427**	**13,245**	**15,229**	**16,963**	**17,291**	**18,432**
Assets, total [1 2]	**597.5**	**845.3**	**887.0**	**1,030.8**	**1,269.4**	**1,403.8**	**1,381.3**	**1,580.2**	**1,791.0**
Depreciable assets (net)	239.1	310.8	345.9	581.6	695.9	779.9	567.5	621.2	669.8
Inventories, end of year	33.2	100.7	77.1	61.8	27.3	47.4	45.1	51.2	59.4
Land	70.2	87.8	98.4	122.0	152.2	179.1	177.9	200.3	213.9
Liabilities, total [1]	**488.7**	**701.6**	**745.2**	**855.4**	**1,269.4**	**1,175.7**	**1,385.7**	**1,580.2**	**1,791.0**
Accounts, payable	33.9	37.3	34.7	32.8	46.9	43.6	41.3	48.9	51.7
Short-term debt [3]	48.0	73.3	67.3	68.6	102.8	92.5	81.7	86.6	86.9
Long-term debt [4]	178.0	236.2	268.3	322.3	382.0	429.2	429.9	473.6	512.1
Nonrecourse loans	118.9	154.5	194.8	260.2	327.6	365.0	388.4	436.9	461.0
Partner's capital accounts	108.8	143.7	141.8	175.5	200.2	228.0	247.4	267.1	355.8
Total receipts [1 5 6]	**292.0**	**296.7**	**291.3**	**375.2**	**367.1**	**397.3**	**473.8**	**540.2**	**550.3**
Business receipts [5 6]	271.1	251.6	243.2	318.3	302.7	327.4	411.5	464.0	465.0
Interest received [7]	10.9	15.3	15.0	16.7	20.6	21.7	17.9	19.0	20.9
Deductions, total [1 6]	**283.7**	**304.0**	**293.9**	**378.7**	**376.0**	**414.7**	**423.5**	**465.0**	**475.4**
Cost of goods sold/operations	113.9	144.6	125.3	180.9	146.3	164.2	237.2	252.6	232.8
Salaries and wages	22.3	23.2	24.7	28.5	33.9	36.3	40.7	47.1	54.1
Taxes paid	9.6	5.3	5.9	6.7	7.7	7.9	6.9	8.0	8.9
Interest paid	28.4	21.5	22.4	25.4	28.7	29.5	20.0	23.2	32.7
Depreciation	21.6	32.4	37.3	19.8	22.6	23.4	19.3	19.8	19.6
Net income (less loss) [6]	**8.2**	**-7.3**	**-2.6**	**-3.5**	**-8.9**	**-17.4**	**-5.4**	**14.5**	**14.1**
Businesses with net income	45.1	53.6	60.3	69.7	77.0	80.2	87.7	111.4	113.9

[1] Includes other amounts not shown separately. [2] Total assets, total liabilities, and partner's capital accounts are somewhat understated because not all partnership returns filed contained a complete balance sheet. [3] Represents mortgages, notes, and bonds payable in less than 1 year. [4] Represents mortgages, notes, and bonds payable in 1 year or more. [5] Beginning 1987, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. [6] Beginning 1987, receipts, deductions, and net income from trade or business only. Except for total receipts, excludes income and expenses related to certain investment activities. See source for detail. [7] Beginning 1982, includes both interest and dividends.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin*, various publications.

No. 832. Corporate Funds—Sources and Uses: 1970 to 1990

[**In billions of dollars, except percent.** Covers nonfarm nonfinancial corporate business. See text, section 17]

SOURCE AND USE	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991
Sources, total	**102.9**	**320.6**	**491.4**	**464.3**	**521.5**	**545.0**	**586.7**	**549.3**	**470.6**	**472.5**
Internal	63.9	199.7	336.4	351.9	336.8	376.1	404.4	404.9	381.5	391.5
Domestic undistributed profits	8.6	52.9	35.0	10.7	-18.9	26.7	44.4	30.2	7.6	-11.3
IVA and CCA [1]	-1.1	-61.4	24.1	54.4	53.4	30.6	15.7	7.0	10.8	-0.7
Capital consumption allowances	49.4	173.3	246.2	256.1	269.3	279.3	295.2	313.9	324.5	337.8
Foreign earnings [2]	7.2	35.0	31.1	30.8	32.9	39.5	49.1	53.8	60.2	65.7
External [3]	38.9	120.8	155.0	112.3	184.7	168.9	182.3	144.4	89.1	81.0
Percent of total	37.8	37.7	31.5	24.2	35.4	31.0	31.1	26.3	18.9	17.2
Credit market funds	34.1	68.4	92.5	52.4	126.7	63.0	63.0	42.1	16.5	39.7
Securities and mortgages	26.2	27.8	-13.0	-4.5	60.9	27.5	-13.0	-41.8	-13.5	97.7
Equity issues	5.7	10.4	-79.0	-84.5	-85.0	-75.5	-129.5	-124.2	-63.0	17.5
Bonds and mortgages [4]	20.5	17.4	65.9	80.0	145.9	103.0	116.5	82.3	49.5	80.2
Loans and short-term paper	7.8	40.6	105.5	56.9	65.8	35.4	76.0	83.9	30.0	-58.0
Other	4.9	52.5	62.5	59.9	58.0	106.0	119.3	102.3	72.6	41.4
Profit taxes payable	-3.7	-0.8	4.4	-0.4	5.3	4.9	2.2	2.9	2.7	-
Trade debt	7.1	38.0	33.7	34.0	13.7	39.9	59.1	27.8	31.1	19.6
Foreign direct investments in U.S	1.5	15.3	24.4	26.3	39.0	61.2	57.9	71.6	38.8	21.8
Uses, total	**100.6**	**353.7**	**506.2**	**458.1**	**505.1**	**477.5**	**558.3**	**525.2**	**489.7**	**452.9**
Capital expenditures	81.9	254.2	399.1	375.3	353.9	365.8	394.5	421.4	403.2	365.6
Increase in financial assets	18.7	99.4	107.2	82.8	151.2	111.7	163.8	103.9	86.5	87.3
Discrepancy (sources less uses)	*2.2*	*-33.1*	*-14.8*	*6.2*	*16.4*	*67.5*	*28.4*	*24.1*	*-19.1*	*19.6*

- Represents or rounds to zero. [1] Inventory valuation and capital consumption adjustment. [2] Foreign branch profits, dividends, and subsidiaries' earnings retained abroad. [3] Net increases in liability. [4] Includes industrial pollution control revenue bonds, issued by State and local governments.

Source: Board of Governors of the Federal Reserve System. Data derived from *Flow of Funds Accounts*, annual.

No. 833. Nonfinancial Corporate Business-Sector Balance Sheet: 1970 to 1990

[**In billions of dollars.** Represents year-end outstandings]

ITEM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total assets	**1,304**	**3,999**	**4,473**	**4,644**	**4,862**	**5,198**	**5,437**	**5,759**	**6,126**	**6,500**	**6,858**	**7,111**
Tangible assets (current cost)	934	2,983	3,357	3,502	3,606	3,844	3,993	4,151	4,380	4,635	4,874	5,030
Reproducible	823	2,666	2,988	3,102	3,181	3,380	3,499	3,625	3,828	4,058	4,271	4,413
Land	112	317	369	400	424	463	494	526	553	577	603	617
Financial assets	370	1,015	1,116	1,142	1,257	1,355	1,444	1,609	1,746	1,866	1,985	2,081
Liquid assets [1]	69	197	220	267	302	326	355	416	441	436	451	474
Checkable deposits and currency	44	57	47	53	62	75	94	113	120	135	128	128
Time deposits	5	38	48	59	71	74	80	88	92	92	99	105
Consumer credit	15	25	25	25	29	31	32	32	35	36	35	37
Mutual fund shares	1	2	2	3	5	7	11	16	13	11	14	14
Trade credit	191	482	507	492	544	592	634	664	725	787	814	839
Miscellaneous assets	94	310	361	354	377	398	412	481	532	596	671	717
Total liabilities	**537**	**1,290**	**1436**	**1,490**	**1,624**	**1,863**	**2,052**	**2,313**	**2,542**	**2,817**	**3,080**	**3,194**
Credit market instruments	352	829	927	970	1,049	1,224	1,362	1,571	1,725	1,900	2,065	2,142
Profit taxes payable	11	30	24	14	19	22	18	22	26	26	24	26
Trade debt	160	348	376	381	418	452	486	500	520	563	591	622
Foreign direct investment in U.S	13	83	109	125	137	165	185	220	272	329	401	404
Net worth	**767**	**2,709**	**3,037**	**3,154**	**3,239**	**3,336**	**3,386**	**3,447**	**3,584**	**3,684**	**3,778**	**3,917**

[1] Includes other assets not shown separately.
Source: Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy.*

No. 834. Corporation Income Tax Returns—Selected Financial Items: 1980 to 1988

[**In billions of dollars, except number of returns.** Covers active corporations only. All corporations are required to file returns except those specifically exempt. See source for changes in law affecting comparability of historical data. Based on samples; see Appendix III. See also *Historical Statistics, Colonial Times to 1970,* series Y 381-392]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of returns, total (1,000)	**2,711**	**2,812**	**2,926**	**2,999**	**3,171**	**3,277**	**3,429**	**3,612**	**3,563**
Number with net income (1,000)	1,597	1,597	1,608	1,676	1,778	1,820	1,908	1,995	1,909
S Corporation returns [1] (1,000)	545	541	564	648	701	725	826	1,128	1,257
BALANCE SHEET									
Assets, total [2]	**7,617**	**8,547**	**9,358**	**10,201**	**11,107**	**12,773**	**14,163**	**15,311**	**16,568**
Cash	529	533	541	590	596	683	763	754	785
Notes and accounts receivable	1,985	2,240	2,420	2,677	2,897	3,318	3,594	3,763	4,099
Inventories	535	588	581	599	664	715	733	829	846
Investments in Government obligations	472	515	606	685	726	917	1,059	1,092	1,095
Mortgage and real estate	894	934	942	982	1,127	1,259	1,377	1,455	1,605
Other investments	1,214	1,388	1,605	1,798	1,973	2,414	2,848	3,227	3,614
Depreciable assets	2,107	2,353	2,583	2,730	2,913	3,174	3,383	3,603	3,821
Depletable assets	72	84	95	108	115	112	116	123	124
Land	93	102	110	119	128	141	150	159	177
Liabilities [2]	**7,617**	**8,547**	**9,358**	**10,201**	**11,107**	**12,773**	**14,163**	**15,311**	**16,568**
Accounts payable	542	620	679	671	741	892	909	998	1,023
Mortgages, notes, and bonds, short-term [3]	505	586	667	760	867	1,001	1,084	1,247	1,431
Mortgages, notes, and bonds, long-term [4]	987	1,058	1,224	1,323	1,494	1,699	1,958	2,141	2,352
Capital stock	417	533	658	787	839	920	1,191	1,292	1,429
Paid-in or capital surplus	532	671	782	874	1,066	1,421	1,726	1,988	2,154
Retained earnings [5]	1,070	1,170	1,228	1,274	1,308	1,366	1,394	1,417	1,493
Net worth	**1,944**	**2,244**	**2,470**	**2,645**	**2,884**	**3,304**	**3,698**	**3,947**	**4,207**
INCOME STATEMENT									
Receipts, total [2 6]	**6,361**	**7,026**	**7,024**	**7,135**	**7,861**	**8,398**	**8,669**	**9,582**	**10,265**
Business receipts [6 7]	5,732	6,245	6,157	6,335	6,948	7,370	7,535	8,415	8,950
Interest [8]	367	494	530	511	580	635	662	706	805
Rents and royalties	54	68	83	83	90	105	110	113	116
Deductions, total [2 6]	**6,125**	**6,814**	**6,869**	**6,945**	**7,629**	**8,158**	**8,395**	**9,244**	**9,853**
Cost of sales and operations [7]	4,205	4,509	4,271	4,308	4,693	4,894	4,923	5,596	5,945
Compensation of officers	109	120	129	141	157	171	185	200	203
Rent paid on business property	72	82	95	105	119	135	145	154	161
Taxes paid	163	170	166	173	192	201	203	211	222
Interest paid	345	477	515	475	536	569	573	590	672
Depreciation	157	186	213	241	265	304	313	317	328
Advertising	52	60	65	72	82	92	99	107	114
Net income (less loss), total [6]	**239**	**214**	**154**	**188**	**233**	**240**	**270**	**328**	**413**
Net income	297	301	274	297	349	364	409	465	556
Deficit	58	87	120	109	116	124	139	137	143
TAX ITEMS									
Income subject to tax	247	240	205	219	257	266	276	312	383
Income tax before credits [9]	104	101	85	90	106	109	109	115	127
Tax credits, total [2]	**42**	**44**	**40**	**40**	**44**	**48**	**37**	**31**	**35**
Foreign tax credit	25	22	19	20	21	24	21	21	27
Income tax after credits [9]	**62**	**57**	**45**	**51**	**62**	**61**	**72**	**84**	**92**

[1] Represents corporations with no more than 35 shareholders (10 prior to 1983), most of which are individuals, electing to be taxed at the shareholder level. [2] Includes items not shown separately. [3] Payable in less than one year. [4] Payable in one year or more. [5] Appropriated and unappropriated. [6] Beginning 1987, receipts, deductions and net income of S corporations (footnote 1) limited to those from trade or business. Except for total receipts, excludes income and expenses related to certain investment activities. [7] Beginning 1987, includes sales and cost of sales of securities, commodities and real estate by exchanges, brokers or dealers selling on their own account. [8] Includes tax-exempt interest on Government obligations issued by U.S., State, and local governments. [9] Consists of regular (and alternative tax); excludes minimum tax and adjustments for certain prior year credits.
Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns,* annual.

No. 835. Corporation Income Tax Returns—Financial Summary, by Industry: 1980 to 1988

[**In billions of dollars, except as indicated.** Covers active corporations only. Industrial distribution based on data collected from companies; see text, section 17. Excludes corporations not allocable by nature of business]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988
Agriculture, forestry, and fishing:								
Returns (1,000)	81	91	92	98	103	107	117	120
Assets	40.7	50.4	50.3	50.7	52.7	53.5	55.4	60.5
Liabilities [1]	29.3	36.3	36.7	36.4	37.2	36.4	37.2	40.2
Receipts [2]	52.1	65.4	59.2	66.6	70.5	77.5	77.1	86.3
Deductions [2]	51.4	65.4	59.4	66.4	70.6	76.3	75.4	84.6
Net income (less loss) [2]	0.7	(-Z)	-0.2	0.2	-0.1	1.1	1.6	1.6
Mining:								
Returns (1,000)	26	37	37	41	41	40	42	41
Assets	126.9	192.4	194.4	209.0	240.8	206.1	220.1	225.6
Liabilities [1]	72.9	112.5	108.8	114.7	136.0	107.5	110.6	113.8
Receipts [2]	176.7	203.1	132.4	123.5	142.0	98.6	96.8	100.4
Deductions [2]	169.1	203.0	134.3	124.6	145.4	102.1	96.7	96.8
Net income (less loss) [2]	7.8	0.5	-1.6	-0.4	-2.5	-3.1	0.3	4.1
Construction:								
Returns (1,000)	272	282	284	307	318	342	371	381
Assets	132.9	153.1	161.4	195.3	215.3	218.9	222.1	241.4
Liabilities [1]	100.1	114.2	119.8	144.9	160.6	166.1	168.1	178.9
Receipts [2]	267.2	281.7	290.8	338.6	387.2	412.5	454.8	499.7
Deductions [2]	262.1	279.6	288.6	335.7	382.8	406.7	446.1	488.4
Net income (less loss) [2]	5.3	2.3	2.3	2.9	4.4	5.8	8.7	11.3
Manufacturing:								
Returns (1,000)	243	259	262	272	277	285	294	300
Assets	1,709.5	2,060.7	2,233.0	2,417.6	2,644.4	2,931.6	3,111.7	3,390.4
Liabilities [1]	960.3	1,163.8	1,279.9	1,392.6	1,544.7	1,807.2	1,920.0	2,137.2
Receipts [2]	2,404.3	2,488.3	2,552.8	2,768.2	2,831.1	2,810.7	3,141.4	3,349.0
Deductions [2]	2,290.6	2,423.3	2,469.3	2,661.2	2,733.1	2,723.7	3,012.1	3,170.0
Net income (less loss) [2]	125.7	75.8	95.3	121.2	113.8	101.8	145.5	205.1
Transportation and public utilities:								
Returns (1,000)	111	115	123	128	138	138	148	149
Assets	758.4	919.9	998.9	1,084.9	1,246.4	1,310.2	1,352.5	1,411.2
Liabilities [1]	467.7	567.0	604.6	660.9	755.9	807.7	842.4	891.8
Receipts [2]	523.8	632.3	657.4	725.6	772.4	782.2	786.2	838.8
Deductions [2]	504.0	614.4	638.2	697.2	747.8	740.7	749.0	792.5
Net income (less loss) [2]	20.0	18.3	19.5	28.9	25.1	21.0	37.5	46.9
Wholesale and retail trade:								
Returns (1,000)	800	840	852	897	917	939	972	985
Assets	646.9	753.4	804.2	899.0	1,010.0	1,073.5	1,177.7	1,295.8
Liabilities [1]	424.6	501.9	539.0	609.7	723.7	773.4	861.2	963.9
Receipts [2]	1,955.5	2,017.7	2,119.4	2,307.6	2,473.9	2,547.4	2,766.7	2,978.0
Deductions [2]	1,919.5	1,989.7	2,084.5	2,265.8	2,440.4	2,512.1	2,728.5	2,935.5
Net income (less loss) [2]	35.8	28.4	35.3	42.0	33.1	34.0	38.0	42.8
Finance, insurance, and real estate:								
Returns (1,000)	493	462	480	497	518	537	521	572
Assets	4,022.2	4,987.5	5,487.2	5,939.0	7,029.5	7,985.6	8,732.3	9,411.5
Liabilities [1]	3,491.7	4,220.5	4,670.4	5,037.3	5,867.5	6,483.4	7,097.4	7,632.1
Receipts [2]	697.5	949.9	902.8	1,033.1	1,182.0	1,365.1	1,589.2	1,714.4
Deductions [2]	652.6	915.2	856.7	985.7	1,104.6	1,245.5	1,476.7	1,596.0
Net income (less loss) [2]	33.1	21.8	31.7	32.7	60.7	99.8	87.4	91.9
Services:								
Returns (1,000)	671	820	848	899	939	1,012	1,120	995
Assets	178.2	237.9	269.8	307.9	331.0	381.6	435.6	530.3
Liabilities [1]	125.3	170.1	198.1	223.1	241.1	281.4	323.1	402.2
Receipts [2]	279.9	380.8	416.5	490.3	534.6	591.9	663.1	695.3
Deductions [2]	271.8	373.7	410.5	485.0	528.7	584.3	654.0	686.3
Net income (less loss) [2]	8.2	7.2	6.0	5.5	5.9	7.0	9.3	9.3
ANNUAL PERCENT CHANGE RECEIPTS [3]								
Agriculture, forestry, and fishing	-2.4	0.5	-9.4	12.6	5.9	9.9	-0.5	11.9
Mining	33.3	1.5	-34.8	-6.7	15	-30.6	-1.8	3.7
Construction	5.7	0.6	3.2	16.4	14.4	6.5	10.2	9.8
Manufacturing	11.7	-4.8	2.6	8.4	2.3	-0.7	11.7	6.6
Transportation and public utilities	17.5	5.6	4.0	10.3	6.4	-1.3	3.1	6.6
Wholesale and retail trade	11.6	-1.1	5.0	8.9	7.2	3.0	8.6	7.6
Finance, insurance, and real estate	24.3	8.2	-5.0	14.4	14.4	15.5	16.4	7.8
Services	14.2	9.8	9.4	17.7	9.0	10.7	12.0	4.8

Z Less than half the measure. [1] Liabilities does not include net worth. [2] Beginning 1987, receipts, deductions, and net income of S corporations limited to those from trade or business; those from investments are generally excluded. For definition of S corporation, see table 834, footnote 1. [3] Change from preceding year.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns,* annual.

No. 836. Corporation Income Tax Returns, by Asset Size-Class and Industry: 1988

[**In millions of dollars, except returns.** Covers active corporations only. Excludes corporations not allocable by nature of business. The industrial distribution is based on data collected from companies; see text, section 17. Detail may not add to total because of rounding. See table 834. See also *Historical Statistics, Colonial Times to 1970*, series V 167-183 and V 193-196]

INDUSTRY AND ITEM	Total	ASSET SIZE-CLASS					
		Under 10 mil. dol.[1]	10-24.9 mil. dol.	25-49.9 mil. dol.	50-99.9 mil. dol.	100-249.9 mil. dol.	250 mil. dol. and over
Agriculture, forestry, and fishing:							
Returns	119,902	119,457	275	94	44	25	7
Assets	60,492	43,143	4,251	3,207	2,984	3,916	2,990
Receipts	86,258	61,770	5,071	4,568	4,602	6,516	3,732
Deductions	84,637	60,667	5,027	4,490	4,526	6,363	3,565
Net income (less loss)	1,616	1,086	44	72	76	154	183
Mining:							
Returns	41,080	40,199	432	168	115	87	79
Assets	225,639	14,551	6,465	5,966	9,871	22,612	166,175
Receipts	100,427	19,232	4,580	4,073	6,154	14,494	51,894
Deductions	96,765	19,462	4,628	3,988	5,976	13,551	49,161
Net income (less loss)	4,112	−238	−53	81	180	944	3,198
Construction:							
Returns	381,499	379,275	1,579	375	166	64	40
Assets	241,395	134,333	23,015	12,832	12,271	9,442	49,502
Receipts	499,690	364,098	43,008	21,850	17,950	14,794	37,990
Deductions	488,357	356,888	41,689	21,232	17,473	14,613	36,463
Net income (less loss)	11,344	7,192	1,310	605	471	170	1,596
Manufacturing:							
Returns	299,538	288,882	5,648	2,057	1,083	868	1,001
Assets	3,390,434	194,615	87,983	72,596	76,611	139,738	2,818,890
Receipts	3,348,966	483,382	159,781	114,768	108,311	174,596	2,308,128
Deductions	3,169,975	473,621	154,637	110,426	103,054	166,170	2,162,067
Net income (less loss)	205,084	9,949	5,180	4,391	5,312	8,811	171,441
Transportation and public utilities:							
Returns	149,248	147,278	920	343	195	171	341
Assets	1,411,201	52,415	13,677	18,724	13,436	28,647	1,284,302
Receipts	838,753	129,322	17,487	18,029	12,464	22,262	639,190
Deductions	792,540	128,408	17,208	17,717	12,116	21,910	595,182
Net income (less loss)	46,944	907	275	295	358	425	44,683
Wholesale and retail trade:							
Returns	984,553	976,118	5,398	1,540	687	447	364
Assets	1,295,819	402,038	81,015	52,854	47,318	70,917	641,677
Receipts	2,977,983	1,406,785	233,016	141,783	117,288	161,378	917,733
Deductions	2,935,533	1,394,309	228,841	139,490	115,510	158,450	898,933
Net income (less loss)	42,845	12,425	4,178	2,300	1,780	2,983	19,180
Finance, insurance, and real estate:							
Returns	572,418	548,300	7,977	5,286	4,360	3,405	3,091
Assets	9,411,547	222,585	130,048	189,849	307,738	532,439	8,028,889
Receipts	1,714,352	200,608	35,925	37,340	54,376	98,156	1,287,947
Deductions	1,596,045	196,071	34,650	35,802	50,541	89,338	1,189,642
Net income (less loss)	91,893	4,195	984	953	2,646	6,882	76,233
Services:							
Returns	995,425	992,063	1,914	647	372	259	171
Assets	530,326	167,526	29,260	28,151	26,387	41,070	237,932
Receipts	695,265	441,757	34,509	26,292	27,605	36,632	128,469
Deductions	686,268	437,842	34,880	25,613	27,227	36,145	124,562
Net income (less loss)	9,277	3,884	−387	666	434	494	4,186
PERCENT DISTRIBUTION RECEIPTS							
Agriculture, forestry, and fishing	100.0	71.6	5.9	5.3	5.3	7.6	4.3
Mining	100.0	19.2	4.6	4.1	6.1	14.4	51.7
Construction	100.0	72.9	8.6	4.4	3.6	3.0	7.6
Manufacturing	100.0	14.4	4.8	3.4	3.2	5.2	68.9
Transportation and public utilities	100.0	15.4	2.1	2.1	1.5	2.7	76.2
Wholesale and retail trade	100.0	47.2	7.8	4.8	3.9	5.4	30.8
Finance, insurance, and real estate	100.0	11.7	2.1	2.2	3.2	5.7	75.1
Services	100.0	63.5	5.0	3.8	4.0	5.3	18.5

[1] Includes returns with zero assets.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns*, annual.

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No. 837. Employees and Payroll, by Employment-Size Class: 1975 to 1989

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

EMPLOYMENT-SIZE CLASS	Unit	1975	1980	1983	1984	1985	1986	1987	1988	1989
Employees, total [1]	**1,000**	**60,519**	**74,844**	**72,974**	**78,021**	**81,111**	**83,379**	**85,484**	**87,882**	**91,631**
Under 20 employees	1,000	16,393	19,423	20,136	21,171	21,810	22,296	23,069	23,583	23,992
20 to 99 employees	1,000	16,272	21,168	20,806	22,449	23,539	24,311	25,221	25,930	26,829
100 to 499 employees	1,000	13,713	17,840	16,794	18,348	19,410	20,260	20,615	21,307	22,387
500 to 999 employees	1,000	4,872	5,689	5,186	5,614	5,716	5,780	5,922	6,078	6,442
1,000 or more employees	1,000	9,315	10,716	10,050	10,413	10,645	10,734	10,657	10,984	11,981
Annual payroll [1]	**Bil. dol**	**596**	**1,035**	**1,269**	**1,339**	**1,514**	**1,608**	**1,724**	**1,860**	**1,990**
Under 20 employees	Bil. dol.	138	231	298	326	352	375	414	440	461
20 to 99 employees	Bil. dol.	147	261	319	358	388	414	449	485	514
100 to 499 employees	Bil. dol.	135	249	297	334	362	391	417	452	488
500 to 999 employees	Bil. dol.	53	91	107	120	126	132	140	152	163
1,000 or more employees	Bil. dol.	123	208	248	269	286	298	305	331	364

[1] Prior to 1987, totals for employees and annual payroll have been revised. Detail may not add to totals because revisions for size class are not available.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

No. 838. Establishments, Employees, and Payroll, by Industry: 1975 to 1989

[See headnote, table 837. For 1975-85, data are based on the *1972 Standard Industrial Classification (SIC) Manual*. 1989 data are based on the *1987 SIC Manual*]

INDUSTRY	ESTABLISHMENTS (1,000)				EMPLOYEES (1,000)				PAYROLL (bil. dol.)			
	1975	1980	1985	1989	1975	1980	1985	1989	1975	1980	1985	1989
All industries [1]	**4,114**	**4,543**	**5,701**	**6,107**	**60,519**	**74,844**	**81,111**	**91,631**	**596**	**1,035**	**1,513**	**1,990**
Agricultural services [2]	40	46	64	79	195	290	380	489	2	3	5	8
Mining	24	30	37	30	720	994	943	711	10	22	28	25
Contract construction	364	418	476	547	3,322	4,473	4,480	5,036	44	75	98	127
Manufacturing	306	319	358	363	18,372	21,165	19,429	19,492	213	355	458	533
Transportation [3]	147	168	203	228	3,908	4,623	4,809	5,418	51	88	123	154
Wholesale trade	350	385	438	460	4,332	5,211	5,624	6,153	52	89	130	170
Retail trade	1,190	1,223	1,407	1,495	12,271	15,047	16,851	19,335	76	124	178	229
Finance and insurance [4]	372	421	488	529	4,247	5,295	6,005	6,802	42	77	132	184
Services	1,118	1,278	1,712	1,977	12,655	17,186	21,549	27,339	102	197	346	544

[1] Includes nonclassifiable establishments, not shown separately. [2] Includes forestry and fisheries. [3] Includes other public utilities. [4] Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

No. 839. Establishments, Employees, and Payroll, by Employment-Size Class and Industry: 1989

[See headnote, table 837. Data are based on the *1987 Standard Industrial Classification Manual*]

EMPLOYMENT SIZE-CLASS	Unit	All industries [1]	Agricultural services [2]	Mining	Contract construction	Manufacturing	Transportation [3]	Wholesale trade	Retail trade	Finance and insurance [4]	Services
Establishments, total	**1,000**	**6,107**	**79**	**30**	**547**	**363**	**228**	**460**	**1,495**	**529**	**1,977**
Under 20 employees	1,000	5,305	75	24	496	234	183	390	1,265	472	1,774
20 to 99 employees	1,000	668	4	5	46	91	36	62	206	48	164
100 to 499 employees	1,000	119	(Z)	1	5	33	8	7	23	8	34
500 to 999 employees	1,000	9	(Z)	(Z)	(Z)	4	1	(Z)	1	1	3
1,000 or more employees	1,000	5	(Z)	(Z)	(Z)	2	(Z)	(Z)	(Z)	(Z)	2
Employees, total	**1,000**	**91,631**	**489**	**711**	**5,036**	**19,492**	**5,418**	**6,153**	**19,335**	**6,802**	**27,339**
Under 20 employees	1,000	23,992	277	117	2,089	1,453	900	2,148	6,789	1,946	7,591
20 to 99 employees	1,000	26,829	136	203	1,745	4,039	1,482	2,373	8,174	1,888	6,614
100 to 499 employees	1,000	22,387	58	225	869	6,787	1,472	1,230	3,768	1,542	6,436
500 to 999 employees	1,000	6,442	(D)	(D)	154	2,510	460	232	371	522	2,101
1,000 or more employees	1,000	11,981	(D)	(D)	178	4,704	1,104	170	233	903	4,596
Annual payroll	**Bil. dol**	**1,990**	**7.8**	**24.9**	**127.3**	**533.1**	**153.5**	**170.4**	**228.6**	**184.5**	**543.8**
Under 20 employees	Bil. dol	461	4.5	3.2	45.4	31.8	19.7	55.6	77.2	46.4	162.6
20 to 99 employees	Bil. dol	514	2.1	6.2	46.3	93.8	37.7	63.9	90.0	49.5	122.9
100 to 499 employees	Bil. dol	488	0.9	8.6	25.7	166.7	42.6	37.0	49.5	43.5	113.0
500 to 999 employees	Bil. dol	163	(D)	(D)	4.3	69.4	15.2	7.9	6.6	14.8	41.6
1,000 or more employees	Bil. dol	364	(D)	(D)	5.6	171.4	38.3	6.1	5.3	30.3	103.6

D Withheld to avoid disclosing data for individual companies; data are included in higher-level totals. Z Less than 500 establishments or $500 million. [1] Includes nonclassifiable establishments not shown separately. [2] Includes forestry and fisheries. [3] Includes other public utilities. [4] Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

No. 840. Women-Owned Firms—Major Industry Statistics: 1982 and 1987

1972 SIC[1] code	INDUSTRY	1982		1987					
		Number of firms (1,000)	Sales and receipts (mil. dol.)	Number of firms			Sales and receipts		
				Total (1,000)	Percent change, 1982-87	Percent of U.S.	Total (mil. dol.)	Percent change, 1982-87	Percent of U.S.
(X)	All industries [2]	2,612.6	98,292	4,114.8	57	30	278,138	183	17
(A)	Agriculture [3]	19.5	686	48.0	146	13	1,933	182	9
(B)	Mining [2]	19.8	2,221	26.4	33	22	1,934	-13	13
(C)	Construction [2]	59.0	4,565	94.3	60	6	20,302	345	9
15	General building contractors	11.1	1,483	21.3	92	6	7,625	414	9
17	Special trade contractors	44.9	2,497	67.1	50	5	9,152	267	9
(D)	Manufacturing [2]	44.9	5,303	94.0	109	22	30,914	483	14
23	Apparel and other textile products	4.7	526	17.9	280	55	2,641	402	16
27	Printing and publishing	13.0	847	19.7	52	26	3,999	372	16
(E)	Transportation, public utilities [2]	38.9	3,229	79.8	105	13	10,936	239	14
42	Trucking and warehousing	16.2	1,342	27.4	69	8	4,654	247	11
47	Transportation services	13.7	1,282	30.4	121	35	3,968	210	28
(F)	Wholesale trade	32.1	9,190	82.5	157	19	42,805	366	14
(G)	Retail trade [2]	631.3	35,861	798.7	27	36	85,418	138	16
52	Building materials and garden supplies	9.5	1,186	11.3	18	18	4,096	245	12
53	General merchandise stores	6.3	1,182	10.2	62	32	1,198	1	15
54	Food stores	36.8	6,047	48.5	32	24	14,428	139	18
55	Auto dealers, service stations	14.0	4,754	20.9	50	10	20,224	325	10
56	Apparel accessory stores	27.7	2,446	40.6	47	43	5,216	113	28
58	Eating and drinking places	66.2	6,684	90.8	37	28	14,167	112	19
(H)	Finance, insurance, real estate [2]	246.4	6,370	437.4	77	36	17,833	180	14
64	Insurance agents, brokers	29.2	882	53.2	82	17	2,306	162	10
65	Real estate [4]	212.0	4,733	335.4	58	46	12,641	167	18
(I)	Services [2]	1,284.8	26,278	2,269.0	77	38	61,123	133	15
70	Hotels and other lodging places	17.5	1,671	22.2	27	30	3,201	92	12
72	Personal services	394.6	5,500	561.7	42	52	10,289	87	34
73	Business services	(NA)	(NA)	690.5	(X)	38	18,936	(X)	19
75	Auto repair, services, and garages	11.0	929	23.5	114	7	2,644	184	9
76	Miscellaneous repair services	13.3	430	24.0	81	10	1,167	171	10
79	Amusement and recreation services	45.0	1,132	99.5	121	26	3,100	174	16
80	Health services	123.1	3,989	235.3	91	37	9,618	141	12
81	Legal services	23.3	853	41.9	80	17	2,220	160	4
83	Social services	(NA)	(NA)	269.2	(X)	83	3,047	(X)	56

NA Not available. X Not applicable. [1] Standard Industrial Classification; see text, section 13. [2] Includes industries not shown separately. [3] Includes agricultural services, forestry, and fishing. [4] Excludes industry 6552 which is included in construction industries.

Source: U.S. Bureau of the Census, *1987 Survey of Women-Owned Businesses*, series WB87-1.

No. 841. Women-Owned Firms—Number and Receipts, by State: 1982 and 1987

STATE	1982		1987			
	Firms (1,000)	Sales and receipts (mil. dol.)	Number of firms		Sales and receipts	
			Total (1,000)	Percent of U.S. total	Total (mil. dol.)	Percent of U.S. total
U.S.	**2,612.6**	**98,292**	**4,114.8**	**30**	**278,138**	**14**
AL	30.9	1,268	48.0	27	3,624	14
AK	9.5	379	14.0	29	829	17
AZ	35.1	1,027	60.6	32	2,911	13
AR	24.5	1,069	35.5	26	2,008	15
CA	354.7	12,023	559.8	31	31,027	13
CO	57.4	1,829	89.4	34	4,261	16
CT	35.5	1,401	60.9	31	5,320	15
DE	5.7	196	9.7	31	753	16
DC	8.9	334	11.0	38	774	12
FL	125.4	4,789	221.4	30	16,828	17
GA	53.3	1,848	88.1	29	5,874	12
HI	14.4	356	21.7	36	857	13
ID	13.4	427	19.0	28	813	12
IL	110.3	4,567	177.1	31	13,884	14
IN	62.0	3,192	89.9	31	8,913	18
IA	36.1	1,137	53.6	31	2,905	16
KS	36.8	1,235	53.5	32	2,661	16
KY	36.6	1,583	53.5	28	3,265	14
LA	38.3	2,201	55.9	27	2,962	14
ME	14.5	420	23.9	27	1,635	16
MD	48.4	1,530	81.9	34	5,509	13
MA	63.2	1,778	111.4	31	11,140	17
MI	87.1	2,790	134.0	31	7,889	12
MN	56.2	1,751	88.1	31	4,991	14
MS	20.4	955	29.0	26	2,062	16
MO	54.1	1,989	87.7	30	5,349	14
MT	12.8	499	17.7	28	930	17
NE	22.7	717	32.3	31	1,649	14
NV	11.7	450	18.8	31	1,414	14
NH	11.9	392	22.7	28	1,858	14
NJ	63.2	3,573	117.4	29	13,554	14
NM	16.3	576	25.4	31	1,166	16
NY	176.5	8,352	284.9	31	29,970	14
NC	57.4	1,860	93.5	28	6,813	15
ND	8.8	340	12.7	30	572	14
OH	102.5	3,615	154.1	30	8,872	12
OK	49.2	2,123	63.7	28	2,948	15
OR	40.5	1,357	58.9	32	4,279	19
PA	106.2	4,186	167.4	28	13,339	11
RI	8.0	270	14.5	28	1,340	13
SC	27.1	983	42.6	29	2,950	16
SD	9.4	368	13.4	28	726	14
TN	44.6	1,707	67.4	27	4,226	12
TX	199.8	8,074	298.1	29	13,385	12
UT	19.1	665	29.8	30	1,392	14
VT	8.0	267	13.8	31	766	15
VA	56.9	1,753	94.4	32	5,952	14
WA	59.3	1,599	90.3	32	4,689	13
WV	15.7	616	22.5	29	1,114	16
WI	44.4	1,562	69.2	29	4,667	15
WY	8.4	312	10.8	31	524	15

Source: U.S. Bureau of the Census, *1987 Survey of Women-Owned Business Enterprises*, series WB87-1.

No. 842. Women- and Minority-Owned Firms, by Selected Metropolitan Area: 1987

[Metropolitan areas as defined June 30, 1987. MSA=Metropolitan Statistical Area. PMSA=Primary Metropolitan Statistical Area; see text, section 1]

METROPOLITAN AREAS RANKED BY 1990 POPULATION	WOMEN-OWNED		BLACK-OWNED		HISPANIC-OWNED		AMERICAN INDIANS, ALASKA NATIVES, ASIAN AND PACIFIC ISLANDERS-OWNED	
	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)
Los Angeles-Long Beach, CA PMSA	162,417	10,775	23,932	1,300	56,679	3,346	63,139	6,873
New York, NY PMSA	136,209	17,314	28,063	1,235	23,014	1,240	29,248	2,435
Chicago, IL PMSA	89,424	9,195	15,374	909	7,848	506	12,593	1,211
Philadelphia, PA-NJ PMSA	68,032	6,749	10,249	613	1,930	202	5,521	758
Detroit, MI PMSA	58,791	4,183	9,852	514	1,288	75	3,058	296
Houston, TX PMSA	59,866	2,653	12,989	372	15,967	584	8,777	805
Boston, MA PMSA	58,975	7,545	3,191	198	1,420	72	2,637	188
Atlanta, GA MSA	49,340	3,075	11,804	747	1,424	110	3,042	329
Nassau-Suffolk, NY PMSA	50,471	6,001	3,990	392	3,313	215	3,985	431
Riverside-San Bernardino, CA PMSA	34,214	1,773	2,788	139	10,195	577	4,366	480
Dallas, TX PMSA	55,452	2,722	7,857	235	6,747	294	5,650	396
San Diego, CA MSA	47,450	2,201	2,481	105	10,373	559	6,731	442
Minneapolis-St. Paul, MN-WI MSA	52,427	3,442	1,333	113	568	23	1,595	151
Anaheim-Santa Ana, CA PMSA	54,367	3,266	1,318	81	9,683	651	15,407	1,425
Baltimore, MD MSA	36,891	2,628	8,593	331	680	71	2,619	273
Phoenix, AZ MSA	37,407	1,900	1,218	67	4,507	223	1,826	170
Oakland, CA PMSA	45,590	1,899	6,541	247	6,046	354	12,011	1,057
Tampa-St. Petersburg-Clearwater, FL MSA	35,218	2,688	2,630	165	4,513	342	1,299	110
Seattle, WA PMSA	43,335	2,030	1,639	87	1,034	55	5,696	588
Miami-Hialeah, FL PMSA	32,937	2,954	6,747	276	47,725	3,771	1,845	195
Cleveland, OH PMSA	25,794	1,726	4,755	218	433	19	1,126	88
Newark, NJ PMSA	28,420	3,567	5,641	446	2,877	235	2,941	254
Denver, CO PMSA	45,449	2,390	2,198	84	4,760	222	2,523	149
San Francisco, CA PMSA	46,000	3,255	3,131	140	6,472	431	17,260	1,740

Source: U.S. Bureau of the Census, *1987 Survey of Minority-Owned Enterprises*, series MB87-1, MB87-2, MB87-3, and *1987 Survey of Women-Owned Businesses*, series WB87-1.

No. 843. Minority-Owned Firms—Major Industry Statistics: 1987

1972 SIC[1] code	INDUSTRY	BLACK-OWNED		HISPANIC-OWNED		AMERICAN INDIAN AND ALASKA NATIVE-OWNED		ASIAN AND PACIFIC ISLANDER-OWNED	
		Number of firms	Sales and receipts (mil. dol.)	Number of firms	Sales and receipts (mil. dol.)	Number of firms	Sales and receipts (mil. dol.)	Number of firms	Sales and receipts (mil. dol.)
(X)	All industries [2]	424,165	19,763	422,373	24,732	21,380	911	355,331	33,124
(A)	Agriculture [3]	7,316	217	16,365	695	3,661	104	9,726	365
(C)	Construction [2]	36,763	2,174	55,516	3,439	2,832	156	13,391	1,224
15	General building contractors	6,285	636	7,990	861	461	34	2,632	486
17	Special trade contractors	29,631	1,314	46,383	2,266	2,268	97	10,331	579
(D)	Manufacturing [2]	8,004	1,023	11,090	1,450	911	64	10,121	1,461
23	Apparel and other textile products	552	65	1,713	279	76	(D)	4,265	(D)
(E)	Transportation, public utilities [2]	36,958	1,573	26,955	1,381	917	44	11,940	691
41	Local and interurban passenger trans.	11,566	218	4,522	106	95	3	6,049	133
42	Trucking and warehousing	19,663	1,010	17,304	907	590	32	2,214	122
47	Transportation services	4,053	223	3,617	285	134	6	2,959	388
(F)	Wholesale trade	5,519	1,327	10,154	2,445	360	36	10,654	4,189
(G)	Retail trade [2]	66,229	5,890	69,911	7,644	3,090	268	88,761	13,316
54	Food stores	8,952	1,001	9,599	1,636	301	54	17,263	3,786
55	Auto dealers, service stations	3,690	2,156	5,627	2,100	222	65	2,831	1,881
56	Apparel accessory stores	3,061	140	3,472	231	85	6	6,208	677
58	Eating and drinking places	11,834	1,084	14,003	1,645	464	35	26,280	3,600
(H)	Finance, insurance, real estate [2]	26,989	804	22,106	864	614	20	27,297	1,087
64	Insurance agents, brokers	7,956	189	6,013	209	152	5	6,829	176
65	Real estate [4]	15,552	506	12,872	472	370	13	16,794	692
(I)	Services [2]	209,547	6,120	184,372	6,031	7,604	178	165,342	9,881
70	Hotels and other lodging places	1,734	128	973	113	102	6	7,809	1,366
72	Personal services	56,772	960	44,872	893	1,719	27	36,392	1,318
73	Business services	59,177	1,570	59,948	1,420	2,532	49	46,066	1,523
75	Auto repair, services, and garages	11,801	427	15,824	837	538	21	5,072	499
76	Miscellaneous repair services	5,197	154	8,337	302	300	11	3,601	163
79	Amusement and recreation services	13,250	503	9,528	204	556	16	5,307	142
80	Health services	30,026	1,351	16,322	1,326	488	21	34,590	3,755
81	Legal services	4,920	336	3,690	287	169	11	2,186	180
83	Social services	13,210	224	8,840	100	451	4	4,038	85

D Withheld to avoid disclosing data for individual companies; data are included in higher-level totals. [1] Standard Industrial Classification code; see text, section 13. [2] Includes industries not shown separately. [3] Includes agricultural services, forestry, and fishing. [4] Excludes industry 6552 which is included in contruction industries.

Source: U.S. Bureau of the Census, *1987 Survey of Minority-Owned Business Enterprises*, series MB87-4.

No. 844. Minority-Owned Firms, by State: 1987

[A firm is classified as minority owned if sole owner or at least half of the partners or shareholders are of minority ancestry]

STATE	BLACK OWNED		HISPANIC OWNED		AMERICAN INDIAN AND ALASKA NATIVE OWNED		ASIAN AND PACIFIC ISLANDER OWNED	
	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)	Firms	Sales and receipts (mil. dol.)
United States	**424,165**	**19,763**	**422,373**	**24,732**	**21,380**	**911**	**355,331**	**33,124**
Alabama	10,085	440	397	30	90	5	917	126
Alaska	507	14	502	27	4,006	118	1,028	78
Arizona	1,811	91	9,845	513	872	50	2,526	253
Arkansas	4,392	215	324	14	91	3	567	53
California	47,728	2,364	132,212	8,120	3,280	162	144,353	14,620
Colorado	2,871	106	9,516	394	351	14	3,192	216
Connecticut	4,061	226	2,235	176	88	(D)	1,963	(D)
Delaware	1,399	78	184	6	43	(D)	436	(D)
District of Columbia	8,275	412	762	64	28	1	779	133
Florida	25,527	1,212	64,413	4,949	349	(D)	8,553	(D)
Georgia	21,283	1,180	1,931	145	129	6	4,092	463
Hawaii	399	12	1,226	58	106	6	31,300	1,656
Idaho	94	5	974	31	80	7	433	31
Illinois	19,011	1,100	9,636	589	193	7	14,679	1,438
Indiana	5,867	350	1,427	106	90	3	1,718	205
Iowa	703	45	475	20	43	1	574	54
Kansas	2,323	154	1,541	62	231	(D)	1,135	(D)
Kentucky	3,738	120	359	17	24	2	875	96
Louisiana	15,331	532	2,697	136	225	(D)	2,583	(D)
Maine	131	5	139	12	68	4	165	23
Maryland	21,678	720	2,931	185	123	9	7,831	702
Massachusetts	4,761	252	2,636	174	132	5	3,784	292
Michigan	13,708	701	2,654	126	305	(D)	4,424	(D)
Minnesota	1,448	125	751	29	340	18	1,684	154
Mississippi	9,667	532	308	12	50	(D)	1,128	(D)
Missouri	7,832	336	1,247	50	137	2	2,056	165
Montana	77	7	304	10	405	17	207	13
Nebraska	863	31	619	19	66	2	385	30
Nevada	1,002	39	1,767	142	150	9	1,245	84
New Hampshire	229	31	244	13	29	(D)	304	(D)
New Jersey	14,556	996	12,094	902	135	(D)	12,530	(D)
New Mexico	587	27	14,299	702	1,258	37	897	67
New York	36,289	1,886	28,254	1,556	445	25	35,812	3,193
North Carolina	19,487	746	918	93	1,758	(D)	2,069	(D)
North Dakota	57	1	88	2	210	(D)	119	(D)
Ohio	15,983	626	1,989	192	152	(D)	3,859	(D)
Oklahoma	3,461	94	1,516	50	2,051	57	1,700	98
Oregon	848	34	1,598	110	333	19	3,007	332
Pennsylvania	11,728	747	2,650	247	140	(D)	7,049	(D)
Rhode Island	489	18	426	40	36	(D)	436	(D)
South Carolina	12,815	444	393	16	47	4	918	84
South Dakota	63	5	109	4	267	11	108	6
Tennessee	10,423	386	554	35	90	(D)	1,574	(D)
Texas	35,725	1,084	94,754	4,108	929	28	21,753	1,787
Utah	202	9	1,300	47	110	(D)	1,129	(D)
Vermont	98	7	118	5	9	(D)	102	(D)
Virginia	18,781	811	2,716	141	190	(D)	7,973	(D)
Washington	2,583	176	2,686	141	682	48	7,559	745
West Virginia	727	39	177	14	28	1	523	75
Wisconsin	2,381	191	894	74	307	(D)	1,144	(D)
Wyoming	81	4	584	22	79	(D)	154	(D)

D Figure withheld to avoid disclosure pertaining to a specific organization or individual.

Source: U.S. Bureau of the Census, *Survey of Minority-Owned Business Enterprises*, series MB87-4.

No. 845. New Business Incorporations and Business Failures—Number and Liabilities: 1970 to 1991

[1970 excludes Hawaii; 1970 and 1975 exclude Alaska. Total concerns and failure data prior to 1984 exclude agriculture, forestry and fishing, finance, insurance, and real estate, and services; therefore, are not directly comparable with data for 1984 and later. See also *Historical Statistics, Colonial Times to 1970*, series V 20-30]

YEAR	Total concerns in business [1] (1,000)	Index of net business formations [2] (1967 = 100)	New incorporations (1,000)	FAILURES [3]			YEAR	Total concerns in business [1] (1,000)	Index of net business formations [2] (1967 = 100)	New incorporations (1,000)	FAILURES [3]		
				Number	Rate per 10,000 concerns	Current liabilities [4] (mil. dol.)					Number	Rate per 10,000 concerns	Current liabilities [4] (mil. dol.)
1970	2,442	108.8	264	10,748	44	1,888	1985	4,990	120.9	663	57,078	115	36,937
1975	2,679	109.9	326	11,432	43	4,380	1986	5,119	120.4	702	61,616	120	44,724
1980	2,780	129.9	532	11,742	42	4,635	1987	6,004	121.2	685	61,111	102	34,724
1981	2,745	124.8	581	16,794	61	6,955	1988	5,804	124.1	685	57,098	98	39,126
1982	2,806	116.4	566	24,908	88	15,611	1989	7,694	124.7	677	50,361	65	44,261
1983	2,851	117.5	602	31,334	110	16,073	1990	8,039	120.7	647	60,432	75	64,044
1984	4,885	121.3	635	52,078	107	29,269	1991, prel.	8,218	115.4	629	(NA)	(NA)	(NA)

NA Not available. [1] Data through 1983 represent number of names listed in July issue of *Dun & Bradstreet Reference Book*. Data for 1984-91 represent the number of establishments listed in the Dun's Census of American Business. The base has been changed due to expanded business failure coverage. [2] Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*. [3] Includes concerns discontinued following assignment, voluntary or involuntary petition in bankruptcy, attachment, execution, foreclosure, etc.; voluntary withdrawals from business with known loss to creditors; also enterprises involved in court action, such as receivership and reorganization or arrangement which may or may not lead to discontinuance; and businesses making voluntary compromise with creditors out of court. [4] Liabilities exclude long-term publicly held obligations; offsetting assets are not taken into account.

Source: Except as noted, Dun & Bradstreet Corporation, New York, NY, *New Business Incorporations*, monthly; *The Failure Record Through 1991*; and *Monthly Failure Report*.

No. 846. New Business Incorporations and Number of Failures, by State: 1989 to 1991

[1991 preliminary. See headnote, table 845]

DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES		DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES	
	1990	1991	1989	1990		1990	1991	1989	1990
United States	**647,366**	**628,580**	**50,361**	**60,432**	Virginia	17,376	16,883	1,177	1,585
New England	**31,363**	**28,864**	**1,282**	**3,057**	West Virginia	2,542	2,219	162	231
Maine	2,428	2,326	132	197	North Carolina	12,376	11,944	762	1,030
New Hampshire	2,679	2,387	125	275	South Carolina	7,158	5,700	182	415
Vermont	1,650	1,486	51	74	Georgia	18,891	18,098	1,787	1,937
Massachusetts	12,468	11,706	771	1,898	Florida	82,172	81,083	3,160	3,655
Rhode Island	3,000	2,458	56	183	**East South Central**	**24,456**	**24,806**	**2,866**	**3,655**
Connecticut	9,138	8,501	147	430	Kentucky	6,669	6,782	676	1,048
Middle Atlantic	**113,281**	**109,142**	**4,176**	**6,736**	Tennessee	8,290	8,306	1,164	1,474
New York	65,569	63,808	1,964	3,281	Alabama	6,092	6,116	490	676
New Jersey	28,281	27,994	606	1,246	Mississippi	3,405	3,602	536	457
Pennsylvania	19,431	17,340	1,606	2,209	**West South Central**	**57,760**	**55,943**	**8,414**	**9,738**
East North Central	**87,519**	**84,261**	**8,822**	**8,308**	Arkansas	6,111	5,326	307	260
Ohio	18,094	17,895	1,713	2,254	Louisiana	8,974	8,973	1,402	1,153
Indiana	10,608	10,205	929	1,164	Oklahoma	7,152	7,073	1,266	1,587
Illinois	29,279	29,068	3,382	2,124	Texas	35,523	34,571	5,439	6,738
Michigan	22,204	20,099	2,080	2,100	**Mountain**	**46,017**	**47,033**	**4,213**	**4,781**
Wisconsin	7,334	6,994	718	666	Montana	1,519	1,572	191	191
West North Central	**32,941**	**32,499**	**3,164**	**3,823**	Idaho	1,909	1,944	233	309
Minnesota	9,678	9,564	323	522	Wyoming	1,171	1,386	118	177
Iowa	4,381	4,531	560	554	Colorado	12,257	13,583	1,516	2,077
Missouri	9,761	9,521	1,150	1,216	New Mexico	2,854	2,713	393	318
North Dakota	860	820	105	145	Arizona	10,129	9,832	1,250	1,084
South Dakota	1,078	1,040	142	270	Utah	4,147	4,973	281	372
Nebraska	2,934	3,093	216	358	Nevada	12,031	11,030	231	253
Kansas	4,249	3,930	668	758	**Pacific**	**64,723**	**61,499**	**9,887**	**10,614**
South Atlantic	**189,306**	**184,533**	**7,537**	**9,720**	Washington	11,948	11,521	1,316	854
Delaware	29,861	29,887	31	80	Oregon	8,525	8,375	444	588
Maryland	16,674	16,463	232	686	California	39,111	36,561	7,814	8,902
District of Columbia	2,256	2,256	44	101	Alaska	1,345	1,250	143	123
					Hawaii	3,794	3,792	170	147

Source: Dun & Bradstreet Corporation, New York, NY, *New Business Incorporations*, monthly; and *Business Failure Record*, annual, (copyright).

No. 847. Business Failures—Number and Rate, by Industry: 1985 to 1990

INDUSTRY	NUMBER					RATE PER 10,000 FIRMS				
	1985	1986	1987	1989	1990	1985	1986	1987	1989	1990
Total [1]	**57,253**	**61,616**	**61,111**	**50,361**	**60,432**	**115**	**120**	**102**	**65**	**75**
Agriculture, forestry, fishing	2,699	2,649	3,766	1,540	1,727	197	175	194	49	50
Mining	796	921	627	351	381	193	223	148	79	86
Construction	7,005	7,109	6,735	7,120	8,072	109	108	92	86	90
Manufacturing	4,869	4,772	4,273	3,933	4,709	119	114	95	79	91
Food and kindred products	261	239	191	216	226	127	113	87	87	89
Textile mill products	110	72	73	75	101	129	82	77	72	96
Apparel, other textile products	338	287	265	204	318	128	108	96	73	114
Lumber and wood products	415	392	374	368	417	136	125	107	91	96
Furniture and fixtures	236	244	200	253	257	161	164	128	154	150
Paper and allied products	55	46	60	46	66	100	81	101	72	101
Printing and publishing	659	606	633	679	728	94	85	79	71	73
Chemicals and allied products	172	129	116	102	134	126	92	79	63	83
Petroleum refining	26	35	21	21	21	145	189	106	83	83
Rubber and misc. products	157	145	145	109	160	117	103	101	71	102
Leather and leather products	47	48	34	30	40	130	137	96	84	113
Stone, clay, and glass products	159	164	164	114	165	98	101	94	59	82
Primary metal products	122	133	107	71	114	169	177	135	79	122
Fabricated metal products	484	528	461	374	396	125	132	111	87	90
Machinery, exc. electric	721	739	639	511	650	110	111	91	67	84
Electric and electronic equipment	329	332	262	256	288	154	151	113	104	114
Transportation equipment	197	226	175	190	240	165	185	131	117	146
Instruments and related equipment	110	140	112	108	119	85	103	78	66	68
Miscellaneous	271	267	241	206	269	101	97	76	58	73
Transportation, public utilities	2,536	2,565	2,236	2,115	2,610	151	140	109	82	93
Wholesale trade	4,836	4,869	4,336	3,687	4,376	102	100	82	66	76
Retail trade	13,494	13,620	12,240	11,120	12,826	109	110	81	56	65
Finance, insurance, real estate	2,676	2,797	2,550	2,932	3,881	62	65	54	47	61
Services	16,649	20,967	23,802	13,679	17,673	115	139	128	53	64

[1] Includes industries not shown separately.

Source: The Dun and Bradstreet Corporation, New York, NY, *Business Failure Record,* annual, (copyright).

No. 848. Bankruptcy Petitions Filed, by State: 1981 to 1991

[**In thousands. For years ending June 30.** Includes outlying areas, not shown separately. Covers only b filed under the Bankruptcy Reform Act of 1978. **Bankruptcy:** legal recogition that a company or indivi and must restructure or liquidate. Petitions "filed" means the commencement of a proceeding through the present a petition to the clerk of the court]

STATE	1981	1985	1988	1989	1990	1991	STATE	1981	1985	1988	1989	1990	1991
U.S.	360.3	364.5	594.6	643.0	725.5	880.4	MO	7.9	7.4	10.7	12.0	13.4	17.3
AL	10.8	10.9	18.4	20.9	24.7	27.8	MT	1.1	1.1	1.8	1.9	1.8	2.1
AK	0.4	0.5	1.4	1.4	1.2	1.1	NE	2.8	2.8	3.4	3.3	3.8	4.5
AZ	4.3	5.2	12.7	14.9	17.7	19.3	NV	2.6	2.9	5.5	5.7	6.2	6.9
AR	2.6	3.9	5.9	6.0	6.8	7.7	NH	0.7	0.5	0.7	1.0	1.8	3.4
CA	50.2	61.8	96.4	99.3	103.2	124.2	NJ	7.0	6.7	8.3	9.3	12.6	19.4
CO	6.7	7.0	17.0	18.3	17.1	17.0	NM	1.5	1.6	2.8	3.4	4.0	4.5
CT	2.5	1.8	2.4	3.0	4.4	6.9	NY	24.2	14.2	18.8	21.9	29.0	40.3
DE	0.6	0.5	0.7	0.7	0.9	1.3	NC	8.3	5.4	8.1	8.9	10.7	15.5
DC	0.7	0.7	1.1	1.1	1.0	1.2	ND	0.6	0.7	1.1	1.1	1.1	1.2
FL	6.8	9.1	20.0	25.3	31.9	43.4	OH	27.3	19.5	29.1	31.7	36.8	42.8
GA	11.7	14.4	25.0	29.5	38.7	49.0	OK	4.7	7.1	14.3	14.1	14.3	16.2
HI	0.8	0.6	0.9	0.9	0.9	1.0	OR	5.5	6.5	10.1	10.1	11.3	13.5
ID	2.2	2.4	3.9	3.9	4.1	4.2	PA	10.0	9.8	13.3	13.5	15.8	20.8
IL	26.6	25.6	31.1	32.5	35.8	40.5	RI	1.0	0.8	0.9	1.0	1.7	3.1
IN	13.5	12.2	18.8	20.0	22.2	26.8	SC	1.6	2.3	4.1	4.6	4.8	6.9
IA	4.5	4.7	5.1	4.9	5.5	5.8	SD	0.6	0.9	1.3	1.2	1.4	1.6
KS	4.5	4.8	7.0	7.3	8.1	9.6	TN	13.8	14.7	26.0	29.3	34.2	40.6
KY	7.8	7.0	10.4	12.0	13.6	15.6	TX	9.6	16.8	40.4	41.4	41.7	46.6
LA	5.2	7.7	13.7	12.5	12.9	13.3	UT	3.8	4.0	7.3	7.9	8.0	8.0
ME	1.0	0.6	0.9	1.1	1.5	2.2	VT	0.3	0.2	0.3	0.3	0.5	0.8
MD	5.3	3.9	7.6	8.1	9.2	12.8	VA	9.9	9.2	14.7	16.3	19.3	25.3
MA	3.4	2.0	3.0	4.2	7.6	12.9	WA	8.4	11.3	17.5	18.3	17.0	17.2
MI	15.1	8.6	15.3	16.5	18.8	23.3	WV	2.2	1.9	3.1	3.4	3.5	4.0
MN	5.4	5.4	9.9	11.6	14.0	16.7	WI	5.8	7.4	8.9	9.3	10.2	12.1
MS	5.1	4.8	8.7	9.8	10.6	12.3	WY	0.6	1.0	1.5	1.4	1.5	1.5

Source: Compiled by U.S. Bureau of the Census; based on unpublished data from Adminstrative Office of the U.S. Courts.

No. 849. Bankruptcy Petitions Filed and Pending, by Type and Chapter: 1981 to 1991

[**For years ending June 30.** Covers only bankruptcy cases filed under the Bankruptcy Reform Act of 1978. **Bankruptcy:** legal recognition that a company or individual is insolvent and must restructure or liquidate. Petitions "filed" means the commencement of a proceeding through the presentation of a petition to the clerk of the court; "pending" is a proceeding in which the administration has not been completed]

ITEM	1981	1984	1985	1986	1987	1988	1989	1990	1991
Total, filed	**360,329**	**344,275**	**364,536**	**477,856**	**561,278**	**594,567**	**642,993**	**725,484**	**880,399**
Business [1]	47,415	62,170	66,651	76,281	88,278	68,501	62,534	64,688	69,193
Nonbusiness [2]	312,914	282,105	297,885	401,575	473,000	526,066	580,459	660,796	811,206
Voluntary	358,997	342,828	362,939	476,214	559,658	593,158	641,528	723,886	878,626
Involuntary	1,332	1,447	1,597	1,642	1,620	1,409	1,465	1,598	1,773
Chapter 7 [3]	265,721	232,994	244,650	332,679	397,551	423,796	457,240	505,337	612,330
Chapter 9 [4]	1	4	3	7	10	3	7	7	20
Chapter 11 [5]	7,828	19,913	21,425	24,443	22,566	18,891	17,465	19,591	22,495
Chapter 12 [6]	(X)	(X)	(X)	(X)	4,824	3,099	1,717	1,351	1,358
Chapter 13 [7]	86,778	91,358	98,452	120,726	136,300	148,771	166,539	199,186	244,192
Section 304 [8]	1	6	6	1	27	7	25	12	4
Total, pending	**361,664**	**577,567**	**608,945**	**728,577**	**808,504**	**814,195**	**869,340**	**961,919**	**1,123,433**

X Not applicable. [1] Business bankruptcies include those filed under chapters 7, 9, 11, or 12. [2] Bankruptcies include those filed under chapters 7, 11, or 13. [3] Chapter 7, liquidation of non-exempt assets of businesses or individuals. [4] Chapter 9, adjustment of debts of a municipality. [5] Chapter 11, individual or business reorganization. [6] Chapter 12, adjustment of debts of a family farmer with regular annual income, effective November 26, 1986. [7] Chapter 13, adjustment of debts of an individual with regular income. [8] 11 U.S.C., Section 304, cases ancillary to foreign proceedings.

Source: Administrative Office of the U.S. Courts, *Annual Report of the Director.*

No. 850. Small Business Administration Loans to All Small Businesses: 1980 to 1991

[**For fiscal year ending in year shown;** see text, section 9. A small business must be independently owned and operated, must not be dominant in its particular industry, and must meet standards set by the Small Business Administration as to its annual receipts or number of employees. Loans include both direct and guaranteed loans to small business establishments. Does not include Disaster Assistance Loans]

LOANS APPROVED	Unit	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Loans, all businesses	1,000	31.7	15.4	19.2	21.3	19.3	16.8	17.1	17.1	17.0	18.8	19.4
Loans, minority-owned businesses	1,000	6.0	2.5	2.7	3.1	2.8	2.0	2.1	2.2	2.4	2.4	2.9
Percent of all business loans	Percent	19	16	14	15	15	12	12	13	14	13	15
Value of total loans [1]	Mil. dol.	3,858	2,038	3,007	3,450	3,217	3,013	3,232	3,434	3,490	4,354	4,625
Value of loans to minority-operated businesses [2]	Mil. dol.	470	238	295	383	324	265	299	343	385	473	601

[1] Includes both SBA and bank portions of loans. [2] SBA direct loans and guaranteed portion of bank loans only.

Source: U.S. Small Business Administration, unpublished data.

No. 851. Job Creation, by Firm Size and Industry: 1976 to 1990

YEAR	Total (1,000)	SHARE OF JOBS BY EMPLOYMENT-SIZE OF FIRM			
		Less than 500 employees			More than 500 employees
		Total	Less than 20	20 to 499	
1976 to 1978	6,062	4,407	2,316	2,091	1,655
1978 to 1980	5,777	2,605	1,519	1,086	3,172
1980 to 1982	1,542	1,473	1,510	-37	69
1982 to 1984	4,318	3,312	2,107	1,205	1,006
1984 to 1986	4,611	2,412	1,637	775	2,199
1986 to 1988	6,169	2,770	1,487	1,283	3,399
1988 to 1990	**2,664**	**3,165**	**4,015**	**-849.8**	**-501**
Agriculture, forestry, fishing	201	180	185	-4.1	21
Mining	-76	-5	3	-8.1	-70
Construction	3	21	261	-239.8	-18
Manufacturing	-974	8	220	-212.3	-982
Transportation, communications, and public utilities	139	99	134	-35.7	40
Wholesale trade	-93	38	139	-100.5	-132
Retail trade	760	605	686	-81.3	155
Finance, insurance, real estate	338	254	278	-24.5	84
Services	2,366	1,967	2,111	-143.9	400

Source: U.S. Small Business Administration, Office of Advocacy, Small Business Data Base, linked 1988-1990 USEEM files, unpublished data.

No. 852. Federal Contract Actions—Small and Minority-Owned Small Businesses Share, by State of Principal Place of Performance: 1989 and 1990

[**In millions of dollars, except percent. For fiscal year.** Excludes Guam, Puerto Rico, and Virgin Islands. Represents contract awards of $25,000 or more awarded to establishments. A contract may consist of more than one action. Minus sign (-) indicates decrease]

REGION, DIVISION, AND STATE	TOTAL CONTRACT ACTIONS			SMALL BUSINESS SHARE				SMALL MINORITY-OWNED SHARE			
	1989	1990	Percent change 1989-90	1989	1990 Amount	1990 Percent of total	Percent change 1989-90	1989	1990 Amount	1990 Percent of total	Percent change 1989-90
U.S.	**159,112**	**163,775**	**3**	**23,105**	**25,399**	**19**	**33**	**5,103**	**5,757**	**4**	**15**
Northeast	**33,268**	**31,730**	**-5**	**3,721**	**3,859**	**12**	**4**	**599**	**655**	**2**	**9**
New England	**17,273**	**15,399**	**-11**	**1,427**	**1,263**	**8**	**-12**	**183**	**212**	**1**	**16**
Maine	389	921	137	61	59	6	-3	4	4	(Z)	-
New Hampshire	509	419	-18	63	61	15	-3	8	5	1	-38
Vermont	184	96	-48	19	19	20	-	2	1	1	-50
Massachusetts	9,347	9,008	-4	815	715	8	-12	117	141	2	21
Rhode Island	433	580	34	140	137	24	-2	19	31	5	63
Connecticut	6,411	4,375	-32	329	272	6	-17	33	30	1	-9
Middle Atlantic	**15,995**	**16,331**	**2**	**2,294**	**2,596**	**16**	**13**	**416**	**443**	**3**	**7**
New York	8,412	8,238	-2	821	1,098	13	34	111	203	3	83
New Jersey	3,938	4,127	5	701	784	19	12	103	121	3	18
Pennsylvania	3,645	3,966	9	772	714	18	-8	202	119	3	-41
Midwest	**25,073**	**24,250**	**-3**	**3,516**	**3,526**	**15**	**(Z)**	**560**	**653**	**3**	**33**
East North Central	**13,670**	**12,929**	**-5**	**2,443**	**2,559**	**20**	**5**	**399**	**438**	**3**	**10**
Ohio	6,660	5,879	-12	847	925	16	9	231	263	5	14
Indiana	1,854	1,888	2	197	222	12	13	29	31	2	7
Illinois	2,249	2,357	5	553	574	24	4	120	112	5	-7
Michigan	1,542	1,597	4	412	421	26	2	12	26	2	117
Wisconsin	1,365	1,208	-12	434	417	35	-4	7	6	1	-14
West North Central	**11,403**	**11,321**	**-1**	**1,073**	**967**	**9**	**-10**	**161**	**215**	**3**	**91**
Minnesota	1,891	2,015	7	162	140	7	-14	1	13	1	1,200
Iowa	584	652	12	69	58	9	-16	5	4	1	20
Missouri	7,111	6,884	-3	386	349	5	-10	66	51	1	-23
North Dakota	162	159	-2	117	94	59	-20	43	44	28	2
South Dakota	141	120	-15	61	53	44	-13	17	56	47	229
Nebraska	373	402	8	141	134	33	5	7	10	25	43
Kansas	1,141	1,089	-5	137	139	13	2	22	37	3	68
South	**52,221**	**58,205**	**12**	**9,975**	**12,069**	**30**	**74**	**2,623**	**3,060**	**5**	**17**
South Atlantic	**28,741**	**33,528**	**17**	**6,096**	**6,972**	**37**	**101**	**1,705**	**2,184**	**7**	**28**
Delaware	191	116	-39	36	36	31	-	5	10	9	100
Maryland	6,104	6,798	11	1,170	1,269	19	9	430	559	8	30
District of Columbia	2,861	3,096	8	664	874	28	32	321	424	14	32
Virginia	7,305	10,434	43	2,003	2,403	23	20	607	768	7	27
West Virginia	341	305	-11	151	151	50	(Z)	64	88	29	38
North Carolina	1,406	1,533	9	376	361	24	-4	27	41	3	52
South Carolina	2,450	2,664	9	296	377	14	27	39	39	2	-
Georgia	2,063	2,147	4	512	456	21	-11	97	80	4	-18
Florida	6,020	6,435	7	889	1,045	16	18	114	175	3	54
East South Central	**8,727**	**10,156**	**16**	**1,350**	**2,576**	**25**	**91**	**333**	**355**	**4**	**7**
Kentucky	1,145	1,972	72	153	1,075	55	603	59	49	3	-17
Tennessee	3,966	3,241	-18	406	603	19	49	76	134	4	76
Alabama	2,242	3,352	50	616	713	21	16	171	133	4	-22
Mississippi	1,374	1,591	16	175	185	12	6	26	39	3	50
West South Central	**14,753**	**14,521**	**-2**	**2,529**	**2,521**	**17**	**(-Z)**	**586**	**521**	**4**	**-11**
Arkansas	496	361	-27	253	152	42	-40	22	15	4	-32
Louisiana	2,414	2,332	-3	400	586	25	47	56	51	2	-9
Oklahoma	767	845	10	329	292	35	-11	140	159	19	14
Texas	11,076	10,983	-1	1,547	1,491	14	-4	367	296	3	-19
West	**48,550**	**49,590**	**2**	**5,893**	**5,945**	**12**	**1**	**1,321**	**1,389**	**3**	**5**
Mountain	**13,980**	**15,004**	**7**	**1,642**	**1,687**	**11**	**3**	**451**	**459**	**3**	**2**
Montana	155	156	1	99	122	78	23	20	29	19	45
Idaho	1,079	854	-21	90	83	10	-8	17	15	2	-12
Wyoming	139	131	-6	95	89	68	-6	9	6	5	-33
Colorado	3,921	4,651	19	425	437	9	3	108	125	3	16
New Mexico	3,110	3,245	4	277	303	9	9	117	128	4	9
Arizona	3,144	3,625	15	316	290	8	-8	99	68	2	-31
Utah	1,507	1,529	2	215	264	17	23	31	56	4	81
Nevada	925	813	-12	124	99	12	-20	49	32	4	-35
Pacific	**34,570**	**34,586**	**(Z)**	**4,251**	**4,258**	**12**	**(Z)**	**870**	**930**	**3**	**7**
Washington	4,099	3,878	-5	414	419	11	1	89	80	2	-10
Oregon	327	530	62	163	201	38	23	22	20	4	-9
California	28,920	29,110	1	3,119	3,211	11	3	607	687	2	13
Alaska	615	529	-14	290	190	36	-35	35	48	9	37
Hawaii	609	539	-12	265	237	44	-11	118	95	18	-20

- Represents or rounds to zero. Z Less than $500,000 or .5 percent.

Source: U.S. Small Business Administration, *The State of Small Business: A Report of the President*, annual. Data from Federal Procurement Data Center, March 13, 1991.

No. 853. Mergers and Acquisitions—Summary: 1980 to 1990

[Covers transactions valued at $1 million or more. Values based on transactions for which price data revealed. **All activity** includes mergers, acquisitions, acquisitions of interest, acquisitions of controlling interest, divestitures, and leveraged transactions that result in a change in ownership. **Divestiture:** sale of a business, division, or subsidiary by corporate owner to another party. **Leveraged buyout:** acquisition of a business in which buyers use mostly borrowed money to finance purchase price and incorporate debt into capital structure of business after change in ownership]

ITEM	Unit	1980	1983	1984	1985	1986	1987	1988	1989	1990
All activity: Number	Number	1,558	2,395	3,176	3,489	4,463	4,024	4,233	4,167	4,168
Value	Mil. dol.	32,830	52,708	126,140	145,978	205,958	177,900	240,177	254,020	172,319
Divestitures: Number	Number	104	661	794	1,041	1,419	1,221	1,336	1,333	1,406
Value	Mil. dol.	5,090	12,949	30,572	43,534	72,427	57,797	83,979	66,685	59,605
Leveraged buyouts: Number	Number	11	231	254	255	337	279	383	382	254
Value	Mil. dol.	236	4,519	18,718	19,670	45,160	36,228	47,068	66,915	16,022
Form of payment: All cash	Percent	8	24	36	40	43	54	60	43	46
All stock	Percent	19	13	12	10	12	11	5	10	6
Combination cash, stock debt, other	Percent	17	28	26	24	20	18	25	37	33
Undisclosed [1]	Percent	56	35	26	26	25	17	10	10	15
Ownership status of acquisition targets:										
Public acquired company:										
Number	Number	398	554	835	823	865	1,011	984	1,124	915
Value	Mil. dol.	11,948	31,899	85,692	91,653	109,217	103,029	130,385	168,852	89,974
Private acquired company:										
Number	Number	1,059	1,195	1,555	1,621	2,168	1,739	1,848	1,600	1,695
Value	Mil. dol.	15,911	8,344	10,069	10,608	24,454	15,067	24,089	18,236	17,939

[1] Price was given but form of payment was not.

No. 854. Mergers and Acquisitions—Number and Value of Transactions by, Industry: 1990

[See headnote table 853]

INDUSTRY	TOTAL		U.S. COMPANY ACQUIRING U.S. COMPANY		FOREIGN COMPANY ACQUIRING U.S. COMPANY		U.S. COMPANY ACQUIRING FOREIGN COMPANY	
	Number	Value (mil. dol.)	Number	Value (mil. dol.)	Number	Value (mil. dol.)	Number	Value (mil. dol.)
Total activity [1]	**4,168**	**172,319**	**3,244**	**107,210**	**599**	**47,595**	**325**	**17,514**
Agriculture, forestry, fishing	13	57	10	54	2	3	1	(NA)
Mining	208	11,646	165	6,401	29	5,091	14	154
Construction	35	281	30	229	5	52	-	(X)
Manufacturing:								
Food and kindred products	92	9,246	65	3,716	16	781	11	4,749
Textile mill products	29	212	21	83	1	43	7	86
Apparel, other textile products	25	544	21	134	1	410	3	(NA)
Lumber and wood products	14	258	10	202	3	56	1	(NA)
Paper and allied products	41	5,682	24	5,314	4	235	13	133
Printing and publishing	130	3,953	95	2,162	29	1,334	6	457
Chemicals and allied products	193	15,612	119	3,787	54	11,545	20	280
Rubber and plastic products	53	2,298	40	1,399	6	877	7	22
Stone, clay, glass, and concrete	43	4,839	21	1,579	17	3,030	5	230
Primary metals industries	51	1,572	32	620	17	309	2	643
Fabricated metal products	89	2,715	64	1,536	21	947	4	232
Industrial machinery, computer equipment	233	5,978	170	4,263	43	1,638	20	77
Electrical and electronic equipment	186	6,381	131	3,885	37	1,811	18	685
Transportation equipment	63	4,837	40	1,552	12	570	11	2,715
Instruments and related products	144	2,778	108	1,094	26	1,661	10	23
Transportation and public utilities	343	19,838	292	14,224	32	1,321	19	4,293
Wholesale trade	266	3,132	190	1,888	38	1,008	38	236
Retail trade	158	7,373	126	4,660	23	2,650	9	63
Finance, insurance, real estate	905	28,142	808	21,337	78	6,015	19	790
Services	744	32,746	585	26,161	86	5,504	73	1,081

- Represents or rounds to zero. NA Not available. X Not applicable. [1] Includes other industries, not shown separately.
Source of tables 853 and 854: MLR Publishing Company, Philadelphia, PA, *Mergers and Acquisitions*, 1991, (copyright). Publication contains extract from database, M&A Database.

No. 855. Employee Stock Ownership Plans—Number of Plans and Participants: 1975 to 1990

[As of **end of year**]

YEAR	Number of plans	Number of employees (1,000)	YEAR	Number of plans	Number of employees (1,000)	YEAR	Number of plans	Number of employees (1,000)
1975	1,601	248	1981	5,680	4,537	1986	8,046	7,860
1977	3,137	1,658	1982	6,082	4,745	1987	8,514	8,860
1978	4,028	2,800	1983	6,456	5,397	1988	8,862	9,076
1979	4,551	3,039	1984	6,904	6,576	1989	9,385	10,631
1980	5,009	4,048	1985	7,402	7,353	1990	9,870	11,271

Source: National Center for Employee Ownership, Inc., Oakland, CA, unpublished data.

No. 856. Patents and Trademarks: 1980 to 1990

[**In thousands.** Calendar year data. Covers patents issued to citizens of the United States and residents of foreign countries. For data on copyrights, see table 902. For data on foreign countries, see table 1390. See also *Historical Statistics, Colonial Times to 1970*, series W 96-108]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Patent applications filed	113.0	118.4	112.4	120.6	127.1	133.0	139.8	151.9	166.3	176.7
Inventions	104.3	109.6	103.7	111.3	117.0	122.4	127.9	139.8	152.8	164.5
Designs	7.8	8.2	8.1	8.7	9.6	9.9	11.2	11.3	12.6	11.3
Botanical plants	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.4
Reissues	0.6	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5
Patents issued	66.2	63.3	62.0	72.7	77.2	76.9	89.4	84.3	102.5	99.1
Inventions	61.8	57.9	56.9	67.2	71.7	70.9	83.0	77.9	95.5	90.4
Individuals	13.3	11.9	10.5	12.3	12.9	13.3	15.3	14.3	17.9	17.3
Corporations: United States	29.4	25.8	25.7	30.1	31.3	29.6	33.8	31.4	38.7	36.1
Foreign [1]	18.2	19.2	19.6	23.6	26.4	27.0	32.9	31.4	38.0	36.0
U.S. Government	1.0	1.0	1.0	1.2	1.1	1.0	1.0	0.7	0.9	1.0
Designs	3.9	4.9	4.6	4.9	5.1	5.5	6.0	5.7	6.1	8.0
Botanical plants	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6	0.3
Reissues	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.4
U.S. residents [2]	40.8	37.7	36.6	42.2	43.3	42.0	47.7	44.6	54.6	52.9
Foreign country residents [2]	25.4	25.6	25.4	30.5	33.9	34.9	41.7	39.7	47.9	46.2
Percent of total	38	41	41	42	44	45	47	47	47	47
Other published documents [3]	(Z)	(Z)	(Z)	(Z)	(Z)	0.2	0.2	0.2	0.2	0.1
Trademarks:										
Applications filed	46,837	63,745	55,545	62,600	65,134	69,091	71,292	78,345	94,401	127,346
Issued:	24.7	48.4	46.8	54.0	71.7	51.8	51.4	54.3	63.1	60.8
Trademarks	18.9	42.4	40.5	48.6	65.8	46.7	47.3	47.4	55.3	53.6
Trademark renewals	5.9	6.0	6.2	5.4	5.9	5.1	4.1	6.9	7.8	7.2

Z Less than 50. [1] Includes patents to foreign governments. [2] Includes patents for inventions, designs, botanical plants, and reissues. [3] Includes Defensive Publications, a practice which began in November 1968 and ended in July 1986; and Statutory Invention Registrations, the current practice, which began May 1985. These documents are patent applications, which are published to provide the defensive properties of a patent, but do not have the enforceable rights of a patent.

Source: U.S. Patent and Trademark Office. Fiscal-year figures are published in the *Commissioner of Patents and Trademarks Annual Report*.

No. 857. Patents, by State: 1990

[Includes only U.S. patents granted to residents of the United States and territories]

STATE	Total	Inventions	Designs	Botanical plants	Reissue	STATE	Total	Inventions	Designs	Botanical plants	Reissue
U.S. [1]	**52,855**	**47,393**	**5,068**	**153**	**241**	MT	72	66	5	-	1
						NE	147	133	13	-	1
AL	355	308	46	-	1	NV	127	105	19	-	3
AK	34	31	2	-	1	NH	328	303	23	-	2
AZ	737	664	72	-	1	NJ	3,090	2,830	240	12	8
AR	148	125	23	-	-	NM	198	192	4	-	2
CA	7,922	6,944	866	75	37	NY	4,524	4,059	445	1	19
CO	830	746	78	-	6	NC	848	740	106	1	1
CT	1,512	1,360	151	-	1	ND	50	41	9	-	-
DE	434	417	16	-	1	OH	2,727	2,374	326	15	12
DC	48	39	9	-	-	OK	632	564	64	1	3
FL	1,904	1,663	212	14	15	OR	640	542	90	3	5
GA	723	628	79	9	7	PA	2,820	2,625	173	6	16
HI	84	71	12	-	1	RI	181	142	39	-	-
ID	190	164	25	1	-	SC	407	373	30	-	4
IL	2,935	2,608	309	1	17	SD	41	33	8	-	-
IN	1,049	935	111	-	3	TN	559	513	44	-	2
IA	388	346	40	-	2	TX	3,176	2,926	232	2	16
KS	328	242	83	1	2	UT	368	324	43	-	1
KY	310	284	25	-	1	VT	145	128	17	-	-
LA	505	469	32	-	4	VA	824	746	78	-	-
ME	113	99	14	-	-	WA	951	869	72	7	3
MD	889	825	53	1	10	WV	166	154	12	-	-
MA	2,113	1,957	151	-	5	WI	1,216	1,068	140	-	8
MI	2,707	2,529	170	-	8	WY	36	27	9	-	-
MN	1,474	1,316	148	3	7						
MS	129	116	11	-	2	PR	16	12	4	-	-
MO	702	616	84	-	2	VI	2	2	-	-	-

- Represents zero. [1] Includes patents not distributed by State.

Source: U.S. Patent and Trademark Office, *Technology Assessment and Forecast Data Base*.

No. 858. Patents, by Industry: 1970 to 1990

[Includes all patents for inventions granted to residents of the United States, its territories, and foreign citizens. Number of patents by industry may not add to total since a patent may be recorded in more than one industry category. Except for totals, data for all years have been revised to reflect the U.S. Patent Classification System as of 1990]

SIC [1] code	INDUSTRY	1970	1980	1985	1988	1989	1990
(X)	**Total**	**64,429**	**61,819**	**71,661**	**77,924**	**95,539**	**90,366**
(X)	Durable goods:						
32	Stone, clay, glass and concrete products	1,227	1,289	1,380	1,481	1,859	1,729
33, 3462-3	Primary metals	639	623	689	758	858	737
34	Fabricated metal products [2]	5,142	5,146	5,629	5,882	7,203	6,969
35	Machinery, except electrical	15,758	14,361	16,781	17,331	20,092	18,466
36, 3825	Electrical and electronic equipment, and supplies	13,038	10,449	13,644	16,145	20,100	18,850
37, 348	Transportation and other public utilities	3,053	2,911	3,569	4,061	4,586	4,405
38	Professional and scientific instruments [3]	7,293	7,665	9,166	10,707	13,571	13,010
(X)	Nondurable goods:						
20	Food and kindred products	488	482	545	531	803	726
22	Textile mill products	480	420	498	498	621	501
28	Chemicals and allied products	8,806	9,828	10,238	10,090	12,704	12,377
13, 29	Petroleum, oil and gas extraction	829	729	959	794	962	830
30	Rubber and miscellaneous plastics products	2,478	2,647	3,119	3,308	4,009	3,892
(X)	All other SIC [1] groups	5,100	5,259	5,432	6,213	7,892	7,486

X Not applicable. [1] Standard Industrial Classification. [2] Excludes SIC groups 3462, 3463, and 348. [3] Excludes SIC group 3825.

Source: U.S. Patent and Trademark Office, *Patenting Trends in the United States, State Country Report, 1963-1990.*

No. 859. Consumer Packaged Goods—New Product Introductions: 1980 to 1991

[**Consumer packaged goods:** consumable products packaged by the manufacturer for retail sale primarily through grocery and drug stores. **New product:** a product not previously offered for sale by a particular manufacturer including new varieties, formats, sizes, and packaging for existing products]

ITEM	Food	Beverages	Health and beauty	Household products	Pet products	Miscellaneous products
Domestic and imports:						
1980	1,192	256	834	331	86	197
1981	1,356	262	868	315	74	237
1982	1,762	332	919	390	103	113
1983	3,013	587	1,355	473	138	105
1984	2,678	569	1,094	303	108	227
1985	2,327	585	1,222	463	139	294
1986	2,764	657	1,327	365	107	194
1987	2,895	634	1,526	362	152	292
1988	2,781	597	1,496	310	151	222
1989	2,866	524	1,492	313	204	206
1990	3,453	630	1,531	432	164	154
1991, total	**3,130**	**589**	**1,614**	**422**	**175**	**113**
Percent:						
New brands [1]	33.8	37.9	27.0	30.6	40.6	43.4
Brand extensions [2]	0.9	0.5	0.8	1.2	0.6	1.8
Line extensions [3]	65.3	61.6	72.2	68.2	58.8	54.8
Types of new product innovation (percent): [4]						
Formulation [5]	56.5	63.6	44.3	47.7	59.3	42.9
New market [6]	0.5	-	1.5	-	-	-
Packaging [7]	12.1	9.0	15.7	20.5	11.1	14.2
Positioning [8]	29.0	27.4	36.4	31.8	29.6	42.9
Technology [9]	1.9	-	2.1	-	-	-
CUMULATIVE						
Domestic, except imports, 1980-91	26,768	5,148	14,230	4,274	1,541	2,189
Imports, 1980-91 [10]	3,449	1,074	1,048	205	60	165
International, 1985-91 [11]	10,289	2,979	9,054	1,980	427	736

- Represents or rounds to zero. [1] Product introduced under completely or partly new brand name. [2] Product introduced in a category with an existing brand name which has not been used in the category before. [3] Introduction of a new variety, format, size or package of an existing product/brand name. [4] Product which offers consumers something significantly different from existing products. [5] Added or new ingredient which offers a benefit not previously provided by existing products in its category. [6] Special category for new products which do not compete with any existing category of products. [7] New product packaged in a way that makes it easier to store, handle, prepare, or dispense than others in its category. [8] New product presented for new users or uses compared to existing products in its category. [9] New product with added consumer benefits resulting from use of a new technology. [10] New products introduced in the U.S. by foreign companies. [11] New products introduced by U.S. and foreign companies outside the United States.

Source: Marketing Intelligence Service Ltd., Naples, New York, *Product Alert Weekly.* Publication contains extract from database, Productscan.

No. 860. Gross Stock of Fixed Private Capital, Nonresidential and Residential, by Industry: 1970 to 1990

[**In billions of dollars.** Estimates as of **Dec. 31.** Based on the *1987 Standard Industrial Classification Manual;* see text, section 13]

INDUSTRY	CURRENT DOLLARS				CONSTANT (1987) DOLLARS			
	1970	1980	1985	1990	1970	1980	1985	1990
Fixed private capital	**2,689.0**	**9,364.1**	**12,746.6**	**16,821.0**	**8,131.2**	**11,584.7**	**13,322.3**	**15,214.5**
Nonresidential	**1,469.6**	**5,072.1**	**7,156.4**	**9,433.0**	**4,250.1**	**6,263.6**	**7,388.5**	**8,459.1**
Agriculture, forestry and fisheries	**96.7**	**333.2**	**398.2**	**418.1**	**300.6**	**436.1**	**418.5**	**369.5**
Farms	90.7	308.6	363.1	370.6	282.6	405.0	382.0	326.9
Agr. serv., forestry and fisheries	6.0	24.6	35.1	47.6	18.0	31.1	36.6	42.5
Mining	**83.5**	**403.3**	**541.4**	**516.1**	**282.4**	**383.7**	**495.8**	**445.7**
Metal mining	6.9	30.6	40.0	42.0	21.3	39.6	41.7	37.0
Coal mining	4.7	31.0	46.0	49.9	15.1	39.3	47.8	43.9
Oil and gas extraction	67.2	323.2	431.4	395.5	231.2	280.8	381.4	339.7
Nonmetallic minerals, exc. fuels	4.7	18.4	23.9	28.8	14.8	24.0	25.0	25.1
Construction	**28.1**	**91.8**	**96.4**	**113.3**	**87.3**	**120.0**	**102.4**	**100.9**
Manufacturing	**338.4**	**1,144.5**	**1,598.6**	**2,088.7**	**1,001.1**	**1,480.7**	**1,694.1**	**1,873.3**
Durable goods	184.0	622.6	873.1	1,122.2	533.7	797.9	922.5	1,013.7
Lumber and wood products	7.8	31.0	37.1	41.8	24.2	40.5	39.5	37.3
Furniture and fixtures	2.6	9.6	13.7	19.1	7.7	12.6	14.5	17.3
Stone, clay, glass products	14.6	47.8	57.9	63.1	44.9	61.4	61.4	57.5
Primary metal industries	49.0	143.2	178.0	203.3	144.3	185.6	188.7	179.9
Fabricated metal products	19.8	70.0	95.5	124.4	57.6	90.2	101.6	111.6
Machinery, exc. electrical	28.2	99.8	148.1	194.0	75.7	123.2	155.1	178.9
Elec. and elec. equipment	16.5	65.4	115.6	167.4	46.8	84.8	121.2	152.0
Motor vehicles and equipment	22.4	73.3	95.1	116.5	65.8	93.6	101.3	104.6
Other transp. equipment	12.7	41.2	65.4	95.9	36.6	53.1	68.9	86.4
Instruments, related products	7.1	29.5	51.4	77.8	20.4	37.6	54.1	71.3
Misc. mfg. industries	3.4	11.8	15.2	18.9	9.8	15.3	16.2	16.9
Nondurable goods	154.4	521.9	725.5	966.5	467.4	682.8	771.7	859.6
Food and kindred products	33.9	103.8	141.8	189.2	103.5	137.2	151.8	168.6
Tobacco manufacturers	1.4	5.3	10.7	14.5	4.0	7.0	11.3	13.0
Textile mill products	11.5	34.7	43.4	51.1	36.9	47.1	47.0	45.6
Apparel; other textile products	3.2	11.8	15.3	18.0	9.4	15.4	16.4	16.1
Paper and allied products	20.8	69.8	98.7	143.4	63.9	91.9	105.0	126.5
Printing and publishing	10.7	36.1	52.7	81.0	33.3	47.8	56.2	74.2
Chemicals, allied products	41.0	149.6	202.6	271.5	119.5	192.1	213.9	239.3
Petroleum and coal products	21.7	71.4	107.5	127.0	65.6	92.6	113.4	112.8
Rubber; misc. plastic products	9.3	36.7	49.4	66.9	28.3	48.0	52.9	59.9
Leather and leather products	1.0	2.8	3.5	4.0	3.2	3.7	3.8	3.6
Transportation and public utilities	**483.2**	**1,498.3**	**1,940.5**	**2,423.9**	**1,348.7**	**1,810.2**	**1,978.5**	**2,143.3**
Transportation	192.6	492.4	572.1	617.1	555.1	603.1	580.5	553.0
Railroad transportation	114.1	232.0	253.1	251.4	332.6	281.1	252.0	226.0
Local, interurban pass. transit	5.1	8.9	10.3	12.6	14.4	11.2	10.7	11.5
Trucking and warehousing	20.7	77.5	100.9	106.4	60.5	101.6	105.2	96.1
Water transportation	14.5	46.6	51.0	54.8	39.3	56.5	53.3	48.5
Transportation by air	19.0	64.0	83.1	106.2	51.5	78.9	85.5	95.7
Pipelines, exc. natural gas	9.8	33.3	37.4	41.3	28.5	40.1	37.9	35.8
Transportation services	9.3	30.0	36.4	44.4	28.2	33.8	35.9	39.4
Communication	101.8	360.2	492.9	622.2	249.7	426.7	505.8	561.4
Telephone and telegraph	95.8	336.4	444.6	539.5	233.3	395.3	455.5	485.9
Radio and TV broadcasting	6.0	23.8	48.4	82.7	16.5	31.4	50.3	75.5
Elec., gas, and sanitary services	188.7	645.7	875.5	1,184.6	544.0	780.4	892.2	1,028.9
Electric services	136.5	492.6	677.1	916.4	391.7	596.3	690.2	791.8
Gas services	46.6	135.3	170.7	210.1	136.2	163.6	174.0	183.2
Sanitary services	5.6	17.8	27.7	58.2	16.0	20.4	28.0	53.8
Wholesale trade	**40.7**	**160.5**	**276.3**	**394.8**	**107.6**	**199.6**	**286.6**	**366.7**
Retail trade	**75.8**	**259.6**	**412.8**	**606.2**	**216.5**	**334.8**	**432.3**	**547.8**
Finance, insurance, real estate	**216.8**	**794.3**	**1,302.7**	**2,031.9**	**619.8**	**1,006.3**	**1,362.9**	**1,842.3**
Banking	22.4	126.1	235.4	407.9	60.9	151.2	244.5	377.7
Credit agencies other than banks	6.2	39.1	58.2	105.5	16.7	44.8	59.9	95.9
Security and commodity brokers and services	1.1	3.8	8.6	12.9	2.6	4.4	8.8	12.4
Insurance carriers	5.6	21.8	56.2	122.4	13.4	25.3	57.2	120.2
Insurance agents, brokers, and services	1.9	4.8	5.4	5.9	3.9	5.0	5.5	5.7
Real estate	177.5	589.6	919.5	1,349.6	517.8	765.5	967.4	1,203.4
Holding, other investment companies	2.1	9.0	19.3	27.7	4.6	10.2	19.6	27.0
Services	**106.3**	**386.7**	**589.6**	**840.1**	**286.1**	**492.1**	**617.3**	**769.7**
Hotels, other lodging places	20.1	63.2	96.0	129.5	60.0	82.4	101.0	115.4
Personal services	7.9	20.7	24.2	32.1	19.9	26.0	25.2	29.7
Business services	18.7	88.4	149.7	216.9	48.0	111.2	157.2	198.3
Auto repair; serv., garages	16.3	68.2	103.4	145.6	43.8	86.5	107.8	136.8
Misc. repair services	2.4	9.4	12.3	14.9	7.0	12.0	12.9	13.5
Motion pictures	2.8	9.0	11.4	19.8	6.8	10.8	12.1	18.4
Amusement, recreation services	10.0	28.5	34.8	41.7	27.3	36.4	36.3	37.5
Other services	28.1	99.5	157.8	239.6	73.3	126.8	164.8	220.0
Health services	14.0	50.6	83.0	130.0	38.8	64.9	86.9	117.7
Legal services	2.8	7.9	14.5	25.5	7.0	9.9	15.1	24.2
Educational services	1.4	2.6	3.6	5.5	2.9	3.1	3.8	5.0
Other [1]	9.8	38.4	56.7	78.6	24.6	48.9	59.0	73.0
Residential	**1,219.4**	**4,292.0**	**5,590.2**	**7,387.9**	**3,881.1**	**5,321.2**	**5,933.8**	**6,755.4**
Farms	50.9	129.1	144.7	159.8	161.6	160.8	153.1	146.4
Real estate	1,168.5	4,162.9	5,445.5	7,228.1	3,719.5	5,160.4	5,780.7	6,609.0

[1] Consists of social services, membership organizations, and miscellaneous professional services.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business,* January 1992.

No. 861. Fixed Nonresidential Private Capital Valued in Current and Constant (1987) Dollars: 1980 to 1991

[**In billions of dollars.** Stocks as of **Dec. 31;** depreciation over entire calendar year. Data refer to privately owned assets and are based on the fixed capital formation components of the gross domestic product. Excludes residential capital and government enterprises; includes nonprofit institutions. Gross stocks allow for retirement; net stocks allow for retirement and depreciation. Net stock and depreciation estimates are based on the straight-line depreciation formula. For manufacturing industry, see table 1307]

ITEM	CURRENT DOLLARS						CONSTANT (1987) DOLLARS					
	1980	1985	1988	1989	1990	1991	1980	1985	1988	1989	1990	1991
Gross stocks	5,072.1	7,156.4	8,488.0	8,933.7	9,433.0	9,748.7	6,263.6	7,388.5	8,045.3	8,256.3	8,459.1	8,641.2
Equipment	2,388.7	3,373.6	4,009.9	4,201.7	4,447.2	4,659.8	3,008.8	3,518.4	3,854.6	3,965.9	4,069.2	4,178.4
Structures	2,683.4	3,782.8	4,478.2	4,732.0	4,985.8	5,088.9	3,254.8	3,870.1	4,190.8	4,290.4	4,389.8	4,462.8
Net stocks	2,974.2	4,112.7	4,810.3	5,033.7	5,280.3	5,413.0	3,677.4	4,247.8	4,561.9	4,657.5	4,742.4	4,809.5
Equipment	1,359.8	1,851.8	2,173.9	2,262.6	2,373.4	2,471.6	1,709.2	1,929.0	2,092.0	2,142.3	2,181.5	2,227.6
Structures	1,614.5	2,260.8	2,636.4	2,771.0	2,906.9	2,941.4	1,968.3	2,318.9	2,469.8	2,515.2	2,560.9	2,581.9
Depreciation	239.6	357.9	419.6	448.6	466.6	486.4	307.8	367.8	408.1	425.0	434.2	446.2
Equipment	161.3	239.7	285.5	304.0	318.2	333.9	211.0	249.8	280.9	293.3	302.3	312.6
Structures	78.4	118.2	134.1	144.6	148.4	152.5	96.9	118.0	127.3	131.6	131.9	133.6

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, January 1992; and unpublished data.

No. 862. Business Expenditures for New Plant and Equipment: 1980 to 1992

[**In billions of dollars.** Based on sample and subject to sampling variability; see text, section 17. Represents expenditures facilities and for expansion or replacement of existing facilities that are chargeable to fixed asset accounts and for which depreciation or amortization accounts are ordinarily maintained. Excludes expenditures for land and mineral rights; maintenance and repair; used plant and equipment, including that purchased or acquired through mergers or acquisitions; assets located in foreign countries; residential structures; etc. They also differ from the nonresidential fixed investment data in type of detail, data sources, coverage, and timing. For further information, see the February 1985 *Survey of Current Business*]

INDUSTRY	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992, plans
All industries [1]	**286.4**	**321.2**	**373.8**	**410.1**	**399.4**	**410.5**	**455.5**	**507.4**	**532.6**	**530.0**	**558.6**
(1987 dollars) [2]	**354.6**	**337.7**	**390.9**	**424.5**	**405.9**	**410.6**	**443.2**	**482.3**	**498.1**	**492.8**	**521.0**
Manufacturing	112.6	117.4	139.6	152.9	138.0	141.1	163.5	183.8	192.6	184.3	184.1
Durable goods [3]	54.8	51.6	64.6	70.9	65.7	68.0	77.0	82.6	82.6	77.0	79.4
Primary metals	6.7	5.9	6.8	7.5	6.7	8.6	11.0	12.0	12.2	11.0	10.0
Electrical machinery	10.2	12.7	16.2	17.1	15.6	16.8	20.8	20.5	22.0	21.2	22.7
Machinery, except electrical	10.7	12.0	13.6	13.8	11.4	11.9	13.7	14.6	13.7	12.3	12.5
Transportation equipment	16.1	11.9	16.6	19.6	18.9	16.7	15.8	18.7	17.9	16.7	17.8
Nondurable goods [3]	57.8	65.7	75.0	82.0	72.3	73.0	86.4	101.2	110.0	107.3	104.7
Food and beverage	8.5	8.5	9.7	11.4	11.6	12.1	14.2	15.9	16.4	17.7	18.8
Paper	6.4	5.7	6.9	8.1	8.3	8.5	10.9	15.6	16.5	11.9	10.6
Chemicals	10.6	11.6	13.5	14.4	14.5	13.9	16.6	18.5	20.6	21.2	22.5
Petroleum	22.8	29.5	32.6	34.1	23.1	22.1	26.0	30.1	34.8	37.2	31.9
Mining	12.7	10.6	11.9	12.0	8.2	8.3	9.3	9.2	9.9	10.1	9.5
Public utilities	41.3	53.0	57.5	59.6	56.6	56.3	60.4	66.3	67.2	66.0	71.4
Transportation	13.6	10.8	13.4	14.6	15.1	15.1	16.6	18.8	21.5	22.2	26.2
Wholesale and retail trade	32.0	44.5	53.4	60.1	65.4	68.5	76.4	84.5	95.6	(NA)	(NA)
Finance and insurance	22.6	32.0	37.9	45.2	49.6	54.1	59.2	70.3	69.0	(NA)	(NA)
Personal and business services [4]	24.9	25.1	28.5	28.8	28.4	30.1	32.9	34.6	33.7	(NA)	(NA)
Communication	26.8	27.9	31.6	37.1	38.2	37.2	37.2	39.8	43.1	(NA)	(NA)

NA Not available. [1] Surveyed quarterly. [2] For preparation of constant-dollar estimates, see source for detail. [3] Includes industries not shown separately. [4] Includes construction.

Source: U.S. Bureau of the Census, *Plant and Equipment Expenditures and Plans*, quarterly.

No. 863. Gross Private Domestic Investment: 1970 to 1990

[**In billions of dollars**]

YEAR	CURRENT DOLLARS						CONSTANT (1987) DOLLARS					
	Gross private domestic investment				Less: Capital consumption allowances [2]	Equals: Net private domestic investment	Gross private domestic investment				Less: Capital consumption allowances [2]	Equals: Net private domestic investment
	Total [1]	Fixed investment	Nonresidential	Residential			Total [1]	Fixed investment	Nonresidential	Residential		
1970	150	148	107	41	89	62	430	424	292	132	258	172
1980	468	477	354	123	312	156	594	603	438	165	401	194
1985	715	690	504	186	455	260	746	724	522	202	472	274
1986	718	709	492	217	479	239	735	727	500	226	487	248
1987	749	723	498	225	502	247	749	723	498	225	502	247
1988	794	777	545	232	534	260	773	753	531	223	519	255
1989	838	802	571	231	575	263	789	757	542	214	542	247
1990	803	803	587	216	595	208	745	744	549	196	551	194

[1] Includes change in inventories, not shown separately. [2] With capital consumption adjustment.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, January 1992; and unpublished data.

No. 864. Composite Indexes of Economic Cyclical Indicators: 1980 to 1990

[1990 figures are preliminary. See source for discussion of composite indexes. Minus sign (-) indicates decrease. **Leading indicators** are economic time series that tend to reach their cyclical high and low points earlier than the corresponding peaks and troughs in the overall economy. **Coincident indicators** are economic time series that tend to reach their cyclical high and low points about the same time as the corresponding peaks and troughs in the overall economy. **Lagging indicators** are economic time series that tend to reach their cyclical high and low points later than the corresponding peaks and troughs in the overall economy]

ITEM	Unit	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
LEADING INDICATORS											
Composite index	**1982=100**	**99.2**	**100.0**	**116.2**	**121.7**	**124.0**	**132.4**	**140.1**	**142.4**	**145.0**	**144.0**
Building permits [1]	1967=100	96.7	80.7	131.1	134.8	138.1	141.2	122.9	115.8	107.7	89.5
Common stock prices, index [2]	1941-43=100	118.8	119.7	160.4	160.5	186.8	236.4	286.8	265.8	322.8	334.6
Initial claims, unemployment insurance	1,000	480	578	426	366	383	370	314	305	327	383
Change in sensitive materials prices [3 4]	Percent	0.4	-0.9	1.1	0.2	-0.8	0.4	1.1	0.4	0.1	-0.3
Vendor performance, slower deliveries	Percent	41	44	57	57	48	51	57	58	48	48
Average workweek, manufacturing [5]	Hours	39.7	38.9	40.1	40.7	40.5	40.7	41.0	41.1	41.0	40.8
Plant and equipment contracts and orders (1982 dol.)	Bil. dol.	332	280	288	350	381	383	433	496	550	546
New orders, manufacturing, consumer goods and materials (1982 dol.)	Bil. dol.	909	837	934	1,016	1,022	1,043	1,098	1,120	1,129	1,109
Money supply (M2) [6] (1982 dol.)	Bil. dol.	1,836	1,875	2,044	2,119	2,228	2,365	2,433	2,458	2,437	2,433
Consumer expectations index [7]	1966=100	56.8	62.7	84.7	92.7	86.5	85.8	81.3	85.2	85.3	70.2
Change in manufacturers' unfilled orders, durable goods (1982 dol.) [4]	Bil. dol.	-12	-31	16	30	3	2	18	17	27	9
COINCIDENT INDICATORS											
Composite index	**1982=100**	**107.2**	**100.0**	**101.9**	**112.3**	**116.3**	**119.0**	**123.6**	**130.0**	**133.5**	**132.8**
Industrial production index	1987=100	84.1	81.9	84.9	92.8	94.4	95.3	100.0	105.4	108.1	109.2
Employees, nonagricultural payrolls	Million	90.4	89.6	90.2	94.5	97.5	99.5	102.2	105.5	108.3	110.0
Personal income less transfer payments (1987 dol.)	Bil. dol.	2,722	2,776	2,812	3,015	3,110	3,200	3,260	3,357	3,441	3,483
Sales, mfg. and trade (1982 dol.)	Bil. dol.	4,341	4,184	4,362	4,726	4,870	5,046	5,338	5,587	5,722	5,747
LAGGING INDICATORS											
Composite index	**1982=100**	**105.5**	**100.0**	**91.4**	**100.7**	**107.5**	**111.4**	**110.6**	**114.3**	**119.3**	**119.2**
Change in labor cost per unit of output, manufacturing [4]	Percent	10.1	4.1	-3.3	1.6	1.8	-0.2	-2.6	3.1	1.2	2.2
Ratio, consumer installment credit to personal income	Percent	13.2	11.8	12.0	13.0	14.3	15.3	15.5	15.7	16.0	15.6
Average prime rate charged by banks	Percent	15.3	14.9	10.8	12.0	9.9	8.3	8.2	9.3	10.9	10.0
Average duration of unemployment	Weeks	11.9	15.6	20.0	18.2	15.6	15.0	14.5	13.5	11.9	12.1
Ratio, inventories to sales, mfg. and trade (1982 dol.)	Ratio	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5
Commercial and industrial loans outstanding (1982 dol.) [8]	Bil. dol.	225	268	261	296	329	349	354	364	390	402
Change in CPI for services [4 9]	Percent	15.2	6.8	3.1	5.6	5.0	4.8	4.2	4.7	5.0	5.9

[1] New private housing units authorized. [2] Standard and Poor's 500 stocks. [3] Producer prices of selected crude and intermediate materials and spot market prices of selected raw industrial materials. [4] Smoothed by an autoregressive-moving-average filter developed by Statistics Canada. [5] Production workers. [6] See table 803. [7] Copyrighted by the University of Michigan's Survey Research Center. [8] Includes commercial paper issued by nonfinancial companies. [9] Consumer Price Index.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, monthly.

No. 865. Business Cycle Expansions and Contractions—Months of Duration: 1919 to 1990

[A trough is the low point of a business cycle; a peak is the high point. Contraction or recession, is the period from peak to subsequent trough; expansion is the period from trough to subsequent peak. Business cycle reference dates are determined by the National Bureau of Economic Research, Inc.]

BUSINESS CYCLE REFERENCE DATE		Contraction (trough from previous peak)	Expansion (trough to peak)	LENGTH OF CYCLE	
Trough	Peak			Trough from previous trough	Peak from previous peak
March 1919	January 1920	[1]7	10	[2]51	[1]17
July 1921	May 1923	18	22	28	40
July 1924	October 1926	14	27	36	41
November 1927	August 1929	13	21	40	34
March 1933	May 1937	43	50	64	93
June 1938	February 1945	13	80	63	93
October 1945	November 1948	8	37	88	45
October 1949	July 1953	11	45	48	56
May 1954	August 1957	10	39	55	49
April 1958	April 1960	8	24	47	32
February 1961	December 1969	10	106	34	116
November 1970	November 1973	11	36	117	47
March 1975	January 1980	16	58	52	74
July 1980	July 1981	6	12	64	18
November 1982	July 1990	16	92	28	108
Average, all cycles:					
1919 to 1945 (six cycles)		18	35	53	53
1945 to 1990 (eight cycles)		11	[3]50	56	[3]61

[1] Previous peak: August 1918. [2] Previous trough: December 1914. [3] For nine cycles.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, April 1992.

No. 866. Manufacturing and Trade—Sales and Inventories in Current and Constant (1982) Dollars: 1980 to 1991

[In billions of dollars, except ratios]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
CURRENT DOLLARS												
Sales, average monthly	**328**	**357**	**349**	**370**	**412**	**424**	**432**	**459**	**496**	**526**	**543**	**535**
Manufacturing	154	168	163	173	191	195	195	206	224	237	243	239
Retail trade	80	87	89	98	107	115	121	129	138	145	151	152
Merchant wholesalers	93	102	96	100	113	115	116	124	135	144	149	145
Inventories [1]	**494**	**538**	**581**	**575**	**627**	**657**	**667**	**687**	**740**	**797**	**819**	**815**
Manufacturing	264	283	319	307	329	337	327	328	352	380	388	381
Retail trade	116	128	133	140	159	174	188	200	212	232	240	240
Merchant wholesalers	113	127	130	128	139	146	153	159	175	185	192	195
Inventory-sales ratio [2]	**1.51**	**1.51**	**1.66**	**1.55**	**1.52**	**1.55**	**1.54**	**1.50**	**1.49**	**1.52**	**1.51**	**1.52**
Manufacturing	1.71	1.68	1.96	1.77	1.72	1.73	1.68	1.59	1.57	1.60	1.60	1.59
Retail trade	1.45	1.47	1.49	1.43	1.49	1.51	1.55	1.55	1.54	1.60	1.59	1.58
Merchant wholesalers	1.22	1.25	1.35	1.28	1.23	1.27	1.32	1.28	1.30	1.28	1.29	1.34
CONSTANT (1982) DOLLARS												
Sales, average monthly [3]	**372**	**357**	**346**	**383**	**403**	**414**	**432**	**457**	**478**	**482**	**(NA)**	**(NA)**
Manufacturing	175	167	159	178	186	189	192	214	224	224	(NA)	(NA)
Retail trade	93	91	94	102	108	112	120	121	127	126	(NA)	(NA)
Merchant wholesalers	104	99	93	102	109	113	120	122	127	132	(NA)	(NA)
Inventories	**591**	**602**	**582**	**584**	**631**	**638**	**642**	**669**	**689**	**702**	**(NA)**	**(NA)**
Manufacturing	327	330	315	309	330	321	316	323	330	334	(NA)	(NA)
Retail trade	130	136	133	142	158	169	171	186	192	199	(NA)	(NA)
Merchant wholesalers	134	136	134	133	143	149	155	160	166	169	(NA)	(NA)
Inventory-sales ratios [4]	**1.59**	**1.68**	**1.68**	**1.53**	**1.56**	**1.54**	**1.49**	**1.46**	**1.44**	**1.46**	**(NA)**	**(NA)**
Manufacturing	1.87	1.98	1.99	1.74	1.77	1.70	1.64	1.51	1.47	1.49	(NA)	(NA)
Retail trade	1.40	1.48	1.41	1.39	1.46	1.51	1.43	1.54	1.52	1.58	(NA)	(NA)
Merchant wholesalers	1.29	1.37	1.44	1.30	1.31	1.32	1.29	1.31	1.31	1.28	(NA)	(NA)

NA Not available. [1] Book value; seasonally adjusted end-of-year data. See text, section 17. [2] Average inventories to average sales. Average inventories based on weighted averages of end-of-month figures. [3] Average monthly sales for fourth quarter. [4] End of fourth quarter inventories to average monthly sales for fourth quarter.

Source: Current dollars from U.S. Bureau of the Census, *Current Business Reports,* "Manufacturing and Trade Inventories and Sales" February 1990 and unpublished data; constant dollars from U.S. Bureau of Economic Analysis, *Survey of Current Business,* September issues.

No. 867. Manufacturing Corporations, Assets, and Profits, by Asset Size: 1970 to 1990

[Corporations and assets as of **end of 4th quarter;** profit for **entire year.** Through 1979, corporations under $10 million based on sample; $10 million and over based on complete canvass. The asset value for complete canvass was raised in 1980 to $25 million and again in 1988 to $50 million. Asset sizes less than these values continue to be sampled, except as noted. For details regarding methodology, see source for first quarter, 1988]

YEAR AND ITEM	Unit	Total	ASSET-SIZE CLASS						
			Under [1] $10 mil.	$10-$25 mil.	$25-$50 mil.	$50-$100 mil.	$100-$250 mil.	$250 mil. -$1 bil.	$1 bil. and over
Corporations:									
1970 [2]	Number	197,807	[3]195,000	1,202	533	366	289	218	102
1980	Number	(NA)	(NA)	1,777	941	590	491	369	244
1983	Number	(NA)	(NA)	(NA)	863	683	559	403	275
1984	Number	(NA)	(NA)	(NA)	872	703	601	420	287
1985	Number	(NA)	(NA)	(NA)	896	744	608	428	281
1986	Number	(NA)	(NA)	(NA)	962	741	628	445	291
1987	Number	(NA)	(NA)	(NA)	1,007	811	676	481	318
1988	Number	(NA)	(NA)	(NA)	(NA)	783	729	550	334
1989	Number	(NA)	(NA)	(NA)	(NA)	781	750	579	347
1990	Number	(NA)	(NA)	(NA)	(NA)	834	774	597	367
Assets:									
1970	Mil. dol	578,234	69,101	20,471	20,138	25,946	47,783	112,475	282,320
1980	Mil. dol	1,384,474	126,639	43,569	34,930	41,963	75,284	179,959	882,129
1983	Mil. dol	1,704,951	149,791	54,506	41,766	52,673	87,391	194,212	1,124,612
1984	Mil. dol	1,853,457	156,671	59,549	49,419	53,517	94,315	206,698	1,233,288
1985	Mil. dol	1,932,766	153,883	64,324	52,669	58,019	96,748	208,403	1,298,720
1986	Mil. dol	1,994,120	140,864	67,663	55,974	58,233	97,908	217,341	1,356,137
1987	Mil. dol	2,135,266	147,919	65,623	50,171	60,874	109,458	235,368	1,465,853
1988	Mil. dol	2,339,690	149,276	77,068	53,461	62,190	110,411	261,880	1,625,404
1989	Mil. dol	2,501,097	144,814	73,487	56,548	68,149	117,014	282,056	1,759,029
1990	Mil. dol	2,629,542	142,619	74,488	55,947	72,593	123,847	287,512	1,872,536
Net profit: [4]									
1970	Mil. dol	28,572	2,812	811	836	1,101	2,315	5,862	14,832
1980	Mil. dol	92,443	7,770	2,235	1,904	2,479	4,532	11,485	62,041
1983	Mil. dol	85,834	7,438	2,893	2,149	2,466	3,861	6,134	60,893
1984	Mil. dol	107,648	10,037	3,417	2,527	2,877	4,864	9,278	74,648
1985	Mil. dol	87,647	8,601	2,551	2,305	2,819	3,628	7,312	60,431
1986	Mil. dol	83,122	6,659	2,988	2,129	2,514	3,884	7,572	57,376
1987	Mil. dol	115,600	7,273	3,849	2,753	3,338	5,237	9,636	83,514
1988	Mil. dol	154,583	11,364	4,488	3,199	3,978	5,473	13,994	112,086
1989	Mil. dol	136,490	10,381	5,173	2,921	3,105	4,434	11,824	98,651
1990	Mil. dol	111,549	8,529	5,152	2,769	2,681	3,520	7,245	81,652

NA Not available. [1] Beginning 1986, excludes estimates for corporations with less than $250,000 in assets at time of sample selection. Prior periods include estimates for corporations in this size category. [2] Source: U.S. Securities and Exchange Commission. [3] Data derived from U.S. Internal Revenue Service, *Statistics of Income,* annual. [4] After taxes.

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

No. 868. Largest Industrial Corporations—Sales, Assets, and Profits by Sales Group Rank: 1987 and 1991

[**In billions of dollars, except percent.** Excludes large privately owned companies that do not publish sales. Includes service and rental revenues, but companies must derive more than 50 percent of revenues from manufacturing or mining for years ending not later than **Dec. 31 of year stated,** sales exclude excise taxes collected by manufacturer and include discontinued operations. Minus sign (-) indicates decrease]

RANK BY SALES GROUP	SALES			ASSETS [1]			PROFITS [2]		
	1987	1991	Percent change, 1987-91	1987	1991	Percent change, 1987-91	1987	1991	Percent change 1987-1991
500 largest	**1,880**	**2,263**	**20**	**1,706**	**2,458**	**44**	**91**	**55**	**-39**
Top 100	1,307	1,619	24	1,217	1,844	51	66	38	-41
101-200	287	323	13	240	328	37	14	9	-36
201-300	142	160	13	123	151	23	5	4	-21
301-400	88	96	8	73	77	6	2	3	12
401-500	56	65	16	52	57	9	3	1	-72
Percent of total:									
Top 100	70	72	(X)	71	75	(X)	73	70	(X)
101-200	15	14	(X)	14	13	(X)	16	17	(X)
201-300	8	7	(X)	7	6	(X)	6	8	(X)
301-400	5	4	(X)	4	3	(X)	3	5	(X)
401-500	3	3	(X)	3	2	(X)	3	1	(X)

X Not applicable. [1] Total assets employed in business at end of fiscal year, less depreciation and depletion. [2] After taxes, special charges, and credits.
Source: Time Warner, New York, NY, *The Fortune Directories,* (copyright).

No. 869. 500 Largest Industrial Corporations—Selected Financial Items: 1970 to 1991

ITEM	Unit	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991
Sales per employee	$1,000	29.5	71.1	100.6	106.0	110.7	124.4	137.9	146.0	154.1	159.7
Changes in profits	Percent	(NA)	(NA)	24.9	-19.1	-7.9	41.3	26.9	-8.1	-11.7	-41.0
Sales per dollar of stockholder's equity	Dollar	2.4	3.12	2.78	2.80	2.79	2.77	2.93	2.96	2.95	2.81
Return on stockholder's equity	Percent	9.5	14.1	13.6	11.6	11.6	14.4	16.2	15.0	13.0	10.2
Return on sales	Percent	3.9	4.5	4.5	3.9	4.1	5.1	5.5	4.6	4.1	3.2
Total return to investors [1]	Percent	6.5	21.6	-0.8	26.3	16.1	6.6	14.1	17.5	-10.2	29.5

NA Not available. [1] Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock.
Source: Time Warner, New York, NY, *The Fortune Directories,* (copyright).

No. 870. 500 Largest Industrial Corporations—Selected Financial Items, by Industry: 1987 and 1991

[Data are medians and are ranked based on sales per employee for latest year shown. See headnote, table 868. Minus sign (-) indicates decrease. For definition of median, see Guide to Tabular Presentation]

INDUSTRY	SALES PER EMPLOYEE ($1,000)		CHANGES IN PROFITS FROM PREVIOUS YEAR (percent)		SALES PER DOLLAR OF STOCKHOLDER'S EQUITY (dol.)		RETURN ON STOCKHOLDER'S EQUITY (percent)		RETURN ON SALES (percent)		TOTAL RETURN TO INVESTORS [1] (percent)	
	1987	1991	1987	1991	1987	1991	1987	1991	1987	1991	1987	1991
Total	**124.4**	**159.7**	**41.3**	**11.6**	**2.77**	**2.81**	**14.4**	**10.2**	**5.1**	**3.2**	**6.6**	**29.5**
Petroleum refining	416.5	555.2	0.1	-52.1	3.05	3.44	10.2	8.5	3.4	1.5	6.8	0.7
Mining, crude-oil production	248.7	414.5	14.2	-61.9	1.86	1.64	7.0	7.7	3.3	4.8	24.5	-5.5
Soaps, cosmetics	181.1	241.1	13.6	-12.9	3.64	3.11	16.2	14.7	4.9	5.1	6.0	19.4
Food	178.3	239.0	19.5	13.2	5.32	4.82	16.1	19.7	3.5	3.5	3.4	26.7
Chemicals	173.1	227.3	29.4	-17.8	2.41	2.36	14.2	12.6	6.0	3.7	8.5	31.9
Beverages	160.6	201.1	11.2	5.9	2.06	2.48	14.0	21.1	7.0	5.5	0.2	32.3
Metals	157.1	176.7	53.6	-51.8	2.73	2.50	11.1	5.2	4.3	1.5	50.5	18.2
Tobacco	150.3	257.1	24.6	27.2	2.63	5.20	20.0	12.1	8.3	2.3	19.2	137.3
Forest products	145.6	174.1	59.7	39.6	2.22	1.77	14.7	4.6	6.5	2.9	9.1	37.5
Building materials	140.8	157.9	17.2	-53.8	2.14	1.95	13.4	-0.7	6.8	-3.6	25.2	39.8
Transportation equipment [2]	125.9	118.4	(NA)	-11.7	5.51	3.72	23.1	8.9	3.1	2.4	1.1	54.3
Pharmaceuticals	123.5	168.9	15.1	16.0	1.97	1.85	22.7	26.1	13.2	12.8	11.7	61.5
Rubber and plastic products	107.2	152.7	51.9	13.3	3.48	3.23	13.1	11.6	5.6	3.4	15.7	90.3
Metal products	105.1	123.0	35.3	-1.0	2.93	3.43	14.3	11.8	5.4	3.4	12.0	40.8
Computers (incl. office equip.)	105.0	163.7	26.9	1.1	2.17	2.38	14.6	10.2	8.2	4.9	6.3	12.3
Publishing, printing	103.3	133.0	15.6	-10.3	2.13	2.14	18.9	10.7	8.4	5.1	8.7	19.4
Motor vehicles and parts	101.9	129.9	20.6	-58.7	3.48	3.37	11.6	1.0	3.5	0.4	-7.7	16.7
Aerospace	98.9	135.7	3.9	0.7	4.21	3.91	11.3	12.4	3.7	3.3	-24.5	35.5
Industrial and farm equipment	97.7	137.7	42.4	28.9	2.98	3.34	11.2	6.0	3.3	1.5	10.0	15.0
Scientific, photographic equipment	94.5	130.0	21.9	16.3	1.92	2.50	16.3	14.3	8.3	5.3	0.5	50.2
Electronics	85.1	111.2	17.1	-9.3	2.46	2.78	14.1	10.7	5.0	2.7	1.4	37.6
Furniture	75.4	105.5	8.0	20.6	2.61	3.17	15.2	9.2	5.2	2.3	-7.0	41.5
Textiles	71.3	93.4	24.3	-49.5	3.26	2.97	12.8	4.6	4.1	1.4	-6.3	45.2
Apparel	52.2	73.9	29.0	1.1	3.14	3.96	14.1	13.6	3.9	3.4	-18.9	52.6

NA Not available. [1] Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock. [2] Excludes motor vehicles and aircraft.
Source: Time Warner, New York, NY, *The Fortune Directories,* (copyright).

No. 871. Corporate Profits, Taxes, and Dividends: 1980 to 1991

[**In billions of dollars.** Covers corporations organized for profit and other entities treated as corporations. Represents profits to U.S. residents, without deduction of depletion charges and exclusive of capital gains and losses; intercorporate dividends from profits of domestic corporations are eliminated; net receipts of dividends, reinvested earnings of incorporated foreign affiliates, and earnings of unincorporated foreign affiliates are added]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Profits before taxes	240.9	228.9	176.3	210.7	240.5	225.0	217.8	287.9	347.5	344.5	332.3	312.7
Less: Income tax liability [1]	84.8	81.1	63.1	77.2	94.0	96.5	106.5	127.1	137.0	138.0	135.3	124.6
Equals: Profits after taxes	156.1	147.8	113.2	133.5	146.4	128.5	111.3	160.8	210.5	206.6	197.0	188.1
Less: Net dividends [2]	59.0	69.2	70.0	81.2	82.7	92.4	109.8	106.2	115.3	127.9	133.7	137.8
Equals: Undistributed profits	97.1	78.6	43.2	52.3	63.8	36.1	1.6	54.6	95.2	78.7	63.3	50.3
Capital consumption allowances [3]	164.9	198.2	228.8	268.1	293.7	333.3	338.3	354.1	372.3	375.2	366.3	374.9
Profits after tax plus capital consumption allowances [3]	321.0	346.0	342.0	401.6	440.1	461.8	449.6	514.9	582.8	581.8	563.3	563.0

[1] Federal, State, and local. [2] Disbursements to U.S. residents, measured after eliminations of intercorporate dividends. [3] Without capital consumption adjustment. Includes depreciation and accidental damages.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business,* March 1992, and unpublished data.

No. 872. Corporate Profits, by Industry: 1987 to 1990

[**In billions of dollars.** Profits are without inventory valuation and capital consumption adjustments. Minus sign (-) indicates loss. See headnote, table 871]

INDUSTRY	BEFORE TAXES				AFTER TAXES			
	1987	1988	1989	1990	1987	1988	1989	1990
Total	**287.9**	**347.5**	**344.5**	**332.3**	**160.8**	**210.5**	**206.6**	**197.0**
Domestic industries	**248.4**	**298.5**	**290.7**	**272.1**	**121.3**	**161.4**	**152.7**	**136.8**
Agriculture [1]	1.9	1.8	1.9	2.0	1.3	1.2	1.3	1.4
Mining	-1.4	0.5	1.9	2.8	-2.2	-0.7	0.4	1.0
Construction	11.3	12.5	13.5	14.3	8.4	9.8	10.5	11.1
Manufacturing	93.9	130.1	118.4	99.4	50.3	76.8	68.9	53.1
Transportation	4.2	7.0	4.3	1.9	1.2	2.6	1.8	-0.2
Communications	19.5	19.1	22.3	24.9	11.8	11.6	13.6	15.4
Public utilities	18.9	20.9	19.7	18.6	10.3	12.9	10.9	9.1
Wholesale and retail trade	47.1	49.4	51.2	48.9	29.5	33.5	35.0	32.9
Finance, insurance [2]	38.0	42.3	39.1	39.5	0.9	3.7	-3.6	-2.6
Services	15.1	14.9	18.4	19.8	9.8	10.0	14.0	15.6
Rest of world [3]	**39.5**	**49.1**	**53.9**	**60.2**	**39.5**	**49.1**	**53.9**	**60.2**

[1] Includes forestry and fisheries. [2] Includes real estate. [3] Consists of receipts by all U.S. residents, including both corporations and persons, of earnings of unincorporated foreign affiliates, dividends from their incorporated foreign affiliates, and their share of their incorporated foreign affiliates, net of corresponding outflows.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business,* January 1992.

No. 873. Corporate Profits With Inventory Valuation and Capital Consumption Adjustments—Financial and Nonfinancial Industries: 1970 to 1991

[**In billions of dollars.** Minus sign (-) indicates loss. See headnote, table 871]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991
Corporate profits with IVA [1] and CCA [2]	**77.5**	**177.7**	**212.7**	**264.2**	**280.8**	**271.6**	**319.8**	**365.0**	**351.7**	**319.0**	**307.1**
Domestic industries	70.4	142.7	182.3	233.0	250.0	238.7	280.3	315.9	297.8	258.8	241.0
Financial	13.3	22.0	22.4	18.7	28.6	34.9	36.1	41.5	36.9	34.5	35.6
Nonfinancial	57.1	120.7	159.9	214.3	221.4	203.8	244.2	274.4	261.0	224.3	205.4
Rest of the world	7.1	35.0	30.4	31.2	30.8	32.9	39.5	49.1	53.9	60.2	66.1
Corporate profits with IVA [1]	**71.8**	**197.8**	**202.2**	**236.4**	**225.3**	**227.6**	**273.4**	**320.3**	**327.0**	**318.2**	**315.8**
Domestic industries	64.7	162.9	171.9	205.2	194.5	194.6	233.9	271.2	273.1	258.0	249.7
Financial	13.1	24.3	24.5	20.3	28.7	35.8	36.4	41.8	39.2	39.6	41.8
Federal Reserve banks	3.5	11.8	14.6	16.4	16.3	15.5	15.7	17.6	20.2	21.3	20.7
Other	9.6	12.6	9.9	3.9	12.4	20.3	20.7	24.2	19.0	18.3	21.1
Nonfinancial	51.6	138.5	147.4	185.0	165.8	158.9	197.5	229.4	233.9	218.3	207.9
Manufacturing	27.1	75.8	71.4	86.7	80.1	59.0	87.0	117.5	113.6	95.7	81.9
Durable goods [3]	10.4	17.9	18.4	37.2	29.0	30.0	42.2	52.2	50.2	37.2	23.5
Primary metal industries	0.8	2.6	-4.9	-0.4	-0.9	0.9	2.6	5.9	6.4	4.6	2.2
Fabricated metal products	1.1	4.3	3.1	4.5	4.7	5.3	5.2	6.4	6.9	5.6	4.6
Machinery, except electrical	3.0	7.5	4.4	6.3	5.3	3.2	7.3	10.5	10.3	10.2	8.5
Electric and electronic equipment	1.3	5.0	3.4	4.8	2.4	2.6	6.2	7.6	8.7	7.9	6.4
Motor vehicles and equipment	1.3	-4.3	5.2	8.9	7.3	4.4	3.7	5.7	1.7	-7.1	-11.1
Nondurable goods [3]	16.8	57.8	53.0	49.5	51.1	29.0	44.8	65.3	63.4	58.5	58.4
Food and kindred products	3.2	6.0	5.8	7.3	8.4	7.5	11.4	11.8	11.8	12.6	15.6
Chemicals and allied products	3.9	5.5	6.8	7.3	6.0	8.0	15.1	19.3	19.9	20.3	20.2
Petroleum and coal products	3.6	33.6	22.1	15.9	17.1	-8.5	-3.6	10.4	7.2	6.5	4.0
Transportation and public utilities	8.2	18.3	28.9	39.9	34.1	36.5	43.4	47.5	45.0	44.5	45.3
Wholesale and retail trade	10.3	22.8	38.7	49.7	43.1	46.3	39.9	37.1	42.8	39.8	46.1
Other	5.9	21.6	8.4	8.7	8.5	17.1	27.2	27.3	32.6	38.4	34.6

[1] Inventory valuation adjustment. [2] Capital consumption adjustment. [3] Includes other industries not shown separately.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business,* March 1992, and unpublished data.

No. 874. Selected Corporate Profits and Stockholders' Equity Ratios, by Industry: 1980 to 1990

[Averages of quarterly figures at annual rates. Beginning 1989, manufacturing data exclude estimates for corporations with less than $250,000 in assets at time of sample selection. Data are not necessarily comparable from year to year due to changes in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source. Based on sample; see source for discussion of methodology. Minus sign (-) indicates loss]

INDUSTRY GROUP	RATIO OF PROFITS TO STOCKHOLDERS' EQUITY (percent)				PROFITS PER DOLLAR OF SALES (cents)				RATIO OF STOCKHOLDERS' EQUITY TO DEBT			
	1980	1985	1989	1990	1980	1985	1989	1990	1980	1985	1989	1990
All manufacturing corporations [1]	**13.9**	**10.1**	**13.7**	**10.7**	**4.9**	**3.8**	**5.0**	**4.0**	**2.3**	**1.9**	**1.4**	**1.3**
Durable goods industries	**11.2**	**9.2**	**11.0**	**8.0**	**4.0**	**3.4**	**4.1**	**3.0**	**2.2**	**2.2**	**1.6**	**1.6**
Stone, clay, and glass products	10.8	7.9	10.4	5.4	4.2	3.1	3.3	1.8	1.9	1.7	0.8	0.8
Primary metal industries	11.7	−7.9	18.4	9.5	4.1	−2.6	4.6	2.6	1.7	1.2	1.1	1.1
Iron and steel	9.0	11.0	20.2	6.6	2.9	−2.6	2.7	1.0	1.7	0.8	0.6	0.6
Nonferrous metals	15.6	−5.7	17.7	10.4	5.8	−2.5	6.3	4.0	1.8	1.6	1.5	1.6
Fabricated metal products	13.9	9.2	13.6	11.7	4.2	2.8	3.8	3.4	2.1	1.6	1.3	1.3
Machinery, exc. electrical	15.0	9.3	7.4	8.1	6.5	4.7	3.8	4.4	2.2	2.6	2.1	2.2
Electrical and electronic equipment	15.1	8.3	10.9	7.5	5.0	3.4	4.4	3.0	2.6	2.7	1.8	1.6
Transportation equipment	0.6	15.4	11.1	3.8	−0.3	4.1	3.6	1.3	2.7	2.9	2.1	1.9
Motor vehicles and equipment	−9.3	18.2	10.9	−1.0	3.4	4.9	3.6	−0.5	3.4	4.2	2.4	2.2
Aircraft, guided missiles and parts	16.0	11.1	10.7	11.5	4.3	3.1	3.3	3.4	2.8	2.6	1.9	1.6
Instruments and related products	17.5	10.1	12.4	12.9	9.3	5.7	6.2	6.6	4.3	3.5	1.6	1.6
Nondurable goods industries	**16.4**	**11.0**	**16.3**	**13.3**	**5.6**	**4.1**	**5.9**	**4.9**	**2.3**	**1.7**	**1.2**	**1.2**
Food and kindred products [2]	14.7	15.3	17.1	16.1	3.4	4.1	4.2	4.1	1.9	1.4	0.8	0.8
Tobacco manufactures	19.8	(2)	(2)	(2)	11.7	(2)	(2)	(2)	1.8	(2)	(2)	(2)
Textile mill products	8.5	8.6	10.0	3.4	2.2	2.4	2.5	0.8	2.0	1.5	0.8	0.7
Paper and allied products	12.1	9.7	15.6	10.6	5.1	4.0	6.2	4.2	2.0	1.7	1.3	1.1
Printing and publishing	16.4	19.2	15.0	8.3	5.5	6.5	5.7	3.6	2.1	1.7	1.1	1.2
Chemicals and allied products	15.4	9.4	19.7	17.3	7.1	4.7	8.8	8.2	2.2	2.1	1.5	1.4
Industrial	11.9	4.2	17.9	13.8	5.4	2.2	8.3	7.0	1.9	1.8	1.5	1.4
Drugs	19.9	15.2	28.0	27.1	13.2	9.8	15.1	15.7	3.0	3.2	2.1	2.2
Petroleum and coal products	20.0	8.5	14.6	12.8	7.7	4.0	7.4	5.7	3.4	1.6	1.6	1.7
Rubber and misc. plastics products	6.7	9.5	12.1	6.9	2.0	2.6	3.0	1.8	1.6	1.6	1.0	1.0
Mining corporations, total [3]	**19.2**	**−4.0**	**6.0**	**8.1**	**11.3**	**−3.2**	**4.5**	**5.7**	**1.3**	**1.0**	**1.2**	**1.3**
Retail trade corporations, total [3]	**13.2**	**12.5**	**13.2**	**8.4**	**1.7**	**2.2**	**1.9**	**1.1**	**1.2**	**1.4**	**0.7**	**0.6**
Wholesale trade corporations, total [3]	**17.3**	**8.7**	**9.0**	**5.0**	**1.8**	**1.0**	**1.1**	**0.6**	**1.2**	**1.0**	**1.0**	**1.0**

[1] Includes other industries not shown separately. [2] Beginning 1985, tobacco included in food and kindred products. [3] For 1985, represents results of companies with assets over $25 million; thereafter, asset cut-off raised to $50 million.

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

No. 875. Manufacturing Corporations—Sales, Profits, Stockholders' Equity, and Debt: 1970 to 1990

[**In billions of dollars.** Data are not necessarily comparable from year to year due to changes in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source. See also *Historical Statistics, Colonial Times to 1970,* series P 93-106]

YEAR	ALL MANUFACTURING CORPS.					DURABLE GOODS INDUSTRIES					NONDURABLE GOODS INDUSTRIES				
	Sales	Profits		Stockholders' equity [1]	Debt [1]	Sales	Profits		Stockholders' equity [1]	Debt [1]	Sales	Profits		Stockholders' equity [1]	Debt [1]
		Before taxes	After taxes				Before taxes	After taxes				Before taxes	After taxes		
1970	709	48	29	307	134	363	23	13	155	71	346	25	16	152	63
1975	1,065	80	49	423	183	521	35	21	208	94	544	45	28	215	89
1976	1,203	105	65	463	188	590	51	31	224	91	614	54	34	238	97
1977	1,328	115	70	497	200	657	58	35	240	95	671	57	36	257	106
1978	1,496	133	81	541	222	761	70	42	263	106	736	63	39	278	117
1979	1,742	154	99	600	252	866	72	45	292	123	876	82	54	308	129
1980	1,897	145	92	665	292	883	57	36	316	143	1,014	88	57	349	149
1981	2,145	159	101	743	335	979	67	42	350	159	1,165	91	60	393	176
1982	2,039	108	71	770	371	913	35	22	356	177	1,126	74	49	415	193
1983	2,114	133	86	813	368	973	49	30	372	168	1,141	84	56	440	200
1984	2,335	166	108	864	405	1,108	76	49	396	166	1,228	90	59	469	239
1985	2,331	137	88	866	454	1,143	61	39	421	187	1,189	76	49	445	267
1986 [2]	2,221	129	83	875	501	1,126	52	33	436	203	1,096	78	51	438	298
1987	2,378	173	116	901	553	1,178	78	53	444	229	1,200	95	63	457	324
1988	2,596	216	155	958	622	1,285	92	67	469	265	1,312	124	88	489	357
1989	2,745	189	136	999	733	1,357	75	56	501	308	1,388	114	81	498	425
1990	2,811	160	112	1,044	781	1,357	58	41	515	328	1,454	102	71	529	453

[1] Annual data are average equity or debt for the year (using four end-of-quarter figures). [2] Beginning 1986, data exclude estimates for corporations with less than $250,000 in assets at time of sample selection. Prior periods include estimates for corporations in this size category.

Source: Through 1981, U.S. Federal Trade Commission; thereafter, U.S. Bureau of Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.* In U.S. Council of Economic Advisers, *Economic Report of the President,* annual.

No. 876. Corporate Philanthropy as a Percent of Worldwide Pretax Net Income: 1985 to 1989

[Data are based on a sample greater than 1,200 corporations. Medians by industry]

INDUSTRY CLASS	1985	1987	1988	1989	INDUSTRY CLASS	1985	1987	1988	1989
All firms, median	**1.0**	**0.9**	**0.8**	**0.9**	Paper and like products	1.2	0.7	0.6	0.7
					Petroleum and gas [2]	0.7	0.9	0.5	0.8
Manufacturing firms, median	**1.1**	**1.0**	**0.8**	**0.9**	Pharmaceuticals	1.0	1.0	1.1	1.0
Chemicals	1.1	0.8	0.7	0.8	Primary metal industries	1.1	(1)	(1)	(1)
Electrical machinery and equipment	1.6	1.2	0.6	0.7	Printing and publishing	1.3	0.8	2.3	1.7
Fabricated metal products	0.8	[1]1.2	[1]0.8	[1]1.0	Stone, clay and glass products	1.5	(1)	(1)	(1)
Food, beverage and tobacco	1.2	1.3	1.0	1.4	Textiles	(3)	(3)	(3)	0.8
Machinery, nonelectrical	1.1	1.0	0.9	0.7	Transportation equipment [4]	1.0	0.9	1.1	1.2
					Nonmanufacturing firms, median	**0.9**	**0.7**	**0.9**	**1.0**

[1] Primary metals and stone, clay, and glass firms included with fabricated metal firms. [2] Mining firms included with petroleum firms. [3] Fewer than 4 companies reporting. [4] Rubber and miscellaneous plastic firms included with transportation firms.

Source: The Conference Board, New York, NY, *Annual Survey of Corporate Contributions,* (copyright).

No. 877. U.S. Largest Public Companies, Profitability and Growth: 1991

[In percent, except ranks. For fiscal years ending in the 12 month period ending September 30. Included in the Forbes Universe of 1,177 companies is every firm with revenue of over $400 million in **1991,** electric and banking firms $800 million. Represents industry medians; calculated by listing companies in rank order and selecting the midpoint. Where there is an even number of companies, an arithmetic average of the two middle companies is substituted]

INDUSTRY	PROFITABILITY					GROWTH					
	Return on equity [1]			1991		Sales [3]			Earnings per share		
	5-year rank	5-year average	Latest 12 months, 1991	Return on capital, [2] latest 12 months	Debt/capital	5-year rank	5-year average	Latest 12 months, 1991	5-year rank	5-year average	Latest 12 months, 1991
All-industry medians	**(X)**	**13.2**	**9.9**	**7.6**	**32.4**	**(X)**	**11.3**	**3.7**	**(X)**	**4.5**	**-5.9**
Food, drink and tobacco	1	20.0	17.0	12.4	30.6	14	10.6	7.0	1	14.8	7.4
Consumer nondurables	2	18.0	13.6	9.4	32.4	5	12.3	7.6	5	10.8	10.3
Health	3	17.9	16.9	14.2	18.9	4	12.5	10.8	2	14.7	18.5
Chemicals	4	16.7	13.0	9.4	30.8	6	12.2	4.0	3	13.9	-11.1
Entertainment and information	5	15.4	8.4	7.6	31.6	12	11.0	0.7	12	-0.7	-22.6
Business services and supplies	6	14.8	10.3	9.0	31.4	7	11.7	2.6	7	8.5	-10.1
Forest products and packaging	7	14.4	5.5	4.3	33.3	9	11.6	-1.8	4	12.6	48.1
Food distribution	8	14.2	12.0	10.0	39.7	8	11.6	3.5	6	9.0	7.0
Retailing	9	14.0	10.5	9.3	32.4	2	13.5	7.7	11	4.5	-5.9
Metals	10	13.2	3.7	3.7	31.2	13	10.7	5.7	8	7.5	-66.9
Computers and communications	11	13.2	9.4	7.4	25.0	1	14.3	4.5	16	-13.6	-19.1
Capital goods	12	13.2	7.5	7.2	28.9	11	11.3	-0.8	9	7.1	29.8
Electric utilities	13	12.4	12.2	7.0	40.4	20	3.2	3.7	14	-11.7	1.7
Aerospace and defense	14	12.2	9.4	7.6	32.8	19	6.8	2.2	17	-18.7	1.5
Insurance	15	12.1	10.7	9.9	19.5	15	9.6	5.4	10	4.9	1.3
Financial services	16	11.1	12.0	8.7	27.2	10	11.3	0.1	19	(NS)	0.8
Consumer durables	17	11.0	4.3	5.3	34.5	16	9.4	-2.3	18	(NS)	-51.1
Transport	18	10.8	9.9	6.7	36.8	17	8.8	4.3	13	-6.7	2.9
Energy	19	10.7	9.6	7.2	37.7	21	-4.2	6.0	19	(NS)	-4.7
Construction	20	9.6	0.8	3.5	39.5	18	8.6	-8.2	15	-11.7	-87.8
Travel	21	9.4	0.2	2.3	50.4	3	12.6	9.0	19	(NS)	(4)

NS Not significant. X Not applicable. [1] Represents primary earnings per share before extraordinary item divided by common shareholders' equity per share. Common shareholders' equity is total shareholders' equity including the stated value of all preferred stock at the beginning of each year minus the involuntary liquidating value of non-convertible preferred shares. [2] After-tax profits, the amount remaining if the interest paid on long-term debt was taxed, and minority interest divided by a firm's total capitalization. Total capitalization is long-term debt, common and preferred equity, deferred taxes, investment tax credits and minority interest in consolidated subsidiaries. [3] Net sales plus other operating revenue. [4] Profit to deficit.

Source: Forbes, Inc., New York, NY, *Forbes Annual Report on American Industry.* (copyright).

No. 878. Foreign Corporate Activity in the United States: 1988

[Includes corporations controlled or owned by any foreign person (i.e., an individual, partnership, corporation, estate, or trust), directly or indirectly, based on 50 percent or more of a U.S. corporations's voting stock at the end of the tax year]

AREA AND COUNTRY [1]	Number of returns	Total assets (bil. dol.)	Total receipts [2] (bil. dol.)	Net income (less deficit) (mil. dol.)	TOTAL U.S. INCOME TAX	
					Before credits (mil. dol.)	After credits (mil. dol.)
All corporations in the United States	**3,562,789**	**16,568**	**10,265**	**412,983**	**131,367**	**95,896**
Corporations controlled by a foreign person [3]	**46,298**	**1,199**	**826**	**11,201**	**7,071**	**5,824**
Canada	7,545	116	83	935	562	485
Latin America	7,170	39	37	7	272	209
Other Western Hemisphere	459	11	9	−6	58	50
Europe, total	16,454	682	442	9,639	4,757	3,806
European Economic Community countries [3]	13,693	612	382	8,595	4,256	3,430
Belgium	179	9	10	735	236	115
France	1,876	62	43	711	429	363
Netherlands	1,877	148	93	1,854	792	668
United Kingdom	5,043	301	150	4,673	2,193	1,783
West Germany	3,291	74	74	675	540	439
Sweden	265	15	14	410	160	107
Switzerland	1,803	43	39	719	307	238
Africa	659	2	1	−14	1	1
Asia [3]	8,527	315	232	389	1,254	1,190
Hong Kong	1,172	35	6	−216	18	17
Japan	5,345	248	209	956	1,160	1,112
South Korea	148	4	8	−5	8	8
Oceania	653	29	14	87	64	32
Puerto Rico and U.S. possessions	179	2	1	180	67	15
Country not stated	4,651	4	6	−15	37	36

[1] Geographic location of the foreign owners country of residence, incorporation, organization, creation, or administration. [2] Total receipts includes business plus investment receipts. [3] Some countries not shown separately.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin, Fall 1991.*

No. 879. U.S. Multinational Companies—Assets, Sales, Employment, Employee Compensation, and U.S. Exports and Imports: 1989

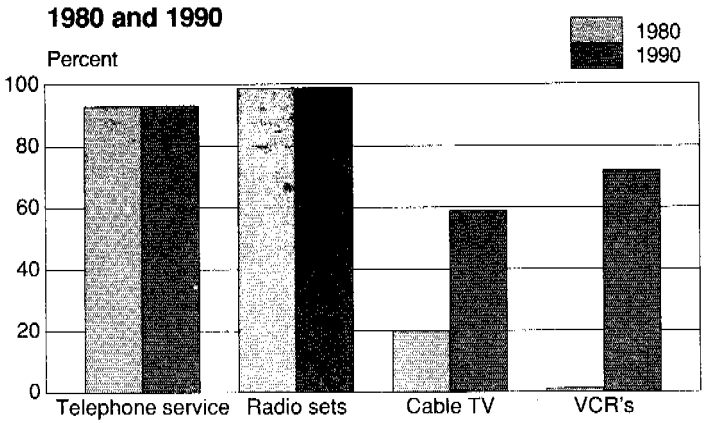
[**In billions of dollars, except as indicated.** Consists of non-bank U.S. parent companies and their foreign affiliates. U.S. parent is a U.S. person that owns or controls directly or indirectly, 10 percent or more of the voting securities of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise. A U.S. person can be an incorporated business enterprise. A foreign affiliate is a foreign business enterprise owned or controlled by a U.S. parent company]

INDUSTRY [1]	U.S. PARENTS				FOREIGN AFFILIATES				U.S. exports shipped to foreign affiliates	U.S. imports shipped from foreign affiliates
	Total assets	Sales	Employment (1,000)	Employee compensation	Total assets	Sales	Employment (1,000)	Employee compensation		
All industries	**4,905**	**3,134**	**18,721**	**662**	**1,314**	**1,266**	**6,621**	**162**	**102**	**94**
Petroleum	502	353	628	29	193	224	291	11	2	11
Manufacturing	1,878	1,545	10,138	391	491	641	4,189	101	70	72
Food and kindred products	187	193	1,136	29	48	69	479	9	2	1
Chemical and allied products	295	232	1,253	54	102	115	580	16	8	4
Primary and fabricated metals	107	104	691	26	23	26	222	5	2	2
Machinery (except electrical)	220	174	1,267	57	74	104	553	18	12	12
Electric and electronic equipment	207	137	1,016	38	52	61	650	13	8	9
Transportation equipment	447	359	2,083	94	99	160	833	22	29	34
Other	416	346	2,693	93	94	106	872	20	8	9
Wholesale trade	99	225	424	14	112	221	535	19	27	8
Finance (except banking), insurance, real estate	1,620	376	1,081	46	403	59	160	6	(Z)	(Z)
Services	136	111	1,726	43	48	41	483	12	(Z)	(D)
Other industries	671	524	4,724	140	67	79	964	12	2	(D)

D Withheld to avoid disclosure. Z Less than $500 million. [1] Represents industry of U.S. parent or industry of foreign affiliate.

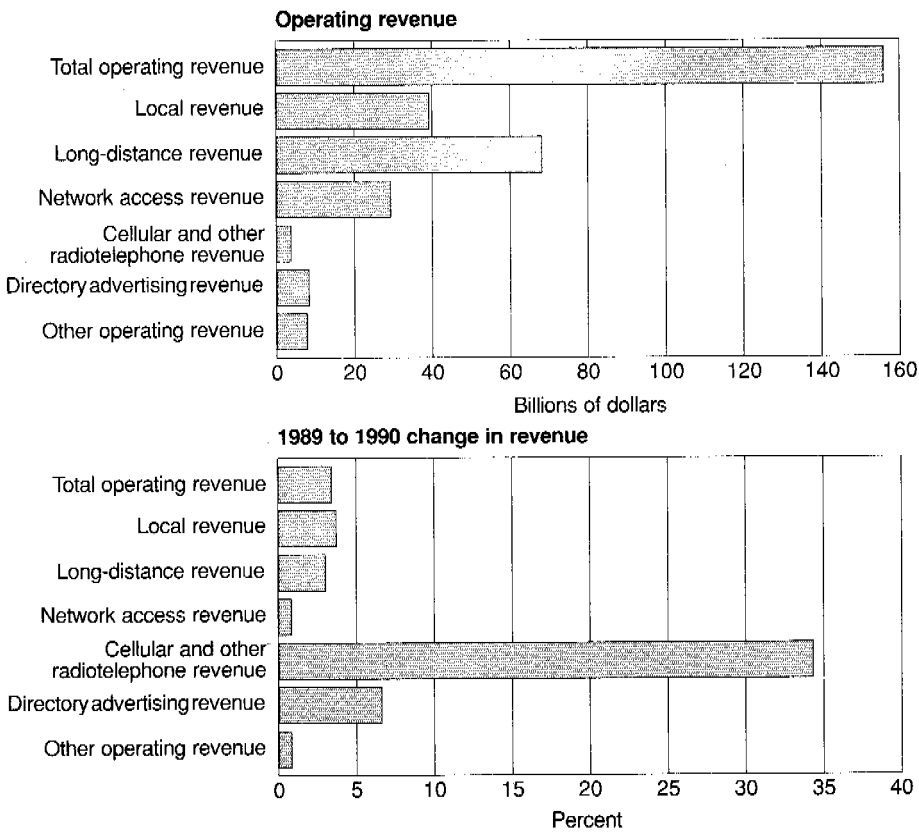
Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, October 1991.

Figure 18.1
Households With Selected Media: 1980 and 1990



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 884.

Figure 18.2
Telephone Communications: 1990



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 887.

Communications

This section presents statistics on the usage, finances, and operations of the Postal Service and of the various communications media: telephone, telegraph, radio, television, newspapers, and periodicals. Expenditure data for advertising in the media are also included.

In Brief

Households in 1989 with:

Telephone service	*93%*
Radio sets	*94%*
Television	*98%*
Cable television	*59%*
VCR's	*72%*

Postal Service.—The Postal Service provides mail processing and delivery services within the United States. The Postal Reorganization Act of 1970 created the Postal Service, effective July 1971, as an independent establishment of the Federal Executive Branch.

Revenue and cost analysis describes the Postal Service's system of attributing revenues and costs to classes of mail and service. This system draws primarily upon probability sampling techniques to develop estimates of revenues, volumes, and weights, as well as costs by class of mail and special service. The costs attributed to classes of mail and special services are primarily incremental costs which vary in response to changes in volume; they account for roughly 60 percent of the total costs of the Postal Service. The balance represents "institutional costs." Statistics on revenues, volume of mail, and distribution of expenditures are presented in the Postal Service's annual report, *Cost and Revenue Analysis,* and its *Annual Report of the Postmaster General.*

Communication media.—The Bureau of the Census *Annual Survey of Communication Services* (ASCS) covers all employer firms with one or more establishments that are primarily engaged in providing point-to-point communication services, whether by wire or radio, and whether intended to be received aurally or visually. This includes telephone communications, including cellular and other radiotelephone services; telegraph and other message communications, such as electronic mail services, facsimile transmission services, telex services, and so on; radio and television broadcasting stations and networks; cable and other pay television services; and other communication services, such as radar station operations, satellite earth stations, satellite or missile tracking stations, and so on. The report presents statistics that are summarized by kind-of- business classification based on the 1972 edition of the *Standard Industrial Classification Manual.*

The Federal Communications Commission (FCC), established in 1934, regulates wire and radio communications. Only the largest carriers and holding companies file annual or monthly financial reports. The FCC has jurisdiction over interstate and foreign communication services, but not over intrastate or local services. The gross operating revenues of the telephone carriers reporting annually to the FCC, however, are estimated to cover about 90 percent of the revenues of all U.S. telephone companies. Data are not comparable with Bureau of the Census *Annual Survey of Communication Services* because of coverage (*ASCS* includes all domestic long-distance telephone companies, all local exchange carriers, and all cellular telephone companies) and different accounting practices for those telephone companies which report to the FCC.

Reports filed by the broadcasting industry cover substantially all radio and television stations operating in the United States. The private radio services represent the largest and most diverse group of licensees regulated by the FCC. These services provide voice, data communications, point-to-point and point-to-multipoint radio communications for fixed and mobile communicators. Major users of these services are small business, the aviation industry, the maritime trades, the land transportation industry, manufacturing industries, State and local public safety and governmental authorities, emergency medical service providers, amateur radio operators, and personal

radio operations (CB and the General Mobile Radio Service). The FCC also licenses entities as private and common carriers. Private and common carriers provide fixed and land mobile communications service on a for-profit basis. Principal sources of wire, radio, and television data are the FCC's *Annual Report* and its annual *Statistics of Communications Common Carriers*.

Statistics on the printed media are available from the U.S. Bureau of the Census, as well as from various private agencies. The censuses of manufactures (conducted by the Census Bureau every 5 years, for the years ending in "2" and "7") provide statistics on the number and circulation of newspapers and periodicals and on sales of books and pamphlets. Editor & Publisher Co. New York, NY presents annual data on the number and circulation of daily and Sunday newspapers in its *International Year Book*. Monthly data on new books and new editions appear in *Publishers Weekly*, issued by R. R. Bowker Company, New York. (See table 386 for annual data.)

Advertising.—Data on advertising expenditures are compiled primarily by McCann-Erickson, Inc., which compiles certain of the data shown (see tables 903-904). Monthly index figures of advertising in certain media are also published periodically by McCann-Erickson in *Advertising Age*.

The Broadcast Advertisers Reports distinguishes between spot and local advertising primarily on the basis of the type of advertiser to whom the time is sold, rather than how and by whom it is sold. In general, time purchased on behalf of retail or service establishments in the market is considered local, even though the establishments may be part of a national or regional chain. That is, spot advertising promotes a product, while local advertising promotes a given establishment. Network advertising, mutually exclusive of spot and local, is broadcast through the network system.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability applicable to Census Bureau 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. 880. U.S. Postal Service—Summary: 1975 to 1990

[Employees in thousands; revenue and expenditures in millions of dollars, except as indicated. For fiscal years; see text, section 9. Includes Puerto Rico and all outlying areas except Canal Zone. See text, section 18. See also *Historical Statistics, Colonial Times to 1970,* series R 163-171]

ITEM	1975	1980	1984	1985	1986	1987	1988	1989	1990
Number of post offices	30,754	30,326	29,750	29,557	29,344	29,319	29,203	29,083	28,959
Pieces of mail handled (est.) (bil.)	89.3	106.3	131.5	140.1	147.4	153.9	161.0	161.6	166.3
First-class, number (bil.) [1]	51.4	60.3	68.4	72.4	76.2	78.9	84.7	85.9	89.3
Percent	57.6	56.7	52.0	51.7	51.7	51.3	52.6	53.2	53.7
Second class (bil.)	9.1	8.4	9.5	10.4	10.6	10.3	10.4	10.5	10.7
Employees, total	**702**	**667**	**702**	**744**	**785**	**791**	**824**	**817**	**809**
Regular	559	536	561	586	606	751	764	764	747
Postmasters	30	29	28	28	27	28	28	27	27
Office supervisors and tech. personnel	37	36	45	46	49	55	55	55	53
Office clerks and mail handlers [2]	239	229	235	249	260	345	347	345	333
City carriers and vehicle drivers	167	160	171	179	187	237	243	243	240
Rural carriers	31	33	35	35	36	37	39	40	42
Other	55	49	47	48	47	49	52	54	52
Substitute (part-time)	143	130	141	159	179	40	60	53	62
Compensation and employee benefits (mil. dol.)	10,805	16,541	22,157	24,349	25,576	27,229	30,749	32,368	34,214
Avg. salary per employee (dol.) [3]	15,392	24,799	31,562	32,727	32,581	34,424	36,989	39,619	42,292
Pieces of mail per employee, avg	127	159	187	188	188	195	195	198	206
Total revenue [4]	**11,590**	**19,106**	**26,474**	**28,956**	**31,021**	**32,297**	**35,939**	**38,920**	**40,074**
Operating postal revenue	10,015	17,143	25,314	27,736	30,102	31,528	35,036	37,979	39,201
Stamps, postal cards, etc	2,819	4,287	6,023	6,520	6,969	7,246	7,784	8,381	8,638
Second-class postage paid in money (pound rates) [5]	284	881	1,056	1,339	1,271	1,326	1,455	1,594	1,580
Other postage paid under permit and meter	6,241	10,828	16,067	17,747	19,294	20,280	22,676	24,534	25,311
Box rents	67	160	188	230	259	273	296	362	394
Miscellaneous	556	892	1,847	1,774	2,174	2,255	2,683	2,959	3,124
Money-order revenues	53	95	132	126	135	148	142	148	154
Government appropriations	1,533	1,610	879	970	716	650	517	436	453
Percent of total revenue	13.2	8.4	3.3	3.3	2.3	2.0	1.4	1.1	1.1
Investment income, net	37	353	282	250	203	119	386	504	420
Mail and service:									
First-class mail [1]	5,798	10,146	15,216	16,740	18,035	18,786	21,402	23,234	24,023
Priority mail [6]	411	612	928	960	1,011	1,086	1,329	1,416	1,555
Second-class publishers' mail [7]	277	864	1,025	1,093	1,222	1,280	1,400	1,519	1,509
Third-class mail [8]	1,348	2,412	4,241	4,887	5,606	6,148	7,311	7,924	8,082
Bulk rate	1,167	2,168	4,039	4,697	5,414	5,947	7,096	7,668	7,844
Single piece rate and fees	181	244	202	190	193	200	215	256	238
Fourth-class mail [9]	718	805	774	763	814	823	929	908	920
Zone rate mail (parcels, catalogs, etc.)	577	500	519	524	550	563	647	612	655
Special fourth-class rate	130	272	210	199	213	203	223	235	215
Library rate and fees	11	33	45	40	51	57	59	61	50
Government mail [10]	484	745	901	934	992	907	(NA)	(NA)	(NA)
International mail [11]	390	596	859	882	934	957	992	1,081	1,163
Special services	251	518	868	918	979	1,030	1,136	1,314	1,310
Express mail	(X)	184	490	544	491	499	524	572	631
Mailgrams	(X)	15	13	15	17	13	12	10	8
Other [12]	1,913	2,205	1,159	1,220	919	769	903	938	873
Expenditures [13]	**12,578**	**19,412**	**26,357**	**29,207**	**30,716**	**32,520**	**36,119**	**38,370**	**40,490**

NA Not available. X Not applicable. [1] Items mailed at 1st-class rates and weighing 12 ounces or less. [2] Includes mobile unit employees. [3] Includes fringe benefits. [4] Net revenues after refunds of postage. Includes operating reimbursements, embossed envelope purchases, indemnity claims, and miscellaneous revenue and expenditure offsets. Shown in year which gave rise to the earnings. [5] Includes controlled circulation publications. [6] Items otherwise qualified as 1st-class or airmail that exceeds 12 ounces and 8 ounces, respectively. [7] Includes mail paid at other than bulk rates. Publishers' mail includes printed publications periodically issued and mailed at a known post office to paid subscribers, such as regular rate newspapers and magazines, and classroom and nonprofit rate publications. See source for further detail. [8] Items less than 16 ounces in weight not mailed at either 1st- or 2d-class rates. [9] Items not mailed at 1st-, 2d-, or 3d-class rates, except government and international mail. May include parcel post, catalogs weighing 16 ounces or more, books, films, and records. [10] Penalty and franked. Beginning in 1989 penalty and franked mail are included in their appropriate classes of mail. [11] Mail from U.S. to foreign countries paid at international mail rates. [12] Consists of unassignable revenues; 1975 includes domestic airmail. [13] Shown in year in which obligation was incurred.

Source: U.S. Postal Service, *Annual Report of the Postmaster General.*

No. 881. U.S. Postal Service—Volume of Mail, by Class: 1970 to 1990

[**In millions, except per capita. For fiscal years;** see text section 9. Includes Puerto Rico and all outlying areas except Canal Zone. For definition of classes of mail, see footnotes, table 880. See also *Historical Statistics, Colonial Times to 1970,* series R 172-186]

CLASS OF MAIL	PIECES OF MAIL					WEIGHT OF MAIL (lb.)				
	1970	1980	1985	1989	1990	1970	1980	1985	1989	1990
Total	**84,882**	**106,311**	**140,098**	**161,603**	**166,875**	**13,281**	**12,958**	**16,783**	**18,412**	**18,826**
Domestic	**83,986**	**105,348**	**139,269**	**160,880**	**166,077**	**13,055**	**12,742**	**16,564**	**18,184**	**18,577**
1st class and airmail [1]	50,174	60,332	72,517	85,926	89,917	1,636	2,213	2,807	3,315	3,452
Priority mail	185	248	308	471	518	371	591	672	939	1,007
2d class	9,914	10,221	10,380	10,523	10,680	3,641	3,478	3,966	4,170	4,233
3d class	19,974	30,381	52,170	62,779	63,725	2,032	3,240	6,453	7,479	7,648
4th class	977	633	576	626	663	4,786	2,661	2,156	2,196	2,109
Penalty	2,544	2,992	2,608	(NA)	(NA)	540	503	470	(NA)	(NA)
Franked and free for blind	218	540	710	555	574	49	56	40	84	127
International	**896**	**963**	**829**	**724**	**798**	**226**	**216**	**219**	**228**	**249**
Per capita: [2]										
Total, all domestic mail [3]	411	464	585	651	666	64	56	70	74	74
1st class and airmail	245	266	304	348	360	8	10	12	13	14
2d class	49	45	44	43	43	18	15	17	17	17
3d class	98	134	219	254	255	10	14	27	30	31
4th class	5	3	2	3	3	23	12	9	9	8

NA Not available. [1] Beginning 1980, includes express mail established as a class of mail on October 9, 1977, and mailgrams. [2] 1970, 1980, and 1990 based on April 1 population, including Armed Forces abroad; otherwise, based on estimated total population as of Jan. 1, including Armed Forces abroad. [3] Includes types of mail not shown separately.

Source: U.S. Postal Service, *Annual Report of the Postmaster General.*

No. 882. U.S. Postal Service Rates for Letters and Post Cards: 1958 to 1991

[Domestic airmail letters discontinued in 1973 at 13 cents per ounce; superceded by express mail. See also *Historical Statistics, Colonial Times to 1970,* series R 188-191]

DATE OF RATE CHANGE	SURFACE MAIL				Express mail [1]	DATE OF RATE CHANGE	SURFACE MAIL				Express mail [1]
	Letters			Postal and post cards			Letters			Postal and post cards	
	Each oz.	First oz.	Each added oz.				Each oz.	First oz.	Each added oz.		
1958 (Aug. 1)	$0.04	(X)	(X)	$0.03	(X)	1978 (May 29)	(X)	$0.15	$0.13	$0.10	(X)
1963 (Jan. 7)	$0.05	(X)	(X)	$0.04	(X)	1981 (Mar. 22)	(X)	$0.18	$0.17	$0.12	(X)
1968 (Jan. 7)	$0.06	(X)	(X)	$0.05	(X)	1981 (Nov. 1)	(X)	$0.20	$0.17	$0.13	$9.35
1971 (May 16)	$0.08	(X)	(X)	$0.06	(X)	1985 (Feb.17)	(X)	$0.22	$0.17	$0.14	$10.75
1974 (Mar. 2)	$0.10	(X)	(X)	$0.08	(X)	1988 (Apr. 3)	(X)	$0.25	$0.20	$0.15	[3]$12.00
1975 (Sept. 14)	(X)	$0.10	$0.09	$0.07	(X)	1991 (Feb. 3)	(X)	$0.29	$0.23	$0.19	[3]$13.95
1975 (Dec. 31)	[2](X)	[2]$0.13	[2]$0.11	[2]$0.09	(X)						

X Not applicable. [1] Post Office to addressee rates. Rates shown are for weights up to 2 pounds, all zones. Beginning Feb. 17, 1985, for weights between 2 and 5 lbs, $12.85 is charged. Prior to Nov. 1, 1981, rate varied by weight and distances. Over 5 pounds still varies by distance. [2] As of October 11, 1975, surface mail service upgraded to level of airmail. [3] Over 8 ounces and up to 2 pounds.

No. 883. International Air Mail Rates From the United States: 1961 to 1991

[Excludes Canada and Mexico. Zones discontinued as of February 1991]

DATE OF RATE CHANGE	ZONE 1 [1]		ZONE 1 [2]		ZONE 1 [3]		Postal and post cards	Aerogrammes
	Each 1/2 oz. up to 2 ozs.	Each added 1/2 oz.	Each 1/2 oz. up to 2 ozs.	Each added 1/2 oz.	Each 1/2 oz. up to 2 ozs.	Each added 1/2 oz.		
1961 (July 1)	$0.13	$0.13	$0.15	$0.15	$0.25	$0.25	$0.11	$0.11
1967 (May 1)	$0.15	$0.15	$0.20	$0.20	$0.25	$0.25	$0.13	$0.13
1971 (July 1)	$0.17	$0.17	$0.21	$0.21	$0.21	$0.21	$0.13	$0.13
1974 (March 2)	$0.21	$0.17	$0.26	$0.21	$0.26	$0.21	$0.18	$0.18
1976 (January 3)	$0.25	$0.21	$0.31	$0.26	$0.31	$0.26	$0.21	$0.22
1981 (January 1)	$0.35	[4]$0.30	$0.40	[5]$0.35	$0.40	[5]$0.35	$0.28	$0.30
1985 (February 17)	$0.39	[6]$0.33	$0.44	[7]$0.39	$0.44	[7]$0.39	$0.33	$0.36
1988 (April 17) [8]	$0.45	$0.42	$0.45	$0.42	$0.45	$0.42	$0.36	$0.39
1991 (February 3) [8]	[9]$0.50	(X)	(X)	(X)	(X)	(X)	$0.40	$0.45

X Not applicable. [1] Caribbean, Central and South America. The airmail letter rate to South America, 1961 to 1967, was the same as that to Europe. Beginning January 3, 1976, the airmail letter rate to all South American countries except Colombia and Venezuela is the same as Europe; Colombia and Venezuela are included in the first zone. [2] Europe and Mediterranean Africa. [3] Rest of world. [4] Up to 32 oz.; 30 cents per additional ounce over 32. [5] Up to 32 oz.; 35 cents per additional ounce over 32. [6] Up to 32 oz.; 33 cents per additional ounce over 32. [7] Up to 32 oz.; 39 cents per additional ounce over 32. [8] Air letters collapsed to a single schedule except for Canada and Mexico. [9] First 1/2 ounce = 50 cents; second 1/2 ounce = 40 cents, 39 cents for each additional 1/2 ounce up to the limit of 64 oz.

Source of tables 882 and 883: U.S. Postal Service, "United States Domestic Postage Rate: Recent History," and unpublished data.

No. 884. Utilization of Selected Media: 1970 to 1991

ITEM	Unit	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990	1991
Households with—												
Telephone service [1]	Percent	87.0	(NA)	93.0	91.8	91.8	92.2	92.5	92.9	93.0	93.3	93.6
Radio sets	Millions	62.0	71.4	78.6	86.7	87.1	88.1	89.9	91.1	92.8	94.4	(NA)
Percentage of households [2]	Percent	98.6	98.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	(NA)
Average number of sets	Number	5.1	5.6	5.5	5.5	5.5	5.4	5.4	5.6	5.6	5.6	(NA)
Television households [3]	Millions	59	69	76	84	85	86	87	89	90	92	93
Percent of total households	Percent	95.3	97.1	97.9	98.1	98.1	98.1	98.1	98.1	98.2	98.2	(NA)
Television sets in homes	Millions	81	105	128	149	155	158	163	168	176	193	(NA)
Average number of sets per home	Number	1.4	1.5	1.7	1.8	1.8	1.8	1.9	1.9	1.9	2.1	(NA)
Color set households	Millions	21	47	63	76	78	80	83	85	87	91	91
Cable television [4]	Millions	4	9	15	33	36	39	42	44	48	55	55
Percent of TV households	Percent	6.7	12.6	19.9	39.3	42.8	45.6	47.7	49.4	52.8	58.9	58.9
VCR's [4]	Millions	(NA)	(NA)	1	9	18	31	43	51	58	67	67
Percent of TV households	Percent	(NA)	(NA)	1.1	10.6	20.8	36.0	48.7	58.0	64.6	71.9	71.9
Commercial radio stations: [2]												
AM	Number	4,323	4,463	4,589	4,754	[5]4,718	4,863	4,902	4,932	4,975	4,987	(NA)
FM	Number	2,196	2,767	3,282	3,716	[5]3,875	3,944	4,041	4,155	4,269	4,392	(NA)
Television stations: [6] Total	Number	862	953	1,011	1,138	1,182	1,235	1,290	1,362	1,403	1,442	1,460
Commercial	Number	677	706	734	841	883	919	968	1,028	1,061	1,092	1,099
VHF [3]	Number	501	514	516	523	520	522	524	539	545	547	547
UHF [3]	Number	176	192	218	318	363	397	444	489	516	545	552
Cable television: [7]												
Systems	Number	2,490	3,506	4,225	6,200	6,844	7,600	7,900	8,500	(NA)	(NA)	(NA)
Subscribers served	Millions	4.5	9.8	15.5	30.0	31.3	37.5	41.0	43.8	47.8	(NA)	(NA)
Daily newspaper circulation: [8]												
Number	Millions	62	61	62	63	63	63	63	63	(NA)	62.3	(NA)
Per capita [9]	Number	0.305	0.282	0.275	0.267	0.263	0.260	0.258	0.256	(NA)	0.251	0.251

NA Not available. [1] For occupied housing units. 1970, 1980, and 1990 as of April 1; all other years as of March. Source: U.S. Bureau of the Census, *Census of Housing: 1970, 1980, and 1990* vol. 1, and unpublished data. [2] As of Dec. 31, except as noted. Source: Radio Advertising Bureau, New York, NY, *Radio Facts*, annual (copyright). Number of stations on the air compiled from Federal Communications Commission reports. [3] 1970-1975, as of Sept. of prior year; all other years as of Jan. of year shown. Excludes Alaska and Hawaii. Source: Television Bureau of Advertising, Inc., *Trends in Television*, annual (copyright). [4] As of February. Excludes Alaska and Hawaii. Source: See footnote 3. [5] As of February 1986. [6] As of Jan. 1 of year shown. Number of television stations on the air. Source: See footnote 3. [7] As of Jan. 1 of year shown. Source: Cable Advertising Bureau. [8] As of Sept. 30. Source: Editor & Publisher, Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright). [9] Per capita based on enumerated total resident population as of April 1 1970, 1980, and 1990. For all other years, based on estimates as of July 1. Estimates do not reflect revisions based on the 1990 Census of Population. Source: See footnote 3.

Source: Compiled from sources mentioned in footnotes.

No. 885. Multimedia Audiences—Summary: 1991

[**In percent, except as indicated.** As of spring. For persons **18 years old and over.** Based on sample and subject to sampling error; see source for details]

ITEM	Total population (1,000)	Television viewing/ coverage	Television prime time viewing/ coverage	Cable viewing/ coverage	Radio listening/ coverage	Newspaper reading/ coverage
Total	183,814	92.8	79.4	56.1	84.7	83.9
18 to 24 years old	25,866	91.7	74.9	56.3	93.8	78.5
25 to 34 years old	44,367	92.0	79.0	57.1	91.9	84.2
35 to 44 years old	36,739	92.3	79.0	59.2	89.6	86.7
45 to 54 years old	25,123	91.5	77.9	59.0	85.6	86.9
55 to 64 years old	21,937	95.2	82.0	57.9	76.6	84.7
65 years old and over	29,782	94.9	83.6	46.9	65.0	81.4
Male	87,656	93.3	78.0	58.6	86.8	84.6
Female	96,158	92.4	80.6	53.8	82.7	83.2
White	158,153	92.4	78.6	58.1	84.8	85.5
Black	20,734	95.8	85.2	44.9	84.5	76.3
Other	4,926	92.5	79.6	41.0	80.1	64.4
Spanish speaking	13,949	94.8	82.9	39.4	87.9	72.4
Not high school graduate	41,614	93.5	81.0	40.3	75.5	65.4
High school graduate	71,872	93.1	80.9	58.5	85.2	86.2
Attended college	34,878	93.2	77.7	62.9	89.5	89.9
College graduate	35,449	91.1	76.1	63.1	89.6	95.1
Employed:						
Full-time	101,332	92.2	77.7	59.8	90.8	87.8
Part-time	14,797	91.4	77.9	58.4	88.3	86.2
Not employed	67,685	94.0	82.3	50.1	74.6	77.5
Household income:						
Less than $10,000	21,383	93.3	80.3	35.0	73.2	60.9
$10,000 to $19,999	30,690	94.0	82.2	44.2	78.7	76.5
$20,000 to $29,999	30,246	93.4	80.2	52.3	83.3	84.3
$30,000 to $34,999	15,122	92.8	78.9	60.6	85.2	85.8
$35,000 to $39,999	13,333	94.5	80.4	61.1	87.9	87.9
$40,000 to $49,999	21,970	92.6	78.3	64.6	90.3	90.1
$50,000 or more	51,070	91.2	77.2	68.1	90.4	93.3

Source: Mediamark Research Inc., New York, NY, *Multimedia Audiences*, fall 1991, (copyright).

No. 886. Telephone and Telegraph Systems: 1970 to 1990

[Covers principal carriers filing annual reports with Federal Communications Commission. Minus sign (-) indicates loss. See *Historical Statistics, Colonial Times to 1970,* series R 46-70 and R 75-88, for data on telegraph systems]

ITEM	Unit	1970	1980	1984	1985	1986	1987	1988	1989	1990
Domestic telephone: [1]										
Carriers [2]	Number	56	59	61	39	39	37	54	53	53
Access lines	Million	(NA)	(NA)	100	103	106	111	122	126	126
Miles of wire	Million	628	1,131	1,290	1,313	1,338	1,371	1,483	1,502	1,525
Gross book cost of plant	Bil. dol.	59.9	147.4	183.0	195.1	207.4	222.0	250.2	260.1	264.7
Depreciation reserves [3]	Bil. dol.	13.2	26.5	42.9	50.0	58.7	69.8	84.7	94.2	97.6
Ratio to book cost	Percent	22.1	18.0	23.5	25.6	28.3	31.4	33.9	36.2	36.9
Capital stock and premium	Bil. dol.	16.4	31.3	46.9	48.1	41.5	42.8	45.4	45.7	46.3
Operating revenues	Bil. dol.	18.2	55.6	98.9	104.8	106.4	106.3	116.7	117.3	117.7
Operating expenses [4]	Bil. dol.	11.7	37.3	74.7	78.6	79.0	79.8	90.8	91.7	91.6
Net operating income [5]	Bil. dol.	3.1	10.0	12.4	13.4	13.9	14.5	16.5	16.2	16.3
Net income	Bil. dol.	2.3	6.6	8.5	9.5	10.4	11.1	12.6	12.4	12.8
Employees	1,000	839	938	742	(NA)	(NA)	(NA)	688	663	648
Compensation of employees	Bil. dol.	7.0	20.2	22.7	(NA)	(NA)	(NA)	24.9	24.4	25.9
Overseas telephone:										
Number of overseas calls	Million	23.4	199.6	427.6	411.7	477.6	579.6	705.7	1,007.8	1,200.7
Revenue from overseas calls	Mil. dol.	252	1,535	1,772	1,799	1,841	2,127	2,573	3,513.4	4,362.2
Ocean cable systems	Number	17	24	26	26	26	26	26	23	24
Communications satellites [6]	Number	4	5	6	6	11	11	14	15	16
Domestic and overseas telegraph: [7]										
Carriers	Number	7	8	7	7	7	7	6	6	3
Revenue messages transmitted	Million	102	75	48	42	29	25	(NA)	(NA)	(NA)
Message revenues [8]	Mil. dol.	358	676	732	708	678	594	483	521	259
Total operating revenues	Mil. dol.	596	1,232	1,382	1,367	1,206	1,076	882	1,019	408
Operating revenue deductions	Mil. dol.	524	1,008	1,323	1,292	1,243	1,125	942	995	447
Operating income [9]	Mil. dol.	72	147	48	102	-37	-48	-56	24	-39
Return on investment: [10]										
Telephone	Percent	7.1	8.7	9.2	9.4	9.4	9.6	10.0	9.8	9.8
Overseas telegraph	Percent	10.6	15.9	3.3	6.7	-1.5	2.5	-5.5	3.9	-9.4

NA Not available. [1] Includes Puerto Rico and Virgin Islands. Excludes intercompany duplications. Gross operating revenues of carriers reporting estimated at 90 percent of all carriers. Beginning 1988, based on new accounting rules; prior years not directly comparable. [2] Beginning 1985, number of carriers changed due to change in dollar requirement of reporting carriers from $1,000,000 to $100,000,000. [3] Includes amortization reserves. [4] Excludes taxes. [5] After tax deductions. [6] Excludes contingency and retired satellites. [7] Excludes South American and most Caribbean operations of All America Cables and Radio, Inc. [8] Includes telex service; for domestic telegraph, excludes TWX. [9] After Federal income taxes. [10] Ratio of net operating income (after taxes) to average net book cost of communications plant.

Source: U.S. Federal Communications Commission, *Statistics of Communications Common Carriers,* annual; and unpublished data.

No. 887. Telephone Communications—Operating Revenue and Expenses: 1989 and 1990

[Covers employer firms with one or more establishments that are primarily engaged in furnishing telephone communication services. Based on the *1972 Standard Industrial Classification Manual;* see text, section 13]

ITEM	1989		1990		Percent change, 1989-90
	Total (mil. dol.)	Percent of total	Total (mil. dol.)	Percent of total	
OPERATING REVENUE					
Total	150,935	100.0	156,003	100.0	3.4
Local service	37,816	25.1	39,231	25.2	3.7
Long-distance service	66,165	43.8	68,128	43.7	3.0
Network access	28,971	19.2	29,189	18.7	0.8
Cellular and other radiotelephone	2,652	1.8	3,563	2.3	34.3
Directory advertising	7,683	5.1	8,187	5.3	6.6
Other operating revenue	7,647	5.1	7,705	4.9	0.8
OPERATING EXPENSES					
Total	123,131	100.0	126,775	100.0	3.0
Annual payroll	29,205	23.7	30,799	24.3	5.5
Employer contributions to Social Security and other supplemental benefits	7,166	5.8	7,303	5.8	1.9
Access charges	24,783	20.1	25,003	19.7	0.9
Depreciation	22,561	18.3	22,817	18.0	1.1
Buildings, offices, and structures	756	0.6	769	0.6	1.6
Communication systems	18,336	14.9	18,320	14.5	-0.1
Vehicles, machinery and equipment, and other tangible assets	3,469	2.8	3,728	2.9	7.5
Lease and rental	3,592	2.9	3,442	2.7	-4.2
Buildings, offices, and structures	1,426	1.2	1,520	1.2	6.6
Communication systems	1,215	1.0	1,178	0.9	-3.0
Vehicles, machinery and equipment, and other tangible assets	951	0.8	744	0.6	-21.8
Purchased repairs	2,624	2.1	2,819	2.2	7.4
Insurance	170	0.1	171	0.1	0.4
Telephone and other purchased communication services	406	0.3	485	0.4	19.4
Purchased utilities	882	0.7	889	0.7	0.7
Purchased advertising	1,625	1.3	2,004	1.6	23.3
Taxes	4,930	4.0	5,106	4.0	3.6
Other operating expenses	25,186	20.5	25,939	20.5	3.0

Source: U.S. Bureau of the Census, *Annual Survey of Communication Services: 1990.*

No. 888. Telephone Companies—Summary: 1980 to 1990

[**As of Dec. 31** or **calendar year,** as applicable. January 1, 1988 marked the beginning of significant rules changes in the way that local exchange carriers account for assets, liabilities, revenue, expenses, and income. Any comparisons with earlier data would not be meaningful. See also *Historical Statistics, Colonial Times to 1970,* series R 31-45]

ITEM	Unit	INDEPENDENT COMPANIES [1]				ALL TELEPHONE COMPANIES				
		1980	1985	1989	1990	1984	1985	1988	1989	1990
All companies	Number	1,483	1,402	1,332	1,310	1,440	1,426	1,371	1,354	1,332
Access lines	Millions	20.8	24.3	32.2	32.2	114.5	118.2	130.0	135.0	138.1
Total telephone plant	Bil. dol.	35.3	49.1	61.8	64.7	193.8	207.3	238.3	249.0	256.0
Operating revenues	Bil. dol.	10.5	17.2	21.7	22.1	73.9	78.4	89.9	89.1	90.1
Avg. daily conversations [2]	Millions	192	226	(NA)	(NA)	1,199	1,264	1,700	9,569	9,515
Local calls	Millions	177	203	(NA)	(NA)	1,111	1,162	(NA)	(NA)	(NA)
Toll calls	Millions	15	20	(NA)	(NA)	88	102	(NA)	(NA)	(NA)
Reporting companies [3]	Number	765	653	579	594	655	677	607	601	616
Access lines	Millions	19.4	23.4	29.8	30.3	113.6	117.4	129.7	132.7	136.3
Telephone plant in service [4]	Bil. dol.	32.5	45.5	60.0	62.8	186.2	200.0	233.3	243.9	250.9
Depreciation reserves [5]	Bil. dol.	7.8	14.3	22.0	23.7	45.7	52.9	80.0	89.6	95.0
Operating revenues	Bil. dol.	10.2	16.7	21.7	22.1	73.3	77.9	85.9	87.9	89.1
Operating expenses [6]	Bil. dol.	7.3	11.9	15.3	15.6	59.8	63.7	61.2	63.9	65.2
Net income	Bil. dol.	1.3	2.4	3.3	3.4	9.3	10.1	11.8	11.5	11.6
Stockholders' equity	Bil. dol.	9.6	13.9	20.9	22.1	63.1	66.5	75.8	76.8	80.4
Net income to stockholders equity	Percent	13.2	17.5	15.8	15.4	14.7	15.1	15.6	15.0	14.4
Employees	1,000	189	170	163	161	724	695	639	626	606
Wages and salaries	Bil. dol.	3.4	4.6	(NA)	(NA)	22.1	21.4	(NA)	(NA)	(NA)

NA Not available. [1] Companies independent of the Bell System, prior to divestiture of January 1984. [2] Average business day minutes of use beginning 1989. [3] Comprises only companies submitting operating information to source cited below. [4] Total property plant and equipment beginning 1989. [5] Total accumulated depreciation and amortization beginning 1989. [6] Excludes Federal income tax.

Source: United States Telephone Association, Washington, DC, *Statistics of the Local Exchange Carriers,* annual, (copyright).

No. 889. Cellular Telephone Industry: 1984 to 1991

[**Calendar year data.** Based on a survey mailed to 1,252 cellular systems]

ITEM	Unit	1984	1985	1986	1987	1988	1989	1990	1991
Systems	Number	32	102	166	312	517	584	751	1,252
Subscribers	1,000	92	340	682	1,231	2,069	3,509	5,283	7,557
Cell sites [1]	Number	346	913	1,531	2,305	3,209	4,169	5,616	7,847
Employees	Number	1,404	2,727	4,334	7,147	11,400	15,927	21,382	26,327
Service revenue	Mil. dol.	178	482	823	1,152	1,960	3,341	4,549	5,709
Roamer revenue [2]	Mil. dol.	(NA)	(NA)	(NA)	(NA)	89	295	456	704
Capital investment	Mil. dol.	355	556	526	798	1,039	1,206	1,801	2,390
Average monthly bill [3]	Dollars	(NA)	(NA)	(NA)	96.83	98.02	89.30	80.90	72.74
Average call length [3]	Minutes	(NA)	(NA)	(NA)	2.33	2.26	2.48	2.20	2.38

NA Not available. [1] The basic geographic unit of a cellular system. A city or county is divided into smaller "cells," each of which is equipped with a low-powered radio transmitter/receiver. The cells can vary in size depending upon terrain, capacity demands, etc. By controlling the transmission power, the radio frequencies assigned to one cell can be limited to the boundaries of that cell. When a cellular phone moves from one cell toward another, a computer at the Switching Office monitors the movement and at the proper time, transfers or hands off the phone call to the new cell and another radio frequency. [2] Service revenue generated by subscribers' calls outside of their home system areas. Excludes taxes and tolls. [3] As of December 31.

Source: Cellular Telecommunications Industry Association, Washington, DC, *State of the Cellular Industry,* annual, (copyright).

No. 890. Private Radio Stations Authorized, by Class: 1985 to 1990

[**In thousands. As of Sept. 30.** Includes Puerto Rico and Virgin Islands. See also *Historical Statistics, Colonial Times to 1970,* series R 140-148]

CLASS	1985	1988	1989	1990	CLASS	1985	1988	1989	1990
Private radio services [1]	2,420	2,748	2,828	2,880	Railroad	13.8	15.4	16.0	16.2
Personal [1]	(X)	475.3	501.7	528.0	Taxicab	6.1	5.9	5.9	5.7
General mobile	33.6	36.2	34.4	32.3	Interurban property	4.4	5.4	5.6	5.8
Amateur and disaster	415.4	439.1	467.3	495.7	Other	13.4	13.4	12.9	12.4
Aviation	245.7	248.5	251.2	250.9	Marine	525.3	605.4	620.4	622.9
Aircraft	207.3	207.9	210.2	209.6	Ship	510.4	589.4	604.6	607.2
Aeronautical and fixed	10.9	11.7	11.7	12.1	Alaskan	2.7	2.7	2.5	2.4
Civil air patrol	23.0	23.9	24.2	24.4	Coastal and other	12.2	13.3	13.3	13.3
Other	4.5	5.0	5.1	4.8	Public safety	194.5	221.4	228.5	234.5
Industrial	811.3	875.6	873.9	864.8	Police	42.3	47.8	49.1	50.5
Power	34.4	42.8	44.3	45.7	Fire	36.6	41.3	42.8	44.0
Business	593.5	641.7	638.0	628.1	Forestry conservation	9.6	10.7	11.1	11.3
Petroleum	25.2	26.8	27.0	26.8	Highway maintenance	12.7	14.3	14.6	15.0
Forest products	9.8	11.3	11.6	11.7	Special emergency	37.4	40.5	40.9	41.1
Special industrial	115.0	117.0	115.4	113.5	Other	55.9	66.8	70.0	72.6
Other	33.4	36.0	37.6	39.0	Operational fixed				
Land transportation	37.7	40.1	40.4	40.1	services [2]	23.1	29.2	29.9	32.9

X Not applicable. [1] Includes items not shown separately. Each license, construction permit, or combination construction permit and license is counted one station; therefore, a station might include a transmitter and many mobile units. [2] Includes microwave operations.

Source: U.S. Federal Communications Commission, *Annual Report,* and unpublished data.

No. 891. Radio and Television Broadcasting Services—Operating Revenue and Expenses: 1989 and 1990

[**In millions of dollars.** Based on the *1972 Standard Industrial Classification Manual;* see text, section 13. Based on a sample; see Appendix III]

ITEM	TOTAL BROADCASTING		RADIO		TELEVISION	
	1989	1990	1989	1990	1989	1990
OPERATING REVENUE						
Total	27,882	28,684	7,341	7,391	20,540	21,293
Station time sales	18,511	18,847	6,658	6,670	11,854	12,176
Network compensation	587	592	124	131	464	461
National/regional advertising	6,868	7,090	1,687	1,712	5,181	5,378
Local advertising	11,056	11,164	4,847	4,827	6,209	6,337
Network time sales	7,893	8,178	324	328	7,569	7,850
Other operating revenue	1,477	1,660	360	392	1,118	1,267
OPERATING EXPENSES						
Total	23,810	24,948	6,688	6,788	17,122	18,160
Annual payroll	6,478	6,681	2,577	2,636	3,901	4,045
Employer contributions to Social Security and other supplemental benefits	1,008	1,056	351	361	657	696
Broadcast rights	7,458	8,085	438	445	7,020	7,641
Music license fees	364	357	151	152	212	205
Network compensation fees	513	525	90	103	423	422
Depreciation	1,377	1,372	525	516	852	856
Lease and rental	511	514	167	173	344	340
Purchased repairs	244	249	84	86	160	163
Insurance	149	147	70	69	78	78
Telephone and other purchased communication services	238	241	114	113	124	128
Purchased utilities	250	255	95	98	155	157
Purchased advertising	963	951	419	392	544	559
Taxes	179	174	62	61	117	113
Other operating expenses	4,079	4,341	1,544	1,582	2,535	2,758

Source: U.S. Bureau of the Census, *Annual Survey of Communication Services: 1990.*

No. 892. Public Television Stations: 1976 to 1988

[**Calendar year data for 1976; fiscal year data thereafter.** General programing is directed at the general community. Instructional programing is directed at students in the classroom or otherwise in the general context of formal education]

ITEM	1976	1978	1980	1982	1984	1986	1988
Stations broadcasting	253	272	281	291	303	305	(NA)
Number of broadcasters [1]	152	156	160	164	169	178	169
Average annual hours per broadcaster	4,542	4,894	5,128	5,421	5,542	5,650	6,135
BROADCAST HOURS, PERCENT DISTRIBUTION							
Program content [2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General [2]	66.5	70.7	71.3	72.0	73.2	74.5	72.9
News and public affairs [3]	11.9	11.0	12.2	12.4	14.1	16.4	16.3
Information and skills	19.9	23.6	22.8	24.5	25.5	29.5	21.7
Cultural	20.9	22.1	21.9	22.8	20.1	20.5	17.9
General children's and youth's	10.0	8.7	8.9	7.5	7.9	6.5	5.8
Instructional	16.6	14.9	14.7	14.3	13.0	14.5	15.5
The Electric Co., Villa Alegre [4]	1.8	1.6	1.5	1.1	1.0	0.4	(NA)
Other [5]	14.8	13.3	13.2	13.2	12.0	14.1	(NA)
Sesame Street and The Electric Company [4]	17.8	16.1	15.5	14.8	11.4	11.4	11.7
Producer [2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local	10.1	7.7	7.0	6.7	5.7	5.2	5.2
Major public television production center, and other	48.2	52.2	46.2	45.6	44.4	37.6	27.1
Consortium	1.7	1.8	2.7	2.6	3.3	3.1	9.8
Children's television workshop	18.8	16.8	17.1	15.8	16.4	29.1	16.1
Independent and commercial producers	8.9	8.0	11.1	15.2	12.0	(NA)	23.8
Foreign producer, international coproduction	7.6	9.1	12.5	10.1	13.2	15.1	14.0
Distributor [2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local distribution only	10.0	7.4	6.8	6.2	5.6	4.9	6.4
Public broadcasting service	69.3	71.6	69.6	67.1	65.3	63.9	62.0
Regional public television network	6.2	5.4	7.6	10.8	13.0	14.0	17.8

NA Not available. [1] In 1988, only broadcasters in the 50 U.S. States were surveyed. [2] Includes other items not shown separately. [3] In 1986 and 1988, this category includes "Business or Consumer". [4] After 1976 *"Electric Company"* was double counted if aired during school hours when school is in session. [5] Excluding *"Sesame Street"* and *"The Electric Company"* but including *"Mister Rogers."* Includes adult educational.

Source: Corporation for Public Broadcasting, Washington, DC, *PTV Programming Survey*, biennial.

No. 893. Public Broadcasting Systems—Income, by Source: 1980 to 1990

[**In millions of dollars, except percent.** Stations **as of Dec. 31; fiscal year** data for income. Includes nonbroadcast income]

NUMBER OF STATIONS AND INCOME SOURCE	1980	1985	1986	1987	1988	1989	1990	PERCENT DISTRIBUTION		
								1980	1985	1990
CPB-qualified public radio stations	217	288	295	299	308	313	315	(X)	(X)	(X)
Public television stations	290	317	322	323	324	340	341	(X)	(X)	(X)
Total income	**705**	**1,096**	**1,134**	**1,295**	**1,368**	**1,549**	**1,581**	**100.0**	**100.0**	**100.0**
Federal government	193	179	186	243	248	264	267	27.3	16.3	16.9
State and local government [1]	272	358	379	389	416	454	474	38.5	32.7	30.0
Subscribers and auction/marathon	102	248	269	298	321	347	364	14.5	22.6	23.0
Business and industry	72	171	171	196	213	242	262	10.3	15.6	16.6
Foundation	24	43	38	48	51	69	71	3.3	3.9	4.5
Other	43	97	92	121	120	173	143	6.0	8.9	9.0

X Not applicable. [1] Includes income received from State colleges and universities.
Source: Corporation for Public Broadcasting (CPB), Washington, DC, *Public Broadcasting Income, Fiscal Year, 1990;* and unpublished data.

No. 894. Cable Television—Systems and Subscribers: 1970 to 1991

[**Subscribers in thousands, except percent.** Estimated]

YEAR (As of Jan. 1)	Systems	Subscribers	YEAR (As of Jan. 1)	Systems	Subscribers	SUBSCRIBER SIZE-GROUP	NUMBER OF [1]—		PERCENT OF [1]—	
							Systems	Subscribers	Systems	Subscribers
1970	2,490	4,500	1982	4,825	21,000	**1991, total [2]**	**10,704**	**50,770**	**100**	**100**
1973	2,991	7,300	1983	5,600	25,000	50,000 and over	203	19,647	2	39
1974	3,158	8,700	1984	6,200	30,000	20,000 to 49,999	410	12,783	4	25
1975	3,506	9,800	1985	6,600	32,000	10,000 to 19,999	496	7,018	5	14
1976	3,681	10,800	1986	7,600	37,500	5,000 to 9,999	635	4,453	6	9
1977	3,832	11,900	1987	7,900	41,100	3,500 to 4,999	401	1,665	4	3
1978	3,875	13,000	1988	8,500	44,000	1,000 to 3,499	1,774	3,377	17	7
1979	4,150	14,100	1989	9,050	47,500	500 to 999	1,339	954	13	2
1980	4,225	16,000	1990	9,575	50,000	250 to 499	1,411	508	13	1
1981	4,375	18,300	1991	10,704	51,000	Less than 250	2,787	364	26	1

[1] As of April 1, 1991. [2] Excludes 1,248 systems not available by subscriber size-group.
Source: Warren Publishing, Inc., Washington, DC, *Television & Cable Factbook*, annual, (copyright).

No. 895. Cable and Pay TV—Summary: 1955 to 1990

[Cable TV for calendar year. Pay TV, as of **Dec. 31** of year shown]

YEAR	CABLE TV				PAY TV					
	Avg. basic subscribers (1,000)	Avg. monthly basic rate (dol.)	Revenue [1] (mil. dol.)		Units [2] (1,000)		Monthly rate (dollars)		Pay cable units	
			Total	Basic	Total pay [3]	Pay cable	Total pay [3]	Pay cable	Percent of homes passed	Percent basic
1955	250	5.00	20	20	(X)	(X)	(X)	(X)	(X)	(X)
1960	750	5.00	50	50	(X)	(X)	(X)	(X)	(X)	(X)
1965	1,500	5.00	95	95	(X)	(X)	(X)	(X)	(X)	(X)
1970	5,100	5.50	345	345	(X)	(X)	(X)	(X)	(X)	(X)
1975	9,800	6.50	804	774	469	469	(X)	7.85	11.1	23.6
1976	11,000	6.72	976	897	1,021	978	(NA)	7.87	10.6	22.3
1977	12,200	7.00	1,221	1,035	1,733	1,642	8.12	7.92	12.2	25.3
1978	13,400	7.26	1,496	1,177	3,580	3,289	8.62	8.09	17.9	35.0
1979	15,000	7.53	1,906	1,367	6,409	5,732	9.37	8.44	22.3	41.3
1980	17,500	7.85	2,603	1,668	10,389	9,144	9.78	8.80	27.9	50.6
1981	21,500	8.14	3,717	2,140	17,521	15,450	10.13	9.02	37.6	68.8
1982	25,400	8.46	5,097	2,628	23,179	20,791	10.36	9.57	46.2	84.0
1983	29,450	8.76	6,512	3,151	28,115	26,418	10.25	9.84	47.3	84.3
1984	32,850	9.20	7,892	3,696	31,027	29,966	10.32	10.08	49.5	87.5
1985	35,430	10.24	9,305	4,522	31,055	30,596	10.53	10.42	47.1	83.3
1986	38,740	11.09	10,520	5,341	32,428	32,064	10.40	10.31	46.2	80.8
1987	41,200	13.27	12,374	6,778	35,110	34,793	10.21	10.15	47.5	81.6
1988	44,200	14.45	13,979	7,883	39,144	38,819	10.22	10.18	50.3	85.0
1989	47,390	15.97	15,933	9,322	41,234	41,095	10.26	10.21	49.6	83.3
1990	[4]50,455	17.58	[4]17,784	[4]10,074	(NA)	41,505	(NA)	10.38	(NA)	80.2

NA Not available. X Not applicable. [1] Includes installation revenue. [2] Individual program services sold to subscribers. [3] Includes multipoint distribution service (MDS) and satellite TV (STV). [4] Projection.

Source: Paul Kagan Associates, Inc., Carmel, CA, *The Cable TV Financial Databook*, annual, (copyright); *The Kagan Census of Cable, and Pay TV*, 1991, and *The Pay TV Newsletter*, June 29, 1991.

No. 896. Cable and Other Pay Television Services—Operating Revenue: 1989 and 1990

[Cable and other pay television services include establishments primarily engaged in the dissemination of visual and textual television programs on a subscription or fee basis. Based on the *1972 Standard Industrial Classification Manual;* see text, section 13]

OPERATING REVENUE	1989		1990		Percent change, 1989-90
	Total (mil. dol.)	Percent of total	Total (mil. dol.)	Percent of total	
Total	18,739	100.0	21,309	100.0	13.7
Advertising	1,254	6.7	1,602	7.5	27.7
Program revenue	861	4.6	1,103	5.2	28.2
Basic service	10,042	53.6	11,475	53.9	14.3
Pay and other premium service	5,284	28.2	5,643	26.5	6.8
Installation fees	298	1.6	330	1.6	10.9
Other cable and pay television revenue	1,000	5.3	1,156	5.4	15.6

Source: U.S. Bureau of the Census, *Annual Survey of Communication Services: 1990.*

No. 897. Publishing Industry—Summary: 1982 to 1990

[In millions of dollars, except as noted. Number in parentheses represents Standard Industrial Classification code; see text, section 13. Based on the censuses of manufactures and the Annual Survey of Manufactures (ASM). For the 1990 ASM, a major change in the survey was introduced. This change resulted from a backlog of previously unclassified single-establishment companies, now classified as manufacturing; for details, see text, section 27 and Appendix III]

ITEM	NEWSPAPERS (271)				PERIODICALS (272)				BOOKS (273)			
	1982	1987	1989	1990	1982	1987	1989	1990	1982	1987	1989	1990
Establishments	8,846	9,091	(NA)	(NA)	3,328	4,020	(NA)	(NA)	2,130	2,298	(NA)	(NA)
With 20 or more employees	2,554	2,617	(NA)	(NA)	690	876	(NA)	(NA)	419	424	(NA)	(NA)
Employees [1] (1,000)	402	435	431	443	94	110	116	115	67	70	74	74
Payroll	6,555	9,025	9,842	10,407	1,986	2,983	3,423	3,659	1,327	1,860	2,132	2,300
Value of receipts	21,276	31,849	34,146	34,642	11,478	17,329	19,787	20,397	7,740	12,620	14,074	15,318
Cost of materials	6,006	7,533	8,218	8,087	4,568	5,873	6,581	6,580	2,420	3,663	4,366	4,466
Value added [2]	15,275	24,311	25,930	26,560	6,911	11,452	13,248	13,848	5,292	9,111	9,916	10,920
New capital expends.	1,029	1,523	1,985	1,886	195	246	272	275	174	240	319	329
Fixed assets, gross assets	8,701	14,028	(NA)	(NA)	1,370	2,528	(NA)	(NA)	1,109	1,680	(NA)	(NA)
Inventories, Dec. 31	755	857	881	975	724	902	1,107	1,118	1,380	2,091	2,643	2,769

NA Not available. [1] Represents the average number of production workers plus the number of other employees in mid-March. [2] By manufacture, derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments. This result is then adjusted by the addition of value added by merchandising operations, plus the net change in finished goods and work-in-process inventories between the beginning and the end of the year.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1987,* Industry Reports, series MC87-I-27A, and *1990 Annual Survey of Manufactures,* M90(AS)-1.

No. 898. Newspapers and Periodicals—Number, by Type: 1970 to 1992

[Data refer to year of compilation of the Directory cited as the source, i.e., generally to year preceding year shown. See also *Historical Statistics, Colonial Times to 1970*, series R 232-243]

TYPE	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991	1992
Newspapers [1]	11,383	11,400	9,620	9,134	9,144	9,031	10,088	10,457	11,471	11,689	11,339
Semiweekly	423	506	537	517	495	510	555	567	579	574	562
Weekly	8,903	8,824	7,159	6,811	6,857	6,750	7,438	7,622	8,420	8,546	8,293
Daily	1,838	1,819	1,744	1,701	1,651	1,646	1,745	1,773	1,788	1,781	1,755
Periodicals [1]	9,573	9,657	10,236	11,090	11,328	11,593	11,229	11,556	11,092	11,239	11,143
Weekly	1,856	1,918	1,716	1,367	1,383	1,400	880	828	553	511	466
Semimonthly [2]	589	537	645	801	789	858	619	622	435	412	371
Monthly	4,314	4,087	3,985	4,088	4,066	4,031	4,192	4,445	4,239	4,340	4,326
Bimonthly	957	1,009	1,114	1,361	1,387	1,402	1,558	1,880	2,087	2,116	2,143
Quarterly	1,108	1,093	1,444	1,759	1,895	1,984	2,245	2,513	2,758	2,861	3,024

[1] Includes other items not shown separately. [2] Includes fortnightly (every 2 weeks).

Source: Gale Research, Inc., *1992 Gale Directory of Publications and Broadcast Media*, 124th edition, and earlier editions, (copyright).

No. 899. Number and Circulation of Daily and Sunday Newspapers: 1970 to 1990

[Number of newspapers as of Feb. 1 of the following year. Circulation figures as of **Sept. 30.** For English language newspapers only. See also *Historical Statistics, Colonial Times to 1970*, series R 224-231]

TYPE	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER OF NEWSPAPERS													
Daily: Total [1]	1,748	1,756	1,745	1,730	1,711	1,701	1,688	1,676	1,657	1,645	1,642	1,626	1,611
Morning	334	339	387	408	434	446	458	482	499	511	529	530	559
Evening	1,429	1,436	1,388	1,352	1,310	1,284	1,257	1,220	1,188	1,166	1,141	1,125	1,084
Sunday	586	639	736	755	768	772	783	798	802	820	840	847	863
CIRCULATION (mil.)													
Daily: Total [1]	62.1	60.7	62.2	61.4	62.5	62.6	63.1	62.8	62.5	62.8	62.7	62.6	62.3
Morning	25.9	25.5	29.4	30.6	33.2	33.8	35.4	36.4	37.4	39.1	40.4	40.7	41.3
Evening	36.2	35.2	32.8	30.9	29.3	28.8	27.7	26.4	25.1	23.7	22.2	21.8	21.0
Sunday	49.2	51.1	54.7	55.2	56.3	56.7	57.5	58.8	58.9	60.1	61.5	62.0	62.6

[1] All-day newspapers are counted in both morning and evening columns but only once in total. Circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual, (copyright).

No. 900. Number and Circulation of Daily Newspapers, by Population—Size Class of City: 1975 to 1990

[Number of newspapers as of **Feb.** 1 of the following year. Circulation as of **Sept. 30.** For English language newspapers only. See table 37 for number of cities by population size]

TYPE OF DAILY AND POPULATION-SIZE CLASS	NUMBER [1]					NET PAID CIRCULATION [1] (1,000)				
	1975	1980	1985	1989	1990	1975	1980	1985	1989	1990
Morning dailies, total	339	387	482	530	559	26,491	29,413	36,361	40,759	41,311
In cities of—										
1,000,001 or more	14	20	22	28	18	7,159	8,795	9,367	11,727	6,508
500,001 to 1,000,000	25	27	24	23	22	5,581	5,705	6,897	5,053	4,804
100,001 to 500,000	89	99	121	130	138	7,836	8,996	12,197	14,890	20,051
50,001 to 100,000	69	75	87	94	100	2,619	2,973	3,653	4,071	4,373
25,001 to 50,000	67	64	83	97	102	1,422	1,701	2,145	2,927	3,209
Less than 25,000	75	102	145	158	179	874	1,243	2,099	2,087	2,365
Evening dailies, total	1,436	1,388	1,220	1,125	1,084	35,166	32,788	26,407	21,890	21,017
In cities of—										
1,000,001 or more	12	11	8	8	7	4,156	2,984	2,169	1,349	1,423
500,001 to 1,000,000	24	23	14	14	12	4,573	4,101	1,626	1,569	1,350
100,001 to 500,000	127	123	102	77	71	8,918	8,178	6,987	5,035	4,687
50,001 to 100,000	175	156	127	105	94	5,379	4,896	3,942	3,336	2,941
25,001 to 50,000	248	246	229	209	204	4,898	5,106	4,606	4,065	4,278
Less than 25,000	850	829	740	712	696	7,242	7,523	7,075	6,533	6,338

[1] All-day newspapers are counted in both morning and evening columns; circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual, (copyright).

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No. 901. Daily and Sunday Newspapers—Number and Circulation, by State: 1990

[Number of newspapers **as of Feb. 1** of the following year. Circulation figures **as of Sept. 30.** For English language newspapers only. New York, Massachusetts, and Virginia Sunday newspapers include national circulation]

STATE	DAILY			SUNDAY		STATE	DAILY			SUNDAY	
	Number	Circulation [1]		Number	Net paid circulation (1,000)		Number	Circulation [1]		Number	Net paid circulation (1,000)
		Net paid (1,000)	Per capita [2]					Net paid (1,000)	Per capita [2]		
Total	1,611	62,328.0	0.25	863	62,634.5	MO	44	1,092.6	0.21	20	1,336.2
AL	27	766.5	0.19	21	766.9	MT	11	188.7	0.24	7	194.0
AK	7	136.3	0.25	4	151.0	NE	20	471.3	0.30	7	436.8
AZ	20	737.4	0.20	12	820.9	NV	8	261.9	0.22	4	301.8
AR	32	566.0	0.24	17	675.2	NH	9	215.5	0.19	4	158.3
CA	116	6,591.3	0.22	71	6,753.9	NJ	23	1,685.9	0.22	17	1,925.1
CO	29	1,007.9	0.31	11	1,159.8	NM	18	314.1	0.21	13	289.0
CT	21	847.8	0.26	11	830.6	NY	71	7,418.1	0.41	40	5,902.4
DE	2	144.7	0.22	2	171.9	NC	53	1,453.4	0.22	35	1,452.7
DC	2	877.8	1.45	1	1,137.0	ND	10	187.3	0.29	7	185.6
FL	43	3,175.0	0.25	36	3,920.0	OH	87	2,745.6	0.25	34	2,893.2
GA	36	1,211.4	0.19	18	1,311.6	OK	49	744.2	0.24	43	907.3
HI	6	244.3	0.22	5	262.0	OR	20	673.1	0.24	10	701.1
ID	12	208.8	0.21	8	226.8	PA	91	3,277.8	0.28	29	3,165.3
IL	69	2,596.6	0.23	27	2,748.0	RI	6	294.6	0.29	3	306.8
IN	74	1,512.0	0.27	22	1,370.5	SC	17	675.5	0.19	13	727.5
IA	37	724.9	0.26	10	738.1	SD	12	168.0	0.24	4	136.6
KS	46	531.1	0.21	17	492.6	TN	28	969.5	0.20	16	1,082.6
KY	23	662.4	0.18	12	673.7	TX	98	3,586.3	0.21	89	4,599.5
LA	28	780.4	0.18	21	892.1	UT	6	285.3	0.17	6	327.5
ME	8	282.3	0.23	2	189.7	VT	9	149.8	0.27	3	103.4
MD	15	738.5	0.15	7	679.0	VA	34	2,525.4	0.41	15	980.3
MA	40	2,015.9	0.34	14	1,770.1	WA	26	1,181.9	0.24	15	1,207.7
MI	52	2,373.3	0.26	23	2,431.4	WV	23	436.0	0.24	11	412.0
MN	25	949.9	0.22	13	1,147.1	WI	36	1,145.2	0.23	15	1,118.4
MS	22	403.2	0.16	14	379.5	WY	10	95.6	0.21	4	74.2

[1] Circulation figures based on the principal community served by a newspaper which is not necessarily the same location as the publisher's office. [2] Per capita based on enumerated resident population as of April 1.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual, (copyright).

No. 902. Copyright Registration, by Subject Matter: 1985 to 1991

[**In thousands.** For years ending **Sept. 30. Comprises claims to copyright registered for both U.S. and foreign works.** See also *Historical Statistics, Colonial Times to 1970*, series W 82-95]

SUBJECT MATTER OF COPYRIGHT	1985	1990	1991	SUBJECT MATTER OF COPYRIGHT	1985	1990	1991
Total	539.8	643.5	663.7	Sound recordings	22.7	37.5	36.8
Monographs [1]	154.5	179.7	193.8	Renewals	43.8	51.8	52.3
Semiconductor chip products	0.9	1.0	1.2	Musical works [2]	147.9	185.3	191.2
Serials	120.0	111.5	109.2	Works of the visual arts [3]	50.0	76.7	79.2

[1] Includes computer software and machine readable works. [2] Includes dramatic works, accompanying music, choreography, pantomimes, motion pictures, and filmstrips. [3] Two-dimensional works of fine and graphic art, including prints and art reproductions; sculptural works; technical drawings and models; photographs; commercial prints and labels; works of applied arts, cartographic works, and multimedia works.

Source: The Library of Congress, *Annual Report*.

No. 903. Advertising—Estimated Expenditures: 1950 to 1991

[**In millions of dollars.** National advertising is defined as advertising done for companies whose products are distributed nationally and for which national media rates are paid. Local advertising is defined as advertising done for companies which market products locally and which may pay special "local" media rates. See also *Historical Statistics, Colonial Times to 1970*, series T 444-446]

YEAR	Total	National	Local	YEAR	Total	National	Local	YEAR	Total	National	Local
1950	5,700	3,260	2,440	1975	27,900	15,200	12,700	1984	87,820	49,690	38,130
1955	9,150	5,380	3,770	1976	33,300	18,355	14,945	1985	94,750	53,355	41,395
1960	11,960	7,305	4,655	1977	37,440	20,595	16,845	1986	102,140	56,850	45,290
1965	15,250	9,340	5,910	1978	43,330	23,720	19,610	1987	109,650	60,625	49,025
1970	19,550	11,350	8,200	1979	48,780	26,695	22,085	1988	118,050	65,610	52,440
1971	20,700	11,755	8,945	1980	53,550	29,815	23,735	1989	123,930	68,990	54,940
1972	23,210	12,980	10,230	1981	60,430	33,890	26,540	1990	128,640	72,780	55,860
1973	24,980	13,700	11,280	1982	66,580	37,785	28,795	1991 [1]	126,680	72,690	53,990
1974	26,620	14,700	11,920	1983	75,850	42,525	33,325				

[1] Projection.

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age*, (copyright).

No. 904. Advertising—Indexes of National Advertising Expenditures, by Medium: 1970 to 1990

[1982-84 = 100. Based on the average monthly expenditure for those major media which give national coverage. See also *Historical Statistics, Colonial Times to 1970*, series T 472-484]

MEDIUM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
General index	26	71	79	87	98	114	118	124	128	136	141	(NA)
Network television	23	72	78	86	97	116	113	117	119	128	128	131
Spot television	25	67	77	89	99	112	123	134	140	146	150	159
Magazines	30	73	82	86	99	115	120	124	131	142	156	159
Newspapers	32	71	82	89	99	112	122	123	127	130	135	140

NA Not available.
Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age*, (copyright).

No. 905. Advertising—Estimated Expenditures, by Medium: 1970 to 1990

[**In millions of dollars, except percent.** See text, section 18 for a discussion of types of advertising. See also *Historical Statistics, Colonial Times to 1970*, series R 106-109, R 123-126, and T 444-471]

MEDIUM	EXPENDITURES							PERCENT			
	1970	1980	1985	1987	1988	1989	1990	1970	1980	1985	1990
Total	**19,550**	**53,550**	**94,750**	**109,650**	**118,050**	**123,930**	**128,640**	**100**	**100**	**100**	**100**
National	11,350	29,815	53,355	60,625	65,610	68,990	72,780	58	56	56	57
Local	8,200	23,735	41,395	49,025	52,440	54,940	55,860	42	44	44	43
Newspapers	5,704	14,794	25,170	29,412	31,197	32,368	32,281	29	28	27	25
National	891	1,963	3,352	3,494	3,586	3,720	3,867	5	4	4	3
Local	4,813	12,831	21,818	25,918	27,611	28,648	28,414	25	24	23	22
Magazines	1,292	3,149	5,155	5,607	6,072	6,716	6,803	7	6	5	5
Weeklies	617	1,418	2,297	2,445	2,646	2,813	2,864	3	3	2	2
Women's	301	782	1,294	1,417	1,504	1,710	1,713	2	2	1	1
Monthlies	374	949	1,564	1,745	1,922	2,193	2,226	2	2	2	2
Farm publications	62	130	186	196	196	212	215	(Z)	(Z)	(Z)	(Z)
Television	3,596	11,469	21,022	23,904	25,686	26,891	28,405	18	21	22	22
Three networks	1,658	5,130	8,060	8,500	9,172	9,110	9,383	9	10	9	7
Cable networks	-	45	594	760	942	1,197	1,393	-	(Z)	1	1
Syndication (nat'l)	-	50	520	762	901	1,288	1,589	-	(Z)	1	1
Spot (national)	1,234	3,269	6,004	6,846	7,147	7,354	7,788	6	6	6	6
Spot (local)	704	2,967	5,714	6,833	7,270	7,612	7,856	4	6	6	6
Cable (non-network)	-	8	130	203	254	330	396	-	(Z)	(Z)	(Z)
Radio	1,308	3,702	6,490	7,206	7,798	8,323	8,726	7	7	7	7
Network	56	183	365	413	425	476	482	(Z)	(Z)	(Z)	(Z)
Spot	371	779	1,335	1,330	1,418	1,547	1,635	2	2	1	1
Local	881	2,740	4,790	5,463	5,955	6,300	6,609	5	5	5	5
Yellow Pages	(NA)	2,900	5,800	7,300	7,781	8,330	8,926	(NA)	5	6	7
National	(NA)	330	695	830	944	1,011	1,132	(NA)	1	1	1
Local	(NA)	2,570	5,105	6,470	6,837	7,319	7,794	(NA)	5	5	6
Direct mail	2,766	7,596	15,500	19,111	21,115	21,945	23,370	14	14	16	18
Business papers	740	1,674	2,375	2,458	2,610	2,763	2,875	4	3	3	2
Outdoor	234	578	945	1,025	1,064	1,111	1,084	1	1	1	1
Miscellaneous	3,848	7,558	12,107	13,431	14,531	15,271	15,955	20	14	13	12

- Represents or rounds to zero. NA Not available. Z Less than .5 percent.
Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age*, (copyright). Percentages derived by U.S. Bureau of the Census.

No. 906. Magazine Advertising—Expenditures, by Product Type: 1970 to 1990

[**In millions of dollars, except percent.** Space cost based on one-time rate; special rates used where applicable. Year-to-year data not strictly comparable, as a few minor publications are added or deleted]

TYPE OF PRODUCT	1970	1980	1985	1986	1987	1988	1989	1990	PERCENT DISTRIBUTION		
									1970	1980	1990
Total	**1,193**	**2,846**	**4,961**	**5,120**	**5,390**	**5,943**	**6,611**	**6,745**	**100**	**100**	**100**
Apparel, footwear, and accessories	51	112	251	291	323	363	396	428	4	4	6
Automotive [1]	97	230	549	597	678	801	881	899	8	8	13
Beer, wine, and liquor	98	239	240	225	208	213	255	277	8	8	4
Computers, office equipment, stationery	32	79	250	219	247	252	284	283	3	3	4
Consumer services [2]	74	190	463	484	491	466	522	516	6	7	8
Drugs and remedies	38	79	135	148	142	145	135	163	3	3	2
Food and food products	86	199	342	389	377	377	435	444	7	7	7
Household equipment and supplies	34	65	100	93	97	102	104	118	3	2	2
Household furnishings	38	73	87	103	111	116	126	116	3	2	2
Jewelry, optical goods, camera	30	79	101	113	121	142	156	157	3	3	2
Mail orders/direct response	(NA)	(NA)	328	363	407	467	513	531	(NA)	(NA)	8
Publishing and media	38	146	188	176	186	192	191	212	3	5	3
Retail	53	(NA)	121	143	138	176	211	255	4	(NA)	4
Smoking materials	65	290	383	322	334	352	393	305	5	10	5
Toiletries and toilet goods	119	206	385	390	455	554	651	679	10	7	10
Travel, hotels, and resorts	54	123	245	249	273	311	374	380	5	4	6
All other	289	736	793	815	802	914	984	982	24	26	15

NA Not available. [1] Includes accessories and equipment. [2] Includes business services.
Source: Publishers Information Bureau, Inc., New York, NY, as compiled by Leading National Advertisers.

No. 907. Television—Expenditures for Network Advertising: 1980 to 1990

[In millions of dollars. See text, section 18 for a definition of network advertising]

TYPE OF PRODUCT	1980	1985	1989	1990	TYPE OF PRODUCT	1980	1985	1989	1990
Total	5,147	8,313	9,559	10,132	Household equipment, supplies, and furnishings	225	275	323	297
Apparel, footwear, and accessories	131	161	269	276	Insurance	74	99	158	172
Automotive	529	848	1,491	1,781	Financial planning services	20	60	63	51
Beer and wine	242	428	364	293	Jewelry and cameras [1]	119	129	111	127
Building material, equipment, fixtures	59	97	84	72	Laundry soaps, cleansers, and polishes	306	397	319	317
Computers, office equipment, and stationery	57	249	159	149	Movies	103	138	214	242
Confectionery, soft drinks	281	388	379	407	Pet products	144	175	134	104
Consumer services	178	303	437	524	Proprietary medicines	430	700	767	817
Dept. and discount stores	94	161	196	248	Publishing and media	34	50	61	28
Food and food products	844	1,502	1,685	1,704	Restaurants and drive-ins	132	416	604	624
Freight and industrial development	7	40	56	55	Tobacco products and supplies	8	6	-	-
Gas, lubricants, etc.	71	49	38	39	Toiletries and toilet goods	765	955	850	944
Home electronics equipment	50	36	56	85	Toys and sporting goods	93	152	126	138
Horticulture	15	30	38	36	Travel, hotels, and resorts	72	102	169	146
					All other	64	367	408	456

- Represents or rounds to zero. [1] Includes optical goods.

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., New York, NY.

No. 908. Television—Estimated Time Charges for Spot Advertising: 1980 to 1990

[In millions of dollars. Data represent activity in the top 75 markets monitored by The Arbitron Co., currently covering approximately 356 stations. Beginning 1989, data exclude National Syndicated activity therefore are not directly comparable to prior years. See text, section 18 for a definition of types of advertising]

TYPE OF PRODUCT	1980	1985	1989	1990	TYPE OF PRODUCT	1980	1985	1989	1990
Total	2,496	4,504	5,423	5,697	Home electronics equipment	73	67	116	131
Agriculture and farming	15	17	17	12	Horticulture	35	37	47	41
Apparel, footwear, and accessories	105	95	94	105	Household equipment, supplies, and furnishings	133	217	175	175
Automotive	228	683	1,415	1,449	Insurance	34	88	104	120
Beer and wine	156	218	208	201	Jewelry, optical goods, and cameras	55	68	59	48
Building material, equipment, and fixtures	47	58	79	58	Laundry soaps, polishes	111	175	118	156
Computers, office equipment and stationery	15	25	32	21	Pet products	33	60	41	36
Confectionery, soft drinks	212	355	303	338	Proprietary medicines	93	148	167	201
Consumer services	83	262	380	414	Publishing and media	78	147	130	124
Food and food products	507	927	958	1,069	Tobacco products, suppliers	8	14	5	4
Freight and industrial development	5	36	36	33	Toiletries and toilet goods	223	267	281	258
Gasoline, lubricants, etc.	50	102	164	169	Toys and sporting goods	104	211	193	192
					Travel, hotels, and resorts	76	187	215	276
					All other	17	40	86	66

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., New York, NY in the top 75 markets.

No. 909. Television—Expenditures for Retail/Local Advertising: 1980 to 1990

[In millions of dollars. See headnote, table 908]

TYPE OF PRODUCT	1980	1985	1989	1990	TYPE OF PRODUCT	1980	1985	1989	1990
Total	1,983	3,899	5,076	5,200	Financial planning services	7	29	24	27
Amusements, entertainment	68	121	144	146	Jewelry stores	19	25	26	23
Appliance stores, repair	36	122	153	178	Legal services	5	38	82	95
Auto repair, service stations	28	73	89	94	Leisure time stores and services	42	107	134	151
Auto supply, accessory stores	12	41	40	34	Loan, mortgage companies	12	25	30	39
Auto, truck dealers	99	311	321	271	Mail order, catalog showrooms	13	23	11	10
Banks, S&L associations	141	195	197	179	Medical, dental services	13	87	145	150
Builders, home improvement	20	32	27	26	Movies	102	103	211	238
Carpet, floor covering stores	24	40	51	47	Newspapers	15	32	37	29
Clothing stores	46	82	144	129	Optical services, supplies	14	28	77	84
Department stores	131	186	213	169	Political	70	22	49	203
Discount department stores	74	115	117	121	Radio, cable TV	69	134	183	168
Drug stores	26	67	94	101	Realtors, real estate devel'prs	18	31	34	28
Education services	17	70	132	112	Rental services (non-auto)	15	38	31	30
Food stores, supermarkets	149	259	341	344	Restaurants, drive-ins	288	672	838	828
Furniture stores	111	187	278	273	Shoe stores	27	37	44	36
Gas, electric, water companies	16	38	50	46	Shopping centers	13	20	26	28
Health clubs, reducing salons	21	39	94	116	Sport, hobby, toy stores	23	41	47	50
Home centers and hardware	42	89	106	108	All other	137	278	374	413
Hotels, resorts, U.S.	18	62	82	76					

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., New York, NY in the top 75 markets.

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 25; and on energy-related housing characteristics, see section 26.

In Brief

Energy consumption, 1990
record 81.4 quadrillion Btu
Nuclear power, 1990
20.6 % of all electric generation
"Renewable" energy sources, 1990
7.9 % of consumption

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, 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 1990 for production and consumption, in that order, for various fuels: Petroleum, 5.800 and 5.449 mil. Btu per barrel; total coal, 21.827 and 21.344 mil. Btu per short ton; and natural gas (dry), 1,031 Btu per cubic foot for both. The factors for the production of nuclear power and geothermal power were 10,724 and 21,096 Btu per kilowatt-hour, respectively. The fossil fuel steam-electric power plant generation factor of 10,331 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. 910. Total Horsepower of All Prime Movers: 1960 to 1990

[**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 horse-power	AUTOMOTIVE [1 2]		NONAUTOMOTIVE							
		Total	Percent of total	Total	Facto-ries[3 4]	Mines[3 4]	Rail-roads[5]	Merchant ships and sailing vessels[4]	Farms	Electric central sta-tions[2]	Air-craft[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
1976	25,732	24,339	94.6	1,393	61	47	64	22	324	692	184
1977	26,469	25,025	94.5	1,444	62	47	62	23	328	728	194
1978	27,379	25,892	94.6	1,487	63	48	64	25	[7]335	754	198
1979	28,162	26,617	94.5	1,545	63	48	62	26	342	803	201
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	34,919	33,062	94.7	1,857	66	47	50	28	356	[8]1,043	267

[1] Includes passenger cars, trucks, buses, and motorcycles. [2] As of July 1. [3] Beginning 1965, data are estimates. [4] This is an extensions of trends, since government agencies, suspended compilation of these power capacity statistics. [5] Beginning 1965, not strictly comparable with earlier years. [6] Includes private planes and commercial airlines. [7] Includes estimates of about 3.0 million hp in work animals and 30,000 in windmills. [8] Includes 59,000,000 horsepower in cogenerating and industrial electric power capacity.

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

No. 911. Energy Production and Consumption, by Major Source: 1960 to 1990

[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 produc-tion (quad. Btu)	PERCENT OF PRODUCTION				Total con-sump-tion (quad. Btu)	PERCENT OF CONSUMPTION				Con-sump-tion/ pro-duc-tion ratio
		Coal	Petro-leum [1]	Natural gas [2]	Other [3]		Coal	Petro-leum [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	27.5	28.4	35.0	9.1	78.9	19.1	47.1	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	29.2	28.7	32.0	10.2	70.8	21.7	42.7	26.1	9.5	1.11
1983	61.2	28.2	30.0	30.6	11.2	70.5	22.5	42.6	24.6	10.3	1.15
1984	65.8	29.9	28.6	30.7	10.7	74.1	23.0	41.9	25.0	10.1	1.13
1985	64.8	29.8	29.3	29.6	11.3	74.0	23.6	41.8	24.1	10.5	1.14
1986	64.2	30.4	28.6	29.0	12.0	74.2	23.3	43.4	22.5	10.8	1.16
1987	64.8	31.1	27.3	29.7	11.9	76.8	23.4	42.8	23.1	10.7	1.19
1988	66.0	31.4	26.2	30.0	12.4	80.2	23.5	42.7	23.1	10.7	1.21
1989	66.1	32.3	24.4	30.2	13.1	81.3	23.3	42.1	23.8	10.8	1.23
1990	[4]67.6	33.5	22.9	29.9	13.7	[5]81.5	23.4	41.3	23.8	11.5	1.20

[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. 912. Energy Supply and Disposition, by Type of Fuel: 1970 to 1990

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

TYPE OF FUEL	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Production	62.1	62.1	59.9	64.8	63.9	61.2	65.8	64.8	64.2	64.8	66.0	66.1	[1]67.6
Crude oil [2]	20.4	19.5	17.7	18.2	18.3	18.4	18.9	19.0	18.4	17.7	17.3	16.1	15.5
Natural gas liquids	2.5	2.6	2.4	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2
Natural gas [3]	21.7	22.2	19.6	19.9	18.3	16.5	17.9	16.9	16.5	17.1	17.5	17.8	18.1
Coal	14.6	14.0	15.0	18.6	18.6	17.3	19.7	19.3	19.5	20.1	20.7	21.3	22.6
Nuclear electric power	0.2	0.9	1.9	2.7	3.1	3.2	3.6	4.2	4.5	4.9	5.7	5.7	6.2
Hydro electric power	2.6	2.9	3.2	2.9	3.3	3.5	3.3	2.9	3.0	2.6	2.3	2.8	2.9
Geothermal and other	(Z)	(Z)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Net trade [4]	-5.7	-12.7	-11.8	-12.2	-7.5	-8.3	-9.0	-7.9	-10.4	-11.9	-13.1	-14.2	-13.8
Exports	2.7	2.1	2.4	3.7	4.6	3.7	3.8	4.2	4.1	3.9	4.4	4.8	4.9
Coal	1.9	1.4	1.8	2.4	2.8	2.0	2.2	2.4	2.2	2.1	2.5	2.6	2.8
Imports	8.4	14.7	14.1	16.0	12.1	12.0	12.8	12.1	14.4	15.8	17.6	18.9	18.7
Crude oil	2.8	6.9	8.7	11.2	7.4	7.1	7.3	6.8	9.0	10.1	11.0	12.6	12.7
Consumption	66.4	74.3	70.5	76.0	70.8	70.5	74.1	73.9	74.2	76.8	80.2	81.3	[5]81.4
Petroleum products	29.5	34.8	32.7	34.2	30.2	30.1	31.1	30.9	32.2	32.9	34.2	34.2	33.6
Natural gas [3]	21.8	22.5	19.9	20.4	18.5	17.4	18.5	17.8	16.7	17.7	18.6	19.4	19.4
Coal	12.3	13.0	12.7	15.4	15.3	15.9	17.1	17.5	17.3	18.0	18.8	18.9	19.0
Nuclear power	0.2	0.9	1.9	2.7	3.1	3.2	3.6	4.2	4.5	4.9	5.7	5.7	6.2
Hydro electric power [6]	2.7	3.0	3.2	3.1	3.6	3.9	3.8	3.4	3.4	3.1	2.6	2.9	2.9
Geothermal and other	(Z)	(Z)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2

Z Less than 50 trillion. [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. 913. Selected Energy Indicators—Summary: 1970 to 1990

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

ITEM	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
AVERAGE ANNUAL PERCENT CHANGE [1]													
Gross national product [2]	-0.3	5.2	-1.3	-0.2	-2.5	3.6	6.8	3.4	2.7	3.4	4.5	2.5	1.0
Energy production, total [3]	5.0	-0.6	-1.6	1.5	-0.8	-4.2	7.6	-1.6	-0.8	0.9	1.8	0.1	2.3
Crude oil [4]	4.1	-2.8	-4.8	0.8	0.9	0.5	2.4	0.8	-3.4	-4.0	-2.3	-7.2	-4.3
Natural gas	5.6	-0.1	-8.0	-0.8	-7.9	-10.4	7.8	-6.1	-2.6	3.4	2.7	1.5	1.5
Coal	5.1	-0.7	6.1	5.7	1.4	-8.1	12.5	-2.0	0.9	3.1	2.9	2.8	5.6
Energy consumption, total [3]	3.5	4.2	-2.8	-3.7	-4.3	-0.5	5.1	-0.2	0.4	3.5	4.4	1.4	0.1
Petroleum products	4.0	5.4	-2.2	-8.5	-5.6	-0.6	3.2	-0.4	4.0	2.0	4.0	(Z)	-1.7
Natural gas (dry)	5.1	-0.8	-8.2	-1.3	-7.7	-6.6	6.2	-3.8	-6.3	6.2	4.4	4.3	0.2
Coal	-0.9	7.4	(Z)	2.5	-3.7	3.7	7.4	2.4	-1.2	4.3	4.7	0.5	0.6
PER CAPITA [5] (mil. Btu)													
Energy production	305	294	278	286	275	261	278	271	266	266	269	266	272
Energy consumption	327	351	327	335	305	301	313	310	308	316	326	328	327
Energy consumption per dollar of GNP [2] (1,000 Btu)	27.5	27.1	26.2	23.8	22.8	21.5	21.2	20.4	20.0	20.0	20.0	19.8	19.6

Z Less than .05 percent. [1] Represents annual average for period of intervals shown; for 1980, change from 1955. Percent change derived from Btu values. For explanation of average annual percent change, see Guide to Tabular Presentation. [2] Gross national product in constant (1982) 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.

No. 914. Energy Imports and Exports, by Type of Fuel: 1970 to 1990

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

TYPE OF FUEL	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Net imports: [1]													
Coal	-1.93	-1.42	-1.74	-2.39	-2.77	-2.01	-2.12	-2.39	-2.19	-2.05	-2.45	-2.57	-2.70
Natural Gas (dry)	0.77	0.98	0.90	0.96	0.90	0.89	0.79	0.90	0.69	0.94	1.22	1.28	1.41
Petroleum	6.92	12.98	12.51	13.50	9.05	9.08	9.89	8.95	11.53	12.53	14.01	15.33	15.10
Other [2]	-0.04	0.14	0.08	0.18	0.28	0.36	0.40	0.41	0.35	0.48	0.36	0.14	0.02
Imports:													
Coal	(Z)	(Z)	0.02	0.03	0.02	0.03	0.03	0.05	0.06	0.04	0.05	0.07	0.07
Natural Gas (dry)	0.85	1.06	0.98	1.01	0.95	0.94	0.85	0.95	0.75	0.99	1.30	1.39	1.51
Petroleum	7.47	13.47	12.95	14.66	10.78	10.65	11.43	10.61	13.20	14.16	15.75	17.16	16.94
Other [2]	0.07	0.20	0.16	0.28	0.35	0.41	0.45	0.49	0.43	0.56	0.46	0.33	0.23
Exports:													
Coal	1.94	1.43	1.76	2.42	2.79	2.04	2.15	2.44	2.25	2.09	2.50	2.64	2.77
Natural Gas (dry)	0.07	0.08	0.07	0.05	0.05	0.06	0.06	0.06	0.06	0.05	0.07	0.11	0.10
Petroleum	0.55	0.49	0.44	1.16	1.73	1.57	1.54	1.66	1.67	1.63	1.74	1.84	1.84
Other [2]	0.11	0.06	0.08	0.09	0.06	0.05	0.05	0.08	0.07	0.07	0.10	0.18	0.20

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.

Source of tables 912-914: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*.

No. 915. Energy Consumption—End-Use Sector and Selected Source, by State: 1989

[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)	Percent change, 1988-1989	END-USE SECTOR				SOURCE				
				Residential	Commercial	Industrial	Transportation	Petroleum	Natural gas (dry)	Coal	Hydroelectric power	Nuclear electric power
United States	**81,342**	**327.6**	**1.3**	**16,630**	**12,867**	**[3]29,463**	**22,382**	**34,209**	**19,384**	**18,940**	**2,884**	**5,677**
Northeast	**12,552**	**247.2**	**0.1**	**3,347**	**2,645**	**3,130**	**3,430**	**6,277**	**2,462**	**2,106**	**432**	**1,267**
New England	**3,068**	**235.2**	**0.2**	**927**	**660**	**551**	**929**	**1,911**	**416**	**185**	**126**	**355**
Maine	341	279.0	8.1	84	50	97	110	226	4	7	49	74
New Hampshire	250	226.0	3.0	78	39	56	77	166	14	32	15	-
Vermont	131	231.0	1.7	38	25	25	42	74	6	-	31	39
Massachusetts	1,372	232.0	1.9	417	326	209	420	849	259	121	24	32
Rhode Island	206	206.0	4.0	65	44	36	61	106	35	1	1	-
Connecticut	768	237.0	1.8	245	176	128	219	490	98	24	6	210
Middle Atlantic	**9,484**	**251.4**	**0.1**	**2,420**	**1,985**	**2,579**	**2,501**	**4,366**	**2,046**	**1,921**	**306**	**912**
New York	3,556	198.0	0.8	1,024	977	684	872	1,777	870	363	296	245
New Jersey	2,338	302.0	2.0	529	475	521	813	1,280	469	94	3	247
Pennsylvania	3,590	298.0	0.1	867	533	1,374	816	1,309	707	1,464	13	420
Midwest	**19,923**	**331.2**	**0.3**	**4,666**	**3,151**	**7,244**	**4,862**	**6,941**	**4,769**	**6,665**	**78**	**1,714**
East North Central	**14,061**	**332.4**	**0.5**	**3,304**	**2,187**	**5,343**	**3,227**	**4,612**	**3,460**	**4,680**	**24**	**1,283**
Ohio	3,863	354.0	2.3	864	585	1,585	828	1,185	848	1,464	1	136
Indiana	2,494	446.0	0.6	448	274	1,196	576	825	469	1,308	5	-
Illinois	3,527	303.0	2.0	898	643	1,194	793	1,160	1,014	714	1	802
Michigan	2,764	298.0	0.5	731	449	900	684	944	797	801	47	229
Wisconsin	1,413	290.0	1.5	363	236	468	346	498	332	393	16	116
West North Central	**5,862**	**328.4**	**0.2**	**1,362**	**964**	**1,901**	**1,635**	**2,329**	**1,309**	**1,985**	**102**	**431**
Minnesota	1,335	307.0	1.2	327	195	469	344	509	302	323	4	117
Iowa	925	326.0	1.3	219	138	333	235	324	228	319	7	34
Missouri	1,518	294.0	0.3	395	286	352	484	637	263	550	11	89
North Dakota	319	483.0	2.8	55	37	160	68	118	32	362	20	-
South Dakota	212	297.0	4.3	57	32	58	65	111	26	33	48	-
Nebraska	526	327.0	2.1	127	112	135	152	211	119	132	12	87
Kansas	1,027	409.0	3.1	182	164	394	287	419	339	266	-	104
South	**33,634**	**393.3**	**1.6**	**5,863**	**4,433**	**14,510**	**8,830**	**14,123**	**8,672**	**7,917**	**545**	**2,134**
South Atlantic	**12,435**	**288.4**	**0.9**	**2,899**	**2,196**	**3,519**	**3,822**	**5,258**	**1,536**	**3,813**	**170**	**1,424**
Delaware	233	346.0	1.7	47	33	88	65	137	36	61	-	-
Maryland	1,262	269.0	1.2	325	164	417	357	550	196	295	18	29
Dist. of Columbia	175	290.0	1.3	35	77	33	29	42	34	1	-	-
Virginia	1,839	302.0	0.5	440	376	450	573	772	181	362	4	153
West Virginia	799	430.0	2.7	132	88	429	150	276	140	929	12	-
North Carolina	1,939	295.0	0.9	458	327	604	551	734	167	557	72	313
South Carolina	1,163	331.0	1.8	233	159	479	292	389	120	301	21	437
Georgia	2,030	315.0	0.3	438	313	603	676	803	325	677	41	268
Florida	2,995	236.0	2.4	791	659	416	1,129	1,555	337	630	2	224
East South Central	**5,870**	**381.0**	**3.5**	**1,115**	**685**	**2,495**	**1,575**	**2,216**	**911**	**2,099**	**304**	**375**
Kentucky	1,475	396.0	5.3	277	176	620	402	538	196	765	46	-
Tennessee	1,763	357.0	2.6	382	198	710	473	600	229	564	122	167
Alabama	1,643	399.0	2.0	289	205	744	405	602	252	674	136	124
Mississippi	989	377.0	5.2	167	106	421	295	476	234	96	-	84
West South Central	**15,329**	**567.7**	**1.5**	**1,849**	**1,552**	**8,496**	**3,433**	**6,649**	**6,225**	**2,005**	**71**	**335**
Arkansas	825	343.0	5.0	164	105	320	236	311	251	203	32	95
Louisiana	3,523	804.0	0.8	293	241	2,300	689	1,489	1,599	207	-	133
Oklahoma	1,291	401.0	0.3	237	179	517	358	442	612	269	25	-
Texas	9,690	570.0	1.8	1,155	1,027	5,359	2,150	4,407	3,763	1,326	14	107
West	**15,201**	**293.5**	**3.2**	**2,749**	**2,642**	**4,550**	**5,261**	**6,872**	**3,482**	**2,253**	**1,829**	**562**
Mountain	**4,413**	**326.6**	**3.0**	**832**	**846**	**1,406**	**1,331**	**1,697**	**972**	**2,085**	**327**	**90**
Montana	350	434.0	5.1	62	51	153	84	155	47	178	99	-
Idaho	372	367.0	5.2	78	71	136	87	118	47	10	93	-
Wyoming	381	803.0	0.9	35	37	224	86	135	87	421	7	-
Colorado	909	274.0	0.7	205	231	205	267	323	246	324	18	6
New Mexico	559	366.0	6.8	73	99	182	206	233	205	280	2	-
Arizona	916	258.0	2.3	200	208	185	324	354	151	357	82	84
Utah	543	318.0	1.8	100	83	217	144	203	123	345	6	-
Nevada	383	345.0	8.2	79	66	104	133	176	66	170	20	-
Pacific	**10,788**	**281.8**	**3.2**	**1,917**	**1,796**	**3,144**	**3,930**	**5,175**	**2,510**	**168**	**1,502**	**472**
Washington	1,883	396.0	3.9	376	288	670	550	758	168	97	730	66
Oregon	912	323.0	3.6	203	159	268	281	351	112	7	413	57
California	7,127	245.0	2.0	1,270	1,244	1,839	2,774	3,540	1,906	58	349	349
Alaska	567	1075.0	9.0	43	52	298	173	232	321	5	9	-
Hawaii	299	269.0	13.2	25	53	69	152	294	3	1	1	-

- Represents zero. [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 8.6 trillion Btu of net imports of coal coke not allocated by State.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1960-1989.*

No. 916. Primary Energy Consumption, by End-Use Sector: 1960 to 1990

[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	20.0	37.1	24.1	18.7
1970	66.4	12.1	21.9	16.1	16.3	18.3	33.0	24.2	24.5
1973	74.3	12.3	23.5	18.6	19.9	16.5	31.7	25.0	26.7
1975	70.6	11.6	20.4	18.2	20.4	16.4	28.9	25.8	28.8
1979	78.9	11.5	22.8	20.4	24.1	14.6	28.9	25.9	30.6
1980	76.0	10.7	21.0	19.7	24.5	14.1	27.7	25.9	32.3
1981	74.0	10.0	19.7	19.5	24.8	13.6	26.6	26.3	33.5
1982	70.9	10.1	17.5	19.0	24.3	14.2	24.6	26.9	34.3
1983	70.5	9.7	16.7	19.1	25.0	13.8	23.7	27.1	35.4
1984	74.1	10.1	18.2	19.8	26.0	13.6	24.5	26.8	35.1
1985	74.0	9.8	17.6	20.1	26.5	13.3	23.7	27.1	35.8
1986	74.2	9.6	17.3	20.7	26.6	12.9	23.3	27.9	35.9
1987	76.8	9.7	18.2	21.3	27.6	12.7	23.7	27.7	35.9
1988	80.2	10.4	19.0	22.1	28.6	12.9	23.7	27.6	35.7
1989	81.4	10.5	19.2	22.3	29.3	12.9	23.6	27.5	36.0
1990	81.4	9.9	19.9	22.0	29.6	12.2	24.4	27.0	36.3

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

No. 917. Energy Expenditures and Average Fuel Prices, by Source and Sector: 1970 to 1989

[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	1983	1984	1985	1986	1987	1988	1989
EXPENDITURES (mil. dol.)											
Total[1 2]	**82,579**	**111,616**	**171,784**	**373,901**	**415,749**	**433,584**	**435,901**	**381,490**	**393,838**	**407,749**	**436,643**
Natural gas	10,891	13,933	20,061	51,061	72,000	77,169	72,938	59,702	58,019	61,089	65,419
Petroleum products[2]	48,088	65,305	103,859	238,410	221,469	225,933	223,653	174,772	186,711	189,417	208,536
Motor gasoline	31,596	39,667	59,446	124,408	115,816	114,438	118,044	91,526	99,809	103,211	112,585
Distillate fuel oil	6,253	9,524	15,680	40,797	41,841	44,864	43,611	34,954	37,240	38,362	43,349
Jet fuel	1,441	2,001	4,193	13,923	13,940	15,064	14,747	10,505	11,448	11,318	13,434
Residual fuel	2,046	4,667	10,374	21,573	14,099	14,392	11,462	7,506	7,987	7,143	8,218
Coal	4,593	6,229	13,047	22,648	27,051	29,049	29,719	27,914	27,589	28,372	28,101
Electricity sales	23,351	33,780	50,680	98,098	134,746	142,438	149,242	151,806	154,692	162,065	169,340
Residential sector	20,083	27,078	36,844	68,825	92,350	96,156	98,729	96,628	97,814	103,209	109,171
Commercial sector	10,668	15,104	22,835	46,881	64,943	69,404	70,325	68,320	68,717	71,725	75,605
Industrial sector	16,458	23,531	41,170	94,521	101,412	108,985	105,529	90,436	90,186	91,143	94,891
Transportation sector[2]	35,370	45,904	70,935	163,674	157,044	159,039	161,318	126,107	137,121	141,673	156,977
Motor gasoline	30,525	38,598	57,992	121,809	113,843	112,044	115,201	89,404	97,527	100,988	110,168
Electric utilities	4,316	7,817	16,396	37,435	41,336	43,378	42,558	35,792	36,681	37,435	38,898
AVERAGE FUEL PRICES (dol. per mil. Btu)											
All sectors	**1.65**	**2.02**	**3.33**	**6.91**	**8.47**	**8.36**	**8.43**	**7.36**	**7.38**	**7.31**	**7.72**
Residential sector	2.12	2.73	3.83	7.55	10.85	10.86	11.12	10.97	10.93	10.87	11.26
Commercial sector	1.97	2.56	4.09	7.88	11.05	11.29	11.72	11.40	11.05	10.88	11.36
Industrial sector	0.83	1.08	2.20	4.71	6.30	6.21	6.11	5.39	5.18	5.01	5.14
Transportation sector	2.31	2.57	4.02	8.61	8.44	8.24	8.25	6.23	6.59	6.58	7.23
Electric utilities	0.32	0.46	0.96	1.75	1.98	1.97	1.85	1.55	1.51	1.45	1.48

[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. 918. Energy Expenditures—End-Use Sector and Selected Source, by State: 1989

[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.)	Percent change, 1988-1989	END-USE SECTOR				SOURCE				
				Residential	Commercial	Industrial	Transportation	Petroleum products		Natural gas	Coal	Electricity sales
								Total	Gasoline			
U.S.	**[3]436,643**	**1,759**	**7.1**	**109,171**	**75,605**	**[3]94,891**	**156,977**	**208,536**	**112,585**	**65,419**	**28,101**	**169,340**
Northeast	**83,281**	**1,640**	**8.0**	**25,847**	**18,415**	**13,381**	**25,638**	**39,359**	**19,667**	**12,620**	**3,267**	**33,948**
N.E.	**22,363**	**1,714**	**8.4**	**7,194**	**4,523**	**3,000**	**7,646**	**12,525**	**6,108**	**2,338**	**325**	**8,651**
ME	2,227	1,822	1.0	626	308	393	900	1,475	647	21	18	801
NH	1,861	1,681	10.1	619	280	323	640	1,088	555	86	55	759
VT	983	1,734	9.0	310	173	135	365	590	304	28	1	366
MA	9,838	1,664	10.3	3,164	2,184	1,222	3,268	5,312	2,601	1,367	198	3,801
RI	1,505	1,508	4.9	487	302	192	524	779	424	216	2	526
CT	5,948	1,836	8.5	1,989	1,276	734	1,949	3,281	1,576	620	51	2,398
M.A	**60,918**	**1,615**	**7.8**	**18,653**	**13,892**	**10,381**	**17,992**	**26,834**	**13,559**	**10,282**	**2,942**	**25,297**
NY	25,210	1,404	7.4	8,480	7,235	2,849	6,647	10,784	5,480	4,627	590	11,353
NJ	15,343	1,983	9.0	4,069	3,317	2,446	5,511	7,739	3,626	2,360	153	5,583
PA	20,365	1,691	7.5	6,105	3,341	5,086	5,834	8,310	4,453	3,295	2,200	8,361
Midwest	**108,899**	**1,807**	**5.4**	**28,833**	**17,456**	**26,112**	**36,298**	**47,861**	**27,542**	**19,762**	**9,847**	**39,193**
E.N.C	**76,819**	**1,816**	**5.4**	**20,798**	**12,613**	**19,177**	**24,231**	**31,761**	**16,574**	**15,238**	**7,389**	**28,290**
OH	20,599	1,889	7.6	5,420	3,408	5,362	6,409	8,333	4,994	3,826	2,208	8,033
IN	11,685	2,089	5.2	2,737	1,434	3,593	3,920	5,028	2,461	2,045	1,953	3,913
IL	20,456	1,755	3.2	5,895	3,877	4,580	6,104	7,744	4,853	4,359	1,261	8,158
MI	16,096	1,736	5.3	4,459	2,700	3,912	5,025	6,855	4,127	3,517	1,377	5,572
WI	7,983	1,640	5.8	2,287	1,194	1,729	2,773	3,801	2,139	1,491	590	2,614
W.N.C.	**31,880**	**1,786**	**5.6**	**8,035**	**4,843**	**6,935**	**12,067**	**16,100**	**8,968**	**4,524**	**2,458**	**10,903**
MN	7,217	1,658	5.9	1,880	918	1,640	2,779	3,666	2,225	1,109	406	2,410
IA	4,971	1,750	3.0	1,344	686	1,088	1,853	2,428	1,436	778	398	1,695
MO	8,854	1,716	5.8	2,408	1,559	1,481	3,406	4,257	2,493	1,161	740	3,396
ND	1,525	2,311	6.8	298	174	512	541	772	392	105	437	401
SD	1,308	1,830	16.9	363	164	258	523	821	408	106	35	383
NE	2,942	1,826	7.1	674	535	550	1,183	1,533	814	437	113	972
KS	5,062	2,014	3.7	1,068	806	1,405	1,782	2,623	1,201	829	330	1,647
South	**161,732**	**1,891**	**6.5**	**37,101**	**24,067**	**40,889**	**59,673**	**79,685**	**41,757**	**21,528**	**12,304**	**64,293**
S.A.	**72,265**	**1,676**	**6.8**	**19,380**	**12,473**	**12,909**	**27,503**	**34,367**	**20,838**	**6,350**	**6,285**	**32,473**
DE	1,308	1,943	6.9	346	193	264	505	745	380	143	106	504
MD	7,587	1,616	8.6	2,090	952	1,661	2,884	3,809	2,279	990	473	2,946
DC	1,067	1,766	1.7	226	426	155	259	310	209	213	3	567
VA	10,513	1,744	7.8	2,810	1,924	1,482	4,297	5,293	3,183	851	569	4,308
WV	3,488	1,878	9.3	707	433	1,201	1,146	1,758	872	475	1,326	1,085
NC	11,530	1,755	5.7	3,180	1,820	2,359	4,171	5,234	3,306	719	982	5,479
SC	6,348	1,808	8.4	1,542	885	1,758	2,163	2,722	1,755	495	514	3,038
GA	11,560	1,796	5.8	2,871	1,972	2,349	4,368	5,111	3,122	1,486	1,182	4,885
FL	18,864	1,489	6.1	5,606	3,868	1,680	7,709	9,383	5,732	977	1,128	9,661
E.S.C	**29,162**	**1,893**	**7.8**	**6,247**	**3,513**	**8,225**	**11,176**	**14,108**	**7,738**	**2,850**	**3,094**	**11,749**
KY	7,195	1,931	7.2	1,444	798	2,109	2,844	3,547	1,841	690	934	2,792
TN	9,196	1,862	6.8	1,993	1,032	2,627	3,545	4,227	2,601	797	765	4,031
AL	7,992	1,941	9.4	1,775	1,045	2,247	2,924	3,770	2,067	838	1,234	3,140
MS	4,778	1,823	8.1	1,035	637	1,242	1,864	2,563	1,229	525	161	1,787
W.S.C	**60,305**	**2,233**	**5.5**	**11,474**	**8,081**	**19,755**	**20,994**	**31,210**	**13,181**	**12,328**	**2,925**	**20,071**
AR	4,376	1,819	8.6	1,057	587	1,063	1,670	2,051	1,188	725	333	1,645
LA	11,983	2,735	3.9	1,911	1,363	4,900	3,810	6,375	1,945	2,431	336	3,604
OK	5,570	1,728	5.3	1,340	877	1,063	2,290	2,722	1,590	1,353	346	2,040
TX	38,375	2,259	5.7	7,167	5,255	12,730	13,224	20,062	8,458	7,821	1,910	12,782
West	**82,794**	**1,596**	**9.6**	**17,389**	**15,665**	**14,371**	**35,366**	**41,630**	**23,619**	**11,508**	**2,682**	**31,905**
Mt	**23,162**	**1,714**	**7.7**	**5,091**	**4,468**	**4,138**	**9,464**	**11,375**	**6,714**	**2,804**	**2,394**	**9,052**
MT	1,598	1,982	9.5	302	212	403	681	907	465	165	108	519
ID	1,696	1,673	8.0	357	283	397	659	854	487	149	18	675
WY	1,453	3,060	9.5	184	167	487	616	805	309	135	375	467
CO	4,869	1,468	5.6	1,135	1,129	632	1,974	2,257	1,513	837	349	1,775
NM	2,763	1,808	11.3	513	574	513	1,164	1,511	817	355	345	958
AZ	6,014	1,691	7.1	1,580	1,342	759	2,333	2,572	1,747	511	494	3,030
UT	2,595	1,520	1.6	572	424	526	1,073	1,251	749	406	452	854
NV	2,173	1,956	14.7	449	338	421	965	1,217	626	246	253	773
Pac	**59,632**	**1,558**	**10.4**	**12,298**	**11,197**	**10,233**	**25,902**	**30,255**	**16,905**	**8,704**	**288**	**22,853**
WA	7,756	1,629	11.3	1,597	1,092	1,499	3,568	4,174	2,268	628	157	2,984
OR	4,628	1,641	8.6	946	706	896	2,081	2,465	1,423	430	9	1,774
CA	43,619	1,501	9.8	9,247	8,806	7,410	18,157	20,868	12,504	7,426	112	17,085
AK	1,772	3,362	19.0	283	276	147	1,065	1,273	231	187	9	380
HI	1,856	1,669	17.8	226	317	282	1,031	1,475	479	33	1	630

[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. 919. Residential Energy Consumption, Expenditures, and Average Prices, 1980 to 1987, and by Region, 1987

[For period April to March for 1980-1985; January to December for 1987. 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 25. Btu=British thermal unit; see text, section 19]

TYPE OF FUEL	Unit	1980	1981	1982	1983	1985	1987				
							Total	North-east	Mid-west	South	West
CONSUMPTION											
Total	Quad. Btu.	9.74	9.32	9.51	8.62	9.04	9.13	2.37	2.73	2.61	1.42
Avg. per household	Mil. Btu	126	114	114	103	105	101	124	123	84	78
Natural gas	Quad. Btu.	5.31	4.94	5.39	4.77	4.98	4.83	1.03	1.83	1.09	0.88
Electricity	Quad. Btu.	2.42	2.46	2.48	2.42	2.48	2.76	0.44	0.61	1.22	0.48
Fuel oil, kerosene	Quad. Btu.	1.71	1.55	1.33	1.14	1.26	1.22	0.87	0.16	0.17	0.02
Liquid petroleum gas	Quad. Btu.	0.31	0.36	0.31	0.29	0.31	0.32	0.02	0.13	0.12	0.05
EXPENDITURES											
Total	Bil. dol.	63.2	74.8	85.0	87.8	97.0	97.7	24.3	25.0	33.4	15.0
Avg. per household	Dollars	815	917	1,022	1,048	1,123	1,080	1,276	1,124	1,081	819
Natural gas	Bil. dol.	17.8	19.3	24.5	27.1	29.8	26.1	6.7	9.0	6.1	4.4
Electricity	Bil. dol.	32.6	40.1	45.9	48.4	54.5	61.6	12.3	14.1	25.1	10.0
Fuel oil, kerosene	Bil. dol.	10.7	12.5	11.8	9.6	9.6	7.2	5.1	1.0	1.1	0.1
Liquid petroleum gas	Bil. dol.	2.1	2.9	2.7	2.7	3.1	2.8	0.2	1.0	1.1	0.4
AVERAGE PRICE											
Total	Dol./mil.Btu	6.49	8.03	8.93	10.18	10.73	10.71	10.26	9.18	12.82	10.53
Natural gas	Dol./mil.Btu	3.36	3.90	4.55	5.67	5.97	5.41	6.45	4.93	5.53	5.05
Electricity	Dol./mil.Btu	13.46	16.32	18.51	19.98	21.94	22.34	27.78	23.09	20.61	20.70
Fuel oil, kerosene	Dol./mil.Btu	6.29	8.04	8.89	8.42	7.64	5.89	5.79	5.97	6.29	6.10
Liquid petroleum gas	Dol./mil.Btu	6.71	7.92	8.74	9.42	9.91	8.91	13.24	7.58	9.56	9.30

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey.* Not conducted in 1984 and 1986.

No. 920. Residential Energy Consumption and Expenditures, by Type of Fuel and Selected Household Characteristic: 1987

[For period January through December 1987. Quad.=quadrillion. See headnote, table 919]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total[1] (quad.)	Avg. per house-hold[1] (mil.)	Nat-ural gas (quad.)	Elec-tricity (quad.)	Fuel oil[2] (quad.)	Total[1] (bil. dol.)	Avg. per house-hold[1] (dol.)	Nat-ural gas (bil. dol.)	Elec-tricity (bil. dol.)	Fuel oil[2] (bil. dol.)
Total households	**9.13**	**101**	**4.83**	**2.76**	**1.22**	**97.7**	**1,080**	**26.1**	**61.6**	**7.2**
Single-family detached	6.32	115	3.30	1.97	0.80	67.6	1,226	17.5	43.1	4.8
Single-family attached	0.53	99	0.29	0.16	0.07	6.0	1,135	1.7	3.8	0.5
Two- to four-unit building	0.94	93	0.61	0.20	0.13	9.1	905	3.4	4.9	0.8
Five or more unit building	0.96	64	0.51	0.28	0.17	10.1	681	2.8	6.5	0.8
Mobile home	0.39	76	0.12	0.16	0.05	4.8	948	0.6	3.3	0.3
Year house built:										
1939 or earlier	2.59	120	1.53	0.48	0.51	23.7	1,105	8.4	11.7	3.0
1940 to 1949	0.85	104	0.48	0.22	0.13	8.6	1,042	2.7	4.9	0.7
1950 to 1959	1.43	110	0.79	0.38	0.22	14.6	1,121	4.2	8.7	1.3
1960 to 1969	1.63	100	0.92	0.50	0.18	17.4	1,060	5.1	11.0	1.0
1970 to 1974	0.92	95	0.49	0.31	0.07	10.2	1,062	2.5	6.8	0.4
1975 to 1979	0.90	86	0.34	0.44	0.08	11.9	1,131	1.7	9.3	0.5
1980 to 1984	0.53	71	0.20	0.28	0.02	7.3	984	1.1	5.8	0.1
1985 or later	0.27	71	0.10	0.15	0.01	4.0	1,049	0.5	3.3	(B)
Heating and cooling degree day zones:[3]										
Less than 2,000 CDD and —										
More than 7,000 HDD	0.94	110	0.42	0.23	0.21	8.8	1,030	2.1	4.8	1.2
5,500 to 7,000 HDD	3.26	126	2.09	0.69	0.44	30.0	1,156	10.6	16.3	2.6
4,000 to 5,499 HDD	2.34	107	1.09	0.67	0.51	24.9	1,138	6.6	14.9	2.9
Less than 4,000 HDD	1.38	77	0.73	0.53	0.05	16.6	931	4.1	11.5	0.4
More than 2,000 CDD and less than 4,000 HDD	1.20	74	0.51	0.64	0.01	17.4	1,068	2.8	14.2	0.1
1987 family income:										
Less than $5,000	0.51	83	0.30	0.13	0.05	5.1	818	1.6	2.8	0.3
$5,000 to $9,999	1.03	90	0.57	0.26	0.16	10.1	881	3.0	5.8	0.9
$10,000 to $14,999	1.15	91	0.62	0.31	0.16	11.7	927	3.3	6.9	0.9
$15,000 to $19,999	0.83	92	0.45	0.24	0.11	8.7	967	2.4	5.3	0.7
$20,000 to $24,999	0.84	96	0.42	0.27	0.12	9.1	1,038	2.2	5.9	0.7
$25,000 to $34,999	1.60	99	0.81	0.52	0.22	17.7	1,091	4.4	11.5	1.3
$35,000 to $49,999	1.50	112	0.77	0.51	0.19	16.8	1,257	4.2	11.2	1.1
$50,000 or more	1.67	129	0.90	0.52	0.22	18.6	1,440	4.9	12.1	1.3

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, *Residential Energy Consumption Survey, 1987.*

No. 921. Residential Energy Expenditures, by Type of End Use and Household Characteristic: 1987

[For period January through December 1987. See headnote, table 919]

CHARACTERISTIC	EXPENDITURES (bil. dol.)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All end uses	End use				All end uses	End use			
		Space heating [1]	Air-conditioning [2]	Water heating [1]	Other [3]		Space heating [1]	Air-conditioning [2]	Water heating [1]	Other [3]
Total households	**97.7**	**31.7**	**9.8**	**13.9**	**42.3**	**1,080**	**350**	**109**	**154**	**467**
Type:										
Single-family detached	67.6	21.5	7.0	9.2	29.9	1,226	391	127	167	542
Single-family attached	6.0	2.1	0.6	0.8	2.5	1,135	404	111	148	472
Two- to four-unit building	9.1	3.4	0.6	1.3	3.8	905	338	60	131	376
Five or more unit building	10.1	3.1	1.3	1.7	4.1	681	206	85	114	276
Mobile home	4.8	1.5	0.4	0.9	2.0	948	297	74	180	397
Year house built:										
1939 or earlier	23.7	9.7	1.2	3.3	9.6	1,105	452	55	152	446
1940 to 1949	8.6	2.9	0.7	1.3	3.7	1,042	357	82	152	450
1950 to 1959	14.6	4.7	1.4	2.0	6.5	1,121	360	111	152	498
1960 to 1969	17.4	5.3	2.2	2.4	7.5	1,060	324	133	145	459
1970 to 1974	10.2	3.1	1.2	1.5	4.5	1,062	320	120	154	468
1975 to 1979	11.9	3.3	1.7	1.7	5.2	1,131	310	163	158	500
1980 to 1984	7.3	1.7	1.0	1.2	3.4	984	230	130	162	463
1985 or later	4.0	1.0	0.5	0.7	1.8	1,049	258	137	183	472
1987 family income:										
Less than $5,000	5.1	1.9	0.3	0.8	2.0	818	312	55	135	316
$5,000-$9,999	10.1	3.7	0.7	1.6	4.1	881	324	63	139	354
$10,000-$14,999	11.7	4.0	0.9	1.8	4.9	927	319	75	145	388
$15,000-$19,999	8.7	2.9	0.7	1.3	3.7	967	323	83	148	414
$20,000-$24,999	9.1	2.9	0.9	1.3	4.0	1,038	330	105	152	452
$25,000-$34,999	17.7	5.5	2.0	2.5	7.7	1,091	341	121	153	475
$35,000-$49,999	16.8	5.0	1.9	2.3	7.6	1,257	374	142	171	570
$50,000 or more	18.6	5.7	2.3	2.2	8.4	1,440	440	179	171	650

[1] Heating from the primary and secondary heating equipment. [2] Cooling by refrigeration; does not include dehumidifiers, evaporative coolers, or fans not connected to air-conditioning equipment. [3] Appliance usage; includes fans in central, forced-air furnaces.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey, 1987.*

No. 922. Manufacturing Energy Consumption Required to Produce Heat, Power, and Electricity by Type of Fuel and Industry Group: 1988

[Based on the Manufacturing Energy Consumption Survey; therefore, subject to sampling variability]

SIC[1] code	INDUSTRY	TOTAL FUEL CONSUMPTION (tril. Btu)						CONSUMPTION PER—	
		Total	Net electricity [2]	Fuel oil [3]	Natural gas	Coal and coke	Other	Employee (mil. Btu)	Dollar of value added (1,000 Btu)
(X)	**Total**	**20,534**	**2,398**	**810**	**5,860**	**2,783**	**8,684**	**868**	**12.1**
20	Food and kindred	994	171	83	489	157	95	694	7.6
21	Tobacco products	25	3	1	2	17	1	580	1.4
22	Textile mill products	275	101	26	93	39	15	451	10.8
23	Apparel and other textile products	54	23	4	22	3	2	42	1.3
24	Lumber and wood products	407	56	26	35	2	288	551	13.0
25	Furniture and fixtures	63	19	4	23	3	13	131	3.1
26	Paper and allied products	2,366	189	191	431	315	1,241	3,498	36.7
27	Printing and publishing	116	58	3	49	-	6	73	1.3
28	Chemicals and allied products	4,360	416	137	2,049	317	1,441	3,601	22.4
29	Petroleum and coal products	6,412	106	126	723	8	5,449	28,414	127.0
30	Rubber and misc. plastic products	253	107	20	111	9	7	329	5.6
31	Leather and leather products	16	5	4	5	1	(Z)	108	3.3
32	Stone, clay, and glass products	966	115	50	468	301	31	2,037	29.5
33	Primary metal industries	2,875	509	59	751	1,505	51	3,782	45.9
34	Fabricated metal products	346	106	12	204	10	14	251	4.4
35	Machinery, except electrical	260	114	12	129	18	6	145	2.0
36	Electric and electronic equipment	224	109	10	85	11	9	144	2.2
37	Transportation equipment	350	127	31	139	42	11	193	2.4
38	Instruments and related products	113	49	8	32	22	2	104	1.3
39	Miscellaneous manufacturing	41	14	3	20	2	1	110	2.2

- Represents zero. X Not applicable. Z Less than 0.5 trillion Btu. [1] Standard Industrial Classification; 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. [3] Includes distillate and residual.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption Survey: Consumption of Energy,* 1988.

No. 923. Commercial Buildings—Energy Consumption and Expenditures, by Major Fuel Type Used: 1986

[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 the Construction and Housing section. Trll. = trillion]

ITEM	Unit	All major fuels	Electricity	Natural gas	Fuel oil	Propane	District Heat
Number of buildings using the fuel	1,000	3,992	3,965	2,214	534	344	77
Square footage of floorspace	Million	56,825	56,508	37,263	11,005	3,213	4,625
Square footage per building	1,000	14.2	14.3	16.8	20.6	9.3	59.7
Energy consumed, total	Trll. Btu	5,040	2,390	1,723	442	63	422
Energy consumed per building	Mil. Btu	1,262	603	778	827	184	5,446
Energy consumed per square foot of floorspace	1,000 Btu	89	42	46	40	20	91
Energy consumed per employee	Mil. Btu	69	33	35	28	18	52
Expenditures, total	Mil. dol.	60,762	47,186	8,355	2,059	543	2,620
Expenditures per building	$1,000	15.2	11.9	3.8	3.9	1.6	33.8
Expenditures per square foot of floorspace	Dollars	1.07	0.84	0.22	0.19	0.17	0.57
Expenditures per million Btu of energy consumed	Dollars	12.06	19.74	4.85	4.66	8.59	6.21

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Commercial Buildings, Consumption and Expenditure, 1986.*

No. 924. Commercial Buildings—Energy Consumption and Expenditures: 1986

[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 26. For composition of regions, see table 25]

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	**3,992**	**56,825**	**5,040**	**2,390**	**1,723**	**60,762**	**47,186**	**8,355**
Region:								
Northeast	639	11,506	1,046	430	244	14,362	10,886	1,472
Midwest	1,036	15,728	1,603	584	742	15,848	10,869	3,400
South	1,517	18,882	1,485	867	426	17,945	14,856	1,958
West	800	10,708	906	510	311	12,607	10,575	1,524
Year constructed:								
1900 or before	179	2,294	129	42	54	1,376	891	278
1901 to 1920	237	3,520	274	96	109	3,559	2,597	521
1921 to 1945	596	8,077	666	201	254	6,698	4,233	1,324
1946 to 1960	843	9,410	754	302	308	8,717	6,428	1,495
1961 to 1970	715	11,352	1,252	615	435	14,741	11,574	2,038
1971 to 1973	238	4,290	474	226	158	5,418	4,175	755
1974 to 1979	557	8,186	739	438	196	9,837	8,326	912
1980 to 1983	342	5,179	398	254	102	5,632	4,862	520
1984 to 1986	286	4,517	354	216	106	4,783	4,100	510
Principal activity within building:								
Assembly	572	7,305	401	164	157	5,009	3,707	811
Education	241	7,292	635	179	254	5,782	3,606	1,189
Food sales/services	303	1,993	411	220	159	5,417	4,374	805
Health care	52	2,107	457	132	205	3,824	2,287	884
Lodging	137	2,785	311	120	105	3,330	2,251	523
Mercantile/services	1,280	12,781	1,002	536	332	13,231	10,781	1,706
Office	610	9,532	1,010	641	258	14,777	12,884	1,178
Public order and safety	53	678	86	30	25	720	475	133
Warehouse	491	8,558	466	252	143	5,620	4,537	722
Other	94	1,704	169	83	46	2,013	1,568	204
Vacant	160	2,090	92	35	38	1,040	715	200
Square footage:								
1,001 to 5,000	2,113	5,943	719	376	248	10,133	8,175	1,316
5,001 to 10,000	901	6,638	598	278	236	7,647	5,962	1,206
10,001 to 25,000	541	8,873	724	312	305	8,374	6,265	1,519
25,001 to 50,000	239	8,551	662	312	191	7,856	6,060	967
50,001 to 100,000	118	8,217	640	303	220	7,445	5,720	1,057
100,001 to 200,000	51	7,128	577	249	180	6,153	4,514	848
Over 200,000	29	11,475	1,120	560	343	13,154	10,489	1,441

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

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Commercial Buildings, Consumption and Expenditure, 1986.*

No. 925. Fossil Fuel Prices in Current and Constant (1982) Dollars: 1970 to 1990

[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	1982	1983	1984	1985	1986	1987	1988	1989	1990
CURRENT DOLLARS													
Composite [1]	31.7	39.8	82.1	204.2	275.8	270.1	264.6	251.2	165.3	170.0	153.3	167.1	184.6
Crude oil	54.8	67.1	132.2	372.2	491.7	451.6	446.2	415.3	215.7	265.5	216.9	273.4	345.3
Natural gas	15.4	20.1	40.2	144.8	222.2	232.3	239.9	225.7	174.8	150.2	152.4	152.7	155.4
Bituminous coal [2]	26.2	36.5	83.9	109.4	122.1	117.2	115.9	114.8	108.2	104.9	100.8	100.0	100.8
Anthracite coal	48.8	61.7	149.5	185.9	214.0	230.0	208.7	204.2	191.1	188.9	189.8	183.6	183.9
CONSTANT (1982) DOLLARS													
Composite [1]	75.5	80.4	138.4	238.3	275.8	260.0	245.7	226.5	145.3	144.8	126.4	132.3	140.4
Crude oil	130.5	135.6	222.9	434.3	491.7	434.6	414.3	374.5	189.5	226.1	178.8	216.5	262.6
Natural gas	36.7	40.6	67.8	169.0	222.2	223.6	222.7	203.5	153.6	127.9	125.6	120.9	118.2
Bituminous coal [2]	62.4	73.7	141.5	127.7	122.1	112.8	107.6	103.5	95.1	89.4	83.1	79.2	76.7
Anthracite coal	116.2	124.6	252.1	216.9	214.0	221.4	193.8	184.1	167.9	160.9	156.5	145.4	139.8
GNP price deflator[3] (1982=100)	42.0	49.5	59.3	85.7	100.0	103.9	107.7	110.9	113.9	117.4	121.3	126.3	131.5

[1] Weighted by relative importance of individual fuels in total fuels production. [2] Includes lignite. [3] GNP=Gross national product; see text, section 15.

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

No. 926. World Energy Consumption, by Region and Energy Source: 1960 to 1988

[In tons of coal equivalent. Metric ton=1.1023 short tons. Kilogram=2.205 pounds. See text, section 31 for general comments about the data]

REGION AND ENERGY SOURCE	CONSUMPTION (mil. metric tons)					PER CAPITA (kilograms)				PERCENT DISTRIBUTION			
	1960	1970	1980	1987	1988	1960	1970	1980	1988	1960	1970	1980	1988
World, total	**3,924**	**6,440**	**8,544**	**9,655**	**10,013**	**1,302**	**1,748**	**1,919**	**1,959**	**100.0**	**100.0**	**100.0**	**100.0**
North America [1]	1,599	2,502	2,796	2,812	2,922	5,951	7,825	7,480	7,011	40.7	38.9	32.7	29.2
United States	1,454	2,217	2,364	2,366	2,458	8,047	10,811	10,386	10,015	37.1	34.4	27.7	24.5
South America	79	143	251	232	297	535	749	1,046	1,042	2.0	2.2	2.9	3.0
Europe	1,039	1,720	2,145	2,192	2,190	2,443	3,745	4,433	4,418	26.5	26.7	25.1	21.9
Asia	514	903	1,579	2,140	2,265	276	386	607	752	13.1	14.0	18.5	22.6
Japan	96	333	435	445	480	1,025	3,246	3,726	3,921	2.4	5.2	5.1	4.8
Soviet Union	595	999	1,473	1,862	1,954	2,777	4,132	5,549	6,888	15.2	15.5	17.2	19.5
Oceania	41	71	105	130	134	2,597	3,675	4,572	5,189	1.0	1.1	1.2	1.3
Energy source:													
Solid fuels	1,940	2,159	2,632	3,168	3,299	644	586	591	645	49.4	33.5	30.8	32.9
Liquid fuels	1,306	2,835	3,778	3,771	3,922	433	770	848	794	33.3	44.0	44.2	39.1
Natural gas	593	1,292	1,834	2,249	2,302	197	351	412	449	15.1	20.1	21.5	23.0
Electricity	84	154	301	466	490	28	42	68	95	2.1	2.4	3.5	5.0

[1] Includes Central America.

Source: Statistical Office of the United Nations, New York, NY, *Energy Statistics Yearbook*, annual, (copyright).

No. 927. World Primary Energy Production, by Region and Type: 1973 to 1989

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

REGION AND TYPE	1973	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
World total	**244.8**	**245.0**	**286.6**	**281.7**	**280.2**	**282.2**	**297.0**	**304.3**	**314.1**	**322.0**	**334.2**	**338.3**
North America	73.3	71.1	80.5	80.9	81.3	78.9	84.6	84.1	82.8	84.1	86.2	86.2
United States	62.0	59.8	64.7	64.3	63.8	61.1	65.7	64.6	64.0	64.6	65.8	65.8
Central and South America	12.9	10.6	12.1	12.1	12.0	12.2	13.1	13.5	14.2	14.2	15.2	15.3
Western Europe	19.6	21.4	28.7	29.8	30.7	31.9	32.4	35.0	35.9	36.5	37.0	36.7
Eastern Europe and Soviet Union	51.4	55.9	69.3	69.7	72.5	74.2	76.6	78.7	81.5	83.4	86.2	85.2
Middle East	46.6	43.5	42.2	36.7	29.5	27.3	27.7	25.7	30.6	32.1	36.0	39.6
Africa	14.8	13.3	17.3	15.1	15.4	16.1	17.5	18.4	18.1	18.5	19.4	20.2
Far East and Oceania	26.2	29.3	36.5	37.5	38.8	41.5	45.1	49.0	51.1	53.1	54.2	55.3
Crude oil	117.8	111.6	127.6	119.5	113.9	113.4	116.2	114.7	119.5	120.4	125.4	127.5
Natural gas	43.2	43.9	52.8	54.3	53.7	54.1	59.1	61.4	62.6	65.6	69.0	71.1
Natural gas liquids	4.2	4.4	5.5	5.8	5.8	5.8	6.1	6.2	6.5	6.7	6.8	7.0
Coal	63.8	66.3	75.0	75.2	78.4	78.5	82.2	86.1	88.3	90.4	92.0	91.9
Hydroelectric power	13.5	15.0	18.2	18.4	18.9	19.8	20.4	20.6	21.0	21.1	21.6	21.2
Nuclear electric power	2.2	3.9	7.6	8.5	9.5	10.7	13.0	15.4	16.3	17.8	19.3	19.7

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

No. 928. U.S. Foreign Trade in Selected Mineral Fuels: 1970 to 1990

[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	1983	1984	1985	1986	1987	1988	1989	1990
NATURAL GAS												
Imports:												
Billion cubic feet	821	1,033	953	985	920	843	950	750	993	1,294	1,382	1,505
Trillion Btu	846	1,060	978	1,006	942	847	952	748	992	1,296	1,387	1,511
Exports:												
Billion cubic feet	70	77	73	49	55	55	55	61	54	74	107	99
Trillion Btu	72	79	74	49	55	55	56	62	55	75	109	101
Net trade:												
Billion cubic feet	-751	-956	-880	-936	-865	-788	-894	-689	-939	-1,220	-1,275	-1,406
Trillion Btu	-774	-981	-904	-957	-887	-792	-896	-686	-937	-1,221	-1,278	-1,410
CRUDE OIL												
Imports: [1]												
Million barrels	483	1,184	1,498	1,926	1,215	1,254	1,168	1,525	1,706	1,869	2,133	2,145
Trillion Btu	2,814	6,887	8,721	11,195	7,079	7,302	6,814	9,002	10,067	11,027	12,596	12,674
Exports:												
Million barrels	5	1	2	105	60	66	75	56	55	57	52	42
Trillion Btu	29	4	12	609	348	384	432	326	319	329	300	245
Net trade:												
Million barrels	-478	-1,183	-1,496	-1,821	-1,155	-1,188	-1,094	-1,469	-1,651	-1,812	-2,081	-2,102
Trillion Btu	-2,785	-6,883	-8,708	-10,586	-6,731	-6,918	-6,381	-8,676	-9,748	-10,698	-12,296	-12,429
PETROLEUM PRODUCTS												
Imports:												
Million barrels	765	1,099	712	603	629	736	681	747	731	840	809	759
Trillion Btu	4,656	6,578	4,227	3,463	3,568	4,131	3,796	4,199	4,095	4,720	4,565	4,265
Exports:												
Million barrels	89	84	74	94	210	198	211	230	224	242	262	273
Trillion Btu	520	482	427	551	1,217	1,161	1,225	1,344	1,311	1,412	1,536	1,594
Net trade:												
Million barrels	-675	-1,015	-638	-509	-419	-538	-471	-516	-508	-598	-548	-486
Trillion Btu	-4,136	-6,097	-3,800	-2,912	-2,351	-2,970	-2,570	-2,855	-2,784	-3,308	-3,029	-2,671
COAL												
Imports:												
Thousand short tons	36	127	940	1,194	1,271	1,286	1,952	2,212	1,747	2,134	2,851	2,699
Trillion Btu	1	3	24	30	32	32	49	55	44	53	71	67
Exports:												
Thousand short tons	71,733	53,587	66,309	91,742	77,772	81,482	92,680	85,518	79,607	95,023	100,815	105,804
Trillion Btu	1,936	1,425	1,761	2,421	2,045	2,151	2,438	2,248	2,093	2,499	2,637	2,772
Net trade:												
Thousand short tons	71,697	53,460	65,369	90,548	76,501	80,196	90,728	83,306	77,860	92,889	97,964	103,105
Trillion Btu	1,935	1,422	1,738	2,391	2,013	2,119	2,389	2,193	2,049	2,446	2,566	2,704

Z Less than 500,000 barrels. [1] Beginning 1979, includes strategic petroleum reserve imports.

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

No. 929. Daily International Flow of Crude Oil, by Area: 1988

[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	**25,724**	**5,107**	**449**	**[2]1,617**	**9,000**	**2,135**	**1,132**	**3,268**	**3,016**
United States	155	(X)	10	142	-	-	-	-	3
North America, except U.S.	1,999	1,355	11	52	344	-	35	180	22
Central and South America	1,463	660	34	484	189	-	16	8	72
Western Europe	2,515	321	294	-	1,861	16	23	-	2
Eastern Europe and Soviet Union	2,830	-	-	85	1,194	1,412	46	2	91
Middle East	10,621	1,401	33	619	3,074	505	748	2,195	2,046
Africa	4,142	1,011	67	211	2,319	188	249	29	68
Far East and Oceania	1,997	359	-	24	19	14	15	854	712

- Represents zero. X Not applicable. [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. 930. Crude Oil Imports Into the United States, by Country of Origin: 1970 to 1990

[In millions of barrels. Barrels contain 42 gallons]

COUNTRY OF ORIGIN	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	**483**	**1,184**	**1,498**	**1,926**	**1,273**	**1,215**	**1,254**	**1,168**	**1,525**	**1,706**	**1,869**	**2,133**	**2,151**
Canada	245	365	219	73	78	100	125	171	208	222	249	230	235
Mexico	-	(Z)	26	186	235	280	241	261	227	220	247	261	251
Norway	-	-	5	53	37	24	41	11	19	25	23	46	35
Trinidad-Tobago	(Z)	22	42	42	34	30	32	36	34	27	26	27	28
United Kingdom	-	-	(Z)	63	161	133	138	102	116	111	93	58	56
OPEC [1]	222	765	1,172	1,414	633	539	553	479	771	876	987	1,232	1,282
Algeria	2	44	96	167	33	64	71	31	28	42	21	22	23
Ecuador	-	17	21	6	12	21	17	20	23	8	12	29	14
Gabon	-	-	10	9	14	21	21	19	9	13	6	18	23
Indonesia	26	73	138	115	82	115	111	107	108	96	68	58	36
Iran	12	79	102	3	13	18	4	10	7	36	(Z)	-	-
Iraq	-	2	1	10	1	4	5	17	29	30	126	161	187
Kuwait	12	15	1	10	1	3	9	1	10	26	29	57	29
Libya	17	49	81	200	8	-	-	-	-	-	-	-	-
Nigeria	17	164	272	308	186	110	76	102	160	193	222	282	286
Qatar	-	3	7	8	3	-	1	-	4	-	-	1	1
Saudi Arabia	15	169	256	458	194	117	113	48	226	234	333	407	436
United Arab Emirates	23	26	43	63	30	7	33	13	14	21	8	7	3
Venezuela	98	126	144	57	56	60	93	112	152	178	161	181	243
Other	16	32	34	95	95	109	124	108	150	225	244	288	264

- 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. 931. Crude Oil and Refined Products—Summary: 1973 to 1991

[Barrels of 42 gallons. Data are averages]

YEAR AND QUARTER	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: Total [1]	Imports: Strategic reserve	Exports	Domestic demand	Imports	Exports		Total	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	3,426	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
1st qtr	13,128	7,492	6,081	27	123	16,884	2,444	681	8,422	953	582
2d qtr	13,375	7,281	6,287	48	104	16,952	2,251	647	8,484	971	587
3d qtr	14,153	7,228	6,321	32	74	17,223	2,031	723	8,362	932	590
4th qtr	12,827	7,423	4,940	-	134	16,708	1,775	923	6,717	908	586
1991:[4]											
1st qtr	12,864	7,480	5,304	-	112	16,427	1,515	1,074	6,819	905	568
2d qtr	13,495	7,372	6,079	-	135	16,319	1,942	803	8,021	916	568

- 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 or quarter. [4] Preliminary.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, August 1991.

No. 932. Strategic Petroleum Reserve: 1977 to 1990

[**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 YEAREND			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	0.6	1
1980	16.07	1.30	107.80	23.1	7.7	17
1981	93.30	28.79	230.34	38.8	15.5	43
1982	60.19	3.79	293.83	45.7	20.5	68
1983	85.29	0.42	379.09	52.4	26.1	88
1984	72.04	0.05	450.51	56.6	28.9	96
1985	43.12	0.17	493.32	60.6	32.5	115
1986	17.56	1.21	511.57	60.7	32.1	94
1987	26.52	2.69	540.65	60.8	33.6	91
1988	18.76	(Z)	559.52	62.9	35.0	85
1989	20.35	-	579.86	62.9	36.7	81
1990	9.77	-	585.69	64.5	36.1	83

- Represents zero. Z Less than .005 million barrels. [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. 933. World Petroleum Consumption, by Major Consuming Country: 1970 to 1990

[**Million barrels per day.** OECD = Organization for Economic Cooperation Development. For a complete list of OECD countries, see Section 31]

COUNTRY	1970	1973	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
World, total	**46.81**	**57.24**	**56.20**	**63.07**	**58.70**	**59.79**	**59.87**	**61.52**	**62.78**	**64.50**	**65.80**	**(NA)**
OECD countries, total	33.27	39.90	36.98	38.60	33.79	34.50	34.27	35.28	35.91	37.09	37.56	37.53
United States	14.70	17.31	16.32	17.06	15.23	15.73	15.73	16.28	16.67	17.28	17.33	16.99
Australia	0.52	0.57	0.64	0.59	0.59	0.61	0.63	0.63	0.64	0.65	0.68	([1])
Canada	1.52	1.73	1.78	1.87	1.45	1.47	1.50	1.51	1.55	1.69	1.73	1.70
France	1.94	2.60	2.25	2.26	1.84	1.75	1.78	1.77	1.79	1.80	1.86	1.81
West Germany	2.61	3.06	2.65	2.71	2.32	2.32	2.34	2.50	2.42	2.42	2.28	2.38
Italy	1.71	2.07	1.86	1.93	1.75	1.65	1.72	1.74	1.86	1.84	1.93	1.84
Japan	3.82	4.95	4.62	4.96	4.40	4.58	4.38	4.44	4.48	4.75	4.98	5.22
Spain	0.58	0.78	0.87	0.99	1.01	0.91	0.85	0.88	0.90	0.98	1.03	([1])
United Kingdom	2.10	2.34	1.91	1.73	1.53	1.65	1.63	1.65	1.60	1.70	1.74	1.74
Other OECD	3.79	4.50	4.08	4.50	3.67	3.63	3.72	3.90	4.00	3.98	4.00	5.85
Brazil	0.53	0.78	0.92	1.15	0.98	1.03	1.08	1.24	1.26	1.30	1.32	(NA)
China	0.62	1.12	1.36	1.77	1.73	1.74	1.78	1.92	2.08	2.15	2.28	(NA)
Mexico	0.50	0.67	0.75	1.27	1.35	1.45	1.47	1.49	1.52	1.55	1.66	(NA)
U.S.S.R.	5.31	6.60	7.52	9.00	8.95	8.91	8.95	8.98	9.00	8.89	8.80	(NA)

NA Not available. [1] Included in OECD total.

Source: U.S. Energy Information Administration, *Annual Energy Review,* and *Monthly Energy Review,* August 1991 issue.

No. 934. Energy Producing Companies—Selected Financial and Investment Indicators: 1979 to 1989

[Based on data from major publicly-owned domestic crude oil producing companies which either had at least one percent of domestic production or reserves of oil, natural gas, coal, or uranium, or at least one percent of refining capacity or petroleum product sales. There were 26 companies during 1979 through 1982; 25 in 1983; 22 during 1984 through 1987; and 23 in 1988]

ITEM	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
INCOME STATEMENT (bil. dol.)											
Operating revenues	392.6	518.6	575.7	549.7	511.0	517.4	492.5	378.5	417.4	419.8	433.6
Operating expenses	345.8	455.9	520.8	504.2	462.8	467.3	444.2	354.4	383.7	381.6	397.7
Operating income	46.8	62.7	54.8	45.5	48.2	50.1	48.3	24.0	33.7	38.2	35.9
Pretax income	48.6	66.9	60.0	45.2	47.4	47.6	43.6	20.6	25.0	34.3	35.3
Net income	23.5	31.0	30.0	21.8	21.9	21.3	17.4	9.2	11.3	22.3	19.8
Funds from operations[1]	45.4	59.0	61.6	60.4	60.7	63.6	63.5	53.1	51.6	57.8	48.3
BALANCE SHEET (bil. dol.)											
Net property, plant, and equipment	159.3	188.9	224.9	265.5	278.4	292.4	297.7	291.1	297.6	293.6	293.4
Net investment in place [2]	169.9	202.6	240.8	282.5	296.3	309.1	315.4	310.0	316.4	309.6	309.9
Total assets	282.8	333.0	372.5	411.9	421.8	442.9	438.4	427.0	443.6	437.8	434.5
RATIOS (percent)											
Net income to operating revenues	6.0	6.0	5.2	4.0	4.3	4.1	3.5	2.4	2.7	5.3	4.6
Net income to total assets	8.3	9.3	8.0	5.3	5.2	5.0	4.0	2.2	2.5	5.1	4.6
Net income to stockholders' equity	18.8	21.1	18.1	11.9	11.4	12.1	10.5	5.6	6.8	13.5	12.3
Long-term debt to stockholders' equity [3]	33.7	31.5	32.2	37.1	34.8	49.5	54.3	56.0	57.6	56.6	56.5
Long-term debt to total assets[3]	14.9	13.9	14.3	16.6	15.9	20.6	20.5	21.6	21.5	21.3	20.9

[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] Long-term debt includes amounts applicable to capitalized leases.

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

No. 935. Petroleum and Coal Products Corporations—Sales, Net Profit, and Profit Per Dollar of Sales: 1975 to 1990

[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	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Sales	Bil. dol.	121.8	333.2	376.1	357.1	312.7	338.4	320.9	226.5	248.3	252.2	265.3	318.5
Net profit:													
Before income taxes	Bil. dol.	13.3	39.1	35.3	27.8	27.1	24.5	17.7	9.8	14.2	27.3	23.7	23.3
After income taxes	Bil. dol.	9.3	25.5	23.7	19.7	19.3	17.2	12.7	8.8	10.9	21.2	19.5	18.0
Depreciation[1]	Bil. dol.	5.6	11.6	13.7	16.3	17.5	20.7	22.1	21.9	20.3	20.0	18.5	18.6
Profits per dollar of sales:													
Before income taxes	Cents	10.9	11.7	9.4	7.8	8.7	7.2	5.5	4.1	5.8	10.8	9.0	7.4
After income taxes	Cents	7.6	7.7	6.3	5.5	6.2	5.1	4.0	3.8	4.5	8.5	7.4	5.7
Profits on stockholders' equity:													
Before income taxes	Percent	17.9	30.7	25.6	18.7	17.8	14.3	11.7	6.8	10.1	19.2	17.8	16.6
After income taxes	Percent	12.5	20.0	17.2	13.2	12.7	10.0	8.5	6.1	7.7	14.9	14.6	12.8

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

Source: Through 1981, U.S. Federal Trade Commission and, beginning 1982, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations.*

No. 936. Major Petroleum Companies—Financial Data Summary: 1973 to 1990

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

ITEM	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
FINANCIAL DATA (bil. dol.)												
Net income	11.8	11.6	32.9	21.1	20.6	22.7	19.4	10.8	15.0	24.6	24.7	26.8
Depreciation, depletion, etc	10.5	11.3	32.5	37.2	37.4	45.3	53.0	43.7	45.0	34.3	33.7	40.5
Cash flow[1]	22.3	22.8	65.4	58.3	58.1	68.0	72.4	54.5	60.0	58.9	58.4	67.3
Dividends paid	4.0	4.7	9.3	10.6	10.5	11.6	12.0	12.1	12.4	14.0	16.0	16.8
Net internal funds available for investment or debt repayment[2]	18.3	18.1	56.1	47.7	47.6	56.4	60.4	42.4	47.6	44.9	42.4	50.5
Capital and exploratory expenditures	16.3	26.9	62.1	67.8	50.7	57.5	58.3	38.3	50.1	62.4	55.1	60.2
Long-term capitalization	102.9	121.1	211.4	243.8	240.0	285.7	272.1	279.9	282.2	287.8	290.0	304.6
Long-term debt	22.5	28.9	49.8	62.6	61.0	95.8	93.5	95.5	88.4	88.5	91.4	91.2
Preferred stock	0.4	0.4	2.0	3.5	3.5	5.2	3.3	3.7	4.1	4.5	6.4	5.4
Common stock and retained earnings[3]	80.0	91.9	159.6	177.7	175.5	184.7	175.3	180.7	189.7	194.8	192.2	208.0
Excess of expenditures over cash income[4]	−2.0	8.9	6.0	20.1	3.1	1.1	−2.1	3.0	−2.5	17.5	12.7	9.7
RATIOS[5] (percent)												
Long-term debt to long-term capitalization	22.0	23.8	23.6	25.7	25.4	33.5	34.4	34.1	31.3	30.8	31.5	29.9
Net income to total average capital	12.0	10.0	17.0	8.6	8.8	8.6	7.0	4.0	4.6	8.6	8.3	9.0
Net income to average common equity	15.6	13.1	22.5	11.5	12.0	12.5	10.8	6.2	7.3	12.8	12.4	13.4

[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, 1990-1989,* and earlier reports.

No. 937. Electric Utility Sales and Average Prices, by End-Use Sector: 1970 to 1990

[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 (1982) 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	4.0	5.2	5.0	2.4
1973	1,713	579	388	686	2.0	2.5	2.4	1.3	4.0	5.1	4.8	2.6
1975	1,747	588	403	688	2.9	3.5	3.5	2.1	4.9	5.9	5.9	3.5
1979	2,071	683	473	842	4.0	4.6	4.7	3.1	5.1	5.9	6.0	3.9
1980	2,094	717	488	815	4.7	5.4	5.5	3.7	5.5	6.3	6.4	4.3
1981	2,147	722	514	826	5.5	6.2	6.3	4.3	5.9	6.6	6.7	4.6
1982	2,086	730	526	745	6.1	6.9	6.9	5.0	6.1	6.9	6.9	5.0
1983	2,151	751	544	776	6.3	7.2	7.0	5.0	6.1	6.9	6.7	4.8
1984	2,286	780	583	836	6.3	7.2	7.1	4.8	5.8	6.7	6.6	4.5
1985	2,324	794	606	837	6.4	7.4	7.3	5.0	5.8	6.7	6.6	4.5
1986	2,369	819	631	831	6.4	7.4	7.2	4.9	5.6	6.5	6.3	4.3
1987	2,457	850	660	858	6.4	7.5	7.1	4.8	5.5	6.3	6.0	4.1
1988	2,578	893	699	896	6.4	7.5	7.0	4.7	5.3	6.2	5.8	3.9
1989	2,647	906	726	926	6.5	7.6	7.2	4.7	5.1	6.0	5.7	3.7
1990	2,705	922	753	938	6.6	7.8	7.3	4.7	5.0	5.9	5.6	3.6

[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. 938. Electric Utility Industry—Net Generation, Net Summer Capability, Generating Units, and Consumption of Fuels: 1970 to 1990

[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 86-10

ITEM	Unit	1970	1980	1984	1985	1986	1987	1988	1989	1990
NET GENERATION										
Total	**Bil. kWh**	**1,532**	**2,286**	**2,416**	**2,470**	**2,487**	**2,572**	**2,704**	**2,784**	**2,805**
Average annual change [1]	Percent	7.3	1.8	4.4	2.2	0.7	3.4	4.9	2.9	0.7
Net generation, kWh per kW of net summer capability [2]	Rate	4,554	3,952	3,805	3,771	3,741	3,816	3,990	4,067	4,073
Investor owned	Bil. kWh	1,183	1,783	1,849	1,918	1,928	2,022	2,146	2,192	2,201
Percent of total utilities	Percent	77.2	78.0	76.5	77.7	77.5	78.6	79.4	78.7	78.5
Publicly owned	Bil. kWh	349	503	567	552	559	550	559	592	606
Municipal	Bil. kWh	71	87	75	74	79	86	97	100	98
Federal	Bil. kWh	186	235	254	233	225	205	201	224	235
Cooperatives and other	Bil. kWh	91	182	239	245	255	258	261	269	273
Source of energy:										
Coal [3]	Percent	46.0	51.0	55.9	57.2	56.2	57.4	57.4	56.2	55.9
Nuclear	Percent	1.4	11.0	13.6	15.5	16.6	17.7	19.5	19.0	20.6
Oil	Percent	12.0	10.8	5.0	4.1	5.5	4.6	5.5	5.7	4.2
Gas	Percent	24.3	15.1	12.3	11.8	10.0	10.6	9.3	9.6	9.4
Hydro	Percent	16.2	12.1	13.3	11.4	11.7	9.7	8.2	9.5	10.0
Type of prime mover: [4]										
Hydro	Bil. kWh	248	276	321	281	291	250	223	265	280
Steam conventional [5]	Bil. kWh	1,240	1,726	1,742	1,778	1,756	1,837	1,921	1,950	1,916
Gas turbine and internal combustion	Bil. kWh	22	28	17	16	15	18	22	29	22
Steam nuclear	Bil. kWh	22	251	328	384	414	455	527	529	577
Other	Bil. kWh	1	6	9	11	12	12	12	11	11
NET SUMMER CAPABILITY										
Total [6]	**Mil. kW**	**336**	**579**	**635**	**655**	**665**	**674**	**678**	**685**	**689**
Average annual change [1]	Percent	7.2	1.6	2.2	3.1	1.4	1.4	0.5	1.0	0.6
Hydro	Mil. kW	64	82	85	89	89	90	90	91	91
Steam conventional [7]	Mil. kW	248	397	431	437	441	440	442	444	446
Gas turbine	Mil. kW	13	43	44	44	43	44	44	45	46
Steam nuclear	Mil. kW	7	52	70	79	85	94	95	98	100
Internal combustion	Mil. kW	4	5	5	5	5	5	5	5	5
Geothermal and other	Mil. kW	(Z)	1	1	2	2	2	2	2	2
NUMBER OF GENERATING UNITS										
Total [8]	**Number**	**9,717**	**11,084**	**(NA)**	**(NA)**	**10,611**	**10,406**	**10,305**	**10,325**	**10,296**
Hydro	Number	3,108	3,275	(NA)	(NA)	3,489	3,488	3,496	3,479	3,479
Steam conventional	Number	2,813	2,862	(NA)	(NA)	2,536	2,437	2,383	2,363	2,354
Gas turbine	Number	658	1,447	(NA)	(NA)	1,439	1,408	1,397	1,438	1,460
Steam nuclear	Number	16	74	(NA)	(NA)	99	109	108	110	111
Internal combustion	Number	3,118	3,410	(NA)	(NA)	2,998	2,917	2,872	2,889	2,847
CONSUMPTION OF FUELS										
Net generation by fuel [9]	**Bil. kWh**	**1,284**	**2,010**	**2,095**	**2,189**	**2,197**	**2,322**	**2,481**	**2,519**	**2,525**
Average annual change [1]	Percent	52.5	2.1	5.6	4.3	0.4	5.4	6.4	1.4	0.2
Coal	Bil. kWh	704	1,162	1,342	1,402	1,386	1,464	1,541	1,554	1,557
Percent of total	Percent	54.8	57.8	64.1	64.0	63.1	63.0	62.1	61.7	61.7
Petroleum	Bil. kWh	184	246	120	100	137	118	149	158	117
Gas	Bil. kWh	373	346	297	292	249	273	253	267	263
Nuclear	Bil. kWh	22	251	328	384	414	455	527	529	577
Fuel consumed:										
Total energy equivalent	Quad. Btu	13.40	18.57	18.53	18.79	18.59	19.37	20.12	20.56	20.28
Coal	Mil. sh. tons	320	569	664	694	685	718	758	767	772
Oil	Mil. bbl.	339	421	206	175	232	201	250	267	196
Gas	Bil cu. ft.	3,932	3,682	3,111	3,044	2,602	2,844	2,636	2,787	2,776

NA Not available. Z Less than .5 million kWh. [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%) 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. 939. Electric Utility Industry—Capability, Peak Load, and Capacity Margin: 1970 to 1990

[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
1976	498,750	19,450	511,000	18,550	370,900	349,850	127,850	25.6	161,150	31.5
1977	516,000	17,250	537,600	26,600	396,350	360,200	119,650	23.2	177,400	33.0
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	384,567	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	9,673	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

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. 940. Electric Energy Sales, by Class of Service, 1970 to 1990, and by State, 1990

[In billions of kilowatthours]

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
1986	2,350.8	817.7	641.5	808.3
1987	2,457.3	850.4	660.4	858.2
1988	2,578.1	892.9	699.1	896.5
1989	2,646.7	904.0	725.2	926.4
1990, total	**2,705.5**	**921.6**	**752.6**	**937.8**
Northeast	**412.6**	**135.5**	**140.6**	**120.1**
New England	**104.3**	**37.7**	**37.5**	**27.1**
Maine	11.5	3.9	2.7	4.7
New Hampshire	9.1	3.5	2.0	3.5
Vermont	4.8	1.9	1.5	1.4
Massachusetts	45.3	15.6	18.5	10.0
Rhode Island	6.4	2.4	2.5	1.4
Connecticut	27.2	10.4	10.4	6.1
Middle Atlantic	**308.3**	**97.9**	**103.2**	**92.9**
New York	130.1	38.6	46.9	32.2
New Jersey	62.6	20.5	27.0	15.0
Pennsylvania	115.6	38.8	29.6	45.7
Midwest	**649.0**	**204.4**	**161.2**	**283.3**
East North Central	**459.5**	**134.1**	**111.2**	**199.5**
Ohio	141.9	37.7	30.6	69.2
Indiana	73.6	21.9	15.4	35.6
Illinois	112.2	32.7	31.7	40.0
Michigan	82.7	25.2	20.8	35.5
Wisconsin	49.2	16.6	12.8	19.1
West North Central	**189.5**	**70.3**	**50.0**	**83.9**
Minnesota	47.4	15.0	8.2	23.3
Iowa	28.1	10.5	6.6	11.1
Missouri	54.7	22.1	17.7	13.8
North Dakota	7.1	3.0	1.8	1.8
South Dakota	6.3	2.8	1.5	1.6
Nebraska	17.8	7.2	5.1	4.2
Kansas	27.1	9.5	9.2	8.0
South	**1,128.4**	**417.8**	**283.1**	**391.5**
South Atlantic	**532.2**	**210.4**	**152.2**	**152.5**
Delaware	8.3	2.7	2.3	3.3
Maryland	49.7	19.0	10.4	19.6
Dist. of Columbia	9.8	1.5	5.1	3.0
Virginia	72.6	28.0	20.0	16.6
West Virginia	23.4	7.7	5.0	10.5
North Carolina	89.5	33.1	23.7	31.1
South Carolina	55.5	17.6	11.9	25.2
Georgia	80.3	29.5	22.9	27.0
Florida	143.1	71.4	50.9	16.2
East South Central	**230.6**	**77.9**	**39.0**	**109.1**
Kentucky	62.3	16.6	9.3	34.0
Tennessee	76.6	28.4	12.0	35.4
Alabama	59.7	20.8	11.1	27.3
Mississippi	31.9	12.1	6.7	12.5
West South Central	**365.6**	**129.5**	**92.0**	**129.8**
Arkansas	26.7	10.5	6.0	9.6
Louisiana	62.9	21.1	13.5	25.7
Oklahoma	38.3	14.8	10.3	11.1
Texas	237.7	83.1	62.2	83.5
West	**515.4**	**163.8**	**167.6**	**162.9**
Mountain	**160.3**	**49.2**	**51.3**	**53.4**
Montana	13.2	3.3	2.7	6.6
Idaho	18.0	5.7	5.0	7.1
Wyoming	11.7	1.7	2.2	7.6
Colorado	31.2	9.8	14.5	6.0
New Mexico	13.7	3.6	4.6	4.3
Arizona	40.4	15.3	13.7	9.6
Utah	15.2	4.2	4.7	5.6
Nevada	16.9	5.6	3.9	6.6
Pacific	**355.1**	**114.6**	**116.3**	**109.5**
Washington	88.5	29.0	16.9	38.8
Oregon	42.6	15.2	11.6	15.4
California	211.4	66.4	83.7	51.2
Alaska	4.3	1.7	2.0	0.4
Hawaii	8.3	2.3	2.2	3.7

[1] Includes other service, not shown separately.

Source: U.S. Energy Information Association, *Electric Power Annual* and *Electric Power Monthly*, December 1990 issue.

No. 941. Electric Energy—Net Generation and Installed Generating Capacity, by State: 1980 to 1990

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

DIVISION AND STATE	NET GENERATION (bil. kWh)				INSTALLED CAPACITY (mil. kW)		DIVISION AND STATE	NET GENERATION (bil. kWh)				INSTALLED CAPACITY (mil. kW)	
	1980	1989	1990 Total	1990 Percent from coal	1980	1990		1980	1989	1990 Total	1990 Percent from coal	1980	1990
U.S.	**2,286.4**	**2,784.3**	**2,805.3**	**55.5**	**613.5**	**735.1**	VA	34.3	43.4	47.2	44.5	11.7	14.6
							WV	70.8	82.9	77.4	99.1	15.2	15.1
N.E	**78.2**	**97.4**	**94.1**	**17.6**	**21.1**	**23.9**	NC	72.1	87.1	79.8	58.4	15.6	20.9
ME	7.9	11.6	9.1	0.0	2.4	2.4	SC	41.9	67.0	69.3	33.0	11.7	16.3
NH	6.0	7.1	10.8	27.4	1.6	2.6	GA	63.3	92.4	97.6	69.3	16.3	21.3
VT	3.8	4.8	5.0	0.0	0.9	1.1	FL	95.9	124.3	123.5	47.8	29.0	36.2
MA	34.8	39.2	36.5	30.9	9.6	10.1	**E.S.C**	**214.1**	**243.4**	**246.8**	**74.3**	**53.3**	**64.0**
RI	1.0	0.5	0.6	0.0	0.3	0.3	KY	57.1	70.8	73.8	95.6	13.6	17.3
CT	24.7	34.3	32.2	7.3	6.3	7.4	TN	60.2	74.0	73.9	68.0	15.9	18.2
M.A	**260.5**	**326.4**	**330.8**	**40.4**	**78.4**	**85.2**	AL	78.3	77.6	76.2	69.9	18.2	21.3
NY	108.6	130.5	128.7	19.1	31.4	33.3	MS	18.5	21.1	23.0	41.1	5.5	7.2
NJ	29.4	41.1	36.5	19.3	12.6	14.9	**W.S.C**	**313.1**	**364.5**	**374.0**	**48.3**	**84.7**	**107.5**
PA	122.5	154.8	165.7	61.6	34.4	37.0	AR	19.7	33.4	37.1	51.7	7.2	9.9
E.N.C	**397.0**	**482.7**	**485.8**	**74.6**	**107.9**	**123.9**	LA	45.7	54.3	57.4	30.5	12.9	18.1
OH	110.2	131.4	126.5	90.9	27.4	28.9	OK	44.6	44.4	45.1	55.9	11.3	13.6
IN	70.6	88.6	97.7	98.2	17.1	22.9	TX	203.0	232.4	234.5	50.7	53.3	66.0
IL	103.4	126.8	127.0	42.4	29.9	36.9	**Mt**	**158.8**	**235.5**	**247.3**	**75.7**	**35.8**	**52.3**
MI	74.8	91.5	89.0	73.3	22.7	24.1	MT	15.5	25.8	25.7	57.9	3.2	4.9
WI	37.8	44.4	45.6	70.6	10.7	11.1	ID	9.5	8.9	8.6	0.0	2.0	2.1
W.N.C	**168.2**	**215.9**	**216.2**	**75.3**	**49.0**	**58.6**	WY	22.4	36.8	39.4	98.2	4.1	6.2
MN	31.5	40.4	39.5	64.6	8.8	9.2	CO	23.6	32.3	31.3	94.5	6.1	6.7
IA	21.8	28.1	29.0	85.7	7.3	8.6	NM	24.7	28.3	28.5	90.6	5.0	5.5
MO	48.9	59.4	59.0	82.2	13.8	16.7	AZ	36.9	53.1	62.3	50.8	9.4	16.5
ND	15.8	25.7	26.8	93.5	3.4	4.7	UT	12.1	30.5	32.3	97.7	2.1	5.2
SD	8.6	7.0	6.4	38.5	2.2	2.7	NV	14.1	19.7	19.3	78.1	3.9	5.1
NE	16.3	21.1	21.6	58.5	5.1	5.9	**Pac**	**278.8**	**276.7**	**276.5**	**3.2**	**71.9**	**81.9**
KS	25.1	34.2	33.9	70.0	8.3	10.8	WA	92.3	87.1	100.5	7.3	23.0	23.4
S.A	**417.8**	**541.9**	**533.7**	**60.3**	**111.5**	**137.9**	OR	36.6	45.0	49.0	2.2	8.5	10.6
DE	6.7	8.5	7.1	69.1	1.6	2.1	CA	140.3	132.3	114.6	0.0	37.8	44.5
MD	32.2	35.8	31.5	74.0	9.2	10.5	AK	3.1	4.4	4.5	6.9	1.1	1.8
DC	0.7	0.7	0.4	0.0	1.2	0.9	HI	6.5	7.9	8.0	0.0	1.4	1.5

Source: U.S. Energy Information Administration, 1980, *Power Production, Fuel Consumption, and Installed Capacity Data*, annual; thereafter, *Electric Power Annual, Electric Power Monthly*, December 1989 issue, and *Inventory of Power Plants in the United States*, annual.

No. 942. Nuclear Power Plants—Number of Units, Net Generation, and Net Summer Capability, by State: 1990

DIVISION AND STATE	Number of units	NET GENERATION Total (mil. kW)	NET GENERATION Percent of total[1]	NET SUMMER CAPABILITY Total (mil. kW)	NET SUMMER CAPABILITY Percent of total[1]	DIVISION AND STATE	Number of units	NET GENERATION Total (mil. kW)	NET GENERATION Percent of total[1]	NET SUMMER CAPABILITY Total (mil. kW)	NET SUMMER CAPABILITY Percent of total[1]
U.S.	**111**	**576,784**	**20.6**	**99.6**	**14.4**	KS	1	7,874	23.3	1.1	11.9
						South	**42**	**215,169**	**18.6**	**39.3**	**13.5**
Northeast	**28**	**142,585**	**33.6**	**24.0**	**23.6**	**S.A**	**27**	**140,354**	**26.3**	**23.6**	**18.3**
N.E	**9**	**37,404**	**39.8**	**6.6**	**28.0**	MD	2	1,251	4.0	1.7	16.9
ME	1	4,861	53.6	0.9	35.7	VA	4	23,820	50.5	3.4	24.8
NH	1	4,081	37.7	1.2	43.6	NC	5	25,905	32.5	4.7	23.3
VT	1	3,616	72.4	0.5	46.6	SC	7	42,881	61.9	6.3	42.6
MA	2	5,070	13.9	0.8	8.4	GA	4	24,797	25.4	3.7	18.0
CT	4	19,776	61.5	3.2	45.0	FL	5	21,699	17.6	3.8	11.7
M.A	**19**	**105,181**	**31.8**	**17.4**	**22.3**	**E.S.C**	**8**	**33,477**	**13.6**	**8.3**	**13.9**
NY	6	23,623	18.4	4.8	15.5	TN	2	14,003	19.0	2.3	13.5
NJ	4	23,770	65.1	3.9	28.1	AL	5	12,052	15.8	4.8	24.2
PA	9	57,787	34.9	8.7	26.2	MS	1	7,422	32.3	1.1	16.3
Midwest	**31**	**153,923**	**21.9**	**25.8**	**15.4**	**W.S.C**	**7**	**41,338**	**11.1**	**7.4**	**7.3**
E.N.C	**23**	**115,388**	**23.8**	**20.2**	**17.8**	AR	2	11,282	30.4	1.7	17.6
OH	2	10,664	8.4	2.0	7.6	LA	2	14,197	24.7	2.0	12.0
IL	13	71,887	56.6	12.6	38.7	TX	3	15,859	6.8	3.7	5.9
MI	5	21,610	24.3	4.0	18.0	**West**	**10**	**65,110**	**12.4**	**10.6**	**8.1**
WI	3	11,226	24.6	1.5	14.3	**Mt**	**3**	**20,598**	**8.3**	**3.7**	**7.4**
W.N.C	**8**	**38,535**	**17.8**	**5.6**	**10.3**	AZ	3	20,598	33.1	3.7	24.6
MN	3	12,139	30.8	1.5	17.4	**Pac**	**7**	**44,512**	**16.9**	**7.0**	**8.5**
IA	1	3,012	10.4	0.5	6.7	WA	1	5,742	5.7	1.1	4.6
MO	1	7,998	13.6	1.1	7.4	OR	1	6,074	12.4	1.1	9.8
NE	2	7,511	34.7	1.3	23.0	CA	5	32,696	28.5	4.7	10.9

[1] For total capability and generation, see table 941.

Source: U.S. Energy Information Administration, *Electric Power Monthly*, December 1990 issue.

No. 943. Nuclear Power Plants—Number, Capacity, and Generation: 1965 to 1990

ITEM	1965	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
Operable generating units[1]	6	18	54	70	80	86	95	100	107	108	110	111
Net summer capability[1 2] (mil. kW)	0.8	7.0	37.3	51.8	63.0	69.7	79.4	85.2	93.6	94.7	98.2	99.6
Electricity generated (bil. kWh)	0.4	21.8	172.5	251.1	293.7	327.6	383.7	414.0	455.3	527.0	529.4	576.8
Percent of total electric utility generation	0.3	1.4	9.0	11.0	12.7	13.6	15.5	16.6	17.7	19.5	19.0	20.6
Capacity factor[3]	(NA)	(NA)	55.9	56.3	54.4	56.3	58.0	56.9	57.4	63.5	62.2	66.1

NA Not available. [1] As of yearend. [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. 944. Commercial Nuclear Power Generation, by Country: 1970 to 1991

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

COUNTRY	REACTORS				GROSS ELECTRICITY GENERATED (bil. kWh)				GROSS CAPACITY (1,000 kW)			
	1970	1980	1990	1991	1970	1980	1990	1991	1970	1980	1990	1991
Total	**64**	**208**	**368**	**362**	**73.9**	**617.8**	**1,743.9**	**1,844.0**	**15,186**	**128,847**	**301,745**	**302,020**
United States	15	74	112	112	23.2	265.2	606.4	643.5	5,211	56,529	105,998	105,998
Argentina	-	1	2	2	0.0	2.3	7.0	7.5	-	357	1,005	1,005
Belgium	1	3	7	7	0.3	12.5	42.7	42.9	11	1,744	5,740	5,740
Brazil	-	-	1	1	0.0	0.0	2.0	1.4	-	-	657	657
Canada	1	9	19	19	0.9	40.4	74.0	86.1	220	5,588	13,855	13,904
China: Taiwan	-	2	6	6	0.0	8.2	32.9	35.3	-	1,272	5,146	5,146
Finland	-	4	4	4	0.0	7.0	18.9	19.2	-	2,296	2,400	2,400
France	4	22	58	57	5.7	61.2	314.1	331.4	1,606	15,412	58,862	59,224
Germany	4	11	22	22	5.3	43.7	147.2	147.2	907	8,996	23,973	23,983
Great Britain	27	33	42	37	26.5	37.2	68.8	70.4	4,783	9,012	15,274	14,813
Hungary	-	-	4	4	0.0	0.0	13.6	13.7	-	-	1,760	1,820
India	2	4	6	7	2.2	2.9	6.0	5.4	400	860	1,330	1,565
Italy	3	4	2	-	3.3	2.2	0.0	0.0	631	1,490	1,132	-
Japan	3	22	40	42	3.3	81.0	191.9	205.8	828	15,117	31,645	33,399
Mexico	-	-	1	1	0.0	0.0	2.1	4.2	-	-	675	675
Netherlands	1	2	2	2	0.4	4.2	3.4	3.3	55	529	540	540
Pakistan	-	1	1	1	0.0	0.1	0.4	0.4	-	137	137	137
South Africa	-	-	2	2	0.0	0.0	8.9	9.7	-	-	1,930	1,930
South Korea	-	1	9	9	0.0	3.5	52.8	56.3	-	587	7,616	7,616
Spain	1	3	10	9	0.9	5.2	54.3	55.6	160	1,117	7,984	7,368
Sweden	1	8	12	12	(Z)	26.7	68.2	76.8	12	5,770	10,344	10,359
Switzerland	1	4	5	5	1.9	14.3	23.6	22.9	364	2,034	3,079	3,079
Yugoslavia	-	-	1	1	0.0	0.0	4.6	5.0	-	-	664	664

- Represents zero. Z Less than 50 million kWh.

Source: McGraw-Hill, Inc., New York, NY, *Nucleonics Week,* January issues, (copyright).

No. 945. Uranium Supply, Enrichment, and Discharged Commercial Reactor Fuel: 1970 to 1990

[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	1984	1985	1986	1987	1988	1989	1990
URANIUM CONCENTRATE											
Production	Mil. lb	25.81	23.20	43.70	14.88	11.31	13.51	12.99	13.13	13.84	8.90
Exports	Mil. lb	4.20	1.00	5.80	2.20	5.30	1.60	1.00	3.30	2.10	2.00
Imports	Mil. lb	-	1.40	3.60	12.50	11.70	13.50	15.10	15.80	13.10	23.70
Delivered price	Dol./lb.	(NA)	10.50	26.00	32.65	31.43	30.01	27.37	25.65	19.56	15.70
ENRICHMENT[3]											
Enriched product[1]	Mil. Swu[2]	5.10	9.92	10.69	11.2	10.2	8.6	8.1	9.9	11.9	10.2
For domestic customers	Mil. Swu[2]	3.74	4.36	6.89	5.8	6.0	4.9	3.4	6.3	7.6	6.8
For foreign customers	Mil. Swu[2]	1.36	5.56	3.80	5.4	4.2	3.7	4.7	3.6	4.3	3.4
Sales	Mil. dol	(NA)	376	1,379	1,457	1,403	1,085	921	1,094	1,320	1,148
DISCHARGED COMMERCIAL REACTOR FUEL[4]											
Annual discharge	Metric tons.	82	499	1,193	1,257	1,330	1,431	1,615	(NA)	(NA)	(NA)
Inventory, yearend[5]	Metric tons.	118	1,538	6,434	11,006	12,481	13,881	(NA)	(NA)	(NA)	(NA)

- Represents zero. NA Not available. [1] Based on sales. [2] 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. [3] Beginning 1984, represents fiscal years. [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. 946. Electric Utilities—Generation, Sales, Revenue, and Customers: 1970 to 1990

[Sales and revenue are to and from ultimate customers]

CLASS	Unit	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990, prel.
Generation [1]	Bil. kWh	1,532	1,918	2,286	2,416	2,470	2,487	2,572	2,704	2,784	2,807
Sales [2]	**Bil. kWh**	**1,391**	**1,733**	**2,126**	**2,281**	**2,306**	**2,355**	**2,435**	**2,554**	**2,621**	**2,667**
Residential or domestic	Bil. kWh	448	586	734	783	793	820	846	886	899	910
Percent of total	Percent	32.2	33.8	34.5	34.3	34.4	34.8	34.8	34.7	34.3	34.1
Commercial [3]	Bil. kWh	313	418	524	578	606	629	658	698	716	735
Industrial [4]	Bil. kWh	573	662	794	835	820	819	844	882	913	926
Revenue [2]	**Bil. dol**	**22.1**	**46.9**	**95.5**	**143.1**	**149.2**	**152.5**	**155.7**	**162.4**	**169.6**	**175.5**
Residential or domestic	Bil. dol	9.4	18.8	37.6	56.1	58.6	60.9	63.0	66.4	68.8	71.2
Percent of total	Percent	42.7	40.1	39.4	39.2	39.3	39.9	40.5	40.9	40.5	40.6
Commercial [3]	Bil. dol	6.3	13.5	27.4	41.3	44.1	45.4	46.7	49.1	51.6	53.9
Industrial [4]	Bil. dol	5.4	12.7	27.3	40.8	41.4	40.9	40.6	41.6	43.7	44.8
Ultimate customers, Dec. 31 [2]	**Million**	**72.5**	**81.8**	**92.7**	**99.4**	**101.6**	**103.0**	**104.6**	**106.4**	**108.5**	**109.8**
Residential or domestic	Million	64.0	72.6	82.2	87.9	89.8	91.0	92.4	93.9	95.6	96.8
Commercial [3]	Million	7.9	8.6	9.7	10.6	10.9	11.1	11.4	11.6	12.0	12.1
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**	**23.2**	**22.9**	**23.1**	**23.5**	**24.2**	**24.4**	**24.5**
Residential	1,000	7.1	8.2	9.0	9.0	8.9	9.1	9.2	9.5	9.5	9.5
Commercial [3]	1,000	40.0	49.0	54.5	55.2	56.1	57.2	58.4	60.4	60.6	61.1
Avg. annual bill per customer	**Dollar**	**307**	**579**	**1,040**	**1,453**	**1,482**	**1,494**	**1,501**	**1,536**	**1,576**	**1,610**
Residential	Dollar	149	262	462	644	658	675	688	712	725	741
Commercial [3]	Dollar	804	1,580	2,848	3,940	4,080	4,127	4,147	4,256	4,363	4,478
Avg. revenue per kWh sold	**Cents**	**1.59**	**2.70**	**4.49**	**6.27**	**6.47**	**6.47**	**6.39**	**6.36**	**6.47**	**6.58**
Residential	Cents	2.10	3.21	5.12	7.17	7.39	7.43	7.45	7.49	7.65	7.82
Commercial [3]	Cents	2.01	3.23	5.22	7.14	7.27	7.22	7.10	7.04	7.20	7.33
Industrial [4]	Cents	0.95	1.92	3.44	4.88	5.04	4.99	4.82	4.71	4.79	4.83

[1] Source: 1970 and 1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, August 1991. [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*.

No. 947. Electric Utilities—Balance Sheet and Income Account of Privately Owned Companies: 1970 to 1989

[**In billions of dollars.** As of **Dec. 31.** See also *Historical Statistics, Colonial Times to 1970*, series S 133-146 and V 197-212]

ITEM	CLASS A AND B INVESTOR-OWNED ELECTRIC UTILITIES [1]				MAJOR-INVESTOR-OWNED ELECTRIC UTILITIES [2]							
	1970	1980	1981	1981	1982	1983	1984	1985	1986	1987	1988	1989
COMPOSITE BALANCE SHEET												
Assets and other debits	**87.4**	**260.0**	**286.0**	**285.1**	**315.0**	**342.4**	**375.6**	**404.7**	**426.1**	**446.3**	**454.3**	**465.7**
Electric utility plant [3]	93.3	266.9	292.7	291.6	321.2	347.9	364.7	396.9	419.5	434.6	449.4	462.4
Depreciation and amortization	*20.3*	*55.5*	*61.5*	*61.1*	*67.6*	*74.3*	*77.1*	*85.1*	*93.9*	*103.2*	*113.5*	*125.0*
Net electric utility plant	73.1	211.5	231.2	230.5	253.6	273.6	287.5	311.8	325.6	331.4	335.9	337.5
Other utility plant	9.0	14.8	15.7	15.7	16.7	17.5	17.6	19.9	21.2	23.1	24.6	26.3
Depreciation and amortization	*2.1*	*4.5*	*4.9*	*4.9*	*5.3*	*5.8*	*6.1*	*6.5*	*7.2*	*7.8*	*8.5*	*9.2*
Net other utility plant	6.9	10.3	10.8	10.8	11.4	11.8	12.1	13.4	14.0	15.2	16.1	17.1
Total utility plant	102.3	281.7	308.4	307.3	337.9	365.5	395.3	431.1	455.9	475.7	493.0	507.9
Depreciation and amortization	*22.3*	*60.0*	*66.4*	*66.0*	*72.9*	*80.1*	*88.0*	*97.4*	*107.7*	*118.7*	*131.3*	*144.6*
Net total utility plant	79.9	221.7	242.0	241.3	265.0	285.4	307.3	333.8	348.2	357.0	361.6	363.2
Other property and investments	1.7	6.5	7.9	7.9	9.1	10.3	10.8	12.1	13.5	15.6	15.2	16.2
Current and accrued assets	5.3	26.2	28.7	28.6	31.7	33.3	37.9	39.4	38.4	40.9	39.1	41.5
Deferred debits	0.4	5.5	7.3	7.3	9.3	13.4	19.3	19.4	26.1	32.9	38.3	44.8
Liabilities and other credits [4]	**87.4**	**260.0**	**286.0**	**285.1**	**315.0**	**342.4**	**375.3**	**404.7**	**426.1**	**446.3**	**454.3**	**465.7**
Capital stock	20.8	59.3	63.9	63.7	70.3	75.9	79.0	82.8	81.6	79.9	80.7	82.9
Other paid-in capital	4.4	21.5	24.0	23.9	27.7	31.0	34.0	36.3	38.4	40.3	40.4	39.1
Retained earnings	9.4	22.7	25.0	24.8	27.9	31.9	37.1	41.1	46.0	48.0	47.1	47.7
Subsidiary earnings [5]	(X)	1.1	1.3	1.3	1.6	1.7	1.9	2.2	2.3	2.6	2.5	2.8
Long-term debt	41.9	105.3	115.5	115.2	124.0	131.6	140.6	152.7	157.2	158.4	160.7	162.9
Current and accrued liabilities	7.3	26.3	28.4	26.1	28.6	29.5	32.0	32.0	34.0	39.3	38.4	42.0
Deferred credits and operating reserves	0.9	9.8	11.5	11.0	15.1	16.6	19.0	20.9	22.4	25.6	28.1	28.5
Deferred income taxes [6]	2.2	14.1	16.7	16.6	19.4	23.6	28.1	32.7	39.6	45.9	50.2	53.3
COMPOSITE INCOME ACCOUNTS												
Electric operating revenues	19.8	87.1	102.3	101.7	109.3	116.7	128.3	135.3	136.3	138.5	143.9	150.9
Electric operating expenses	*15.3*	*73.4*	*86.0*	*85.5*	*91.1*	*96.2*	*105.5*	*111.1*	*110.2*	*111.6*	*115.3*	*121.6*
Net electric operating revenues	4.5	13.6	16.3	16.2	18.1	20.5	22.8	24.1	26.1	27.0	28.6	29.4
Other utility operating income	0.4	0.7	0.9	0.7	0.9	0.9	1.1	1.2	1.1	1.1	1.2	1.2
Total utility operating income	4.9	14.4	17.0	17.0	19.1	21.4	24.0	25.3	27.2	28.1	29.8	30.6
Other income	0.8	3.6	4.4	4.4	5.3	6.5	6.8	7.4	7.2	6.6	5.0	5.2
Total income	5.7	18.0	21.4	21.3	24.4	28.0	30.8	32.7	34.4	34.6	34.8	35.8
Income deductions	*2.3*	*7.3*	*8.7*	*8.7*	*9.4*	*10.1*	*11.1*	*14.0*	*14.0*	*15.6*	*18.8*	*18.5*
Net income [7]	3.4	10.7	12.7	12.7	15.0	17.9	19.7	18.7	20.4	19.0	16.0	17.3

X Not applicable. [1] There were 197 utilities of this type in 1981. [2] There were 181 utilities of this type in 1987. [3] Includes construction work in progress. [4] Includes contributions in aid of construction through 1970. [5] Unappropriated undistributed. [6] Cumulative. [7] Beginning 1980, includes net extraordinary income.
Source: 1970, U.S. Federal Power Commission and 1980, U.S. Energy Information Administration, *Statistics of Privately Owned Electric Utilities in the United States*, annual; 1981-84 U.S. Energy Information Administration, *Financial Statistics of Selected Electric Utilities*, annual; thereafter, U.S. Energy Information Administration, *Financial Statistics of Selected Investor-Owned Electric Utilities*, annual.

No. 948. Water Power—Developed and Undeveloped Capacity, by Division: 1950 to 1990

[**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 25. See also *Historical Statistics, Colonial Times to 1970*, series S 160-175]

DIVISION	DEVELOPED INSTALLED CAPACITY							ESTIMATED UNDEVELOPED CAPACITY						
	1950	1960	1970	1980	1985	1989	1990	1950	1960	1970	1980	1985	1989	1990
United States	**18.7**	**33.2**	**52.0**	**64.4**	**68.8**	**71.8**	**73.0**	**87.6**	**114.2**	**128.0**	**129.9**	**76.4**	**75.2**	**73.9**
New England	1.2	1.5	1.5	1.5	1.7	1.9	1.9	3.3	2.9	3.3	4.7	4.4	4.5	4.4
Middle Atlantic	1.7	2.5	4.3	4.3	4.5	4.8	4.9	6.6	7.6	4.5	5.1	5.4	5.2	5.1
East North Central	0.9	0.9	0.9	0.9	1.1	1.1	1.1	2.3	3.0	1.6	2.0	1.8	1.7	1.7
West North Central	0.6	1.6	2.7	2.8	2.9	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	6.5	6.7	6.7	8.2	8.4	9.6	9.6	7.4	7.1	7.0
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	2.7	2.4	2.4
West South Central	0.5	0.9	1.9	2.3	2.3	2.4	2.7	3.6	3.9	3.3	4.7	5.4	4.8	4.6
Mountain	2.3	4.6	6.2	7.4	8.1	8.9	9.2	23.4	23.6	26.7	34.2	19.4	19.3	19.4
Pacific	6.0	13.6	23.9	33.7	35.8	37.0	37.5	29.8	53.8	70.9	62.9	26.8	27.1	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. 949. Solar Collector Shipments, by Type, End-Use, and Market Sector: 1975 to 1989

[**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)
1976	186	5,801	3,876	1,925	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1977	321	10,312	4,743	5,569	6,334	1,713	1,699	7,978	1,680	105
1978	340	10,860	5,872	4,988	5,970	2,513	1,736	8,095	1,848	263
1979	349	14,251	8,395	5,857	8,551	2,958	1,722	11,387	2,015	314
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	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	44	11,482	4,283	1,989	4,688	1,374	205	5,804	424	42

NA Not available. [1] Includes other end uses and market sectors not shown separately. [2] Declines between 1984 and 1988 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. 950. Wood Energy Consumption, by Region and Sector: 1980 to 1989

[**In trillions of Btu, except percent.** For composition of regions, see table 25. X Not applicable]

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	(X)	9
1989	2,487	3.1	413	527	1,109	438	918	1,556	(X)	13

No. 951. Households That Burn Wood: 1980 to 1987

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

ITEM	Unit	HOUSEHOLDS THAT BURN WOOD					HOUSEHOLDS THAT BURN WOOD AS MAIN HEATING FUEL				
		1980	1981	1982	1984	1987	1980	1981	1982	1984	1987
Number of households	Millions	21.6	22.8	21.4	22.9	22.5	4.7	5.3	5.6	6.4	5.0
Percent of all households	Percent	26.4	27.4	25.6	26.6	24.8	5.8	6.4	6.7	7.5	5.6
Number of cords burned	Millions	42.7	44.0	48.6	49.0	42.6	22.4	24.7	28.7	29.4	23.5
Average number per household	Number	2.0	1.9	2.3	2.1	1.9	4.7	4.6	5.1	4.6	4.7
Median number per household	Number	0.7	1.0	1.0	1.0	0.7	3.3	3.0	4.0	4.0	4.0
Wood energy consumption	Tril. Btu	854	881	971	981	853	448	493	574	589	470

Source of tables 950 and 951: U.S. Energy Information Administration, *Annual Energy Review*.

No. 952. Renewable Energy Consumption Estimates by Type: 1988 to 1990

SOURCES	QUANTITY (Quadrillion Btu)			PERCENT CHANGE	
	1988	1989	1990	1988 –1989	1989 –1990
Adjusted Total energy consumption estimates [1]	**83.63**	**84.54**	**84.99**	**1.1**	**0.5**
Total renewable energy consumption estimates	**6.31**	**6.29**	**6.70**	**–0.3**	**6.5**
Percent of adjusted total	7.50	7.40	7.90	–1.3	6.8
Reported renewable energy consumption	**2.88**	**3.10**	**3.15**	**7.6**	**1.6**
Hydroelectric power	2.64	2.88	2.94	9.1	2.1
Electric utilities	2.28	2.74	2.89	20.2	5.5
Industrial	0.03	0.03	0.03	-	-
Imported electricity	0.40	0.27	0.21	–32.5	–22.2
Exported electricity	0.07	0.17	0.19	142.9	11.8
Geothermal energy at electric utilities	0.22	0.20	0.18	–9.1	–10.0
Wood and waste energy at electric utilities	0.02	0.02	0.02	-	-
Wind energy at electric utilities	(Z)	(Z)	(Z)	(X)	(X)
Additional renewable energy consumption estimates	**3.43**	**3.19**	**3.55**	**–7.0**	**11.3**
Biofuels	3.15	2.90	3.23	–7.9	11.4
Residential, commercial, and industrial use	3.09	2.83	3.15	–8.4	11.3
Transportation use	0.06	0.07	0.08	16.7	14.3
Geothermal energy (nonelectric utilities)	0.13	0.14	0.16	7.7	14.3
Solar energy (nonelectric utilities)	0.09	0.09	0.08	-	–11.1
Wind energy (nonelectric utilities)	0.03	0.03	0.04	-	33.3
Hydroelectric power (additional industrial use)	0.03	0.03	0.04	-	33.3

- Represents zero or rounds to zero. X Not applicable. Z Less than 50 billion. [1] Adjusted total energy consumption estimates will differ from other energy consumption estimates shown in tables 911-916.

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

No. 953. Privately Owned Gas Utility Industry—Balance Sheet and Income Account: 1970 to 1990

[**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	1970	1980	1984	1985	1986	1987	1988	1989	1990
COMPOSITE BALANCE SHEET									
Assets, total [1]	**34,929**	**75,851**	**98,933**	**104,478**	**104,008**	**109,390**	**121,667**	**123,820**	**121,763**
Total utility plant	38,541	67,071	83,118	88,121	91,606	93,540	99,933	106,017	112,894
Depreciation and amortization	*10,696*	*26,162*	*35,542*	*36,377*	*36,776*	*41,162*	*44,423*	*47,054*	*49,500*
Utility plant (net)	27,845	40,909	47,576	51,744	54,830	52,378	55,510	58,963	63,394
Investment and fund accounts [1]	3,024	15,530	21,872	23,871	21,850	25,660	31,552	28,111	23,895
Current and accrued assets	3,674	17,243	25,367	24,771	21,477	21,025	23,402	24,836	23,279
Deferred debits [2]	386	2,169	4,118	4,092	5,851	8,633	9,658	10,364	9,603
Liabilities, total [1]	**34,929**	**75,851**	**98,933**	**104,478**	**104,008**	**109,390**	**121,667**	**123,820**	**121,763**
Capitalization, total [1]	28,646	51,382	64,458	65,799	66,660	66,312	69,875	74,753	75,003
Capital stock [1]	12,965	29,315	38,959	39,517	39,902	38,212	39,898	43,889	43,839
Long-term debts	15,681	22,067	25,499	26,282	26,758	28,100	29,977	30,864	31,164
Current and accrued liabilities	4,832	18,119	23,043	26,125	23,855	26,664	33,735	31,005	29,562
Deferred income taxes [3]	788	4,149	7,000	7,769	8,363	9,901	10,685	11,292	11,371
Other liabilities and credits	663	2,201	4,432	4,785	5,130	6,513	7,372	6,770	5,827
COMPOSITE INCOME ACCOUNT									
Operating revenues, total	**16,380**	**85,918**	**115,491**	**103,945**	**80,978**	**69,566**	**69,754**	**70,363**	**66,049**
Operating expenses [4]	*14,306*	*81,789*	*109,165*	*98,320*	*75,470*	*64,409*	*64,696*	*64,262*	*60,157*
Operation and maintenance	11,636	74,508	98,953	88,572	66,032	56,054	57,032	55,990	51,644
Federal, State, and local taxes	1,569	4,847	7,146	6,590	6,133	5,179	4,241	4,843	4,958
Operating income	2,074	4,129	6,326	5,625	5,508	5,157	5,058	6,101	5,892
Utility operating income	2,159	4,471	6,647	6,030	5,943	5,452	5,202	6,274	6,079
Income before interest charges [1]	2,457	6,929	9,068	7,636	7,085	6,845	7,472	8,764	8,083
Net income [1]	1,427	4,194	5,619	3,785	3,390	2,971	3,352	4,641	4,411
Dividends	1,006	2,564	4,471	4,060	3,882	3,453	3,151	3,113	3,192

[1] Beginning 1980, not comparable with 1970 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. 954. Gas Utility Industry—Summary: 1970 to 1990

[Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately and municipally owned gas utilities in U.S., 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	1984	1985	1986	1987	1988	1989	1990
Customers [1]	**1,000**	**41,482**	**44,555**	**47,223**	**49,325**	**49,971**	**50,704**	**51,576**	**52,422**	**53,356**	**54,293**
Residential	1,000	38,097	40,950	43,489	45,367	45,929	46,583	47,362	48,133	48,980	49,830
Commercial	1,000	3,131	3,367	3,496	3,730	3,816	3,892	3,980	4,069	4,161	4,249
Industrial and other	1,000	254	237	236	228	226	229	234	220	215	214
Sales [2]	**Tril. Btu**	**16,044**	**14,863**	**15,413**	**13,162**	**12,616**	**11,125**	**10,543**	**10,705**	**10,551**	**9,846**
Residential	Tril. Btu	4,923	4,991	4,826	4,628	4,513	4,381	4,385	4,695	4,798	4,471
Percent of total	Percent	30.7	33.6	31.3	35.2	35.8	39.4	41.6	43.9	45.5	45.4
Commercial	Tril. Btu	2,007	2,387	2,453	2,396	2,338	2,239	2,156	2,306	2,322	2,194
Industrial	Tril. Btu	8,439	6,837	7,957	5,991	5,635	4,338	3,848	3,544	3,243	3,011
Other	Tril. Btu	674	648	177	147	130	167	155	160	188	171
Revenues [2]	**Mil. dol**	**10,283**	**19,101**	**48,303**	**67,496**	**63,293**	**51,201**	**45,492**	**46,162**	**47,493**	**45,174**
Residential	Mil. dol	5,207	8,445	17,432	27,485	26,864	24,759	23,622	24,828	26,172	25,014
Percent of total	Percent	50.6	44.2	36.1	40.7	42.4	48.4	51.9	53.8	55.1	55.4
Commercial	Mil. dol	1,620	3,302	8,183	13,205	12,722	11,274	10,271	10,681	11,074	10,610
Industrial	Mil. dol	3,181	6,745	22,215	26,094	23,086	14,495	11,069	10,113	9,666	8,997
Other	Mil. dol	274	608	473	712	621	673	530	538	581	553
Prices per mil. Btu [3]	**Dollars**	**0.64**	**1.29**	**3.13**	**5.13**	**5.02**	**4.60**	**4.32**	**4.31**	**4.50**	**4.59**
Residential	Dollars	1.06	1.69	3.61	5.94	5.95	5.65	5.39	5.29	5.45	5.59
Commercial	Dollars	0.81	1.38	3.34	5.51	5.44	5.04	4.77	4.63	4.77	4.84
Industrial	Dollars	0.38	0.99	2.79	4.36	4.10	3.34	2.88	2.85	2.98	2.99
Gas mains mileage	**1,000**	**913**	**980**	**1,052**	**1,102**	**1,119**	**1,134**	**1,151**	**1,169**	**1,185**	**1,206**
Field and gathering	1,000	66	68	84	94	94	94	94	92	91	89
Transmission	1,000	252	263	266	272	271	271	274	276	276	280
Distribution	1,000	595	649	702	736	754	769	784	801	818	837
Construction expenditures [4]	**Mil. dol**	**2,506**	**2,466**	**5,350**	**4,645**	**5,671**	**5,342**	**5,328**	**6,166**	**7,341**	**7,899**
Transmission	Mil. dol	1,019	590	1,583	1,301	1,562	1,448	1,295	1,568	2,081	2,886
Distribution	Mil. dol	913	910	1,869	2,266	2,577	2,920	3,055	3,389	3,980	3,714
Production and storage	Mil. dol	370	831	1,546	543	965	383	251	268	276	309

[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. 955. Gas Utility Industry—Customers, Sales, and Revenues, by State: 1989

[See headnote, table 954. For definition of Btu, see text, section 19]

DIVISION AND STATE	CUSTOMERS[1]		SALES[3] (tril. Btu)		REVENUES[3] (mil. dol.)	
	Total[2]	Residential	Total[2]	Residential	Total[2]	Residential
U.S.	**54,293**	**49,830**	**9,846**	**4,471**	**45,174**	**25,014**
Northeast	**10,944**	**10,032**	**1,724**	**946**	**10,383**	**6,505**
N.E	**2,045**	**1,850**	**389**	**170**	**2,372**	**1,309**
ME	16	12	4	1	26	5
NH	85	73	16	7	103	50
VT	25	21	7	2	34	14
MA	1,230	1,121	239	101	1,391	772
RI	213	195	31	19	206	135
CT	476	428	92	40	611	333
M.A.	**8,899**	**8,182**	**1,335**	**776**	**8,011**	**5,196**
NY	4,202	3,893	571	352	3,647	2,491
NJ	2,199	1,977	354	176	1,947	1,128
PA	2,498	2,312	410	248	2,416	1,578
Midwest	**16,707**	**15,256**	**2,917**	**1,777**	**13,357**	**8,744**
E.N.C	**12,001**	**11,020**	**2,085**	**1,343**	**9,818**	**6,678**
OH	2,991	2,755	491	322	2,362	1,622
IN	1,449	1,320	262	146	1,275	787
IL	3,548	3,250	621	426	2,871	2,046
MI	2,779	2,573	481	335	2,198	1,572
WI	1,234	1,122	230	115	1,112	651
W.N.C	**4,706**	**4,236**	**832**	**434**	**3,539**	**2,066**
MN	1,062	961	224	108	917	502
IA	790	705	149	71	613	347
MO	1,317	1,210	195	120	934	610
ND	98	86	18	10	79	43
SD	119	105	21	10	92	51
NE	485	422	90	43	365	193
KS	835	747	134	72	539	319
South	**13,404**	**12,199**	**3,150**	**881**	**12,186**	**5,099**
S.A	**5,014**	**4,559**	**1,016**	**344**	**4,791**	**2,208**
DE	97	89	22	7	101	44
MD	837	771	129	66	700	416
DC	147	133	31	12	204	94
VA	680	611	119	50	633	333
WV	404	370	64	41	341	236
NC	583	513	130	37	565	220
SC	374	333	86	19	422	128
GA	1,412	1,303	204	99	1,091	636
FL	480	436	222	13	734	101
E.S.C.	**2,513**	**2,258**	**449**	**180**	**1,948**	**943**
KY	684	618	103	58	463	276
TN	683	596	159	48	645	230
AL	733	673	111	48	542	302
MS	413	371	76	26	299	135
W.S.C	**5,877**	**5,382**	**1,685**	**357**	**5,447**	**1,948**
AR	552	489	84	38	358	190
LA	973	910	211	54	754	324
OK	897	809	217	67	633	312
TX	3,455	3,174	1,173	198	3,702	1,122
West	**13,238**	**12,344**	**2,056**	**867**	**9,249**	**4,666**
Mt.	**3,336**	**3,025**	**486**	**259**	**2,160**	**1,284**
MT	199	176	39	19	151	78
ID	136	117	17	9	75	42
WY	123	109	23	12	100	55
CO	1,099	986	165	94	699	424
NM	405	365	53	31	256	163
AZ	618	571	80	29	380	193
UT	479	444	73	47	328	231
NV	277	257	36	18	171	98
Pac.	**9,902**	**9,319**	**1,570**	**608**	**7,089**	**3,382**
WA	513	452	134	41	478	202
OR	364	317	56	24	282	147
CA	8,909	8,449	1,337	528	6,158	2,970
AK	82	70	40	14	128	53
HI	34	31	3	1	43	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).

In Brief

R&D expenditures in constant (1982) dollars:

1970	*62.4 bil.*
1980	*73.3 bil.*
1990	*110.5 bil.*

Nondefense R&D spending as percent of GNP: 1989

Japan	*3.0*
West Germany	*2.8*
United States	*1.9*
France	*1.8*
United Kingdom	*1.6*

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.

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.

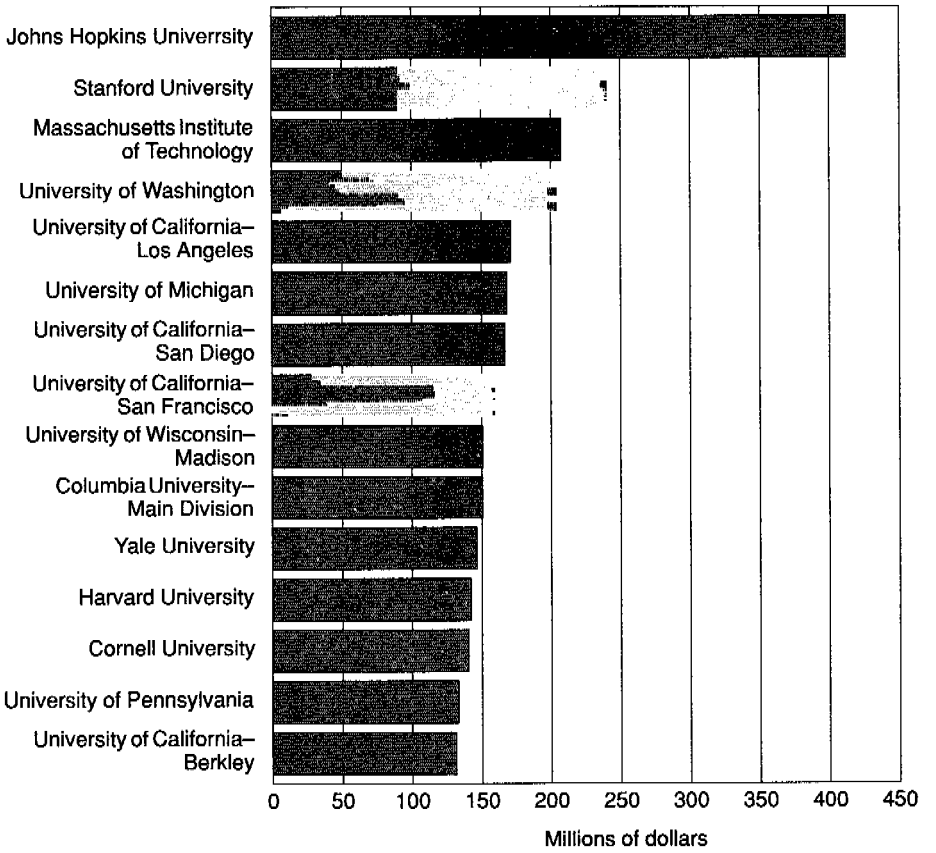
Research and development outlays.—NSF defines research as a "systematic and intensive study directed toward a fuller knowledge of the subject studied" and development as "the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, methods, or processes." 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: 1989



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 965.

No. 956. Research and Development (R&D)—Expenditures: 1960 to 1990

[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 OR PERIOD	CURRENT DOLLARS (bil. dol.)			CONSTANT (1982) 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 GNP [2]	Current dollars	Constant dollars	Total	Defense	Space	Total	Non-Federal	Federal
1960	13.5	7.4	6.1	43.6	2.6	9.4	7.5	55	52	3	45	35	10
1961	14.3	8.0	6.3	45.8	2.7	5.9	4.9	56	50	6	44	35	9
1962	15.4	8.6	6.8	48.2	2.7	7.5	5.2	56	49	7	44	36	8
1963	17.1	9.2	7.8	52.6	2.8	10.8	9.2	54	41	13	46	34	12
1964	18.9	10.6	8.3	57.2	2.9	10.5	8.8	56	37	19	44	34	10
1965	20.0	10.8	9.2	59.4	2.8	6.3	3.8	54	33	21	46	35	11
1966	21.8	11.1	10.7	62.6	2.8	9.0	5.5	51	32	19	49	36	13
1967	23.1	11.3	11.8	64.4	2.8	6.0	2.9	49	35	14	51	38	13
1968	24.6	12.1	12.5	65.5	2.8	6.3	1.6	49	35	14	51	39	12
1969	25.6	11.5	14.1	64.7	2.7	4.2	-1.2	45	34	11	55	42	13
1970	26.1	11.2	14.9	62.4	2.6	2.0	-3.5	43	33	10	57	43	14
1971	26.7	11.5	15.2	60.4	2.4	2.1	-3.2	43	33	10	57	44	13
1972	28.5	11.7	16.8	61.4	2.4	6.7	1.7	41	33	8	59	44	15
1973	30.7	12.0	18.7	62.4	2.3	7.9	1.7	39	32	7	61	47	14
1974	32.9	11.8	21.0	61.5	2.2	7.0	-1.5	36	29	7	64	49	15
1975	35.2	12.0	23.2	59.9	2.2	7.2	-2.6	34	27	7	66	49	17
1976	39.0	13.7	25.4	62.1	2.2	10.8	3.8	35	27	8	65	49	16
1977	42.8	14.5	28.2	63.7	2.2	9.6	2.4	34	27	7	66	50	16
1978	48.1	15.4	32.7	66.8	2.1	12.5	4.9	32	26	6	68	50	18
1979	55.0	17.0	37.9	70.1	2.2	14.2	5.0	31	25	6	69	51	18
1980	62.6	18.2	44.5	73.3	2.3	13.9	4.5	29	24	5	71	53	18
1981	71.9	20.8	51.0	76.6	2.4	14.8	4.6	29	24	5	71	54	17
1982	80.0	24.0	56.0	80.0	2.5	11.3	4.4	30	26	4	70	54	16
1983	89.1	26.7	62.4	85.8	2.6	11.4	7.2	30	27	3	70	54	16
1984	101.1	31.4	69.8	93.8	2.7	13.5	9.4	31	28	3	69	55	14
1985	113.8	37.6	76.3	102.5	2.8	12.5	9.2	33	30	3	67	54	13
1986	119.5	40.6	78.9	104.9	2.8	5.0	2.3	34	31	3	66	55	11
1987	125.4	43.9	81.5	106.6	2.8	4.9	1.7	35	32	3	65	54	11
1988	133.7	45.5	88.3	110.2	2.7	6.7	3.3	34	31	3	66	54	12
1989	140.5	46.4	94.1	111.1	2.7	5.0	0.9	33	29	4	67	55	12
1990	145.5	46.5	98.9	110.5	2.7	3.5	-0.6	32	28	4	68	56	12

[1] Based on GNP implicit price deflator. [2] GNP = Gross National Product. [3] Change from prior year shown; 1960 change from 1955.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990;* and unpublished data.

No. 957. Research and Development (R&D)—Source of Funds and Performance Sector: 1970 to 1990

[**In millions of dollars.** See headnote, table 958]

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
1982	80,018	36,578	40,692	1,731	1,017	9,141	58,650	7,323	2,479	2,425
1983	89,139	40,832	45,251	1,929	1,127	10,582	65,268	7,877	2,737	2,675
1984	101,139	45,641	52,204	2,104	1,190	11,572	74,800	8,617	3,150	3,000
1985	113,818	52,120	57,977	2,376	1,345	12,945	84,239	9,686	3,523	3,425
1986	119,529	54,273	61,056	2,790	1,410	13,535	87,823	10,926	3,895	3,350
1987	125,352	57,904	62,642	3,200	1,606	13,413	92,155	12,153	4,206	3,425
1988	133,741	61,499	66,953	3,473	1,816	14,281	97,889	13,465	4,531	3,575
1989	140,486	62,688	71,767	3,948	2,083	15,121	101,599	14,987	4,729	4,050
1990	145,450	64,000	74,700	4,450	2,300	16,100	104,200	16,000	4,800	4,350
Constant (1982) dollars: [3]										
1970	62,403	35,632	24,851	1,114	807	9,833	42,986	5,629	1,777	2,179
1975	59,882	30,985	26,679	1,302	916	9,308	40,781	5,926	1,716	2,151
1980	73,255	34,557	36,065	1,574	1,059	9,006	51,919	7,171	2,650	2,508
1981	76,641	35,690	38,257	1,667	1,027	9,040	55,140	7,345	2,667	2,448
1982	80,018	36,578	40,692	1,731	1,017	9,141	58,650	7,323	2,479	2,425
1983	85,753	39,251	43,568	1,851	1,083	10,152	62,842	7,557	2,626	2,576
1984	93,790	42,286	48,456	1,945	1,102	10,696	69,433	7,965	2,912	2,785
1985	102,462	46,870	52,252	2,130	1,209	11,606	75,925	8,684	3,159	3,087
1986	104,866	47,555	53,639	2,436	1,235	11,820	77,160	9,542	3,401	2,943
1987	106,616	49,201	53,341	2,711	1,364	11,364	78,477	10,296	3,563	2,917
1988	110,166	50,635	55,181	2,856	1,495	11,742	80,680	11,072	3,726	2,947
1989	111,129	49,553	56,815	3,115	1,646	11,931	80,436	11,825	3,731	3,206
1990	110,470	48,591	56,757	3,376	1,746	12,213	79,173	12,137	3,641	3,305

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

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990.*

No. 958. Research and Development (R&D) Funds, by Performance Sector and Source: 1970 to 1990

[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 AND SOURCE OF FUNDS	1970	1980	1983	1984	1985	1986	1987	1988	1989	1990
Total R&D [1]	**26,134**	**62,610**	**89,139**	**101,139**	**113,818**	**119,529**	**125,352**	**133,741**	**140,486**	**145,450**
In 1982 dollars [2]	62,403	73,255	85,753	93,790	102,462	104,866	106,616	110,166	111,129	110,470
Percent Federal as source	57.0	47.1	45.8	45.1	45.8	45.4	46.2	46.0	44.6	44.0
Percent of gross national product	2.6	2.3	2.6	2.7	2.8	2.8	2.8	2.7	2.7	2.7
Federal Government	4,079	7,632	10,582	11,572	12,945	13,535	13,413	14,281	15,121	16,100
Industry	18,067	44,505	65,268	74,800	84,239	87,823	92,155	97,889	101,599	104,200
Federal funds	7,779	14,029	20,680	23,396	27,196	27,891	30,752	32,306	31,366	31,200
Industry funds	10,288	30,476	44,588	51,404	57,043	59,932	61,403	65,583	70,233	73,000
Universities and colleges	2,335	6,077	7,877	8,617	9,686	10,926	12,153	13,465	14,987	16,000
Federal funds	1,647	4,104	4,983	5,423	6,056	6,702	7,333	8,181	8,972	9,250
Industry funds	61	236	388	475	559	699	789	870	984	1,100
University and college funds [3]	462	1,334	1,929	2,104	2,376	2,790	3,200	3,473	3,948	4,450
Other nonprofit institutions funds [3]	165	403	577	615	695	735	831	941	1,083	1,200
Universities and colleges, associated federally funded R&D centers	737	2,246	2,737	3,150	3,523	3,895	4,206	4,531	4,729	4,800
Other nonprofit institutions	916	2,150	2,675	3,000	3,425	3,350	3,425	3,575	4,050	4,350
Federal funds	649	1,450	1,850	2,100	2,400	2,250	2,200	2,200	2,500	2,650
Industry funds	95	200	275	325	375	425	450	500	550	600
Other [4]	172	500	550	575	650	675	775	875	1,000	1,100
Total research, basic and applied	**9,269**	**22,292**	**32,328**	**35,760**	**40,029**	**44,156**	**46,095**	**48,548**	**53,185**	**55,815**
In 1982 dollars [2]	22,198	26,154	31,077	33,133	35,999	38,698	39,167	39,972	42,044	42,379
Percent Federal as source	60.1	55.3	52.4	51.5	51.4	47.1	47.6	47.4	47.4	47.2
Federal Government	1,904	3,666	4,710	4,764	5,056	5,160	5,438	5,338	5,982	6,400
Industry	4,029	9,775	16,150	18,373	21,117	23,807	24,136	25,001	27,086	27,800
Federal funds	1,207	2,190	4,104	4,700	5,836	5,229	5,400	5,449	5,920	5,900
Industry funds	2,822	7,585	12,046	13,673	15,281	18,578	18,736	19,552	21,166	21,900
Universities and colleges	2,223	5,739	7,450	8,194	9,232	10,406	11,566	12,820	14,266	15,195
Federal funds	1,563	3,904	4,758	5,223	5,856	6,477	7,083	7,906	8,672	8,925
Industry funds	56	219	361	442	520	650	734	809	915	1,020
University and college funds [3]	449	1,241	1,794	1,957	2,210	2,595	2,976	3,230	3,672	4,130
Other nonprofit institutions funds [3]	155	375	537	572	646	684	773	875	1,007	1,120
Universities and colleges, associated federally funded R&D centers	485	1,627	2,198	2,479	2,584	2,633	2,705	2,919	3,051	3,250
Other nonprofit institutions	628	1,485	1,820	1,950	2,040	2,150	2,250	2,470	2,800	3,170
Federal funds	409	930	1,180	1,250	1,250	1,300	1,300	1,400	1,600	1,850
Industry funds	77	160	220	260	300	340	360	400	440	480
Other [4]	142	395	420	440	490	510	590	670	760	840
Total basic research	**3,531**	**8,432**	**11,634**	**12,909**	**14,198**	**16,590**	**17,999**	**18,673**	**19,885**	**21,920**
In 1982 dollars [2]	8,483	9,922	11,172	11,946	12,749	14,515	15,273	15,365	15,704	16,636
Percent of total R&D	13.5	13.5	13.1	12.8	12.5	13.9	14.4	14.0	14.2	15.1
Percent Federal as source	70.0	70.1	66.8	65.8	64.6	60.2	60.4	61.8	64.2	62.3
Federal Government	559	1,182	1,690	1,861	1,923	2,019	2,046	2,050	2,371	2,600
Industry	602	1,325	2,223	2,608	2,862	4,047	4,323	4,244	4,000	4,750
Federal funds	158	290	463	476	489	551	740	891	1,095	1,150
Industry funds	444	1,035	1,760	2,132	2,373	3,496	3,583	3,353	2,905	3,600
Universities and colleges	1,796	4,041	5,304	5,735	6,559	7,495	8,398	8,827	9,685	10,350
Federal funds	1,296	2,863	3,544	3,827	4,338	4,862	5,369	5,629	6,127	6,400
Industry funds	40	141	236	284	342	436	496	527	582	650
University and college funds [3]	350	796	1,173	1,257	1,454	1,739	2,011	2,101	2,335	2,600
Other nonprofit institutions funds [3]	110	241	351	367	425	458	522	570	641	700
Universities and colleges, associated federally funded R&D centers	269	1,124	1,472	1,675	1,749	1,859	2,012	2,222	2,329	2,500
Other nonprofit institutions	305	760	945	1,030	1,105	1,170	1,220	1,330	1,500	1,720
Federal funds	189	450	600	650	675	700	700	750	850	1,000
Industry funds	44	95	125	150	170	200	210	230	250	280
Other [4]	72	215	220	230	260	270	310	350	400	440
Total development	**16,865**	**40,318**	**56,811**	**65,379**	**73,789**	**75,373**	**79,257**	**85,193**	**87,301**	**89,635**
In 1982 dollars [2]	40,206	47,101	54,676	60,657	66,463	66,167	67,449	70,194	69,085	68,092
Percent of total R&D	64.5	64.4	63.7	64.6	64.8	63.1	63.2	63.7	62.1	61.6
Percent Federal as source	55.3	42.5	42.0	41.6	42.7	44.4	45.4	45.2	42.9	42.0

[1] Basic research, applied research, and development. [2] Based on gross national 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: 1990*; and unpublished data.

No. 959. Funds for Research and Development—Performance Sector, by State: 1989

[In millions of dollars. See headnote, table 958. Data may differ slightly due to revisions not available on the State level]

REGION, DIVISION, AND STATE	Total	Federal government	Industry	Universities and colleges [1]	Other nonprofit [2]
U.S.	**140,486**	**15,121**	**101,599**	**19,716**	**4,050**
Northeast	**34,628**	**1,458**	**27,873**	**4,486**	**811**
N.E	**11,710**	**665**	**8,789**	**1,721**	**535**
ME	72	4	33	20	15
NH	(NA)	22	(3)	62	(Z)
VT	(NA)	4	(4)	43	3
MA	7,949	401	5,825	1,232	491
RI	428	196	139	80	13
CT	2,745	38	2,410	284	13
M.A	**22,918**	**793**	**19,084**	**2,765**	**276**
NY	7,229	430	6,381	396	22
NJ	9,898	89	8,071	1,587	151
PA	5,791	274	4,632	782	103
Midwest	**29,877**	**1,454**	**24,615**	**3,587**	**221**
E.N.C.	**23,347**	**1,288**	**19,308**	**2,600**	**151**
OH	5,465	1,056	3,946	417	46
IN	2,120	75	1,815	227	3
IL	5,307	59	4,050	1,133	65
MI	9,057	71	8,468	486	32
WI	1,399	27	1,030	337	5
W.N.C	**6,530**	**166**	**5,307**	**987**	**70**
MN	2,399	31	2,066	259	43
IA	616	20	363	231	2
MO	2,710	58	2,380	255	17
ND	79	20	27	28	4
SD	23	6	4	12	(Z)
NE	182	22	64	94	2
KS	523	9	404	108	2
South	**28,500**	**7,973**	**15,320**	**4,686**	**521**
S.A	**17,779**	**6,538**	**8,100**	**2,752**	**389**
DE	(NA)	3	(5)	37	2
MD	5,091	3,012	1,068	922	69
DC	(NA)	1,522	(6)	114	136
VA	2,536	1,018	1,126	272	120
WV	(NA)	63	(7)	58	2
NC	1,826	60	1,305	425	36
SC	576	60	386	120	10
GA	1,302	158	719	417	8
FL	3,375	642	2,341	386	6
E.S.C	**3,132**	**864**	**1,640**	**589**	**39**
KY	343	31	226	84	2
TN	1,302	135	930	223	14
AL	1,223	568	428	207	20
MS	264	130	56	75	3
W.S.C	**7,589**	**571**	**5,580**	**1,345**	**93**
AR	121	25	51	44	1
LA	384	36	168	179	1
OK	507	46	332	113	16
TX	6,576	464	5,028	1,009	75
West	**42,035**	**3,739**	**30,659**	**6,664**	**773**
Mt	**7,109**	**1,021**	**4,095**	**1,867**	**126**
MT	(NA)	21	(8)	32	1
ID	(NA)	19	(8)	33	1
WY	(NA)	9	(10)	23	21
CO	1,649	117	1,162	290	80
NM	2,680	594	1,034	1,039	13
AZ	1,293	116	917	251	7
UT	620	66	387	165	2
NV	141	77	29	34	1
Pac	**34,925**	**2,718**	**26,764**	**4,796**	**647**
WA	3,225	111	2,716	277	121
OR	579	42	355	161	21
CA	30,881	2,478	23,675	4,231	497
AK	118	51	9	57	1
HI	123	36	9	71	7
Other [11]	5,446	497	2,932	294	1,724

NA Not available. Z Less than $0.5 million. [1] Distribution by States includes R&D performed in only Doctoral degree granting institutions; U.S. total includes R&D performed in all institutions. [2] 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. [3] Between $95 and $140 million. [4] Between $242 and $287 million. [5] Between $845 and $1,032 million. [6] Between $23 and $210 million. [7] Between $80 and $267 million. [8] Between $5 and $405 million. [9] Between $161 and $561 million. [10] Below $400 million. [11] Includes unknown.

Source: U.S. National Science Foundation, as reported in the National Science Board, *Science and Engineering Indicators—1991.*

No. 960. Federal Obligations for Research and Development, by Agency in Current and Constant (1982) Dollars: 1975 to 1991

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Includes those agencies with obligations of $1 billion dollars or more in 1991. See *Historical Statistics, Colonial Times to 1970,* series W 142, for total R&D expenditures]

AGENCY	1975	1980	1984	1985	1986	1987	1988	1989	1990, est.	1991, est.
CURRENT DOLLARS										
Obligations, total [1]	**19,039**	**29,830**	**42,225**	**48,360**	**51,412**	**55,253**	**56,935**	**61,406**	**62,320**	**66,107**
Dept. of Defense	9,013	13,981	25,373	29,792	32,938	35,232	35,415	37,577	35,899	36,918
Dept. of Health and Human Services	2,281	3,780	4,831	5,451	5,658	6,606	7,158	7,903	8,457	8,888
National Aeronautics and Space Administration	3,064	3,234	2,822	3,327	3,420	3,787	4,330	5,394	6,635	8,322
Dept. of Energy	2,047	4,754	4,674	4,966	4,688	4,757	5,036	5,193	5,698	6,006
National Science Foundation	595	882	1,203	1,346	1,353	1,471	1,533	1,670	1,766	1,983
Dept. of Agriculture	420	688	866	943	929	948	1,017	1,038	1,104	1,158
CONSTANT (1982) DOLLARS [2]										
Obligations, total [1]	**33,098**	**35,202**	**39,028**	**43,359**	**44,898**	**46,823**	**46,822**	**48,450**	**47,277**	**48,022**
Dept. of Defense	15,668	16,499	23,452	26,711	28,764	29,856	29,125	29,649	27,233	26,818
Dept. of Health and Human Services	3,965	4,461	4,465	4,887	4,941	5,598	5,887	6,236	6,416	6,456
National Aeronautics and Space Administration	5,327	3,816	2,608	2,983	2,986	3,209	3,561	4,256	5,033	6,045
Dept. of Energy	3,559	5,610	4,320	4,452	4,094	4,031	4,142	4,097	4,323	4,363
National Science Foundation	1,034	1,041	1,112	1,206	1,182	1,246	1,261	1,318	1,340	1,441
Dept. of Agriculture	730	811	801	845	811	803	836	819	838	841

[1] Includes other agencies, not shown separately. [2] See footnote 1, table 956.

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

No. 961. Federal Funding for Research and Development, by Selected Budget Function, in Current and Constant (1982) Dollars: 1980 to 1992

[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 1992. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991, est.	1992, est.
CURRENT DOLLARS											
Total [1]	**15,339**	**29,739**	**44,214**	**49,887**	**53,249**	**57,069**	**59,106**	**62,115**	**63,794**	**64,135**	**72,070**
8 functions, percent of total	96.6	96.5	98.1	98.3	98.3	98.2	98.3	98.2	98.0	97.7	97.8
National defense	7,981	14,946	29,287	33,698	36,926	39,152	40,099	40,665	39,925	37,788	43,247
Health	1,084	3,694	4,779	5,418	5,565	6,556	7,076	7,773	8,314	9,090	9,655
Space research and technology	3,606	2,738	2,300	2,725	2,894	3,398	3,683	4,555	5,765	6,428	7,656
General science	452	1,233	1,676	1,862	1,873	2,042	2,160	2,373	2,410	2,632	2,962
Energy	574	3,603	2,581	2,389	2,286	2,053	2,126	2,419	2,715	2,885	2,920
Natural resources and environment	340	999	963	1,059	1,062	1,133	1,160	1,255	1,386	1,553	1,602
Transportation	535	887	1,040	1,030	917	908	896	1,064	1,045	1,251	1,380
Agriculture	238	585	762	836	815	822	882	907	957	1,057	1,098
CONSTANT (1982) DOLLARS [2]											
Total [1]	**36,975**	**35,094**	**40,866**	**44,728**	**46,502**	**48,350**	**48,600**	**49,009**	**48,393**	**46,590**	**50,298**
National defense	19,239	17,637	27,070	30,213	32,247	33,170	32,971	32,085	30,286	27,451	30,182
Health	2,613	4,359	4,417	4,858	4,860	5,554	5,818	6,133	6,307	6,603	6,738
Space research and technology	8,692	3,231	2,126	2,443	2,527	2,879	3,028	3,594	4,373	4,670	5,343
General science	1,090	1,455	1,549	1,669	1,636	1,730	1,776	1,872	1,828	1,912	2,067
Energy	1,384	4,252	2,386	2,142	1,996	1,739	1,748	1,909	2,060	2,096	2,038
Natural resources and environment	820	1,179	890	949	927	960	954	990	1,051	1,128	1,118
Transportation	1,290	1,047	961	923	801	769	737	840	793	909	963
Agriculture	574	690	704	750	712	696	725	716	726	768	766

[1] Includes other functions, not shown separately. [2] See footnote 1, table 956.
Source: U.S. National Science Foundation, *Federal R&D Funding by Budget Function*, annual.

No. 962. National Research and Development (R&D) Expenditures as a Percent of Gross National Product, by Country: 1975 to 1990

YEAR	TOTAL R&D					NON DEFENSE R&D [1]				
	United States	France	West Germany	Japan	United Kingdom	United States	France	West Germany	Japan	United Kingdom
1975	2.2	1.8	2.2	2.0	2.1	1.6	1.5	2.1	2.0	1.5
1980	2.3	1.8	2.4	2.2	(NA)	1.7	1.4	2.3	2.2	(NA)
1985	2.8	2.3	2.8	2.8	2.3	2.0	1.8	2.7	2.8	1.6
1987	2.8	2.3	2.9	2.8	2.3	1.9	1.8	2.8	2.8	1.8
1988	2.7	2.3	2.9	2.9	2.2	1.9	1.8	2.7	2.9	1.7
1989	2.7	2.3	2.9	3.0	2.0	1.9	1.8	2.8	3.0	1.6
1990	2.7	(NA)	(NA)	(NA)	(NA)	1.9	(NA)	(NA)	(NA)	(NA)

NA Not available. [1] Estimated.
Source: U.S. National Science Foundation, *Science Indicators*, biennial; *National Patterns of R&D Resources: 1990;* and *International Science and Technology Data Update*, annual.

No. 963. Research and Development (R&D) Expenditures in Science and Engineering at Universities and Colleges in Current and Constant (1982) Dollars: 1981 to 1990

[In millions of dollars]

CHARACTERISTIC	1981	1988	1989	1990	CHARACTERISTIC	1981	1988	1989	1990
CURRENT DOLLARS					CONSTANT (1982) DOLLARS [1]				
Total	**6,846**	**13,464**	**15,009**	**16,325**	**Total**	**7,345**	**11,070**	**11,842**	**12,384**
Basic research	4,597	8,827	9,710	10,431	Basic research	4,932	7,258	7,661	7,913
Applied R&D	2,249	4,637	5,299	5,894	Applied R&D	2,413	3,813	4,181	4,471
Source of funds:					Source of funds:				
All governments	5,111	9,288	10,218	10,949	All governments	5,483	7,637	8,062	8,306
Institutions' own funds	1,008	2,364	2,712	3,017	Institutions' own funds	1,081	1,944	2,140	2,289
Industry	291	871	998	1,135	Industry	312	716	787	861
Other	436	941	1,081	1,223	Other	468	774	853	928
Fields:					Fields:				
Physical sciences	765	1,545	1,641	1,781	Physical sciences	821	1,270	1,295	1,351
Environmental sciences	549	885	989	1,047	Environmental sciences	589	728	780	794
Mathematical sciences	87	199	215	221	Mathematical sciences	93	164	169	168
Computer sciences	132	410	468	503	Computer sciences	142	337	369	381
Life sciences	3,698	7,256	8,088	8,763	Life sciences	3,967	5,966	6,381	6,648
Psychology	127	214	238	260	Psychology	136	176	188	197
Social sciences	366	553	637	702	Social sciences	393	455	502	533
Other sciences	145	305	330	365	Other sciences	156	251	261	277
Engineering	977	2,097	2,404	2,682	Engineering	1,048	1,724	1,897	2,034

[1] See footnote 1, table 956.
Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Expenditures at Universities and Colleges*, annual.

No. 964. Federal Obligations to Universities and Colleges: 1970 to 1989

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. Total and nonscience/engineering activities for 1983 are estimates based on revised student aid data from the Dept. of Education. Minus sign (-) indicates decrease]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
CURRENT DOLLARS										
Federal obligations, total	**3,237**	**4,547**	**8,299**	**9,345**	**10,039**	**10,972**	**11,619**	**13,433**	**14,066**	**15,658**
Annual percent change [1]	6.5	1.5	9.1	6.5	7.4	9.3	5.9	15.6	4.7	11.3
Academic science/engineering obligations	2,188	2,806	4,791	5,681	6,308	7,258	7,431	8,565	9,133	10,073
Percent of total	67.6	61.7	57.7	60.8	62.8	66.2	64.0	63.8	64.9	64.3
Research and development	1,447	2,246	4,161	5,024	5,449	6,246	6,457	7,241	7,719	8,517
Research and development plant	45	45	38	38	50	114	106	230	203	237
Other science/engineering activities	696	515	593	619	809	898	868	1,095	1,211	1,319
Nonscience/engineering activities	1,049	1,741	3,508	3,664	3,731	3,714	4,188	4,868	4,933	5,584
CONSTANT (1982) DOLLARS [2]										
Federal obligations, total	**7,802**	**7,905**	**9,793**	**8,965**	**9,279**	**9,838**	**10,147**	**11,381**	**11,566**	**12,354**
Annual percent change [1]	0.6	-8.0	0.3	2.1	3.5	6.0	3.1	12.2	1.6	6.8
Academic science/engineering obligations	5,273	4,878	5,654	5,450	5,830	6,508	6,489	7,257	7,509	7,948
Percent of total	67.6	61.7	57.7	60.8	62.8	66.2	64.0	63.8	64.9	64.3
Research and development	3,487	3,905	4,910	4,820	5,036	5,600	5,639	6,135	6,347	6,720
Research and development plant	108	78	45	36	46	102	93	195	167	187
Other science/engineering activities	1,678	895	699	594	748	805	758	928	996	1,041
Nonscience/engineering activities	2,529	3,027	4,139	3,515	3,449	3,330	3,657	4,124	4,056	4,406

[1] Percent change from immediate prior year. [2] See footnote 1, table 956.

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

No. 965. Federal R&D Obligations to Selected Universities and Colleges: 1981 to 1989

[For fiscal years ending in year shown; see text, section 9. For the top 45 institutions receiving Federal R&D funds in 1989. 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 1989 FEDERAL R&D OBLIGATIONS	OBLIGATIONS ($1,000)				RANK			
	1981	1985	1988	1989	1981	1985	1988	1989
Total, all institutions [1]	**4,410,931**	**6,246,181**	**7,719,162**	**8,516,849**	**(X)**	**(X)**	**(X)**	**(X)**
45 institutions, percent of total	62.2	61.4	61.1	60.8	(X)	(X)	(X)	(X)
Johns Hopkins University	363,429	297,374	431,593	411,879	1	1	1	1
Stanford University	106,073	174,961	210,572	239,847	3	3	2	2
Massachusetts Institute of Technology	146,035	189,558	187,558	207,157	2	2	3	3
University of Washington	99,965	146,179	181,301	203,691	4	4	4	4
University of California—Los Angeles	94,945	128,211	154,964	170,839	5	5	5	5
University of Michigan	73,999	108,035	148,446	167,865	11	11	6	6
University of California—San Diego	91,403	103,633	139,149	166,601	6	13	8	7
University of California—San Francisco	64,814	98,536	147,553	159,027	15	16	7	8
University of Wisconsin—Madison	86,918	124,604	131,186	150,474	8	7	12	9
Columbia University—Main Division	83,659	127,331	139,108	150,263	9	6	9	10
Yale University	73,526	109,227	135,421	146,245	12	10	10	11
Harvard University	87,830	109,414	125,242	141,760	7	9	13	12
Cornell University	72,671	119,966	134,493	139,954	13	8	11	13
University of Pennsylvania	76,136	103,119	120,029	132,805	10	15	14	14
University of California—Berkeley	64,065	106,710	106,844	131,070	16	12	16	15
University of Minnesota	72,001	103,272	119,831	128,727	14	14	15	16
Pennsylvania State University	47,099	76,726	105,443	119,435	21	19	18	17
University of Southern California	49,221	89,706	99,399	114,766	20	17	19	18
Duke University	44,287	69,169	92,763	108,611	23	26	23	19
Washington University	54,170	71,978	95,368	102,974	17	22	21	20
University of Colorado	46,146	71,424	105,772	101,345	22	23	17	21
University of Illinois—Urbana	53,583	83,122	95,748	100,062	19	18	20	22
University of Rochester	42,983	70,379	94,885	98,550	25	25	22	23
University of NC at Chapel Hill	38,447	63,105	84,918	93,244	30	27	24	24
University of Pittsburgh	38,512	58,620	79,380	91,094	29	28	28	25
University of Chicago	53,992	71,194	84,668	90,611	18	24	25	26
University of Texas at Austin	43,756	72,379	84,400	84,619	24	21	26	27
University of Arizona	36,308	49,740	65,258	82,913	33	37	33	28
New York University	40,636	74,577	79,516	77,761	28	20	27	29
University of Iowa	35,300	55,117	72,309	76,059	34	31	30	30
Ohio State University	42,899	56,065	62,946	72,702	26	30	36	31
University of Alabama—Birmingham	29,970	44,093	59,933	70,702	44	46	38	32
Case Western Reserve University	33,744	47,994	62,989	69,589	38	40	35	33
Baylor College of Medicine	35,062	45,837	63,117	69,499	35	45	34	34
California Institute of Technology	32,959	55,083	65,982	69,335	40	32	32	35
Yeshiva University	42,590	56,988	67,096	68,553	27	29	31	36
Woods Hole Oceanographic Institution	27,633	31,392	35,285	67,289	48	63	66	37
University of Massachusetts	22,418	46,046	62,300	67,183	55	44	37	38
Vanderbilt University	27,426	39,909	58,389	63,978	49	48	39	39
Purdue University	36,549	51,544	45,907	62,751	32	34	53	40
University of Utah	38,163	50,938	56,686	61,361	31	36	41	41
Georgia Institute of Technology	33,616	51,585	55,486	60,949	39	33	43	42
University of Maryland—College Park	27,313	51,073	54,580	60,252	50	35	45	43
University of Miami	28,956	33,709	58,241	60,135	46	59	40	44
University of California—Davis	31,757	43,156	55,239	60,100	42	47	44	45

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

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

330-309 O—92—20: QL3

No. 966. Funds for Performance of Industrial Research and Development (R&D), by Source of Funds and Selected Industries, in Current and Constant (1982) Dollars: 1970 to 1989

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

1972 SIC [1] code	INDUSTRY	1970	1975	1980	1985	1986	1987	1988	1989
(X)	CURRENT DOLLARS								
(X)	**Total funds**	**18,067**	**24,187**	**44,505**	**84,239**	**87,823**	**92,155**	**97,889**	**101,599**
28	Chemicals and allied products	1,773	2,727	4,636	8,540	8,843	9,635	10,772	11,537
13,29	Petroleum refining and extraction	515	693	1,552	(D)	(D)	1,897	1,944	2,066
35	Machinery	1,729	3,196	5,901	12,216	(D)	(D)	(D)	(D)
36	Electrical equipment	4,220	5,105	9,175	14,432	14,980	15,848	16,242	16,768
371	Motor vehicles and motor vehicles equipment	1,591	2,340	4,955	6,984	(D)	(D)	(D)	(D)
372,376	Aircraft and missiles	5,219	5,713	9,198	22,231	21,050	24,458	25,900	25,654
38	Professional and scientific instruments	744	1,173	3,029	5,013	5,103	5,222	5,426	5,763
(X)	All other [2]	2,276	3,240	6,059	(D)	(D)	(D)	(D)	(D)
(X)	**Company funds**	**10,288**	**15,582**	**30,476**	**57,043**	**59,932**	**61,403**	**65,583**	**70,233**
28	Chemicals and allied products	1,593	2,490	4,264	8,310	8,664	9,445	10,573	11,449
13,29	Petroleum refining and extraction	493	(D)	1,401	2,194	1,971	1,883	1,923	2,050
35	Machinery	1,469	2687	5,254	10,701	10,701	10,577	11,992	13,216
36	Electrical equipment	2,008	2,798	5,431	9,271	9,767	10,449	10,872	11,546
371	Motor vehicles and motor vehicles equipment	1,278	2,022	4,300	6,164	7,171	7,167	7,769	8,726
372,376	Aircraft and missiles	1,213	1,285	2,570	5,649	6,066	5,939	6,023	6,020
38	Professional and scientific instruments	550	1,001	2,456	4,622	4,752	4,950	5,306	5,638
(X)	All other [2]	1,684	(D)	4,800	10,132	10,840	10,993	11,125	11,588
(X)	CONSTANT (1982) DOLLARS [3]								
(X)	**Total funds**	**42,986**	**40,781**	**51,919**	**75,925**	**77,160**	**78,477**	**80,680**	**80,436**
28	Chemicals and allied products	4,218	4,598	5,408	7,697	7,769	8,205	8,878	9,134
13,29	Petroleum refining and extraction	1,225	1,168	1,811	(D)	(D)	1,615	1,602	1,636
35	Machinery	4,114	5,389	6,884	11,010	(D)	(D)	(D)	(D)
36	Electrical equipment	10,040	8,607	10,703	13,008	13,161	13,496	13,387	13,275
371	Motor vehicles and motor vehicles equipment	3,785	3,945	5,780	6,295	(D)	(D)	(D)	(D)
372,376	Aircraft and missiles	12,417	9,632	10,730	20,037	18,494	20,828	21,347	20,310
38	Professional and scientific instruments	1,770	1,978	3,534	4,518	4,483	4,447	4,472	4,563
(X)	All other [2]	5,415	5,463	7,068	(D)	(D)	(D)	(D)	(D)
(X)	**Company funds**	**24,478**	**26,272**	**35,553**	**51,413**	**52,655**	**52,289**	**54,053**	**55,604**
28	Chemicals and allied products	3,790	4,198	4,974	7,490	7,612	8,043	8,714	9,064
13,29	Petroleum refining and extraction	1,173	(D)	1,634	1,977	1,732	1,604	1,585	1,623
35	Machinery	3,495	4,530	6,129	9,645	9,402	9,007	9,884	10,463
36	Electrical equipment	4,778	4,718	6,336	8,356	8,581	8,898	8,961	9,141
371	Motor vehicles and motor vehicles equipment	3,041	3,409	5,016	5,556	6,300	6,103	6,403	6,908
372,376	Aircraft and missiles	2,886	2,167	2,998	5,091	5,329	5,057	4,964	4,766
38	Professional and scientific instruments	1,309	1,688	2,865	4,166	4,175	4,215	4,373	4,464
(X)	All other [2]	4,007	(D)	5,600	9,132	9,524	9,361	9,169	9,174

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 nonmanfacturing. [3] See footnote 1, table 956.

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

No. 967. R&D Funds as a Percent of Net Sales in R&D—Performing Manufacturing Companies, by Industry: 1970 to 1989

1972 SIC [1] code	INDUSTRY GROUP	TOTAL R&D FUNDS AS A PERCENT OF NET SALES					COMPANY R&D FUNDS AS A PERCENT OF NET SALES				
		1970	1980	1985	1988	1989	1970	1980	1985	1988	1989
(X)	Total [2]	3.7	3.0	4.4	4.7	4.7	2.2	2.1	3.0	3.1	3.1
20	Food and kindred products [3]	0.5	0.4	(D)	(D)	(D)	0.5	(D)	0.6	0.5	0.5
26	Paper and allied products	0.9	1.0	(D)	(D)	0.7	(D)	1.0	0.8	0.7	0.7
28	Chemicals and allied products	3.9	3.6	5.0	5.4	5.4	3.5	3.3	4.9	5.3	5.3
13,29	Petroleum refining and extraction	1.0	0.6	(D)	1.0	1.0	0.9	0.5	0.9	1.0	1.0
30	Rubber products	2.3	2.2	(D)	(D)	(D)	1.7	(D)	1.8	1.6	1.7
32	Stone, clay, and glass products	1.8	1.4	(D)	(D)	(D)	1.7	1.3	2.3	2.2	2.3
33	Primary metals	0.8	0.7	(D)	0.8	0.9	0.8	0.5	0.9	0.8	0.9
34	Fabricated metal products	1.2	1.4	1.5	1.3	1.3	1.1	1.2	1.4	1.0	1.1
35	Machinery	4.0	5.0	7.6	(D)	(D)	3.4	4.5	6.7	7.2	7.8
36	Electrical equipment	7.3	6.6	7.6	7.8	7.7	3.4	3.9	4.8	5.2	5.3
371	Motor vehicles and motor vehicle equipment	3.5	4.9	3.8	(D)	(D)	2.8	4.2	3.1	3.4	3.8
372,376	Aircraft and missiles	16.2	13.7	14.9	15.6	15.5	3.8	3.8	3.9	3.6	3.6
38	Professional and scientific instruments	5.7	7.5	8.9	7.5	7.4	4.2	6.1	8.3	7.3	7.2

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) for 1985-89.

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

No. 968. Federal Obligations for Research, by Field of Science in Current and Constant (1982) Dollars: 1980 to 1991

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. See headnote, table 961]

FIELD	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991, est.
CURRENT DOLLARS										
Research, total	**11,597**	**14,254**	**14,979**	**16,133**	**16,502**	**17,940**	**18,650**	**20,765**	**21,683**	**23,220**
Basic	4,674	6,260	7,067	7,819	8,153	8,942	9,474	10,602	11,348	12,255
Applied	6,923	7,993	7,911	8,315	8,349	8,998	9,176	10,163	10,335	10,965
Life sciences	4,192	5,178	5,636	6,363	6,464	7,341	7,725	8,495	8,914	9,407
Psychology	199	241	267	327	334	370	390	422	448	510
Physical sciences	2,001	2,891	2,969	3,046	3,069	3,253	3,317	3,705	3,895	4,191
Environmental sciences	1,261	1,251	1,276	1,404	1,482	1,512	1,607	1,773	2,104	2,345
Mathematics and computer sciences	241	419	440	575	615	641	643	735	721	792
Engineering	2,830	3,517	3,624	3,618	3,739	3,906	3,956	4,442	4,361	4,684
Social sciences	524	435	436	460	416	480	486	551	621	646
Other sciences, n.e.c. [1]	350	320	331	342	383	438	527	642	619	645
CONSTANT (1982) DOLLARS [2]										
Research, total	**13,686**	**13,675**	**13,845**	**14,465**	**14,411**	**15,203**	**15,335**	**16,384**	**16,449**	**16,867**
Basic	5,516	6,006	6,532	7,010	7,120	7,578	7,790	8,365	8,609	8,902
Applied	8,170	7,669	7,312	7,455	7,291	7,625	7,545	8,019	7,840	7,965
Life sciences	4,947	4,968	5,209	5,705	5,645	6,221	6,351	6,703	6,762	6,834
Psychology	235	231	247	293	292	313	321	333	340	370
Physical sciences	2,361	2,774	2,744	2,731	2,680	2,756	2,728	2,923	2,955	3,045
Environmental sciences	1,488	1,200	1,179	1,259	1,294	1,281	1,321	1,399	1,596	1,703
Mathematics and computer sciences	284	402	407	515	537	543	529	580	547	575
Engineering	3,340	3,374	3,350	3,244	3,265	3,310	3,253	3,505	3,308	3,403
Social sciences	618	418	403	412	363	407	399	435	471	469
Other sciences, n.e.c. [1]	413	307	305	306	335	371	433	506	470	468

[1] N.e.c. = Not elsewhere classified. [2] See footnote 1, table 956.
Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

No. 969. Research and Development Scientists and Engineers—Average Full-Time-Equivalent Employment and Cost, by Industry: 1975 to 1988

[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]

1972 SIC [1] code	INDUSTRY	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
(X)	EMPLOYED SCIENTISTS										
(X)	**Average FTE of scientists**										
(X)	**and engineers (1,000) [2] [3]**	**363.9**	**469.2**	**498.8**	**525.4**	**562.5**	**603.3**	**646.8**	**684.2**	**703.0**	**716.8**
28	Chemicals [4]	44.8	53.1	58.2	64.5	68.6	70.5	73.5	74.4	74.4	76.6
35	Machinery	54.3	65.7	72.6	77.8	83.3	84.4	85.7	93.1	97.4	99.1
36	Electrical equipment [5]	81.5	100.7	108.4	109.2	110.9	113.2	115.6	123.1	130.4	136.2
371	Motor vehicles	25.7	36.7	32.6	29.5	28.8	28.7	31.3	42.1	48.8	46.6
372,376	Aircraft and missiles	67.2	90.6	93.2	97.1	107.3	120.9	137.5	137.5	133.3	139.3
(X)	CONSTANT (1982) DOLLARS [6]										
(X)	**Cost per scientist or**										
(X)	**engineer ($1,000) [3] [7]**	**112.1**	**110.7**	**110.6**	**111.6**	**111.7**	**115.1**	**117.4**	**113.2**	**114.1**	**114.4**
28	Chemicals [4]	102.7	102.0	102.8	102.5	100.9	104.4	104.8	104.5	113.1	115.9
35	Machinery	99.3	104.9	99.9	103.8	104.4	115.6	128.4	(D)	(D)	(D)
36	Electrical equipment [5]	105.7	106.3	101.4	100.0	110.1	113.0	112.6	106.9	104.9	101.3
371	Motor vehicles	153.6	157.7	156.9	162.6	177.8	196.2	201.1	(D)	(D)	(D)
372,376	Aircraft and missiles	143.5	118.5	136.7	148.8	138.3	144.8	145.7	134.5	156.6	152.0

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] See footnote 1, table 956. [7] Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in two consecutive years divided into total R&D expenditures in each industry.
Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

No. 970. Scientists and Engineers Employed in Research and Development: 1970 to 1988

[**In thousands of full-time equivalent employees.** Data are estimates. Yearly averages for industry sector only. Excludes those employed by State and local government agencies. DOD=Dept. of Defense. FFRDC's=federally funded R&D centers]

SECTOR	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	**543.8**	**651.2**	**683.3**	**711.9**	**751.7**	**797.8**	**849.2**	**896.5**	**923.3**	**949.2**
Industry (excl. social scientists) [1]	375.6	469.2	498.8	525.4	562.5	603.3	646.8	684.2	703.0	716.8
Universities and colleges, total [1]	79.5	95.9	98.3	99.5	100.4	103.4	108.5	118.0	126.5	135.1
Scientists and engineers	61.3	72.7	73.9	74.5	75.5	77.3	81.1	89.1	95.2	101.8
Graduate students	18.2	23.2	24.4	25.0	24.9	26.1	27.4	28.9	31.3	33.3
Federal Government (incl. DOD)	67.5	58.6	59.2	60.0	61.3	62.1	62.9	63.3	62.3	65.8
Other nonprofit institutions [1]	21.2	27.5	27.0	27.0	27.5	29.0	31.0	31.0	31.5	31.5

[1] Includes professional R&D personnel employed at FFRDC's administered by organizations in their respective sectors.
Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990.*

No. 971. Science and Engineering Degree Recipients in 1988 and 1989—Selected Characteristics: 1990

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

DEGREE AND FIELD	Graduates 1988 and 1989	PERCENT DISTRIBUTION—1990				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.*

No. 972. Professional Scientific, Engineering, and Technical Personnel in the Federal Government, by Occupational Group: 1970 to 1989

[**In thousands, except percent.** As of **October.** Excludes health professional personnel]

OCCUPATIONAL GROUP	1970	1980	1985 [1]	1987 [1]	1988 [1 2]	1989 [1 2]	PERCENT FEMALE					
							1970	1980	1985 [1]	1987 [1]	1988 [1 2]	1989 [1 2]
Total	**180.3**	**206.9**	**238.0**	**240.0**	**217.6**	**223.3**	**6.7**	**9.5**	**13.8**	**15.4**	**13.8**	**14.7**
Scientific personnel	77.2	88.0	91.4	89.1	86.7	87.7	8.0	12.7	15.6	22.7	17.6	18.6
Physical sciences	29.8	27.6	27.6	27.1	26.5	26.6	6.4	9.5	12.5	13.9	14.4	14.8
Mathematics [3]	8.6	11.1	11.0	10.4	9.8	9.7	17.4	19.8	22.8	23.7	23.4	24.0
Life sciences	26.9	30.5	33.5	33.1	33.2	33.8	4.1	8.7	12.1	14.2	15.0	16.3
Social sciences [4]	6.6	10.5	10.1	10.1	10.4	10.2	16.2	23.3	25.1	26.3	26.4	28.8
Economics	4.3	5.9	5.9	5.6	5.5	5.5	11.1	17.4	20.6	21.3	21.5	22.1
Other	2.3	4.6	4.2	4.5	4.9	4.7	25.1	30.8	31.5	32.6	31.9	36.6
Geography [5]	3.3	4.9	5.7	4.9	3.6	4.1	8.5	14.8	17.0	18.0	19.2	19.2
Psychology	2.2	3.3	3.4	3.5	3.3	3.4	13.7	16.8	21.4	23.6	23.0	24.7
Engineering personnel	83.0	89.6	105.1	109.7	108.2	111.4	0.5	1.9	5.3	6.7	7.2	7.8
Computer specialists	20.1	29.3	41.5	41.2	22.7	24.3	21.1	23.3	31.4	34.8	31.2	32.0

[1] Excludes U.S. Post Office. [2] Not comparable with previous years. Excludes employees with less than a bachelor's degree. [3] Includes statistics. [4] Includes community planning. [5] Includes cartography and land surveying.
Source: U.S. National Science Foundation. Compiled from data supplied by the U.S. Office of Personnel Management.

No. 973. Civilian Employment of Scientists, Engineers, and Technicians, by Occupation and Major Industrial Sector: 1990

[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	**2,600.7**	**48.0**	**24.9**	**927.2**	**117.7**	**61.8**	**87.1**	**711.1**	**451.4**	**161.0**
Scientists	1,081.7	22.6	1.3	182.9	33.6	27.5	72.5	356.9	250.2	125.0
Physical scientists	199.5	19.0	0.1	59.3	2.6	2.0	0.2	61.8	43.1	11.0
Life scientists	173.5	0.2	-	23.6	1.0	1.6	0.6	64.4	66.6	7.0
Mathematical scientists	21.6	-	-	2.5	1.7	-	2.0	9.1	6.3	-
Social scientists	223.9	0.4	-	0.0	1.8	-	10.0	87.6	58.8	65.0
Systems analysts, EDP	463.2	3.1	1.2	97.4	26.6	23.8	59.7	133.9	75.4	42.0
Engineers [5]	1,519.0	25.4	23.6	744.3	84.1	34.4	14.6	354.2	201.2	36.0
Civil engineers	198.0	1.0	8.9	9.4	7.4	0.4	1.1	79.0	83.6	7.0
Electrical/electronics	426.2	1.1	4.5	196.7	40.5	18.8	0.9	117.3	40.4	6.0
Mechanical engineers	233.3	1.7	4.7	141.6	5.8	5.4	0.9	54.0	14.3	5.0
Engineering and science technicians	**1,326.4**	**18.0**	**24.6**	**481.9**	**77.0**	**99.6**	**7.1**	**412.3**	**173.8**	**24.0**
Electrical/electronics technicians	363.0	0.8	5.0	145.6	32.0	78.8	1.6	64.7	29.6	5.0
Engineering technicians	391.8	5.5	5.4	137.5	24.0	9.1	1.6	105.2	97.6	5.0
Drafters	325.2	4.1	14.1	106.4	17.4	7.6	1.7	148.0	13.8	10.0
Science technicians	246.4	7.6	0.0	92.3	3.8	4.1	2.3	94.3	32.8	4.0
Surveyors	**108.0**	**2.7**	**2.8**	**-**	**2.9**	**-**	**0.5**	**68.2**	**24.3**	**6.0**
Computer programmers	**564.7**	**3.2**	**2.1**	**99.7**	**26.6**	**56.3**	**77.4**	**233.6**	**50.4**	**15.0**

- Represents or rounds to zero. [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 1991. (Data collected biennially.)

No. 974. Doctoral Scientists and Engineers—Selected Characteristics: 1975 to 1989

[In thousands]

CHARACTERISTIC	1975	1985	1989		CHARACTERISTIC	1975	1985	1989	
			Number	Employed				Number	Employed
Total	**270.4**	**424.6**	**485.2**	**448.7**	Women	25.6	64.0	84.5	77.2
Field:					Race:				
Life scientists	68.3	109.9	127.0	115.8	White	245.4	377.9	432.0	397.2
Physical scientists	58.5	73.1	78.3	70.2	Black	2.6	5.9	7.6	7.2
Psychologists	31.3	54.9	64.8	60.6	Asian/Pacific Islander	13.9	35.5	42.6	41.1
Social scientists	38.6	68.5	76.8	70.0	Other and not reported	8.4	5.2	2.9	3.2
Economists	12.6	19.1	20.5	18.6	Employment status:				
Other social scientists	26.0	49.4	56.3	51.4	Full-time employed	240.6	371.9	411.0	411.0
Engineers	43.5	67.9	78.4	74.8	Part-time employed	7.3	16.7	22.9	22.9
Mathematical scientists	14.2	17.5	18.8	17.6	Postdoctorates	8.2	11.8	14.8	14.8
Computer specialists	3.5	15.0	19.9	19.8	Unemployed/seeking	2.5	3.4	3.8	(X)
Environmental scientists	12.5	18.0	21.1	19.8	Unemployed/not seeking	2.4	3.9	4.2	(X)
Sex:					Retired/not employed	8.7	16.2	27.4	(X)
Men	244.9	360.6	400.6	371.5	Other and not reported	0.9	0.8	1.1	(X)

X Not applicable.

Source: U.S. National Science Foundation, *Characteristics of Doctoral Scientists and Engineers in the United States*, biennial series.

No. 975. Graduate Science/Engineering Students in Doctorate-Granting Institutions of Higher Education, by Sex, Citizenship, and Enrollment Status: 1975 to 1990

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

FIELD OF SCIENCE OR ENGINEERING	TOTAL (1,000)				PERCENT—								
					Female			Foreign		Part-time			
	1975	1980	1989	1990	1980	1989	1990	1989	1990	1975	1980	1989	1990
Total, all surveyed fields	**291.8**	**322.7**	**384.0**	**398.4**	**32.6**	**36.7**	**37.5**	**25.2**	**25.2**	**29.2**	**30.9**	**30.5**	**30.9**
Science/engineering	268.9	286.3	338.6	350.0	27.7	31.5	32.2	27.5	27.6	29.3	29.9	28.2	28.6
Engineering, total	65.2	69.9	96.9	100.3	8.7	13.2	13.6	36.1	36.0	43.0	40.0	35.5	36.0
Sciences, total	203.7	216.4	241.7	249.8	33.9	38.8	39.6	24.0	24.1	24.9	26.7	25.3	25.6
Physical sciences	24.9	25.4	31.8	32.5	16.6	22.9	23.3	35.8	36.9	13.9	12.3	10.6	11.3
Environmental	11.1	12.8	12.7	12.9	22.7	27.9	29.1	20.1	20.4	18.2	19.3	23.4	23.5
Mathematical sciences	14.7	13.6	16.9	17.3	25.4	30.1	30.4	37.6	35.2	30.8	31.3	23.0	23.7
Computer sciences	7.4	11.4	26.5	27.7	21.8	23.4	22.8	31.8	33.1	43.5	48.0	46.9	46.9
Agricultural sciences	10.1	11.6	10.4	10.4	23.5	28.0	29.5	26.3	27.3	15.5	17.2	17.5	18.1
Biological sciences	41.7	42.8	45.8	47.1	38.1	44.9	45.4	23.2	24.2	15.7	16.2	13.9	14.7
Psychology	27.8	30.0	33.6	34.7	52.2	63.7	65.5	4.4	4.6	27.2	26.0	26.5	28.1
Social sciences	66.1	69.0	64.0	67.2	37.1	41.9	43.0	22.7	21.7	33.1	37.3	33.4	32.1
Health fields, total	22.9	36.4	45.4	48.4	71.0	75.8	76.2	8.2	8.5	28.0	38.8	47.5	47.8

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

No. 976. Doctorates Conferred, by Recipients' Characteristics, 1980 to 1990, and by Selected Science and Engineering Fields, 1990

[In percent, except as indicated]

CHARACTERISTIC	ALL FIELDS		1990									
	1980	1985	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**	**31,297**	**36,027**	**4,892**	**3,494**	**769**	**892**	**704**	**4,333**	**1,176**	**3,146**	**3,267**
Male	69.7	65.7	22,966	4,478	2,843	620	734	594	2,727	930	2,112	1,361
Female	30.3	34.3	13,061	414	651	149	158	110	1,606	246	1,034	1,906
Median age [5]	32.2	33.3	33.9	31.2	29.8	32.4	30.9	31.7	31.4	33.6	34.4	33.9
CITIZENSHIP [6]												
Total conferred (number)	30,156	29,921	33,588	4,494	3,265	715	829	659	4,109	1,103	2,913	2,975
U.S. citizen	83.6	78.1	24,190	1,927	2,077	521	369	343	3,104	622	1,865	2,790
Foreign citizen	16.4	21.9	9,398	2,567	1,188	194	460	316	1,005	481	1,048	185
RACE/ETHNICITY [7]												
Total conferred (number)	26,512	24,693	25,844	2,303	2,244	544	416	396	3,288	679	2,047	2,859
White [8]	84.7	86.2	22,345	1,818	1,929	502	367	334	2,908	597	1,721	2,551
Black [8]	4.2	4.2	972	40	27	2	4	1	41	15	100	110
Asian/Pacific [8]	4.2	4.3	1,260	345	161	17	25	46	193	30	100	51
Indian/Alaskan [8]	0.3	0.4	93	4	3	1	1	-	3	4	6	18
Hispanic	1.8	2.6	813	53	70	13	10	5	88	23	86	103
Other/unknown	4.9	2.2	361	43	54	9	9	10	55	10	34	26

- Represents or rounds to zero. [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. [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.*

No. 977. Nobel Prize Laureates in Chemistry, Physics, and Physiology/Medicine—Selected Countries: 1901 to 1990

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

COUNTRY	1901-1990				1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1990
	Total	Physics	Chemistry	Physiology/Medicine						
Total	**406**	**140**	**115**	**151**	**52**	**41**	**49**	**74**	**92**	**98**
United States	162	57	36	69	3	3	14	38	41	63
United Kingdom	69	21	24	24	7	8	11	14	20	9
West Germany [1]	57	17	28	12	15	12	11	4	8	7
France	22	8	7	7	10	3	2	-	5	2
Soviet Union	10	7	1	2	2	-	-	4	3	1
Japan	4	3	1	-	-	-	-	1	2	1
Other countries	82	27	18	37	15	15	11	13	13	15

- Represents zero. [1] Includes East Germany before 1946.

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

No. 978. 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	1979	7,244	4,030	55.6	3,036	41.9	178
1965	6,956	5,138	73.9	1,574	22.6	244	1980	8,689	4,680	53.9	3,848	44.3	160
1966	6,970	5,065	72.7	1,689	24.2	217	1981	9,978	4,992	50.0	4,828	48.4	158
1969	5,976	3,822	64.0	2,013	33.7	141	1982	12,441	5,528	44.4	6,679	53.7	234
1970	5,341	3,547	66.4	1,678	31.4	115	1983	15,589	6,328	40.6	9,019	57.9	242
1971	4,741	3,101	65.4	1,512	31.9	127	1984	17,136	6,648	38.8	10,195	59.5	293
1972	4,575	3,071	67.1	1,407	30.8	97	1985	20,167	6,925	34.3	12,768	63.3	474
1973	4,825	3,093	64.1	1,623	33.6	109	1986	21,659	7,165	33.1	14,126	65.2	368
1974	4,640	2,759	59.4	1,766	38.1	116	1987	26,448	[3]9,809	37.1	16,287	61.6	352
1975	4,914	2,915	59.3	1,892	38.5	107	1988	26,607	8,302	31.2	17,679	66.4	626
1976 [2]	6,660	4,075	61.2	2,444	36.7	142	1989	28,443	10,098	35.5	17,906	63.0	440
1977	5,983	3,440	57.5	2,412	40.3	131	1990	31,854	12,142	38.1	19,382	60.8	330
1978	6,518	3,623	55.6	2,738	42.0	157	1991 [4]	34,419	13,603	39.5	20,443	59.4	373

[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. [4] Estimated.

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. 979. Space Vehicle Systems—Net Sales and Backlog Orders: 1965 to 1990

[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	1984	5,225	3,019	2,206	4,624	3,099	1,525
1970	1,956	1,025	931	1,184	786	398	1985	6,300	4,241	2,059	6,707	4,941	1,766
1975	2,119	1,096	1,023	1,304	1,019	285	1986	6,304	4,579	[1]1,725	8,063	6,028	[1]2,035
1980	3,483	1,461	2,022	1,814	951	863	1987	8,051	5,248	[1]2,803	12,393	9,460	[1]2,933
1981	3,856	1,736	2,120	3,174	2,164	1,010	1988	8,622	6,190	[1]2,432	10,838	7,880	[1]2,958
1982	4,749	2,606	2,143	4,337	2,403	1,934	1989	9,758	6,457	[1]3,301	13,356	9,192	[1]4,164
1983	4,940	2,420	2,520	4,865	2,733	2,132	1990	9,663	6,288	[1]3,375	13,258	8,719	[1]4,539

[1] Includes data for non-military missile systems and parts.
Source: U.S. Bureau of the Census, *Current Industrial Reports*, MA-37D, *Aerospace Industry (Orders, Sales, and Backlog)*.

No. 980. National Aeronautics and Space Administration—Budget Summary: 1989 to 1991

[In millions of dollars]

ITEM	1989	1990	1991
Appropriations, total	**10,898**	**12,296**	**15,078**
Research and development	**4,267**	**5,221**	**6,024**
Space station	885	1,724	1,875
Space transportation capability [1]	660	546	589
Space lab	88	119	129
Upper stages	132	80	76
Engineering and technical base	161	182	209
Commercial programs	44	56	87
Aeronautics and space technology	727	765	869
Space research and technology	274	274	280
Aeronautical research and technology	385	434	495
Transatmospheric research and technology	69	58	94
Tracking and data advanced systems	19	19	20
Safety, reliability, and quality assurance	22	22	33
University space science and technology program	(X)	37	54
Space science and applications	1,774	1,965	2,395
Physics and astronomy	712	847	954
Planetary exploration	406	381	470
Life sciences	78	105	136
Space applications	578	632	835
Operating account	104	94	102
Adjustment	32	-7	-
Space flight, control and data communication programs	**4,464**	**4,555**	**6,334**
Space flight	3,721	3,818	4,287
Shuttle production/operation	1,117	1,190	1,310
Space transportation operations	2,604	2,628	2,977
Space tracking and data systems	813	898	974
Operating account	14	9	10
Adjustment	-84	-171	1,063
Research and program management	**1,862**	**1,923**	**2,212**
Construction of facilities	**305**	**588**	**498**
Trust funds	1	1	1
Inspector General	**(X)**	**8**	**9**

- Represents or rounds to zero. X Not applicable. [1] Includes other items not shown separately.
Source: U.S. National Aeronautics and Space Administration, *NASA News*.

No. 981. NASA Financial Summary: 1970 to 1991

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

YEAR	Appropriations	Direct obligations	OUTLAYS					
			Total	R&D	Communications [1]	Facility construction	Research and program management	Personnel (number)
1970	3,749	3,859	3,753	2,992	-	54	707	32,548
1975	3,231	3,266	3,267	2,420	-	85	761	25,638
1980	5,243	5,098	4,852	3,701	-	140	1,010	23,470
1984	7,243	7,135	7,048	2,792	2,915	109	1,232	21,870
1985	7,552	7,638	7,318	2,118	3,707	170	1,323	22,316
1986	7,764	7,463	7,404	2,615	3,267	189	1,332	21,960
1987	10,621	8,604	7,591	2,436	3,597	149	1,409	22,646
1988	9,002	9,915	9,092	2,916	4,362	166	1,648	22,823
1989 [2]	10,898	11,316	11,052	3,922	5,030	190	1,908	23,893
1990 [2]	12,296	13,069	12,429	5,094	5,117	218	1,991	23,625
1991 [2]	15,078	13,974	13,878	5,765	5,590	326	2,185	(NA)

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

Source: National Aeronautics and Space Administration, *NASA News*.

No. 982. Space Shuttle System Expenditures by NASA in Constant (1982) Dollars: 1973 to 1991

[**In millions of dollars. For year ending Sept. 30.** These data cannot be used alone to estimate the total shuttle cost. Only operating expenditures correspond to an annual cost in the economic sense, and even those estimates require adjustment for the three-year period over which the cost of a shuttle flight is incurred and reimbursements are received. For details, see source]

YEAR	Total	D.D.T. and E. [1]	Construction	Production	Operations	YEAR	Total	D.D.T. and E. [1]	Construction	Production	Operations
1973	58	-	58	-	-	1983	3,014	-	26	1,635	1,354
1974	325	216	109	-	-	1984	3,127	-	73	690	2,364
1975	1,543	1,407	136	-	-	1985	2,636	-	42	1,376	1,218
1976	2,619	2,541	79	-	-	1986	2,606	-	-	1,184	1,422
1977	2,258	2,089	60	109	-	1987	4,165	-	-	2,611	1,553
1978	2,062	1,898	103	61	-	1988	2,538	-	-	948	1,590
1979	2,251	1,713	42	496	-	1989	3,084	-	-	943	2,141
1980	2,751	1,339	42	907	463	1990	2,996	-	-	968	2,028
1981	2,724	1,041	13	1,093	578	1991	2,989	-	-	938	2,051
1982	2,932	894	20	1,283	735						

- Represents or rounds to zero. [1] Design, development, testing, and evaluation.

Source: U.S. Congress, Congressional Budget Office, unpublished data.

No. 983. Space Shuttle Flights—Summary: 1981 to 1992

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

- Represents zero.

Source: U.S. National Aeronautics and Space Administration, *Payload Flight Assignments NASA Mixed Fleets,* monthly, and "Upcoming Shuttle Flights," November 1991.

No. 984. World-Wide Successful Space Launches: 1957 to 1990

[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	1985	1986	1987	1988	1989	1990
Total	**3,308**	**289**	**586**	**555**	**607**	**605**	**550**	**120**	**103**	**110**	**116**	**101**	**116**
Soviet Union	2,255	82	302	405	461	483	447	97	91	95	90	74	75
United States	932	207	279	139	126	93	61	17	6	8	12	18	27
Japan	41	-	-	5	10	12	11	2	2	3	2	2	3
ESA [1]	35	-	-	-	1	8	21	3	2	2	7	7	5
China: Mainland	28	-	-	2	6	6	9	1	2	2	4	-	5
France	10	-	4	3	3	-	-	-	-	-	-	-	-
India	3	-	-	-	-	3	-	-	-	-	-	-	-
Israel	2	-	-	-	-	-	1	-	-	-	1	-	1
Australia	1	-	1	-	-	-	-	-	-	-	-	-	-
United Kingdom	1	-	-	1	-	-	-	-	-	-	-	-	-

- Represents zero. [1] European Space Agency.

Source: Library of Congress, Congressional Research Service, Science Policy Research Division, *Space Activities of the United States, Soviet Union and Other Launching Countries/Organization: 1957-1990,* July 1991.

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 $954 billion in 1990

State gasoline tax rates for 1991—
Lowest rate, 7.5 percent in Georgia
Highest rate, 26 percent in Rhode Island

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; *Bus Facts,* issued annually by the American Bus Association, 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 Motor Vehicle Manufacturers Association of the United States, Inc., 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 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.—Federal law provides that Federal funds be matched in varying proportions with State funds for the costs of planning, engineering, right-of-way acquisition, and construction of highways. Other costs, such as maintenance and policing, are borne entirely by the States and local agencies.

Effective July 1, 1976, a uniform road classification system was implemented which shortened the mileage of the highway system and redefined the three main systems of Federal-aid routes. The Federal-aid primary system is comprised of a network of main roads important to interstate, statewide, and regional travel. The system consists of main rural roads and their extensions into or through urban areas. The Federal-aid secondary system consists of rural roads of a more local nature, such as those which connect county seats and the larger population centers not served by the primary system. The Federal-aid urban system is located in urban places of 5,000 or more persons and consists of major urban roads and streets, except those on the primary system.

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. 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. 985. Passenger and Freight Transportation Outlays, by Type of Transport: 1970 to 1990

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

TYPE OF TRANSPORT	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total outlays [1]	**195.6**	**297.8**	**453.2**	**492.4**	**540.9**	**595.8**	**588.7**	**638.7**	**706.0**	**755.6**	**769.9**	**802.5**	**865.1**	**906.3**	**954.3**
Passenger, total	114.9	187.4	287.5	307.6	336.9	373.5	377.7	409.0	455.7	493.5	502.6	520.8	566.8	592.6	621.6
Private transportation	99.6	161.3	249.9	263.9	284.8	317.4	320.6	347.2	387.0	419.3	426.6	440.8	473.9	496.7	520.7
Automobiles [2]	97.0	156.6	244.1	256.8	276.7	308.0	312.4	339.8	378.8	411.0	418.4	432.1	464.4	487.3	510.8
New and used cars	32.1	46.0	80.4	77.1	73.3	82.6	85.7	105.6	125.7	139.3	156.7	149.2	165.6	161.6	164.6
Tires, tubes, accessories	7.1	12.4	17.2	19.8	22.2	24.6	24.9	26.9	27.5	29.4	31.3	33.2	36.8	38.2	40.1
Gasoline and oil	29.9	53.9	68.3	78.3	99.7	111.3	106.3	105.9	106.7	108.9	86.9	90.6	90.4	98.6	110.4
Insurance less claims	4.4	4.5	10.2	10.3	11.5	10.8	11.2	12.5	12.0	11.6	14.8	18.2	19.8	20.0	21.4
Interest on debt	4.7	7.3	13.0	15.4	17.5	21.0	21.8	19.6	25.1	26.7	26.5	29.1	33.7	36.7	35.7
Registration and operator's permit fees	1.9	2.3	3.0	3.1	3.3	3.5	3.8	4.1	4.5	5.3	5.6	5.9	6.2	6.6	6.9
Repair, greasing, washing, parking, tolls [3]	13.2	22.1	33.0	36.7	38.0	41.5	43.5	45.7	50.4	56.8	60.9	66.4	73.5	81.9	90.4
Air	2.6	4.7	5.8	7.1	8.1	9.4	8.2	7.4	8.2	8.3	8.1	8.7	9.4	9.5	9.9
For-hire transportation	15.3	26.2	37.6	43.3	52.2	56.1	57.1	61.8	68.7	74.2	76.0	82.3	92.9	95.8	100.9
Local [4]	5.4	10.5	14.2	15.4	18.5	20.4	21.3	22.3	23.6	27.7	29.0	30.5	33.1	32.9	33.1
Bus and transit [5]	1.8	4.7	6.7	7.5	9.2	10.1	10.3	11.4	11.7	15.1	15.1	15.8	17.4	15.7	15.6
School bus	1.2	2.2	2.7	3.2	3.8	4.7	5.0	5.2	5.8	6.1	6.4	6.8	7.1	7.3	7.5
Taxi	2.1	3.4	4.4	4.5	5.2	5.2	5.6	5.3	5.5	5.6	6.0	6.4	6.9	7.1	7.5
Intercity	7.7	12.9	19.6	23.3	28.4	30.6	30.5	33.5	38.5	39.5	39.8	42.6	48.6	50.8	53.3
Air	6.6	11.2	17.1	20.4	25.1	26.8	26.8	29.7	33.6	35.9	36.4	39.3	44.9	46.9	49.5
Rail [6]	0.3	0.6	1.3	1.4	1.6	1.9	1.8	1.8	1.8	1.6	1.5	1.5	1.6	1.7	1.7
Bus	0.8	1.0	1.2	1.4	1.7	1.8	1.9	2.0	2.0	2.0	1.9	1.8	2.0	2.2	2.0
International	2.2	2.7	3.8	4.6	5.3	5.3	5.4	6.0	6.6	7.0	7.1	9.2	11.2	12.1	14.5
Freight, total [4]	83.8	115.5	172.9	192.9	212.1	234.6	220.9	240.5	262.1	272.3	279.6	292.6	311.5	330.1	349.7
Highway	62.5	84.8	127.2	142.7	155.4	173.3	162.7	180.5	195.6	208.6	214.1	224.7	239.2	257.0	272.6
Truck, intercity	33.6	47.4	77.9	90.2	94.6	100.2	99.9	111.1	120.7	126.2	129.1	136.3	143.2	151.3	160.6
Truck, local	28.8	37.3	49.1	52.3	60.5	72.8	62.5	69.2	74.7	82.2	84.8	89.6	95.8	105.5	111.8
Rail	11.9	16.5	21.9	24.8	27.7	30.5	27.1	27.3	30.5	29.2	27.8	28.4	29.6	29.9	30.4
Water	5.1	7.9	12.9	13.4	14.8	15.7	15.6	16.2	17.8	18.7	19.0	19.1	20.2	19.8	20.7
Oil pipeline	1.4	2.2	5.5	6.2	7.1	7.4	7.9	8.3	8.7	8.9	8.6	8.5	8.6	7.8	8.4
Air carrier	1.2	1.8	2.7	2.8	4.0	4.3	4.4	5.0	6.0	6.8	7.6	8.7	10.2	11.9	13.7

[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 Foundation for Transportation, Westport, CT, *Transportation in America*, May 1990, with periodic supplements, (copyright).

No. 986. Employment and Earnings in Transportation, by Industry: 1980 to 1991

[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]

SIC [1] code	INDUSTRY	1980	1984	1985	1986	1987	1988	1989	1990	1991
(X)	NUMBER (1,000)									
(X)	**Total transportation**	**2,960**	**2,916**	**3,001**	**3,056**	**3,163**	**3,312**	**3,428**	**3,554**	**3,562**
40	Railroads	532	376	359	332	309	298	293	280	269
4011	Class I railroads	482	345	323	294	271	259	252	241	231
41	Local and interurban passengers	265	271	278	287	296	312	329	343	361
42	Trucking and warehousing	1,280	1,318	1,363	1,396	1,468	1,552	1,600	1,638	1,638
44	Water transportation	211	190	185	175	173	172	173	174	174
45	Air transportation	453	489	522	567	603	646	684	751	750
46	Pipelines, exc. natural gas	21	19	19	18	19	19	19	19	19
47	Transportation services	198	253	276	282	296	313	331	350	352
(X)	AVERAGE WEEKLY EARNINGS (dol.)									
4011	Class I railroads	427	573	595	608	627	674	693	727	707
41	Local and interurban passengers	217	258	261	274	281	293	305	307	314
42	Trucking and warehousing	358	407	405	408	414	419	437	451	456
46	Pipelines, exc. natural gas	441	597	629	637	644	662	671	711	733

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

Source: U.S. Bureau of Labor Statistics, Bulletin 2370 and, Supplement to Employment and Earnings, July 1991, *Employment and Earnings*, monthly.

No. 987. Volume of Domestic Intercity Freight and Passenger Traffic, by Type of Transport: 1970 to 1990

[**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	1975	1980	1985	1989	1990	1970	1975	1980	1985	1989	1990
Freight traffic, total	**1,936**	**2,066**	**2,487**	**2,458**	**2,807**	**2,855**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Railroads	771	759	932	895	1,048	1,071	39.8	36.7	37.5	36.4	37.3	37.5
Truck:												
ICC truck	167	200	242	250	302	311	8.6	9.7	9.7	10.2	10.8	10.9
Non-ICC truck	245	254	313	360	414	424	12.7	12.3	12.6	14.7	14.8	14.9
Water:												
Rivers/canals	205	243	311	306	363	377	10.6	11.8	12.5	12.5	12.9	13.2
Great Lakes	114	99	96	76	86	85	5.9	4.8	3.9	3.1	3.1	3.0
Oil pipelines	431	507	588	564	584	577	22.3	24.5	23.6	23.0	20.8	20.2
Domestic airways [1]	3	4	5	7	10	11	0.2	0.2	0.2	0.3	0.4	0.4
Passenger traffic, total	**1,181**	**1,354**	**1,557**	**1,744**	**2,012**	**2,054**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Private automobiles	1,026	1,171	1,300	1,418	1,627	1,660	86.9	86.5	83.5	81.3	80.9	80.8
Domestic airways [2]	119	148	219	291	347	358	10.1	10.9	14.1	16.7	17.3	17.4
Bus [3]	25	25	27	24	24	23	2.1	1.9	1.7	1.4	1.2	1.1
Railroads [4]	11	10	11	11	13	13	0.9	0.7	0.7	0.6	0.7	0.6

[1] Revenue service only for scheduled and non-scheduled 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 Foundation for Transportation, Westport, CT, *Transportation in America*, May 1990, with periodic supplements (copyright).

No. 988. Passenger Transportation Arrangement: 1988 to 1990

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

SOURCE OF RECEIPTS	1988	1989	1990	OPERATING EXPENSES	1988	1989	1990
Receipts, total [1]	**8,082**	**8,945**	**9,453**	**Expenses, total [1]**	**7,297**	**8,017**	**8594**
Air carriers	4,622	5,135	5,369	Payroll, annual	2,963	3,239	3,507
Water carriers	342	374	422	Employer contributions [2]	372	440	478
Hotels and motels	458	531	556	Lease and rental payments	748	792	828
Motor coaches	318	321	342	Advertising and promotion	473	528	604
Railroads	47	56	56	Taxes and licenses	126	141	145
Rental cars	148	160	173	Utilities	297	336	373
Package tours	1,664	1,817	1,971	Depreciation	293	287	298
Other	483	551	563	Office Supplies	251	284	283
				Repair Services	95	93	106

[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. 989. Transportation Accidents, Deaths, and Injuries: 1970 to 1990

[For related data, see also table 1008, and 1032]

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:													
1970	16,013	16,000	8,095	(NA)	55	(NA)	(NA)	4,712	3,803	1,019	351	2,582	(NA)
1975	16,524	16,500	8,041	237	37	48	152	3,995	6,308	1,373	254	3,310	10,951
1980	17,925	17,900	8,451	228	19	38	171	3,590	5,513	1,996	219	4,624	15,737
1985	19,348	19,300	3,275	195	22	21	152	2,737	6,237	331	183	3,439	6,014
1989	12,832	12,800	2,898	160	30	17	113	2,201	6,063	257	161	3,270	7,545
1990	11,531	11,500	2,879	144	26	14	104	2,138	6,411	199	177	1,227	[12]8,687
Deaths:													
1970	54.8	52.6	785	(NA)	146	(NA)	(NA)	1,310	1,418	22	4	178	(NA)
1975	48.2	44.5	575	221	124	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	951	1,116	26	5	131	8
1989	49.1	45.6	523	397	278	31	88	757	896	36	3	79	8
1990	47.9	44.5	599	83	39	4	40	736	865	5	3	14	4
Injuries:													
1970	2,024	2,000	21,327	(NA)	(NA)	(NA)	(NA)	(NA)	780	347	21	105	(NA)
1975	1,858	1,800	54,306	109	71	6	32	728	2,136	819	17	97	648
1980	2,066	2,000	62,246	74	17	14	43	675	2,650	310	12	176	626
1985	1,705	1,700	31,592	89	30	16	43	517	2,757	106	18	187	253
1989	1,734	1,700	23,847	61	23	4	34	423	3,635	78	38	187	329
1990	1,734	1,700	22,736	83	40	11	32	424	3,822	67	7	25	390

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 1008. 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 non-scheduled (charter) air carriers. Represents serious injuries. [4] All scheduled service. Represents serious injuries. [5] All non-scheduled 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. [12] Preliminary.

Source: U.S. Dept. of Transportation, Transportation Systems Center, Cambridge, MA, *Transportation Safety Information Report*, annual.

No. 990. Federal Outlays for Transportation, by Function: 1970 to 1991

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

FUNCTION	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991, est.
Total outlays	**7,008**	**10,918**	**21,329**	**21,334**	**23,669**	**25,838**	**28,117**	**26,222**	**27,272**	**27,608**	**29,485**	**31,099**
Ground transportation	4,678	7,027	15,274	14,265	16,158	17,606	18,725	17,150	18,148	17,946	18,954	19,545
Air transportation	1,408	2,387	3,723	4,000	4,415	4,895	5,287	5,520	5,897	6,622	7,234	8,184
Water transportation	895	1,430	2,229	2,969	3,010	3,201	3,964	3,461	3,111	2,916	3,151	3,148
Other transportation	26	74	104	99	85	137	140	91	116	124	146	223

Source: U.S. Office of Management and Budget, *Budget of the United States Government*, annual.

No. 991. Expedited Domestic Package Express Volume and Growth: 1977 and 1988

[Year ended December 31. Represents the activity of domestic package express companies. Companies such as Federal Express Inc. and United Parcel Service Inc. Also includes package express services offered by trucking companies, the postal service, passenger airlines, freight forwarders, couriers, Amtrak, and bus companies. The Department of Transportation defines package express as the transpotation of parcels of 150 pounds or less, with overnight or second-day delivery]

EXPEDITED PACKAGE EXPRESS	Unit	1977	1988	Percent change 1977-88	Average annual percent change, 1977-88
Expedited package express, total:					
Shipments	Millions	628	3,176	406.6	40.6
Weight	Mil. lbs	9,409	37,258	296.0	29.6
Revenue	Mil. dol	2,487	20,771	741.9	74.2
Air: Shipments	Millions	81	544	571.8	57.2
Weight	Mil. lbs	4,485	8,914	98.7	9.9
Revenue	Mil. dol	1,384	11,403	724.1	72.4
Surface express: Shipments	Millions	547	2,632	381.0	38.1
Weight	Mil. lbs	4,924	28,344	475.6	47.6
Revenue	Mil. dol	1,083	9,368	764.8	76.5

Source: U.S. Department of Commerce, *Journal of Commerce*.

No. 992. Highway Mileage—Urban and Rural, by Type and Control, and Federal-Aid Highway System: 1970 to 1990

[**In thousands, except percent. As of Dec. 31.** Beginning 1980, data for urban and rural mileage are not comparable to prior years 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	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
Total mileage [1]	**3,730**	**3,838**	**[2]3,955**	**3,880**	**3,892**	**3,862**	**3,880**	**3,874**	**3,871**	**3,877**	**3,380**
Urban mileage [3]	561	639	624	662	674	691	701	710	739	754	757
Under State control	74	84	79	100	103	111	94	95	96	97	96
Under local control	487	555	543	562	571	578	606	614	642	656	661
Rural mileage	3,169	3,199	[2]3,331	3,217	3,218	3,171	3,178	3,164	3,132	3,123	3,123
Percent surfaced [4]	76.1	77.6	77.5	86.0	87.5	88.1	88.4	88.4	88.1	88.4	88.6
Under State control	707	711	702	817	818	773	704	704	704	706	703
Under local control	2,275	2,261	2,270	2,138	2,134	2,173	2,243	2,249	2,244	2,238	2,242
Under Federal control	188	227	262	262	266	225	231	212	183	178	178
Fed.-aid highway system: [5]											
Primary (urban and rural)	272	266	300	300	300	301	303	302	304	304	305
Interstate	32	37	41	43	43	44	44	44	45	45	45
Urban	(X)	65	124	137	140	144	146	148	147	148	148
Secondary	647	643	398	397	398	398	398	398	400	400	400

X Not applicable. [1] Prior to 1980, includes public and nonpublic road mileage; beginning 1983, 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] Prior to 1980, represents municipal mileage; see text, section 21. [4] Covers soil-surfaced roads and roads with slag, gravel, stone, bituminous, or concrete surfaces. [5] For definition, see text, section 21. Beginning 1980, data represent actual mileage open to traffic rather than total highway miles carrying interstate traffic.

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

No. 993. Highway Mileage—Urban, Rural, and Federal-Aid Highway System: 1990

[**As of Dec. 31.** For definition of urban, rural, and Federal-aid highway system roads, see text, section 21]

STATE	Urban	Rural	FEDERAL-AID HIGHWAY SYSTEM [1]			
			Total		Urban	Secondary
			Primary	Interstate [2]		
U.S.	757,363	3,122,788	305,347	45,074	147,680	399,974
AL	16,854	73,818	7,651	889	2,792	11,581
AK	1,549	11,936	2,108	1,089	238	1,816
AZ	14,667	36,945	5,276	1,169	1,833	3,256
AR	7,677	69,408	5,757	542	1,160	7,374
CA	73,922	89,652	13,477	2,399	17,791	11,176
CO	11,272	66,408	5,247	942	2,394	3,410
CT	10,905	9,086	1,611	341	2,955	902
DE	1,615	3,829	484	41	321	605
DC	1,102	-	190	12	233	-
FL	48,034	60,051	9,436	1,426	4,603	4,396
GA	21,728	87,873	11,367	1,245	3,982	14,011
HI	1,512	2,587	554	43	322	435
ID	2,429	60,006	3,362	605	725	4,057
IL	32,003	103,941	11,838	1,961	6,645	12,922
IN	17,868	74,040	6,153	1,148	4,714	9,740
IA	8,786	103,755	9,535	782	2,443	13,566
KS	9,105	124,473	8,922	872	1,651	22,655
KY	7,692	61,976	4,609	763	2,008	7,172
LA	12,290	46,330	3,976	844	2,167	7,349
ME	2,494	19,895	2,376	366	706	2,742
MD	12,290	16,462	2,605	400	2,155	1,911
MA	20,846	13,230	2,777	567	5,905	2,007
MI	26,676	90,773	8,454	1,227	5,466	17,059
MN	14,208	115,189	10,208	905	2,256	16,604
MS	7,356	65,164	6,461	684	1,719	11,695
MO	15,039	105,488	8,197	1,177	2,483	18,093
MT	2,271	69,116	6,645	1,191	342	4,744
NE	4,952	87,451	7,675	481	1,064	11,458
NV	3,084	42,440	2,401	545	557	2,315
NH	2,433	12,403	1,357	224	726	1,232
NJ	22,502	11,750	1,875	396	5,388	1,687
NM	5,498	49,238	4,888	1,000	573	3,640
NY	37,913	73,329	9,946	1,500	8,733	6,293
NC	19,245	75,445	5,381	937	2,995	10,325
ND	1,811	84,706	6,110	570	501	10,628
OH	31,428	82,172	8,161	1,572	7,866	11,793
OK	12,083	99,682	6,237	930	2,995	11,809
OR	8,410	86,559	5,773	727	2,056	7,817
PA	28,344	88,164	11,482	1,569	7,053	7,980
RI	4,588	1,523	504	70	930	201
SC	9,343	54,703	6,473	791	1,168	8,534
SD	1,734	72,962	6,477	678	390	11,094
TN	15,340	69,299	7,227	1,062	3,168	5,456
TX	88,776	217,175	20,003	3,229	8,198	32,638
UT	5,575	37,669	3,553	938	927	2,706
VT	1,180	12,941	1,444	320	349	1,913
VA	15,251	52,449	6,489	1,076	3,450	10,200
WA	16,260	65,039	5,782	759	4,236	7,320
WV	3,076	31,516	2,964	517	808	6,351
WI	14,395	95,481	9,966	640	2,982	13,040
WY	1,952	37,261	3903	913	558	2,266

- Represents zero. [1] Highway mileage open to traffic. [2] Although the interstate system is part of the Federal-aid primary system, its mileage is shown separately.

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

No. 994. Highway Pavement Condition, by Type of Road System: 1980 to 1990

[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	1985	1989	1990	1980	1985	1989	1990	1980	1985	1989	1990
URBAN AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4) [1]	6	7	7	6	7	5	4	4	9	7	14	13
PSR 2.0-3.4 (2.5-3.4) [1]	26	38	36	35	42	53	54	52	50	58	54	55
PSR 3.5-5.0	68	55	57	59	51	42	42	44	41	35	32	32
RURAL AREAS												
Percent of road mileage rated—												
PSR 0.1-1.9 (0.1-2.4) [1]	5	7	7	6	6	4	3	2	16	10	9	8
PSR 2.0-3.4 (2.5-3.4) [1]	26	33	35	35	46	51	49	48	55	59	55	54
PSR 3.5-5.0	69	60	58	59	48	45	48	50	29	31	36	38

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

No. 995. Receipts and Disbursements for Highways, by Type: 1970 to 1991

[**In millions of dollars.** Data compiled from reports of State and local authorities. For Federal highway trust fund receipts, disbursements, and balances, see table 493. State data include District of Columbia]

TYPE	1970	1980	1985	1988	1989	1990, prel.	1991, proj.		
							Total [1]	Federal	State
Total receipts	**21,747**	**39,715**	**61,506**	**69,002**	**72,775**	**73,919**	**79,995**	**17,215**	**40,635**
Current income	19,861	37,604	54,957	64,593	67,623	68,547	74,577	17,215	37,437
Imposts on highway users [2]	15,311	22,559	35,599	41,588	44,079	44,172	48,994	15,286	32,163
Other taxes and fees	3,732	11,808	15,127	18,158	17,987	18,438	19,714	873	3,151
Investment income, other receipts	818	3,237	4,231	4,847	5,557	5,937	5,869	1,056	2,123
Bond issue proceeds [3]	1,886	2,111	6,549	4,409	5,152	5,372	5,418	-	3,198
Intergovernmental payments	(X)	(X)	(X)	(X)	(X)	(X)	(X)	-14035	5,650
Funds from (+) or to (-) reserves [4]	-912	2,080	-4058	-393	-1852	966	-2874	-2333	-47
Total funds available	20,835	41,795	57,448	68,609	70,923	74,885	77,121	847	46,238
Total disbursements	**20,835**	**41,795**	**57,448**	**68,609**	**70,923**	**74,885**	**77,121**	**847**	**46,238**
Current disbursements	19,583	40,084	54,725	66,044	67,311	71,573	73,787	847	44,364
Capital outlay	11,575	20,337	27,138	32,982	33,204	35,481	36,236	410	26,316
Maintenance and traffic services	4,720	11,445	16,032	18,969	18,952	19,742	21,643	112	8,861
Administration and research	1,275	3,022	4,033	5,124	5,683	6,355	5,707	325	3,477
Law enforcement and safety	1,303	3,824	5,334	6,142	6,647	6,922	7,105	-	3,830
Interest on debt	710	1,456	2,188	2,827	2,825	3,073	3,096	-	1,880
Debt retirement [3]	1,252	1,711	2,723	2,565	3,612	3,312	3,334	-	1,874

- Represents zero. X Not applicable. [1] Includes other levels of government not shown separately. [2] Excludes amounts later allocated for nonhighway purposes. [3] Par value. Excludes issue and redemption of short-term notes or refunding bonds. Premiums and discounts on sale of bonds and accrued interest are investment income and other receipts. Redemption premiums and discounts are included with interest on debt. [4] Plus sign (+) indicates net receipt of funds from other levels of government; minus sign (-) indicates net disbursement of funds to other levels.

Source of tables 994 and 995: U.S. Federal Highway Administration, *Highway Statistics*, annual; and releases.

No. 996. Disbursements of State Highway Funds, by State: 1980 to 1990

[**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	1985	1990	STATE	1980	1985	1990	STATE	1980	1985	1990
U.S.	**30,049**	**40,891**	**53,536**	KY	913	901	1,008	OH	1,032	1,622	2,271
AL	517	875	866	LA	682	879	923	OK	461	668	827
AK	274	383	336	ME	164	238	332	OR	482	492	765
AZ	365	778	1,525	MD	663	988	1,464	PA	1,557	2,340	2,885
AR	425	488	456	MA	704	786	1,055	RI	72	139	214
CA	1,930	3,006	4,294	MI	997	1,275	1,526	SC	309	420	585
CO	411	563	714	MN	611	980	1,228	SD	151	211	232
CT	393	565	1,204	MS	468	845	529	TN	609	800	1,174
DE	152	234	315	MO	555	854	937	TX	1,882	1,825	3,001
DC	57	142	273	MT	224	286	302	UT	241	394	355
FL	1,261	1,647	1,677	NE	274	358	449	VT	87	135	165
GA	762	1,115	1,278	NV	169	241	309	VA	894	1,165	1,874
HI	134	137	297	NH	152	219	299	WA	787	1,040	1,251
ID	153	229	300	NJ	662	1,229	1,831	WV	672	582	605
IL	1,652	2,087	2,645	NM	197	384	409	WI	468	669	979
IN	688	919	1,218	NY	1,650	2,022	2,874	WY	192	298	297
IA	504	746	869	NC	807	986	1,428				
KS	440	506	697	ND	143	199	189				

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

No. 997. Federal Grants to State and Local Governments for Highway Trust Fund and Urban Mass Transportation Administration (UMTA), by State: 1990

[Year ending **Sept. 30**]

STATE	HIGHWAY TRUST FUND		UMTA		STATE	HIGHWAY TRUST FUND		UMTA		STATE	HIGHWAY TRUST FUND		UMTA	
	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.	**13,557**	**54.5**	**3,731**	**15.0**	KS	162	65.3	7	2.7	ND	70	110.2	2	2.9
					KY	161	43.6	11	3.1	OH	404	37.2	109	10.1
AL	292	72.3	15	3.6	LA	302	40	9.5		OK	175	55.6	14	4.4
AK	160	291.1	2	2.8	ME	66	53.9	11	8.9	OR	159	55.9	29	10.1
AZ	186	50.8	26	7.1	MD	365	76.3	96	20.1	PA	759	63.9	179	15.1
AR	128	54.6	7	2.8	MA	181	30.1	134	22.3	RI	126	125.8	8	8.3
CA	1,344	45.2	488	16.4	MI	356	38.3	57	6.2	SC	161	46.1	11	3.3
CO	250	75.9	28	8.6	MN	281	64.1	34	7.7	SD	95	136.8	2	2.6
CT	391	119.0	46	14.0	MS	124	48.3	7	2.8	TN	271	55.5	18	3.6
DE	40	60.1	4	6.4	MO	272	53.1	67	13.1	TX	1,026	60.4	108	6.4
DC	67	110.5	324	534.2	MT	96	120.0	2	3.0	UT	121	70.3	22	12.7
FL	478	37.0	93	7.2	NE	103	65.6	8	5.4	VT	55	97.4	2	3.1
GA	387	59.7	87	13.5	NV	90	74.9	5	4.6	VA	316	51.1	32	5.2
HI	125	112.5	14	13.1	NH	56	50.2	3	2.8	WA	401	82.3	71	14.6
ID	126	125.2	3	2.8	NJ	354	45.8	222	28.7	WV	108	60.5	6	3.6
IL	502	44.0	324	28.4	NM	96	63.3	11	7.2	WI	222	45.3	33	6.8
IN	259	46.8	28	2.0	NY	604	33.6	843	46.8	WY	111	245.7	2	4.9
IA	186	67.1	17	6.0	NC	386	58.2	17	2.6					

[1] Based on Bureau of the Census resident population as of April 1, 1990.

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

No. 998. State Gasoline Tax Rates, 1990 and 1991, and Motor Fuel Tax Receipts, 1990

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

STATE	RATE [1] (cents/gal.)		Receipts, [2] 1990 (mil. dol.)	STATE	RATE [1] (cents/gal.)		Receipts, [2] 1990 (mil. dol.)	STATE	RATE [1] (cents/gal.)		Receipts, [2] 1990 (mil. dol.)
	1990	1991			1990	1991			1990	1991	
Federal	14.1	14.1	(NA)	KS	16.0	17.0	225	ND	17.0	17.0	69
State	**(NA)**	**(NA)**	**(NA)**	KY [3]	15.4	15.4	357	OH	20.0	21.0	1,043
AL	13.0	13.0	352	LA	20.0	20.0	452	OK [4]	17.0	17.0	316
AK	8.0	8.0	25	ME	17.0	19.0	121	OR	18.0	20.0	244
AZ	18.0	18.0	344	MD	18.5	18.5	444	PA	17.8	22.4	1,018
AR	13.7	18.7	215	MA	17.0	21.0	347	RI	20.0	26.0	84
CA	9.0	15.0	1,324	MI	15.0	15.0	668	SC	16.0	16.0	348
CO	20.0	22.0	320	MN	20.0	20.0	437	SD	18.0	18.0	80
CT	22.0	25.0	306	MS	18.2	18.2	282	TN [5]	20.0	20.0	610
DE	16.0	19.0	64	MO	11.0	11.0	358	TX	15.0	20.0	1,511
DC	18.0	18.0	30	MT	20.0	20.0	105	UT	19.0	19.0	166
FL	10.9	11.2	701	NE	21.7	23.8	204	VT	16.0	16.0	56
GA	7.5	7.5	329	NV	18.0	21.5	149	VA [3]	17.7	17.7	612
HI	11.0	16.0	45	NH	16.6	18.6	84	WA	22.0	23.0	538
ID	18.0	21.0	106	NJ	10.5	10.5	408	WV	20.4	20.4	152
IL	19.0	19.0	1,059	NM	17.0	17.0	159	WI	21.5	22.2	539
IN	15.0	15.0	579	NY	14.4	20.8	529	WY	9.0	9.0	43
IA	20.0	20.0	318	NC	21.5	22.6	833				

NA Not available. [1] In effect Dec. 31. [2] Represents net gallonage receipts. [3] Trucks or combinations with more than 2 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. 999. Public Highway Debt—State and Local Governments: 1970 to 1991

[**In millions of dollars.** Long-term obligations. State data are for calendar years; local data for varying fiscal years. Excludes duplicated and interunit obligations. Municipal debt includes other political subdivisions urban in character. See also *Historical Statistics, Colonial Times to 1970,* series Q 136-147]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989	1990 [1]	1991 [2]
Total debt issued [3]	1,886	2,094	2,566	3,151	6,074	6,296	3,802	4,261	5,268	5,413	5,418
State	1,305	1,128	1,072	1,715	3,404	3,946	1,927	2,384	3,096	3,233	3,198
County and township	174	276	475	524	1,387	1,200	451	567	650	580	800
Municipal	407	690	1,019	912	1,283	1,150	1,424	1,310	1,522	1,600	1,420
Total debt redeemed [4]	1,252	1,706	2,172	2,411	2,737	3,132	2,685	2,735	3,606	3,302	3,478
State	782	1,022	1,191	1,507	1,580	1,875	1,625	1,396	2,063	1,602	2,070
County and township	152	209	303	216	378	432	349	353	618	750	375
Municipal	318	475	678	688	779	825	711	986	925	950	1,033
Total debt outstanding	19,107	25,851	27,224	27,964	31,301	34,465	36,565	38,091	39,716	41,827	43,767

[1] Preliminary. [2] Projection. [3] Excludes refunding issues. [4] Excludes redemptions by refunding.

Source of tables 998 and 999: U.S. Federal Highway Administration, *Highway Statistics,* annual.

No. 1000. Motor Vehicles—Summary: 1980 to 1990

ITEM	Unit	1980	1984	1985	1986	1987	1988	1989	1990
Passenger car production	1,000	6,376	7,773	8,185	7,829	7,099	7,113	6,823	6,077
Passenger car factory sales	1,000	6,400	7,621	8,002	7,516	7,085	7,105	6,807	6,050
Passenger car (new), retail sales [1]	1,000	8,979	10,390	11,042	11,460	10,277	10,530	9,772	9,300
Domestic [2]	1,000	6,581	7,952	8,205	8,215	7,081	7,526	7,073	6,897
Subcompact [3]	1,000	1,604	2,322	1,297	1,325	1,101	1,019	926	(NA)
Compact [3]	1,000	1,659	1,336	2,563	2,461	2,389	2,781	2,606	(NA)
Standard [3]	1,000	1,358	1,817	1,882	1,888	1,565	1,722	1,629	(NA)
Intermediate [3]	1,000	1,957	2,484	2,464	2,540	2,026	2,017	1,916	(NA)
Imports [4]	1,000	2,398	2,439	2,838	3,245	3,196	3,004	2,699	2,403
Truck and bus production	1,000	1,634	3,151	3,468	3,506	3,826	4,101	4,051	3,703
Truck and bus factory sales	1,000	1,667	3,075	3,357	3,393	3,821	4,121	4,062	3,719
Truck and bus retail sales [5]	1,000	2,232	3,538	3,984	4,031	4,174	4,608	4,483	4,261
Light duty (up to 14,000 GVW) [6]	1,000	1,964	3,261	3,700	3,766	3,885	4,273	4,171	3,984
Med. duty (14,001-26,000 GVW) [6]	1,000	92	61	53	51	55	83	73	71
Heavy duty (over 26,000 GVW) [6]	1,000	176	216	231	214	234	251	239	207
Motorcycle registrations, new [7]	1,000	876	772	722	631	550	410	294	269
Motorcycle (new) retail sales [8]	1,000	1,070	1,305	1,260	1,075	970	710	515	462
All-terrain vehicles	1,000	(NA)	550	550	480	405	290	200	145
All-terrain vehicle imports	1,000	(NA)	635	683	498	320	210	121	100
Motorcycle imports, total [9]	1,000	1,120	441	733	550	318	287	253	169
Value [10]	Mil. dol.	1,142	523	783	763	463	512	542	361
Passenger cars(new), exported [1 11]	1,000	617	616	704	673	633	781	778	794
Passenger cars (new), imported [1 12]	1,000	3,116	3,559	4,398	4,691	4,589	4,450	4,043	3,945
Canada	1,000	595	1,073	1,145	1,162	927	1,191	1,151	1,220
Germany, Federal Republic of	1,000	339	335	473	452	378	264	217	245
Japan	1,000	1,992	1,949	2,527	2,619	2,418	2,123	2,052	1,868
Trucks (new) exports	1,000	186	159	183	205	222	230	189	151
Trucks (new) imports [12]	1,000	747	1,025	1,253	1,351	1,177	938	953	766
Japan	1,000	483	567	800	976	772	542	420	302
Import value, new passenger cars [1]	Mil. dol.	16,675	29,264	36,474	45,302	47,858	47,005	44,417	45,716
Trucks and buses, new [1]	Mil. dol.	1,985	6,541	7,734	8,504	8,729	8,089	8,591	8,155
Export value [1 13]	Mil. dol.	16,015	20,776	22,820	21,955	24,812	29,519	31,574	38,086
Passenger cars (new) [13]	Mil. dol.	3,932	4,876	6,027	6,258	6,695	8,318	8,895	9,708
Trucks and buses (new) [13]	Mil. dol.	2,977	2,479	2,789	2,953	3,375	3,683	3,471	2,845
Parts and accessories [14]	Mil. dol.	9,106	13,421	14,004	12,744	14,742	17,518	19,208	24,996
Cars in use, total	Million	104.6	112.0	114.7	117.3	119.8	121.5	122.8	123.3
Under 3 years	Million	26.8	22.0	24.8	27.9	28.1	27.8	27.1	26.0
3-5 years	Million	25.5	26.8	23.9	22.7	24.7	27.7	30.5	30.5
6-8 years	Million	25.2	26.8	27.8	26.5	24.4	21.6	20.7	22.6
9-11 years	Million	14.6	17.4	17.2	18.7	21.4	22.4	21.1	19.1
12 years and over	Million	12.5	19.0	21.0	21.5	21.2	22.0	23.4	25.1
Average age	Years	6.6	7.5	7.6	7.6	7.6	7.6	7.6	7.8
Cars retired from use [15]	1,000	8,405	6,675	7,729	8,442	8,103	8,754	8,981	8,897
Trucks in use, total	Million	35.2	40.1	42.4	44.8	47.3	50.2	53.2	56.0
Under 3 years	Million	8.8	7.2	9.0	11.1	11.9	12.5	12.5	12.8
3-5 years	Million	8.1	8.0	6.3	6.6	8.3	10.3	12.6	13.2
6-8 years	Million	7.4	9.2	10.2	8.9	7.4	5.9	6.3	8.0
9-11 years	Million	4.4	6.2	6.2	6.7	8.0	8.9	7.9	6.6
12 years and over	Million	6.5	9.6	10.7	11.5	11.8	12.6	14.0	15.5
Average age	Years	7.1	8.2	8.1	8.0	8.0	7.9	7.9	8.0
Trucks retired from use [15]	1,000	1,732	1,602	2,100	2,309	2,364	2,251	2,189	2,177
Tires, passenger car, total [16]	Million	145.9	201.6	200.9	202.7	210.8	218.8	214.8	213.6
Radials	Million	83.5	156.6	164.7	174.0	187.3	200.2	200.4	202.1
Replacement	Million	106.9	144.6	141.5	144.3	151.9	155.3	151.2	152.3
Tires, truck and bus, total [16]	Million	31.1	40.8	41.1	40.6	44.4	46.0	46.9	46.9
Radials	Million	3.8	16.0	19.7	21.1	26.0	29.4	30.6	32.5
Replacement	Million	24.4	31.7	32.1	32.4	34.5	33.9	35.2	36.6
Batteries, total [17]	Million	61.7	74.7	74.4	75.7	75.7	80.1	80.3	79.7
Replacement automobile batteries	Million	50.1	59.3	58.7	60.3	59.9	63.5	64.4	65.2

NA Not available. [1] Based on data from U.S. Dept. of Commerce. [2] Includes domestic models produced in Canada and Mexico. [3] Source: Board of Governors of the Federal Reserve System, unpublished data. Represents total auto sales data from *Ward's Automotive Reports*. Criteria by which each year's car models are grouped into the major size categories vary among those collecting data. Data shown here follow Automotive News classifications. Beginning 1987, data from *Wards Automotive Yearbooks*. Beginning 1980, cars produced in U.S. by foreign manufacturers are included. [4] Excludes domestic models produced in Canada. [5] Excludes motorcoaches and light-duty imports from foreign manufacturers. Beginning 1980, includes imports sold by franchised dealers of U.S. manufacturers. Starting in 1986, includes sales of trucks over 10,000 lbs. GVW by foreign manufacturers. [6] Gross vehicle weight (fully loaded vehicle). [7] Source: R. L. Polk & Company, Detroit, MI, *New Motorcycle Registrations by States*. 1980-1986 excludes Oklahoma; 1984, excludes New York. Reproduction prohibited without Polk permission. [8] Estimates by Motorcycle Industry Council Inc., Irvine, CA. Includes all-terrain vehicles and scooters. Excludes mopeds/motorized bicycles. [9] 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). [10] Dutiable value for customs purposes prior to 1980, thereafter, c.i.f. value. [11] Beginning 1980, includes chassis. [12] Includes other countries, not shown separately. [13] Covers assembled and unassembled vehicles. [14] Includes rubber tires and tubes and used vehicles. [15] For years ending June 30. Represents vehicles failing to re-register. [16] Includes original equipment. Also includes exports, not shown separately. Source: The Rubber Manufacturers Association, Inc., Washington, D.C., *RMA Monthly Tire Report*. [17] Source: Battery Council International, Chicago, IL, and U.S. Bureau of the Census.

Source: Except as noted, Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual; and *World Motor Vehicle Data*, annual.

No. 1001. Motor Vehicle Registrations, 1980 to 1990, Vehicle Miles of Travel, 1990, and Drivers Licenses, 1990, by State

[**In thousands, except as indicated.** Motor vehicle registrations cover publicly, privately, and commercially owned vehicles. For uniformity, figures 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]					1990				
	1980	1985	1989	1990		Public road and street mileage (1,000 mi.)	Vehicle miles of travel		Drivers licenses	Motorcycles [1] (incl. official)
				Total	Automobiles (incl. taxis)		Total (bil. mi.)	Per mile of road (1,000)		
U.S.	**155,796**	**171,654**	**188,261**	**188,655**	**143,026**	**3,880**	**2,147.0**	**553**	**167,015**	**4,259**
AL	2,938	3,338	3,623	3,744	2,733	91	42.3	466	2,753	44
AK	262	353	364	477	302	14	4.0	296	314	12
AZ	1,917	2,235	2,775	2,825	2,002	52	35.5	688	2,393	80
AR	1,574	1,384	1,433	1,448	934	77	21.0	272	1,722	15
CA	16,873	18,899	21,671	21,926	16,972	164	258.9	1,583	19,846	641
CO	2,342	2,759	3,154	3,155	2,300	78	27.2	350	2,043	108
CT	2,147	2,465	2,651	2,623	2,472	20	26.3	1,315	2,214	51
DE	397	465	522	526	406	5	6.5	1,204	485	9
DC	268	326	259	262	245	1	3.4	3,091	412	3
FL	7,614	9,865	11,207	10,950	8,695	108	110.0	1,018	9,231	206
GA	3,818	4,580	5,270	5,489	3,834	110	72.7	663	4,478	74
HI	570	651	736	771	672	4	8.1	1,976	678	20
ID	834	854	1,039	1,054	636	62	9.8	157	704	42
IL	7,477	7,727	8,022	7,873	6,300	136	83.3	613	7,295	180
IN	3,826	4,024	4,322	4,366	3,197	92	53.7	584	3,601	97
IA	2,329	2,696	2,583	2,632	1,880	113	23.0	204	1,872	173
KS	2,007	2,148	1,987	2,012	1,405	134	22.8	171	1,715	76
KY	2,593	2,615	2,843	2,909	1,915	70	33.6	482	2,402	35
LA	2,779	3,012	2,976	2,995	1,998	59	37.7	643	2,575	30
ME	724	840	939	977	742	22	11.9	531	887	38
MD	2,803	3,276	3,527	3,607	2,970	29	40.5	1,406	3,362	56
MA	3,749	3,738	3,804	3,726	3,224	34	46.1	1,352	4,229	56
MI	6,488	6,727	7,139	7,209	5,613	117	81.1	691	6,440	177
MN	3,091	3,385	3,283	3,508	2,742	129	38.9	301	2,529	122
MS	1,577	1,746	1,867	1,875	1,434	73	24.4	337	1,885	26
MO	3,271	3,558	3,844	3,905	2,760	121	50.9	422	3,688	68
MT	680	652	741	783	457	71	8.3	116	604	22
NE	1,254	1,257	1,362	1,384	913	92	14.0	152	1,089	22
NV	655	709	826	853	592	46	10.2	224	846	19
NH	704	974	936	946	751	15	9.8	662	843	40
NJ	4,761	4,909	5,636	5,652	5,180	34	58.9	1,717	5,585	86
NM	1,068	1,176	1,295	1,301	806	55	16.1	294	1,074	33
NY	8,002	9,042	10,021	10,196	8,831	111	106.9	961	10,254	198
NC	4,532	4,450	5,113	5,162	3,677	95	62.7	662	4,551	57
ND	627	655	636	630	372	87	5.9	68	425	20
OH	7,771	8,102	9514	8,410	6,818	114	87.0	766	7,427	228
OK	2,583	2,864	2,568	2,649	1,711	112	33.1	296	2,278	61
OR	2,081	2,204	2,379	2,445	1,839	95	26.7	281	2,212	64
PA	6,926	7,209	7,909	7,971	6,384	117	85.7	736	7,899	173
RI	623	610	671	672	563	6	7.0	1,148	671	24
SC	1,996	2,222	2,469	2,521	1,878	64	34.4	538	2,373	31
SD	601	650	705	704	425	75	7.0	94	492	30
TN	3,271	3,754	4,316	4,444	3,553	85	46.7	552	3,334	80
TX	10,475	12,444	12,565	12,800	8,714	306	162.2	530	11,137	174
UT	992	1,099	1,175	1,206	789	43	14.6	338	1,046	28
VT	347	398	462	462	342	14	5.8	411	412	18
VA	3,626	4,253	4,860	4,938	3,776	68	60.2	889	4,389	62
WA	3,225	3,526	4,090	4,257	2,979	81	44.7	550	3,377	119
WV	1,320	1,143	1,214	1,225	753	35	15.4	445	1,284	22
WI	2,941	3,187	3,471	3,672	2,757	110	44.3	403	3,328	189
WY	467	500	487	528	309	39	5.8	148	334	20

[1] Excludes vehicles owned by military services.

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

No. 1002. Motor Vehicles—Registrations, Factory Sales, and Retail Sales: 1960 to 1990

[For definition of average annual percent change, see Guide to Tabular Presentation. See also *Historical Statistics, Colonial Times to 1970*, series Q 148-155]

YEAR	REGISTRATION [1] (mil.)			Motor-cycle regis-trat-ions [1] (1,000)	FACTORY SALES (1,000)			RETAIL SALES (1,000)					
								Passenger cars			Trucks		
	Total cars, trucks, buses	Pas-senger cars [2]	Trucks and buses		Total cars, trucks, buses	Pas-senger cars	Trucks and buses [3]	Total	Do-mestic	Imports	Total	Do-mestic	Imports
1960	74	62	12	574	7,869	6,675	1,194	6,641	6,142	499	963	926	37
1965	90	75	15	1,382	11,057	9,306	1,752	9,332	8,763	569	1,553	1,539	14
1970	108	89	19	2,824	8,239	6,547	1,692	8,400	7,119	1,280	1,811	1,746	65
1975	133	107	26	4,964	8,985	6,713	2,272	8,624	7,053	1,571	2,478	2,249	229
1976	139	110	28	4,933	11,480	8,500	2,979	10,110	8,611	1,498	3,181	2,944	237
1977	142	112	30	4,881	12,642	9,201	3,441	11,183	9,109	2,074	3,675	3,352	323
1978	148	117	32	4,868	12,871	9,165	3,706	11,314	9,312	2,002	4,109	3,773	336
1979	152	118	33	5,422	11,456	8,419	3,037	10,673	8,341	2,332	3,480	3,010	470
1980	156	122	34	5,694	8,067	6,400	1,667	8,979	6,581	2,398	2,487	2,001	486
1981	158	123	35	5,831	7,956	6,255	1,701	8,536	6,209	2,327	2,260	1,809	451
1982	160	124	36	5,754	6,955	5,049	1,906	7,982	5,759	2,224	2,560	2,146	414
1983	164	126	37	5,585	9,153	6,739	2,414	9,182	6,795	2,387	3,129	2,658	471
1984	166	128	38	5,480	10,696	7,621	3,075	10,390	7,952	2,439	4,093	3,475	618
1985	172	132	40	5,444	11,359	8,002	3,357	11,042	8,205	2,838	4,682	3,902	780
1986	176	135	41	5,262	10,909	7,516	3,393	11,460	8,215	3,245	4,863	3,921	942
1987	179	137	42	4,886	10,907	7,085	3,821	10,277	7,081	3,196	4,912	4,055	857
1988	184	141	43	4,584	11,225	7,105	4,121	10,530	7,526	3,004	5,149	4,508	641
1989	187	143	44	4,434	10,869	6,807	4,062	9,772	7,073	2,699	4,941	4,403	538
1990	189	144	45	4,259	9,769	6,050	3,719	9,301	6,897	2,404	4,846	4,215	631

[1] Includes publicly owned vehicles. Excludes military vehicles. [2] Includes taxis. [3] Includes standard equipment.

Source: Registrations—U.S. Federal Highway Administration, *Selected Highway Statistics and Charts*, annual; sales—Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *MVMA Motor Vehicle Facts and Figures*, annual.

No. 1003. Automobile Output and Trade in National Income Accounts: 1970 to 1990

[In billions of current and constant (1982) dollars, except percent. 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	1970	1975	1980	1984	1985	1986	1987	1988	1989	1990
Current dollar auto output	**28.5**	**40.3**	**59.2**	**104.2**	**115.8**	**120.4**	**118.9**	**129.1**	**133.9**	**130.3**
Final sales	29.7	41.9	60.1	101.0	111.3	118.9	112.1	128.1	132.2	135.0
Personal consumption expenditures	26.8	36.8	57.2	98.7	111.7	125.7	121.6	131.6	132.5	132.4
New autos	21.9	29.3	46.4	77.6	87.4	100.3	93.5	101.0	100.0	96.6
Net purchases of used autos	4.8	7.4	10.8	21.2	24.3	25.4	28.2	30.5	32.5	35.8
Producers' durable equipment	5.3	8.6	14.3	26.2	27.7	30.2	28.9	32.3	31.2	35.5
New autos	7.6	12.6	20.8	40.2	44.0	46.1	45.1	51.2	49.7	55.0
Net purchases of used autos	−2.3	3.9	−6.5	−14.0	−16.3	−15.9	−16.2	−18.9	−18.6	−19.6
Net exports	−2.9	−4.2	−12.8	−25.8	−30.0	−39.0	40.6	−38.0	−33.7	−35.4
Exports	0.8	2.9	4.0	4.9	6.1	6.3	7.4	9.0	10.8	10.5
Imports	3.7	7.1	16.8	30.7	36.1	45.3	47.9	47.1	44.5	45.9
Government purchases	0.5	0.7	1.4	2.0	2.0	2.0	2.1	2.2	2.3	2.5
Change in business inventories (new and used)	-1.2	−1.5	−0.9	3.2	4.5	1.5	6.8	1.0	1.6	-4.7
New	−1.0	−1.9	−0.1	2.6	4.0	1.4	6.3	0.2	0.9	−4.2
Used	−0.1	0.4	−0.8	0.6	0.5	0.1	0.5	0.9	0.8	−0.6
Addenda:										
Domestic output of new autos [1]	23.8	33.7	49.3	87.1	95.9	98.1	95.5	101.9	104.9	99.7
Sales of imported new autos [2]	5.8	10.4	21.8	38.5	45.7	55.4	55.1	60.5	57.5	59.3
Constant dollar auto output	**65.4**	**74.8**	**79.1**	**115.8**	**125.0**	**124.4**	**118.9**	**127.3**	**127.1**	**121.1**
Final sales	68.3	78.5	80.5	112.1	120.7	124.8	112.1	126.7	125.4	126.5
Personal consumption expenditures	68.3	73.5	80.9	111.4	122.4	133.3	121.6	129.6	126.2	124.9
New autos	47.4	53.3	60.2	86.4	94.5	103.9	93.5	99.1	96.1	91.5
Net purchases of used autos	20.9	20.3	20.8	25.0	27.9	29.4	28.2	30.5	30.1	33.4
Producers' durable equipment	10.0	14.8	16.8	31.8	32.2	31.7	28.9	31.9	30.1	33.1
New autos	16.4	22.8	26.9	44.7	47.6	47.8	45.1	50.2	47.8	52.1
Net purchases of used autos	-6.3	−8.0	−10.1	−13.0	−15.4	−16.1	16.2	18.3	17.6	19.0
Net exports	−11.5	−11.4	−19.2	−32.4	36.1	−42.3	−40.6	−37.0	−33.1	−33.8
Exports	1.8	5.2	5.3	5.5	6.5	6.5	7.4	8.9	9.5	9.7
Imports	13.3	16.6	24.5	37.9	42.6	48.8	47.9	45.8	42.6	43.6
Government purchases	1.5	1.5	2.0	2.3	2.2	2.1	2.1	2.2	2.2	2.3
Change in business inventories of new and used	−3.0	−3.7	−1.5	2.7	4.3	−0.4	6.8	0.6	1.7	−5.3
New	−2.6	−4.5	-0.1	2.3	3.9	−0.5	6.3	−0.3	0.9	−4.8
Used	−0.3	0.8	−1.3	0.5	0.4	0.1	0.5	0.9	0.8	−0.5
Addenda:										
Domestic output of new autos [1]	51.7	61.6	64.6	97.9	104.7	102.1	95.5	99.9	100.0	93.5
Sales of imported new autos [2]	11.7	17.9	27.5	41.5	47.9	55.7	55.1	59.3	55.3	56.2

[1] Consists of final sales and change in business inventories of new autos assembled in the United States. [2] Consists of personal consumption expenditures, producers' durable equipment, and government purchases.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

No. 1004. New Trucks—Retail Sales, by Weight Class and Type: 1980 to 1989

WEIGHT CLASS AND TYPE	NUMBER (1,000)							PERCENT CHANGE			
	1980	1985	1986	1987	1988	1989	1990	1986-1987	1987-1988	1988-1989	1989-1990
Total	**2,232**	**3,984**	**4,031**	**4,174**	**4,608**	**4,483**	**4,261**	**3.5**	**10.4**	**-2.7**	**-5.0**
Under 6,000 pounds	**985**	**2,408**	**2,541**	**2,696**	**2,926**	**2,854**	**2,866**	**6.1**	**8.5**	**-2.4**	**0.4**
Utility	51	429	387	403	445	447	490	4.0	10.5	0.6	9.6
Pickup, conventional	545	644	582	566	593	600	614	-2.8	4.8	1.2	2.3
Pickup, compact	254	696	757	861	901	840	786	13.7	4.7	-6.8	-6.4
Domestic	26	625	679	795	848	811	774	17.2	6.7	-4.4	-4.6
Import (U.S. manufactures)	229	70	79	66	53	29	12	-16.7	-18.8	-45.6	-58.6
Van	79	115	112	89	47	43	31	-20.5	-47.0	-8.5	27.9
Mini van (cargo)	(X)	103	110	101	105	97	83	-8.2	4.0	-7.8	-14.4
Station wagon (truck chassis)	(X)	86	98	108	138	138	112	11.1	27.6	-	-18.8
Mini passenger carrier	(X)	301	460	546	692	688	750	18.8	26.6	-0.5	9.0
6,000 to 10,000 pounds [1]	**975**	**1,280**	**1,214**	**1,175**	**1,333**	**1,297**	**1,097**	**-3.2**	**13.4**	**-2.7**	**-15.4**
Utility	108	108	101	91	90	93	68	-9.6	-1.2	3.0	26.9
Van	172	261	261	254	302	289	254	-2.8	19.0	-4.2	-12.1
Pickup, conventional	546	628	582	569	666	663	568	-2.2	17.0	-0.4	-14.3
Station wagon (truck chassis)	39	95	98	91	104	100	85	-7.5	14.3	-4.2	-15.0
10,001 pounds and over	**271**	**295**	**276**	**302**	**349**	**331**	**298**	**9.6**	**15.3**	**-5.0**	**-10.0**

- Represents zero. X Not applicable. [1] Includes vehicles not shown separately.

Source: Motor Vehicle Manufacturers Association, Detroit, MI, *Motor Vehicle Facts and Figures,* annual.

No. 1005. New Car Buyers—Characteristics, by Type of Vehicle Purchased: 1990

[In percent, except as indicated. Based on Newsweek's survey of 33,780 buyers of 1990 new cars. Forty-three percent of new car buyers responded]

CHARACTERISTIC	All cars	Domestic	Asian	European	CHARACTERISTIC	All cars	Domestic	Asian	European
Household income:					Education:				
Less than $35,000	31	34	27	7	High school or less	31	37	18	15
$35,000-$49,999	22	22	22	10	Some college	27	27	28	19
$50,000-$74,999	22	22	23	20	College graduate or more	39	34	51	65
$75,000 and over	24	22	28	63					
Mean ($1,000)	62.6	59.5	65.5	116.4					
Median ($1,000)	48.1	46.2	50.9	96.0	Employed	74	70	84	82
Sex: Male	56	57	52	62					
Female	44	43	48	38	Occupation (Base = Employed):				
Age: Under 25 years	8	7	10	3					
25-54 years	59	54	70	70	Prof./manager	64	61	68	84
55 years and over	33	38	20	27	Blue collar	15	18	11	5
Median (years)	44.6	47.6	40.3	42.9					

Source: Newsweek, Inc., New York, NY, *1990 Buyers of New Cars.* (Copyright. All rights reserved. Reprinted by permission.)

No. 1006. Recreational Vehicles—Number and Retail Value of Shipments: 1970 to 1990

ITEM	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
NUMBER (1,000)												
Total	**380.3**	**339.6**	**181.4**	**258.0**	**358.0**	**398.2**	**359.2**	**379.5**	**400.2**	**427.3**	**395.7**	**354.5**
Motorized homes	30.3	96.6	99.9	152.5	223.7	257.3	233.5	249.6	255.7	277.1	261.6	226.5
Travel trailers	138.0	150.6	52.0	65.5	90.0	92.4	82.9	86.0	92.8	96.9	90.3	87.6
Folding camping trailers	116.1	48.1	24.5	34.3	37.5	40.9	35.9	36.5	41.6	42.3	33.9	30.7
Truck campers	95.9	44.3	5.0	5.7	6.8	7.6	6.9	7.4	10.1	11.0	9.9	9.7
RETAIL VALUE (mil. dol.)												
Total	**1,122**	**2,320**	**1,952**	**3,505**	**6,324**	**7,610**	**7,029**	**7,564**	**8,400**	**9,188**	**9,027**	**8,223**
Motorized homes	318	1,251	1,381	2,701	5,099	6,262	5,724	6,155	6,826	7,543	7,420	6,660
Travel trailers	445	856	485	666	1,067	1,157	1,122	1,213	1,331	1,381	1,378	1,342
Folding camping trailers	175	101	69	110	122	145	137	144	167	175	147	134
Truck campers	183	112	17	28	36	46	46	53	76	88	81	86

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

No. 1007. Motorcycles—Travel, Registration, and Fuel Consumption: 1970 to 1989

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989
Vehicle-miles of travel	Million	2,979	5,629	10,214	9,910	8,760	8,784	9,086	9,397	9,506	10,024	10,371
Number of registered vehicles	1,000	2,824	4,964	5,694	5,754	5,585	5,480	5,444	5,199	4,917	4,584	4,434
Average travel per vehicle	Miles	1,055	1,134	1,794	1,722	1,568	1,603	1,669	1,807	1,933	2,187	2,339
Fuel consumption, total	Mil. gal	59.6	112.6	204.3	198.2	175.2	175.7	181.7	187.9	190.1	200.5	207.4
Average per vehicle	Gallon	21	23	36	34	31	32	33	36	39	44	47

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

No. 1008. Motor Vehicle Accidents—Number and Deaths: 1970 to 1990

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

ITEM	Unit	1970	1972 [1]	1980	1985	1986	1987	1988	1989	1990
Motor vehicle accidents [2]	Million	16.0	17.0	17.9	19.3	17.7	20.8	20.6	12.8	11.5
Cars	Million	23.5	24.5	22.8	25.6	27.7	25.9	28.2	15.3	14.3
Trucks	Million	3.2	3.5	5.5	6.1	6.1	6.0	6.8	6.5	4.4
Motorcycles	1,000	305	343	560	480	440	380	370	211	180
Motor vehicle deaths within 1 yr. [3]	1,000	54.6	56.3	53.2	45.9	47.9	48.3	49.1	47.1	46.3
Noncollision accidents	1,000	15.4	15.8	14.7	12.6	13.1	5.2	5.3	5.0	4.9
Collision accidents:										
With other motor vehicles	1,000	23.2	23.9	23.0	19.9	20.8	20.7	20.9	20.0	19.4
With pedestrians	1,000	9.9	10.3	9.7	8.5	8.9	7.5	7.7	7.6	7.4
With fixed objects	1,000	3.8	3.9	3.7	3.2	3.3	13.2	13.4	12.6	12.9
Deaths within 30 days [4]	1,000	52.6	54.6	51.1	43.8	46.1	46.4	47.1	45.6	(NA)
Vehicle occupants	1,000	40.6	41.4	36.8	31.5	33.7	34.5	35.5	34.9	(NA)
Pedestrians	1,000	9.0	9.2	8.1	6.8	6.8	6.7	6.9	6.6	(NA)
Motorcyclists [5]	1,000	2.3	3.0	5.1	4.6	4.6	4.0	3.7	3.1	(NA)
Bicyclists	1,000	0.8	1.0	1.0	0.9	0.9	0.9	0.9	0.8	(NA)
Traffic death rates: [4 6]										
Per 100,000 resident population	Rate	25.8	26.2	22.6	18.4	19.1	19.1	19.2	18.4	(NA)
Per 100,000 registered vehicles	Rate	47.3	44.5	31.6	24.8	25.4	25.2	24.9	23.6	(NA)
Per 100 million vehicle miles	Rate	4.7	4.3	3.3	2.5	2.5	2.4	2.3	2.2	(NA)
Per 100,000 licensed drivers	Rate	47.2	46.1	35.2	27.9	28.9	28.7	28.9	27.6	(NA)
Motor vehicle accidents [7]	Million	22.1	24.9	24.1	32.5	33.3	33.9	34.2	34.4	33.4
Injuries [7]	1,000	4,983	5,190	5,230	5,044	5,300	5,400	5,500	5,560	5,560
Economic loss [7 8]	Bil. dol.	23.5	28.7	57.1	76.0	80.0	85.0	89.0	93.9	95.9

NA Not available. [1] Represents peak year for deaths from motor vehicle accidents. [2] Covers only accidents occurring on the road. [3] Deaths that occur within one 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. 1986 data for economic loss based on information from the National Center for Health Statistics, National Health Survey. [8] Wage loss; legal, medical, hospital, and funeral expenses; insurance administrative costs; and property damage.

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

No. 1009. Motor Vehicle Deaths, by State: 1985 to 1990

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

STATE	1985	1988	1989	1990	MILEAGE RATE [1] 1985	MILEAGE RATE [1] 1990	STATE	1985	1988	1989	1990	MILEAGE RATE [1] 1985	MILEAGE RATE [1] 1990
U.S.	**45,901**	**49,391**	**47,100**	**46,300**	**2.6**	**2.2**	DC	96	123	75	55	3.0	1.6
							VA	1,021	1,093	999	1,073	2.1	1.8
Northeast	**6,797**	**7,412**	**6,708**	**6,243**	**(NA)**	**(NA)**	WV	461	491	468	481	3.6	3.2
N.E.	**1,873**	**1,960**	**1,702**	**1,528**	**(NA)**	**(NA)**	NC	1,553	1,669	1,464	1,383	3.1	2.3
ME	224	268	190	212	2.4	1.8	SC	943	1,012	996	983	3.5	2.9
NH	198	175	190	158	2.6	1.6	GA	1,462	1,756	1,632	1,563	2.7	2.0
VT	117	129	116	89	2.5	1.5	FL	2,968	3,247	3,016	2,951	3.4	2.7
MA	761	750	700	607	1.9	1.3	**E.S.C.**	**3,664**	**4,196**	**3,616**	**3,868**	**(NA)**	**(NA)**
RI	124	145	100	84	2.1	1.3	KY	749	843	782	850	2.6	2.6
CT	449	493	406	378	2.0	1.5	TN	1,219	1,404	1,081	1,172	3.4	2.6
M.A.	**4,924**	**5,452**	**5,006**	**4,715**	**(NA)**	**(NA)**	AL	1,005	1,158	1,025	1,095	2.9	2.6
NY	2,121	2,345	2,239	2,183	2.3	2.0	MS	691	791	728	751	3.6	3.2
NJ	986	1,079	890	886	1.9	1.5	**W.S.C.**	**6,197**	**5,753**	**5,521**	**5,405**	**(NA)**	**(NA)**
PA	1,817	2,028	1,877	1,646	2.4	1.9	AR	580	667	648	604	3.4	2.9
Midwest	**9,760**	**10,874**	**9,993**	**9,601**	**(NA)**	**(NA)**	LA	1,011	946	857	912	3.0	2.5
E.N.C.	**6,602**	**7,417**	**6,871**	**6,509**	**(NA)**	**(NA)**	OK	781	649	655	646	2.5	2.0
OH	1,581	1,755	1,700	1,550	2.1	1.8	TX	3,825	3,491	3,361	3,243	2.7	2.0
IN	1,045	1,142	973	1,044	2.6	1.8	**West**	**10,352**	**10,803**	**9,847**	**9,944**	**(NA)**	**(NA)**
IL	1,594	1,925	1,748	1,589	2.3	1.9	**Mt.**	**3,409**	**3,371**	**3,100**	**3,098**	**(NA)**	**(NA)**
MI	1,605	1,749	1,633	1,563	2.4	1.9	MT	233	215	181	212	3.1	2.5
WI	777	846	817	763	2.1	1.8	ID	268	278	238	243	3.5	2.9
W.N.C.	**3,158**	**3,457**	**3,122**	**3,092**	**(NA)**	**(NA)**	WY	145	159	127	125	2.7	2.2
MN	657	675	605	568	2.0	1.5	CO	628	544	522	543	2.4	1.9
IA	478	556	511	459	2.4	2.1	NM	561	538	538	499	4.2	3.1
MO	1,005	1,163	1,052	1,096	2.6	2.3	AZ	942	1,003	884	863	4.4	2.5
ND	117	121	81	112	2.2	1.9	UT	335	313	303	270	2.8	2.0
SD	142	160	151	153	2.3	2.3	NV	297	321	307	343	3.9	3.6
NE	259	288	296	262	2.1	1.9	**Pac.**	**6,943**	**7,432**	**6,747**	**6,846**	**(NA)**	**(NA)**
KS	500	494	426	442	2.6	2.1	WA	786	817	781	825	2.3	1.9
South	**19,250**	**20,302**	**18,655**	**18,631**	**(NA)**	**(NA)**	OR	605	726	630	578	2.8	2.2
S.A.	**9,389**	**10,353**	**9,518**	**9,358**	**(NA)**	**(NA)**	CA	5,294	5,632	5,105	5,173	2.6	2.0
DE	119	169	118	143	2.2	2.2	AK	124	104	84	95	3.2	2.1
MD	766	793	750	726	2.3	1.9	HI	134	153	147	175	2.0	2.3

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, 1991*, (copyright).

No. 1010. Fatal Motor-Vehicle Accidents, by Type of Vehicle: 1980 to 1990

[Based on data from the Fatal Accident Reporting System]

TYPE OF VEHICLE	ACCIDENTS [1]					OCCUPANT FATALITIES				
	1980	1985	1988	1989	1990	1980	1985	1988	1989	1990
Total [2]	**45,284**	**39,195**	**42,130**	**60,834**	**59,193**	**41,927**	**36,043**	**39,170**	**38,087**	**37,081**
Passenger cars [3]	31,550	27,142	29,534	35,384	33,972	27,455	23,214	25,808	25,063	24,025
Mini-compact	3,263	3,973	4,445	4,145	4,207	2,966	3,429	3,794	3,481	3,523
Subcompact	4,875	5,445	6,137	6,144	5,949	4,158	4,422	4,945	4,785	4,698
Compact	1,118	3,445	6,122	6,751	7,198	927	2,635	4,764	4,987	5,272
Intermediate	5,224	6,064	6,941	7,037	6,959	3,878	4,391	5,016	4,943	4,833
Full size	7,026	4,906	4,490	4,024	3,824	4,831	2,974	2,840	2,569	2,363
Largest size	10,817	6,452	5,095	4,476	3,988	6,746	3,612	2,904	2,534	2,247
Unknown	5,134	2,699	2,378	2,807	1,847	3,943	1,751	1,515	1,747	1,089
Motorcycles	4,879	4,342	3,480	3,194	3,270	5,144	4,564	3,662	3,036	3,238
Moped, mini bike	180	151	164	76	86	183	147	170	71	83
Light trucks [2]	10,841	10,470	12,626	13,801	15,601	7,486	6,689	8,306	8,551	8,593
Pickup	8,796	8,375	9,629	10,262	10,272	5,463	4,886	5,880	5,864	5,951
Van	2,009	1,807	2,378	2,563	2,419	1,000	791	1,001	1214	1,079
Medium and heavy trucks	5112	4871	4936	4,982	4,761	1261	971	911	857	704
Single-unit heavy trucks [4]	377	370	406	442	443	89	48	68	66	58
Two-unit [5]	3,396	3,411	3,256	(NA)	(NA)	812	692	607	(NA)	(NA)
Multi-unit	148	182	253	(NA)	(NA)	41	31	43	(NA)	(NA)
Buses	329	304	284	311	288	46	55	54	50	32

NA Not available. [1] Each accident involving multiple types of vehicles is recorded in each category; therefore, the aggregate of all types will exceed the total number of accidents. [2] Includes other types and unknown, not shown separately. [3] Mini-compact wheel base less than 95 in.; subcompact, 95 in. to 99 in.; compact, 100 in. to 104 in.; intermediate, 105 in. to 109 in.; full size, 110-114 in.; and largest size greater than 115 in. [4] Gross vehicle weight greater than 26,000 lbs. [5] Tractor-trailer combination.

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

No. 1011. Highway Mileage, Vehicle Miles of Travel, Accidents, and Fatalities, 1975 to 1989, and by Type of Highway System, 1990

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	3,838	1,328	948	39,993	3.01	1,861	140	45,500	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	43,795	2.47
1986	3,880	1,835	1,298	41,062	2.23	2,254	123	46,056	2.51
1987	3,874	1,921	1,361	41,434	2.15	2,294	119	46,385	2.41
1988	3,871	2,026	1,430	42,119	2.08	2,302	114	47,093	2.32
1989	3,877	2,096	1,489	40,718	1.93	2,384	113	45,555	2.16
1990, total	**3,880**	**2,148**	**1,516**	**39,779**	**1.85**	**2,501**	**116**	**44,529**	**2.07**
Urban	757	1,277	4,620	17,382	1.36	1,833	143	18,750	1.47
Rural	3,123	870	764	22,397	2.57	669	77	25,779	2.96
Interstate	45	479	29,114	4,223	0.88	185	34	4,941	1.03
Urban	12	278	66,171	1,965	0.71	121	43	2,228	0.80
Rural	34	201	16,380	2,258	1.13	44	22	2,713	1.35
Noninterstate	3,921	1,669	1,166	35,556	2.13	2,337	140	39,588	2.37
Urban	746	999	3,669	15,417	1.54	1,712	171	16,522	1.65
Rural	3,089	670	594	20,139	3.01	625	93	23,066	3.44
Federal-aid highway system	853	1,733	5,568	30,063	1.73	1,593	92	33,962	1.96
Urban	193	1,022	14,474	13,704	1.34	1,181	116	14,850	1.45
Rural	660	712	2,956	16,359	2.30	411	58	19,112	2.69
Interstate	45	479	29,114	4,223	0.88	185	34	4,941	1.03
Other primary arterial	260	614	6,468	11,919	1.94	515	84	13,743	2.24
Urban	34	287	22,988	3,716	1.30	314	109	4,081	1.42
Rural	226	328	3,969	8,203	2.50	201	81	9,662	2.95
Urban (arterial and collector)	148	456	8,457	8,023	1.76	747	164	8,541	1.87
Secondary (collector)	340	184	1,258	5,898	3.21	166	90	6,737	3.67
Non-Federal-aid highway system	3,027	414	375	9,716	2.35	909	219	10,567	2.55
Arterial	10	35	9,235	410	1.16	24	69	476	1.35
Urban	8	32	10,798	216	0.68	22	70	232	0.73
Rural	2	4	4,147	194	5.21	2	56	244	6.56
Collector	353	85	661	2,110	2.48	93	110	2,318	2.72
Urban	23	27	3,263	222	0.82	28	104	234	0.87
Rural	330	58	482	1,888	3.25	65	112	2,084	3.58
Local	2,664	294	302	7,196	2.45	791	269	7,773	2.65
Urban	533	197	1,011	3,240	1.65	601	305	3,434	1.75
Rural	2,130	97	125	3,958	4.08	190	196	4,339	4.48

[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. 1012. State Legislation—Alcohol and Road Safety Laws: Various Years

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	no	0.10	none	(X)	(X)	(1)	18	4/87	all
VT	1986	no	0.10	none	(X)	(X)	7/84	yes	4/87	all
MA	1985	no	0.10	repealed	(X)	(X)	1/82	yes	none	(X)
RI	1984	no	[10]0.10	none	(X)	(X)	7/87	([11])	none	(X)
CT	1985	no	0.10	1/86	1	front	1982	18	none	(X)
M.A:										
NY	**1990**	**no**	**(NA)**	**12/84**	**1**	**front**	**4/82**	**yes**	**none**	**(X)**
NJ	1982	no	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	(NA)	7/85	2	front	3/82	yes	12/87	some
WI	1986	yes	[10]0.10	12/87	2	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	repealed	(X)	(X)	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**	**none**	**(X)**	**(X)**	**6/82**	**[8 12]19**	**none**	**(X)**
MD	1982	no	0.10	7/86	2	[13]front	1/84	18	none	(X)
DC	1986	no	0.10	12/85	2	[13]front	7/83	yes	none	(X)
VA	1986	yes	0.10	1/88	2	front	1/83	yes	7/88	some
WV	1986	yes	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	no	0.12	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	**1938**	**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	none	(X)	(X)	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**	**none**	**(X)**	**(X)**	**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:										
Mt:										
MT	**1967**	**no**	**(NA)**	**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	no	0.10	7/87	2	all	7/83	yes	4/87	all
Pac										
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	2	all	1/83	15.5	5/87	some
AK	1983	yes	0.10	9/90	2	all	7/85	19	none	(X)
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 causes 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. 1013. Motor Vehicle Safety Defect Recalls, by Domestic and Foreign Manufacturers: 1980 to 1989

[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	1981	1982	1983	1984	1985	1986	1987	1988	1989
Motor vehicles:											
Total recall campaigns [1]	**Number**	**167**	**156**	**135**	**140**	**164**	**173**	**174**	**199**	**197**	**237**
Domestic	Number	129	128	107	110	127	137	139	150	152	182
Foreign	Number	38	28	28	30	37	36	35	49	45	55
Total vehicles recalled	**1,000**	**4,863**	**9,405**	**1,914**	**6,114**	**7,220**	**5,629**	**2,880**	**9,091**	**4,486**	**7,033**
Domestic	1,000	3,939	7,379	1,401	3,090	6,283	4,995	1,731	7,297	3,171	6,070
Vehicles recalled by Four leading auto manufacturers	1,000	3,730	7,247	1,324	3,021	6,148	4,811	1,382	6,945	[2]2,900	5,842
Foreign	1,000	924	2,026	513	3,024	937	634	1,149	1,793	1,315	963
Motor vehicle tires:											
Recall campaigns [1]	Number	24	25	17	21	16	19	14	16	12	11
Tires recalled	1,000	7,070	125	131	95	81	28	164	43	214	115

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

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

No. 1014. Licensed Drivers and Estimated Arrests for Driving Under the Influence, by Age: 1975 and 1986

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

AGE	1975			1986			Percent change in rate, 1975-86
	Drivers	Arrests	Arrests per 100,000 drivers	Drivers	Arrests	Arrests per 100,000 drivers	
Total	**129,671**	**946**	**729**	**158,494**	**1,792**	**1,130**	**55**
Percent distribution	100.0	100.0	(X)	100.0	100.0	(X)	(X)
16 to 17 years old	3.7	1.8	352	2.6	1.5	647	84
18 to 24 years old	18.9	25.3	979	15.7	28.8	2,075	112
25 to 29 years old	12.9	15.0	847	13.0	22.0	1,909	125
30 to 34 years old	10.3	12.2	867	12.2	15.8	1,471	70
35 to 39 years old	8.5	10.6	909	10.9	11.1	1,158	27
40 to 44 years old	7.9	9.8	904	8.5	7.2	968	7
45 to 49 years old	8.0	8.9	812	6.9	4.9	805	−1
50 to 54 years old	7.9	7.3	675	6.3	3.4	609	−10
55 to 59 years old	6.8	4.6	490	6.3	2.4	434	−11
60 to 64 years old	5.7	2.7	347	5.9	1.6	299	−14
65 years old and over	9.5	1.8	141	11.9	1.2	118	−16

X Not applicable.

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

No. 1015. Licensed Drivers, Fatal Motor-Vehicle Accidents, and Alcohol Involvement, by Age of Driver: 1989

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	164,912	4,146	12,248	10,859	41,089	34,126	22,477	18,897	21,070
Percent distribution	Percent	100.0	2.5	7.4	6.6	24.9	20.7	13.6	11.5	12.8
Licensed drivers involved in fatal accidents	Number	60,398	2,900	8,537	5,709	15,919	10,100	6,031	4,200	5,426
Percent distribution	Percent	100.0	4.8	14.1	9.5	26.4	16.7	10.0	7.0	9.0
Drinking drivers involved in fatal accidents	Number	19,256	568	3,210	2,567	6,400	3,161	1,442	762	548
Percent distribution	Percent	100.0	2.9	16.7	13.3	33.2	16.4	7.5	4.0	2.8

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

Source: Except as noted, U.S. National Highway Traffic Safety Administration, unpublished data from the Fatal Accident Reporting System.

No. 1016. Police-Reported Traffic Crashes, by Age Group: 1990

[Based on probability sample of police-reported crashes. 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
Crash-involved	11,253,000	40,000	1,962,000	1,398,000	3,041,000	2,095,000	1,153,000	750,000	815,000
Percent male	62.0	67.0	62.0	63.0	62	60	62	63	63
Percent female	38.0	33.0	38.0	37.0	38	40	38	37	37
Percent alcohol-involved	4.0	4.0	4.0	6.0	6	4	3	2	1
Passengers injured or killed	1,033,000	236,000	246,000	108,000	180,000	96,000	60,000	46,000	61,000
Percent male	41.0	[1]42.0	[2]45.0	50.0	43	36	31	19	[3]19
Percent female	59.0	[1]58.0	[2]55.0	50.0	57	64	69	81	[3]81
Pedestrians injured or killed	109,000	[1]34,000	[2]13,000	[4]9,000	(NA)	[5]34,000	[6]10,000	(NA)	10,000
Percent during day	63.0	[1]75.0	[7]49.0	[4]35.0	(NA)	[5]56.0	[6]71.0	(NA)	76.0
Percent at night	37.0	[1]25.0	[7]51.0	[4]65.0	(NA)	[5]44.0	[6]29.0	(NA)	24.0
Pedalcyclists injured or killed	77,000	[1]31,000	[7]14,000	[4]10,000	(NA)	[5]17,000	(NA)	(NA)	[8]5,000

NA Not available. [1] 14 years and under. [2] 15 to 20 years. [3] 65 to 74 years. [4] 20 to 24 years. [5] 25 to 44 years. [6] 45 to 64 years. [7] 15 to 19 years.

Source: U.S. National Highway Traffic Safety Administration, *General Estimates System*, annual.

No. 1017. Cost of Owning and Operating an Automobile: 1975 to 1990

ITEM	Unit	1975	1980	1985	1986	1987	1988	1989	1990
Cost per mile [1]	Cents	18.31	27.95	27.20	29.59	32.64	33.40	38.20	41.0
Cost per 10,000 miles [1]	Dollars	1,831	2,795	2,720	2,959	3,264	3,341	3,820	41.0
Variable cost	Cents/mile	6.45	7.62	8.04	6.52	7.20	7.60	7.90	8.4
Gas and oil	Cents/mile	4.82	5.86	6.16	4.48	4.80	5.20	5.20	5.4
Maintenance	Cents/mile	0.97	1.12	1.23	1.37	1.60	1.60	1.90	2.1
Tires	Cents/mile	0.66	0.64	0.65	0.67	0.80	0.80	0.80	0.9
Fixed cost	Dollars	1,186	2,033	2,441	2,596	2,782	3,061	3,534	[2]3,256
Insurance	Dollars	383	490	503	509	535	573	663	675
License and registration	Dollars	30	82	115	130	140	139	151	165
Depreciation	Dollars	773	1,038	1,253	1,320	1,506	1,784	2,094	2,357
Finance charge	Dollars	(NA)	423	570	637	601	565	626	680

NA Not available. [1] Beginning 1985, not comparable to previous data. [2] Not comparable to previous years. Ownership costs based on a 6 year or 60,000 mile retention cycle.

Source: Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI, *Motor Vehicle Facts and Figures*, annual.

No. 1018. New Car Prices and Consumer Expenditures per New Car: 1970 to 1990

[**In dollars**, except as indicated]

YEAR	CONSUMER EXPENDITURE PER NEW CAR [1]			ESTIMATED AVG. NEW CAR PRICE FOR A 1967 "COMPARABLE CAR"		WEEKS OF MEDIAN FAMILY INCOME TO EQUAL		
							Cost of comparable car	
	Domestic	Import	Average	With added safety and emissions equipment [2]	Without added safety and emissions equipment [3]	Average new car expend. [4]	With added safety and emissions equipment [5]	Without added safety and emissions equipment [6]
1970	3,708	2,648	3,542	3,601	3,459	18.7	19.0	18.2
1980	7,609	7,482	7,574	6,863	5,764	18.7	17.0	14.3
1985	11,733	12,875	12,022	8,984	6,958	23.0	17.2	13.3
1989	14,959	16,127	15,292	10,248	7,825	24.5	16.4	12.5
1990	15,641	17,010	16,012	10,581	7,938	24.5	16.2	12.2

[1] Average transaction price per new car. [2] 1967 "average consumer expenditures per new car" plus the value of added safety and emissions equipment, all inflated to current dollars. [3] 1967 average consumer expenditure per new car inflated to current dollars. [4] Average consumer expenditures divided by annual median family income multiplied by 52 weeks. [5] Estimated average new car price of comparable cars with new safety equipment added, divided by annual median family income, multiplied by 52 weeks. This index is a good reflection of price as seen by the car purchasers who would not otherwise buy safety/emissions equipment. [6] Estimated average new car price of comparable cars without new safety and emissions equipment divided by annual median family income, multiplied by 52 weeks. This index is a good reflection of price as seen by purchasers who place full value on new safety/emissions equipment.

Source: Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, MI *Motor Vehicle Facts and Figures*, annual.

No. 1019. Domestic Motor Fuel Consumption, by Type of Vehicle: 1970 to 1990

[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	131.6	-0.2	72.4	0.9	58.1	505	1,436	1,305	21.00	5.36	10.62

[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. 1020. Household Motor Vehicle Transportation, by Vehicle Model Year: 1988

[Preliminary. Household vehicles include all motorized vehicles used for personal transportation, excluding motorcycles, mopeds, large trucks, and buses. The reporting unit for 1988 is all households which owned a vehicle at any time during 1988. Based on the Residential Transportation Energy Consumption Survey; subject to sampling variability. For composition of regions, see fig. I, inside front cover]

HOUSEHOLD CHARACTERISTICS	Households with motor vehicles (mil.)	VEHICLES (millions)					MILES PER GALLON				
		Total	Model year				Average	Model year			
			1974 and earlier	1975 to 1980	1981 to 1985	1986 to 1989		1976 and earlier	1981 or 1982	1986	1988 or 1989
Total	81.3	147.5	13	29	35	23	18.3	12.3	20.7	21.9	22.1
Northeast	15.2	26.6	8	24	40	28	19.6	12.2	21.8	22.3	21.5
Midwest	20.4	37.8	11	32	35	22	18.2	12.2	20.7	21.5	23.0
South	28.3	50.6	12	29	34	24	18.0	12.0	19.7	21.8	21.9
West	17.3	32.5	21	29	30	20	18.0	12.7	21.5	22.3	22.3

Source: U.S. Energy Information Administration, *Household Vehicles Energy Consumption, 1988*.

No. 1021. Household Vehicles—Annual Mileage, Fuel Consumption, and Fuel Expenditures: 1988

[See headnote, table 1020]

HOUSEHOLD AND VEHICLE CHARACTERISTICS	NUMBER OF—			MILES DRIVEN		GALLONS CONSUMED		FUEL EXPENDITURES	
	Households [1] (millions)	Vehicles (millions)	Vehicles per household	Total (billion)	Percent	Total (billion)	Percent	Total (bil. dol.)	Percent
Total	**81.3**	**147.5**	**1.8**	**1,511**	**100.0**	**82.4**	**100.0**	**81.1**	**100.0**
Metropolitan status:									
Metropolitan	63.0	113.9	1.8	1,171	77.5	62.6	76.0	61.9	76.3
Nonmetropolitan	18.3	33.6	1.8	341	22.5	19.8	24.0	19.2	23.7
Origin of householder: White	71.5	132.2	1.8	1,346	89.0	73.5	89.2	72.3	89.1
Black	7.2	10.6	1.5	115	7.6	6.2	7.5	6.2	7.6
Other	2.6	4.7	1.8	51	3.4	2.8	3.3	2.7	3.3
Family income 1988:									
Less than $10,000	10.2	13.3	1.3	111	7.4	6.6	8.0	6.4	7.9
$10,000-$14,999	11.8	17.0	1.4	153	10.2	9.0	10.9	8.8	10.8
$15,000-$19,999	8.3	13.3	1.6	132	8.7	7.3	8.9	7.2	8.9
$20,000-$24,999	8.6	15.1	1.7	154	10.2	8.5	10.3	8.3	10.3
$25,000-$34,999	16.0	29.2	1.8	297	19.7	16.4	19.9	16.1	19.9
$35,000-$49,999	12.9	28.3	2.2	313	20.7	16.5	20.0	16.3	20.1
$50,000-$74,999	8.8	20.5	2.3	226	15.0	11.8	14.3	11.6	14.3
$75,000 or more	4.5	10.8	2.4	124	8.2	6.3	7.7	6.3	7.8

[1] Includes only households with vehicles.

Source: U.S. Energy Information Administration, *Household Vehicles Energy Consumption 1988*.

No. 1022. Motor Vehicle Travel, by Type of Vehicle, and by Speed: 1970 to 1990

[**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 as part of 55 mile per hour Speed Limit 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 [2]				
	Total	Cars [1]	Buses	Trucks	Passenger vehicles		Trucks	Vehicles recorded (1,000) [3]	Avg. speed (miles per hour)	Percent of vehicles exceeding—		
					Cars [1]	Buses				55 mph	60 mph	65 mph
1970	1,110	920	4.5	186	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
1983	1,653	1,207	5.2	441	9.1	8.9	12.0	7,856	59.1	74	41	15
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	2,148	1,525	5.7	617	10.3	9.1	13.9	7,511	60.4	78	50	23

[1] Includes motorcycles. [2] Represents speed on rural interstate highways. Beginning 1980, for year ending Sept. 30. [3] Citations issued for 55 mph violations.

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

No. 1023. Passenger Transit Industry—Summary: 1980 to 1990

[Includes Puerto Rico. Includes aggregate information for all transit systems in the United States. Except as noted, prior-to-1984 data exclude commuter railroad, automated guideway, urban ferry boat, and demand response, as well as most transit systems outside of urbanized areas. Data are noncontinuous between 1983 and 1984. Non-transit 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) are excluded. Beginning in 1984, only active vehicles are counted]

ITEM	Unit	1980	1984	1985	1986	1987	1988	1989	1990, prel.
Operating systems	Number	1,044	4,938	4,972	5,018	5,047	5,036	5,046	5,073
Motorbus systems [1]	Number	1,040	2,604	2,631	2,655	2,671	2,671	2,665	2,686
Publicly owned systems [1]	Number	576	(NA)	1,435	(NA)	(NA)	(NA)	(NA)	1,580
Passenger vehicles owned [2,3]	Number	75,388	96,901	94,368	98,709	96,127	97,209	92,293	93,752
Motorbus [2]	Number	59,411	67,294	64,258	66,218	63,017	62,572	58,919	59,753
Trolley bus	Number	823	664	676	680	671	710	725	832
Heavy rail [2]	Number	9,641	9,083	9,326	10,386	10,168	10,539	10,506	10,419
Light rail [2]	Number	1,013	733	717	697	766	831	755	913
Commuter rail	Number	4,500	4,075	4,035	4,440	4,686	4,649	4,472	4,415
Demand response	Number	(NA)	14,164	14,490	15,346	15,944	16,812	15,856	16,222
Total revenue	Mil. dol	6,510	11,623	12,195	13,342	14,091	14,537	14,985	15,982
Passenger revenue	Mil. dol	2,557	4,448	4,575	5,113	5,114	5,225	5,420	5,858
Other operating revenue [4]	Mil. dol	248	781	702	737	777	841	837	904
Operating assistance	Mil. dol	3,705	6,395	6,918	7,491	8,200	8,471	8,728	9,220
Federal	Mil. dol	1,094	996	940	941	955	901	937	863
State and local	Mil. dol	2,611	5,399	5,979	4,245	4,681	4,893	4,995	5,338
Local	Mil. dol	(NA)	(NA)	(NA)	2,306	2,565	2,677	2,796	3,019
Total expense	Mil. dol	6,711	12,957	14,077	14,726	15,405	16,442	17,169	18,340
Operating expense	Mil. dol	6,247	11,574	12,381	12,952	13,472	14,287	14,972	16,058
Transportation	Mil. dol	3,248	5,142	5,655	5,690	5,790	6,052	6,275	6,768
Maintenance	Mil. dol	1,774	3,062	3,672	4,029	4,094	4,313	4,493	4,682
Administration	Mil. dol	1,224	3,370	3,054	3,298	3,714	4,041	4,223	3,588
Reconciling expense	Mil. dol	464	1,383	1,696	1,774	1,933	2,155	2,196	2,282
Capital expenditure, Federal	Mil. dol	2,787	2,876	2,510	3,138	2,475	2,521	2,590	2,380
Vehicle-miles operated [3]	Million	2,287	2,750	2,791	2,986	3,055	3,157	3,203	3,274
Motorbus	Million	1,677	1,845	1,863	2,002	2,079	2,097	2,109	2,153
Trolley bus	Million	13	15	16	15	15	15	15	14
Heavy rail	Million	385	436	451	476	490	517	532	537
Light rail	Million	18	17	17	17	18	21	21	24
Commuter rail	Million	179	168	183	189	189	202	210	213
Demand response	Million	(NA)	256	247	275	250	289	300	317
Passengers carried [3]	Million	8,567	8,829	8,636	8,777	8,735	8,666	8,931	8,873
Motorbus	Million	5,837	5,908	5,675	5,753	5,614	5,590	5,620	5,754
Trolley bus	Million	142	165	142	139	141	136	130	126
Heavy rail	Million	2,108	2,231	2,290	2,333	2,402	2,308	2,542	2,346
Light rail	Million	133	135	132	130	133	154	162	176
Commuter rail	Million	280	267	275	306	311	325	330	329
Demand response	Million	(NA)	62	59	63	64	73	70	62
Avg.revenue per passenger	Cents	31.0	50.3	52.8	58.1	58.4	60.1	60.5	65.8
Employees, number (avg.)	1,000	187	263	270	278	277	276	272	276
Payroll, employee	Mil. dol	3,281	5,488	5,843	6,119	6,324	6,675	6,898	7,325
Fringe benefits, employee	Mil. dol	1,353	2,717	2,868	3,126	3,267	3,529	3,737	4,049

NA Not available. [1] Includes systems with combined services including motorbuses, heavy rail cars, light rail cars, trolley coaches, cable cars, and inclined plane cars. Beginning 1984, combined services also include suburban rail cars, urban ferry boats, vanpools, aerial tramways, automated guideways, and demand response vehicles. [2] Beginning 1984, includes active vehicles only. Includes other vehicles not shown separately. [3] Includes other not shown separately. [4] Includes other operating revenue, non-operating revenue, and auxiliary income.

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

No. 1024. Class I Intercity Motor Carriers of Passengers: 1975 to 1990

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

ITEM	Unit	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Carriers reporting [1]	Number	77	48	50	45	43	43	29	32	21	20	21
Number of employees, average	1,000	31	31	30	25	25	24	20	(NA)	(NA)	(NA)	(NA)
Compensation of employees	Mil. dol.	383	599	646	570	551	518	443	(NA)	(NA)	(NA)	(NA)
Operating revenue	Mil. dol.	942	1,397	1,447	1,276	1,255	1,233	1,117	1,079	1,122	1,205	943
Passenger revenue [2]	Mil. dol.	651	947	969	876	861	836	765	751	825	890	738
Special bus revenue and other	Mil. dol.	291	215	229	180	180	184	155	165	155	165	90
Operating expenses	*Mil. dol.*	*880*	*1,318*	*1,416*	*1,283*	*1,254*	*1,168*	*1,082*	*1,081*	*1,059*	*1,133*	*1,015*
Net operating revenue	Mil. dol.	61	79	30	-7	1	65	35	-2	63	72	-72
Ordinary income:												
Before income taxes	Mil. dol.	83	107	35	16	53	65	50	-11	(NA)	(NA)	(NA)
After income taxes	Mil. dol.	56	90	37	26	43	53	36	-21	(NA)	12	-180
Passenger vehicles in service [2]	1,000	9.7	8.6	8.1	7.3	7.0	8.4	8.3	(NA)	(NA)	(NA)	(NA)
Vehicle-miles, passenger	Million	835	781	717	591	585	567	495	(NA)	(NA)	(NA)	(NA)
Revenue passengers carried	Million	147	134	112	94	89	88	74	82	55	54	43
Expense per vehicle-mile	Dollar	1.05	1.69	1.98	2.17	2.14	2.06	2.18	(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. 1025. Intercity Bus Lines—Summary of Operations: 1970 to 1987

ITEM	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987
Operating companies	Number	1,000	950	1,200	1,330	1,470	1,520	(NA)	(NA)	(NA)	(NA)	3,550
Buses	1,000	22.0	20.5	21.3	21.4	21.7	20.9	20.4	20.1	20.1	19.1	18.4
Miles of highway served (Dec. 31) [1]	1,000	267	274	280	279	276	273	270	266	263	257	249
Employees (Dec. 31) [2]	1,000	50	47	48	49	50	48	45	44	43	41	39
Bus miles, total	Million	1,209	1,126	1,153	1,162	1,151	1,115	1,027	1,016	997	945	914
Revenue passengers	Million	401	351	368	370	370	359	352	352	353	346	333
Charter and tour passengers	Million	92	145	185	195	204	206	209	(NA)	(NA)	(NA)	(NA)
Revenue passenger-miles	Billion	25.3	25.4	27.7	27.4	268	27.3	25.4	35.2	23.8	22.5	21.9
Operating revenue, all services	Mil. dol.	901	1,172	1,664	1,943	2,097	2,070	1,953	1,914	1,898	1,838	1,717
Operating expenses	Mil. dol.	812	1,103	1,572	1,811	1,982	2,013	1,938	1,896	1,839	1,781	1,669
Net operating revenue [3]	Mil. dol.	89	69	92	132	115	57	15	18	59	57	48

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. 1026. Warehousing Services—Revenues, Expenses, and Payroll: 1985 to 1990

[In millions of dollars]

SIC [1] code	KIND OF BUSINESS	OPERATING REVENUES		OPERATING EXPENSES		ANNUAL PAYROLL	
		1985	1990	1985	1990	1985	1990
42	Motor frgt transport.and warehousing srvs. [2]	91,663	121,171	87,448	120,321	28,091	37,495
421	Trucking, local and long distance	82,212	120,190	78,819	114,120	25,576	35,675
422	Public warehousing	4,415	6,923	3,847	6,148	1,322	1,798
4221	Farm product warehousing and storage	518	670	457	564	(D)	(D)
4222	Refrigerated warehousing	1,007	1,343	872	1,144	313	391
4224	Household goods warehousing, storage	233	264	200	212	53	83

D Data do not meet publication standards because of high sampling error or high imputation rate. [1] Standard Industrial Classification. [2] Includes SIC 4231 and 4225,6 not shown separately.

Source: U.S. Bureau of the Census, *Current Business Reports, 1988 Motor Freight Transportation and Warehousing Survey*.

No. 1027. Trucking Costs and Rates for Fresh Fruit and Vegetables: 1980 to 1989

[Dollars per box, except as indicated]

SELECTED ITEMS	1980	1982	1983	1984	1985	1986	1987	1988	1989
Truck costs for fleet operators [1] (dollars per mile)	0.97	1.11	1.13	1.15	1.17	1.14	1.17	1.18	1.23
Truck rates by commodity and origin/destination: [2]									
Lettuce [3], California to New York City	3.36	3.62	3.62	3.65	3.62	3.75	3.83	3.69	3.76
Citrus and vegetables, Southern California to New York City	2.77	2.91	2.98	3.18	3.06	3.16	3.23	3.14	3.2
Apples, Washington to New York City	3.09	3.20	3.41	3.19	3.20	3.21	3.28	3.30	3.31

[1] Truck costs developed by Office of Transportation, USDA. [2] Average rates reported by Agricultural Marketing Service, Market News Service, USDA, for the first week of the month. [3] January to April: Imperial Valley, California to New York City; May to December: Salinas, California, to New York City.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Food Cost Review*, 1989.

No. 1028. Trucking Services—Operating Revenues, Operating Expenses, and Equipment, by Type of Carrier: 1985 to 1990

[**In millions of dollars, except as indicated.** Data cover SIC group 421. Estimates include both regulated and nonregulated carriers; excluded are non-employers (i.e., firms with no paid employees) and private fleets operated as auxiliary establishments to nontransportation companies. Some unpublished estimates may be derived from this table by subtraction, but such figures are subject to high sampling variability and should be used with caution]

ITEM	ALL CARRIERS			SPECIALTY FREIGHT CARRIERS			GENERAL FREIGHT CARRIERS		
	1985	1989	1990	1985	1989	1990	1985	1989	1990
Operating revenues:									
Total [1]	86,858	112,263	120,190	30,435	39,524	40,904	56,423	72,739	79,286
Motor carrier	81,347	105,158	112,572	26,974	34,705	35,805	54,373	70,453	76,767
Local trucking	17,548	22,287	23,859	9,084	12,610	13,380	8,464	9,677	10,479
Intercity trucking	63,799	82,871	88,713	17,890	22,095	22,425	45,909	60,776	66,288
Operating expenses:									
Total	83,266	107,432	114,120	28,933	37,790	39,186	54,333	69,642	74,934
Annual payroll	26,722	34,161	35,675	7,600	9,788	10,201	19,122	24,373	25,474
Employer contributions to Social Security and other benefits	6,113	8,282	8,708	1428	2,015	2,088	4,685	6,267	6,620
Purchased fuels	6,825	7,737	9,186	2,191	2,443	2,772	4,634	5,294	6,414
Cost of purchased transportation	(NA)	23,050	24,162	(NA)	9,438	9,355	(NA)	13,612	14,807
Lease and rental payments	1,314	2,063	2,258	504	876	925	810	1,187	1,333
Cost of insurance	(NA)	4,426	4,580	(NA)	1,624	1,583	(NA)	2,802	2,997
Maintenance and repair costs	(NA)	6,054	6,509	(NA)	2,319	2,408	(NA)	3,735	4,101
Depreciation	4,193	5,820	6,141	1,596	2,183	2,122	2,597	3,637	4,019
Taxes and licenses	1,950	2,370	2,493	619	778	804	1,331	1,592	1,689
Other	(NA)	13,469	14,408	(NA)	6,326	6,928	(NA)	7,143	7,480
Equipment (1,000 units): [2]									
Trucks	201	247	259	94	104	107	(S)	143	152
Truck-tractors	461	541	549	167	170	167	302	371	382
Trailers, full and semi	1,055	1,178	1,214	246	295	299	765	883	915

NA Not available. S Data do not meet publication standards. [1] Includes other revenues not shown separately. [2] Represents revenue generating freight equipment as of December 31. Includes owned and leased equipment.

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

No. 1029. Class I Intercity Motor Carriers of Property, by Carrier: 1980 to 1990

[See headnote, table 1024. Common carriers are carriers offering regular scheduled service. Contract carriers provide service at request of user. Minus sign (-) indicates loss]

ITEM	Unit	1980	1985	1989	1990	1980	1985	1989	1990
		COMMON CARRIER, GENERAL FREIGHT				COMMON CARRIER OTHER THAN GENERAL FREIGHT			
Carriers reporting	Number	298	237	192	191	441	397	337	322
Number of employees, average	1,000	413	376	461	465	101	76	84	87
Compensation of employees	Mil. dol.	9,803	10,217	12,854	13,556	1,931	1,783	2,105	2,236
Operating revenues	Mil. dol.	19,725	22,314	27,405	29,682	8,792	7,962	8,321	9,042
Intercity freight	Mil. dol.	19,480	22,080	27,289	29,517	8,339	7,664	8,024	8,762
Operating expenses	Mil. dol.	18,870	21,037	26,242	28,340	8,426	7,752	8,081	8,702
Ordinary income before taxes	Mil. dol.	701	1,198	988	1,146	230	123	117	198
Net income	Mil. dol.	−72	658	659	746	14	94	88	153
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	6,557	6,804	6,889	5,714	6,320	6,566
Tons of intercity revenue freight carried	Million	178	136	145	157	324	303	278	302
		CONTRACT CARRIER OTHER THAN GENERAL FREIGHT				CARRIERS OF HOUSEHOLD GOODS			
Carriers reporting	Number	69	64	77	87	28	40	36	36
Number of employees, average	1,000	14	22	29	34	10	11	12	13
Compensation of employees	Mil. dol.	336	630	893	1,082	157	240	276	296
Operating revenues	Mil. dol.	1,272	1,942	2,946	3,486	1,824	2,684	3,114	3,152
Intercity freight	Mil. dol.	1,172	1,792	2,693	3,209	1,676	2,388	2,703	2,702
Operating expenses	Mil. dol.	1,207	1,807	2,888	3,422	1,781	2,635	3,059	3,129
Ordinary income before taxes	Mil. dol.	48	103	15	3	74	79	41	12
Net income	Mil. dol.	28	69	3	−13	42	54	28	8
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	1,826	2,044	969	1,171	1,229	1,366
Tons of intercity revenue freight carried	Million	37	41	80	80	5	7	7	8

NA Not available.

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

No. 1030. Trucks—Percent Distribution, Operational Characteristics: 1977 to 1987

[See headnote, table 1031]

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 catttlerack	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 [5]	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, mini-van, station wagon, and utility trucks. [3] Includes multi-stop or walk-in. [4] See footnote 6, table 1031. [5] Includes not reported. [6] See footnote 8, table 1031. [7] See footnote 9, table 1031.

No. 1031. 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) Total	TRUCKS (1,000) Excl. pickups, panels [1]	TRUCK-MILES (bil.)
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 [5]	1,424	1,424	48.8
All other	1,794	1,794	28.5
Vehicle size: [6] 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	285.1
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: [8] 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	57.6
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]			
Flammables 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 mini-vans, utilities, and station wagons. [2] Includes forestry and lumbering. [3] Also includes multi-stop, mini-vans, station wagons, and utility trucks. [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 1030 and 1031: U.S. Bureau of the Census, *1987 Census of Transportation, TC87-T-52.*

No. 1032. Railroads, Class I—Summary: 1970 to 1990

[As of **Dec. 31**, or **calendar year** data, except as noted. Compiled from annual reports of class I railroads only, except where noted. Beginning 1983, 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	1970	1980	1984	1985	1986	1987	1988	1989	1990
Class I line-hauling companies [1]	Number.	71	40	29	23	22	18	17	15	14
Employees [2]	1,000	566	459	323	302	276	249	236	228	216
Compensation	Mil. dol.	5,711	11,318	11,004	10,563	9,900	9,373	9,301	9,043	8,654
Average per hour	Dollars	4.14	10.2	13.8	14.3	14.8	15.1	15.6	15.8	15.8
Average per year	Dollars	10,086	24,659	34,064	34,991	35,894	37,716	39,431	39,742	39,987
Mileage:										
Railroad line owned [3]	1,000	206	179	157	155	154	152	150	149	144
Railroad track owned [4]	1,000	336	290	264	257	256	254	251	249	239
Equipment:										
Locomotives in service	Number.	27,077	28,094	22,548	22,932	20,790	19,358	19,364	19,015	18,835
Average horsepower	1,000 lb	1,926	2,302	2,415	2,469	2,531	2,554	2,579	2,624	2,665
Cars in service:										
Passenger train	Number.	11,177	4,347	[5]2,580	2,502	2,307	2,350	2,332	(NA)	(NA)
Freight train [6]	1,000	1,784	1,711	1,486	1,422	1,339	1,288	1,239	1,224	1,212
Freight cars [7]	1,000	1,424	1,168	948	867	799	749	725	682	659
Average capacity [7]	Tons	67.1	78.5	83.4	83.2	84.1	85.0	86.4	87.8	87.5
Aggregate capacity [7]	Mil. tons	95.6	92.7	80.0	72.2	67.2	63.6	55.9	55.0	53.0
Box [7]	1,000	590	347	245	216	180	163	144	133	123
Gondola and hopper [7]	1,000	724	636	552	505	473	445	437	423	411
Other [7]	1,000	140	185	151	145	146	141	144	132	125
Income and expenses:										
Operating revenues	Mil. dol.	11,992	28,258	29,453	27,586	26,204	26,622	27,934	27,956	28,370
Operating expenses	Mil. dol.	11,478	26,355	25,800	25,225	24,896	23,878	24,811	25,038	24,652
Net revenue from operations	*Mil. dol.*	*514*	*1,902*	*3,653*	*2,361*	*1,308*	*2,744*	*3,123*	*2,918*	*3,718*
Income before fixed charges	Mil. dol.	994	2,897	4,893	3,393	2,480	3,932	4,460	4,162	4,627
Provision for taxes [8]	Mil. dol.	88	592	1,185	660	163	1,051	1,162	1,040	1,088
Ordinary income	Mil. dol.	227	1,129	2,654	1,788	747	1,965	2,286	2,009	1,961
Net income	Mil. dol.	227	1,129	2,701	1,882	544	2,055	2,382	2,203	1,977
Net railway operating income	Mil. dol.	486	1,339	2,537	1,746	507	1,756	1,980	1,894	2,648
Total taxes [9]	Mil. dol.	1,069	2,585	3,605	3,169	2,728	3,553	3,871	3,742	3,780
Indus. return on net investment	Percent.	1.7	4.2	5.7	4.6	1.3	4.8	6.7	6.3	8.1
Gross capital expenditures	Mil. dol.	1,351	3,238	4,121	4,485	3,645	3,076	3,546	3,865	3,591
Equipment	Mil. dol.	993	2,280	806	965	693	657	1,027	1,171	996
Roadway and structures	Mil. dol.	358	953	2,938	3,458	2,908	2,314	2,654	2,538	2,644
Other	Mil. dol.	-	5	377	62	44	105	-135	156	-49
Balance sheet:										
Total property investment	Mil. dol.	38,213	43,923	63,471	64,241	64,781	66,760	68,550	67,661	70,348
Accrued depreciation and amortization	Mil. dol.	10,027	10,706	20,098	19,756	20,940	21,070	21,497	21,481	22,222
Net investment	Mil. dol.	28,186	33,419	45,435	46,237	45,344	45,690	47,053	47,370	48,126
Shareholder's equity	Mil. dol.	17,323	19,860	27,986	27,805	25,442	25,616	26,467	25,753	23,663
Net working capital	Mil. dol.	-59	897	1,844	1,084	743	1,241	-190	-2119	-3505
Cash dividends	Mil. dol.	421	610	1,066	1,444	1,376	1,252	1,814	1,910	2,074
AMTRAK passenger traffic:										
Passenger revenue	Mil. dol.	(NA)	(NA)	556.7	604.9	633.6	681.1	784.2	893.0	941.9
Revenue passengers carried	1,000	(NA)	21,303	20,065	20,945	20,165	20,727	21,490	21,394	22,383
Revenue passenger miles	Million.	(NA)	4,645	4,566	4,977	5,015	5,368	5,686	5,912	6,125
Averages:										
Revenue per passenger	Dollars	(NA)	(NA)	28.2	28.9	31.4	32.9	36.5	41.8	42.1
Revenue per passenger mile	Cents	(NA)	(NA)	12.4	12.2	12.6	12.7	13.8	15.1	15.4
Trip per passenger	Miles	(NA)	218.1	227.6	237.6	248.7	259.0	264.6	276.3	273.7
Freight service:										
Freight revenue	Mil. dol.	10,922	26,200	28,472	26,688	25,344	25,797	27,092	27,059	24,471
Per ton-mile	Cents	1.4	2.8	3.1	3.0	2.9	2.7	2.7	2.7	2.7
Per ton originated	Dollar	7.7	17.7	19.9	20.2	19.4	18.8	19.0	19.3	19.3
Revenue-tons originated	Million.	1,485	1,492	1,429	1,320	1,087	1,372	1,430	1,402	1,425
Revenue-tons carried	Million.	2,616	2,434	2,119	1,985	1,938	1,984	2,045	1,988	2,024
Tons carried one mile	Billion	765	919	922	877	868	944	996	1,014	1,034
Average miles of road operated	1,000	209	179	165	161	155	147	141	138	133
Revenue ton-miles per mile of road	1,000	3,652	5,133	5,578	5,446	5,587	6,395	7,052	7,373	7,763
Revenue per ton-mile	Cents	1.428	3	3	3	3	3	3	3	2,657
Train miles	Million.	427	428	369	347	347	361	379	382	380
Net ton-miles per train-mile [10]	Number.	1,820	2,175	2,543	2,574	2,552	2,644	2,662	2,683	2,755
Net ton-miles per loaded car-mile [10]	Number.	44.9	63.5	62.4	62.7	63.2	64.0	65.5	67.0	69.0
Train-miles per train-hour	Miles	20.1	18.2	21.9	21.9	22.5	22.2	21.5	23.0	24.0
Haul per ton, U.S. as a system	Miles	490	616	645	664	664	688	697	723	726
Accident: [11]										
Persons killed	Number.	2,255	1,417	1,247	1,036	1,091	1,165	1,199	1,324	1,297
Persons injured	Number.	21,327	62,246	38,570	34,304	26,923	26,033	27,054	26,715	25,143

- Represents zero. NA Not available. [1] See text, section 21 for definition of Class I. [2] Average mid-month 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] Excludes Long Island Railroad, which was reclassified. [6] Includes cars owned by all railroads, private car companies, and shippers. [7] Class I railroads only. [8] Includes State income taxes beginning 1980. [9] Includes payroll, income, and other taxes. [10] Revenue and non-revenue freight. [11] Includes highway grade crossing casualties. 1970 not comparable with later years due to change in requirements for reporting injuries.

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. 1033. Railroads, Class I-Cars of Revenue Freight Loaded, 1970 to 1990, and by Commodity Group, 1989 and 1990

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

YEAR	CARLOADS		COMMODITY GROUP	CARLOADS		COMMODITY GROUP	CARLOADS	
	Total	Piggy-back		1989	1990		1989	1990
1970	27,160	1,450	Coal	5,969	6,296	Metals and products	421	454
1975	23,217	1,308	Metallic ores	514	506	Stone, clay, and glass products	509	489
1980	22,598	1,661	Chemicals, allied products	1,382	1,421	Crushed stone, gravel, sand	717	710
1985	19,574	2,863	Grain	1,472	1,428	Nonmetalic minerals, n.e.c	492	459
1986	19,783	3,279	Motor vehicles and equipment	958	882	Waste and scrap materials	416	414
1987	21,133	3,294	Pulp, paper, allied products	494	485	Lumber, wood products, n.e.c. [1]	339	301
1988	16,422	(NA)	Primary forest products	431	410	Coke	274	281
1989	16,030	(NA)	Food and kindred prod., n.e.c.	448	448	Petroleum product	253	255
1990	16,177	(NA)	Grain mill products	513	520	All other carloads	527	418

NA Not available. [1] Excludes furniture.

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

No. 1034. Railroads, Class I Line-Haul-Revenue Freight Originated, by Commodity Group: 1970 to 1990

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

COMMODITY GROUP	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
Carloads (1,000) [1]	**27,015**	**22,930**	**22,223**	**19,013**	**20,946**	**19,501**	**19,587**	**20,602**	**21,600**	**21,226**	**21,401**
Coal	5,296	4,844	5,789	5,276	6,061	5,684	5,433	5,430	5,621	5,672	5,912
Farm products	2,374	1,873	1,866	1,642	1,757	1,494	1,602	1,907	1,977	1,781	1,689
Chemicals, allied products	1,576	1,313	1,322	1,216	1,312	1,296	1,287	1,410	1,497	1,486	1,531
Food and kindred products	2,706	2,154	1,767	1,316	1,234	1,224	1,276	1,326	1,318	1,284	1,307
Nonmetallic minerals [2]	2,204	1,895	1,474	1,079	1,204	1,196	1,113	1,188	1,290	1,254	1,202
Transportation equipment	1,059	1,135	1,004	954	1,141	1,202	1,148	1,085	1,160	1,141	1,091
Lumber and wood products [3]	2,048	1,615	1,384	1,075	1,051	948	965	986	910	843	780
Pulp, paper, allied products	1,197	1,015	954	746	741	703	672	561	646	615	611
Petroleum and coal products	699	787	596	495	529	491	477	520	568	561	573
Stone, clay, and glass products	1,231	906	776	543	576	551	530	559	577	565	539
Metallic ores	1,602	1,338	1,258	812	1,001	511	508	494	582	523	508
Primary metal products	1,486	796	756	440	487	449	389	428	479	452	477
Waste and scrap materials	805	744	632	417	480	429	402	440	471	444	439
Machinery, exc. electrical	200	156	77	38	40	35	31	33	40	38	39
Fabricated metal products [4]	398	244	72	33	37	31	26	24	26	27	31
Tons (mil.) [1]	**1,485**	**1,395**	**1,492**	**1,293**	**1,429**	**1,320**	**1,306**	**1,372**	**1,429**	**1,403**	**1,425**
Coal	405	408	522	494	567	538	518	523	543	551	579
Farm products	134	134	156	142	151	127	136	163	170	154	147
Chemicals, allied products	92	91	108	99	107	106	106	116	123	123	126
Nonmetallic minerals [2]	163	151	125	97	108	108	101	109	115	111	109
Food and kindred products	110	100	92	75	72	74	78	81	81	79	81
Lumber and wood products [3]	102	89	86	72	70	63	65	67	62	57	53
Metallic ores	127	106	105	68	86	47	46	45	52	47	47
Stone, clay, and glass products	71	57	54	42	45	44	42	44	46	47	44
Petroleum and coal products	36	46	38	34	35	33	33	35	39	39	40
Primary metal products	82	51	53	32	36	34	30	33	38	36	38
Pulp, paper, allied products	43	41	42	37	38	36	36	36	35	34	33
Waste and scrap materials	40	38	34	25	29	26	25	28	30	28	28
Transportation equipment	24	27	24	22	26	27	26	24	25	24	23
Machinery, exc. electrical	5	4	2	1	1	1	1	1	1	1	1
Fabricated metal products [4]	11	8	2	1	1	1	1	1	1	1	1
Gross revenue (mil. dol.) [1]	**11,388**	**15,899**	**26,938**	**26,710**	**29,866**	**28,225**	**27,186**	**27,657**	**29,529**	**29,328**	**29,775**
Coal	1,381	2,146	4,956	5,969	6,965	6,556	6,089	6,097	6,430	6,581	6,954
Chemicals, allied products	1,137	1,681	2,946	3,078	3,360	3,342	3,342	3,477	3,795	3,788	3,933
Transportation equipment	734	1,283	1,917	2,292	2,859	3,110	2,997	2,866	3,218	3,269	3,100
Farm products	1,068	1,472	2,801	2,374	2,483	1,977	2,007	2,246	2,534	2,444	2,422
Food and kindred products	1,363	1,822	2,837	2,349	2,309	2,256	2,192	2,171	2,198	2,128	2,188
Pulp, paper, allied products	730	977	1,652	1,671	1,762	1,641	1,572	1,542	1,540	1,514	1,486
Lumber and wood products [3]	832	1,066	1,543	1,527	1,611	1,525	1,563	1,660	1,626	1,500	1,390
Primary metal products	813	848	1,332	816	955	872	787	863	1,013	972	979
Stone, clay, and glass products	512	651	1,025	908	1,024	960	907	914	965	960	931
Petroleum and coal products	305	573	865	844	913	861	800	809	903	917	918
Nonmetallic minerals [2]	409	596	948	834	997	949	839	854	890	868	885
Waste and scrap materials	232	359	513	423	496	446	425	474	526	492	504
Metallic ores	333	468	597	450	567	403	375	348	415	397	408
Machinery, exc. electrical	148	200	176	75	81	72	58	57	63	66	67
Fabricated metal products [4]	210	221	110	52	57	48	40	37	38	38	42

[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: 1970-1975, U.S. Interstate Commerce Commission, *Freight Commodity Statistics—Class I Railroads in the United States,* annual; thereafter, Association of American Railroads, Washington, DC, *Freight Commodity Statistics,* annual.

No. 1035. Railroad Freight—Producer Price Indexes: 1970 to 1991

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

COMMODITY	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total railroad freight	**29.1**	**45.3**	**75.9**	**95.0**	**99.3**	**99.9**	**100.7**	**100.1**	**104.8**	**106.4**	**107.5**	**109.3**
Coal	26.9	44.0	75.8	96.5	99.9	100.0	100.7	100.1	104.3	105.3	104.2	105.2
Farm products	29.7	45.2	75.6	94.0	98.7	99.0	99.6	99.3	105.5	108.5	110.4	111.5
Food products	28.9	44.8	75.2	94.6	99.1	100.0	99.9	98.6	103.1	103.9	105.4	108.2
Metallic ores	26.4	43.2	74.5	95.9	99.4	100.2	100.5	99.0	103.9	105.8	106.5	106.7
Chemicals or allied products	30.0	46.5	75.6	94.3	98.7	100.1	101.2	100.8	106.9	110.0	111.7	113.5
Nonmetallic minerals	25.4	40.5	72.2	94.6	98.9	100.1	101.6	101.1	106.1	108.3	111.7	116.0
Wood or lumber products	28.3	42.8	72.7	93.3	99.7	100.0	100.9	100.4	105.3	105.9	107.5	108.7
Transportation equipment	31.7	50.3	81.7	95.6	99.8	100.0	100.8	99.3	103.4	106.4	107.5	109.7
Pulp, paper, or allied products	31.5	47.1	76.7	95.6	99.9	100.0	101.0	100.6	104.0	105.1	108.0	111.5
Primary metal products	29.9	47.8	77.8	95.4	99.7	99.7	100.2	99.7	108.8	112.3	113.1	116.1
Clay, concrete, glass, or stone products	26.9	43.0	74.2	94.4	98.8	100.0	102.2	102.2	107.5	110.5	114.1	117.3

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

No. 1036. Petroleum Pipeline Companies—Characteristics: 1975 to 1990

[1975, covers pipeline companies operating in interstate commerce and subject to jurisdiction of Interstate Commerce Commission; thereafter, Federal Energy Regulatory Commission]

ITEM	Unit	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Miles of pipeline, total	1,000	171	173	173	168	174	171	170	168	171	169	168
Gathering lines	1,000	40	36	36	31	36	35	34	35	34	33	32
Trunk lines	1,000	130	136	137	137	138	136	136	133	136	135	136
Total deliveries	Mil. bbl.	9,391	10,600	10,181	10,310	10,224	10,745	11,002	11,194	11,484	11,281	11,378
Crude oil	Mil. bbl.	5,729	6,405	5,968	6,020	5,671	6,239	6,286	6,278	6,509	6,435	6,563
Products	Mil. bbl.	3,662	4,195	4,213	4,289	4,552	4,506	4,716	4,917	4,974	4,847	4,816
Total trunk line traffic	Bil. bbl-miles	2,892	3,405	3,442	3,328	3,406	3,342	3,467	3,524	3,619	3,505	3,500
Crude oil	Bil. bbl-miles	1,551	1,948	1,938	1,875	1,855	1,842	1,893	1,932	1,970	1,918	1,891
Products	Bil. bbl-miles	1,341	1,458	1,484	1,452	1,551	1,500	1,573	1,592	1,649	1,587	1,609
Carrier property value	Mil. dol.	10,740	19,752	21,942	22,255	19,397	21,605	22,384	21,353	24,332	24,638	25,828
Operating revenues	Mil. dol.	1,869	6,356	7,140	7,472	7,824	7,461	7,287	7,057	6,861	6,512	7,149
Net income	Mil. dol.	456	1,912	2,162	2,353	2,545	2,431	2,051	2,475	2,505	2,227	2,340

Source: PennWell Publishing Co., Tulsa, OK, *Oil & Gas Journal*, November 25, 1991, and earlier issues. (copyright)

No. 1037. Major Interstate Natural Gas Pipeline Companies—Summary: 1982 to 1989

[In 1984, the reporting criteria were changed from that of prior years. The classification of A and B interstate natural gas pipeline companies was changed to major companies and nonmajor companies. Major natural gas pipleline 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	1982	1983	1984	1985	1986	1987	1988	1989
Sales	Tril. cu. ft.	14.4	12.9	13.2	11.3	7.8	6.5	6.4	5.6
Residential	Tril. cu. ft.	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.1
Commercial, industrial	Tril. cu. ft.	1.2	1.0	1.2	1.1	0.5	0.4	0.5	0.5
For resale	Tril. cu. ft.	13.0	11.6	11.6	9.9	7.1	5.8	5.6	4.9
Operating revenues	Mil. dol	56,203	56,792	56,326	49,106	33,859	27,565	27,501	25,695
From sales [1]	Mil. dol	53,601	53,710	52,529	44,996	29,508	22,942	22,512	19,786
Residential	Mil. dol	1,273	1,725	1,927	1,879	1,122	1,094	1,553	819
Commercial, industrial	Mil. dol	4,453	4,233	5,180	4,466	1,909	1,464	1,544	1,452
For resale	Mil. dol	47,776	47,661	45,268	38,545	26,413	20,351	19,420	17,505
From transportation of gas of others	Mil. dol	1,259	1,787	1,923	2,272	3,027	3,622	4,059	4,959
Other	Mil. dol	1,344	1,296	1,874	1,838	1,325	1,002	929	950
Operation, maintenance expenses	Mil. dol	49,989	49,391	48,411	42,528	27,460	21,794	22,742	20,829
Production	Mil. dol	44,449	43,516	42,407	36,739	22,208	16,955	17,625	15,257
Storage	Mil. dol	405	441	415	418	420	409	436	458
Transmission	Mil. dol	3,629	3,729	3,760	3,409	2,984	2,598	2,589	2,589
Distribution	Mil. dol	103	131	131	132	80	80	127	94
Administrative, general, and other	Mil. dol	1,402	1,576	1,697	1,830	1,768	1,752	1,966	2,430
Pipeline mileage:									
Transmission lines	1,000	178.0	176.7	183.4	189.7	184.6	181.2	191.6	194.1
Field lines	1,000	64.6	63.7	65.2	69.6	64.5	62.9	55.5	55.1
Storage	1,000	6.9	6.5	4.6	4.8	4.6	4.3	4.8	4.8

[1] Includes other ultimate customers not shown separately.

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

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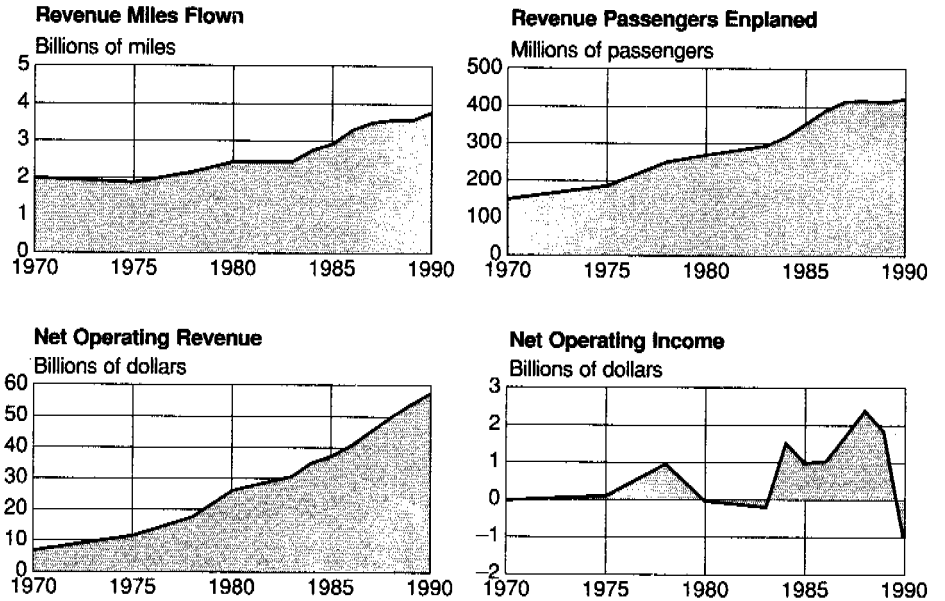
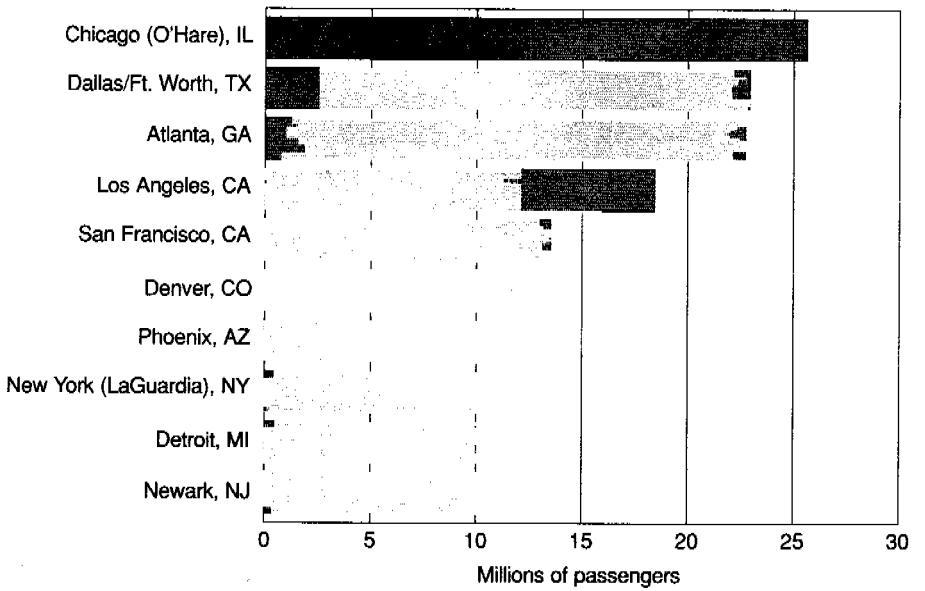
Figure 22.1
Domestic Scheduled Operations of Air Carriers: 1970 to 1990



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1038.

Figure 22.2
Revenue Passengers Enplaned—Top 10 Airports: 1990



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1044.

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

DOMESTIC AIR CARRIERS

Revenue passengers enplaned:	
1970	*153 million*
1980	*273 million*
1990	*424 million*
Net operating income:	
1970	*+$3 million*
1980	*-$6 million*
1990	*-$1,012 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 annually data 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. 1038. Certificated Route Air Carriers—Summary: 1970 to 1990

[As of **Dec. 31 or for calendar years.** See text, section 22. Operations between conterminous United States, Puerto Rico, and outlying areas included with international. Minus sign (-) indicates loss. See also *Historical Statistics, Colonial Times to 1970,* series Q 577-590 and Q 624-633]

ITEM	Unit	1970	1975	1978	1980	1985	1988	1989	1990
Domestic operators [1]	Number	35	33	34	72	86	66	62	60
Operating revenue	Mil. dol.	7,131	11,911	17,943	26,404	37,629	50,187	54,314	57,991
Operating expenses	Mil. dol.	7,128	11,781	16,948	26,409	36,611	47,739	52,460	59,004
Net operating income	Mil. dol.	3	129	995	-6	1,018	2,448	1,855	-1,012
International operators	Number	6	2	2	(1)	(1)	(1)	(1)	(1)
Operating revenue	Mil. dol.	1,913	3,063	4,332	6,543	8,302	13,402	14,911	17,976
Operating expenses	Mil. dol.	1,894	3,059	4,008	6,766	7,984	12,403	14,954	18,878
Net operating income	Mil. dol.	19	4	324	-223	319	998	-43	-902
Employment, total [2]	1,000	297	290	329	371	355	481	507	545
Pilots, copilots, and other flight personnel	1,000	33	32	36	39	40	52	52	56
Flight attendants	1,000	34	39	48	57	63	76	78	83
Mechanics	1,000	48	45	44	45	43	55	57	61
Aircraft and traffic servicing personnel	1,000	84	83	96	122	101	212	225	252
Other	1,000	98	91	104	108	108	86	95	94
Fixed-wing aircraft in operation [3]	Number	2,421	2,260	2,345	2,505	2,860	4,439	4,477	4,665
Turbojet	Number	2,041	2,022	2,184	2,336	2,740	3,913	3,939	4,145
Two-engine	Number	519	500	579	652	1,235	1,944	2,052	2,275
Three-engine	Number	631	961	1,140	1,311	1,277	1,542	1,459	1,438
Four-engine	Number	891	561	465	373	228	427	428	432
Turboprop	Number	316	193	155	163	110	438	447	438
Piston	Number	64	45	6	6	10	88	91	82
Average available seats: [4 5]									
Domestic operations	Number	110.4	130.4	140	143.1	152.5	153.1	152.1	151.9
International operations	Number	154.9	224.8	244.1	274.5	296.6	281.3	277.1	275.7
Average speed: [5]									
Domestic operations	Mi. per h	403	403	409	405	409	409	406	408
International operations	Mi. per h	482	482	489	494	497	488	486	489
Jet fuel consumed [6]	Mil. gal	10,083	9,507	10,534	11,311	12,603	15,094	15,624	16,252
Domestic operations	Mil. gal	7,842	7,558	8,621	9,218	10,115	11,902	12,087	12,461
International operations	Mil. gal	2,241	1,949	1,913	2,093	2,488	3,192	3,537	3,791
Revenue-miles flown [5]	Millions	2,426	2,241	2,520	2,816	3,320	4,141	4,193	4,491
Domestic operations	Millions	2,027	1,909	2,201	2,471	2,950	3,603	3,591	3,818
International operations	Millions	399	332	319	345	370	538	602	674
Revenue passengers enplaned [5]	Millions	169	205	275	297	382	455	454	466
Domestic operations	Millions	153	189	254	273	357	419	416	424
International operations	Millions	16	16	21	24	25	35	37	42
Revenue passenger-miles flown [5]	Billions	131.7	162.8	226.8	255.2	336.4	423.3	432.7	457.9
Domestic operations	Billions	104.1	131.7	182.7	200.8	270.6	329.3	330.0	340.2
International operations	Billions	27.6	31.1	44.1	54.4	65.8	94.0	102.7	117.7
Available seat-miles [5]	Billions	265.2	303.0	368.7	432.5	547.8	676.8	684.4	733.4
Domestic operations	Billions	213.2	241.3	299.5	346.0	445.8	536.7	530.1	563.0
International operations	Billions	52.0	61.7	69.2	86.5	102.0	140.1	154.3	170.3
Passenger load factor [5]	Percent	49.7	53.7	61.5	59.0	61.4	62.5	63.2	62.4
Domestic operations	Percent	48.9	54.6	61.0	58.0	60.7	61.4	62.3	60.4
International operations	Percent	53.0	50.4	63.7	62.8	64.6	67.1	66.6	69.1
Revenue passenger-miles per gallon of fuel	Number	13.1	17.1	21.5	22.6	26.7	28.0	27.7	28.2
Domestic operations	Number	13.3	17.4	21.2	21.8	26.8	27.7	27.3	27.3
International operations	Number	12.3	16.0	23.1	26.0	26.4	29.4	29.0	31
Average passenger-mile rate: [5 7]									
Domestic operations	Dollars	0.060	0.077	0.085	0.113	0.123	0.123	0.131	0.134
International operations	Dollars	0.050	0.072	0.075	0.075	0.098	0.104	0.104	0.108
Express and freight revenue, ton-miles flown [5]	Millions	3,515	4,796	5,818	5,742	6,020	9,632	10,275	10,600
Domestic operations	Millions	2,216	2,747	3,505	3,277	3,133	4,843	4,916	5,076
International operations	Millions	1,299	2,049	2,313	2,465	2,887	4,789	5,359	5,524
Mail, ton-miles flown [5]	Millions	1,264	1,109	1,181	1,342	1,659	1,837	1,911	2,004
Domestic operations	Millions	715	683	807	949	1,214	1,367	1,415	1,490
International operations	Millions	549	426	374	393	445	470	496	513

[1] The Airline Deregulation Act of 1978 lifted some restrictions on entering new markets. As a result there is no longer a clear distinction between domestic and international operators. Includes all cargo. Carrier count as of end of year. Revenue and expense data exclude carriers which report system totals only. [2] Scheduled airlines only. Source: Air Transport Association of America, Washington, DC, *Air Transport Facts and Figures,* annual. [3] Excludes those used for crew training and general utility purposes, or held for disposal. Beginning 1980, includes aircraft operated by the scheduled all-cargo certificated route air carriers. Beginning in 1988 also includes large aircraft (passenger seating capacity of more than 30 or a payload of more than 7,500 pounds) operated by commuters and air taxis. [4] Seats per aircraft mile. Passenger seat-miles divided by revenue-miles flown in passenger service. [5] Scheduled services of all certificated route air carriers; includes all cargo. [6] Includes all cargo. Beginning 1980 includes very small amount of gasoline. Beginning 1988, excludes fuel consumption for airlines with a waiver for reporting. [7] Passenger revenues divided by revenue passenger-miles flown.

Source: Except as noted, U.S. Dept. of Transportation, Federal Aviation Administration and Research and Special Programs Administration, *Air Carrier Traffic Statistics,* monthly and *Air Carrier Financial Statistics,* quarterly. Includes data from U.S. National Transportation Safety Board.

No. 1039. Airline Cost Indexes: 1970 to 1990

[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]

ITEM	INDEX (1972=100)									PERCENT DISTRIBUTION OF CASH OPERATING EXPENSES [1]			
	1970	1975	1980	1985	1986	1987	1988	1989	1990	1970	1985	1980	1990
Composite	**87.8**	**142.5**	**262.5**	**313.4**	**293.1**	**299.5**	**310.0**	**329.6**	**353.2**	**100.0**	**100.0**	**100.0**	**100.0**
Labor	82.9	129.8	211.4	277.8	272.1	276.3	286.6	295.4	301.1	45.8	35.1	34.9	32.5
Interest [2]	99.0	125.0	167.2	198.8	191.2	184.5	187.9	210.2	202.3	3.6	2.9	3.5	2.5
Fuel	94.3	250.8	770.3	689.6	473.6	479.2	457.7	515.0	658.7	12.8	29.7	22.3	17.6
Passenger food	97.4	120.8	153.6	167.0	167.7	173.3	182.3	199.9	215.0	3.9	2.9	3.2	3.6
Advertising and promotion	99.5	102.7	141.5	203.3	210.4	184.7	197.2	218.0	221.7	2.7	1.7	2.3	2.1
Landing fees	82.2	136.1	192.9	217.6	242.6	262.5	276.8	294.0	316.7	2.2	1.7	1.7	1.9
Passenger traffic commissions	80.2	154.0	322.8	491.4	499.9	540.8	619.0	679.0	733.4	2.6	4.8	7.4	9.7
All other	95.5	127.6	184.4	239.2	245.4	253.2	260.9	271.8	282.8	26.4	21.3	24.6	30.1

[1] Total operating expenses plus interest on long term debt, less depreciation and amortization. [2] Interest on debt.
Source: Air Transport Association of America, Washington, DC, *Air Transport, 1990,* annual; and unpublished data.

No. 1040. Aircraft in Operation and Aircraft Age, by Type of Aircraft: 1983 to 1989

[**As of January 1.** For U.S. domestic and major services. Major carriers have operating revenue of $1 billion or more; national carriers have operating revenues of $75 million to $1 billion]

TYPE OF AIRCRAFT	AIRCRAFT IN OPERATION				MEAN AGE (years) [1]			
	1983	1985	1987	1989	1983	1985	1987	1989
Industry total	**2,360**	**2,790**	**2,816**	**3,190**	**10.5**	**10.8**	**11.8**	**12.0**
Majors	1,953	2,185	2,386	2,850	10.9	11.6	12.0	12.2
Nationals	407	605	430	340	8.4	8.0	10.6	10.6
Type of aircraft:								
Boeing 727 [2]	1,001	996	993	956	10.5	12.0	13.9	15.5
Boeing 737	270	365	547	698	8.9	9.1	8.8	8.2
Boeing 747	130	136	124	136	10.9	11.8	15.0	15.8
Boeing 757	2	23	73	107	1.0	2.0	2.4	3.6
Boeing 767	14	54	61	111	1.0	2.6	3.9	4.3
Airbus A300/A310	30	134	59	76	3.4	1.9	5.7	5.3
Lockheed L-1011 [2]	119	184	107	111	7.3	7.5	11.0	13.0
McDonnell Douglas DC-8 [2]	98	72	52	40	15.8	17.2	18.8	20.9
McDonnell Douglas DC-9 [2]	541	658	433	455	11.9	9.9	16.7	18.5
McDonnell Douglas DC-10 [2]	155	168	161	159	9.1	9.8	12.5	14.6
McDonnell Douglas MD-80	(X)	(X)	206	341	(X)	(X)	3.1	3.9

X Not applicable. [1] For definition of mean, see Guide to Tabular Presentation. [2] No longer in production.
Source: AVMARK, Arlington, VA. Compiled from data by the U.S. Dept. of Transportation and Aviation Information Services Limited, London, England, *The World's Jet and Turboprop Airliner Fleet.*

No. 1041. Net New Firm Orders Booked for U.S. Civil Jet Transport Aircraft: 1983 to 1990

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

TYPE OF AIRCRAFT AND CUSTOMER	1983	1984	1985	1986	1987	1988	1989	1990
Total number [1]	**158**	**319**	**468**	**332**	**519**	**956**	**1,015**	**670**
U.S. customers	89	212	242	134	217	404	507	259
Foreign customers	69	107	226	198	302	552	508	411
Boeing 737, total	82	144	253	106	234	311	397	189
U.S. customers	50	116	146	45	105	173	216	38
Foreign customers	32	28	107	61	129	138	181	151
Boeing 747, total	19	32	37	68	61	57	57	153
U.S. customers	5	-	13	6	15	22	4	24
Foreign customers	14	32	24	62	46	35	53	129
Boeing 757, total	3	22	51	21	44	186	190	66
U.S. customers	-1	21	39	11	18	101	137	33
Foreign customers	4	1	12	10	26	85	53	33
Boeing 767, total	9	12	10	22	42	87	138	60
U.S. customers	-2	-6	4	3	11	32	40	23
Foreign customers	11	18	6	19	31	55	98	37
Boeing 777, total	-	-	-	-	-	-	-	34
U.S. customers	-	-	-	-	-	-	-	34
Foreign customers	-	-	-	-	-	-	-	-
McDonnell Douglas MD-11, total	-	-	-	-	29	59	38	52
U.S. customers	-	-	-	-	2	11	17	16
Foreign customers	-	-	-	-	27	48	21	36
McDonnell Douglas MD-80/90, total	44	97	114	112	105	254	195	116
U.S. customers	37	75	37	68	65	65	93	91
Foreign customers	7	22	77	44	40	189	102	25
Total value	**4,258**	**9,624**	**14,811**	**13,948**	**18,737**	**39,806**	**47,470**	**45,485**
U.S. customers	1,530	4,981	7,869	3,394	6,999	16,308	20,304	14,828
Foreign customers	2,728	4,643	6,942	10,554	11,738	23,498	27,166	30,657

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

No. 1042. Worldwide Airline Fatalities: 1970 to 1990

[Passenger deaths for scheduled air transport operations]

YEAR	Aircraft fatal accidents	Passenger deaths	Death rate [1]	YEAR	Aircraft fatal accidents	Passenger deaths	Death rate [1]
1970	29	700	0.29	1981	21	362	0.06
1971	32	884	0.35	1982	26	764	0.13
1972	41	1,209	0.42	1983	20	809	0.13
1973	29	862	0.27	1984	16	223	0.03
1974	21	1,299	0.38	1985	22	1,066	0.15
1975	20	467	0.13	1986 [2]	22	546	0.06
1976	24	734	0.19	1987 [2]	26	901	0.09
1977	25	516	0.12	1988 [2]	28	729	0.07
1978	31	754	0.15	1989 [2]	27	817	0.05
1979	31	877	0.16	1990 [2 3]	25	495	0.03
1980	22	814	0.14				

[1] Rate per 100 million passenger miles flown. [2] Includes USSR which began reporting in 1986. [3] Preliminary.
Source: International Civil Aviation Organization, Montreal, Canada, *Civil Aviation Statistics of the World*, annual.

No. 1043. Aircraft Accidents and Hijackings: 1975 to 1990

[For years ending December 31]

ITEM	Unit	1975	1980	1985	1986	1987	1988	1989	1990
Aircraft accidents: [1]									
General aviation [2]	Number	3,995	3,590	2,737	2,576	2,464	2,354	2,201	2,138
Fatal	Number	633	618	497	473	431	447	423	424
Rate per 100,000 aircraft hours flown	Rate	2.20	1.69	1.62	1.61	1.47	1.51	1.38	1.39
Fatalities	Number	1,252	1,239	951	965	807	777	757	736
Air carrier, all services [3]	Number	(NA)	19	22	24	36	29	30	26
Fatal	Number	(NA)	1	7	3	5	3	11	6
Rate per 1,000,000 aircraft miles flown	Rate	(X)	-	0.002	0.001	0.001	-	0.002	0.001
Fatalities	Number	(NA)	1	526	8	232	285	278	39
Air carrier, scheduled services	Number	29	15	17	21	32	28	25	24
Fatal	Number	2	-	4	2	4	3	8	6
Rate per 1,000,000 aircraft miles flown	Rate	0.001	0.000	0.001	-	0.001	0.001	0.002	0.001
Fatalities	Number	122	-	197	5	231	285	131	39
Commuter air carriers [4]	Number	48	38	21	15	32	19	17	14
Fatal	Number	12	8	7	2	10	2	5	2
Rate per 1,000,000 aircraft miles flown	Rate	0.07	0.04	0.02	0.01	0.03	0.01	0.01	0.01
Fatalities	Number	28	37	37	4	59	21	31	4
Air taxis [5]	Number	152	171	152	116	97	96	113	104
Fatal	Number	24	46	35	31	30	27	26	26
Rate per 100,000 aircraft hours flown	Rate	0.95	1.27	1.26	1.06	1.04	0.95	0.83	0.82
Fatalities	Number	69	105	76	65	65	58	88	40
Hijacking incidents, worldwide	Number	25	39	35	12	15	17	24	46
U.S. registered aircraft	Number	12	21	4	4	4	3	6	4
Successful [6]	Number	4	13	2	-	-	-	-	(NA)
Foreign-registered aircraft	Number	13	18	31	8	11	14	18	42
Successful [6]	Number	3	9	18	2	5	-	-	(NA)
Bomb threats:									
U.S. airports	Number	449	268	256	238	376	178	487	448
Explosions	Number	4	1	-	-	-	-	-	-
U.S. worldwide and foreign aircraft in U.S	Number	1,853	1,179	372	401	898	372	479	338
Explosions	Number	2	1	1	1	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. 1044. Top 10 Airports—Traffic Summary: 1990

[**In thousands, except percent change.** For **calendar year.** Airports ranked by revenue passengers enplaned, **1990**]

AIRPORT	Rank	AIRCRAFT DEPARTURES			REVENUE PASSENGERS ENPLANED		ENPLANED REVENUE TONS		
		Total [1]	Scheduled				Total [2]	Freight and express	U.S. mail
			Number	Completed	Total	Percent change, 1980-1989			
All airports [2]	**(X)**	**6,642**	**6,759**	**6,601**	**438,544**	**57.1**	**6,299**	**4,733**	**1,566**
Atlanta, Hartsfield International	3	286	289	285	22,666	13.4	259	166	93
Chicago, O'Hare	1	322	332	322	25,636	33.3	441	300	140
Dallas/Ft. Worth International	2	267	270	266	22,899	119.5	229	143	87
Denver, Stapleton International	6	154	156	154	11,962	24.4	105	67	38
Detroit, Metro Wayne	9	135	138	134	9,903	97.1	75	43	32
Los Angeles International	4	213	216	212	18,438	30.2	424	353	72
New York, LaGuardia	8	130	131	129	10,725	27.7	59	23	36
Newark International	10	130	133	129	9,854	134.3	197	163	34
Phoenix, Sky Harbor International	7	148	149	148	10,727	217.4	66	43	24
San Francisco International	5	172	188	172	13,475	43.3	77	22	55

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. 1045. On-Time Flight Arrivals and Departures at Major U.S. Airports: 1990 and 1991

[**In percent.** Quarterly, based on gate arrival and departure times for domestic scheduled operations in the 48 contigious states of major U.S. airlines, per DOT reporting rule effective September 1987. All U.S. airlines with one 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% of the reporting airlines' scheduled operations). See source for data on individual airlines]

AIRPORT	ON-TIME ARRIVALS						ON-TIME DEPARTURES					
	1990		1991				1990		1991			
	3d qtr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.	3d qtr.	4th qtr.	1st qtr.	2d qtr.	3d qtr.	4th qtr.
Total, all airports	81.3	79.1	78.5	84.1	85.2	82.0	87.6	85.0	84.1	89.1	90.2	87.5
Total 29 major airports	80.1	78.4	77.5	83.0	83.8	80.9	86.2	84.1	82.9	87.9	88.7	86.1
Atlanta, Hartsfield International	78.8	77.5	78.0	80.0	80.7	81.1	85.3	82.8	82.4	84.9	88.4	88.1
Baltimore/Washington International	81.1	83.4	84.6	86.6	85.8	84.1	87.4	88.5	88.6	91.2	90.6	89.4
Boston, Logan International	74.9	77.7	76.8	81.2	79.6	75.4	83.6	85.3	84.7	88.3	85.6	83.3
Charlotte, Douglas	84.3	82.9	85.0	85.7	83.7	86.4	87.1	86.3	88.2	89.9	87.9	87.6
Chicago, O'Hare	80.0	78.1	76.0	82.9	85.6	77.0	85.0	82.5	80.3	86.6	89.0	80.8
Dallas/Ft. Worth International	83.5	75.4	78.7	84.1	83.7	77.1	89.0	81.2	84.4	87.7	90.7	84.3
Denver, Stapleton International	82.1	76.4	75.9	78.1	82.4	77.0	87.0	82.2	82.8	84.3	87.5	83.1
Detroit, Metro Wayne	81.7	83.4	85.1	88.6	90.8	87.9	86.9	86.1	87.2	90.6	91.9	89.8
Dulles International	83.5	85.3	83.8	84.6	85.4	85.8	88.4	88.9	87.2	88.4	90.1	88.8
Houston Intercontinental	81.9	79.5	78.3	78.0	85.3	81.3	89.1	86.2	85.2	83.7	89.4	87.1
Las Vegas, McCarran International	86.4	77.7	74.2	84.9	87.0	86.0	90.0	83.5	79.2	88.7	88.9	89.0
Los Angeles International	80.7	75.7	70.0	79.1	78.5	76.0	87.4	84.1	78.0	86.3	85.9	83.9
Miami International	81.7	83.4	82.5	84.1	78.2	77.8	86.8	89.7	87.3	90.7	89.2	88.6
Minneapolis/St. Paul International	81.0	84.1	82.3	88.1	88.6	81.1	85.5	85.8	84.9	90.7	91.0	83.8
Newark International	70.2	72.8	74.4	80.1	79.4	80.1	80.1	82.1	82.3	87.2	85.3	87.0
New York, Kennedy International	69.9	76.5	76.9	81.2	78.5	78.1	74.5	81.4	82.1	85.5	80.2	81.2
New York, LaGuardia	73.2	78.5	81.1	81.6	82.5	83.1	84.4	87.2	86.4	89.1	88.8	88.9
Orlando International	78.8	81.6	79.8	84.0	83.8	84.1	88.7	90.3	87.6	90.0	90.6	91.3
Philadelphia International	70.7	78.6	80.2	82.9	82.3	81.5	80.4	84.8	84.2	88.9	88.4	86.1
Phoenix, Sky Harbor International	83.0	75.5	72.7	86.7	88.8	85.0	86.5	77.6	74.1	87.0	88.6	85.7
Pittsburgh, Greater International	78.2	82.7	81.7	85.6	85.1	80.9	81.9	83.0	83.6	88.1	86.9	81.0
Raleigh/Durham	87.4	85.8	88.9	91.5	88.9	90.3	89.9	88.5	90.1	93.4	92.5	92.6
St. Louis, Lambert	84.0	75.8	69.6	83.4	86.7	81.2	86.7	80.2	75.7	89.5	91.2	85.7
Salt Lake City International	85.3	79.7	77.8	87.5	87.2	80.7	90.8	85.2	83.7	91.8	90.9	87.1
San Diego International, Lindbergh	83.7	76.4	72.2	83.2	85.2	82.5	87.5	83.6	78.7	88.2	88.3	86.5
San Francisco International	78.2	75.4	62.3	73.4	75.1	79.6	87.2	84.7	74.5	82.9	83.3	85.7
Seattle-Tacoma International	78.0	65.7	74.7	81.1	84.9	75.6	84.7	79.9	83.7	88.6	88.1	86.6
Tampa International	80.2	82.1	80.6	84.9	83.2	83.6	89.2	90.3	88.7	92.1	92.9	92.8
Washington National	81.1	84.3	84.9	86.0	86.3	84.9	88.2	88.7	89.8	90.9	91.3	89.9

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

No. 1046. Consumer Complaints Against U.S. Airlines: 1986 to 1991

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

COMPLAINT CATEGORY	COMPLAINTS						PERCENT			RANK		
	1986	1987	1988	1989	1990	1991	1986	1989	1991	1986	1989	1991
Total	**10,802**	**40,985**	**21,493**	**10,553**	**7,703**	**6,126**	**100.0**	**100.0**	**100.0**	**(X)**	**(X)**	**(X)**
Flight problems [1]	3,390	18,019	8,831	4,111	3,034	1,883	31.4	39.0	30.7	1	1	1
Baggage	2,149	7,438	3,938	1,702	1,329	888	19.9	16.1	14.5	2	2	2
Refunds	1,627	3,313	1,667	1,023	701	787	15.1	9.7	12.8	3	3	3
Customer service [2]	702	3,888	2,120	1,002	758	714	6.5	9.5	11.7	5	4	4
Ticketing/boarding [3]	687	2,458	1,445	821	624	661	6.4	7.8	10.8	6	5	5
Fares [4]	468	937	455	341	312	388	4.3	3.2	6.3	7	7	6
Oversales [5]	849	2,122	1,353	607	399	304	7.9	5.8	5.0	4	6	7
Advertising	122	344	141	89	96	96	1.1	0.8	1.6	9	9	8
Smoking	311	888	546	232	74	30	2.9	2.2	0.5	8	8	9
Tours	33	90	37	22	29	23	0.3	0.2	0.4	11	10	10
Credit	40	101	35	19	5	10	0.4	0.2	0.2	10	11	11
Other	424	1,387	925	584	342	342	3.9	5.5	5.6	(X)	(X)	(X)

X Not applicable. [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. 1047. Commuter/Regional Airline Operations—Summary: 1980 to 1990

[**Calendar year data.** Commuter/regional airlines operate primarily aircraft of predominately 60 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 mean. For definition of mean, see Guide to Tabular Presentation]

ITEM	Unit	1980	1983	1984	1985	1986	1987	1988	1989	1990
Passenger carriers operating	Number	214	196	203	179	179	169	163	151	150
Passengers enplaned	Millions	14.8	21.8	26.1	[1]26.0	28.4	31.8	35.2	37.4	42.1
Average passengers enplaned per carrier	1,000	69.2	111.2	128.1	152.4	158.4	187.7	213.9	247.4	277.5
Revenue passenger miles (RPM)	Billions	1.92	3.24	4.17	[1]4.41	4.47	5.0	6.04	6.77	7.61
Average RPMs per carrier	Millions	8.97	16.53	20.46	[1]24.64	24.98	29.60	37.05	44.84	50.75
Airports served	Number	732	854	853	854	824	834	861	817	811
Average trip length	Miles	129	149	160	173	158	158	173	181	183
Passenger aircraft operated	Number	1,339	1,545	1,747	1,745	1,806	1,841	1,801	1,907	1,917
Average seating capacity (seats)	Number	13.9	18.1	18.4	19.2	18.4	19.7	20.5	21.8	22.1
Fleet flying hours	1,000	1,740	2,415	2,764	2,854	2,929	2,942	3,078	3,266	3,447
Average annual utilization aircraft	Hours	1,299	1,563	1,582	1,635	1,622	1,598	1,709	1,712	1,798

[1] Adjusted to exclude a merger in 1986.
Source: Regional Airline Association, Washington, DC, *1991 Annual Report of the Regional Airline Industry* (copyright).

No. 1048. Civil Flying—Summary: 1970 to 1990

[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	1986	1987	1988	1989	1990
Airports in operation [1]	Number	11,261	15,161	16,318	16,582	17,015	17,327	17,446	17,490
Heliports	Number	790	2,336	3,120	3,336	3,653	3,913	4,016	4,085
Public	Number	4,260	4,814	5,861	4,924	4,984	5,043	5,084	5,078
Private	Number	7,001	10,347	10,457	11,658	12,031	12,284	12,362	12,412
Airports with runway lights	Number	3,554	4,738	4,941	4,954	4,922	4,890	4,443	4,822
Airports with paved runways	Number	3,805	5,833	6,721	6,948	7,232	7,429	7,612	7,694
Miles (nautical) of Federal airways	1,000	324.7	411.1	368.5	332.0	332.9	334.8	366.6	(NA)
Airport Improvement Program [2]	Mil. dol.	50.5	639.0	842.1	1,615.3	919.4	1,278.3	1,271.2	1,244.7
Total civil aircraft	1,000	154.5	259.4	274.9	275.7	275.1	272.7	274.8	275.9
Active aircraft [3]	1,000	134.5	214.8	215.4	224.9	222.4	215.9	225.4	218.9
Air carriers, total [4]	1,000	2.8	3.8	4.7	4.9	5.2	5.6	5.7	6.7
General aviation aircraft [5]	1,000	131.7	211.0	210.7	220.0	217.2	210.3	219.7	212.2
Fixed-wing aircraft:									
Multi-engine	1,000	18.4	31.7	33.6	34.3	33.0	32.2	34.1	32.7
Single-engine:									
4-place and over	1,000	64.6	107.9	105.6	109.4	107.5	105.2	107.8	104.6
3-place and less	1,000	44.9	60.5	58.8	62.4	63.5	59.6	62.6	60.5
Rotorcraft [6]	1,000	2.2	6.0	6.4	6.9	6.3	6.4	7.5	7.4
Balloons, blimps, gliders, etc	1,000	1.6	5.0	6.3	7.0	6.8	6.9	7.7	7.0
Airman certificates held	1,000	1,002	1,195	1,105	1,119	1,128	1,143	1,168	1,195
Pilot [7]	1,000	733	827	710	709	700	694	700	703
Held by women	Percent	4.0	6.4	6.1	6.1	6.1	6.1	6.1	5.8
Airline transport	1,000	34	70	83	87	91	97	102	108
Commercial	1,000	187	183	152	148	144	143	145	149
Private	1,000	304	357	311	306	301	300	293	299
Student	1,000	196	200	147	150	146	137	143	128
Nonpilot [8]	1,000	269	368	395	410	428	449	468	492
Ground technicians [9]	1,000	241	321	341	353	367	385	401	421
FAA employees: Total	Number	53,125	55,340	47,245	46,809	47,907	49,210	50,977	51,269
Air traffic control specialists [10]	Number	(NA)	27,190	23,580	23,515	24,132	24,803	24,368	24,339
Full performance [11]	Number	(NA)	16,317	11,672	12,533	11,617	12,180	12,640	12,985
Developmental [11]	Number	(NA)	4,387	4,304	3,976	5,462	5,495	5,574	5,042
Assistants [11]	Number	(X)	(X)	1,465	1,479	1,481	1,283	1,316	1,153
Traffic management coordinators [12]	Number	(X)	(X)	(X)	(X)	278	347	350	370
Electronic technicians	Number	(NA)	8,871	6,856	6,600	6,788	6,627	6,508	6,458
Aviation safety inspectors	Number	(NA)	2,038	1,897	2,204	2,350	2,499	2,766	2,984
Engineers	Number	(NA)	2,436	2,457	2,417	2,579	2,640	2,657	2,745
Other	Number	(NA)	14,805	12,455	12,073	12,058	12,641	14,678	14,743
General aviation: [5]									
Hours flown	Million	26.0	41.0	34.1	34.4	33.4	33.6	35.0	34.8
Fuel consumed: [13]									
Gasoline	Mil. gal.	362	520	420	410	402	398	343	353
Jet fuel [14]	Mil. gal.	415	766	691	732	672	746	688	663

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. 1985-1990 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 1970-1986 traffic management coordinators, not shown separately) and air traffic assistants. [11] Serving in-flight service stations, towers, and centers. [12] Prior to 1987, 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. 1049. U.S. Aircraft Shipments, 1970 to 1991, and Projections, 1992

[Value in millions of dollars]

YEAR	TOTAL		CIVIL						MILITARY	
	Units	Value	Large transports [1]		General Aviation [2]		Helicopters		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	17,030	9,136	315	3,779	14,072	1,033	864	274	1,779	4,050
1980	14,681	18,950	387	9,895	11,881	2,507	1,366	656	1,047	5,892
1981	11,978	20,093	387	9,706	9,457	2,920	1,072	597	1,062	6,870
1982	6,244	19,257	232	6,246	4,266	1,999	587	365	1,159	10,647
1983	4,409	22,519	262	8,000	2,691	1,470	403	303	1,053	12,746
1984	3,935	21,933	185	5,689	2,438	1,698	376	330	936	14,216
1985	3,610	26,386	278	8,448	2,029	1,431	384	506	919	18,001
1986	3,258	34,809	330	10,308	1,495	1,262	326	287	1,107	22,952
1987	3,010	35,925	357	10,507	1,085	1,364	358	277	1,210	23,777
1988	3,254	34,875	423	13,603	1,143	1,918	383	334	1,305	19,020
1989	3,675	34,229	398	15,074	1,535	1,804	515	251	1,227	17,100
1990	3,418	41,920	521	22,215	1,144	2,007	603	254	1,150	17,444
1991 [3]	3,244	44,273	583	26,200	1,024	1,838	632	188	1,005	16,047
1992 [4]	3,132	43,989	534	26,829	1,068	1,897	660	200	870	15,063

[1] Capacity over 70 seats. [2] Includes aircraft kits for exports. [3] Estimated. [4] Forecast.

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1992.*

No. 1050. Employment and Earnings in Aircraft Industries: 1975 to 1991

[Annual averages of monthly figures]

1987 SIC [1] code	ITEM	Unit	1975	1980	1985	1987	1988	1989	1990	1991
(X)	Employment: Total	1,000	596	746	794	883	893	906	892	821
3721	Aircraft	1,000	293	349	326	356	369	382	377	343
3724	Aircraft engines and engine parts	1,000	126	163	148	158	156	154	151	142
3728	Aircraft equipment, n.e.c. [2]	1,000	84	123	143	163	160	176	178	166
376	Guided missiles, space vehicles, and parts	1,000	93	111	177	206	208	194	186	170
(X)	Average weekly earnings: [3]									
3721	Aircraft	Dollars	256	404	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
3724	Aircraft engines and parts	Dollars	247	394	542	567	582	616	637	654
376	Guided missiles, space vehicles, and parts	Dollars	245	378	518	541	567	589	612	632
(X)	Average hourly earnings: [3]									
3721	Aircraft [4]	Dollars	6.21	9.66	13.18	13.74	14.18	14.89	15.66	16.72
3724	Aircraft engines and parts	Dollars	6.04	9.42	12.85	13.33	13.80	14.42	14.84	15.38
376	Guided missiles, space vehicles, and parts	Dollars	6.02	9.22	12.14	12.73	13.13	13.70	14.39	14.90

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; $14.32 in 1987; $14.65 in 1988; $15.41 in 1989; $16.32 in 1990 and $17.16 in 1991.

Source: U.S. Bureau of Labor Statistics, Bulletin 2370; and *Employment and Earnings,* monthly.

No. 1051. Aerospace Industry—Summary, 1980 to 1991, and Projections, 1992

[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	1984	1985	1986	1987	1988	1989	1990	1991 [1]	1992 [2]
INDUSTRY DATA											
Value of shipments	Mil. dol.	58,483	77,826	90,795	100,999	103,589	107,746	113,477	123,705	123,933	124,558
In 1987 dollars	Mil. dol.	(NA)	(NA)	(NA)	(NA)	103,589	107,671	109,073	114,340	109,529	105,800
Employment, total	1,000	721	693	746	798	810	820	823	814	749	741
Production workers	1,000	387	344	372	400	407	399	400	395	364	360
Average hourly earnings	Dol	9.90	13.24	13.88	14.37	14.92	15.35	15.84	(NA)	(NA)	(NA)
Capital expenditures	Mil. dol.	1,923	3,050	3,784	4,144	3,612	3,388	3,921	(NA)	(NA)	(NA)
PRODUCT DATA											
Value of shipments	Mil. dol.	53,296	70,200	80,625	90,907	97,185	102,242	106,320	117,226	117,249	117,396
In 1987 dollars	Mil. dol.	(NA)	(NA)	(NA)	(NA)	97,185	101,850	101,671	108,189	103,410	100,712

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

Source: U.S. Department of Commerce, International Trade Administration, *U.S. Industrial Outlook, 1992.*

No. 1052. Aerospace—Sales, New Orders, and Backlog: 1970 to 1990

[**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	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989 [1]	1990 [1]
Net sales	24.8	29.5	58.4	83.5	88.9	100.5	105.6	110.3	113.5	122.1	141.6
Percent of U.S. Government	66.3	58.7	45.6	58.8	62.7	63.2	61.9	62.2	60.0	58.0	55.0
Complete aircraft and parts [2]	10.4	11.3	22.6	27.3	28.3	34.2	38.0	37.0	35.7	38.4	50.0
Aircraft engines and parts	3.1	3.4	6.9	8.6	9.1	9.7	9.8	12.0	15.0	15.4	16.4
Missiles and space vehicles, parts	5.4	6.3	8.4	12.7	13.6	16.7	17.5	20.7	21.5	22.6	21.9
Other products, services	5.9	8.5	20.5	34.8	38.0	39.8	40.3	40.5	41.3	45.7	53.4
Net, new orders	21.2	29.0	70.4	91.6	104.9	111.0	110.8	121.2	147.1	173.6	147.3
Backlog, Dec. 31	24.7	35.0	90.5	116.6	132.5	143.0	148.2	158.7	191.5	252.4	264.2

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

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

No. 1053. Aerospace Industry Sales, by Product Group and Customer: 1980 to 1992

[**In billions of dollars.** Due to reporting practices and tabulating methods, figures may differ from those in table 1052]

ITEM	CURRENT DOLLARS						CONSTANT (1982) DOLLARS [3]					
	1980	1985	1989	1990	1991 [1]	1992 [2]	1980	1985	1989	1990	1991 [1]	1992 [2]
Total sales	**54.7**	**96.6**	**117.6**	**134.2**	**140.3**	**142.9**	**68.1**	**86.6**	**98.4**	**107.8**	**108.9**	**107.0**
PRODUCT GROUP												
Aircraft, total	31.5	50.5	61.0	70.8	75.6	77.3	39.2	45.3	51.0	56.9	58.6	58.0
Civil [4]	16.3	13.7	22.1	30.9	36.4	40.3	20.3	12.3	18.5	24.9	28.2	30.2
Military	15.2	36.8	38.9	39.9	39.2	37.0	18.9	33.0	32.5	32.0	30.4	27.8
Missiles	6.5	11.4	11.2	12.1	10.5	10.0	8.1	10.3	9.4	9.8	8.2	7.5
Space	7.9	18.6	25.8	28.9	30.8	31.8	9.9	16.6	21.6	23.2	23.9	23.8
Related products and services [5]	8.8	16.1	19.6	22.4	23.4	23.8	11.0	14.4	16.4	18.0	18.1	17.9
CUSTOMER GROUP												
Aerospace, total	45.9	80.5	98	111.8	116.9	119.1	57.1	72.2	82.0	89.9	90.7	89.3
DOD [6]	22.8	53.2	58.5	60.6	57.9	54.7	28.4	47.7	48.9	48.7	44.9	41.1
NASA [7] and other agencies	4.1	6.3	9.6	11.1	12.8	13.9	5.1	5.6	8.1	9.6	9.9	10.4
Other customers [8]	19.0	21.0	29.9	40.1	46.2	50.4	23.6	18.9	25.0	32.3	35.8	37.8
Related products and services [5]	8.8	16.1	19.6	22.4	23.4	23.8	11.0	14.4	16.4	18.0	18.1	17.9

[1] Preliminary. [2] Estimate. [3] Based on aerospace composite price deflator supplied by the U.S. International Trade Administration. [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 establishments and which 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, *Aerospace Facts and Figures, 1991/92.*

No. 1054. Aerospace Industry—Net Profits After Taxes: 1976 to 1991

YEAR	AEROSPACE INDUSTRY PROFITS				ALL MANUFACTURING CORPORATIONS PROFITS AS PERCENT OF—		
	Total (mil. dol.)	As percent of—			Sales	Assets	Equity
		Sales	Assets	Equity			
1976	1,091	3.4	4.7	12.8	5.4	7.5	14.0
1977	1,427	4.2	5.7	14.9	5.3	7.6	14.2
1978	1,816	4.4	5.5	15.7	5.4	7.8	15.0
1979	2,614	5.0	6.3	18.4	5.7	8.4	16.5
1980	2,588	4.3	5.2	16.0	4.8	6.9	13.9
1981	2,966	4.4	5.2	16.0	4.7	6.7	13.6
1982	2,193	3.3	3.7	12.0	3.5	4.5	9.2
1983	2,829	3.5	4.1	12.1	4.1	5.1	10.5
1984	3,639	4.1	4.7	14.1	4.6	6.0	12.5
1985	3,274	3.1	3.6	11.1	3.8	4.6	10.1
1986	3,093	2.8	3.1	9.4	3.7	4.2	9.5
1987	4,582	4.1	4.4	14.6	4.9	5.6	12.8
1988	4,883	4.3	4.4	14.9	6.0	6.9	16.2
1989	3,866	3.3	3.3	10.7	5.0	5.6	13.7
1990	4,487	3.4	3.4	11.5	4.0	4.3	10.7
1991	2,486	1.8	1.9	6.1	2.5	2.6	6.5

Source: Aerospace Industries Association of America, Washington, DC, *Aerospace Facts and Figures,* annual.

No. 1055. U.S. Exports of Aerospace Vehicles and Equipment, 1988 to 1991, and Projections, 1992

ITEM	NUMBER OF UNITS					VALUE (mil. dol.)				
	1988	1989	1990	1991 [1]	1992 [2]	1988	1989	1990	1991 [1]	1992 [2]
Aerospace vehicles and equipment	(NA)	(NA)	(NA)	(NA)	(NA)	26,915	32,884	39,030	42,413	44,758
Civilian aircraft	2,784	3,940	3,446	3,288	3,247	10,294	14,257	18,110	20,881	22,438
Under 4,536 kg. unladen weight, new	619	1,638	799	600	624	298	265	318	250	260
4,536-15,000 kg. unladen weight, new	24	48	79	70	74	49	164	245	292	304
Over 15,000 kg. unladen weight, new	217	260	306	356	365	8,766	13,122	16,691	19,499	21,059
Rotocraft, new	280	294	349	388	372	219	155	161	173	180
Other new aircraft, n.e.c. [3]	(NA)	(NA)	(NA)	(NA)	(NA)	323	18	15	24	20
Used, rebuilt, and converted	1,644	1,700	1,913	1,874	1,837	639	533	680	643	615
Military aircraft, new and used	(NA)	846	445	498	480	2,157	892	1,481	1,826	2,020
Aircraft engines and parts	(NA)	(NA)	(NA)	(NA)	(NA)	5,420	6,629	6,870	7,058	7,273
Piston engines and parts	(NA)	(NA)	(NA)	(NA)	(NA)	389	438	421	443	460
Complete engines, new and used	6,260	8,653	6,411	7,300	7,000	57	131	110	108	110
Engine parts	(NA)	(NA)	(NA)	(NA)	(NA)	332	307	311	335	350
Turbine engines and parts	(NA)	(NA)	(NA)	(NA)	(NA)	5,031	6,191	6,449	6,615	6,813
Complete engines, new and used	2,486	3,917	3,008	2,860	2,900	1,705	2,053	1,846	2,067	2,130
Engine parts	(NA)	(NA)	(NA)	(NA)	(NA)	3,326	4,138	4,603	4,548	4,683
Propellers and parts	(NA)	(NA)	(NA)	(NA)	(NA)	75	271	343	316	320
Landing gear and parts	(NA)	(NA)	(NA)	(NA)	(NA)	125	273	276	315	322
Aircraft parts, n.e.c. [3]	(NA)	(NA)	(NA)	(NA)	(NA)	7,228	8,198	8,982	9,038	9,220
Guided missiles and parts	(NA)	(NA)	(NA)	(NA)	(NA)	434	1,042	1,306	1,403	1,500
Flight simulators	(NA)	(NA)	(NA)	(NA)	(NA)	159	206	255	220	215
Space launch equipment	(NA)	(NA)	(NA)	(NA)	(NA)	622	384	660	537	550
Avionics	(NA)	(NA)	(NA)	(NA)	(NA)	401	732	747	819	900

NA Not available. [1] Estimated. [2] Forecast. [3] N.e.c. = Not elsewhere classified.
Source: U.S. Dept. of Commerce, International Trade Administration, *U.S. Industrial Outlook,* 1992.

No. 1056. U.S. Receipts and Payments for International Transportation: 1970 to 1989

[**In millions of dollars.** Data are international transportation transactions recorded for balance of payment purposes (see table 1314). 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	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
Total receipts	**3,672**	**14,208**	**15,491**	**16,200**	**17,823**	**18,997**	**20,915**	**23,854**	**27,710**	**30,517**
Ocean transportation	2,256	7,757	7,685	8,133	8,849	8,846	9,169	10,060	11,135	11,628
Export freight earnings	604	2,641	2,549	2,881	2,702	2,866	2,610	2,806	2,959	3,065
Freight earnings on shipments between foreign countries	209	588	555	575	563	574	576	595	708	755
Port expenditures	1,406	4,435	4,468	4,562	5,457	5,274	5,843	6,514	7,315	7,609
Charter hire	37	93	113	115	127	132	140	145	153	199
Air transportation	1,243	5,946	7,326	7,596	8,459	9,670	10,877	12,809	15,563	17,913
Export freight earnings	187	742	762	576	645	706	783	982	1,385	1,719
Passenger fares	544	2,591	3,174	3,610	4,014	4,323	5,457	6,866	8,771	10,101
Port expenditures	512	2,613	3,390	3,410	3,800	4,641	4,637	4,961	5,407	6,093
Other transportation	173	505	480	471	515	481	869	985	1,012	976
Total payments	**4,058**	**15,397**	**16,482**	**18,225**	**20,721**	**22,293**	**23,381**	**25,496**	**27,607**	**29,313**
Ocean transportation	2,380	8,447	8,307	8,624	10,560	11,018	11,619	11,649	12,641	12,641
Import freight payments	1,444	5,809	5,562	5,827	7,755	8,114	8,636	8,657	9,505	9,483
Passenger fares	245	268	290	305	305	320	320	328	328	322
Port expenditures	316	1,905	1,957	1,980	1,972	2,048	2,125	2,114	2,244	2,228
Charter hire	375	465	498	512	528	536	538	550	564	608
Air transportation	1,581	6,705	7,938	9,361	9,918	11,049	11,473	13,515	14,585	16,280
Import freight payments	115	562	725	1,066	1,633	1,666	2,051	2,242	2,226	2,197
Passenger fares	970	3,339	4,482	5,698	5,573	6,330	6,346	7,083	7,604	8,200
Port expenditures	496	2,804	2,731	2,597	2,712	3,053	3,076	4,190	4,755	5,883
Other transportation	97	245	237	240	243	226	289	332	381	392
Balance	**-386**	**-1,189**	**-991**	**-2,025**	**-2,898**	**-3,296**	**-2,466**	**-1,642**	**103**	**1,204**

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

No. 1057. Exports and Imports, by Method of Transport: 1970 to 1990

[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					
		1970	1980	1985	1988	1989	1990	1970	1980	1985	1988	1989	1990
All methods [1]	Bil. dol.	43.2	220.7	213.1	320.4	363.8	393.0	40.0	240.8	345.3	441.3	473.4	495.3
Vessel	Bil. dol.	24.6	120.9	91.7	126.0	146.3	150.8	24.8	165.1	208.4	255.8	269.9	283.4
Air	Bil. dol.	6.1	46.1	52.3	91.6	101.9	110.5	3.4	28.0	51.3	77.5	84.4	90.9
Shipping weight: Vessel	Bil. kg.	218.0	363.7	317.7	361.8	390.6	372.4	271.4	443.1	361.5	466.8	494.7	496.3
Air	Bil. kg.	0.4	1.0	0.8	1.4	1.6	1.5	0.3	0.6	1.3	1.5	4.3	1.7

[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 1988, FT 990, monthly; thereafter, U.S. Merchandise Trade: Selected Highlights, FT-920, monthly.

No. 1058. Federal Expenditures for Civil Functions of the Corps of Engineers, United States Army: 1960 to 1990

[**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
1960	873	310	293	270	1982	2,940	1,331	1,083	453
1965	1,169	426	447	283	1983	2,959	1,290	1,088	482
1970	1,128	398	379	331	1984	3,085	1,383	1,154	445
1975	2,070	694	904	439	1985	2,956	1,234	1,187	419
1977	2,340	792	918	594	1986	3,163	1,345	1,300	402
1978	2,645	951	1,069	583	1987	2,937	1,135	1,272	411
1979	2,934	1,083	1,218	577	1988	3,086	1,271	1,271	423
1980	3,061	1,225	1,228	551	1989	3,252	1,395	1,253	462
1981	3,198	1,339	1,273	527	1990	3,297	1,391	1,397	375

[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. 1059. 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	1981	1982	1983	1984	1985	1986	1987	1988	1989
Total	**220.3**	**318.6**	**406.9**	**410.2**	**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	28.3	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	35.1	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	14.4	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	234.4	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	98.0	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. 1060. Domestic and Foreign Waterborne Commerce, by Type of Commodity: 1970 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 1061 due to minor differences in basic concepts]

COMMODITY	1970		1980		1985		1989			
	Total	Domestic	Total	Domestic	Total	Domestic	Total	Domestic	Foreign: Imports	Foreign: Exports
Net total	**1,531.7**	**950.7**	**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]	394.7	287.3	423.2	339.2	368.8	259.0	441.9	289.2	108.8	43.9
Gasoline	89.3	88.7	87.3	81.0	94.0	78.0	107.9	86.2	19.8	1.9
Distillate fuel oil	78.8	76.9	74.6	72.1	70.0	55.0	75.2	58.1	12.9	4.2
Residual fuel oil	170.5	78.8	188.0	141.3	130.0	83.7	147.5	91.4	42.8	13.3
Crude petroleum	210.5	116.3	480.2	174.2	357.7	194.7	480.8	181.9	298.8	0.1
Coal and lignite	225.4	154.1	256.4	164.1	273.9	179.9	304.8	203.8	2.4	98.6
Nonmetallic minerals [1 2]	166.6	132.6	157.1	111.6	150.7	108.5	158.7	111.6	25.7	21.4
Sand and gravel [3]	78.4	73.9	65.1	60.8	66.4	62.0	58.8	54.9	2.1	1.8
Limestone	42.0	34.1	34.2	23.9	24.5	21.9	41.3	35.5	2.3	3.5
Phosphate rock	16.6	5.8	23.7	9.5	19.4	8.4	15.8	6.1	0.8	8.9
Iron and concentrates	129.3	75.2	98.4	64.9	72.7	50.0	86.5	59.6	21.4	5.5
Farm products [1]	90.4	28.5	216.8	63.4	172.8	60.0	216.3	70.5	8.7	137.1
Corn	27.2	11.7	98.6	30.8	76.3	29.0	96.4	35.8	0.1	60.5
Wheat	25.0	5.8	53.4	14.3	38.0	10.6	55.8	16.5	0.2	39.1
Soybeans	21.2	8.3	39.6	16.1	32.9	14.9	28.8	12.8	(Z)	16.0
Chemicals and allied products	62.0	39.7	91.9	49.4	108.5	53.3	123.3	61.9	15.9	45.5
Food and kindred products	35.0	11.0	54.8	20.4	52.5	17.6	54.3	20.6	11.5	22.2
Lumber and wood products [4]	49.9	27.3	52.0	22.7	47.2	18.8	56.9	21.0	4.7	31.2
Primary metal products	42.4	10.8	28.9	9.0	33.4	8.5	31.5	8.7	17.9	4.9
Waste and scrap	25.9	16.0	31.1	18.8	37.4	23.9	54.6	37.3	0.9	16.4
Other	99.7	51.9	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. 1061. Waterborne Imports and Exports—Cargo Tonnage and Value, by Coastal District: 1970 to 1990

[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 29. 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.)						
	1970	1980	1985	1987	1988	1989	1990	1970	1980	1985	1987	1988	1989	1990
Imports:														
Atlantic	219	183	190	224	234	211	207	15.0	71.5	94.4	105.8	107.4	109.3	110.8
Gulf	47	243	141	184	212	217	225	2.9	56.4	32.8	30.5	31.2	36.1	41.0
Pacific	31	56	51	56	55	55	55	5.5	45.0	90.4	118.4	126.5	140.9	143.3
Great Lakes	26	16	17	14	16	16	16	1.3	1.9	2.8	2.0	2.5	3.7	7.6
Exports:														
Atlantic	79	117	93	78	92	94	101	11.9	51.0	35.2	38.7	48.2	56.3	62.4
Gulf	78	163	144	155	162	152	148	6.9	41.5	31.8	31.6	37.9	40.9	41.2
Pacific	48	78	81	95	110	103	100	4.1	25.2	25.8	31.9	43.3	50.1	53.7
Great Lakes	36	45	34	32	37	34	26	1.4	4.6	2.4	2.1	3.2	3.6	1.7

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

No. 1062. Vessels Entered and Cleared in Foreign Trade—Net Registered Tonnage, by Flag of Carrier Vessel: 1966 to 1990

[**In millions of net 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.	Percent U.S.	Foreign	Total	U.S.	Foreign	Total	U.S.	Foreign
Entered:											
1966-70	53,459	232	29	12.5	203	206	27	180	157	18	139
1971-75	53,760	319	30	9.5	290	292	28	264	220	24	196
1976-80	53,700	458	40	8.7	418	425	38	387	316	30	286
1981-85	50,124	452	57	12.4	395	424	55	369	277	36	241
1986-90	61,978	548	46	8.4	502	521	45	476	346	30	315
1970	53,293	254	26	10.3	226	227	24	202	171	19	152
1975	51,443	355	32	9.9	323	326	30	297	240	26	215
1980	53,645	492	52	10.6	440	460	50	410	310	34	276
1985	53,531	451	53	11.7	398	426	52	374	283	34	249
1986	56,859	489	49	10.0	439	463	48	415	310	32	278
1987	59,563	518	48	9.3	470	492	47	445	333	29	304
1988	62,097	556	47	8.5	509	527	46	481	352	30	322
1989	64,946	587	44	7.4	543	558	42	516	367	31	335
1990	66,424	589	41	7.0	548	564	40	524	367	30	337
Cleared:											
1966-70	52,415	232	30	12.8	202	206	27	179	122	23	99
1971-75	53,039	324	31	9.9	293	296	29	267	149	21	127
1976-80	52,931	453	41	9.1	412	420	38	382	203	26	177
1981-85	50,291	460	57	12.4	403	432	55	377	251	34	217
1986-90	60,249	551	47	8.6	504	524	46	478	284	31	253
1970	52,195	253	27	10.6	226	226	25	201	132	20	112
1975	51,017	363	34	10.3	329	334	31	303	168	23	144
1980	52,928	487	54	11.1	433	456	51	405	246	33	213
1985	53,095	461	55	11.9	406	435	53	382	253	36	217
1986	55,710	491	51	10.4	441	466	49	417	246	33	212
1987	58,307	521	49	9.4	472	495	48	447	269	31	238
1988	60,540	561	49	8.7	512	531	47	484	295	31	264
1989	63,042	590	45	7.6	545	561	44	517	304	30	274
1990	63,648	592	43	7.3	550	566	41	525	304	29	275

Source: U.S. Bureau of the Census, *Vessel Entrances and Clearances*, through 1986, FT 975, annual; thereafter TA 987, annual.

No. 1063. Domestic Merchant Vessels Completed by U.S. Shipyards: 1970 to 1988

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

TYPE	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Merchant vessels	Number	13	15	15	10	12	11	13	5	8	5	4	4
Gross tons	1,000	342	452	1,149	375	275	337	376	118	172	215	153	153
Cargo	Number	6	3	4	6	2	6	6	-	4	2	3	3
Gross tons	1,000	120	65	53	105	53	221	228	-	113	66	58	58
Deadweight tons	1,000	134	71	47	114	73	219	219	-	97	53	63	63
Tankers	Number	7	12	11	4	10	5	7	5	4	3	1	1
Gross tons	1,000	222	387	1,096	270	222	116	148	118	59	149	95	95
Deadweight tons	1,000	427	742	1,901	354	358	226	277	210	92	271	209	209

- Represents zero.

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

No. 1064. United States Flag Merchant Vessels—Number and Vessel Deadweight Tonnage: 1990

[As of **end of fiscal year**; see text, section 9. Covers ocean-going vessels of 1,000 gross tons and over engaged in foreign and domestic trade, and inactive vessels. Excludes special types such as tugs, barges, cable ships, fishing trawlers, and vessels employed on Great Lakes. 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	Tanker	Total	Passenger [1]	Cargo [2]	Intermodal	Bulk carrier	Tanker
Total	635	9	199	168	26	233	24,262	86	2,548	4,711	1,270	15,649
Active vessels	423	7	55	153	22	186	18,374	59	857	4,339	972	12,147
Privately owned	368	2	38	122	22	184	17,329	14	617	3,629	972	12,097
U.S. foreign trade	131	-	27	66	15	23	5,119	-	426	2,271	785	1,637
Foreign-to-foreign	25	-	-	9	-	16	2,103	-	-	227	-	1,876
Domestic trade	158	2	2	26	7	121	8,624	14	24	549	187	7,850
Coastal	83	-	2	-	5	76	3,134	-	24	-	132	2,978
Noncontigious	75	2	-	26	2	45	5,490	14	-	549	55	4,872
Military Sea Lift Command	54	-	9	21	-	24	1,483	-	167	582	-	734
Government owned	55	5	17	31	-	2	1,045	45	240	710	-	50
Ready reserve force	45	2	13	29	-	1	935	23	188	691	-	33
Inactive vessels	212	2	144	15	4	47	5,888	27	1,689	372	298	3,502
Privately owned	38	1	6	8	3	20	3,200	16	70	263	273	2,578
Temporarily inactive	2	-	-	1	-	1	214	-	-	41	-	173
Laid-up	28	1	2	6	3	16	2,754	16	15	192	273	2,258
Laid-up (CHARAD Custody) [3]	8	-	4	1	-	3	232	-	55	30	-	147
Government owned (CHARAD Custody) [3]	174	1	138	7	1	27	2,688	11	1,619	109	25	924
National defense reserve fleet	165	1	133	7	-	24	2,382	11	1,560	109	-	702
Ready reserve fleet	51	-	37	4	-	10	829	-	495	72	-	262
Other reserve	114	1	96	3	-	14	1,553	11	1,065	37	-	440
Nonretention [4]	5	-	5	-	-	-	59	-	59	-	-	-
Other Government owned	4	-	-	-	1	3	247	-	-	-	25	222

- Represents zero. [1] Includes combination passenger and cargo vessels. [2] General cargo. [3] In the custody of the Maritime Administration. [4] 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. 1065. Private Shipyards—Summary: 1970 to 1991

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

ITEM	Unit	1970	1980	1984	1985	1986	1987	1988	1989	1990	1991
Employment	1,000	133.4	177.3	142.0	130.3	120.6	120.4	121.0	123.4	[1]121.8	[1]125.0
Production workers	1,000	108.5	141.8	111.0	99.0	90.3	90.8	90.9	88.6	[1]86.4	[1]94.3
Value of work done	Mil. dol.	2,682	9,269	8,944	9,358	8,640	8,531	(NA)	(NA)	(NA)	(NA)
On ships only	Mil. dol.	2,594	8,889	8,308	9,483	8,913	8,377	(NA)	(NA)	(NA)	(NA)
Value added	Mil. dol.	1,616	5,338	5,206	5,740	5,426	5,227	(NA)	(NA)	(NA)	(NA)
Building activity:											
Merchant vessels: [2]											
Under construction [3]	Number	49	69	10	10	7	6	-	-	-	3
Ordered	Number	13	7	5	-	-	-	-	-	-	3
Delivered	Number	13	23	5	3	1	4	-	-	-	-
Cancelled	Number	-	4	-	-	-	2	-	-	-	-
Under contract [4]	Number	49	49	10	7	6	-	-	-	3	3
Naval vessels: [2]											
Under construction [3]	Number	108	99	111	100	85	79	83	105	98	89
Ordered	Number	6	11	11	11	16	20	32	16	7	(NA)
Delivered	Number	32	19	22	26	20	16	10	23	15	(NA)
Under contract [4]	Number	82	91	100	85	[5]79	83	105	98	[6]89	(NA)
Repairs/conversions:											
Commercial ships	Mil. dol.	431	1,335	1,631	852	847	806	(NA)	(NA)	(NA)	(NA)
Naval ships	Mil. dol.	359	1,134	1,641	2,311	2,008	1,930	(NA)	(NA)	(NA)	(NA)
Unfinished work: [3]											
Commercial ships	Mil. dol.	765	2,070	100	450	315	53	-	-	-	(NA)
Naval ships	Mil. dol.	1,719	7,107	14,003	12,091	9,595	8,265	10,500	16,010	(NA)	(NA)

- Represents zero. NA Not available. [1] Estimate as of July. [2] Vessels of 1,000 tons or larger. [3] As of Jan. 1. [4] As of Dec. 31. [5] Two ships were cancelled during 1986. [6] One contract was terminated in December 1990.

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

No. 1066. Employees in Government and Private Shipyards: 1960 to 1991

[**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	1980	251	178	73	1986	206	131	75
1970	216	134	83	1981	264	187	77	1987	199	124	75
1975	217	154	65	1982	252	172	80	1988	197	124	73
1977	242	174	68	1983	227	143	84	1989	197	126	71
1978	243	172	71	1984	229	146	83	1990	197	129	68
1979	244	173	71	1985	219	138	80	1991	190	127	63

Source: U.S. Bureau of Labor Statistics, Bulletin 2370; *Employment and Earnings,* monthly; and unpublished data.

No. 1067. Employment on U.S. Flag Merchant Vessels, 1970 to 1991, and Basic Monthly (January) Wage Scale for Able-Bodied Seamen, 1970 to 1992

[**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	1985	13.1	1970	$470	$652	1986	$1,419	$2,132
1975	20.5	1986	11.5	1975	612	900	1987	1,419	2,132
1980	19.6	1987	10.4	1979	865	1,287	1988	1,419	2,175
1981	18.3	1988	10.7	1980	967	1,414	1989	1,448	2,218
1982	16.7	1989	9.9	1983	1,320	1,862	1990	1,505	2,218
1983	15.3	1990	11.1	1984	1,419	2,029	1991	1,581	2,329
1984	13.7	1991	11.7	1985	1,419	2,069	1992	1,655	2,438

[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. 1068. Worldwide Tanker Casualties: 1975 to 1991

[Data for **1975** and **1980** covers tankers, ore/oil carriers and bulk/oil vessels of 6,000 deadweight tons and over; beginning **1983,** 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	1983	1984	1985	1986	1987	1988	1989	1990	1991
Casualties	Number	906	(NA)	(NA)	(NA)	340	451	408	456	528	541	507
Total losses [1]	Number	22	15	11	14	12	8	5	3	8	10	10
Deaths	Number	90	132	14	68	53	23	12	63	74	119	205
Oil spills	Number	45	32	17	15	9	8	12	13	31	31	26
Amount	1,000 tons	188	136	388	22	80	5	9	178	188	61	439

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

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

No. 1069. Merchant Vessels—World and United States: 1960 to 1990

[**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
1984	2,210	18,334	76,068	418,682	73	84	6,441	19,292
1985	1,964	18,157	76,395	416,269	66	180	6,447	19,518
1986	1,634	16,845	75,266	404,910	36	223	6,496	19,901
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

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

No. 1070. Merchant Vessels—Ships and Tonnage Lost Worldwide, by Type of Ship: 1980 to 1990

[**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	1988	1989	1990	1980	1985	1988	1989	1990
Total [1]	**387**	**307**	**231**	**211**	**188**	**1,804**	**1,651**	**865**	**667**	**1126**
Tankers	24	19	9	13	8	707	776	327	135	138
Ore/bulk carriers [2]	21	22	8	12	15	458	405	133	182	687
General cargo	211	155	110	92	87	478	363	227	250	202
Container ships	2	5	4	2	-	6	41	26	3	-
Passenger [3]	9	-	2	1	-	112	-	11	12	-
Fishing	96	66	60	67	50	30	26	22	29	20

- 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. 1071. Merchant Fleets of the World: 1980 to 1989

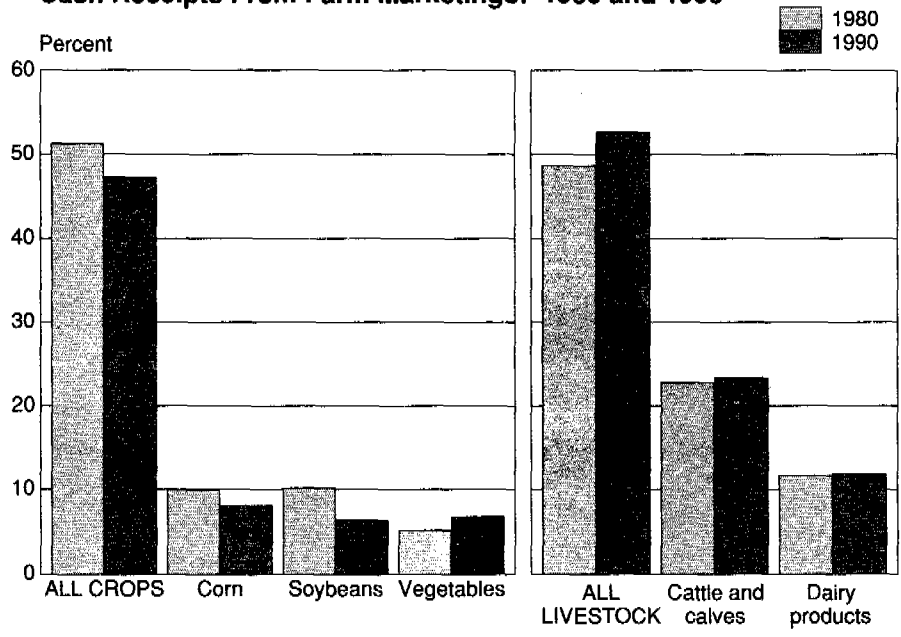
[**Vessels of 1,000 gross tons and over.** As of **Jan. 1** of the following year. Specified countries have 100 or more ships]

YEAR AND COUNTRY OF REGISTRY, 1989	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
1988, world total	**23,468**	**14**	**368**	**23**	**12,518**	**15**	**5,332**	**12**	**5,250**	**14**
United States	675	22	21	41	381	24	26	12	247	19
Foreign	22,793	14	347	22	12,137	15	5,306	12	5,003	13
1989, world total [2]	**22,983**	**14**	**320**	**23**	**12,195**	**15**	**5,335**	**12**	**5,133**	**14**
United States	655	22	19	41	371	24	26	12	239	19
Privately-owned	407	16	4	36	171	14	26	12	206	18
Government-owned	248	33	15	43	200	32	-	(X)	33	31
Foreign	22,328	14	301	22	11,824	15	5,309	12	4,894	13
Argentina	135	18	-	-	69	18	17	16	49	17
Brazil	293	14	2	28	114	19	94	9	83	13
British Colonies	545	15	6	16	252	17	176	12	111	15
Bulgaria	114	15	2	16	52	16	46	14	14	17
China: Mainland	1,281	18	13	25	860	19	240	15	168	17
Taiwan	226	12	1	18	147	13	63	10	15	13
Cyprus	1,054	15	3	32	537	15	410	15	104	15
Denmark (DIS) [3]	199	7	-	-	136	8	9	8	54	7
East Germany	147	14	1	8	125	15	17	13	4	10
Egypt	131	17	4	27	100	18	16	7	11	20
France	134	12	4	10	64	11	15	8	51	14
Greece	914	15	31	28	238	18	442	13	203	16
Honduras	139	25	1	34	107	26	11	24	20	23
India	296	13	3	24	112	15	118	11	63	10
Indonesia	323	19	7	13	217	21	13	8	86	16
Iran	123	13	-	-	38	17	50	10	35	15
Italy	479	16	9	19	161	16	67	14	222	17
Japan	1,007	8	14	10	411	7	287	9	295	8
Liberia	1,409	12	13	16	311	12	511	12	574	11
Malaysia	158	15	-	-	103	17	21	10	34	12
Malta	293	18	2	56	144	18	79	18	68	18
Netherlands	326	9	4	9	256	9	13	8	53	8
Norway (NIS) [3]	587	12	11	8	138	12	177	12	261	12
Panama	3,189	12	38	29	1,707	13	854	10	590	11
Philippines	558	13	10	28	225	15	285	8	38	25
Poland	245	13	3	9	143	13	92	12	7	14
Romania	304	12	-	-	220	12	70	12	14	10
Singapore	407	12	-	-	216	14	70	9	121	11
South Korea	429	14	-	-	211	15	154	12	64	14
Soviet Union	2,428	17	32	25	1,732	17	244	12	420	15
Spain	301	13	-	1	178	13	43	12	80	15
Sweden	162	13	4	17	80	12	17	16	61	14
Thailand	124	21	1	-	88	22	2	19	33	21
Turkey	317	14	4	35	202	12	58	16	53	16
United Kingdom	198	14	12	16	89	13	29	10	68	15
West Germany	310	6	6	11	244	6	10	5	50	8
Yugoslavia	272	14	3	26	167	14	90	13	12	13
All others	2,771	(NA)	57	(NA)	1,610	(NA)	399	(NA)	705	(NA)

- Represents zero. NA Not available. X Not applicable. [1] Includes bulk/oil, ore/oil, and ore/bulk/oil carriers. [2] Average age for the previous year. [3] 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.

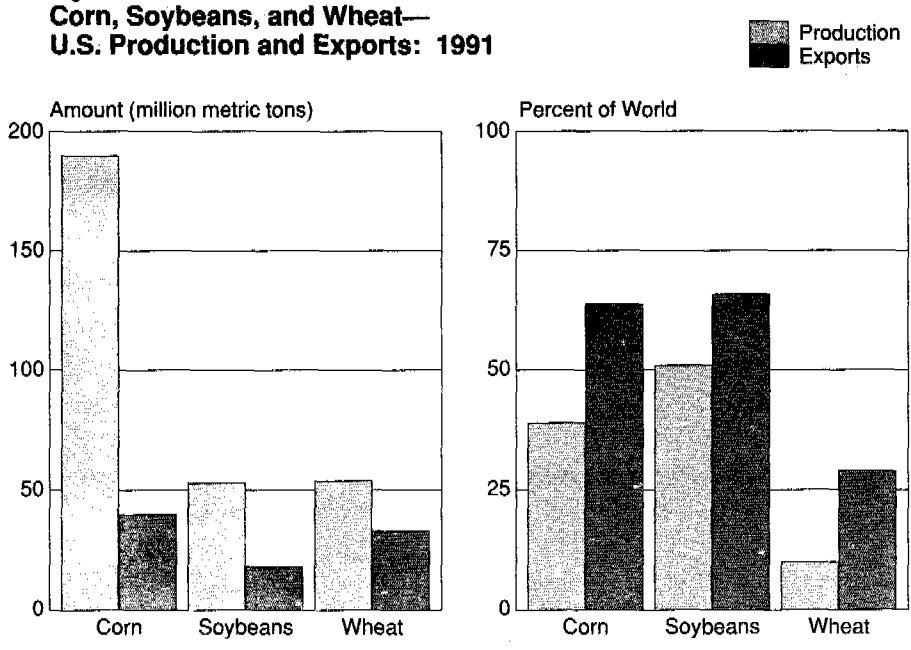
Source: U.S. Maritime Administration, *Merchant Fleets of the World*, summary report, annual.

Figure 23.1
Cash Receipts From Farm Marketings: 1980 and 1990



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1094.

Figure 23.2
Corn, Soybeans, and Wheat—U.S. Production and Exports: 1991



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1107.

Agriculture

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

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. The 1987 Census of Agriculture is the most recent census for which reports 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* (FT 247), *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.

In Brief

Number of farms, 1991: 2.1 million
Leading States—

Texas	*185,000*
Missouri	*107,000*
Iowa	*102,000*

Farm marketings cash receipts, 1990: $170 billion
Leading commodities—

Cattle, calves	*$40 billion*
Dairy products	*$20 billion*
Corn	*$14 billion*

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, 1978, 1982, and 1987 Censuses of Agriculture, 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, 1978, 1982, and 1987 censuses with those in previous

censuses. In the 1969 census, as well as the 1959 and 1964 censuses, places of less than 10 acres were counted as farms if estimated sales of agricultural products for the year amounted to at least $250 and places of 10 or more acres if such sales amounted to at least $50.

Unless otherwise stated in the specific tables of this section, 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 population.—Farm population consists of all persons living on farms in rural areas. Farm population data shown for 1960 to 1975 are based on the definition of a farm used for the 1959, 1964, and 1969 Censuses of Agriculture. Farm population data for 1980 to 1983 are shown on the basis of both the 1969 and 1974 census farm definitions and are so indicated. Beginning in 1984, farm population data are based only on the farm definition adopted for the 1974 Census of Agriculture.

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 1115-1117, 1119, and 1120 should not be confused with cash receipts from farm marketings which relate to sales during a calendar year, irrespective of the year of production.

Price supports.—Agricultural income is supplemented through two basic Government-support mechanisms available to producers of eligible commodities: (1) *a market price support* (loan rate) through which producers may place any

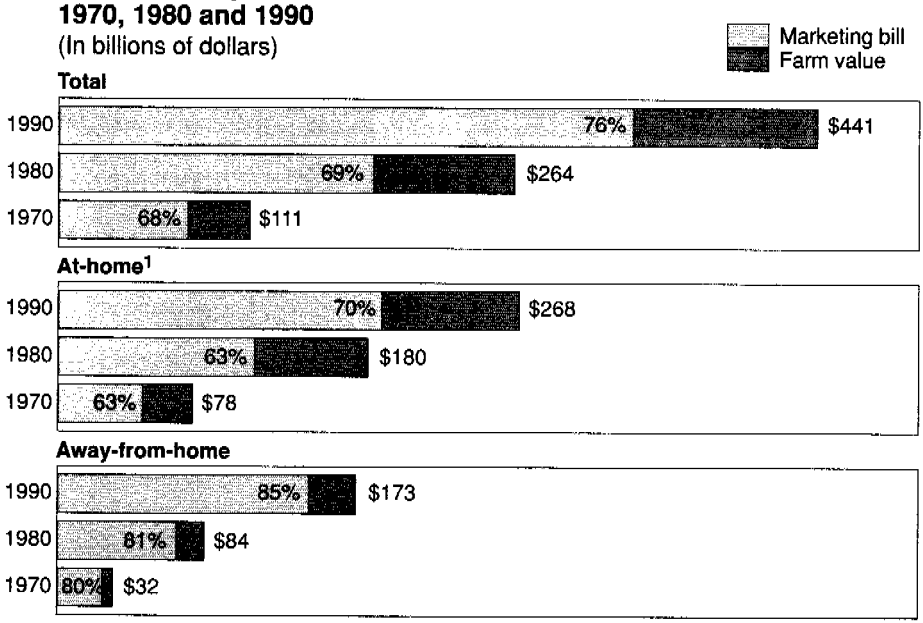
portion of their production in approved storage and receive a loan at a specified rate. The farmer may repay the loan with interest and retain the commodity or, at the end of the loan period, forfeit the commodity as full payment of the loan; (2) *a farm income support* (target price) whose payments vary inversely with the market price of the specified commodity. "Deficiency payments" are made when market prices for a specified period are below the target prices. The payment rate is the difference between the target price and market price, or between the target price and loan rate, whichever is smaller.

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.

Figure 23.3
Consumer Expenditures for Farm Foods: 1970, 1980 and 1990
(In billions of dollars)



[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 1101.

No. 1072. Food and Fiber Sector of Domestic Economy—Employment and Value Added: 1975 to 1990

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

SECTOR	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
EMPLOYMENT										
Food and fiber sector, total	**20.3**	**21.4**	**21.5**	**21.4**	**21.1**	**20.7**	**20.1**	**19.8**	**21.0**	**20.7**
Percent of domestic economy [1]	21.6	20.1	19.3	18.9	18.2	17.6	16.7	16.3	17.0	16.6
Farm sector	3.0	2.6	2.8	2.7	2.3	2.2	1.9	1.9	2.2	2.1
Nonfarm sector	17.2	18.9	18.7	18.7	18.7	18.6	18.2	17.9	18.8	18.6
Food processing	1.5	1.5	1.5	1.4	1.5	1.4	1.3	1.2	1.3	1.3
Manufacturing	3.3	3.3	3.1	3.0	2.9	2.8	2.6	2.6	2.7	2.6
Transportation, trade, and retailing	5.7	6.4	6.5	6.6	6.7	6.7	6.6	6.5	6.8	6.8
Eating establishments	3.1	3.6	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.8
Other	3.7	4.0	4.0	4.1	4.1	4.0	3.9	3.8	4.1	4.1
VALUE ADDED [2]										
Food and fiber sector, total	**325.7**	**499.9**	**602.7**	**660.6**	**698.7**	**713.8**	**715.3**	**731.1**	**820.1**	**843.5**
Percent of domestic economy	20.4	18.3	17.7	17.5	17.4	16.9	15.8	15.0	15.8	15.4
Farm sector	43.3	55.1	49.8	64.6	71.4	66.0	59.9	53.0	71.4	76.2
Nonfarm sector	282.4	444.8	552.9	596.0	627.4	647.8	655.4	678.1	748.7	767.2
Food processing	38.7	56.0	70.4	75.6	83.7	87.3	83.1	83.0	93.9	96.8
Manufacturing	57.0	83.0	98.0	101.5	102.1	104.7	101.3	105.0	115.9	117.9
Transportation, trade, and retailing	96.8	157.5	196.8	209.8	220.9	226.3	232.2	241.9	262.8	270.1
Eating establishments	25.7	42.0	52.0	55.7	57.5	60.2	65.8	70.3	73.5	76.4
Other	64.2	106.3	135.7	153.5	163.2	169.3	173.0	177.9	202.6	206.1

[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. 1073. Farm Population and Employment: 1970 to 1991

[**In thousands, except percent.** For definition of farm population, see text, section 23. See also *Historical Statistics, Colonial Times to 1970,* series C 76 and K 1-2 and K 174-176]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Farm population (**1974** definition) [1]	(NA)	6,051	5,628	5,787	5,754	5,355	5,226	4,986	4,951	4,801	4,591	(NA)
Percent of resident population	(NA)	2.8	2.5	2.5	2.5	2.3	2.2	2.1	2.1	2.0	1.9	(NA)
Farm population (**1969** definition) [1]	9,712	7,241	6,880	7,029	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Percent of resident population	4.8	3.3	3.0	3.0	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Farm employment, total [2]	4,523	3,705	4,043	3,749	3,405	3,115	2,912	2,897	2,954	2,863	2,891	2,877
Self-employed and unpaid workers [3]	3,348	2,402	2,494	2,271	2,175	2,017	1,873	1,846	1,917	1,935	1,999	1,967
Hired workers [4]	1,175	1,303	1,549	1,478	1,230	1,098	1,039	1,051	1,037	928	892	910

NA Not available. [1] April-centered five-quarter averages for 1970 to 1983; annual average for 1984 to 1990. [2] 1970, averages of monthly estimates of employed during last full calendar week ending at least one day before end of month; 1980 and 1989-91, average from Jan., April, July and Oct. surveys; 1982-83 based on July survey; 1984, average from July and Oct. surveys; 1985-88 average from April, July and Oct. surveys. [3] Includes farm operators doing 1 or more hours of farm work and unpaid workers doing 15 or more hours of farm work during survey week. [4] Includes all persons doing 1 or more hours of farm work for pay during survey week. Members of operators' families doing any farm work for cash wages are counted as hired workers.

Source: Population—U.S. Dept. of Agriculture, Economic Research Service and U.S. Bureau of the Census. Published in U.S. Bureau of the Census, *Current Population Reports,* series P-20, No. 457 and earlier series P-20 and series P-27 reports. Farm employment—U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Farm Labor,* periodic.

No. 1074. Characteristics of Farm and Nonfarm Families: 1970 to 1990

[As of **March.** 1970 based on 1969 census farm definition and 1980 and 1990 based on 1974 definition; see text, section 23. 1970, 1980 and 1990 data are based on population controls from 1960, 1970, and 1980 censuses respectively; see text, section 1. Based on Current Population Survey, see text, section 1 and Appendix III. For definition of median, see Guide to Tabular Presentation]

CHARACTERISTIC	1970			1980			1990		
	Total	Farm	Nonfarm	Total	Farm	Nonfarm	Total	Farm	Nonfarm
Total families (1,000)	51,237	2,457	48,781	58,426	1,666	56,760	66,090	1,390	64,701
Persons per family	3.62	3.77	3.61	3.28	3.35	3.27	3.17	3.09	3.17
With own children under 18 (1,000)	28,665	1,169	27,496	30,517	745	29,772	32,289	553	31,736
Mean number of own children	2.33	2.61	2.32	1.89	2.00	1.89	1.83	1.95	1.83
Percent distribution:									
Married couple	86.7	90.5	86.5	82.5	92.3	82.2	79.2	92.5	78.9
Male householder, no wife present	2.4	4.2	2.3	2.9	3.4	2.9	4.4	3.6	4.4
Female householder, no husband present	10.9	5.3	11.2	14.6	4.4	14.9	16.5	3.9	16.7
Two-person families	34.5	37.0	34.3	39.2	42.7	39.1	41.8	45.6	41.7
Three- to five-person families	52.7	46.4	53.1	53.7	47.1	53.9	53.4	49.6	53.5
Six-or-more person families	12.9	16.6	12.6	7.1	10.3	7.0	4.8	4.7	4.8

Source: U.S. Bureau of the Census, *Current Population Reports,* series P-20, No 457; and earlier series P-27 reports; and unpublished data.

No. 1075. Farm Population, by Characteristics: 1970 to 1990

[1970 and 1980, April-centered five-quarter averages; 1985 and 1990 annual averages. For definition of farm population, see text, section 23]

CHARACTERISTIC	FARM POPULATION (1,000)							PERCENT DISTRIBUTION			
	1969 definition		1974 definition					1969 definition, 1970	1974 definition		
	1970	1980	1980	1985	1990 Total	1990 Male	1990 Female		1980	1985	1990
Total, all ages	**9,712**	**7,241**	**6,051**	**5,355**	**4,591**	**2,383**	**2,208**	**100.0**	**100.0**	**100.0**	**100.0**
White	8,775	6,828	5,714	5,195	4,478	2,328	2,150	90.4	94.4	97.0	97.5
Black and other races	938	413	337	160	113	55	58	9.7	5.6	3.0	2.5
Under 15 years old	[1]2,490	[1]1,391	[1]1,146	1,100	940	480	459	[1]25.6	[1]18.9	20.5	20.5
15-19 years old	[2]1,316	[2]926	[2]790	456	356	190	166	[2]13.6	[2]13.1	8.5	7.8
20-24 years old	502	502	444	381	232	134	99	5.2	7.3	7.1	5.1
25-34 years old	770	735	606	640	532	285	247	7.9	10.0	12.0	11.6
35-44 years old	1,061	862	712	687	633	314	319	10.9	11.8	12.8	13.8
45-64 years old	2,452	1,892	1,607	1,342	1,197	616	582	25.2	26.6	25.1	26.1
65 years old and over	1,122	934	746	747	702	365	338	11.6	12.3	13.9	15.3
Total, 15 years old and over	**[3]7,222**	**[3]5,851**	**[3]4,905**	**4,255**	**3,651**	**1,902**	**1,749**	**[3]100.0**	**[3]100.0**	**100.0**	**100.0**
In labor force	4,293	3,682	3,139	2,853	2,528	1,539	990	59.4	64.0	67.1	69.2
Employed, agriculture	2,333	1,722	1,642	1,363	1,157	913	245	32.3	33.5	32.0	31.7
Percent of labor force	54.3	46.8	52.3	47.8	45.8	59.3	24.7	(X)	(X)	(X)	(X)
Self-employed	1,411	1,083	1,034	896	804	664	140	19.5	21.1	21.1	22.0
Wage and salary workers	395	344	326	318	269	217	52	5.5	6.6	7.5	7.4
Unpaid family workers	526	295	282	149	84	31	53	7.3	5.7	3.5	2.3
Employed, nonagriculture	1,878	1,853	1,415	1,402	1,318	599	719	26.0	28.8	32.9	36.1
Self-employed	159	210	161	159	141	77	64	2.2	3.3	3.7	3.9
Wage and salary workers	1,698	1,624	1,239	1,237	1,170	522	648	23.5	25.3	29.1	32.0
Unpaid family workers	21	19	16	7	7	-	6	0.3	0.3	0.2	0.2
Unemployed	82	106	82	88	53	27	27	1.1	1.7	2.1	1.5
Not in labor force	2,929	2,169	1,766	1,402	1,123	364	759	40.6	36.0	32.9	30.8

- Represents or rounds to zero. X Not applicable. [1] Persons under 14 years old. [2] Persons 14 to 19 years old. [3] Persons 14 years old and over.

Source: U.S. Bureau of the Census, *Current Population Reports*, series P-20, No. 457; series P-27, No. 59 and earlier reports; and unpublished data.

No. 1076. Farm Operator Off-Farm Employment, by Age of Operator: 1988

[Based on a sample survey of 44,125 farm operators conducted as part of the Agricultural Economics and Land Ownership Survey. Subject to sampling variability; see source]

TYPE OF OFF-FARM EMPLOYMENT	NUMBER (1,000)				PERCENT DISTRIBUTION			
	All farms	Under 35 years	35 to 64 years	65 years old and over	All farms	Under 35 years	35 to 64 years	65 years old and over
Total	**1,879.6**	**245.2**	**1,224.2**	**410.1**	**100.0**	**100.0**	**100.0**	**100.0**
Farms reporting off-farm work	924.7	149.7	700.2	74.8	49.2	61.0	57.2	18.2
Only operator	336.3	55.7	246.1	34.4	17.9	22.7	20.1	8.4
Only spouse	69.7	8.5	49.5	11.6	3.7	3.5	4.0	2.8
Both operator and spouse	518.7	85.4	404.6	28.7	27.6	34.8	33.0	7.0
Farms reporting no off-farm work	586.6	60.3	322.2	204.3	31.2	24.6	26.3	49.8
Farms not responding	368.1	35.2	201.8	131.1	19.6	14.3	16.5	32.0
Operators reporting off-farm work	855.0	141.2	650.7	63.1	100.0	100.0	100.0	100.0
Employee of another farm	54.9	10.2	35.2	9.5	6.4	7.2	5.4	15.1
Employee of private business	349.7	70.3	263.8	15.6	40.9	49.8	40.5	24.7
Government employee	135.3	14.5	112.9	7.9	15.8	10.3	17.3	12.5
Self-employed:								
Farm related business	75.0	15.1	52.4	7.5	8.8	10.7	8.1	11.8
Nonfarm related business or profession	94.5	11.7	73.2	9.6	11.1	8.3	11.2	15.2
Type of employment not reported	145.6	19.4	113.2	13.0	17.0	13.7	17.4	20.7
Spouses reporting off-farm work	588.4	93.9	454.1	40.4	100.0	100.0	100.0	100.0
Employee of another farm	17.1	1.1	13.4	2.6	2.9	1.2	2.9	6.4
Employee of private business	267.4	49.5	200.9	17.1	45.4	52.7	44.2	42.2
Government employee	140.0	19.4	112.8	7.8	23.8	20.7	24.8	19.4
Self-employed:								
Farm related business	18.3	3.1	13.3	2.0	3.1	3.3	2.9	4.9
Nonfarm related business or profession	48.3	5.8	36.6	5.8	8.2	6.2	8.1	14.4
Type of employment not reported	97.2	15.0	77.1	5.1	16.5	16.0	17.0	12.5

Source: U.S. Bureau of the Census, *1987 Census of Agriculture, Vol. 3, Related Surveys, Part 2, Agricultural Economics and Land Ownership Survey (1988).*

No. 1077. Farms—Number and Acreage: 1959 to 1991

[Based on census year definition indicated; 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)
1969 DEFINITION					**1974 DEFINITION**				
1959	*4,105*	*-139*	*1,183*	*288*	1975	2,521	(X)	1,059	420
1960	3,963	-142	1,176	297	1976	2,497	-24	1,054	422
1964	*3,457*	*-127*	*1,146*	*332*	1977	2,456	-41	1,048	427
1965	3,356	-101	1,140	340	*1978*	*2,436*	*-20*	*1,045*	*429*
1969	*3,000*	*-89*	*1,108*	*369*	1979	2,437	1	1,042	428
					1980	2,440	3	1,039	426
1970	2,949	-51	1,102	374	1981	2,440	-	1,034	424
1971	2,902	-47	1,097	378	*1982*	*2,407*	*-33*	*1,028*	*427*
1972	2,860	-42	1,092	382	1983	2,379	-28	1,023	430
1973	2,823	-37	1,088	385	1984	2,334	-45	1,018	436
1974	*2,795*	*-28*	*1,084*	*388*	1985	2,293	-41	1,012	441
					1986	2,250	-43	1,005	447
1975	2,767	-28	1,081	391	*1987*	*2,213*	*-37*	*999*	*451*
1976	2,738	-29	1,078	394	1988	2,197	-16	995	453
1977	2,706	-32	1,075	397	1989	2,171	-26	991	457
1978	*2,672*	*-34*	*1,072*	*401*	1990	2,140	-31	987	461
					1991, prel.	2,105	-35	983	467

- Represents zero. X Not applicable. [1] Average annual change from preceding year shown. For 1959, change from 1954.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Number of Farms and Land in Farms, 1959-70* (Statistical Bulletin No. 507); *Farms and Land in Farms, 1969-75* (Statistical Bulletin No. 594); *Farm Numbers, 1975-80; Farms and Land in Farms, Final Estimates by States, 1979-1987*; and *Crop Production* (August releases).

No. 1078. Farms—Number and Acreage, by State: 1990 and 1991

[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		STATE	FARMS (1,000)		ACREAGE (mil.)		ACREAGE PER FARM	
	1990	1991, prel.	1990	1991, prel.	1990	1991, prel.		1990	1991, prel.	1990	1991, prel.	1990	1991, prel.
U.S	**2,140**	**2,105**	**987**	**983**	**461**	**467**	Missouri	108	107	30	30	281	284
							Montana	25	25	61	60	2,449	2,431
Alabama	47	45	10	10	215	218	Nebraska	57	56	47	47	826	841
Alaska	1	1	1	1	1,724	1,768	Nevada	3	3	9	9	3,560	3,560
Arizona	8	8	36	36	4,615	4,500	New Hampshire	3	3	(Z)	(Z)	169	166
Arkansas	47	46	16	16	330	337	New Jersey	8	8	1	1	107	106
California	85	84	31	30	362	361	New Mexico	14	14	45	44	3,296	3,281
Colorado	27	26	33	33	1,249	1,262	New York	39	38	8	8	218	218
Connecticut	4	4	(Z)	(Z)	108	108	North Carolina	62	60	10	10	156	160
Delaware	3	3	1	1	197	197	North Dakota	34	33	41	40	1,191	1,224
Florida	41	40	11	11	266	263	Ohio	84	80	16	16	187	196
Georgia	48	46	13	12	260	263	Oklahoma	70	70	33	33	471	471
Hawaii	5	5	2	2	372	372	Oregon	37	37	18	18	488	481
Idaho	22	21	14	14	628	631	Pennsylvania	53	53	8	8	153	153
Illinois	83	82	29	29	343	348	Rhode Island	1	1	(Z)	(Z)	95	94
Indiana	68	65	16	16	240	246	South Carolina	25	24	5	5	208	213
Iowa	104	102	34	34	322	328	South Dakota	35	35	44	44	1,266	1,263
Kansas	69	69	48	48	694	694	Tennessee	89	87	12	12	139	143
Kentucky	93	91	14	14	152	155	Texas	186	185	132	131	710	708
Louisiana	32	30	9	9	278	293	Utah	13	13	11	11	856	850
Maine	7	7	1	1	201	203	Vermont	7	7	2	2	216	219
Maryland	15	15	2	2	148	146	Virginia	46	45	9	9	193	196
Massachusetts	7	7	1	1	99	99	Washington	37	37	16	16	432	432
Michigan	54	54	11	11	200	200	West Virginia	21	20	4	4	180	185
Minnesota	89	88	30	30	337	341	Wisconsin	80	79	18	18	220	222
Mississippi	40	38	13	13	325	337	Wyoming	9	9	35	35	3,910	3,867

Z Less than 500,000 acres.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production* (August 1991 release).

No. 1079. 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

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

CHARACTERISTIC	ALL FARMS		FARMS WITH SALES OF $10,000 AND OVER	
	1982	1987	1982	1987
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.

Source of tables 1079-1081: U.S. Bureau of the Census, *Census of Agriculture: 1974*, vol. II; *1982*, vol. 1; and *1987*, vol. 1.

No. 1082. 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.

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 Number of farms (1,000)	ALL FARMS Land in farms (mil. acres)	ALL FARMS Average size of farm (acres)	FARMS WITH SALES OF $10,000 OR MORE Number of farms (1,000)	FARMS WITH SALES OF $10,000 OR MORE Land in farms (mil. acres)	FARMS WITH SALES OF $10,000 OR MORE 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	636
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	6,286
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 of tables 1082 and 1083: U.S. Bureau of the Census, *Census of Agriculture: 1987*, vol. 1.

No. 1084. 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
Louisiana	3.7	3.9	11.6	14.3	2,273	2,337	25.4	29.1	694	647	7.8	8.1
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
Nevada	2.2	2.2	79.2	73.3	7,881	7,806	78.9	78.1	830	779	8.3	7.8
New Mexico	6.2	7.0	45.9	49.2	14,755	12,385	31.3	26.9	807	718	1.7	1.6
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: U.S. Bureau of the Census, *1987 Census of Agriculture*, vol. 1.

No. 1085. Foreign Ownership of U.S. Agricultural Land: 1991

[**In thousands of acres, except percent.** Covers "foreign persons" reporting under the Agricultural Foreign Investment Disclosure Act of 1978. As defined in the Act, a "foreign person" is any person who is not a U.S. citizen and who is not a permanent resident alien of the U.S. Foreign governments and entities are also "foreign persons." Also, each successive link in a chain of U.S. entities containing foreign interests is considered a "foreign person." An entity is deemed a "foreign person" if it is 10 percent or more foreign owned by a single foreign person or foreign persons acting in concert, or 50 percent foreign owned by a group of foreign persons not acting in concert, none of whom individually holds a 10 percent or greater interest in the entity. Therefore, acreage figures reported do not necessarily mean that they are wholly owned by foreign investors. Covers reports received and accepted as of December 31, 1991]

CHARACTERISTIC	ACREAGE OWNED [1]		ACREAGE ACQUIRED [2]	
	Total	Percent	Total	Percent
Total [3]	**14,809**	**100.0**	**227**	**100.0**
Type of owner:				
Corporation	10,762	72.7	166	73.0
Partnership	2,859	19.3	41	17.8
Individual	942	6.4	10	4.6
Other	245	1.7	11	4.6
Size:				
Less than 100 acres	106	0.7	3	1.1
100-299 acres	296	2.0	8	3.5
300-999 acres	892	6.0	20	8.7
1,000 acres or more	13,515	91.3	197	86.7
Land use:				
Cropland	2,495	16.9	35	15.3
Pasture	3,904	26.4	31	13.8
Forest	7,316	49.4	146	64.3
Other agriculture	673	4.5	6	2.7
Other nonagriculture	420	2.8	9	4.0

CHARACTERISTIC	ACREAGE OWNED [1]		ACREAGE ACQUIRED [2]	
	Total	Percent	Total	Percent
Country of foreign owner:				
Canada	1,971	13.3	6	2.5
Germany	757	5.1	19	8.2
Netherlands Antilles	367	2.5	(Z)	(Z)
Switzerland	300	2.0	1	0.5
United Kingdom	1,803	12.2	14	6.0
Through U.S. interest: [4]				
Canada	1,691	11.4	6	2.5
France	1,020	6.9	29	12.6
Germany	445	3.0	1	0.3
Japan	268	1.8	65	28.4
Luxembourg	234	1.6	(Z)	(Z)
Mexico	323	2.2	1	0.5
Netherlands	316	2.1	2	0.8
Switzerland	333	2.3	46	20.0
United Kingdom	1,327	9.0	6	2.8

Z Less than 500 acres or .05 percent. [1] Landholdings by foreign interests as of Dec. 31. [2] Acquisitions by foreign interests from Jan. 1-Dec. 31, 1991. [3] Includes other countries not shown separately. [4] Reports filed by U.S. corporations with foreign shareholders.
Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Ownership of U.S. Agricultural Land Through December 31, 1991* (Economic Research Service Staff Report AGES 9211), 1992.

No. 1086. Farm Real Estate—Summary: 1980 to 1991

[**1980** and **1986-89**, value data as of **Feb. 1; 1982-85**, as of **April 1; 1990-91**, 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	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total value	**Bil. dol**	**763.3**	**843.3**	**803.9**	**812.9**	**719.4**	**641.1**	**597.1**	**626.9**	**653.5**	**658.5**	**672.2**
Average value per acre	Dollars	737	823	788	801	713	640	599	632	661	668	682
Average value, operating unit	$1,000	313.5	351.2	338.7	349.1	314.5	285.6	270.5	286.0	301.8	308.0	314.4

Source: U.S. Dept. of Agriculture, Economic Research Service, 1980-1984, *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: 1985 to 1991

[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		
	1985	1990	1991	1985	1990	1991
U.S	**719,398**	**658,451**	**672,235**	**$713**	**$668**	**$682**
AL	8,929	8,642	8,147	797	839	791
AZ	11,062	9,468	10,260	295	263	285
AR	14,425	11,625	11,935	907	750	770
CA	59,829	52,483	55,040	1,841	1,704	1,787
CO	15,042	11,850	13,571	437	358	410
CT	1,442	1,855	1,781	3,005	4,417	4,240
DE	1,037	1,288	1,281	1,596	2,259	2,248
FL	19,346	22,727	23,250	1,599	2,085	2,133
GA	11,968	12,650	12,438	886	1,012	995
ID	10,711	9,056	9,028	739	661	659
IL	39,647	39,587	40,841	1,381	1,389	1,433
IN	22,049	20,277	20,783	1,344	1,244	1,275
IA	36,653	36,917	38,760	1,091	1,102	1,157
KS	23,443	22,130	22,369	448	462	467
KY	13,849	13,832	13,564	955	981	962
LA	13,791	8,235	8,145	1,407	915	905
ME	1,153	1,478	1,418	774	1,019	978
MD	5,711	5,445	4,941	2,197	2,420	2,196
MA	1,616	2,559	2,456	2,377	3,763	3,612
MI	12,517	10,854	11,718	1,108	1,005	1,085
MN	27,311	24,150	26,190	898	805	873
MS	12,054	9,464	9,802	855	728	754
MO	21,234	20,642	20,946	689	679	689
MT	14,800	14,399	14,702	243	238	243
NE	22,911	25,905	26,188	485	550	556
NV	2,171	1,727	1,949	244	194	219
NH	777	1,096	1,053	1,439	2,237	2,148
NJ	2,833	4,032	4,273	2,951	4,634	4,912
NM	8,324	8,722	10,235	185	196	230
NY	7,464	8,182	8,660	820	974	1,031
NC	14,373	12,251	12,057	1,331	1,263	1,243
ND	15,253	13,770	14,904	373	340	368
OH	19,203	18,903	19,107	1,215	1,204	1,217
OK	19,691	16,401	16,038	597	497	486
OR	11,077	10,164	10,377	615	571	583
PA	12,416	14,637	14,232	1,427	1,807	1,757
RI	218	357	343	2,990	5,028	4,827
SC	4,939	4,727	4,930	898	909	948
SD	12,856	14,543	15,561	289	328	351
TN	12,650	12,350	12,251	944	996	988
TX	94,025	65,340	63,492	694	495	481
UT	5,947	4,396	4,554	513	389	403
VT	1,515	1,797	1,724	947	1,190	1,142
VA	10,566	13,492	11,526	1,112	1,516	1,295
WA	15,187	12,464	12,768	943	779	798
WV	2,186	2,268	2,313	607	613	625
WI	16,905	14,133	15,013	944	803	853
WY	6,287	5,185	5,324	181	149	153

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 in Current and Constant (1982) Dollars: 1970 to 1990

[**In billions of dollars, except as indicated.** As of **December 31.** Includes farm operator households. See *Historical Statistics, Colonial Times to 1970,* series K 204-219, for data before revisions]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
CURRENT DOLLARS											
Assets	**324.3**	**1,089.2**	**1,056.8**	**1,064.3**	**975.9**	**892.8**	**848.0**	**911.4**	**956.8**	**976.0**	**996.2**
Physical assets:											
Real estate	224.5	850.1	819.1	829.3	735.0	657.0	613.0	658.6	687.0	692.7	702.6
Non-real estate	76.6	199.8	194.9	190.4	193.2	186.5	181.2	196.1	211.8	224.6	232.4
Livestock and poultry [1]	23.7	60.6	53.0	49.5	49.5	46.3	47.8	58.0	62.2	66.2	69.1
Machinery, motor vehicles	34.4	86.9	92.6	92.1	91.1	88.3	86.1	84.5	86.7	90.2	91.7
Crops stored	8.5	32.8	26.4	24.4	26.3	22.9	16.6	17.8	22.7	23.3	22.4
Household furnishings, equipment	10.0	19.4	23.0	24.4	24.3	27.8	28.7	32.9	37.0	42.2	46.3
Purchased inputs	(NA)	(NA)	(NA)	(NA)	2.0	1.2	2.1	3.0	3.3	2.7	2.8
Financial assets	23.2	39.3	42.8	44.6	47.7	49.3	53.8	56.7	58.0	58.7	61.2
Investment in cooperatives	7.2	19.3	21.9	22.8	24.3	24.3	24.4	25.3	25.1	26.1	27.6
Other financial assets	16.0	20.0	20.9	21.8	23.4	25.0	29.4	31.4	32.9	32.5	33.5
Claims	**324.3**	**1,089.2**	**1,056.8**	**1,064.3**	**975.9**	**892.8**	**848.0**	**911.4**	**956.8**	**976.0**	**996.2**
Debt	52.8	178.7	203.1	206.5	204.3	187.9	166.6	153.7	148.5	146.0	145.1
Real estate debt	30.5	97.5	111.3	113.7	112.3	105.7	95.9	87.7	83.0	80.5	78.4
Non-real estate debt	22.3	81.2	91.8	92.7	92.0	82.2	70.8	66.0	65.6	65.5	66.7
Equity	271.5	910.5	853.7	857.9	771.5	704.9	681.3	757.7	808.3	830.0	851.1
Farm debt/asset ratio (percent)	**16.3**	**16.4**	**19.2**	**19.4**	**20.9**	**21.0**	**19.7**	**16.9**	**15.5**	**15.0**	**14.6**
CONSTANT (1982) DOLLARS [2]											
Assets	772.1	1,270.9	1,056.8	1,024.4	906.1	805.0	745.1	776.3	788.8	772.8	757.5
Debt	125.6	208.5	203.1	198.7	189.7	169.4	146.4	130.9	122.5	115.6	110.3
Equity	646.5	1,062.4	853.7	825.7	716.4	635.6	598.7	645.4	666.4	657.2	647.2

NA Not available. [1] Excludes horses and mules. [2] Constant dollar figures are based on gross national product implicit price deflators for year.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary, 1990.*

No. 1089. Percent Distribution of Farms and Farm Debt, by Debt/Asset Ratio: 1987 to 1990

[Value of sales for calendar year shown; balance sheet data as of January 1 of the following year. A farm is a crop or livestock farm if 50 percent or more of its commodity receipts derive from the sale of crop or animal products, respectively. A crop or livestock farm is further categorized as a particular type if 50 percent of its crop or, if applicable, livestock receipts come from a specific commodity area. Based on Farm Costs and Returns Survey conducted in February-March of following year]

VALUE OF SALES AND TYPE OF FARM	FARMS					FARM DEBT				
	Total	Less than 11 percent	11 to 40 percent	41 to 70 percent	Over 70 percent	Total	Less than 11 percent	11 to 40 percent	41 to 70 percent	Over 70 percent
1987	100	58	24	11	7	100	6	34	30	29
1988	100	62	24	9	5	100	7	40	31	21
1989	100	62	24	9	4	100	8	44	31	17
1990, total	**100**	**61**	**26**	**10**	**4**	**100**	**8**	**46**	**32**	**13**
Less than $40,000	100	70	20	7	3	100	12	43	31	14
$40,000 to $99,999	100	47	34	14	5	100	8	46	31	15
$100,000 to $249,999	100	35	43	17	5	100	7	48	33	12
$250,000 to $499,999	100	31	45	20	4	100	7	48	35	10
$500,000 and over	100	33	45	16	6	100	7	45	31	16
Cash grain	100	51	32	12	5	100	7	46	33	14
Tobacco	100	63	26	9	2	100	9	44	24	23
Cotton	100	42	29	16	13	100	7	33	32	28
Other field crops	100	56	27	13	4	100	6	41	39	14
Vegetable, fruit, and nut	100	72	17	7	4	100	17	44	28	11
Nursery, greenhouse	100	66	24	7	3	100	8	55	16	22
Beef, hog, and sheep	100	68	21	8	3	100	10	47	32	11
Poultry	100	38	34	17	11	100	5	33	32	31
Dairy	100	41	40	15	4	100	6	51	34	10
Other livestock	100	65	24	9	3	100	9	43	33	16

Source: U.S. Dept. of Agriculture, Economic Research Service, *Financial Characteristics of U.S. Farms*, annual.

No. 1090. Farms, Farm Income, Assets, and Debt, by Value of Sales: 1990

FARMS WITH VALUE OF SALES OF—	Number of farms [1] (1,000)	Gross cash income [2] (bil. dol.)	Cash receipts (bil. dol.)	Govt. payments (bil. dol.)	Net cash income [2] (bil. dol.)	Assets [3] (bil. dol.)	Debt [3] (bil. dol.)	Debt/asset ratio [3] (percent)	PERCENT DISTRIBUTION		
									Number of farms [1]	Gross cash income [2]	Assets [3]
Total	**2,140**	**186.0**	**170.0**	**9.3**	**61.8**	**996.2**	**145.1**	**14.6**	**100**	**100**	**100**
Less than $20,000	1,254	9.1	7.2	0.2	-0.5	287.7	25.6	8.9	59	5	31
$20,000 to $39,999	259	9.0	7.8	0.5	2.4	103.3	11.6	11.2	12	5	11
$40,000 to $99,999	306	24.0	21.0	1.8	7.9	175.1	25.4	14.5	14	13	18
$100,000 to $249,999	214	39.4	34.8	3.2	15.1	195.5	33.4	17.1	10	21	19
$250,000 to $499,999	64	25.8	23.1	2.1	10.2	89.9	18.8	20.9	3	14	8
$500,000 to $999,999	27	21.2	19.9	1.0	7.5	62.5	13.0	20.7	1	11	6
$1 million and over	16	57.4	56.2	0.4	19.3	82.1	17.3	21.0	1	31	8

[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. Includes farm households.

No. 1091. Net Cash Income and Net Cash Flow From Farming: 1970 to 1990

[**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	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Net cash income	18.4	34.2	32.8	38.1	38.4	37.4	47.1	47.8	55.3	57.4	59.4	61.8
Gross cash income	54.8	143.3	146.0	151.3	151.1	156.1	157.9	152.8	165.1	171.9	179.9	186.0
Cash expenses	36.4	109.1	113.2	113.2	112.8	118.7	110.7	105.0	109.8	114.5	120.5	124.2
Change in loans outstanding	2.3	15.3	15.6	6.4	2.3	2.7	-16.2	-20.6	-12.6	-5.0	-2.2	-0.7
Real estate loans	1.1	10.0	9.1	3.0	1.4	3.5	-6.6	-9.7	-8.0	-4.8	-2.3	-1.9
Nonreal estate loans [1]	1.2	5.3	6.5	3.4	0.9	-0.8	-9.6	11.0	-4.6	-0.3	0.1	1.3
Net change in other financial assets	0.1	0.1	0.2	0.2	0.3	0.2	0.7	1.1	-0.2	0.5	0.1	0.4
Net rent received by nonoperator landlords	2.1	6.1	6.2	5.5	5.2	8.2	7.7	6.1	7.3	7.4	7.9	8.2
Capital expenditures	6.8	18.0	16.8	13.3	12.7	12.5	9.2	8.5	11.2	11.3	12.6	13.4
Net cash flow [2]	16.1	37.6	37.9	37.0	33.4	36.0	30.1	25.9	38.7	49.0	52.6	56.4

[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 of tables 1090 and 1091: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary*, annual.

No. 1092. Gross Farm Product—Summary: 1970 to 1990

[**In billions of dollars.** For definition of gross product, see text, section 14. Minus sign (-) indicates decrease]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
CURRENT DOLLARS											
Farm output, total [1]	**55.1**	**142.9**	**152.0**	**135.1**	**160.0**	**152.7**	**144.0**	**152.1**	**158.2**	**178.4**	**184.8**
Cash receipts from farm marketings	51.3	140.3	135.3	140.2	144.6	136.3	135.2	147.7	159.3	166.6	172.8
Farm housing	3.3	5.1	5.0	5.1	5.1	5.0	4.9	4.9	4.9	5.0	4.9
Other farm income	0.5	2.4	4.8	4.1	3.5	4.6	4.4	5.1	4.6	5.7	4.4
Change in farm inventories	-0.8	-6.1	5.8	-15.4	5.7	5.8	-1.5	-6.4	-11.3	0.5	2.0
Less: Intermediate goods and services purchased [2]	28.9	86.8	86.9	85.9	91.4	85.6	81.1	86.1	90.6	96.3	99.1
Equals: **Gross farm product**	**26.2**	**56.1**	**65.1**	**49.2**	**68.5**	**67.1**	**62.9**	**66.0**	**67.6**	**82.1**	**85.7**
Less: Consumption of fixed capital	6.1	19.4	22.8	23.2	23.2	22.9	22.5	22.0	21.6	21.9	21.7
Indirect business tax [3]	2.0	3.0	3.0	3.2	3.1	3.3	3.3	3.6	3.6	3.8	4.2
Plus: Subsidies to operators	3.3	1.0	2.2	7.5	7.0	6.3	9.5	13.9	11.8	9.3	7.7
Equals: **Farm national income**	**21.4**	**34.7**	**41.6**	**30.3**	**49.2**	**47.2**	**46.6**	**54.3**	**54.2**	**65.6**	**67.6**
CONSTANT (1987) DOLLARS											
Farm output, total [1]	**119.7**	**137.1**	**142.2**	**133.2**	**139.0**	**146.0**	**146.4**	**152.1**	**146.5**	**151.2**	**156.4**
Cash receipts from farm marketings	108.8	130.7	127.9	131.2	127.8	133.1	137.9	147.7	143.9	142.0	145.9
Farm housing	8.0	6.3	5.5	5.4	5.4	5.3	5.1	4.9	4.7	4.6	4.5
Other farm income	1.6	2.3	4.5	3.8	3.1	4.3	4.6	5.1	4.1	4.7	3.8
Change in farm inventories	-0.5	-3.4	3.1	-8.3	1.7	2.4	-2.1	-6.4	-7.0	-0.7	1.7
Less: Intermediate goods and services purchased [2]	70.3	86.1	82.0	79.5	83.9	81.8	82.2	86.1	83.3	84.0	85.0
Equals: **Gross farm product**	**49.5**	**51.0**	**60.2**	**53.7**	**55.1**	**64.2**	**64.3**	**66.0**	**63.2**	**67.2**	**71.4**
Less: Consumption of fixed capital	19.1	26.7	26.5	25.8	25.1	24.3	23.1	22.0	21.1	20.4	19.5
Indirect business tax [3]	2.7	2.8	3.3	2.9	3.0	3.5	3.5	3.6	3.5	3.7	3.9
Plus: Subsidies to operators	8.7	11.9	11.1	11.6	10.7	11.4	12.3	13.9	12.9	12.8	13.4
Equals: **Farm national income**	**36.3**	**33.4**	**41.5**	**36.5**	**37.7**	**47.8**	**49.9**	**54.3**	**51.6**	**55.8**	**61.4**

- 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*, January 1992; and unpublished data.

No. 1093. Farm Income and Expenses: 1970 to 1990

[**In billions of dollars.** See also *Historical Statistics, Colonial Times to 1970*, series K 192, K 259-260, K 264-285, and K 326]

ITEM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Gross farm income	**58.8**	**149.3**	**166.3**	**164.1**	**153.9**	**168.0**	**161.2**	**156.1**	**168.4**	**174.5**	**190.3**	**195.1**
Cash income	54.8	143.3	146.0	151.3	151.1	156.1	157.9	152.8	165.1	171.9	179.9	186.0
Farm marketings	50.5	139.7	141.6	142.6	136.8	142.8	144.1	135.3	141.8	151.1	160.9	170.0
Crops [1]	21.0	71.7	72.5	72.3	67.2	69.9	74.3	63.7	65.8	71.6	76.8	80.4
Livestock and products	29.5	68.0	69.2	70.3	69.6	72.9	69.8	71.6	76.0	79.4	84.1	89.6
Government payments	3.7	1.3	1.9	3.5	9.3	8.4	7.7	11.8	16.7	14.5	10.9	9.3
Other farm income [1]	0.6	2.3	2.5	5.2	5.1	4.9	6.0	5.7	6.6	6.3	8.1	6.7
Value of home consumption	0.8	1.2	1.2	1.1	1.0	1.0	0.9	0.9	0.7	0.7	0.7	0.7
Rental value of dwellings [2]	3.3	11.0	12.6	13.1	12.6	4.9	4.7	4.6	4.9	5.4	5.5	5.6
Value of inventory adjustment [3]	(Z)	-6.3	6.5	-1.4	-10.9	6.0	-2.3	-2.2	-2.3	-3.5	4.3	2.9
Expenses of farm production	**44.5**	**133.1**	**139.4**	**140.3**	**139.6**	**141.9**	**132.4**	**125.1**	**128.7**	**133.9**	**140.2**	**144.3**
Intermediate products	25.2	76.1	76.6	75.4	75.8	78.0	72.3	70.6	74.9	79.4	83.8	85.9
Farm origin	13.3	34.9	33.3	31.4	32.1	32.3	29.3	30.4	32.6	36.5	37.7	39.0
Feed purchased	8.0	21.0	20.9	18.6	20.6	19.4	16.9	17.5	17.5	20.4	21.0	20.7
Livestock, poultry purchased	4.3	10.7	9.0	9.7	8.8	9.5	9.2	9.8	11.8	12.8	13.1	14.7
Seed purchased [4]	0.9	3.2	3.4	3.2	2.7	3.4	3.1	3.2	3.3	3.4	3.6	3.6
Manufactured inputs	5.4	22.4	23.9	22.1	20.1	22.4	20.2	18.2	18.1	18.9	19.7	20.8
Fertilizer and lime	2.4	9.5	9.4	8.0	7.1	8.4	7.5	6.8	6.5	6.9	7.2	7.1
Pesticides	1.0	3.5	4.2	4.3	3.9	4.7	4.3	4.3	4.5	4.6	5.4	5.7
Fuel and oil	1.7	7.9	8.6	7.7	7.2	7.3	6.4	5.3	5.0	5.1	5.0	6.0
Electricity	0.3	1.5	1.7	2.0	2.0	2.1	1.9	1.8	2.2	2.3	2.0	1.9
Repairs and maintenance [5]	2.8	7.1	7.0	6.4	6.5	6.4	6.4	6.4	6.8	6.8	7.3	7.3
Other [6]	3.7	11.8	12.4	15.5	17.1	16.9	16.5	15.5	17.5	17.2	19.2	18.8
Interest	3.4	16.3	19.9	21.8	21.4	21.1	18.6	16.5	15.0	14.7	14.7	14.5
Real estate	1.8	7.5	9.1	10.5	10.8	10.7	9.9	9.1	8.2	7.9	7.8	7.7
Non-real estate	1.6	8.7	10.7	11.3	10.6	10.4	8.7	7.4	6.8	6.8	6.9	6.8
Contract, hired labor expenses [7]	4.3	9.3	8.9	9.4	8.9	9.4	10.0	9.5	10.0	10.4	11.1	12.5
Net rent to nonoperator landlords [8]	2.1	6.1	6.2	5.5	5.2	8.1	7.7	6.1	7.3	7.4	7.9	8.2
Capital consumption [9]	6.9	21.5	23.6	24.2	23.8	20.8	19.3	17.8	16.7	17.1	17.6	17.5
Property taxes	2.6	3.9	4.2	4.0	4.5	4.3	4.5	4.6	4.9	4.8	5.1	5.6
Net farm income	**14.4**	**16.1**	**26.9**	**23.8**	**14.2**	**26.1**	**28.8**	**31.0**	**39.7**	**40.6**	**50.1**	**50.8**

Z Less than $50 million. [1] Forest product sales are included in cash receipts for crops for 1970 and in other farm income beginning 1980. [2] Data for 1970 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 custo expenses; marketing, storage, and transportation expenses and miscellaneous expenses. Beginning 1980 data not strictly comparable with prior years. [7] payments and perquisites. [8] Data for periods 1970, 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. Farm Income—Cash Receipts From Farm Marketings: 1980 to 1990

[Represents gross receipts fr... commercial market sales as well as net Commodity Credit Corporation loans. See also *...torical Statistics, Colonial Times to 1970,* series K 286-302]

COMMODITY	FARM MARKETINGS (mil. dol.)								PERCENT		
	1980	1984	1985	1986	1987	1988	1989	1990	1980	1985	1990
Total	**139,737**	**142,784**	**144,114**	**135,303**	**141,759**	**151,082**	**160,893**	**169,987**	**100.0**	**100.0**	**100.0**
All crops [1]	71,746	69,889	74,293	63,749	65,764	71,645	76,761	80,364	51.3	51.6	47.3
Barley	736	1,087	1,039	835	754	862	765	768	0.5	0.7	0.5
Corn	13,959	10,909	16,880	12,315	9,924	8,928	11,388	13,716	10.0	11.7	8.1
Cotton lint, seed	4,447	3,674	3,687	3,371	4,189	4,546	5,040	5,234	3.2	2.6	3.1
Hay	1,917	2,363	2,390	2,246	2,533	3,132	3,395	3,357	1.4	1.7	2.0
Oats	(NA)	(NA)	298	178	260	305	268	232	(NA)	0.2	0.1
Peanuts	607	1,233	1,005	1,074	1,027	1,116	1,117	1,260	0.4	0.7	0.7
Rice	1,519	1,096	1,042	738	707	1,088	942	1,089	1.1	0.7	0.6
Sorghum	1,392	1,469	1,981	1,332	1,100	1,068	1,240	1,038	1.0	1.4	0.6
Soybean	14,241	11,957	11,161	9,235	10,017	12,138	10,524	10,887	10.2	7.7	6.4
Sunflower/safflower	(NA)	(NA)	242	254	211	224	212	229	(NA)	0.2	0.1
Tobacco	2,672	2,813	2,699	1,894	1,816	2,083	2,415	2,736	1.9	1.9	1.6
Wheat	8,854	8,576	7,909	4,975	5,044	6,356	7,286	6,772	6.3	5.5	4.0
Vegetables [2]	7,307	9,152	8,572	8,865	9,902	9,787	11,461	11,533	5.2	5.9	6.8
Dry beans	(NA)	(NA)	439	437	444	421	688	675	(NA)	0.3	0.4
Snap beans	(NA)	(NA)	167	150	171	166	228	205	(NA)	0.1	0.1
Broccoli	(NA)	(NA)	239	240	240	292	276	268	(NA)	0.2	0.2
Carrots	(NA)	(NA)	206	335	248	268	297	273	(NA)	0.1	0.2
Celery	(NA)	(NA)	190	211	199	231	268	215	(NA)	0.1	0.1
Sweet corn	(NA)	(NA)	368	360	372	360	468	467	(NA)	0.3	0.3
Cucumbers	(NA)	(NA)	181	170	188	196	203	216	(NA)	0.1	0.1
Lettuce	(NA)	(NA)	675	758	1,003	1,040	950	847	(NA)	0.5	0.5
Onions	(NA)	(NA)	372	415	536	498	538	551	(NA)	0.3	0.3
Potatoes	(NA)	1,921	1,601	1,377	1,707	1,625	2,334	2,679	(NA)	1.1	1.6
Tomatoes	(NA)	1,240	1,198	1,265	1,466	1,415	1,824	1,622	(NA)	0.8	1.0
Fruits, tree nuts [2]	6,557	6,734	6,946	7,252	8,062	9,204	9,257	9,306	4.7	4.8	5.5
Apples	(NA)	951	892	927	1,060	1,109	1,114	1,159	(NA)	0.6	0.7
Avocados	(NA)	(NA)	139	163	120	213	221	216	(NA)	0.1	0.1
Grapefruit	(NA)	(NA)	319	358	408	471	440	317	(NA)	0.2	0.2
Grapes	(NA)	983	961	1,177	1,362	1,600	1,866	1,668	(NA)	0.7	1.0
Lemons	(NA)	(NA)	237	157	226	188	223	278	(NA)	0.2	0.2
Oranges	(NA)	1,359	1,404	1,184	1,363	1,825	1,777	1,707	(NA)	1.0	1.0
Peaches	(NA)	(NA)	295	315	311	382	364	365	(NA)	0.2	0.2
Pears	(NA)	(NA)	193	198	196	218	252	266	(NA)	0.1	0.2
Plums and prunes	(NA)	(NA)	196	200	207	255	252	293	(NA)	0.1	0.2
Strawberries	(NA)	(NA)	451	504	554	536	520	560	(NA)	0.3	0.3
Almonds	(NA)	(NA)	361	462	648	600	481	592	(NA)	0.3	0.3
Pecans	(NA)	(NA)	163	197	140	167	179	248	(NA)	0.1	0.1
Walnuts	(NA)	(NA)	175	194	243	194	245	235	(NA)	0.1	0.1
Sugar beets	(NA)	750	774	902	1,025	1,022	1,038	1,157	(NA)	0.5	0.7
Sugarcane	(NA)	(NA)	717	742	803	854	879	857	(NA)	0.5	0.5
Mushrooms	(NA)	(NA)	491	491	519	573	630	667	(NA)	0.3	0.4
Greenhouse, nursery	(NA)	5,176	5,407	5,983	6,755	7,069	7,601	8,145	(NA)	3.8	4.8
All livestock and products [1]	67,991	72,895	69,822	71,553	75,994	79,437	84,131	89,623	48.7	48.4	52.7
Cattle and calves	31,819	30,589	29,002	28,865	33,583	36,810	36,894	39,748	22.8	20.1	23.4
Dairy products	16,365	17,931	18,055	17,724	17,727	17,641	19,396	20,199	11.7	12.5	11.9
Hogs	8,942	9,701	9,033	9,734	10,337	9,207	9,475	11,516	6.4	6.3	6.8
Broilers	4,303	6,020	5,668	6,784	6,177	7,435	8,778	8,366	3.1	3.9	4.9
Eggs	3,247	4,110	3,262	3,543	3,209	3,067	3,862	4,044	2.3	2.3	2.4
Turkeys	1,273	1,655	1,820	1,949	1,703	1,951	2,234	2,383	0.9	1.3	1.4
Sheep and lambs	(NA)	(NA)	514	481	558	476	487	412	(NA)	0.4	0.2
Horses and mules	(NA)	(NA)	560	500	540	540	524	490	(NA)	0.4	0.3
Aquaculture	(NA)	(NA)	205	230	290	324	407	460	(NA)	0.1	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. 1095. Government Payments to Farms, by Program: 1980 to 1990

[**In millions of dollars.** See also *Historical Statistics, Colonial Times to 1970,* series K 326-329]

PROGRAM	1980	1984	1985	1986	1987	1988	1989	1990
Total	**1,265**	**8,431**	**7,705**	**11,814**	**16,747**	**14,480**	**10,887**	**9,298**
Feed grain	382	367	2,861	5,158	8,490	7,219	3,141	2,701
Wheat	211	1,795	1,950	3,500	2,931	1,842	603	2,311
Cotton	172	275	1,106	1,042	1,204	924	1,184	441
Rice	2	192	577	423	475	465	671	465
Wool	28	118	98	112	144	117	81	96
Conservation	214	191	189	254	1,531	1,607	1,771	1,898
Miscellaneous [1]	276	5,493	924	1,325	1,972	2,306	3,436	1,386

[1] Includes value of commodities transferred to farmers under the payment-in-kind program (PIK).

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: National Financial Summary, 1990.*

No. 1096. Farm Assets, Debt, and Income, by State: 1989 and 1990

[**Assets and debt,** as of **December 31.** Includes farm operator households. Farm income data are after inventory adjustment]

DIVISION AND STATE	ASSETS (mil. dol.)		DEBT (mil. dol.)		DEBT/ASSET RATIO (percent)		GROSS FARM INCOME (mil. dol.)		NET FARM INCOME (mil. dol.)	
	1989	1990 [1]	1989	1990	1989	1990	1989	1990	1989	1990
United States	**975,985**	**997,935**	**145,966**	**145,067**	**15.0**	**14.6**	**190,293**	**195,123**	**50,074**	**50,832**
New England:										
Maine	2,367	2,296	340	332	14.4	14.4	513	520	148	151
New Hampshire	1,665	1,671	73	76	4.4	4.6	164	167	41	40
Vermont	2,797	2,751	350	371	12.5	13.5	481	485	134	127
Massachusetts	4,826	4,697	265	317	5.5	6.8	490	480	173	149
Rhode Island	605	565	30	37	5.0	6.5	86	79	45	37
Connecticut	4,320	4,022	216	231	5.0	5.7	462	496	164	188
Middle Atlantic:										
New York	13,868	14,597	2,363	2,313	17.0	15.8	3,141	3,267	880	935
New Jersey	8,935	9,370	401	435	4.5	4.6	768	757	277	247
Pennsylvania	21,945	21,551	2,392	2,406	10.9	11.2	4,000	4,050	1,108	1,139
East North Central:										
Ohio	28,746	29,229	3,453	3,367	12.0	11.5	4,546	4,783	1,096	1,173
Indiana	29,604	30,093	4,926	4,754	16.6	15.8	5,444	5,468	1,270	1,054
Illinois	53,354	54,616	7,473	7,364	14.0	13.5	8,957	8,898	2,017	1,705
Michigan	17,449	18,802	2,912	2,774	16.7	14.8	3,755	3,724	1,101	941
Wisconsin	26,783	28,236	5,297	5,102	19.8	18.1	6,675	6,387	2,283	1,863
West North Central:										
Minnesota	38,168	40,935	7,000	6,592	18.3	16.1	8,270	8,398	2,607	2,504
Iowa	54,269	56,987	9,972	9,911	18.4	17.4	11,497	12,045	2,722	2,964
Missouri	32,138	32,952	4,756	4,687	14.8	14.2	4,866	4,705	1,073	874
North Dakota	20,980	22,360	3,570	3,622	17.0	16.2	3,107	3,463	616	802
South Dakota	21,477	23,026	3,281	3,399	15.3	14.8	3,658	4,078	982	1,285
Nebraska	37,297	38,502	6,474	6,594	17.4	17.1	10,142	10,408	1,748	2,128
Kansas	32,813	33,448	5,603	5,808	17.1	17.4	7,797	8,561	707	1,378
South Atlantic:										
Delaware	1,752	1,715	278	333	15.9	19.4	698	668	190	171
Maryland	7,677	6,877	996	988	13.0	14.4	1,476	1,492	412	427
Virginia	19,131	17,105	2,013	2,049	10.5	12.0	2,418	2,435	569	542
West Virginia	3,671	3,787	440	434	12.0	11.5	415	459	52	76
North Carolina	18,435	18,060	2,759	2,659	15.0	14.7	5,366	5,643	1,810	1,968
South Carolina	7,215	7,398	1,011	974	14.0	13.2	1,400	1,277	398	274
Georgia	18,630	18,564	3,065	2,901	16.5	15.6	4,407	4,203	1,297	1,076
Florida	28,395	28,626	3,711	3,764	13.1	13.1	6,435	5,888	2,930	2,273
East South Central:										
Kentucky	21,510	21,453	2,796	2,717	13.0	12.7	3,429	3,492	1,135	1,038
Tennessee	19,765	19,677	2,160	2,155	10.9	11.0	2,497	2,456	553	461
Alabama	13,142	12,420	1,565	1,521	11.9	12.2	3,032	3,102	844	823
Mississippi	14,195	14,351	2,877	2,656	20.3	18.5	2,807	2,815	652	616
West South Central:										
Arkansas	16,720	17,129	3,019	3,116	18.0	18.2	4,809	4,810	1,242	1,204
Louisiana	11,060	10,512	2,072	1,953	18.7	18.6	2,160	2,239	599	632
Oklahoma	24,511	24,690	4,113	3,991	16.8	16.2	4,327	4,429	998	1,110
Texas	89,777	88,900	10,238	10,139	11.4	11.4	13,227	14,489	2,419	3,371
Mountain:										
Montana	19,680	20,314	2,724	2,647	13.8	13.0	2,162	2,098	532	387
Idaho	13,409	13,466	2,408	2,456	18.0	18.2	3,176	3,332	994	1,090
Wyoming	7,239	7,512	770	882	10.6	11.7	803	857	83	120
Colorado	17,598	19,467	3,107	3,011	17.7	17.0	4,571	4,785	767	873
New Mexico	10,934	12,541	1,065	1,031	9.7	8.2	1,584	1,641	352	337
Arizona	10,715	11,529	1,637	1,443	15.3	12.5	2,106	2,039	704	582
Utah	6,023	6,343	737	698	12.2	11.0	832	883	210	240
Nevada	3,344	3,742	287	267	8.6	7.1	325	341	96	87
Pacific:										
Washington	17,620	18,126	2,981	3,057	16.9	16.9	4,360	4,525	1,380	1,401
Oregon	14,930	15,495	2,565	2,563	17.2	16.5	2,804	2,898	840	852
California	80,428	83,217	13,068	13,779	16.2	16.6	19,209	19,962	6,714	7,030
Alaska	552	593	33	27	6.0	4.8	34	32	9	8
Hawaii	3,523	3,618	322	367	9.2	10.1	605	614	106	84

[1] Reflects revisions subsequent to publication of report.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Financial Summary, 1990*; and unpublished data.

No. 1097. Farm Income—Farm Marketings, 1989 and 1990, Government Payments, 1990, and Principal Commodities, 1990, by State

[In millions of dollars. Cattle include calves; sheep include lambs; and greenhouse includes nursery]

DIVISION AND STATE	1989			1990				
	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.	**160,893**	**76,761**	**84,131**	**169,987**	**80,364**	**89,623**	**9,298**	Cattle, dairy products, corn, hogs
N.E.	**1,951**	**978**	**973**	**1,976**	**971**	**1,005**	**20**	(X)
ME	444	228	216	460	240	220	7	42-Potatoes, dairy products, eggs, blueberries
NH	139	73	65	134	71	63	2	48-Dairy products, greenhouse, apples, cattle
VT	429	50	379	447	49	398	6	43-Dairy products, cattle, hay, greenhouse
MA	434	321	113	418	303	116	3	45-Greenhouse, dairy products, cranberries, eggs
RI	78	65	13	71	58	13	(Z)	49-Greenhouse, dairy products, eggs, potatoes
CT	426	240	186	446	250	196	2	44-Greenhouse, eggs, dairy products, tobacco
M.A	**7,118**	**2,373**	**4,745**	**7,421**	**2,528**	**4,893**	**116**	(X)
NY	2,854	917	1,937	3,006	1,023	1,983	59	23-Dairy products, greenhouse, cattle, apples
NJ	662	464	197	647	452	196	16	39-Greenhouse, dairy products, eggs, soybeans
PA	3,602	992	2,611	3,767	1,053	2,714	41	18-Dairy products, cattle, greenhouse, mushrooms
E.N.C	**23,369**	**11,933**	**11,437**	**25,930**	**13,577**	**12,353**	**1,298**	(X)
OH	3,787	2,088	1,698	4,172	2,335	1,836	197	14-Corn, soybeans, dairy products, hogs
IN	4,281	2,456	1,826	4,931	2,871	2,060	244	10-Corn, soybeans, hogs, cattle
IL	6,979	4,727	2,251	7,938	5,461	2,477	507	5-Corn, soybeans, hogs, cattle
MI	2,923	1,611	1,311	3,183	1,785	1,398	169	21-Dairy products, corn, cattle, greenhouse
WI	5,400	1,050	4,350	5,706	1,125	4,581	181	9-Dairy products, cattle, corn, hogs
W.N.C	**39,890**	**15,972**	**23,918**	**42,995**	**17,025**	**25,970**	**3,902**	(X)
MN	6,513	2,820	3,693	7,011	3,253	3,758	512	6-Dairy products, corn, soybeans, hogs
IA	9,049	3,755	5,293	10,319	4,437	5,882	754	3-Hogs, corn, cattle, soybeans
MO	3,920	1,751	2,169	3,939	1,668	2,271	299	15-Cattle, soybeans, hogs, dairy products
ND	2,152	1,483	669	2,537	1,724	813	545	26-Wheat, cattle, barley, sunflower
SD	2,982	951	2,031	3,349	1,036	2,313	333	20-Cattle, hogs, wheat, soybeans
NE	8,726	3,080	5,646	8,845	2,808	6,037	625	4-Cattle, corn, hogs, soybeans
KS	6,548	2,132	4,416	6,995	2,099	4,896	835	7-Cattle, wheat, corn, hogs
S.A.	**20,329**	**10,811**	**9,518**	**20,039**	**10,346**	**9,693**	**363**	(X)
DE	662	159	503	644	184	460	3	40-Broilers, soybeans, corn, greenhouse
MD	1,336	477	859	1,345	517	828	17	35-Broilers, dairy products, greenhouse, soybeans
VA	2,039	694	1,345	2,120	741	1,379	32	29-Cattle, dairy products, broilers, tobacco
WV	310	60	250	338	70	269	6	46-Cattle, broilers, dairy productss, turkeys
NC	4,593	2,082	2,510	4,867	2,214	2,653	73	11-Tobacco, broilers, hogs, turkeys
SC	1,235	680	554	1,176	599	577	63	36-Tobacco, cattle, broilers, soybeans
GA	3,908	1,626	2,281	3,842	1,574	2,268	131	16-Broilers, peanuts, eggs, cattle
FL	6,246	5,031	1,215	5,708	4,448	1,260	37	8-Oranges, greenhouse, sugar, dairy products
E.S.C	**9,817**	**3,807**	**6,010**	**10,307**	**4,094**	**6,213**	**441**	(X)
KY	2,924	1,266	1,658	3,098	1,400	1,698	82	22-Tobacco, cattle, horses, dairy products
TN	1,946	863	1,082	2,039	928	1,111	91	30-Cattle, dairy products, soybeans, tobacco
AL	2,671	696	1,975	2,737	655	2,083	82	25-Broilers, cattle, greenhouse, eggs
MS	2,276	981	1,295	2,433	1,111	1,322	186	27-Cotton, broilers, cattle, soybeans
W.S.C	**20,303**	**7,790**	**12,513**	**21,715**	**8,297**	**13,419**	**1,761**	(X)
AR	4,157	1,496	2,661	4,259	1,553	2,706	313	12-Broilers, cattle, soybeans, rice
LA	1,708	1,094	614	1,921	1,284	637	155	31-Cotton, soybeans, cattle, rice
OK	3,515	1,137	2,377	3,554	1,191	2,363	319	19-Cattle, wheat, greenhouse, broilers
TX	10,923	4,063	6,861	11,981	4,268	7,712	975	2-Cattle, cotton, dairy products, greenhouse
Mt	**13,479**	**5,726**	**7,754**	**14,003**	**5,687**	**8,316**	**848**	(X)
MT	1,554	625	929	1,606	742	864	300	33-Cattle, wheat, barley, hay
ID	2,745	1,662	1,084	2,935	1,781	1,154	133	24-Cattle, potatoes, dairy products, wheat
WY	827	163	664	767	157	610	31	37-Cattle, sugar beets, hay, sheep
CO	3,969	1,321	2,649	4,213	1,184	3,029	237	13-Cattle, corn, wheat, dairy products
NM	1,459	485	974	1,529	483	1,046	64	34-Cattle, dairy products, hay, chili peppers
AZ	1,926	1,182	744	1,865	1,046	819	43	32-Cattle, cotton, dairy products, hay
UT	755	188	567	755	179	576	35	38-Cattle, dairy products, hay, turkeys
NV	244	102	142	333	115	218	5	47-Cattle, hay, dairy products, potatoes
Pac	**24,638**	**17,373**	**7,264**	**25,601**	**17,839**	**7,762**	**549**	(X)
WA	3,689	2,457	1,233	3,816	2,420	1,396	205	17-Dairy products, cattle, apples, wheat
OR	2,285	1,546	738	2,312	1,557	755	89	28-Cattle, greenhouse, dairy products, wheat
CA	18,050	12,857	5,193	18,859	13,344	5,515	252	1-Dairy products, greenhouse, cattle, grapes
AK	29	20	9	27	19	8	1	50-Greenhouse, dairy products, potatoes, hay
HI	585	493	92	588	499	88	1	41-Sugar, pineapples, greenhouse, nuts

X Not applicable. Z Less than $500 thousand.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Financial Summary, 1990.*

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No. 1098. Commodity Credit Corporation—Summary: 1980 to 1991

[In millions of dollars. As of end of fiscal year or for fiscal year ending in year shown; see text, section 9. The Commodity Credit Corporation is a wholly government-owned corporation. Its purpose is stabilizing, supporting, and protecting farm income and prices; assisting in maintenance of balanced adequate supplies of agricultural commodities; and facilitating orderly distribution of agricultural commodities. See also *Historical Statistics, Colonial Times to 1970,* series K 330-343]

ITEM	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
LOAN ACTIVITY [1]											
Loans made	4,228	11,454	13,710	5,131	10,187	17,391	16,566	13,302	7,068	5,943	6,630
Loans repaid	4,148	4,629	9,373	10,581	4,458	5,675	13,894	17,979	9,394	6,894	6,827
Loans cancelled by acquisition of collateral	115	363	860	1,032	1,638	5,583	6,144	2,110	1,055	871	993
Loans outstanding [2]	**5,119**	**11,633**	**15,084**	**8,571**	**12,631**	**18,668**	**15,174**	**8,354**	**4,922**	**3,071**	**1,858**
Wheat	837	3,321	4,162	3,414	4,591	3,753	2,836	1,608	865	796	500
Corn	1,617	4,210	5,274	1,236	2,766	7,878	7,424	3,803	1,921	1,031	149
Cotton	35	714	960	67	376	1,076	450	569	594	40	19
Tobacco	815	867	1,738	2,084	2,539	2,336	2,071	1,616	1,236	924	787
COMMODITY INVENTORY OPERATIONS											
Acquisitions, value [2]	**2,759**	**2,968**	**8,634**	**8,741**	**4,294**	**9,912**	**17,617**	**12,167**	**3,193**	**2,130**	**2,726**
Purchases	2,643	2,593	7,644	7,676	2,616	4,195	11,212	9,901	2,201	1,225	1,690
Collateral acquired from loans	116	375	990	1,065	1,678	5,717	6,405	2,266	992	904	1,036
Wheat	601	27	1,600	1,983	919	2,196	1,802	1,051	294	307	436
Corn	416	179	3,132	2,591	192	2,287	10,218	8,484	1,418	852	996
Cotton	1	(Z)	175	1,056	53	559	1,273	138	73	32	1
Dairy products	1,262	2,282	2,716	1,983	1,820	2,036	956	1,125	611	399	757
Commodities owned, value [2]	**2,737**	**5,103**	**10,227**	**7,358**	**6,921**	**11,050**	**11,735**	**5,588**	**3,771**	**2,149**	**2,796**
Wheat	705	679	1,533	1,510	1,951	3,491	3,272	1,208	697	505	639
Corn	596	709	3,392	1,045	757	1,757	4,172	2,197	1,253	625	962
Cotton	1	2	174	74	46	226	24	2	34	7	(Z)
Sorghum	93	91	520	290	359	725	1,244	1,268	936	447	162
Dairy products	1,266	3,442	4,219	4,102	3,014	2,830	1,439	734	681	522	1,010

Z Less than $500,000. [1] Covers commodity loans and storage facility and equipment loans. The latter were not available after July 1982. [2] Includes amounts for commodities and storage facilities, not shown separately.

No. 1099. Commodity Credit Corporation—Net Outlays, by Commodity and Function: 1980 to 1991

[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 AND FUNCTION	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Total	**2,752**	**11,652**	**18,851**	**7,315**	**17,683**	**25,841**	**22,408**	**12,461**	**10,523**	**6,471**	**10,110**
Feed grains	1,286	5,397	6,815	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,722
Wheat	879	2,238	3,419	2,536	4,691	3,440	2,836	678	53	806	2,958
Cotton, upland	64	1,190	1,363	244	1,553	2,142	1,786	666	1,461	-79	382
Dairy	1,011	2,182	2,528	1,502	2,085	2,337	1,166	1,295	679	505	839
Rice	-76	164	664	333	990	947	906	128	631	667	867
Wool	35	54	94	132	109	123	152	[1]5	93	104	172
Honey	9	27	48	90	81	89	73	100	42	47	19
Peanuts	28	12	-6	1	12	32	8	7	13	1	48
Sugar	-405	-5	49	10	184	214	-65	-246	-25	15	-20
Tobacco	-88	103	880	346	455	253	-346	-453	-367	-307	-143
Soybeans	116	169	288	-585	711	1,597	-476	-1,676	-86	5	40
Operating expense [2]	157	294	328	362	346	457	535	614	620	618	625
Interest expenditure	518	-13	3,525	1,064	1,435	1,411	1,219	395	98	632	745
Export programs [3]	-669	65	398	743	134	102	276	200	-102	-34	733
1988/89 disaster/livestock assistance	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	3,919	[4]161	121
Other	-113	-225	-1,542	1,295	-314	486	371	1,695	110	609	2
Price support loans [5]	-66	7,015	8,438	-27	6,272	13,628	12,199	4,579	-926	-399	418
Direct payments [6]	418	1,491	3,600	2,117	7,827	6,746	5,862	4,245	6,011	4,370	6,341
Deficiency payments	79	1,184	2,780	612	6,302	6,166	4,833	3,971	5,798	4,178	6,224
Diversion payments	56	(Z)	705	1,504	1,525	64	382	8	-1	-	-
1988/89 crop disaster	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	3,386	[4]5	6
Emergency livestock/forage assistance	23	16	-	-	-	-	-	31	533	156	115
Purchases [7]	1,681	2,031	2,540	1,470	1,331	1,670	-479	-1,131	116	-48	646
Producer storage payments	254	679	964	268	329	485	832	658	174	185	1
Processing, storage and transportation	259	355	665	639	657	1,013	1,659	1,113	659	317	394
Operating expense [2]	157	294	328	362	346	457	535	614	620	618	625
Interest expenditure	518	-13	3,525	1,064	1,435	1,411	1,219	425	98	632	745
Export programs [3]	-669	65	398	743	134	102	276	200	-102	-34	733
Other	177	-281	-1,607	679	-648	329	305	1,727	-46	669	86

- Represents zero. X Not applicable. Z Less than $500,000. [1] Fiscal year 1988 wool and mohair program outlays were $130,635,000 but include a one-time advance appropriation of $126,108,000, which was recorded as a wool program receipt by U.S. Department of Treasury. [2] Excludes CCC transfers to the general sales manager. [3] Covers the direct export credit sales program, the export guarantee program, and transfers to the general sales manager. [4] 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. [5] Price support loans made less loans repaid. [6] Includes disaster payments; beginning 1986 includes dairy termination program. [7] Purchases less sales proceeds.

Source of tables 1098 and 1099: U.S. Agricultural Stabilization and Conservation Service, *Commodity Credit Corporation Report of Financial Condition and Operations*, annual, and *Agricultural Outlook*, monthly.

No. 1100. Indexes of Prices Received and Paid by Farmers: 1980 to 1991

[**1977 = 100, except as noted.** See also *Historical Statistics, Colonial Times to 1970*, series K 344-353]

ITEM	1980	1985	1990	1991	ITEM	1980	1985	1990	1991
Prices received, all products	**134**	**128**	**149**	**146**	**Prices paid, total [3]**	**138**	**162**	**184**	**189**
Crops [1]	125	120	127	130	Production [1]	138	151	171	173
Food grains	165	133	123	115	Feed	123	116	128	123
Feed grains and hay	132	122	123	118	Feeder livestock	177	154	213	214
Cotton	114	93	107	108	Seed	118	152	165	163
Tobacco	125	153	152	159	Fertilizer	134	135	131	134
Oil-bearing crops	102	84	93	90	Agricultural chemicals	102	128	139	151
Fruits	124	180	188	270	Fuels and energy	188	201	204	203
Commercial vegetables [2]	113	129	142	135	Farm and motor supplies	134	146	154	157
Livestock and products	144	136	170	162	Interest payable per acre	174	228	173	172
Meat animals	156	142	193	186	Taxes payable per acre	115	133	156	160
Dairy products	135	131	141	126	Wage rates [4]	127	154	191	201
Poultry and eggs	112	119	131	125	**Parity ratio (1910-14 = 100) [5]**	**65**	**52**	**54**	**51**

[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 738. [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. 1101. Civilian Consumer Expenditures for Farm Foods—Farm Value and Marketing Bill: 1970 to 1990

[**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	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Consumer expenditures, total	**110.6**	**264.4**	**298.9**	**315.0**	**332.0**	**345.4**	**359.6**	**375.5**	**398.8**	**419.4**	**440.8**
Farm value, total	35.5	81.7	81.4	85.3	89.8	86.4	88.8	90.4	96.8	103.8	106.6
Marketing bill, total [1]	75.1	182.7	217.5	229.7	242.2	259.0	270.8	285.1	301.9	315.6	334.2
Percent of total consumer expenditures	67.9	69.1	72.8	72.9	73.0	75.0	75.3	75.9	75.7	75.3	75.8
At-home expenditures [2]	78.2	180.1	196.7	204.6	213.1	220.8	226.0	230.2	242.1	255.5	267.9
Farm value	29.1	65.9	64.1	66.5	69.5	66.6	67.6	67.5	72.5	77.9	79.8
Marketing bill [1]	49.1	114.2	132.6	138.1	143.6	154.2	158.4	162.7	169.6	177.6	188.1
Percent of at-home expenditures	62.8	63.4	67.4	67.5	67.4	69.8	70.1	70.7	70.1	69.5	70.2
Away-from-home expenditures	32.4	84.3	102.2	110.4	118.9	124.6	133.6	145.3	156.7	163.9	172.9
Farm value	6.4	15.8	17.3	18.8	20.3	19.8	21.2	22.9	24.3	25.9	26.8
Marketing bill [1]	26.0	68.5	84.9	91.6	98.6	104.8	112.4	122.4	132.4	138.0	146.1
Percent of away-from-home expenditures	80.2	81.3	83.1	83.0	82.9	84.1	84.1	84.2	84.5	84.2	84.5
Marketing bill cost components:											
Labor cost [3]	32.2	81.5	96.6	102.4	109.3	115.6	122.9	130.0	137.9	145.1	153.8
Packaging materials	8.2	21.0	23.7	24.7	26.2	26.9	27.7	29.9	32.6	35.2	36.2
Rail and truck transport [4]	5.2	13.0	14.7	15.4	15.9	16.5	16.8	17.2	17.8	18.6	19.6
Corporate profits before taxes	3.6	9.9	9.3	9.6	9.6	10.4	10.3	11.1	11.6	11.8	14.1
Fuels and electricity	2.2	9.0	11.0	11.7	12.5	13.1	13.2	13.6	14.1	15.3	16.3
Other [5]	23.7	48.3	62.2	65.9	68.7	76.5	79.9	83.3	87.9	89.6	94.2
Processing	29.7	66.3	75.6	77.8	80.8	88.4	91.0	93.9	99.7	103.8	110.3
Wholesaling	8.7	20.4	25.9	27.1	28.6	29.8	30.5	31.8	33.8	35.2	37.3
Transportation	5.2	13.0	14.9	15.4	16.0	16.6	16.8	17.6	17.7	18.6	19.6
Retailing and food service	31.5	83.0	101.1	109.4	116.8	124.2	132.5	141.8	150.8	158.0	167.0
SELECTED FOOD COMMODITY GROUPS											
Meat products:											
Total expenditures	33.7	83.3	91.9	97.9	101.7	103.2	106.3	110.0	117.6	121.5	124.7
Farm value	14.4	30.8	31.5	31.4	32.4	30.5	30.9	32.7	33.5	34.0	37.0
Percent of total	42.7	37.0	34.3	32.1	31.9	29.6	29.1	29.7	28.5	28.0	29.7
Marketing bill [1]	19.3	52.5	60.4	66.5	69.3	72.7	75.4	77.3	84.1	87.5	87.7
Poultry and eggs:											
Total expenditures	9.1	18.3	20.3	21.7	24.2	26.0	27.6	29.4	31.3	33.9	36.4
Farm value	4.0	8.4	8.5	9.3	11.0	10.2	11.5	10.3	12.1	14.2	13.9
Percent of total	44.0	45.9	41.9	42.9	45.5	39.2	41.7	35.0	38.7	41.9	38.2
Marketing bill [1]	5.1	9.9	11.8	12.4	13.2	15.8	16.1	19.1	19.2	19.7	22.5
Dairy products:											
Total expenditures	16.7	37.8	42.0	45.0	47.4	49.4	51.4	54.0	55.8	58.1	59.9
Farm value	6.9	16.0	16.7	18.0	18.1	17.7	17.8	18.2	17.9	19.6	20.6
Percent of total	41.3	42.3	39.8	40.0	38.2	35.8	34.6	33.7	32.1	33.7	34.4
Marketing bill [1]	9.8	21.8	25.3	27.0	29.3	31.7	33.6	35.8	37.9	38.5	39.3
Fruits and vegetables:											
Total expenditures	22.6	55.5	66.7	70.0	74.7	78.5	81.6	84.7	89.3	96.0	101.7
Farm value	5.1	11.7	11.5	12.9	13.5	13.3	14.6	14.3	16.2	17.8	16.6
Percent of total	22.6	21.1	17.2	18.4	18.1	16.9	17.9	16.9	18.1	18.5	16.3
Marketing bill [1]	17.5	43.8	55.2	57.1	61.2	65.2	67.0	70.4	73.1	78.2	85.1
Bakery, grain mill products:											
Total expenditures	13.6	35.2	39.6	40.6	43.3	45.5	48.3	49.9	54.7	57.7	63.6
Farm value	2.0	5.1	4.8	4.9	5.1	4.7	4.0	3.8	4.9	5.9	5.1
Percent of total	14.7	14.5	12.1	12.1	11.8	10.3	8.3	7.6	9.0	10.2	8.0
Marketing bill [1]	11.6	30.1	34.8	35.7	38.2	40.8	44.3	46.1	49.8	51.8	58.5

[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, 1990*, AER No. 651, June 1991; *National Food Review*, periodic; and *Agricultural Statistics*, annual.

No. 1102. Farmer Marketing and Farm Supply Cooperatives—Summary: 1970 to 1990

[**1970** for **fiscal years** of cooperatives ending between **July 1, 1969** and **June 30, 1970**. Beginning **1980**, reports of cooperatives are for the **calendar year**. Comprises independent local associations, federations, large-scale centralized associations, and sales agencies. Memberships and businesses are estimated. See also *Historical Statistics, Colonial Times to 1970*, series K 195-203]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Cooperatives listed	7,790	6,293	6,125	5,989	5,782	5,625	5,369	5,109	4,937	4,799	4,663
Marketing [1]	5,015	3,924	3,826	3,781	3,646	3,589	3,398	3,168	3,101	2,996	2,946
Farm supply	2,775	2,369	2,299	2,208	2,136	2,036	1,971	1,941	1,836	1,803	1,717
Memberships [2] (1,000)	6,355	5,379	5,136	4,955	4,842	4,781	4,600	4,440	4,195	4,134	4,119
Marketing [1] (1,000)	3,133	2,574	2,469	2,402	2,445	2,383	2,290	2,158	2,053	2,099	2,114
Farm supply (1,000)	3,222	2,804	2,666	2,553	2,397	2,398	2,310	2,282	2,142	2,035	2,006
Business [3] (mil. dol.)	19,080	66,254	69,150	66,755	73,047	65,601	58,395	60,318	66,430	72,129	77,266
Marketing [1] (mil. dol.)	15,207	50,120	52,788	50,812	56,078	48,961	43,300	46,047	51,006	55,222	60,178
Farm supply (mil. dol.)	3,873	16,134	16,362	15,943	16,969	16,641	15,095	14,271	15,424	16,907	17,088

[1] Includes cooperatives whose major activity is providing services related to marketing and purchasing activities. [2] Excludes nonvoting patrons. [3] Value of commodities sold or purchased for patrons. Business dollar volume for marketing includes service receipts for charges related to marketing and purchasing. Represents net volume after eliminating intercooperative business.

Source: U.S. Dept. of Agriculture, Agricultural Cooperative Service, *Farmer Cooperative Statistics*, annual.

No. 1103. Selected Indexes of Farm Inputs: 1970 to 1990

[**1977 = 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	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	**96**	**103**	**98**	**96**	**95**	**91**	**89**	**89**	**87**	**87**	**88**
Farm labor	112	96	93	97	92	85	80	78	75	76	(NA)
Farm real estate [1]	105	103	102	101	99	97	96	95	94	93	93
Mechanical power and machinery	85	101	89	86	85	80	77	74	74	73	71
Agricultural chemicals [2]	75	123	118	102	120	115	109	111	112	119	122
Feed, seed, and livestock purchases [3]	96	114	107	103	103	102	109	116	111	113	113
Taxes and interest	102	100	95	99	93	96	97	100	97	94	(NA)
Miscellaneous	89	96	116	101	110	116	110	122	119	123	(NA)

NA Not available. [1] Includes service buildings, improvements. [2] Includes fertilizer, lime, and pesticides. [3] Includes nonfarm portion.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Production and Efficiency Statistics*, annual. Also in U.S. Council of Economic Advisers, *Economic Report of the President*, annual.

No. 1104. Farm Machinery and Equipment: 1970 to 1990

[See also *Historical Statistics, Colonial Times to 1970*, series K 184-191]

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Value of farm implements and machinery [1]	Bil. dol.	34.4	86.9	92.5	92.6	92.1	91.1	92.4	86.1	84.5	86.7	90.2	91.7
Farmers' expenditures:													
Motor vehicles [2]	Mil. dol.	2,030	5,813	5,652	4,436	4,724	4,583	3,699	3,227	4,275	4,812	5,266	5,383
Tractors	Mil. dol.	1,123	3,683	3,740	2,597	2,606	2,539	1,937	1,513	2,104	2,477	2,763	2,865
Machinery, equipment	Mil. dol.	2,888	6,956	6,481	5,068	4,735	4,682	3,232	3,094	4,297	4,150	4,916	5,322
Repair and maintenance	Mil. dol.	1,910	5,205	5,278	4,635	4,793	4,908	4,834	4,825	4,972	5,163	5,706	5,363
Tractors, machinery and equipment	Mil. dol.	1,126	3,746	3,771	3,557	3,616	3,592	3,442	3,428	3,508	3,559	3,925	3,735
Autos and trucks	Mil. dol.	[3]784	1,459	1,507	1,079	1,178	1,316	1,392	1,397	1,464	1,604	1,781	1,628
Retail sales: [4]													
Tractors, total [5]	1,000	135.5	119.3	103.8	77.2	71.3	66.7	58.5	47.1	48.3	52.0	59.7	66.3
Two-wheel drive	1,000	135.5	108.4	94.1	70.4	66.2	62.7	55.5	45.1	46.6	49.3	55.5	61.2
Four-wheel drive	1,000	(NA)	10.9	9.7	6.8	5.1	4.0	3.0	2.0	1.7	2.7	4.2	5.1
Combines	1,000	26.7	25.7	26.8	16.2	12.8	11.4	8.4	7.7	7.2	6.0	9.1	10.4
Field forage harvesters	1,000	15.0	9.5	7.6	5.1	4.1	3.5	2.5	2.2	2.3	2.4	2.8	3.3

NA Not available. [1] Farm inventory valuations as of December 31. Includes family automobiles. [2] For farm business use. [3] Includes insurance, registration fees, and licensing fees. [4] Source: Equipment Manufacturers Institute, Chicago, IL, unpublished data. [5] Beginning 1980, 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. 1105. Hired Farmworkers—Workers and Weekly Earnings: 1990

[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. Preliminary. 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]
All workers	**886**	**$200**	White [2]	540	201
			Black and other races [2]	85	175
15 to 19 years old	144	100	Hispanic	260	213
20 to 24 years old	135	206			
25 to 34 years old	251	240	Years of school completed:		
35 to 44 years old	170	250	Less than 5 years	98	204
45 to 54 years old	90	200	5 to 8 years	191	200
55 years old and over	95	200	9 to 11 years	202	168
			12 years	278	240
Male	735	216	13 or more years	116	260
Female	151	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.
Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

No. 1106. Farm Output Indexes: 1970 to 1991

[**1977 = 100.** See also *Historical Statistics, Colonial Times to 1970*, series K 414-429]

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990, prel.	1991, prel.
Farm output [1]	**84**	**104**	**116**	**96**	**112**	**118**	**111**	**110**	**102**	**114**	**119**	**120**
Per unit of total input	**87**	**101**	**119**	**100**	**118**	**129**	**124**	**124**	**116**	**130**	**135**	**(NA)**
Gross production:												
Livestock and products [2]	99	108	107	109	107	110	110	113	116	116	117	119
Meat animals	102	107	101	104	101	102	100	102	105	104	104	104
Dairy products	95	105	110	114	110	117	116	116	118	117	120	121
Poultry and eggs	93	115	119	120	123	128	133	144	148	153	162	168
Crops [3]	77	101	117	88	111	118	109	108	92	107	114	111
Feed grains	71	97	122	67	116	134	123	106	73	108	112	106
Hay and forage	92	98	109	100	107	106	106	102	89	101	101	103
Food grains	69	121	138	117	129	121	107	107	98	107	136	104
Vegetables	96	104	116	107	117	122	117	126	115	132	(NA)	(NA)
Fruits and nuts	81	119	113	110	114	119	111	137	137	129	(NA)	(NA)
Sugar crops	95	97	96	93	95	97	106	111	105	105	107	112
Cotton	72	79	85	55	91	94	69	103	107	86	109	122
Tobacco	100	93	104	75	90	81	63	62	72	71	84	87
Oil crops	66	99	121	91	106	117	110	108	89	106	107	114

NA Not available. [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, *Economic Indicators of the Farm Sector: Production and Efficiency Statistics*, annual. Also in *Agricultural Outlook*, monthly.

No. 1107. Selected Farm Products—United States and World Production and Exports: 1989 to 1991

[**In metric tons, except as indicated.** Metric ton = 1.102 short tons or .984 long tons]

ITEM	AMOUNT							UNITED STATES AS PERCENT OF WORLD		
	Unit	United States			World					
		1989	1990	1991	1989	1990	1991	1989	1990	1991
PRODUCTION [1]										
Wheat	Million	55	74	54	538	593	545	10.3	12.6	9.9
Corn for grain	Million	191	202	190	462	479	483	41.3	42.1	39.4
Soybeans	Million	52	52	53	107	103	105	48.8	50.9	50.8
Rice, rough	Million	7.0	7.0	7.2	509	520	509	1.4	1.4	1.4
Tobacco, unmanufactured [2]	1,000	620	737	746	7,110	7,061	6,983	8.7	10.4	10.7
Cotton [3]	Million bales [4]	15.4	12.2	15.5	84.6	80.0	87.1	18.2	15.2	17.8
EXPORTS [5]										
Wheat [6]	Million	33.6	29.1	33.3	107.5	110.1	117.0	31.2	26.4	28.5
Corn	Million	60.2	43.9	40.0	78.7	63.1	62.3	76.5	69.5	64.3
Soybeans	Million	17.0	15.2	17.7	28.2	24.8	26.7	60.1	61.2	66.3
Rice, milled basis	Million	2.5	2.3	2.2	12.0	12.7	12.9	21.2	18.3	16.7
Tobacco, unmanufactured [7]	1,000	220	223	225	1,409	1,493	1,640	15.6	15.0	13.7
Cotton [3]	Million	1.3	1.7	1.7	5.6	5.2	5.1	23.8	32.1	33.5

[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. 1108. Agricultural Exports and Imports—Volume, by Principal Commodities: 1980 to 1990

[In thousands of metric tons]

EXPORTS	1980	1985	1989	1990	IMPORTS	1980	1985	1989	1990
Animal products [1]	2,575	2,517	2,919	2,730	Fruits, nuts, vegetables	2,325	3,326	4,335	4,315
Wheat and products [2]	37,130	26,123	37,525	28,240	Bananas	2,352	2,969	2,920	3,094
Feed grains and products	72,970	51,735	66,975	61,449	Green coffee	1,089	1,122	1,163	1,174
Rice	3,075	1,961	3,047	2,525	Cocoa and products	252	565	569	716
Feeds and fodders	6,888	6,710	11,014	12,287	Meat and products [5]	931	1,139	1,110	1,165
Oilseeds and products [3]	31,042	23,673	21,733	21,858	Vegetable oils	704	961	1,054	1,183
Fruits, nuts, vegetables [4]	4,147	3,255	4,283	5,554	Sugar	3,744	2,178	1,569	1,856
Cotton	1,880	1,135	1,581	1,733					
Tobacco	272	249	220	223					

[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*, annual, and *Foreign Agricultural Trade of the United States*, Jan./Feb. 1991.

No. 1109. Agricultural Exports and Imports—Value: 1970 to 1990

[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
1970 to 1974, average	5.5	12.8	21	7.3	12	1977	10.2	23.6	20	13.4	9
1975 to 1979, average	13.5	26.5	20	13.0	11	1978	14.6	29.4	21	14.8	9
1980 to 1984, average	21.9	39.0	18	17.1	6	1979	18.0	34.7	19	16.7	8
1985 to 1989, average	11.3	32.2	12	20.9	5	1980	23.9	41.2	18	17.4	7
1970	1.5	7.3	17	5.8	15	1981	26.6	43.3	18	16.8	6
1972	2.9	9.4	19	6.5	12	1982	21.2	36.6	17	15.4	6
1973	9.3	17.7	25	8.4	12	1983	19.5	36.1	18	16.6	7
1974	11.7	21.9	23	10.2	10	1984	18.5	37.8	17	19.3	6
1975	12.6	21.9	21	9.3	10	1985	9.1	29.0	13	20.0	6
1976	12.0	23.0	20	11.0	9	1986	4.8	26.2	13	21.5	6
						1987	8.3	28.7	12	20.4	5
						1988	16.1	37.1	12	21.0	5
						1989	18.2	39.9	11	21.7	5
						1990	16.6	39.3	10	22.8	5

Source: U.S. Dept. of Agriculture, Economic Research Service, *U.S. Foreign Agricultural Trade Statistical Report*, annual, and *Foreign Agricultural Trade of the United States*, Jan.-Feb. issues. Also in *Agricultural Statistics*, annual.

No. 1110. Agricultural Imports—Value, by Selected Commodity, 1970 to 1990, and by Leading Countries of Origin, 1990

[In millions of dollars]

COMMODITY	1970	1980	1985	1987	1988	1989	1990	Leading countries of origin, 1990
Total	**5,770**	**17,366**	**19,968**	**20,402**	**20,951**	**21,749**	**22,771**	**Canada, Mexico, Brazil**
Competitive products	3,609	10,374	13,067	13,781	14,688	15,624	17,225	Canada, Mexico, Australia
Beef and veal	680	1,780	1,276	1,562	1,679	1,662	1,871	Australia, New Zealand, Canada
Pork	272	486	861	1,096	933	754	940	Canada, Denmark, Poland
Dairy products	126	488	765	831	875	857	911	New Zealand, Ireland, Italy
Fruits and preparations	146	564	1,738	1,718	1,866	1,820	2,218	Brazil, Chile, Mexico
Vegetables and preparations	296	864	1,385	1,535	1,615	2,049	2,268	Mexico, Canada, Spain
Wine	145	692	998	966	939	930	917	France, Italy, Spain
Malt beverages	32	367	633	882	918	855	923	Netherlands, Canada, Mexico
Grains and feeds	99	371	623	748	909	1,217	1,183	Canada, Thailand, Italy
Sugar and related products	798	2,205	1,190	630	690	956	1,172	Brazil, Dominican Republic, Canada
Noncompetitive products	2,161	6,992	6,902	6,621	6,263	6,125	5,546	Indonesia, Brazil, Ecuador
Coffee and products	1,213	4,186	3,322	2,908	2,470	2,432	1,915	Brazil, Mexico, Colombia
Rubber, crude natural	236	817	654	760	1,023	958	707	Indonesia, Malaysia, Thailand
Cocoa and products	279	920	1,351	1,194	1,003	977	1,072	Brazil, Ivory Coast, Canada
Bananas and plantains	194	430	763	819	832	871	938	Ecuador, Costa Rica, Honduras

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, annual.

No. 1111. Spices—Imports, by Type of Spice: 1970 to 1990

[**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]

SPICE	1970-74	1975-79	1980-84	1985-89	1990	SPICE	1970-74	1975-79	1980-84	1985-89	1990
Total [1]	254.4	298.1	351.0	405.6	590.0	Mace	0.6	0.5	0.6	0.6	0.7
						Mustard seed	89.7	76.1	79.5	106.9	160.3
Anise seed	0.6	1.0	1.4	2.2	2.2	Nutmeg	4.2	4.4	4.8	4.2	4.0
Capsicum	13.7	10.2	13.9	23.4	46.0	Paprika	15.3	12.3	10.5	12.6	10.0
Caraway seed	5.9	6.5	7.5	7.6	8.0	Pepper, black and white	54.2	59.0	72.5	77.5	92.6
Cassia and cinnamon	13.9	18.6	23.4	28.7	26.6	Pimento	1.4	1.5	1.7	1.9	2.4
Celery seed	4.0	4.2	4.7	5.4	5.2	Poppy seed	5.7	6.1	7.2	8.8	7.9
Cloves	2.7	2.5	2.1	2.3	4.2	Sage	3.0	2.9	3.7	4.3	3.8
Coriander seed	3.4	6.8	10.4	7.6	5.2	Sesame seed	49.1	62.5	80.4	81.1	100.1
Cumin seed	6.2	8.1	8.8	9.0	11.1	Turmeric	3.3	3.2	3.7	4.3	3.8
Fennel seed	1.3	1.9	3.4	4.7	6.8	Vanilla beans	2.2	2.3	1.6	2.4	2.4
Ginger root	5.9	7.8	9.5	11.2	18.0						

[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*, annual, and U.S. Bureau of the Census, *U.S. Imports for Consumption, Annual 1990*, series FT247.

No. 1112. Agricultural Exports—Value, by Principal Commodities and Selected Countries of Destination: 1970 to 1990

[See headnote, table 1109. Data by country of destination for 1970 and 1980 are not adjusted for transshipments]

COMMODITY AND COUNTRY	VALUE (mil. dol.)								PERCENT		
	1970	1980	1985	1986	1987	1988	1989	1990	1970	1980	1990
Total agricultural exports [1]	**7,255**	**41,233**	**29,041**	**26,222**	**28,709**	**37,126**	**39,909**	**39,327**	**100.0**	**100.0**	**100.0**
Grains and feeds [2]	2,720	19,117	11,882	8,656	9,423	13,979	17,187	14,410	37.5	46.4	36.6
Feed grains and products	1,093	9,831	6,112	3,176	3,917	5,970	7,870	7,157	15.1	23.8	18.2
Corn	818	8,492	5,206	2,605	3,209	5,040	6,580	6,033	11.3	20.6	15.3
Wheat and products	1,136	6,660	3,898	3,290	3,280	5,117	6,136	4,034	15.7	16.2	10.3
Rice	313	1,289	665	625	576	806	971	802	4.3	3.1	2.0
Oilseeds and products [2]	1,931	9,393	5,794	6,467	6,446	7,753	6,313	5,684	26.6	22.8	14.5
Soybeans	1,228	5,880	3,732	4,326	4,378	4,920	3,942	3,551	16.9	14.3	9.0
Soybean oil cake and meal	344	1,665	870	1,229	1,211	1,580	1,181	987	4.7	4.0	2.5
Vegetable oils and waxes	295	1,216	870	672	626	983	872	809	4.1	2.9	2.1
Animals and animal products [2]	865	3,768	4,150	4,547	5,156	6,422	6,378	6,668	11.9	9.1	17.0
Hides and skins, incl. furskins	187	1,046	1,295	1,522	1,731	1,829	1,717	1,751	2.6	2.5	4.5
Cattle hides	130	623	1,007	1,219	1,328	1,466	1,383	1,369	1.8	1.5	3.5
Meats and meat products	132	890	905	1,130	1,366	1,974	2,348	2,558	1.8	2.2	6.5
Beef and veal	25	249	467	634	771	1,109	1,420	1,579	0.3	0.6	4.0
Fats, oils, and greases	246	769	619	413	431	577	512	424	3.4	1.9	1.1
Poultry and poultry products	82	603	384	504	602	689	713	907	1.1	1.5	2.3
Cotton, excluding linters	372	2,864	1,633	812	1,631	1,975	2,250	2,783	5.1	6.9	7.1
Tobacco, unmanufactured	517	1,334	1,521	1,223	1,090	1,253	1,301	1,441	7.1	3.2	3.7
Fruits and preparations	334	1,335	1,186	1,306	1,484	1,762	1,836	2,360	4.6	3.2	6.0
Fresh fruits	164	739	743	851	939	1,093	1,133	1,486	2.3	1.8	3.8
Vegetables and preparations	219	1,188	930	1,085	1,158	1,361	1,601	2,302	3.0	2.9	5.9
Nuts and preparations	69	757	683	753	804	884	846	976	1.0	1.8	2.5
Other	232	1,477	1,262	1,373	1,517	1,737	2,197	2,703	3.2	3.6	6.9
Asia [1]	2,717	14,886	11,191	10,617	12,535	16,871	18,828	17,600	37.5	36.1	44.8
Japan	1,214	6,111	5,409	5,141	5,723	7,640	8,162	8,058	16.7	14.8	20.5
South Korea	224	1,797	1,413	1,306	1,833	2,283	2,593	2,644	3.1	4.4	6.7
China: Taiwan	134	1,095	1,231	1,171	1,285	1,661	1,754	1,660	1.9	2.7	4.2
Mainland	-	2,210	157	58	362	759	1,435	814	-	5.4	2.1
Hong Kong	57	437	389	400	466	489	611	701	0.8	1.1	1.8
Western Europe [1,3]	2,534	11,744	6,937	7,056	7,309	7,877	6,995	7,320	34.9	28.5	18.6
European Economic Community [4]	2,316	11,033	6,477	6,627	6,880	7,338	6,503	6,817	29.4	22.4	17.3
Netherlands	526	3,412	1,869	2,073	1,985	2,066	1,722	1,582	7.3	8.3	4.0
West Germany	529	1,831	944	1,048	1,285	1,215	1,000	1,119	7.3	4.4	2.8
Spain [5]	143	1,129	837	703	666	883	703	830	2.0	2.7	2.1
United Kingdom	411	928	604	681	661	835	637	713	5.7	2.3	1.8
Italy	210	1,094	669	727	697	693	458	528	2.9	2.7	1.3
France	164	748	403	439	524	534	820	937	2.3	1.8	2.4
Latin America [1]	688	6,150	4,224	3,681	3,678	4,927	5,337	5,092	9.5	14.9	12.9
Mexico	155	2,468	1,439	1,080	1,202	2,227	2,724	2,554	2.1	6.0	6.5
Canada	826	1,852	1,622	1,542	1,808	2,019	2,221	4,197	11.4	4.5	10.7
Soviet Union	16	1,047	1,923	658	938	2,252	3,597	2,268	0.2	2.5	5.8
Eastern Europe	169	2,071	479	434	436	540	401	577	2.3	5.0	1.5
Africa [1]	254	2,179	2,488	2,008	1,766	2,385	2,260	1,935	3.5	5.3	4.9
Algeria	19	176	227	287	310	596	504	513	0.3	0.4	1.3
Egypt	26	770	891	811	679	841	989	693	0.4	1.9	1.8

- Represents or rounds to zero. [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, France, Greece, Ireland, and Portugal, not shown separately. As of Jan. 1, 1973, United Kingdom, Denmark, and Ireland became members of EEC. As of Jan. 1, 1981, Greece became a member of EEC. As of Jan. 1, 1986, Spain and Portugal became members of EEC. 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, *U.S. Foreign Agricultural Trade Statistical Report*, annual. Also in *Agricultural Statistics*, annual, and *Foreign Agricultural Trade of the United States*, Jan/Feb 1991.

No. 1113. Cropland Used for Crops and Acreages of Crops Harvested: 1970 to 1990

[See also *Historical Statistics, Colonial Times to 1970,* series K 496-501]

YEAR	CROPLAND USED FOR CROPS					Index of crop production per acre (1977=100)	ACREAGES OF CROPS HARVESTED [2]				
	Number (mil. acres)						Total (mil. acres)	Used to produce goods for—			
								Domestic use		Exports	
	Total	Cropland harvested [1]	Crop failure	Cultivated summer fallow	Index (1977=100)			Amount (mil. acres)	Per capita (acres) [3]	Amount (mil. acres)	Percent of total
1970	332	289	5	38	88	88	293	221	1.08	72	24.6
1980	382	342	10	30	101	100	352	215	0.94	137	38.9
1985	372	334	7	31	98	120	342	263	1.10	81	23.7
1986	357	316	9	32	94	116	325	229	0.95	96	29.5
1987	331	293	6	32	88	123	302	196	0.80	106	35.1
1988	327	287	10	30	86	107	297	179	0.73	118	39.7
1989	341	306	8	27	90	119	318	215	0.86	103	32.4
1990 [4]	341	310	6	25	90	126	322	239	0.95	83	25.8

[1] Land supporting one or more harvested crops. [2] Area in principal crops harvested as reported by Crop Reporting Board plus acreages in fruits, tree nuts, and farm gardens. [3] Based on Bureau of the Census estimated total population, including Armed Forces overseas, as of July 1. [4] 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.

No. 1114. Crops—Acreage and Value, by State: 1988 to 1991

STATE	ACREAGE HARVESTED (1,000)				FARM VALUE (mil. dol.)				
	1988	1989	1990	1991, prel.	1988	1989	1990	1991, prel. Value	1991, prel. Rank
U.S. [1]	**289,846**	**305,596**	**308,935**	**304,308**	**72,746**	**80,347**	**80,864**	**79,858**	(X)
AL	2,389	2,338	2,342	2,240	570	575	464	593	34
AZ	784	830	802	770	1,060	1,003	894	925	30
AR	7,538	7,603	8,080	7,863	1,780	1,611	1,648	1,760	18
CA	5,107	4,900	4,797	4,340	9,763	10,401	10,649	9,833	1
CO	5,609	5,677	5,862	5,580	1,366	1,341	1,194	1,138	24
CT	124	128	129	125	93	95	112	99	46
DE	504	537	496	556	128	127	139	142	43
FL	1,115	1,128	1,076	1,040	3,247	3,603	2,766	3,445	7
GA	3,754	4,205	3,793	3,774	1,305	1,400	1,273	1,603	20
HI	86	81	79	74	402	407	413	383	36
ID	4,018	4,333	4,281	4,215	1,684	1,966	1,735	1,624	19
IL	21,581	22,977	22,759	22,906	4,242	6,045	5,809	5,360	3
IN	11,082	11,631	11,485	11,555	2,397	3,151	3,023	2,529	9
IA	23,092	24,097	23,276	23,376	4,632	5,767	5,818	5,663	2
KS	19,191	18,794	20,978	20,712	2,774	2,237	2,610	2,529	10
KY	4,968	5,487	5,505	5,495	1,395	1,685	1,721	1,782	17
LA	4,308	4,093	4,367	3,571	1,251	1,093	1,184	1,162	23
ME	346	364	361	351	212	219	180	157	42
MD	1,493	1,602	1,552	1,561	356	362	386	370	37
MA	143	136	135	136	169	167	149	175	41
MI	6,401	6,360	6,510	6,713	1,576	1,842	1,839	1,926	15
MN	18,767	18,661	18,779	18,719	3,134	4,174	4,177	4,052	4
MS	5,149	4,614	4,723	4,481	1,204	1,042	1,149	1,220	22
MO	12,684	13,249	12,685	12,900	2,138	2,254	2,083	2,120	14
MT	7,118	9,475	8,926	8,687	640	1,061	881	1,079	26
NE	16,765	17,450	18,044	18,316	3,661	3,420	3,621	3,724	6
NV	549	554	520	495	149	171	154	106	45
NH	99	93	91	92	30	27	29	27	48
NJ	368	380	364	382	167	164	170	185	40
NM	936	968	881	1,047	338	404	401	407	35
NY	3,439	3,560	3,538	3,443	878	887	916	914	31
NC	4,104	4,526	4,370	4,428	1,852	1,850	1,981	2,129	13
ND	16,216	20,660	21,229	20,925	1,301	1,843	2,082	2,196	12
OH	9,731	10,259	10,132	9,972	2,165	2,477	2,597	2,237	11
OK	8,482	9,396	9,688	8,614	1,203	1,172	1,142	945	29
OR	2,168	2,339	2,290	2,260	1,011	1,063	1,035	1,023	27
PA	4,199	4,198	4,094	4,067	1,119	1,264	1,358	1,137	25
RI	11	10	10	10	6	5	5	5	49
SC	2,022	2,283	2,049	1,827	603	635	517	634	33
SD	13,508	15,210	15,552	15,640	1,158	1,434	1,638	1,596	21
TN	4,548	4,570	4,477	4,379	950	905	954	976	28
TX	16,527	16,697	18,550	17,608	3,656	3,318	4,023	3,945	5
UT	1,026	983	992	973	260	254	257	221	39
VT	453	442	441	434	72	75	77	71	47
VA	2,708	2,768	2,726	2,660	741	816	846	801	32
WA	3,890	4,045	4,168	4,046	2,199	2,222	2,527	2,603	8
WV	644	664	668	615	97	107	114	106	44
WI	8,430	8,615	8,550	8,449	1,325	1,921	1,830	1,896	16
WY	1,674	1,628	1,735	1,889	284	285	292	304	38

X Not applicable. [1] Excludes Alaska.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production,* annual; and *Crop Values,* annual.

No. 1115. Principal Crops—Production, Supply, and Disappearance: 1986 to 1991

[**Marketing year beginning May 1** for **hay, June 1** for **wheat, August 1** for **cotton and rice, and 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.		
1987	23.1	66.2	59.5	119.8	7,131	1.94	14,108	12,016	7,757	1,716	4,259
1988	20.5	67.7	58.3	84.6	4,929	2.54	12,661	9,191	7,260	2,026	1,930
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	18,009	9,282	7,761	1,725	1,521
1991, prel	7.4	76.0	68.8	108.6	7,474	(NA)	(NA)	9,016	7,925	1,525	1,091
Hay:				Sh. tons	Mil. sh. tons	$/ton			Mil. sh. tons		
1986	-	(NA)	62.4	2.49	156	[5,6]59.80	8,611	182	150	(NA)	32
1987	-	(NA)	60.1	2.45	148	[5,6]65.00	8,845	180	153	(NA)	27
1988	-	(NA)	65.1	1.94	126	[5,6]85.20	10,457	153	136	(NA)	18
1989	-	(NA)	63.3	2.30	146	[5,6]87.40	11,514	163	136	(NA)	27
1990	-	(NA)	61.6	2.39	147	[5,6]83.20	11,138	174	147	(NA)	27
Soybeans:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1987	-	58.2	57.2	33.9	1,938	5.88	11,391	2,375	2,073	802	302
1988	-	58.8	57.4	27.0	1,549	7.42	11,488	1,855	1,673	527	182
1989	-	60.8	59.5	32.3	1,924	5.69	10,732	2,109	1,870	623	239
1990	-	57.8	56.5	34.0	1,926	5.75	11,215	2,167	1,838	557	329
1991, prel	-	59.1	58.0	34.3	1,986	(NA)	(NA)	2,320	1,995	665	325
Wheat:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1987	23.9	65.8	55.9	37.7	2,108	2.57	5,498	3,945	2,684	1,598	1,261
1988	22.5	65.5	53.2	34.1	1,812	3.72	6,684	3,096	2,394	1,419	702
1989	9.6	76.6	62.2	32.7	2,037	3.72	7,542	2,762	2,225	1,233	536
1990	7.5	77.2	69.3	39.5	2,736	2.61	7,299	3,309	2,443	1,068	866
1991, prel	15.4	69.9	57.7	34.3	1,981	(NA)	(NA)	2,882	2,492	1,275	390
Cotton:				Lb.	Mil. bales [7]	cents/lb.			Mil. bales [7]		
1987	4.0	10.4	10.0	706	[8]14.8	64.3	4,555	19.8	14.2	6.6	[9]5.8
1988	2.2	12.5	11.9	619	[8]15.4	56.6	4,190	21.2	13.9	6.1	[9]7.1
1989	3.5	10.6	9.5	614	[8]12.2	66.2	3,677	19.3	16.5	7.7	[9]3.0
1990	2.0	12.3	11.7	634	[8]15.5	68.2	5,040	18.5	16.5	7.8	[9]2.3
1991, prel	0.9	14.1	12.8	656	[8]17.5	(NA)	(NA)	19.9	16.1	6.8	[9]3.9
Tobacco: [10]				Lb.	Mil. lb.	$/lb.			Mil. lb.		
1987	(NA)	(NA)	0.6	2,028	1,189	[6]1.57	1,870	4,597	1,688	573	2,909
1988	(NA)	(NA)	0.6	2,160	1,370	[6]1.65	2,261	4,279	1,565	555	2,714
1989	(NA)	(NA)	0.7	2,016	1,367	[6]1.71	3,338	4,081	1,677	558	2,404
1990	(NA)	(NA)	0.7	2,218	1,625	[6]1.74	2,828	3,999	1,808	635	2,191
1991, prel	(NA)	(NA)	0.8	2,143	1,638	[6]1.79	2,932	3,653	(NA)	(NA)	(NA)
Potatoes:				Cwt.	Mil. cwt.	$/cwt.			Mil. cwt.		
1987	(NA)	1.3	1.3	301	389	4.38	1,682	574	[11]307	[12]11	(NA)
1988	(NA)	1.3	1.3	283	356	6.02	2,144	558	[11]300	[12]16	(NA)
1989	(NA)	1.3	1.3	289	370	7.36	2,717	555	[11]315	[12]15	(NA)
1990	(NA)	1.4	1.4	293	402	6.08	2,431	582	[11]327	[12]16	(NA)
1991, prel	(NA)	1.4	1.4	304	418	5.05	2,095	(NA)	(NA)	(NA)	(NA)
Sorghum for grain:				Bu.	Mil. bu.	$/bu.			Mil. bu.		
1987	4.1	11.8	10.5	69.4	731	1.70	1,179	1,474	812	232	663
1988	3.9	10.3	9.0	63.8	577	2.27	1,337	1,239	800	312	440
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	1,202	793	651	232	143
1991, prel	2.3	11.0	9.8	59.0	579	(NA)	(NA)	722	605	200	117
Rice, rough:				Lb.	Mil. cwt.	$/cwt.			Mil. cwt.		
1987	1.6	2.4	2.3	5,555	130	7.27	945	184	153	72	31
1988	1.1	2.9	2.9	5,514	160	6.83	1,092	195	168	86	27
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	991	187	163	71	25
1991, prel	0.7	2.9	2.8	5,617	155	(NA)	(NA)	185	155	60	30

- 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] Flue-cured and cigar wrapper, crop year July-June; all other types October-September. Farm-sales-weight basis. [11] Covers potatoes used for table use, frozen and canned products, chips, and dehydration. [12] Covers fresh potatoes and frozen and dehydrated products.

Source: Production—U.S. Dept. of Agriculture, National Agricultural Statistics Service. In *Crop Production,* annual, *Field Crops* (Statistical Bulletin No. 708); *Crop Values* (Statistical Bulletin No. 729). 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. 1116. Selected Crops—Acreage, Production, and Value, by Leading States: 1988 to 1990

[One bushel of corn=56 pounds; one bushel of soybeans or wheat= 60 pounds. See also *Historical Statistics, Colonial Times to 1970*, series K 502-508, 521, 553-558, and 561-563]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE			PRODUCTION			PRICE			FARM VALUE (mil. dol.)		
	1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990
CORN					(bu.)			(mil. bu.)			($/bu.)				
U.S. [1]	**58,250**	**64,703**	**66,952**	**85**	**116**	**119**	**4,929**	**7,525**	**7,933**	**2.54**	**2.36**	**2.30**	**12,661**	**17,897**	**18,009**
IA	10,700	12,250	12,400	84	118	126	899	1,446	1,562	2.45	2.29	2.20	2,202	3,310	3,437
IL	9,600	10,750	10,400	73	123	127	701	1,322	1,321	2.59	2.40	2.30	1,815	3,173	3,038
NE	6,600	7,000	7,300	124	121	128	818	847	934	2.48	2.30	2.30	2,030	1,948	2,149
MN	4,700	5,600	6,150	74	125	124	348	700	763	2.40	2.27	2.15	835	1,589	1,640
IN	5,000	5,200	5,450	83	133	129	415	692	703	2.65	2.47	2.25	1,100	1,708	1,582
OH	3,000	2,900	3,450	85	118	121	255	342	417	2.61	2.49	2.25	666	852	939
WI	1,950	2,800	3,000	67	111	118	131	311	354	2.55	2.31	2.20	333	718	779
MI	1,600	1,970	2,070	70	113	115	112	223	238	2.53	2.28	2.20	283	508	524
SD	2,400	2,650	3,000	55	72	78	132	191	234	2.38	2.14	2.00	314	408	468
MO	2,020	2,290	1,960	76	96	105	154	220	206	2.63	2.38	2.30	404	523	473
SOYBEANS					(bu.)			(mil. bu.)			($/bu.)				
U.S. [1]	**57,373**	**59,538**	**56,502**	**27**	**32**	**34**	**1,549**	**1,924**	**1,922**	**7.42**	**5.69**	**5.85**	**11,488**	**10,916**	**11,215**
IL	8,700	8,850	9,100	27	40	39	235	354	355	7.45	5.76	6.00	1,750	2,039	2,129
IA	8,100	8,280	7,900	31	39	41	251	323	324	7.33	5.62	5.75	1,841	1,815	1,862
MN	4,800	5,000	4,600	26	37	39	125	185	179	7.30	5.58	5.70	911	1,032	1,023
IN	4,200	4,550	4,180	28	37	41	116	166	171	7.55	5.79	5.85	872	962	1,003
OH	3,700	3,980	3,480	27	32	39	100	125	136	7.54	5.73	5.85	753	718	794
MO	4,230	4,350	4,150	27	28	30	112	122	125	7.45	5.60	5.80	835	682	722
AR	3,200	3,200	3,350	26	24	27	83	75	90	7.55	5.88	6.05	628	442	547
NE	2,360	2,560	2,360	30	32	35	71	82	81	7.31	5.45	5.70	518	446	464
SD	1,730	1,880	1,920	24	26	28	42	49	54	7.21	5.35	5.65	299	262	304
KS	2,000	1,850	1,950	23	27	24	46	50	47	7.26	5.45	5.70	334	272	267
WHEAT					(bu.)			(mil. bu.)			($/bu.)				
U.S. [1]	**53,189**	**62,189**	**69,353**	**34**	**33**	**40**	**1,812**	**2,037**	**2,739**	**3.72**	**3.72**	**2.61**	**6,684**	**7,542**	**7,299**
KS	9,500	8,900	11,800	34	24	40	323	214	472	3.58	3.74	2.60	1,156	799	1,227
ND	7,230	10,330	10,910	14	24	35	103	242	385	4.02	3.45	2.47	416	836	953
OK	4,800	5,700	6,300	36	27	32	173	154	202	3.57	3.79	2.65	617	583	534
WA	2,060	2,270	2,480	61	49	61	125	111	150	4.19	4.04	2.75	522	447	413
MT	3,830	5,235	5,185	16	28	28	60	145	146	3.98	3.66	2.73	239	531	398
MN	2,250	2,699	2,865	23	38	48	52	103	139	3.79	3.63	2.50	196	372	347
TX	3,200	3,000	4,200	28	20	31	90	60	130	3.39	3.79	2.75	304	227	358
SD	2,638	3,520	3,789	14	24	34	38	83	128	3.73	3.60	2.56	142	299	327
ID	1,150	1,370	1,370	66	67	73	76	91	100	4.01	3.67	2.60	303	335	259
IL	1,250	1,780	1,900	54	59	48	68	105	91	3.50	3.80	2.75	236	399	251
COTTON					(lb.)			(1,000 bales) [2]			(cents/lb.)				
U.S. [1]	**11,948**	**9,538**	**11,732**	**619**	**614**	**634**	**15,412**	**12,196**	**15,499**	**56.6**	**66.2**	**67.8**	**4,190**	**3,878**	**5,041**
TX	5,342	3,828	5,057	475	376	479	5,282	2,999	5,046	52.4	60.4	63.7	1,329	875	1,543
CA	1,337	1,058	1,116	1,015	1,226	1,201	2,827	2,701	2,791	64.8	72.2	76.3	879	936	1,022
MS	1,190	1,021	1,221	736	731	728	1,825	1,556	1,852	53.7	62.9	64.4	470	470	573
LA	645	620	790	705	672	715	948	868	1,177	54.5	63.9	65.7	248	266	371
AR	675	595	750	742	687	692	1,044	851	1,081	54.4	63.2	65.3	273	258	339
AZ	477	484	472	1,113	1,118	1,016	1,106	1,126	999	70.4	79.6	76.1	374	424	365
TOBACCO					(lb.)			(mil. lb.)			($/lb.)				
U.S. [1]	**634**	**678**	**730**	**2,160**	**2,016**	**2,201**	**1,370**	**1,367**	**1,607**	**1.65**	**1.71**	**1.73**	**2,254**	**2,335**	**2,786**
NC	250	267	286	2,211	2,029	2,240	553	541	640	1.61	1.68	1.68	890	906	1,075
KY	158	178	194	2,247	2,059	2,248	355	367	437	1.64	1.68	1.76	581	617	769
SC	45	48	51	2,225	2,160	2,155	100	104	110	1.61	1.66	1.59	162	172	174
VA	47	50	53	1,973	1,892	2,055	92	94	109	1.59	1.68	1.71	147	157	187
GA	38	40	43	2,260	2,180	2,400	86	87	103	1.63	1.67	1.68	140	146	174
TN	49	46	49	1,920	1,754	2,031	93	80	99	1.71	1.73	1.76	159	138	175

[1] Includes other States, not shown separately. [2] Bales of 480 lb. net weight.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Crop Production*, annual; and *Crop Values*, annual.

No. 1117. Sugar Beets, Sugarcane, and Sugar—Summary: 1985 to 1990

[Data are for crop year. See also *Historical Statistics, Colonial Times to 1970*, series K 542-546]

ITEM	Unit	SUGAR BEETS			SUGARCANE FOR SUGAR AND SEED			YEAR	SUGAR PRODUCTION (1,000 tons)	
		1985	1989	1990	1985	1989	1990		Raw value [1]	Refined basis [2]
Acreage harvested	1,000 acres	1,103	1,295	1,378	770	852	791	**Beet:** 1985.	3,000	2,804
Yield per acre	Sh. tons	20.4	19.4	20.0	36.6	34.5	34.2	1989	3,442	3,217
Production	Mil. tons	22.5	25.1	27.6	28.2	29.4	27.1	1990	3,809	3,560
Price per ton [3]	Dollars	33.80	42.10	(NA)	[4]26.70	[4]29.20	(NA)	**Cane:** 1985	3,033	2,835
Farm value	Mil. dol	761	1,058	(NA)	[5]752	[5]858	(NA)	1989	3,176	2,967
								1990	3,004	2,807

NA Not available. [1] Raw value equals 96 degree sugar as defined in Sugar Act of 1948. [2] Calculated on the basis of 100 lbs. of raw sugar required to produce 93.46 lbs. of refined sugar. [3] Season average prices received by farmers. Prices exclude Government payments under Sugar Act. [4] Price per ton for sugar. [5] Price per ton of cane for sugar used in evaluating value of production for seed.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Field Crops* (Statistical Bulletin 793); *Crop Production*, June issue and annual; and *Crop Values*, annual.

No. 1118. Fruits and Planted Nuts—Bearing Areas, by Type: 1980 to 1990

[In thousands of acres]

TYPE	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total	**3,556**	**3,544**	**3,572**	**3,545**	**3,494**	**3,432**	**3,458**	**3,485**	**3,495**	**3,540**
Citrus fruit [1]	1,143	1,124	1,092	1,008	899	819	826	833	848	890
Major deciduous fruits [2]	1,608	1,640	1,674	1,704	1,725	1,728	1,739	1,748	1,748	1,756
Miscellaneous noncitrus [3]	242	201	207	210	212	216	217	217	213	206
Planted nuts [4]	563	579	599	624	657	670	675	686	687	688

[1] Grapefruit, lemons, limes, oranges, tangelos, tangerines, and temples. Acreage is for the year of harvest. [2] Commercial apples, apricots, cherries, grapes, nectarines, peaches, pears, plums, and prunes. [3] Avocados, bananas, cranberries (beginning 1983), dates, figs, kiwifruit, olives, papayas, pineapples, and pomegranates. [4] Almonds, filberts, macadamia nuts, walnuts, and pistachios.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Noncitrus Fruits and Nuts*, annual.

No. 1119. Fruits and Nuts—Utilized Production and Value, 1988 to 1990, and Leading Producing States, 1990

FRUIT OR NUT	UTILIZED PRODUCTION [1]				FARM VALUE (mil. dol.)			Leading States in order of production, 1990
	Unit	1988	1989	1990	1988	1989	1990	
Apples (35 States) [2]	Mil. lb	9,078	9,917	9,658	1,150	1,034	1,449	WA, NY, CA, MI
Apricots	1,000 tons	94	119	120	34	40	41	CA, WA, UT
Avocados	1,000 tons	193	139	145	220	251	189	CA, FL, HI
Bananas	Mil. lb	13	12	11	4	4	4	HI
Cherries, sweet	1,000 tons	185	191	132	145	136	119	WA, OR, CA, MI
Cherries, tart	Mil. lb	234	243	203	44	35	37	MI, NY, UT, OR
Cranberries	1,000 bbl. [3]	4,080	3,748	3,370	186	165	147	MA, WI, NJ, OR
Dates	1,000 tons	22	22	24	20	23	21	CA
Figs (fresh)	1,000 tons	56	48	46	20	18	15	CA
Grapefruit (4 States)	Mil. boxes [4]	69	70	49	479	416	372	FL, CA, AZ
Grapes (13 States)	1,000 tons	6,032	5,930	5,660	1,607	1,863	1,662	CA, WA, NY
Kiwifruit	1,000 tons	30	37	34	22	15	14	CA
Lemons (2 States)	Mil. boxes [5]	21	20	19	202	235	280	CA, AZ
Limes (FL)	Mil. boxes [6]	1	2	1	23	21	23	FL
Nectarines	1,000 tons	200	200	211	79	80	100	CA
Olives	1,000 tons	88	123	131	45	57	64	CA
Oranges and tangerines (4 States)	Mil. boxes [7]	205	215	184	1,854	1,932	1,476	FL, CA, AZ
Papayas	Mil. lb	69	74	69	12	14	15	HI
Peaches (32 States)	Mil. lb	2,449	2,209	2,111	382	361	365	CA, GA, SC, PA
Pears	1,000 tons	860	917	964	235	254	264	WA, CA, OR, NY
Pineapples	1,000 tons	659	580	575	107	98	99	HI
Plums and prunes (fresh)	1,000 tons	734	1,015	728	230	281	267	CA, OR, WA, ID
Pomegranates	1,000 tons	18	18	(NA)	6	5	(NA)	(NA)
Tangelos (FL)	Mil. boxes [6]	4	3	3	33	31	21	FL
Temples (FL)	Mil. boxes [8]	4	4	1	28	28	11	FL
Almonds (shelled basis)	Mil. lb	452	395	532	600	481	592	CA
Filberts (in the shell)	1,000 tons	17	13	22	14	11	17	OR, WA
Macadamia nuts	Mil. lb	46	51	50	41	45	41	HI
Pecans (in the shell) (11 States)	Mil. lb	308	251	216	167	179	248	GA, TX, NM, LA
Pistachios	Mil. lb	94	39	118	115	64	127	CA
Walnuts, English (in the shell)	1,000 tons	209	229	227	193	245	229	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. 1120. Commercial Vegetable and Other Specified Crops—Area, Production, and Value, 1988 to 1990, and Leading Producing States, 1989

[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, 1989
	1988	1989	1990	1988	1989	1990	1988	1989	1990	
Asparagus	101	99	96	121	125	122	152	150	148	CA, WA, MI.
Beans, snap [4]	218	249	246	588	870	796	99	151	145	WI, OR, IL.
Beans, dry edible	1,353	1,651	2,086	963	1,186	1,621	575	677	609	MI, NE, ID.
Broccoli	114	117	111	640	676	617	292	276	268	CA, AZ, TX.
Carrots	98	102	94	1,293	1,449	1,462	268	297	273	CA, WA, TX.
Cauliflower	63	68	66	394	392	393	202	205	190	CA, AZ, OR.
Celery	34	35	38	971	1,014	990	231	268	215	CA, FL, MI.
Corn, sweet	625	643	675	3,140	3,756	3,954	360	470	467	WI, MN, WA.
Cucumbers [4]	119	124	116	652	643	657	130	131	137	MI, NC, TX.
Honeydew melons	31	30	27	262	257	226	75	62	82	CA, TX, AZ.
Lettuce	240	243	231	3,525	3,762	3,672	1,040	950	847	CA, AZ, FL.
Peppermint	81	101	102	2.7	3.3	3.5	85	87	97	OR, WA, ID.
Spearmint	23	26	34	0.9	0.9	1.3	22	26	38	WA, WI, IN.
Mushrooms [5]	131	133	138	316	334	357	544	596	645	PA, CA, MI.
Onions	129	133	138	2,337	2,395	2,639	414	497	489	CA, CO, TX.
Peas, green [4]	284	317	341	313	505	528	73	120	131	WI, MN, WA.
Potatoes	1,259	1,282	1,371	17,822	18,522	20,106	2,144	2,718	2,431	ID, WA, WI.
Strawberries	47	46	45	590	571	629	544	538	594	CA, FL, OR.
Sweet potatoes	86	86	90	547	568	651	141	186	139	NC, LA, CA.
Tomatoes	415	462	489	9,203	11,280	12,033	1,422	1,848	1,622	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. 1121. Red Meats—Slaughtering, Supply, and Use: 1980 to 1991

[**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	42,481	41,170	429	882
1985	131.3	39,409	3,255	43,505	42,311	461	733
1988	131.0	40,004	3,594	44,356	42,599	887	870
1989	130.5	39,602	3,138	43,610	41,663	1,287	660
1990	126.4	38,787	3,313	42,760	40,805	1,248	707
1991	128.6	39,585	3,242	43,534	41,235	1,474	825
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
1988	35.3	23,589	2,380	26,355	25,252	681	422
1989	34.1	23,087	2,179	25,688	24,330	1,023	335
1990	33.4	22,743	2,356	25,434	24,031	1,006	397
1991	32.9	22,916	2,406	25,719	24,112	1,188	419
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
1988	88.1	15,684	1,136	17,180	16,548	195	437
1989	89.0	15,813	896	17,146	16,571	262	313
1990	85.4	15,354	898	16,565	16,030	239	296
1991	88.4	15,999	776	17,071	16,395	283	393
Veal:							
1980	2.7	400	21	431	420	2	9
1985	3.5	515	20	549	534	5	11
1988	2.6	396	27	427	412	10	5
1989	2.2	355	(NA)	360	356	(NA)	4
1990	1.8	327	(NA)	331	325	(NA)	6
1991	1.5	306	(NA)	312	305	(NA)	7
Lamb and mutton:							
1980	5.7	318	33	362	351	2	9
1985	6.3	358	36	401	387	1	13
1988	5.4	335	51	394	387	1	6
1989	5.6	347	63	416	406	2	8
1990	5.7	363	59	430	419	3	8
1991	5.8	364	60	432	423	3	6

NA Not available. [1] Total supply equals production plus imports plus ending stocks of previous year. [2] Includes shipments to territories.

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 1991

[**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	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
ALL CATTLE [1]												
Inventory: [2] Number on farms	Mil	111.2	115.4	115.0	113.4	109.6	105.4	102.1	99.6	98.1	98.2	99.4
Total value	Bil. dol.	55.8	47.9	46.7	44.8	44.0	41.2	41.6	52.1	56.9	60.3	64.9
Value per head	Dol	502	415	406	396	402	391	407	523	580	614	653
Production: Quantity	Bil. lb	40.3	40.7	40.4	40.1	40.1	40.6	40.5	40.6	40.2	40.7	(NA)
Beef, price per 100 lb	Dol	62.40	56.70	55.50	57.30	53.70	52.60	61.10	66.60	69.50	74.60	(NA)
Calves, price per 100 lb	Dol	76.80	59.80	61.70	59.90	62.10	61.10	78.50	89.20	90.80	95.60	(NA)
Value of production	Bil. dol.	25.5	22.6	22.0	22.1	21.2	21.0	24.8	27.2	28.0	30.5	(NA)
HOGS AND PIGS												
Inventory: [3] Number on farms	Mil	67.3	58.7	54.5	56.7	54.1	52.3	51.0	54.4	55.5	53.8	54.5
Total value	Bil. dol.	3.8	4.1	4.9	3.3	4.1	3.6	4.7	4.1	3.7	4.3	4.7
Value per head	Dol	56.00	70.10	89.90	58.80	75.00	69.60	91.90	76.00	66.30	79.10	85.40
Production: Quantity	Bil. lb	23.4	19.7	21.2	20.2	20.2	19.5	20.4	21.7	21.9	21.3	(NA)
Price per 100 lb	Dol	38.00	52.30	46.80	47.10	44.00	49.30	51.20	42.30	42.50	53.70	(NA)
Value of production	Bil. dol.	8.9	10.3	9.9	9.5	8.9	9.6	10.4	9.1	9.3	11.3	(NA)
SHEEP AND LAMBS												
Inventory: [2] Number on farms	Mil	12.7	13.0	12.1	11.6	10.7	10.1	10.6	10.9	10.9	11.4	11.2
Total value	Mil. dol	993	742	629	603	654	684	799	985	895	902	735
Value per head	Dol	78.20	57.10	51.80	52.10	61.10	67.40	75.70	90.00	82.40	79.30	65.60
Production: Quantity	Mil. lb	746	785	769	700	704	726	733	707	776	757	(NA)
Sheep, price per 100 lb	Dol	21.30	19.50	15.70	16.40	23.90	25.60	29.50	25.60	24.40	23.20	(NA)
Lambs, price per 100 lb	Dol	63.60	53.10	53.90	60.10	67.70	69.00	77.60	69.10	66.10	55.50	(NA)
Value of production	Mil. dol	403	356	356	378	434	445	503	420	446	361	(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: 1988 to 1991

[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.)		
	1989	1990	1991	1988	1989	1990	1988	1989	1990	1988	1989	1990
CATTLE AND CALVES [3]												
U.S. [4]	**98,065**	**98,162**	**99,436**	**40,557**	**40,241**	**40,743**	**27,220**	**28,031**	**30,519**	**39,294**	**38,467**	**37,758**
AL	1,800	1,750	1,800	672	647	684	431	440	500	283	297	288
CA	4,700	4,800	4,750	2,111	2,025	2,003	1,314	1,274	1,315	1,408	1,362	1,408
CO	2,850	2,900	2,800	1,818	1,791	1,946	1,296	1,320	1,546	2,541	2,542	2,363
ID	1,650	1,660	1,740	824	810	859	525	527	593	899	825	763
IL	1,950	1,950	2,000	778	760	806	547	578	633	1,463	1,389	(5)
IA	4,500	4,500	4,750	2,062	2,078	1,955	1,390	1,467	1,488	2,213	2,162	2,134
KS	5,600	5,700	5,700	3,050	3,083	3,109	2,176	2,262	2,417	7,012	7,001	7,091
KY	2,480	2,420	2,500	701	697	744	473	499	568	107	105	100
MN	2,700	2,600	2,760	1,279	1,233	1,149	807	812	820	1,309	1,209	1,264
MO	4,400	4,400	4,500	1,221	1,242	1,173	904	959	984	433	390	351
MT	2,450	2,300	2,400	923	955	999	631	671	736	19	16	30
NE	5,500	5,800	6,000	3,618	3,714	3,735	2,541	2,728	2,858	6,659	6,698	6,804
OH	1,730	1,650	1,580	561	498	750	361	339	539	472	331	262
OK	5,050	5,250	5,550	2,025	2,033	1,961	1,290	1,371	1,461	126	82	62
SD	3,380	3,380	3,400	1,781	1,792	1,781	1,239	1,272	1,404	704	751	702
TN	2,300	2,300	2,250	726	652	665	439	426	455	173	105	(5)
TX	13,400	13,200	13,400	5,699	5,639	5,926	3,839	3,982	4,564	6,267	6,282	6,100
WA	1,300	1,330	1,340	610	589	653	401	402	481	1,074	986	(5)
WI	4,130	4,170	4,170	1,280	1,244	1,220	798	800	887	1,464	1,436	1,368
HOGS AND PIGS												
U.S. [4]	**55,469**	**53,821**	**54,362**	**21,670**	**21,942**	**21,275**	**9,145**	**9,294**	**11,333**	**21,838**	**22,027**	**21,230**
IL	5,600	5,700	5,700	2,471	2,324	2,225	1,026	986	1,192	2,063	2,178	2,250
IN	4,300	4,350	4,300	1,671	1,666	1,667	696	696	870	1,037	919	876
IA	14,000	13,500	13,800	5,507	5,544	5,394	2,359	2,379	2,912	6,257	6,421	6,571
MN	4,690	4,450	4,500	1,739	1,787	1,715	752	780	948	1,093	1,228	1,382
MO	2,850	2,700	2,800	1,192	1,078	1,040	510	460	566	990	899	685
NE	4,150	4,200	4,300	1,557	1,657	1,624	655	707	881	1,165	1,243	1,299
NC	2,700	2,570	2,800	1,065	1,178	1,190	446	493	607	672	698	654
OH	2,210	2,080	2,000	882	889	837	367	373	437	754	757	642
SD	1,810	1,720	1,770	772	771	753	329	328	410	1,053	998	1,154

[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.

U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Meat Animals-Production, Disposition and Income,* annual and *Livestock and Meat Statistics,* annual.

No. 1124. Milk Production and Commercial Use: 1980 to 1991

[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	5.4	2.1	133.6	8.8	5.7	119.0	13.1
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.3	4.5	130.4	12.8
1987	142.7	2.3	140.5	4.1	2.5	147.1	6.8	4.6	135.7	12.5
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	136.5	12.3
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.5	13.6
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	139.0	13.7
1991	148.5	2.0	146.5	5.1	2.6	154.3	10.5	4.5	139.3	12.2

[1] Removals from commercial supply to Commodity Credit Corporation stocks. [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 Production and Manufactured Dairy Products: 1970 to 1990

[See also *Historical Statistics, Colonial Times to 1970*, series K 595-601]

ITEM	Unit	1970	1980	1984	1985	1986	1987	1988	1989	1990
Cows and heifers that have calved, kept for milk, Jan. 1 [1]	Mil. head	13.3	10.8	10.8	11.0	10.8	10.3	10.3	10.1	10.1
Milk produced on farms	Bil. lb	117	128	135	143	143	143	145	144	148
Production per cow	1,000 lb.	9.8	11.9	12.5	13.0	13.3	13.8	14.1	14.2	14.6
Whole milk sold from farms [2]	Bil. lb	113	126	132	141	141	140	143	142	146
Sales to plants and dealers	Bil. lb	110	125	131	139	140	139	142	141	145
Value of milk produced	Bil. dol.	6.8	16.9	18.3	18.4	18.0	18.0	17.9	19.7	20.5
Gross farm income, dairy products	Bil. dol.	6.7	16.7	18.0	18.1	17.8	17.8	17.7	19.5	20.3
Cash receipts from marketing of milk and cream [2]	Bil. dol.	6.5	16.6	17.9	18.1	17.7	17.7	17.6	19.4	20.2
Sales to plants and dealers	Bil. dol.	6.3	16.3	17.7	17.8	17.5	17.5	17.4	19.1	20.0
Number of dairy manufacturing plants	Number	3,749	2,257	2,059	2,061	1,998	1,933	1,846	1,750	1,714
Manufactured dairy products:										
Butter (incl. whey butter)	Mil. lb	1,137	1,145	1,103	1,248	1,202	1,104	1,208	1,295	1,302
Cheese, total [3]	Mil. lb	2,201	3,984	4,674	5,081	5,209	5,344	5,572	5,615	6,061
American (excl. full-skim American)	Mil. lb	1,428	2,376	2,648	2,855	2,798	2,717	2,757	2,674	2,891
Cream and Neufchatel	Mil. lb	126	229	276	294	322	342	376	401	431
All Italian varieties	Mil. lb	394	983	1,319	1,491	1,633	1,800	1,937	2,043	2,209
Cottage cheese: Creamed [4]	Mil. lb	978	825	736	716	705	675	647	570	531
Curd, pot, and bakers	Mil. lb	726	667	606	599	600	574	557	527	493
Condensed bulk milk	Mil. lb	1,237	952	1,159	1,232	1,362	1,383	1,364	1,417	1,426
Evaporated and condensed canned milk	Mil. lb	1,293	740	666	656	602	597	612	545	615
Nonfat dry milk solids [5]	Mil. lb	1,456	1,168	1,168	1,398	1,294	1,077	998	893	900
Dry whey [6]	Mil. lb	621	690	898	987	1,031	1,097	1,137	1,069	1,143
Ice cream of all kinds	Mil. gal	762	830	894	901	924	928	882	831	816
Ice milk	Mil. gal	287	293	300	301	315	328	355	377	349

[1] For 1970, cows and heifers 2 years old and over. [2] Comprises sales to plants and dealers, and retail sales by farmers direct to consumers. [3] Includes varieties not shown separately. Beginning 1980, includes fullskim. [4] Includes partially creamed (low fat). [5] Includes dry skim milk for animal feed. [6] Includes animal but excludes modified whey production.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Production of Manufactured Dairy Products*, annual; and *Milk Production, Disposition, and Income*, annual.

No. 1126. Milk Cows—Number, Production, and Value, by State: 1988 to 1990

STATE	NUMBER ON FARMS [1] (1,000)			MILK PRODUCED ON FARMS (mil. lb.)			VALUE OF PRODUCTION [2] (mil. dol.)		
	1988	1989	1990	1988	1989	1990	1988	1989	1990
U.S. [3]	**10,262**	**10,126**	**10,127**	**145,152**	**144,239**	**148,284**	**17,921**	**19,688**	**20,483**
California	1,083	1,104	1,135	18,607	19,420	20,953	2,078	2,446	2,562
Idaho	168	171	179	2,628	2,669	2,949	294	328	360
Illinois	206	197	195	2,805	2,743	2,820	342	373	361
Iowa	307	309	305	4,040	4,202	4,330	477	555	576
Michigan	350	345	344	5,228	5,152	5,233	650	702	739
Minnesota	783	734	710	10,413	10,108	10,006	1,215	1,322	1,323
Missouri	230	228	230	3,000	2,975	3,040	366	396	413
New York	794	776	768	11,444	11,071	11,102	1,446	1,576	1,626
Ohio	351	349	342	4,785	4,535	4,495	577	610	625
Pennsylvania	717	698	683	10,204	9,998	9,933	1,359	1,469	1,513
Texas	375	386	386	4,874	5,170	5,539	646	741	814
Washington	221	225	237	3,966	4,097	4,398	496	559	604
Wisconsin	1,760	1,739	1,753	25,000	24,000	24,400	2,993	3,228	3,282

[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, *Production of Manufactured Dairy Products*, annual; and *Milk Production, Disposition, and Income*, annual.

No. 1127. Poultry—Number on Farms, Value, Production, and Prices: 1970 to 1990

[**For year ending November 30, except as noted.** See also *Historical Statistics, Colonial Times to 1970,* series K 609-623]

ITEM	Unit	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
Chickens:[1] Number [2]	Million	433	392	379	365	374	370	373	380	356	356	351
Value per head [2]	Dollars	1.21	1.88	1.85	1.96	2.02	1.90	1.87	1.87	2.04	2.16	2.29
Value, total [2]	Mil. dol.	525	737	701	717	757	704	698	711	726	771	806
Number sold [3]	Million	233	238	242	237	225	220	218	218	224	199	208
Price per lb. [3]	Cents	9.1	11.0	10.3	12.7	15.9	14.8	12.5	11.0	9.2	14.9	9.6
Value of sales [3]	Mil. dol.	107	129	121	145	170	152	128	112	95	138	95
PRODUCTION												
Broilers:[4] Number	Million	2,987	3,963	4,149	4,184	4,283	4,470	4,649	5,004	5,238	5,517	5,865
Weight	Bil. lb.	10.8	15.5	16.8	17.0	17.9	18.9	19.7	21.5	22.5	24.0	25.6
Price per lb	Cents	13.6	27.7	26.9	28.6	33.7	30.1	34.5	28.7	33.1	36.6	32.6
Production value	Mil. dol.	1,475	4,303	4,502	4,873	6,020	5,668	6,784	6,177	7,435	8,779	8,366
Turkeys: Number	Million	116	165	165	171	171	185	207	240	242	261	283
Weight	Bil. lb.	2.2	3.1	3.2	3.3	3.4	3.7	4.1	4.9	5.1	5.5	6.0
Price per lb	Cents	22.6	41.3	39.5	38.0	48.9	49.1	47.1	34.8	38.6	40.9	39.4
Gross income	Mil. dol.	498	1,272	1,255	1,269	1,655	1,819	1,948	1,703	1,951	2,234	2,383

[1] Excludes commercial broilers. [2] As of Dec. 1. [3] 1970-84, represents number produced and production value. [4] 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. Not included in sales of chickens.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Hatchery Production—Annual; Poultry—Production and Value; Turkeys;* and *Chickens and Eggs.*

No. 1128. Poultry—Production, by State: 1988 to 1990

[**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		
	1988	1989	1990	1988	1989	1990		1988	1989	1990	1988	1989	1990
U.S. [1]	**22,464**	**23,979**	**25,634**	**5,059**	**5,465**	**6,042**	NE	6	14	20	31	36	38
AL	2,881	3,150	3,642	(NA)	(NA)	(NA)	NC	2,300	2,444	2,593	939	992	1,160
AR	3,677	3,866	3,995	371	412	453	OH	62	72	96	94	110	135
CA	997	1,049	1,109	572	664	723	OK	472	527	540	(NA)	(NA)	(NA)
DE	1,087	1,132	1,159	(NA)	(NA)	(NA)	OR	83	92	111	32	38	44
FL	505	519	490	(NA)	(NA)	(NA)	PA	533	549	520	158	168	169
GA	3,400	3,573	3,760	71	54	61	SC	283	308	343	164	153	168
IL	(NA)	(NA)	(NA)	35	86	99	SD	(NA)	(NA)	(NA)	67	63	80
IN	(NA)	(NA)	(NA)	261	280	288	TN	365	427	436	(NA)	(NA)	(NA)
IA	26	33	63	187	186	228	TX	1,118	1,254	1,454	(NA)	(NA)	(NA)
MD	1,085	1,108	1,141	3	2	2	UT	(NA)	(NA)	(NA)	90	85	90
MI	3	3	3	84	102	125	VA	791	802	882	306	319	316
MN	156	181	198	705	784	852	WA	130	140	157	(NA)	(NA)	(NA)
MS	1,480	1,627	1,693	(NA)	(NA)	(NA)	WV	130	131	156	42	55	72
MO	240	308	362	335	353	360	WI	56	54	62	(NA)	(NA)	(NA)

NA Not available. [1] Includes other States not shown separately.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Poultry—Production and Value;* and *Turkeys,* annual.

No. 1129. Egg Production, Supply, and Use: 1980 to 1991

YEAR	PRODUCTION [1]			SUPPLY (mil. dozen)			USE (mil. dozen)			
	Number produced (bil.)	Price per dozen (cents)	Production value (mil. dol.)	Total [2]	Production	Imports	Total	Consumption [3]	Hatching use	Exports
1980	69.7	56.3	3,268	5,830	5,806	5	5,811	5,169	499	143
1985	68.4	57.2	3,262	5,734	5,710	13	5,723	5,104	548	71
1987	70.4	54.7	3,209	5,884	5,868	6	5,870	5,160	599	111
1988	69.7	52.8	3,067	5,804	5,784	5	5,789	5,041	606	142
1989	67.2	68.9	3,854	5,639	5,598	25	5,628	4,892	644	92
1990	67.8	71.6	4,857	5,685	5,665	9	5,673	4,896	677	101
1991	(NA)	(NA)	(NA)	5,771	5,758	2	5,758	4,899	705	154

NA Not available. [1] For year ending November 30. [2] Includes beginning stocks, not shown separately. [3] Includes shipments to territories.

Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service, *Layers and Egg Production—Annual;* and Economic Research Service, *Agricultural Outlook,* monthly.