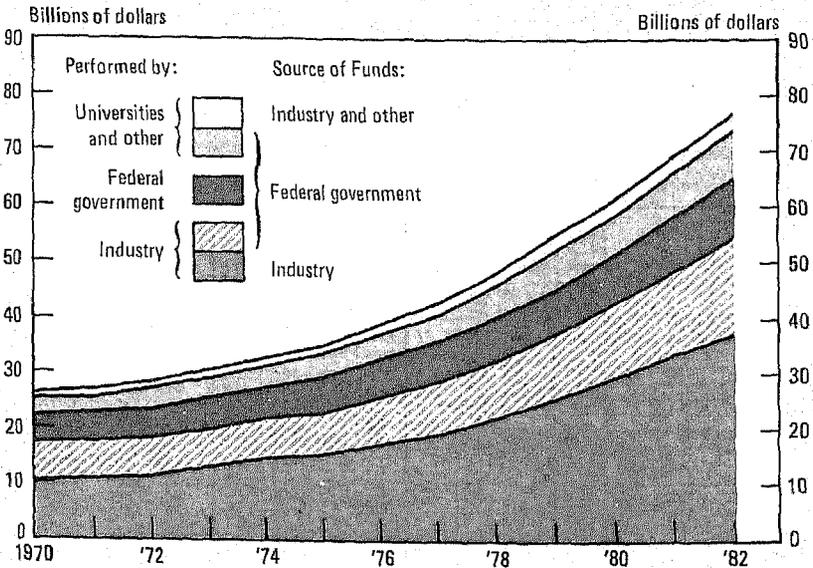
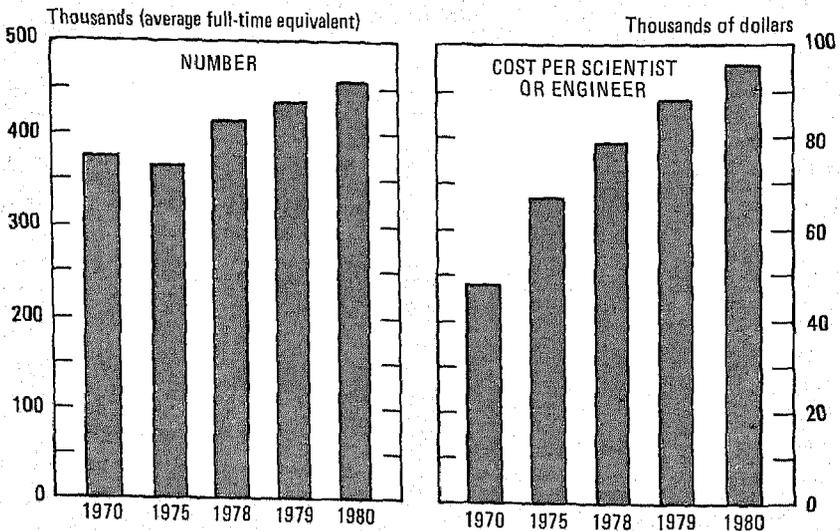


**Figure 21.1**  
**Research and Development, Funds Used: 1970 to 1982**

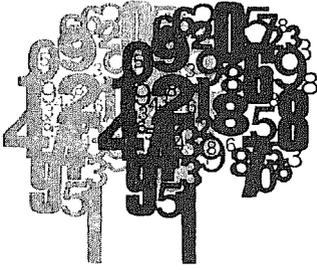


Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1012.

**Figure 21.2**  
**Research and Development Scientists and Engineers in Private Industry: 1970 to 1980**



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1025.



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## Section 21

# Science

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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 and education. Also included are statistics on space program outlays and accomplishments. Principal sources of these data are the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA).

NSF gathers data chiefly through recurring surveys. Some current NSF publications containing data on funds for research and development and on scientific and engineering personnel include *Science Resources Studies Highlights* and the occasional bulletin series, *Reviews of Data on Science Resources*; and annual, biennial, and special reports such as *Federal Funds for Research and Development*; *Research and Development in Industry*; *National Patterns of Science and Technology Resources*; *Academic Science: R&D Funds, Scientists and Engineers, Graduate Enrollment and Support*; *Scientists and Engineers From Abroad*; *Federal Scientific and Technical Personnel*; *Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*; *Characteristics of Doctoral Scientists and Engineers in the United States*; *U.S. Scientists and Engineers*; *Employment Attitudes of Recent Science and Engineering Graduates*; *Science and Engineering Employment*; *Characteristics of Experienced Scientists and Engineers*; *Scientists, Engineers, and Technicians in Private Industry*; *Science and Engineering Personnel: A National Overview*; and policy reports relating to national allocation of human resources and funds to science and technology. Statistical surveys in these areas pose particularly difficult problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. Detailed discussions of the scope and limitations of the data appear in the source publications.

The National Science Board's biennial *Science Indicators* publication contains data and analyses of international and domestic science and technology. *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 I.

No. 1010. RESEARCH AND DEVELOPMENT—OUTLAYS: 1955 TO 1982

[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 (-) denotes decrease]

YEAR OR PERIOD	CURRENT DOLLARS (bil. dol.)			CONSTANT (1972) DOLLARS		ANNUAL PERCENT CHANGE <sup>3</sup>		PERCENT OF TOTAL R AND D OUTLAYS					
	Total <sup>1</sup>	De- fense space relat- ed	Other	Total	Per- cent of GNP <sup>2</sup>	Cur- rent dol- lars	Con- stant dol- lars	Federally funded defense-space-related			Other outlays		
								Total	De- fense	Space	Total	Non- Fed- eral	Fed- eral
1955.....	6.2	3.0	3.1	10.1	1.5	9.4	7.2	49	48	1	51	43	8
1956.....	8.4	4.2	4.2	13.3	2.0	35.5	31.4	50	49	1	50	42	8
1957.....	9.8	5.3	4.5	15.0	2.2	16.9	13.0	54	53	1	47	38	9
1958.....	10.7	5.8	4.9	16.2	2.4	9.6	7.6	54	59	1	47	37	10
1959.....	12.4	7.0	5.3	18.3	2.5	15.4	12.8	57	54	3	43	35	8
1960.....	13.5	7.4	6.1	19.6	2.7	9.4	7.6	57	52	3	44	35	9
1961.....	14.3	8.0	6.3	20.6	2.7	5.9	4.8	56	50	6	44	35	9
1962.....	15.4	8.5	6.9	21.8	2.7	7.5	5.7	55	48	7	45	36	9
1963.....	17.1	9.4	7.7	23.7	2.9	10.8	9.1	55	41	14	45	34	11
1964.....	18.9	10.6	8.3	25.9	3.0	10.5	8.9	56	37	19	43	34	9
1965.....	20.0	10.8	9.2	26.9	2.9	6.3	4.0	54	33	21	46	35	11
1966.....	21.8	11.4	10.5	28.4	2.9	9.0	5.7	52	33	19	48	36	12
1967.....	23.1	11.3	11.8	29.2	2.9	6.0	2.8	49	35	14	51	38	13
1968.....	24.6	11.8	12.8	29.8	2.8	6.3	2.0	48	35	13	52	39	13
1969.....	25.6	11.5	14.1	29.6	2.7	4.2	- .8	45	34	11	55	42	13
1970.....	26.1	11.2	14.9	28.6	2.6	2.0	-3.3	43	33	10	57	43	14
1971.....	26.7	10.9	15.7	27.8	2.5	2.1	-2.8	41	32	9	59	44	15
1972.....	28.5	11.7	16.8	28.5	2.4	6.8	2.4	41	33	8	59	44	15
1973.....	30.7	11.7	19.0	29.2	2.3	7.9	2.4	38	31	7	62	47	15
1974.....	32.9	11.5	21.4	28.8	2.3	7.0	-1.2	35	28	7	65	49	16
1975.....	35.2	12.0	23.2	28.2	2.3	7.1	-2.1	34	27	7	66	49	17
1976.....	39.0	13.3	25.7	29.6	2.3	10.8	4.8	34	26	8	66	49	17
1977.....	43.0	14.2	28.8	30.7	2.2	10.2	3.8	33	26	7	67	49	18
1978.....	48.3	15.0	33.3	32.2	2.2	12.4	4.9	31	24	7	69	50	19
1979.....	55.0	16.5	38.5	33.8	2.3	13.9	4.9	30	23	7	70	51	19
1980.....	62.2	18.7	43.5	35.1	2.4	13.1	3.9	30	23	7	70	52	18
1981.....	69.8	21.6	48.2	36.1	2.4	12.2	2.7	31	24	7	69	53	16
1982, est.....	77.3	24.7	52.6	37.0	2.4	10.7	2.6	32	25	7	68	53	15
Annual average:													
1960-1969.....	19.4	10.1	9.4	25.6	2.8	7.8	5.0	53	40	13	48	36	11
1970-1979.....	36.5	12.8	23.8	29.7	2.3	8.0	1.4	56	28	8	64	48	16
1980-1982.....	69.8	21.7	48.1	36.1	2.4	12.0	3.1	31	24	7	69	53	16

<sup>1</sup>Includes revisions not shown in detail. <sup>2</sup>GNP—Gross national product. <sup>3</sup>Change from prior year shown; 1955 change from 1954.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual, and unpublished data.

No. 1011. RESEARCH AND DEVELOPMENT—SOURCE OF FUNDS AND PERFORMANCE SECTOR: 1960 TO 1982

[In millions of dollars. See heading, table 1012]

YEAR	SOURCE OF FUNDS					PERFORMANCE SECTION					
	Total	Federal Govt.	Industry	Univ. colleges	Other <sup>1</sup>	Total	Federal Govt.	Industry	Univ. colleges	Associated FFRDC's	Other <sup>1</sup>
<b>Current dollars:</b>											
1960.....	13,523	8,738	4,516	149	120	13,523	1,726	10,509	646	360	282
1965.....	20,044	13,012	6,548	267	217	20,044	3,093	14,185	1,474	629	663
1970.....	26,134	14,892	10,444	461	337	26,134	4,079	18,067	2,335	737	918
1975.....	35,213	18,109	15,820	749	535	35,213	5,354	24,187	3,409	887	1,276
1980.....	62,222	29,576	30,400	1,313	933	62,222	7,929	43,879	6,049	2,235	2,130
1981.....	69,790	32,910	34,385	1,490	1,005	69,790	9,000	49,600	6,800	2,350	2,240
1982, est.....	77,285	36,125	38,500	1,600	1,060	77,285	10,000	55,700	6,950	2,350	2,285
<b>Constant (1972) dollars:</b>											
1960.....	19,635	12,673	6,573	214	175	19,635	2,481	15,297	928	517	412
1965.....	26,896	17,443	8,806	356	291	26,896	4,124	19,077	1,965	838	892
1970.....	28,613	16,916	11,421	508	370	28,613	4,481	19,756	2,564	809	1,031
1975.....	29,204	14,561	12,603	608	432	29,204	4,350	19,263	2,771	802	1,018
1980.....	35,114	16,705	17,139	743	527	35,114	4,488	24,740	3,423	1,265	1,200
1981.....	36,052	17,004	17,760	770	518	36,052	4,552	25,619	3,411	1,215	1,155
1982, est.....	36,974	17,276	18,428	764	506	36,974	4,776	26,663	3,319	1,122	1,092

<sup>1</sup>Nonprofit institutions.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

**NO. 1012. RESEARCH AND DEVELOPMENT (R AND D) FUNDS, BY PERFORMANCE SECTOR AND SOURCE: 1965 TO 1982**

[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	1965	1970	1975	1976	1977	1978	1979	1980	1981	1982, est.
<b>Total R &amp; D <sup>1</sup></b> .....	<b>20,044</b>	<b>26,134</b>	<b>35,213</b>	<b>39,016</b>	<b>42,982</b>	<b>48,295</b>	<b>54,994</b>	<b>62,222</b>	<b>69,790</b>	<b>77,285</b>
In 1972 dollars.....	26,896	28,613	28,204	29,559	30,695	32,192	33,782	35,114	36,052	36,974
Percent Federal as source.....	64.9	57.0	51.4	51.0	50.5	49.7	49.0	47.5	47.2	46.7
Percent of gross national product.....	2.9	2.6	2.3	2.3	2.2	2.2	2.3	2.4	2.4	*2.4
<b>Federal Government</b> .....	<b>3,093</b>	<b>4,079</b>	<b>5,354</b>	<b>5,769</b>	<b>6,105</b>	<b>6,920</b>	<b>7,564</b>	<b>7,929</b>	<b>9,000</b>	<b>10,000</b>
<b>Industry</b> .....	<b>14,185</b>	<b>18,067</b>	<b>24,187</b>	<b>26,997</b>	<b>29,928</b>	<b>33,365</b>	<b>38,147</b>	<b>43,879</b>	<b>49,600</b>	<b>55,700</b>
Federal funds.....	7,740	7,779	8,605	9,561	10,521	11,209	12,492	13,939	15,750	17,800
Industry funds.....	6,445	10,288	15,582	17,436	19,407	22,156	25,655	29,940	33,850	37,900
<b>Universities and colleges</b> .....	<b>1,474</b>	<b>2,335</b>	<b>3,409</b>	<b>3,727</b>	<b>4,070</b>	<b>4,621</b>	<b>5,354</b>	<b>6,049</b>	<b>6,600</b>	<b>6,950</b>
Federal funds.....	1,073	1,648	2,288	2,512	2,730	3,057	3,594	4,093	4,400	4,600
Industry funds.....	41	61	113	123	139	170	193	235	260	275
University and college funds <sup>3</sup> .....	267	461	749	808	887	1,035	1,194	1,313	1,490	1,600
Other nonprofit institutions funds <sup>3</sup> .....	93	165	259	284	314	359	373	408	450	475
<b>Universities and colleges, associated federally funded R &amp; D centers</b> .....	<b>629</b>	<b>737</b>	<b>987</b>	<b>1,147</b>	<b>1,384</b>	<b>1,717</b>	<b>1,935</b>	<b>2,235</b>	<b>2,350</b>	<b>2,350</b>
<b>Other nonprofit institutions</b> .....	<b>663</b>	<b>916</b>	<b>1,276</b>	<b>1,376</b>	<b>1,495</b>	<b>1,672</b>	<b>1,994</b>	<b>2,130</b>	<b>2,240</b>	<b>2,285</b>
Federal funds.....	477	649	875	925	987	1,100	1,350	1,380	1,410	1,375
Industry funds.....	62	95	125	135	150	165	180	225	275	325
Other <sup>4</sup> .....	124	172	276	316	358	407	464	525	555	585
<b>Total research, basic and applied</b> .....	<b>6,894</b>	<b>9,269</b>	<b>12,471</b>	<b>14,021</b>	<b>15,305</b>	<b>17,232</b>	<b>19,615</b>	<b>22,011</b>	<b>24,020</b>	<b>25,885</b>
In 1972 dollars.....	9,234	10,160	10,036	10,631	10,916	11,488	12,048	12,431	12,408	12,377
Percent Federal as source.....	62.9	60.1	56.8	56.8	56.2	55.1	55.6	54.5	53.0	52.0
<b>Federal Government</b> .....	<b>1,354</b>	<b>1,904</b>	<b>2,464</b>	<b>2,879</b>	<b>2,958</b>	<b>3,221</b>	<b>3,482</b>	<b>3,666</b>	<b>3,875</b>	<b>4,200</b>
<b>Industry</b> .....	<b>3,280</b>	<b>4,029</b>	<b>5,300</b>	<b>5,931</b>	<b>6,587</b>	<b>7,335</b>	<b>8,375</b>	<b>9,685</b>	<b>10,800</b>	<b>11,950</b>
Federal funds.....	1,224	1,207	1,287	1,385	1,541	1,680	1,820	2,090	2,225	2,450
Industry funds.....	2,026	2,822	4,013	4,546	5,026	5,655	6,555	7,595	8,575	9,500
<b>Universities and colleges</b> .....	<b>1,417</b>	<b>2,223</b>	<b>3,261</b>	<b>3,563</b>	<b>3,870</b>	<b>4,385</b>	<b>5,070</b>	<b>5,706</b>	<b>6,225</b>	<b>6,545</b>
Federal funds.....	1,036	1,564	2,210	2,425	2,618	2,935	3,434	3,885	4,175	4,350
Industry funds.....	39	56	106	114	125	155	177	215	235	250
University and college funds <sup>3</sup> .....	252	448	702	756	829	957	1,109	1,223	1,390	1,495
Other nonprofit institutions funds <sup>3</sup> .....	90	155	243	268	298	338	350	383	425	450
<b>Universities and colleges, associated federally funded R &amp; D centers</b> .....	<b>412</b>	<b>485</b>	<b>573</b>	<b>686</b>	<b>867</b>	<b>1,116</b>	<b>1,298</b>	<b>1,474</b>	<b>1,550</b>	<b>1,575</b>
<b>Other nonprofit institutions</b> .....	<b>461</b>	<b>628</b>	<b>873</b>	<b>962</b>	<b>1,043</b>	<b>1,175</b>	<b>1,390</b>	<b>1,480</b>	<b>1,570</b>	<b>1,615</b>
Federal funds.....	307	409	545	595	635	720	880	885	910	890
Industry funds.....	50	77	103	112	123	135	145	180	220	260
Other <sup>4</sup> .....	104	142	225	255	285	320	365	415	440	465
<b>Total basic research</b> .....	<b>2,555</b>	<b>3,549</b>	<b>4,619</b>	<b>4,987</b>	<b>5,550</b>	<b>6,399</b>	<b>7,260</b>	<b>8,071</b>	<b>8,805</b>	<b>9,330</b>
In 1972 dollars.....	3,416	3,895	3,735	3,784	3,952	4,266	4,460	4,562	4,549	4,459
Percent of total R & D.....	12.7	13.6	13.1	12.8	12.9	13.2	13.2	13.0	12.6	12.1
Percent Federal as source.....	70.8	70.1	68.2	69.1	69.1	69.6	69.6	68.7	67.9	66.7
<b>Federal Government</b> .....	<b>364</b>	<b>577</b>	<b>745</b>	<b>797</b>	<b>925</b>	<b>1,040</b>	<b>1,100</b>	<b>1,193</b>	<b>1,300</b>	<b>1,425</b>
<b>Industry</b> .....	<b>592</b>	<b>802</b>	<b>730</b>	<b>819</b>	<b>911</b>	<b>1,035</b>	<b>1,155</b>	<b>1,325</b>	<b>1,475</b>	<b>1,650</b>
Federal funds.....	186	159	157	185	210	250	265	300	325	350
Industry funds.....	406	444	573	634	701	785	890	1,025	1,150	1,300
<b>Universities and colleges</b> .....	<b>1,138</b>	<b>1,796</b>	<b>2,410</b>	<b>2,548</b>	<b>2,802</b>	<b>3,172</b>	<b>3,607</b>	<b>4,019</b>	<b>4,385</b>	<b>4,560</b>
Federal funds.....	879	1,296	1,694	1,841	2,009	2,262	2,571	2,850	3,075	3,150
Industry funds.....	26	40	72	71	79	99	113	135	150	160
University and college funds <sup>3</sup> .....	164	350	478	474	528	603	707	799	900	975
Other nonprofit institutions funds <sup>3</sup> .....	69	110	166	162	188	208	216	235	260	275
<b>Universities and colleges, associated federally funded R &amp; D centers</b> .....	<b>208</b>	<b>269</b>	<b>309</b>	<b>359</b>	<b>402</b>	<b>567</b>	<b>718</b>	<b>774</b>	<b>825</b>	<b>850</b>
<b>Other nonprofit institutions</b> .....	<b>253</b>	<b>305</b>	<b>425</b>	<b>464</b>	<b>510</b>	<b>585</b>	<b>680</b>	<b>760</b>	<b>820</b>	<b>845</b>
Federal funds.....	172	189	245	265	290	335	400	430	455	445
Industry funds.....	28	44	60	64	70	80	85	105	130	155
Other <sup>4</sup> .....	52	72	120	135	150	170	195	225	235	245
<b>Total development</b> .....	<b>13,150</b>	<b>16,865</b>	<b>22,742</b>	<b>24,995</b>	<b>27,677</b>	<b>31,063</b>	<b>35,379</b>	<b>40,211</b>	<b>45,770</b>	<b>51,400</b>
In 1972 dollars.....	17,662	18,453	18,168	18,928	19,779	20,704	21,734	22,663	23,643	24,597
Percent of total R & D.....	65.6	64.5	64.6	64.1	64.4	64.3	64.3	64.6	65.6	66.5
Percent Federal as source.....	66.0	55.3	48.5	47.8	47.4	46.1	45.3	43.7	44.1	44.1

<sup>1</sup>Basic research, applied research, and development. <sup>2</sup>Based on 2d qtr. GNP. <sup>3</sup>Includes State and local government funds received by these institutions and used for research and development. <sup>4</sup>Includes estimates for independent nonprofit hospitals and voluntary health agencies.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

**NO. 1013. FEDERAL FUNDING FOR RESEARCH AND DEVELOPMENT, BY BUDGET FUNCTION: 1973 TO 1982**

[In millions of dollars. For years ending June 30 except, beginning 1977 ending Sept. 30. Excludes R&D plant. For any given year, obligations differ from expenditures (see table 1015) because not all funds are expended during year obligated. Data for 1973-77 are shown in obligations, and for 1978-82 are shown in budget authority. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982, est.
<b>Total</b> .....	<b>16,800</b>	<b>17,410</b>	<b>19,039</b>	<b>20,780</b>	<b>23,983</b>	<b>26,516</b>	<b>29,041</b>	<b>31,623</b>	<b>35,547</b>	<b>38,701</b>
National defense.....	9,002	9,016	9,679	10,430	11,864	12,899	13,791	14,946	18,413	22,025
Space research and technology.....	2,824	2,702	2,764	3,130	3,365	3,481	3,969	4,587	4,924	5,390
Health.....	1,585	2,069	2,170	2,351	2,629	2,968	3,401	3,694	3,871	3,864
Energy.....	630	759	1,363	1,649	2,562	3,134	3,461	3,603	3,501	2,889
General science.....	658	749	813	858	974	1,050	1,119	1,233	1,340	1,387
Natural resources and environment.....	554	516	624	683	753	904	1,010	999	1,061	952
Transportation.....	572	693	635	631	708	768	798	888	870	746
Agriculture.....	308	313	342	393	457	501	552	585	659	684
Education, training, employment, and social services.....	290	236	239	255	230	345	354	468	298	200
International affairs.....	28	24	29	42	66	57	117	127	160	164
Veterans benefits and services.....	74	85	95	98	107	111	123	126	143	131
Commerce and housing credit.....	50	51	65	69	71	77	93	102	106	107
Community and regional development.....	78	82	93	109	101	92	127	119	104	63
Income security.....	106	71	72	48	55	67	57	77	43	35
Administration of justice.....	33	35	44	35	30	44	47	45	34	26
General government.....	7	9	12	12	13	20	23	22	22	23

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

**NO. 1014. FEDERAL OBLIGATIONS FOR RESEARCH, BY FIELD OF SCIENCE: 1973 TO 1982**

[In millions of dollars. For years ending June 30 except, beginning 1977, ending Sept. 30. See headnote table 1013]

ITEM	1973	1974	1975	1976	1977	1978	1979	1980	1981, est.	1982, est.
<b>Research, total</b> .....	<b>5,581</b>	<b>6,175</b>	<b>6,730</b>	<b>7,619</b>	<b>8,514</b>	<b>9,607</b>	<b>10,535</b>	<b>11,597</b>	<b>12,359</b>	<b>13,534</b>
Basic.....	2,241	2,398	2,600	2,779	3,289	3,711	4,206	4,688	5,037	5,551
Applied.....	3,340	3,777	4,129	4,841	5,245	5,896	6,329	6,909	7,323	7,983
Life sciences.....	1,931	2,265	2,455	2,650	3,008	3,427	3,848	4,192	4,436	4,714
Engineering.....	1,371	1,564	1,718	2,069	2,113	2,405	2,572	2,830	3,027	3,376
Physical sciences.....	982	1,016	1,097	1,259	1,530	1,846	1,793	2,001	2,234	2,644
Environmental sciences.....	581	636	727	789	806	1,025	1,101	1,281	1,276	1,377
Social sciences.....	299	292	302	392	426	489	527	524	517	485
Mathematics and computer sciences.....	115	114	125	158	196	216	210	241	284	322
Psychology.....	110	133	139	144	158	193	197	199	206	228
Other sciences.....	194	154	167	179	179	206	287	350	379	387

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

**NO. 1015. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: 1972 TO 1982**

[In millions of dollars except percent. For years ending June 30 except, beginning 1977, ending Sept. 30. See headnote, table 1013. See *Historical Statistics, Colonial Times to 1970*, series W 142, for total R & D expenditures]

AGENCY	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981, est.	1982, est.
<b>Total</b> .....	<b>16,496</b>	<b>16,800</b>	<b>17,410</b>	<b>19,039</b>	<b>20,780</b>	<b>23,983</b>	<b>26,388</b>	<b>28,978</b>	<b>31,680</b>	<b>35,360</b>	<b>40,602</b>
Departments:											
Agriculture.....	350	367	379	420	462	547	621	663	688	770	860
Commerce.....	187	191	181	215	229	245	284	309	343	337	288
Defense.....	8,318	8,404	8,420	9,012	9,655	10,963	11,554	12,506	13,981	18,864	21,523
Percent of total.....	50.4	50.0	48.4	47.3	46.5	45.7	43.8	43.2	44.1	47.7	53.0
Energy <sup>1</sup> .....	1,298	1,363	1,489	2,047	2,464	3,536	4,245	4,639	4,754	4,927	4,690
RHS <sup>2</sup> .....	1,751	1,838	2,290	2,397	2,584	2,823	3,207	3,505	3,780	3,905	4,169
Interior.....	219	244	192	303	333	315	359	406	411	423	398
Transportation.....	311	311	370	312	295	355	408	370	361	399	404
Agencies:											
EPA <sup>3</sup> .....	122	181	169	258	259	295	385	410	345	363	303
NASA <sup>4</sup> .....	3,157	3,061	3,002	3,064	3,447	3,703	3,875	4,411	5,084	5,408	6,017
NSF <sup>5</sup> .....	455	480	556	595	609	697	749	808	882	937	1,000
Other depts. and agencies.....	328	362	361	416	443	505	701	951	1,052	1,027	950

<sup>1</sup>Prior to 1974, Atomic Energy Commission; 1974-1976 Energy Research and Development Administration. <sup>2</sup>Health and Human Services beginning 1979; prior to then, Health, Education, and Welfare. <sup>3</sup>Environmental Protection Agency. <sup>4</sup>National Aeronautics and Space Administration. <sup>5</sup>National Science Foundation.

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

**No. 1016. FUNDS FOR PERFORMANCE OF INDUSTRIAL RESEARCH AND DEVELOPMENT, BY INDUSTRY, 1965 TO 1980, AND BY SOURCE OF FUNDS, 1980**

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

INDUSTRY	1965	1970	1975	1977	1978	1979	1980		
							Total	Federal Govt.	Private Industry
<b>Total</b> <sup>1</sup> .....	<b>14,185</b>	<b>18,067</b>	<b>24,187</b>	<b>29,928</b>	<b>33,365</b>	<b>38,147</b>	<b>43,879</b>	<b>13,939</b>	<b>29,940</b>
Aircraft and missiles.....	5,140	5,219	5,713	7,104	7,690	8,290	9,626	6,896	2,730
Electrical equipment and communication.....	3,200	4,220	5,105	5,937	6,612	4,927	9,137	3,723	5,414
Machinery.....	1,065	1,729	3,196	3,967	4,480	5,131	6,076	855	5,221
Motor vehicles, transportation equipment.....	1,230	1,591	2,430	3,444	3,969	4,575	4,998	(NA)	(NA)
Chemicals and allied products.....	1,356	1,773	2,727	3,256	3,584	4,033	4,608	407	4,201
Professional and scientific instruments.....	403	744	1,173	1,487	1,758	2,054	2,270	131	2,139
Petroleum refining and extraction.....	397	515	693	918	1,060	1,275	1,565	151	1,414
Primary metals.....	213	275	443	534	549	613	693	38	655
Rubber products.....	162	276	467	491	488	571	646	(NA)	(NA)
Fabricated metal products.....	145	207	324	394	396	479	588	53	535
Food and kindred products.....	157	230	335	395	429	459	517	(NA)	(NA)
Paper and allied products.....	94	178	249	336	391	454	508	(NA)	(NA)
Stone, clay, and glass products.....	112	167	293	287	321	352	401	(NA)	(NA)

NA Not available. <sup>1</sup>Includes industries not available separately. <sup>2</sup>Excludes transportation equipment.  
Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

**No. 1017. COMPANIES PERFORMING RESEARCH AND DEVELOPMENT—SELECTED DATA, BY INDUSTRY GROUP: 1970 TO 1980**

Industry code <sup>1</sup>	INDUSTRY GROUP	R AND D FUNDS (mil. dol.)			RATIO OF NET SALES TO R AND D <sup>2</sup>			R AND D SCIENTISTS/ENGINEERS <sup>3</sup> (1,000)		
		1970	1975	1980	1970	1975	1980	1970	1975	1980
(x)	<b>Total</b> <sup>4</sup> .....	<b>18,067</b>	<b>24,187</b>	<b>43,879</b>	<b>3.7</b>	<b>3.1</b>	<b>3.1</b>	<b>384.2</b>	<b>363.3</b>	<b>446.6</b>
20	Food and kindred products.....	230	335	517	.4	.4	.4	6.3	6.8	7.2
26	Paper and allied products.....	178	249	508	.9	.9	1.1	5.0	5.0	7.5
28	Chemicals and allied products.....	1,773	2,727	4,608	3.9	3.7	3.5	40.1	45.2	50.0
29	Petroleum refining and extraction.....	515	693	1,565	1.0	.7	.6	9.9	8.4	11.0
30	Rubber products.....	276	467	646	2.3	2.5	2.2	7.4	8.4	(NA)
32	Stone, clay, and glass products.....	167	233	401	1.8	1.2	1.3	4.6	4.5	5.4
33	Primary metals.....	275	443	693	.8	.8	.6	6.5	6.3	8.8
34	Fabricated metal products and ordnance.....	207	324	588	1.2	1.2	1.3	5.9	7.4	8.9
35	Machinery.....	1,729	3,196	6,076	4.0	4.8	5.6	42.3	52.8	63.8
36	Electrical equipment and communication.....	4,220	5,105	9,137	7.3	6.5	6.5	100.6	82.6	97.4
37	Transportation.....	6,810	8,143	14,624	8.8	6.8	(NA)	117.7	95.4	122.7
38	Professional and scientific instruments.....	744	1,173	2,270	5.7	5.9	6.0	15.0	17.9	27.3

NA Not available. X Not applicable. <sup>1</sup>Standard Industrial Classification Code; see text, p. 754. <sup>2</sup>Excludes nonmanufacturing industries. <sup>3</sup>As of January. <sup>4</sup>Includes breakdown not shown separately.  
Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

**No. 1018. FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES: 1965 TO 1980**

[In millions of dollars, except percent. For years ending June 30 except, beginning 1977, ending Sept. 30. Minus sign (-) denotes decrease]

ITEM	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total Federal obligations</b> .....	<b>2,305</b>	<b>3,237</b>	<b>4,145</b>	<b>3,839</b>	<b>4,480</b>	<b>4,547</b>	<b>5,403</b>	<b>6,490</b>	<b>7,472</b>	<b>7,604</b>	<b>8,320</b>
Annual percent change <sup>1</sup> .....	41.9	-6.5	18.5	-7.4	16.7	1.5	18.8	20.1	15.1	1.8	9.4
Academic science/engineering obligations.....	1,816	2,188	2,599	2,484	2,737	2,806	2,960	3,351	3,960	4,473	4,825
Percent of total.....	78.8	67.6	62.7	64.2	61.1	61.7	54.8	51.6	53.0	58.8	58.0
Research and development.....	1,095	1,447	1,853	1,871	2,095	2,239	2,423	2,789	3,364	3,847	4,155
Research and development plant.....	126	45	37	43	29	45	24	36	34	32	38
Other science/engineering activities.....	595	696	709	550	623	522	513	526	661	594	632
Nonscience activities.....	489	1,049	1,546	1,375	1,743	1,741	2,443	3,138	3,512	3,131	3,495

<sup>1</sup>For 1965, change from 1964; for 1970, change from 1969, for 1972, change from 1971.

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

NO. 1019. NOBEL PRIZE LAUREATES IN CHEMISTRY, PHYSICS, AND PHYSIOLOGY/MEDICINE—  
SELECTED COUNTRIES: 1901 TO 1981

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

COUNTRY	1901-1981, total	1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1981	1901-1981		
								Physics	Chemistry	Physiology/Medicine
Total	350	52	41	49	74	92	42	120	98	132
United States	129	3	3	14	36	42	29	47	25	57
United Kingdom	64	7	8	11	14	20	4	21	23	20
Germany, Fed. Rep. of <sup>1</sup>	51	15	12	11	4	8	1	14	25	12
France	21	10	3	2	—	5	1	8	6	7
Soviet Union	10	2	—	—	4	3	1	7	1	2
Other countries	75	15	15	11	14	14	6	23	18	34

- Represents zero. <sup>1</sup> Includes East Germany before 1946.

Source: U.S. National Science Foundation, *Science Indicators, 1980*; and unpublished data.

NO. 1020. NATIONAL RESEARCH AND DEVELOPMENT EXPENDITURES AS A PERCENT OF GROSS  
NATIONAL PRODUCT, BY COUNTRY: 1965 TO 1981

YEAR	United States	France	Germany, Fed. Rep.	Japan	United Kingdom	Soviet Union	YEAR	United States	France	Germany, Fed. Rep.	Japan	United Kingdom	Soviet Union
1965	2.90	2.01	1.73	1.52	(NA)	2.85	1974	2.29	1.79	2.26	1.97	(NA)	3.64
1966	2.89	2.06	1.81	1.46	2.31	2.88	1975	2.27	1.80	2.38	1.96	2.05	3.69
1967	2.89	2.13	1.97	1.52	2.29	2.91	1976	2.27	1.77	2.29	1.85	(NA)	3.55
1968	2.82	2.08	1.97	1.60	2.25	(NA)	1977	2.24	1.76	2.31	1.93	(NA)	3.46
1969	2.72	1.94	2.05	1.64	2.22	3.03	1978	2.24	1.76	2.31	1.96	(NA)	3.47
1970	2.63	1.91	2.18	1.81	(NA)	3.23	1979	2.28	(NA)	2.34	2.09	(NA)	3.44
1971	2.48	1.90	2.38	1.85	(NA)	3.29	1980	2.37	1.84	2.32	2.23	(NA)	3.47
1972	2.40	1.86	2.33	1.86	2.05	3.58	1981	2.39	(NA)	(NA)	(NA)	(NA)	(NA)
1973	2.32	1.76	2.22	1.90	(NA)	3.66							

NA Not available.

Source: U.S. National Science Foundation, *Science Indicators, 1980*; and unpublished data.

NO. 1021. RESEARCH AND DEVELOPMENT EXPENDITURES IN SCIENCE AND ENGINEERING AT  
UNIVERSITIES AND COLLEGES: 1970 TO 1980

[In millions of dollars. Estimates for nonrespondents account for less than 7 percent of the total]

CHARACTERISTIC	1970	1975	1979	1980	CHARACTERISTIC	1970	1975	1979	1980
Total	2,335	3,409	5,354	6,049	Field:				
In 1972 dollars <sup>1</sup>	2,564	2,769	3,289	3,423	Life sciences	1,194	1,901	2,828	3,211
Basic research	1,796	2,409	3,607	4,019	Engineering	319	381	768	863
Applied research and develop.	539	999	1,747	2,031	Physical sciences	307	350	603	680
Source of funds:					Environmental sciences	125	255	451	506
All Governments	1,867	2,620	4,063	4,585	Social sciences and other	253	356	428	487
Institutions' own funds	243	417	725	821	Mathematics and computer sciences	72	85	176	192
Industry	61	113	193	236	Psychology	59	80	100	111
Other	185	259	373	408					

<sup>1</sup> Based on GNP implicit price deflator, see text, p. 415.

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

NO. 1022. SCIENTISTS AND ENGINEERS EMPLOYED IN RESEARCH AND DEVELOPMENT: 1961 TO 1982

[In thousands of full-time equivalent employees. Yearly averages for industry sector only. Excludes those employed by State and local government agencies, except as noted. DOD=Dept. of Defense]

SECTOR	1961	1965	1970	1975	1977	1978	1979	1980	1981	1982 <sup>1</sup>	
Total		425.7	494.5	546.6	532.7	570.3	595.3	621.0	647.2	673.0	698.0
Industry (excl. social scientists) <sup>2</sup>	312.0	348.4	375.6	383.8	393.2	413.4	434.9	458.4	482.0	505.0	
Universities and colleges, total	42.4	53.4	68.5	69.8	74.4	76.5	77.8	78.1	81.1	83.0	
Scientists and engineers	33.6	40.4	50.3	51.2	54.4	55.9	56.1	56.4	57.2	58.1	
Graduate students	8.8	13.0	18.2	18.6	20.0	20.6	21.7	22.7	23.9	24.9	
Federal Government (incl. DOD)	51.1	61.8	69.8	63.4	64.7	66.3	66.7	67.0	67.0	68.0	
University-associated federally funded R & D centers	9.1	11.1	11.5	12.7	14.0	14.1	14.1	15.2	15.4	15.9	
Other nonprofit institutions <sup>2,3</sup>	11.1	19.9	21.2	23.0	24.0	25.0	27.5	27.5	27.5	26.1	

<sup>1</sup> Estimated. <sup>2</sup> Includes professional R & D personnel employed at FFRDC's administered by industry and other nonprofit institutions. <sup>3</sup> Includes estimate for R&D scientists and engineers employed in State-affiliated institutions.

Source: U.S. National Science Foundation, *National Patterns of Science and Technology Resources*, annual.

**NO. 1023. SCIENTISTS AND ENGINEERS, BY FIELD, EMPLOYMENT STATUS, AND SEX: 1976 TO 1980**

[In thousands, except percent. Represents the total science and engineering population in the United States]

FIELD	1976			1978			1980			
	Total		In labor force	Total		In labor force	Total		In labor force	Out-side labor force <sup>1</sup>
	Number	Per-cent female		Number	Per-cent female		Number	Per-cent female		
<b>Total, all fields.....</b>	<b>2,706</b>	<b>9.2</b>	<b>2,452</b>	<b>2,741</b>	<b>9.7</b>	<b>2,508</b>	<b>2,964</b>	<b>11.7</b>	<b>2,720</b>	<b>244</b>
Engineers, total .....	1,375	.6	1,268	1,396	1.6	1,285	1,477	2.4	1,369	108
Scientists, total .....	1,330	18.2	1,184	1,345	18.2	1,223	1,487	21.0	1,351	136
Life scientists .....	314	19.4	286	328	22.0	296	412	22.2	375	37
Physical scientists .....	281	9.4	237	255	8.9	217	260	11.5	217	43
Computer scientists .....	180	20.2	173	238	18.0	235	299	21.5	296	4
Social scientists .....	237	24.5	211	205	20.6	189	192	26.0	174	17
Psychologists .....	123	25.0	106	132	27.3	123	130	36.3	119	10
Mathematical scientists.....	110	20.8	92	108	18.4	90	98	18.7	82	16
Environmental scientists.....	86	7.5	77	81	10.6	74	96	11.8	88	9

<sup>1</sup>Includes those not employed or not seeking employment, such as retirees.  
Source: National Science Foundation, *U.S. Scientists and Engineers*, annual.

**NO. 1024. CHARACTERISTICS OF SCIENTISTS AND ENGINEERS: 1980**

[Percent distribution, except as indicated. Represents the total science and engineering population in the United States]

CHARACTERISTIC	Total	Engi-neers	Physical sci-en-tists	Math-ematical	Computer special-ists	Environ-mental scientists	Life sci-en-tists	Psy-chol-ogists	Social sci-en-tists
<b>Total (1,000) .....</b>	<b>2,964</b>	<b>1,477</b>	<b>260</b>	<b>98</b>	<b>299</b>	<b>96</b>	<b>412</b>	<b>130</b>	<b>192</b>
Male .....	89.3	97.6	88.5	81.3	78.5	88.2	77.8	63.7	74.0
Female .....	11.7	2.4	11.5	18.7	21.5	11.8	22.2	36.3	26.0
Highest degree:									
Doctorate .....	11.8	3.7	26.1	17.3	2.3	16.5	22.1	32.8	28.7
Master's .....	28.0	19.7	23.7	61.4	26.4	38.4	36.5	57.1	40.2
Bachelor's .....	58.1	72.6	50.1	21.2	71.1	45.0	41.1	10.0	31.1
Other .....	2.1	4.0	.1	.1	.1	.1	.2	(b)	.1
Type of employer:									
Business, industry.....	62.1	78.2	54.5	39.1	74.9	50.3	31.2	24.8	31.1
Educational institutions.....	15.2	4.0	27.1	39.4	7.5	19.0	32.2	44.5	32.9
Nonprofit organizations.....	3.2	1.3	3.3	3.3	4.3	2.1	5.8	9.4	6.9
Federal Government.....	8.3	6.9	7.9	10.9	6.0	16.9	14.2	3.1	9.8
Military.....	.9	1.0	.6	.9	1.2	1.6	.5	1.6	.3
Other government.....	7.9	6.7	4.6	5.3	4.4	9.2	11.4	11.8	17.7
Other .....	2.3	1.9	2.0	1.1	1.8	1.0	4.6	4.7	1.5

<sup>B</sup> Base figure too small to meet statistical standards for reliability of derived figure.  
Source: U.S. National Science Foundation, *U.S. Scientists and Engineers: 1980* (NSF 82-314).

**NO. 1025. RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS—AVERAGE FULL-TIME-EQUIVALENT EMPLOYMENT AND COST, BY INDUSTRY: 1970 TO 1980**

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

INDUSTRY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Average FTE of scientists and engineers.....</b>	<b>375.6</b>	<b>359.7</b>	<b>355.6</b>	<b>358.1</b>	<b>356.9</b>	<b>363.8</b>	<b>372.2</b>	<b>393.2</b>	<b>413.6</b>	<b>434.9</b>	<b>458.4</b>
Chemicals <sup>1</sup> .....	41.4	41.8	41.3	41.4	42.4	44.8	45.4	47.2	48.5	49.6	51.4
Machinery.....	42.5	40.7	41.9	43.7	44.0	54.2	56.1	56.8	59.8	62.7	64.5
Electrical equipment <sup>2</sup> .....	96.2	89.0	90.5	93.8	92.4	81.4	82.2	84.9	86.7	92.6	101.7
Motor vehicle <sup>3</sup> .....	26.8	28.5	29.4	28.9	27.6	27.5	27.9	31.4	33.8	33.7	32.4
Aircraft and missiles.....	85.2	75.1	72.1	70.6	68.8	67.2	68.2	77.0	84.2	86.7	91.5
Other industries.....	83.5	84.6	80.4	79.7	81.7	88.7	92.2	95.9	100.6	109.6	116.9
<b>Cost per scientist or engineer (dol.).....</b>	<b>48.1</b>	<b>50.4</b>	<b>54.8</b>	<b>58.4</b>	<b>62.7</b>	<b>66.5</b>	<b>71.3</b>	<b>76.1</b>	<b>78.8</b>	<b>87.7</b>	<b>95.7</b>
Chemicals <sup>1</sup> .....	42.8	43.3	46.3	50.3	55.7	60.9	66.5	69.1	73.9	81.4	89.6
Machinery.....	40.7	43.5	46.9	49.1	56.7	58.9	60.1	69.9	74.9	81.9	94.2
Electrical equipment <sup>2</sup> .....	43.9	49.5	54.7	56.9	59.3	62.7	68.5	69.9	76.3	85.7	89.9
Motor vehicle <sup>3</sup> .....	59.6	61.4	67.5	84.4	87.8	88.4	100.1	91.5	117.4	131.4	149.5
Aircraft and missiles.....	61.3	65.4	69.6	71.5	77.2	85.1	89.6	92.3	91.3	95.7	105.3
Other industries.....	42.0	41.3	45.1	48.6	52.5	55.3	50.8	63.2	69.9	(NA)	(NA)

NA Not available. <sup>1</sup>Includes allied products. <sup>2</sup>Includes communication. <sup>3</sup>And other transport equipment  
Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

**NO. 1026. EMPLOYMENT OF SCIENTISTS, ENGINEERS, AND TECHNICIANS IN PRIVATE INDUSTRY, BY OCCUPATION AND MAJOR INDUSTRIAL SECTOR: 1980**

[In thousands. As of August]

ITEM	Total	Mining <sup>1</sup>	Construction	Manufacturing	Transportation	Communications	Public utilities	Trade	Finance, insurance, real estate	Services
<b>Scientists and engineers</b> .....	<b>1,281.0</b>	<b>50.2</b>	<b>54.1</b>	<b>694.7</b>	<b>7.9</b>	<b>42.2</b>	<b>37.7</b>	<b>71.7</b>	<b>38.7</b>	<b>283.8</b>
Scientists.....	320.4	23.3	1.4	123.3	2.7	4.5	5.3	28.0	32.1	99.9
Physical scientists.....	107.1	19.5	(Z)	61.8	.4	(Z)	1.5	1.1	(Z)	22.7
Life scientists.....	23.3	(Z)	(Z)	13.3	(Z)	(Z)	(Z)	.5	(Z)	9.5
Mathematical scientists.....	29.6	.7	(Z)	8.8	.1	.4	(Z)	.7	(Z)	10.4
Social scientists.....	13.5	(Z)	(Z)	2.8	(Z)	.1	(Z)	.4	(Z)	8.7
Psychologists.....	2.8	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	2.8
Computer specialists.....	144.2	3.1	1.4	36.5	2.2	4.0	3.7	25.3	22.2	45.9
Engineers <sup>2</sup> .....	960.6	27.0	52.7	571.4	5.2	37.7	32.5	43.7	6.6	183.9
Civil engineers.....	100.0	1.1	19.6	4.8	(Z)	.8	2.4	16.7	(Z)	54.6
Electrical/electronics eng.....	286.5	.5	8.2	170.6	.6	26.7	15.5	18.1	(Z)	46.4
Mechanical engineers.....	173.7	1.2	13.9	113.6	.8	.7	5.4	2.0	(Z)	36.0
<b>Technicians</b> .....	<b>1,233.3</b>	<b>28.2</b>	<b>53.9</b>	<b>553.5</b>	<b>16.2</b>	<b>32.2</b>	<b>44.4</b>	<b>128.1</b>	<b>30.7</b>	<b>348.2</b>
Engineering technicians <sup>2</sup> .....	854.3	18.1	49.9	374.7	4.6	26.7	34.7	93.9	2.9	248.8
Drafters.....	282.1	6.7	24.8	111.9	2.0	4.8	7.0	5.5	1.7	119.5
Electrical/electronic tech.....	308.4	1.5	18.2	123.8	2.0	16.8	11.4	86.9	(Z)	47.8
Science technicians.....	99.9	3.6	(Z)	70.7	.4	(Z)	1.4	1.7	(Z)	22.2
Computer programmers.....	179.3	2.1	1.4	55.4	5.0	4.2	3.7	18.6	27.8	61.2
All other technicians.....	99.7	2.4	2.7	52.8	6.2	1.1	4.6	13.9	(Z)	16.0

Z Fewer than 50. <sup>1</sup>Includes oil and gas extraction. <sup>2</sup>Includes engineers and technicians not shown separately. Source: U.S. National Science Foundation and U.S. Bureau of Labor Statistics, unpublished data.

**NO. 1027. SCIENTISTS AND ENGINEERS—EMPLOYMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY FIELD: 1965 TO 1981**

[In thousands. As of January. Includes full-time and part-time personnel. Excludes graduate students who receive stipends for part-time services as scientists or engineers. R and D = research and development]

FIELD	1965	1975	1980	1981	FIELD	1965	1975	1980	1981
<b>Total</b> .....	<b>189.9</b>	<b>291.4</b>	<b>339.1</b>	<b>348.7</b>	Math. and computer scientists.....	13.7	26.5	36.0	38.9
Universities, colleges.....	178.9	278.9	324.1	333.4	Life scientists.....	75.8	113.5	133.6	137.2
Teaching staff.....	122.0	215.0	(NA)	(NA)	Agricultural.....	13.5	14.3	15.9	15.9
Engineers <sup>1</sup> .....	21.7	27.9	33.7	34.8	Biological.....	24.3	38.2	44.8	46.3
Civil.....	3.1	4.9	5.5	5.7	Medical.....	38.0	61.0	67.1	68.5
Electrical.....	5.5	6.8	8.2	8.6	Psychologists.....	9.4	21.6	23.3	23.3
Mechanical.....	4.1	5.3	6.1	6.3	Social scientists.....	32.9	48.7	54.1	55.1
Physical and environmental science <sup>1</sup> .....	25.5	38.7	43.4	44.1	Federally funded R & D centers.....	11.0	12.5	15.1	15.3
Chemists.....	10.7	16.1	17.6	18.1	Engineers.....	5.0	5.9	6.5	6.6
Earth scientists.....	4.0	6.0	6.6	6.6	Scientists.....	6.0	6.6	8.6	8.7
Physicists.....	9.1	12.3	13.0	12.9					

NA Not available. <sup>1</sup>Includes other breakdown not shown separately. Source: U.S. National Science Foundation, *Academic Science Scientists and Engineers*, annual.

**NO. 1028. PROFESSIONAL SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL IN THE FEDERAL GOVERNMENT, BY OCCUPATIONAL GROUP: 1970 TO 1980**

[In thousands, except percent. As of October]

OCCUPATIONAL GROUP	1970	1975	1977	1978	1979	1980	PERCENT FEMALE					
							1970	1975	1977	1978	1979	1980
<b>Total</b> .....	<b>206.2</b>	<b>221.9</b>	<b>229.2</b>	<b>236.7</b>	<b>174.7</b>	<b>178.0</b>	<b>16.4</b>	<b>19.7</b>	<b>20.8</b>	<b>21.5</b>	<b>6.4</b>	<b>7.3</b>
Scientific personnel.....	77.2	77.3	81.4	84.8	86.0	88.4	8.0	8.8	9.8	10.7	11.6	12.8
Physical sciences.....	29.8	27.1	27.1	27.5	27.6	27.6	6.4	6.6	7.3	7.9	8.4	9.5
Mathematics and statistics.....	8.6	10.0	10.6	11.2	11.4	11.6	17.4	15.9	16.7	17.6	18.5	19.9
Life sciences.....	26.9	26.4	28.3	29.3	29.5	30.5	4.1	5.1	6.1	6.6	7.5	8.7
Social sciences.....	6.6	8.0	9.1	9.4	10.3	10.5	16.2	17.6	19.9	21.8	22.2	23.3
Geography and cartography.....	3.3	2.9	3.3	3.6	4.1	4.9	8.5	7.9	8.2	9.8	11.9	14.8
Psychology.....	2.2	2.9	3.0	3.2	3.2	3.3	13.7	14.6	15.1	16.0	16.7	18.8
Engineering personnel.....	83.0	86.6	87.8	89.2	88.8	89.6	.5	.7	.9	1.1	1.3	1.9
Health professional personnel.....	46.0	58.0	59.9	62.8	(NA)	(NA)	59.2	62.7	65.1	65.0	(NA)	(NA)
Health officers.....	13.0	13.4	11.7	12.1	(NA)	(NA)	5.5	7.8	9.8	10.6	(NA)	(NA)

NA Not available. <sup>1</sup>Excludes health professional personnel. <sup>2</sup>Includes community planning. Source: U.S. National Science Foundation. Compiled from data supplied by the U.S. Office of Personnel Management.

**NO. 1029. GRADUATE SCIENCE AND ENGINEERING STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS, BY FIELD, ENROLLMENT STATUS, AND LEVEL OF STUDY: 1975 TO 1980**

(In thousands. As of fall. Includes outlying areas)

FIELD OF SCIENCE	TOTAL STUDENTS ENROLLED FULL TIME			TOTAL STUDENTS ENROLLED PART TIME			FULL-TIME STUDENTS, FIRST-YEAR			FULL-TIME STUDENTS, BEYOND FIRST-YEAR		
	1975	1979	1980	1975	1979	1980	1975	1979	1980	1975	1979	1980
<b>Total</b> .....	<b>210.3</b>	<b>223.4</b>	<b>230.6</b>	<b>83.3</b>	<b>97.1</b>	<b>103.1</b>	<b>79.2</b>	<b>73.0</b>	<b>77.4</b>	<b>131.2</b>	<b>150.4</b>	<b>153.2</b>
Engineering .....	37.1	39.8	42.5	27.5	29.0	29.8	16.5	14.8	16.0	20.7	25.1	26.5
Physical sciences .....	21.3	21.8	22.3	3.2	3.1	3.2	6.0	5.4	5.7	15.3	16.3	16.5
Environmental sciences .....	8.9	9.9	10.0	2.0	2.3	2.3	3.2	3.1	3.2	5.7	6.8	6.8
Mathematical/computer sciences .....	14.2	14.2	15.3	7.2	8.4	9.7	5.4	4.8	5.5	8.7	9.4	9.8
Life sciences .....	59.6	66.6	67.7	14.0	21.1	23.0	23.3	22.1	23.0	36.3	44.5	44.7
Psychology .....	19.7	20.7	21.5	7.2	7.2	7.8	5.7	5.5	5.7	13.9	15.2	15.8
Social sciences .....	49.5	50.4	51.3	22.3	26.0	27.3	19.0	17.5	18.3	30.5	33.0	33.1

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

**NO. 1030. DEGREES CONFERRED, BY RECIPIENTS' CHARACTERISTICS, 1970 TO 1981, AND BY SELECTED FIELDS, 1981**

CHARACTERISTIC	ALL FIELDS				Total <sup>1</sup>	1981				
	1970	1975	1979	1980		Physical sciences <sup>2</sup>	Engineering	Bio-logical sciences <sup>3</sup>	Psy-cho-logy	Social sciences <sup>4</sup>
Doctorate conferred .....	29,475	32,913	31,200	30,982	31,319	4,168	2,528	3,397	3,357	2,475
Percent with master's degree .....	78.6	81.3	81.2	80.9	80.6	59.3	89.4	50.7	81.4	84.6
<b>Percent distribution</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Male .....	86.5	78.1	71.4	69.7	68.5	88.0	96.1	71.0	56.2	74.5
Female .....	13.5	21.9	28.6	30.3	31.5	12.0	3.9	29.0	43.8	25.5
White <sup>5</sup> .....	(NA)	79.8	83.3	84.6	85.3	85.3	74.4	88.0	90.1	83.8
Black and other <sup>5</sup> .....	(NA)	12.1	10.9	10.5	10.6	9.0	21.9	7.5	7.3	10.7
Not reported <sup>5</sup> .....	(NA)	8.1	5.8	4.9	4.1	5.7	3.7	4.5	2.6	5.5
U.S. citizens .....	84.2	82.1	81.3	81.0	79.8	73.6	46.2	86.8	92.5	74.9
Foreign citizens .....	14.0	15.9	15.7	15.9	16.6	23.3	49.1	10.7	3.8	20.6
Citizenship unknown .....	1.6	2.0	3.0	3.1	3.6	3.1	4.7	2.6	3.7	4.5
Median age at award <sup>6</sup> (yr.) .....	30.7	31.5	31.9	32.2	32.4	29.1	30.5	29.5	31.4	32.5
Median total time, <sup>6</sup> baccalaureate to doctorate (yr.) .....	7.9	8.6	9.0	9.3	9.4	6.8	7.9	7.0	8.4	9.5
Registered time (yr.) .....	5.6	5.9	6.2	6.3	6.4	5.7	5.6	6.0	6.3	6.9

NA Not available. <sup>1</sup>Includes other fields not shown separately. <sup>2</sup>Astronomy, physics, chemistry, earth sciences, mathematics, and computer sciences. <sup>3</sup>Biochemistry, botany, microbiology, physiology, zoology, and related fields. <sup>4</sup>Anthropology, sociology, economics, political science, public administration, and international relations. <sup>5</sup>1979-1981 data on race limited to U.S. citizens and non-U.S. citizens with permanent visas (26,683 in 1979, 26,394 in 1980, and 26,262 in 1981). <sup>6</sup>For definition of median, see Guide to tabular presentation. <sup>7</sup>Includes first professional degrees.

Source: U.S. National Science Foundation. Data from National Research Council, *Summary Report, 1981: Doctorate Recipients from United States Universities*.

**NO. 1031. SCIENCE DOCTORATES CONFERRED: 1965 TO 1981**

(Doctorates conferred, years ending June 30; enrollment as of fall term. See also *Historical Statistics, Colonial Times to 1970*, series H 767-771, 774, and 776-780)

FIELD OF SCIENCE	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>Science doctorates conferred</b> .....	<b>10,477</b>	<b>17,731</b>	<b>18,352</b>	<b>17,872</b>	<b>17,373</b>	<b>17,034</b>	<b>17,230</b>	<b>17,195</b>	<b>17,623</b>
Life sciences .....	2,539	4,163	4,402	4,350	4,266	4,361	4,495	4,710	4,783
Biological sciences .....	1,963	3,360	3,498	3,562	3,484	3,508	3,640	3,798	3,801
Agricultural sciences <sup>1</sup> .....	576	803	904	788	782	853	855	912	982
Physical sciences .....	2,865	4,400	3,749	3,572	3,410	3,234	3,321	3,151	3,208
Chemistry .....	1,444	2,234	1,762	1,623	1,570	1,545	1,567	1,538	1,611
Physics and astronomy .....	1,046	1,655	1,293	1,235	1,149	1,086	1,108	985	1,015
Earth, environmental, and marine sciences .....	375	511	694	714	691	623	646	628	582
Social sciences .....	1,361	2,626	3,344	3,278	3,137	3,008	2,862	2,794	2,787
Psychology .....	954	1,988	2,749	2,878	2,960	3,049	3,081	3,098	3,357
Engineering .....	2,073	3,432	2,959	2,791	2,641	2,423	2,494	2,479	2,528
Mathematics .....	685	1,222	1,149	1,003	959	959	977	963	960

<sup>1</sup>Excludes agricultural economics, included in social sciences.

Source: U.S. National Science Foundation. Data from National Research Council, *Doctorate Record File*.

## NO. 1032. DOCTORAL SCIENTISTS AND ENGINEERS—SELECTED CHARACTERISTICS: 1975 TO 1981

(In thousands)

CHARACTERISTIC	1975	1977	1979	1981		CHARACTERISTIC	1975	1977	1979	1981	
				Number	Em- ployed					Number	Em- ployed
Total .....	270	303	332	363.9	342.9						
Field:						Race:					
Physical scientists .....	58.4	62.1	64.3	67.7	63.2	White .....	242	270	293.5	322.9	304.4
Mathematical scientists .....	14.2	15.4	16.1	16.5	15.5	Black .....	2.6	2.8	3.7	4.6	4.3
Computer specialists .....	3.5	5.8	6.8	9.1	9.0	Asian .....	12.9	15.7	21.7	27.9	26.9
Environmental scientists .....	12.5	13.5	15.1	16.6	16.0	Others and no report .....	13.0	14.4	13.4	8.5	7.3
Engineers .....	43.4	46.5	51.5	58.3	56.9	Employment status:					
Life scientists .....	70.3	78.3	86.3	93.8	86.5	Full-time employed .....	241	267	292.9	322.3	322.3
Psychologists .....	31.4	35.7	40.3	45.4	43.0	Part-time employed .....	7.3	7.5	10.7	10.7	10.7
Social scientists .....	36.8	45.8	52.0	56.4	52.7	Postdoctorates .....	8.2	9.8	10.2	10.5	10.5
Sex:						Unemployed/seeking .....	2.5	3.3	2.9	2.6	(x)
Men .....	245	272	294.0	318.1	302.6	Not employed/not seeking .....	2.4	2.8	3.6	3.4	(x)
Women .....	25.6	31.7	37.9	45.7	40.9	Retired/not employed .....	8.7	9.7	10.3	12.5	(x)
						Other .....	.4	.5	.8	.4	(x)
						No report .....	.5	2.6	.9	1.4	(x)

X Not applicable.

Source: U.S. National Science Foundation, *Characteristics of Doctoral Scientists and Engineers in the United States: 1979* (NSF 80-323) and unpublished data.

## NO. 1033. DOCTORAL SCIENTISTS AND ENGINEERS, BY SELECTED STATES: 1981

(In thousands. Includes doctorate holders receiving their degrees between 1938 and June 1980. Selected States represent those with more than 4,000 scientists and engineers)

STATE	Total	Natural scientists	Social scientists	Engineers	STATE	Total	Natural scientists	Social scientists	Engineers
Total .....	363.9	208.7	101.9	53.3	Minn .....	6.5	4.2	1.8	.5
Calif .....	44.2	22.8	12.4	9.0	Mo .....	6.1	3.3	1.8	1.0
Colo .....	7.7	4.5	1.8	1.4	N.J. ....	16.0	8.6	3.2	4.2
Conn .....	6.7	3.8	2.1	.8	N.Y. ....	35.0	18.0	12.1	4.9
D.C. ....	12.6	5.9	5.1	1.6	N.C. ....	7.6	6.3	.6	.7
Fla .....	8.7	4.4	3.0	1.3	Ohio .....	14.4	7.8	4.0	2.6
Ga .....	5.1	3.4	1.3	.4	Pa .....	17.4	9.4	5.2	2.8
Ill .....	16.1	8.5	5.2	2.4	Tenn .....	6.1	3.8	1.4	.9
Ind .....	6.4	3.7	1.7	1.0	Tex .....	17.8	10.6	3.6	3.6
La .....	4.1	2.4	.9	.8	Va .....	9.8	5.6	2.7	1.5
Md .....	13.4	6.9	2.9	1.6	Wash .....	7.2	3.9	2.0	1.3
Mass .....	16.1	8.9	4.5	2.7	Wis .....	6.1	3.5	1.8	.8
Mich .....	11.8	6.7	3.2	1.9	Others .....	61.0	39.8	17.6	3.6

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

## NO. 1034. FEDERAL SPACE PROGRAM—BUDGET AUTHORITY, BY AGENCY: 1960 TO 1982

(In millions of dollars, except percent. Through 1976, for years ending June 30; thereafter, years ending Sept. 30. NASA = National Aeronautics and Space Administration)

YEAR	Total <sup>1</sup>	NASA <sup>2</sup>		Dept. of Defense	Dept. of Commerce	Dept. of Energy <sup>3</sup>	YEAR	Total <sup>1</sup>	NASA <sup>2</sup>		Dept. of Defense	Dept. of Commerce	Dept. of Energy <sup>3</sup>
		Total	Percent of total						Total	Percent of total			
1960 .....	1,066	462	49.2	561	(x)	43	1972 .....	4,575	3,071	72.3	1,407	31	55
1961 .....	1,808	926	53.3	814	(x)	68	1973 .....	4,825	3,093	70.6	1,623	40	54
1962 .....	3,295	1,797	55.4	1,298	51	148	1974 .....	4,640	2,759	65.5	1,766	60	42
1963 .....	5,435	3,626	67.6	1,550	43	214	1975 .....	4,914	2,915	65.7	1,892	64	30
1964 .....	6,831	5,016	74.7	1,599	3	210	1976 .....	5,320	3,225	66.7	1,983	72	23
1965 .....	6,956	5,138	75.5	1,574	12	229	1977 .....	5,983	3,440	63.8	2,412	91	22
1966 .....	6,970	5,065	74.2	1,689	27	187	1978 .....	6,509	3,623	62.4	2,729	103	34
1967 .....	6,710	4,830	74.0	1,664	29	184	1979 .....	7,419	4,030	61.9	3,211	98	59
1968 .....	6,529	4,430	70.3	1,922	28	145	1980 .....	8,899	4,680	60.3	3,848	93	40
1969 .....	5,976	3,822	66.8	2,013	20	118	1981 .....	9,978	4,992	55.3	4,828	87	41
1970 .....	5,341	3,547	70.1	1,678	8	103	1982, est .....	12,041	5,462	49.3	6,367	125	38
1971 .....	4,741	3,101	69.8	1,512	27	95							

X Not applicable. <sup>1</sup> Includes agencies not shown separately. <sup>2</sup> Includes outlays for the space shuttle of \$2.7 billion in 1981 and \$3.1 billion in 1982. <sup>3</sup> See footnote 1, table 1015.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. 1035. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—OUTLAYS FOR RESEARCH AND DEVELOPMENT: 1965 TO 1982**

[In millions of dollars, except percent. For years ending June 30 except, beginning 1977, ending Sept. 30. Performance includes research and development, and research and program management. Space science includes technology. Minus sign (-) denotes decrease]

YEAR	Total outlays	Percent change	PERFORMANCE				FACILITIES			
			Total	Space flight	Space science, applications	Air transport and other	Total	Space flight	Space science, applications	Air transport and other
1965	5,093	122.1	4,562	3,138	1,126	298	531	401	78	52
1966	5,933	16.5	5,361	3,819	1,120	422	572	391	63	118
1967	5,426	-8.5	5,137	3,477	1,160	500	289	172	47	70
1968	4,726	-12.9	4,599	3,028	1,061	510	127	69	29	29
1969	4,252	-10.0	4,187	2,754	893	540	65	27	21	17
1970	3,753	-11.7	3,699	2,195	963	541	54	14	21	19
1971	3,382	-9.9	3,338	1,877	926	535	44	8	6	30
1972	3,423	1.2	3,373	1,727	1,111	535	50	13	7	30
1973	3,316	-3.1	3,271	1,532	1,220	519	45	5	11	29
1974	3,256	-1.8	3,181	1,448	1,156	577	75	25	12	38
1975	3,266	.3	3,181	1,500	1,076	606	85	35	9	42
1976	3,670	12.4	3,549	1,934	969	646	121	66	11	43
1977	3,945	7.5	3,840	2,195	1,002	643	105	56	4	45
1978	3,984	1.0	3,860	2,204	964	692	124	56	8	60
1979	4,187	5.0	4,054	2,175	1,144	735	133	41	9	83
1980	4,850	15.8	4,710	2,556	1,341	813	140	38	5	97
1981	5,421	11.8	5,274	3,026	1,380	868	147	26	4	117
1982, est.	5,827	7.5	5,692	3,438	1,341	913	135	24	3	108

<sup>1</sup> Change from 1964.

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

**NO. 1036. SPACE VEHICLE SYSTEMS—SALES AND BACKLOG ORDERS: 1965 TO 1981**

[In millions of dollars. Backlog orders as of Dec. 31. Based on data from major companies engaged in manufacture of aerospace products. 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	1975	2,119	1,096	1,023	1,304	1,019	285
1970	1,956	1,025	931	1,184	786	398	1976	2,002	904	1,098	1,234	902	332
1971	1,725	860	865	916	603	313	1977	1,870	814	1,056	1,589	1,263	326
1972	1,656	905	751	959	646	313	1978	2,324	1,006	1,318	2,188	1,693	495
1973	1,562	902	660	1,177	923	254	1979	2,539	1,105	1,434	1,448	909	539
1974	1,751	944	807	1,492	1,131	361	1980	3,483	1,461	2,022	1,814	951	863
							1981, prel.	4,014	1,680	2,334	2,179	1,165	1,014

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

**NO. 1037. SPACE PAYLOAD LAUNCHINGS: 1957 TO 1982**

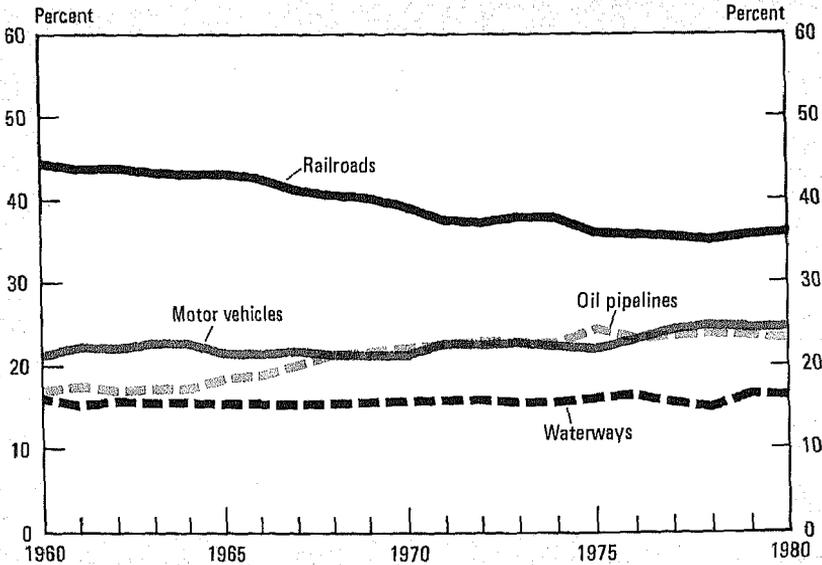
[Criterion of success is attainment of Earth orbit or Earth escape by payload]

YEAR	UNITED STATES				Soviet Union successful launchings	YEAR	UNITED STATES				Soviet Union successful launchings
	Earth orbit		Earth escape				Earth orbit		Earth escape		
	Success	Failure	Success	Failure			Success	Failure	Success	Failure	
<b>Total</b>	<b>982</b>	<b>134</b>	<b>79</b>	<b>15</b>	<b>1,975</b>	1969	58	1	8	1	80
1957	-	1	-	-	2	1970	36	1	3	-	103
1958	5	8	-	4	1	1971	45	2	8	1	114
1959	9	9	1	2	3	1972	33	2	8	-	109
1960	16	12	1	2	3	1973	23	2	3	-	130
1961	35	12	-	2	8	1974	27	2	1	-	114
1962	55	12	4	1	26	1975	30	4	4	-	140
1963	62	11	-	-	20	1976	33	-	1	-	141
1964	69	8	4	-	39	1977	27	2	2	-	125
1965	93	7	4	1	76	1978	34	2	7	-	142
1966	94	12	7	1	52	1979	18	-	-	-	126
1967	78	4	10	-	75	1980	16	4	-	-	132
1968	61	15	3	-	85	1981	18	1	-	-	98
						1982, Jan.-Apr.	7	-	-	-	31

- Represents zero. <sup>1</sup> Attained Earth orbit and included in Earth orbit success totals. <sup>2</sup> Preliminary.

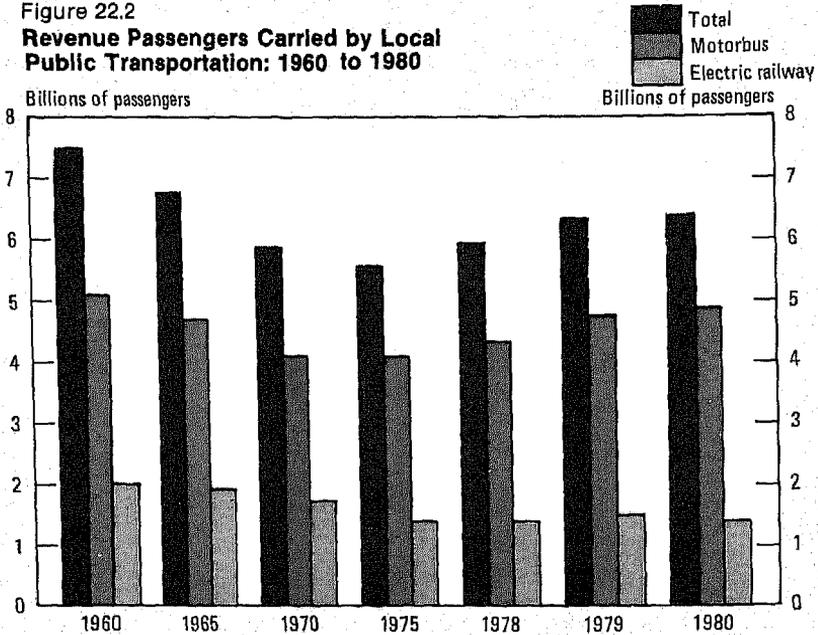
Source: Library of Congress, Congressional Research Service, Science Policy Research Division, *Space Activities of the United States, Soviet Union, and Other Launching Countries/Organizations*, February 1982, and unpublished data.

**Figure 22.1**  
**Ton-Miles of Domestic Intercity Freight Traffic—Percent Distribution by Type of Transportation: 1960 to 1980**

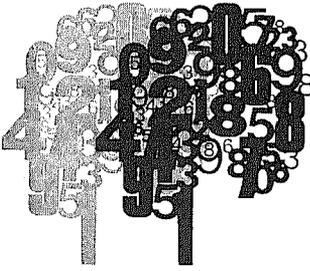


Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1044.

**Figure 22.2**  
**Revenue Passengers Carried by Local Public Transportation: 1960 to 1980**



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1080.



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## Section 22

# Transportation— Land

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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, construction, and cost; motor vehicle travel, accidents, sales, and registrations; automobile operating costs; and characteristics of railroads.

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*. Another major source of data on interstate land transport is the U.S. Interstate Commerce Commission (ICC). Among its publications are the *Annual Report to Congress*, and the *Transport Statistics in the United States* volumes, 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 *Commodity Transportation Survey*, *National Travel Survey*, and *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 provided for selected metropolitan areas in table 1079.

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, D.C.; *Bus Facts*, issued annually by the American Bus Association, Washington, D.C.; and the *Transit Fact Book*, containing electric railway and motorbus statistics, published annually by the American Public Transit Association, Washington, D.C. Useful annual handbooks in the field of motor-vehicle transport are *Motor Vehicle Facts and Figures*, issued by the Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, Mich.; *Accident Facts*, issued by the National Safety Council, Chicago, Ill.; and *Transportation Facts and Trends*, issued by the Transportation Association of America, Washington, D.C.

**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 cointensive 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 1960–1973, 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; since 1974, the class I minimum has been \$3 million. Effective January 1, 1980 class I revenue are those with \$5 million or more. For 1960–1968, class I motor carriers of passengers were classified by the ICC as those with \$200,000 or more of gross annual operating revenue; for 1969–1976, as those with revenues of \$1 million or more; and since 1977, as those with \$3 million or more.

**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 3 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 1950–1955; \$3 million or more for 1956–1964; \$5 million or more for 1965–1975; and \$10 million or more for 1976–1977. Since 1978 the classification has been: 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.

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

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

NO. 1038. OPERATING REVENUES, PASSENGER REVENUES, AND FREIGHT REVENUES, BY TYPE OF TRANSPORT: 1970 TO 1980

TYPE OF TRANSPORT	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>OPERATING REVENUES (mil. dol.)</b>										
Air carrier, certificated <sup>1</sup> .....	9,290	11,163	12,419	14,703	15,356	17,503	19,926	22,892	27,170	33,267
Air carrier, supplemental <sup>1</sup> .....	337	331	374	429	433	418	516	530	562	788
Bus, class 1, intercity.....	722	775	815	933	955	993	983	1,037	1,205	1,394
Local transit.....	1,707	1,729	1,798	1,940	2,002	2,161	2,280	2,381	2,524	2,686
Oil pipeline.....	1,188	1,338	1,446	1,587	1,874	2,137	2,792	4,907	5,585	6,141
Gas pipeline (transmission companies).....	5,928	7,390	7,712	9,085	11,898	15,416	19,836	22,989	29,919	41,574
Motor carriers of property, class 1, intercity.....	11,137	14,994	16,600	16,704	16,164	18,360	22,520	26,855	29,858	30,338
Railroad, class 1.....	11,992	13,410	14,770	16,923	16,402	18,537	20,091	21,721	25,219	28,254
Amtrak.....	(*)	163	202	257	253	287	310	321	399	454
Water transport, classes A and B <sup>3</sup> .....	372	417	474	632	730	777	694	777	772	(NA)
Water transport, maritime.....	833	885	1,087	1,478	1,342	1,593	1,643	1,889	2,235	(NA)
Freight forwarders, class A.....	211	253	326	362	359	431	615	603	701	721
<b>AVERAGE PASSENGER REVENUE PER PASSENGER-MILE (cents)</b>										
Air carrier, certificated: <sup>5</sup> Total.....	6.00	6.40	6.63	7.52	7.69	8.16	8.61	8.49	8.96	11.53
First class.....	8.30	8.70	8.93	9.89	10.58	11.50	12.21	11.87	11.43	14.35
Coach plus economy.....	5.45	5.88	6.11	6.94	7.05	7.49	7.92	7.81	8.34	10.87
Railroad, class 1: <sup>6</sup> Total.....	3.91	4.79	4.88	4.98	4.99	5.65	5.74	5.86	6.02	6.15
Commutation.....	3.75	4.22	4.29	4.44	4.57	5.04	5.07	5.20	5.37	5.92
Other than commutation.....	4.02	6.66	6.81	6.75	6.25	7.60	7.85	7.84	7.93	9.39
Amtrak: Total.....	(*)	4.37	4.40	5.23	5.66	5.56	5.83	6.08	6.59	8.18
Commutation.....	(*)	2.97	3.46	3.52	4.40	3.59	3.01	3.07	3.56	3.62
Other than commutation.....	(*)	4.42	4.44	5.29	5.71	5.62	5.92	6.16	6.67	8.32
Bus, class 1, intercity.....	3.60	3.98	4.05	4.42	4.85	5.14	5.18	5.62	6.21	7.28
<b>AVERAGE FREIGHT REVENUE PER TON-MILE (cents)</b>										
Air carrier, certificated <sup>5</sup> .....	21.91	22.75	23.31	25.92	28.22	31.81	34.20	37.10	41.02	46.29
Railroad, class 1.....	1.43	1.62	1.62	1.85	2.04	2.20	2.29	2.36	2.60	3.12
Motor carriers of property, class 1 intercity:										
Common.....	7.46	8.00	8.34	9.00	9.20	9.97	10.85	11.20	11.97	(NA)
Contract.....	6.86	7.02	6.68	7.00	7.80	8.20	9.05	12.97	13.50	(NA)
Oil pipelines.....	.27	.29	.29	.32	.37	.41	.54	.66	.94	1.03
Water carriers, classes A and B.....	.43	.47	.55	.67	.77	.74	.81	.84	.90	(NA)

NA Not available. <sup>1</sup> Domestic and international. <sup>2</sup> Amtrak established May 1, 1971. <sup>3</sup> Inland and coastal. <sup>4</sup> Preliminary. <sup>5</sup> Schedule service (domestic). <sup>6</sup> Excludes Amtrak and Auto-Train service.

Source: U.S. Dept. of Transportation, Transportation Systems Center, *National Transportation Statistics*, annual.

**NO. 1039. PASSENGER AND FREIGHT TRANSPORTATION OUTLAYS, BY TYPE OF TRANSPORT: 1960 TO 1980**

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

TYPE OF TRANSPORT	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total outlays</b> <sup>1</sup> .....	<b>106.3</b>	<b>141.8</b>	<b>197.9</b>	<b>219.5</b>	<b>243.3</b>	<b>266.6</b>	<b>284.3</b>	<b>303.0</b>	<b>353.6</b>	<b>400.8</b>	<b>453.6</b>	<b>488.0</b>	<b>557.0</b>
Passenger, total.....	60.5	82.2	114.9	133.6	148.2	162.4	170.6	187.4	221.8	254.6	284.4	320.6	358.9
Private transportation.....	53.3	73.0	99.6	117.2	129.9	142.4	147.7	161.3	191.8	221.4	247.0	277.3	306.7
Automobiles <sup>2</sup> .....	52.4	71.6	97.0	114.1	126.4	138.3	143.3	156.6	186.6	216.1	241.4	270.4	299.1
New and used cars.....	20.4	30.4	32.1	41.2	45.8	49.8	42.6	46.0	59.7	70.4	77.6	78.4	74.2
Tires, tubes, accessories.....	2.9	4.1	7.1	8.4	9.4	10.5	11.3	12.4	13.8	15.8	17.2	19.8	22.6
Gasoline and oil.....	16.0	19.6	29.9	31.9	33.9	38.2	48.8	53.9	58.6	64.2	70.3	91.2	118.7
Insurance less claims.....	2.4	2.8	4.4	5.7	6.4	6.2	5.9	4.5	6.4	9.5	10.2	10.3	11.8
Interest on debt.....	2.8	3.5	4.7	5.1	5.5	6.3	6.7	7.3	8.6	10.4	13.0	15.3	18.1
Registration and operator's permit fees.....	1.0	1.3	1.9	2.0	2.1	2.2	2.3	2.3	2.7	2.8	3.0	3.1	<sup>3</sup> 3.2
Repair, greasing, washing, parking, tolls <sup>4</sup> .....	6.0	8.2	13.2	14.9	16.2	17.2	18.7	22.1	25.0	28.1	32.8	37.9	40.4
Air.....	.9	1.4	2.6	3.1	3.5	4.1	4.4	4.7	5.2	5.2	5.6	6.8	7.6
Aircraft.....	.2	.3	.4	.3	.6	.8	.8	1.0	1.2	1.5	1.7	2.1	2.3
Operating costs.....	.7	1.0	2.3	2.8	3.0	3.3	3.6	3.8	4.0	3.7	3.9	4.7	5.3
For-hire transportation.....	7.2	9.2	15.3	16.4	18.3	20.0	22.9	26.2	30.0	33.3	37.3	43.3	52.2
Local <sup>5</sup> .....	3.1	3.4	5.4	6.1	6.8	7.3	7.9	10.5	12.1	12.7	13.9	15.4	17.9
Bus and transit <sup>6</sup> .....	1.3	1.5	1.8	2.0	2.2	2.7	2.9	4.7	5.8	5.9	6.7	7.5	9.0
School bus.....	.5	.7	1.2	1.4	1.5	1.6	1.9	2.2	2.4	2.5	2.7	3.2	3.5
Taxi.....	1.1	1.1	2.1	2.6	2.9	2.8	3.0	3.4	3.8	4.1	4.3	4.5	5.1
Intercity.....	3.3	4.4	7.7	8.4	9.4	10.4	12.3	12.9	14.9	17.2	19.6	23.3	28.8
Air.....	2.1	3.3	6.6	7.3	8.2	9.1	10.8	11.2	13.0	14.9	17.1	20.4	25.3
Rail <sup>7</sup> .....	.6	.5	.3	.3	.3	.4	.5	.6	.9	1.2	1.3	1.4	1.8
Bus.....	.6	.6	.8	.8	.8	.9	1.0	1.1	1.1	1.1	1.2	1.4	1.7
International.....	.9	1.3	2.2	2.0	2.2	2.4	2.6	2.7	2.9	3.4	3.8	4.6	5.5
Freight, total <sup>8</sup> .....	46.8	61.1	83.8	86.4	96.9	107.7	115.7	115.5	133.2	150.4	174.0	192.9	204.7
Highway.....	31.5	43.8	62.5	63.9	73.3	80.7	84.8	84.8	98.0	111.4	128.8	142.7	148.8
Truck, intercity.....	18.0	23.6	33.6	37.5	40.0	44.6	48.8	47.4	56.2	67.4	79.6	90.2	90.4
ICC regulated.....	7.2	10.1	14.6	18.7	18.7	20.8	22.7	22.0	26.0	31.0	36.5	41.2	43.0
Non-ICC regulated.....	10.7	13.6	19.0	20.8	21.3	23.8	26.1	25.4	30.2	36.4	43.1	49.0	47.4
Truck, local.....	13.5	20.1	28.8	25.4	33.1	35.9	37.3	41.6	43.9	49.1	52.3	58.2	58.2
Rail.....	9.0	9.9	11.9	12.7	13.1	14.8	17.0	16.5	19.2	20.5	21.9	24.8	27.9
Water.....	3.3	3.8	5.1	5.2	5.6	6.8	8.0	7.9	6.9	10.3	12.4	13.4	14.7
Oil pipeline.....	.9	1.1	1.4	1.5	1.6	1.7	1.9	2.2	2.5	3.2	5.5	6.2	6.8

<sup>1</sup>Total outlays adjusted to include Federal Government expenditures for public facilities (airways, airports, highways, ground transportation research and development programs, and Urban Mass Transportation Administration programs) and State government expenditures for highways not otherwise included in other items shown, less transport user charges. Estimated freight costs included in costs of new cars, gasoline, oil, tires, and tubes excluded to prevent duplication. <sup>2</sup>Includes business-owned vehicles. <sup>3</sup>Estimated. <sup>4</sup>Includes storage and rental. <sup>5</sup>Includes items not shown separately. <sup>6</sup>Includes Federal, State and local government operating subsidies and capital grants. <sup>7</sup>Includes Federal operating subsidies and capital grants for Amtrak.

Source: Transportation Association of America, Washington, D.C., *Transportation Facts and Trends*, annual, with quarterly supplements. (Copyright.)

**NO. 1040. PERSONAL CONSUMPTION EXPENDITURES FOR TRANSPORTATION: 1960 TO 1981**

[In billions of dollars, except percent. Represents market value of purchases of goods and services by individuals and nonprofit institutions]

TYPE OF PRODUCT OR SERVICE	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
<b>Total transportation expenditures</b> .....	<b>42.4</b>	<b>58.4</b>	<b>80.6</b>	<b>114.6</b>	<b>117.9</b>	<b>129.4</b>	<b>155.2</b>	<b>179.3</b>	<b>198.1</b>	<b>219.4</b>	<b>239.5</b>	<b>260.8</b>
Percent of total personal consumption <sup>1</sup> .....	13.1	13.6	13.0	14.1	13.3	13.2	14.3	14.9	14.7	14.6	14.4	14.1
User-operated transportation.....	39.1	54.5	74.3	106.4	108.8	119.7	144.1	167.0	184.6	204.0	221.2	240.5
Net autos.....	14.0	21.4	21.9	33.9	27.0	29.9	38.1	44.3	48.2	49.1	45.7	49.2
Net purchases of used autos.....	2.6	3.9	5.3	7.3	7.8	8.9	11.9	13.2	14.8	15.7	14.9	18.0
Other motor vehicles.....	.6	1.3	2.9	6.8	6.0	7.1	10.9	13.9	17.9	14.9	10.1	10.3
Tires, tubes, accessories, other parts.....	2.5	3.4	6.1	8.9	8.8	10.5	11.7	13.5	14.7	16.9	19.0	21.0
Repair, greasing, washing, parking <sup>2</sup> .....	5.1	6.9	11.2	14.7	15.9	18.8	21.3	25.1	28.1	31.2	33.9	35.1
Gasoline and oil.....	12.0	14.7	22.4	28.6	36.6	40.4	44.0	48.1	51.2	56.6	67.0	66.8
Bridge, tunnel, ferry, road tolls.....	.3	.5	.7	.8	.8	.8	.9	.9	.9	.9	.9	.9
Insurance premiums less claims paid.....	2.0	2.4	3.6	5.2	5.1	3.9	5.4	8.1	8.7	8.8	9.7	9.1
Purchased local transportation <sup>3</sup> .....	2.0	2.1	3.0	3.5	3.7	4.0	4.4	4.7	5.0	5.4	6.0	6.8
Transit systems.....	1.3	1.3	1.6	1.7	1.8	1.9	2.1	2.2	2.3	2.5	2.6	3.2
Taxicab.....	.6	.6	1.2	1.6	1.6	1.9	2.1	2.2	2.4	2.7	3.1	3.3
Purchased intercity transportation.....	1.3	1.9	3.4	4.7	5.5	5.7	6.7	7.7	8.5	10.0	12.3	13.5
Airline.....	.7	1.2	2.5	3.5	4.1	4.4	5.3	6.1	6.9	8.1	10.0	10.9
Bus.....	.3	.4	.5	.6	.7	.7	.7	.7	.7	.9	1.1	1.1
Railway and other <sup>4</sup> .....	.3	.3	.4	.5	.7	.7	.8	.8	.9	1.1	1.3	1.5

<sup>1</sup>See table 698. <sup>2</sup>Includes rental and storage. <sup>3</sup>Includes railway commutation. <sup>4</sup>Railway excludes commutation; "other" consists of baggage charges, coastal and inland waterway fares, and travel agents' fees.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-76*, and *Survey of Current Business*, July 1982.

## NO. 1041. FEDERAL OUTLAYS FOR TRANSPORTATION, BY FUNCTION: 1970 TO 1982

[For years ending June 30 except, beginning 1977, ending Sept. 30. 1981 estimated]

FUNCTION	TOTAL OUTLAYS (mil. dol.)								PERCENT DISTRIBUTION		
	1970	1975	1977	1978	1979	1980	1981	1982	1970	1980	1982
<b>Total outlays</b> <sup>1</sup> .....	7,006	10,388	14,636	15,444	17,459	21,120	23,381	21,228	100.0	100.0	100.0
Ground transportation.....	4,678	6,501	10,037	10,355	12,064	15,079	17,100	14,728	66.8	71.4	69.4
Highway construction <sup>2</sup> .....	(NA)	4,821	5,719	5,640	6,759	8,397	9,068	8,264	(NA)	39.8	38.9
Highway safety.....	(NA)	150	583	644	733	1,126	336	307	(NA)	5.3	1.4
Mass transit.....	(NA)	929	2,000	2,177	2,542	3,307	3,917	3,817	(NA)	15.7	18.0
Railroads.....	(NA)	555	1,676	1,829	1,962	2,170	3,705	2,271	(NA)	10.3	10.7
Regulation.....	(NA)	46	59	65	67	79	75	70	(NA)	4	.3
Air transportation.....	1,422	2,408	2,816	3,277	3,392	3,762	3,850	3,730	20.3	17.8	17.6
Airways and airports.....	(NA)	2,029	2,369	2,778	2,850	3,136	3,158	3,073	(NA)	14.8	14.5
Aeron. research and technology.....	(NA)	316	344	398	443	509	544	544	(NA)	2.4	2.6
Air carrier subsidies.....	(NA)	64	80	77	72	88	119	88	(NA)	.4	.4
Regulation.....	(NA)	(NA)	23	25	27	28	29	25	(NA)	.1	.1
Water transportation.....	913	1,459	1,749	1,854	1,977	2,235	2,420	2,778	13.0	10.6	13.1
Marine safety and transportation.....	(NA)	922	1,149	1,273	1,424	1,613	1,829	2,114	(NA)	7.6	10.0
Ocean shipping.....	(NA)	537	591	571	543	611	580	653	(NA)	2.9	3.1
Regulation.....	(NA)	(NA)	8	9	10	11	12	11	(NA)	.1	.1
Other.....	26	74	76	61	93	104	110	89	.3	.5	.4

NA Not available. <sup>1</sup>Total reflects deductions for offsetting receipts. <sup>2</sup>Includes improvement.Source: U.S. Office of Management and Budget, *The Budget of the United States Government*, annual.

## NO. 1042. 50 LARGEST TRANSPORTATION COMPANIES—REVENUES AND ASSETS, BY RANK OF OPERATING REVENUES: 1980 AND 1981

[In billions of dollars, except percent. Revenues include nontransportation activities; assets as of end of companies' fiscal years. Companies listed derive more than 50 percent of their operating revenues from the transport of passengers and/or freight (e.g., railroads, airlines, motor carriers, pipelines); excludes companies primarily engaged in freight forwarding, express shipping, or vehicle rental]

OPERATING REVENUE GROUP	1980				1981			
	As-sets	Oper-ating rev-enu-es	Net income	Stock-holders' equity	As-sets	Oper-ating rev-enu-es	Net income	Stock-holders' equity
<b>50 largest, total</b> .....	84.6	76.6	3.4	30.0	88.2	81.5	3.9	29.0
Lowest ten.....	4.6	3.4	(2)	1.5	5.4	3.8	.4	2.0
Second ten.....	6.7	5.7	.6	1.7	5.8	5.7	.3	1.3
Third ten.....	13.0	9.9	.8	2.7	12.1	10.0	.7	3.4
Fourth ten.....	23.0	17.3	.8	8.6	25.4	17.9	1.1	8.3
Highest ten.....	37.2	40.3	1.2	15.4	39.5	44.1	1.3	13.9
<b>Percent, total:</b>								
Lowest ten.....	5.4	4.4	.5	5.1	6.1	4.7	10.8	7.0
Second ten.....	7.9	7.4	1.5	5.7	6.6	7.0	8.9	4.4
Third ten.....	15.4	13.0	22.9	9.1	13.8	12.3	18.5	11.8
Fourth ten.....	27.2	22.5	24.7	28.7	28.8	22.0	27.9	28.6
Highest ten.....	44.0	52.7	34.4	51.5	44.8	54.0	33.9	46.1

Z Less than 500,000.

Source: Time, Inc., New York, N.Y.; adapted from *The Fortune Directory*, July issues. (Copyright.)

## NO. 1043. EMPLOYMENT IN TRANSPORTATION, BY TYPE OF TRANSPORT: 1965 TO 1981

[Annual averages of monthly figures. Based on Current Employment Statistics Program; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Q 36-42]

TYPE OF TRANSPORT	NUMBER (1,000)									PERCENT		
	1965	1970	1975	1976	1977	1978	1979	1980	1981	1965	1970	1981
<b>Total</b> .....	2,532	2,684	2,636	2,680	2,782	2,907	3,022	2,962	2,923	100.0	100.0	100.0
Trucking <sup>1</sup> .....	862	999	1,024	1,068	1,132	1,212	1,249	1,189	1,166	34.9	37.2	39.9
Public warehousing.....	82	84	84	81	88	91	91	91	88	3.2	3.1	3.0
Railroads.....	735	634	548	538	545	539	556	532	496	29.0	23.6	17.0
Class I railroads <sup>2</sup> .....	640	566	498	494	502	490	503	482	457	25.3	21.1	15.6
Airlines <sup>3</sup> .....	229	352	363	374	386	408	438	453	454	9.0	13.1	15.5
Local and interurban passengers.....	269	269	270	264	262	258	263	265	269	10.6	10.0	9.2
Waterlines <sup>3</sup> .....	230	213	195	185	186	208	216	213	218	9.1	8.0	7.4
Pipelines.....	20	18	18	18	19	20	20	21	22	.8	.7	.8
Transportation services.....	85	115	134	142	156	170	189	198	212	3.4	4.3	7.2

<sup>1</sup>Includes terminals. <sup>2</sup>See text, p. 604. <sup>3</sup>Covers establishments engaged in domestic and/or international service.<sup>4</sup>Oil and other commodities, except natural gas.Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly.

**NO. 1044. VOLUME OF DOMESTIC INTERCITY FREIGHT AND PASSENGER TRAFFIC, BY TYPE OF TRANSPORT: 1950 TO 1980**

[Prior to 1960, excludes Alaska and Hawaii, except as noted. 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	1950	1955	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980
<b>FREIGHT TRAFFIC</b>													
<b>BILLIONS OF TON-MILES</b>													
Total.....	1,062	1,275	1,314	1,638	1,936	2,232	2,212	2,066	2,202	2,307	2,467	2,572	2,503
Railroads <sup>1</sup> .....	597	631	579	709	771	858	852	759	800	834	868	927	932
Motor vehicles.....	173	223	285	359	412	505	495	454	510	555	599	608	567
Inland waterways <sup>2</sup> .....	163	217	220	262	319	358	355	342	373	368	409	425	411
Oil pipelines.....	129	203	229	306	431	507	506	507	515	546	586	608	588
Domestic airways <sup>3,4</sup> .....	.3	.6	.8	1.9	3.3	3.9	3.9	3.7	3.9	4.2	4.6	4.4	4.5
<b>PERCENT DISTRIBUTION</b>													
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Railroads <sup>1</sup> .....	57.44	50.43	44.73	43.67	39.83	38.51	38.52	36.74	36.33	36.15	35.18	36.04	37.24
Motor vehicles.....	15.80	17.20	21.46	21.76	21.28	22.66	22.38	21.97	23.16	24.06	24.28	23.64	22.65
Inland waterways <sup>2</sup> .....	14.93	16.68	16.56	15.89	16.46	16.08	16.05	16.55	16.94	15.95	16.58	16.52	16.42
Oil pipelines.....	11.81	15.66	17.19	18.56	22.26	22.75	22.87	24.54	23.38	23.67	23.75	23.64	23.49
Domestic airways <sup>3,4</sup> .....	.03	.04	.06	.12	.17	.18	.18	.19	.18	.18	.19	.18	.18
<b>PASSENGER TRAFFIC</b>													
<b>BILLIONS OF PASSENGER-MILES</b>													
Total <sup>5</sup> .....	508	716	784	920	1,185	1,345	1,310	1,359	1,464	1,532	1,606	1,589	1,559
Private automobiles.....	438	637	706	818	1,026	1,163	1,122	1,171	1,260	1,316	1,362	1,322	1,300
Domestic airways <sup>3,6</sup> .....	10	23	34	58	119	143	146	148	165	176	204	228	219
Bus <sup>7</sup> .....	26	25	19	24	25	26	28	26	25	26	25	27	28
Railroads <sup>1</sup> .....	32	29	22	18	11	9	10	10	10	10	11	12	12
Inland waterways <sup>2</sup> .....	1.2	1.7	2.7	3.1	4.0	4.0	4.1	4.0	4.0	4.0	(NA)	(NA)	(NA)
<b>PERCENT DISTRIBUTION</b>													
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Private automobiles.....	86.20	89.01	90.10	88.86	86.80	86.47	85.65	86.17	86.07	85.90	84.81	83.20	83.39
Domestic airways <sup>3,6</sup> .....	1.98	3.18	4.33	6.31	10.01	10.63	11.15	10.89	11.27	11.49	12.70	14.35	14.05
Bus <sup>7</sup> .....	5.20	3.56	2.47	2.58	2.14	1.93	2.14	1.91	1.71	1.70	1.56	1.70	1.80
Railroads <sup>1</sup> .....	6.39	4.01	2.75	1.91	0.92	.67	.76	.74	.68	.65	.68	.76	.77
Inland waterways <sup>2</sup> .....	.23	.24	.34	.34	.34	.30	.31	.29	.27	.26	.25	(NA)	(NA)

NA Not available. <sup>1</sup>Includes electric railways. Beginning 1970, freight traffic excludes mail and express. <sup>2</sup>Includes Great Lakes. Freight traffic includes Alaska for all years and Hawaii beginning 1960. <sup>3</sup>Revenue service only for certificated route and charter carriers. <sup>4</sup>Includes express, mail, and excess baggage. <sup>5</sup>Beginning 1979, excludes data for inland waterways. <sup>6</sup>Includes private pleasure and business flying. <sup>7</sup>Excludes school bus.

Source: Transportation Association of America, Washington, D.C., *Transportation Fact and Trends*, Dec. 1981.

**NO. 1045. VOLUME OF COMMODITY SHIPMENTS BY MANUFACTURING ESTABLISHMENTS: 1977**

[Based on a sample survey of 19,500 manufacturing establishments]

MEANS OF TRANSPORT AND COMMODITY	Value of shipments (bil. dol.)	Tons (mil.)	Ton-miles (mil.)	COMMODITY	Value of shipments (bil. dol.)	Tons (mil.)	Ton-miles (mil.)
Rail.....	229	548	270,446	Printed matter.....	50	25	4,677
Motor carrier.....	570	691	183,322	Chemicals and allied products.....	116	323	108,348
Private truck.....	316	1,200	95,120	Petroleum and coal products.....	100	998	220,056
Air.....	31	1	1,405	Rubber and misc. plastics.....	38	19	9,387
Water.....	35	293	135,638	Leather and leather products.....	8	2	730
Pipeline.....	50	465	89,303	Stone, clay, glass, and concrete.....	37	653	49,211
Parcel delivery.....	42	3	1,497	Primary metal products.....	103	184	49,126
Other and unknown.....	70	111	2,253	Fabricated metal products.....	93	81	10,323
Food and kindred products.....	192	427	128,129	Machinery, exc. electrical.....	123	26	12,127
Tobacco products.....	9	2	952	Electrical machinery.....	92	16	8,605
Textile mill products.....	35	14	5,036	Transportation equipment.....	159	59	29,341
Apparel, finished textile products.....	46	6	2,380	Motor vehicles and equipment.....	114	51	26,075
Lumber and wood products.....	39	357	57,967	Instruments and related products.....	25	2	1,663
Furniture and fixtures.....	17	8	4,045	Miscellaneous products.....	20	5	2,590

<sup>1</sup>Data for commodities will not add to the total because of independent rounding of those items.

No. 1046. FUEL CONSUMPTION BY MODE OF TRANSPORTATION: 1970 TO 1980

ITEM	Unit	1970	1973	1974	1975	1976	1977	1978	1979	1980
Class I railroads:										
Locomotives:										
Diesel oil.....	Mil. gal.....	3,800	4,141	4,112	3,732	3,890	3,982	3,966	4,069	3,942
Electricity.....	Mil. kWh.....	578	346	467	422	353	417	331	309	180
Coal.....	Tons.....	1,238	1,202	1,160	1,160	1,421	1,569	1,275	1,421	908
Motor cars:										
Diesel oil.....	Mil. gal.....	8	3	4	4	5	3	2	3	2
Electricity.....	Mil. kWh.....	763	901	847	857	790	986	991	1,062	968
Certified air carriers:										
Jet fuel <sup>1</sup> .....	Mil. gal.....	10,085	10,671	9,546	9,507	9,808	10,268	10,639	11,369	11,034
General aviation:										
Aviation gasoline.....	Mil. gal.....	551	411	443	412	432	456	518	570	520
Jet fuel.....	Mil. gal.....	206	304	357	453	495	536	763	736	765
Highway:										
Gasoline:										
Passenger cars and taxis.....	Mil. gal.....	65,649	77,619	73,770	76,010	78,398	80,225	83,312	79,793	73,375
Motorcycles.....	Mil. gal.....	135	392	447	447	448	451	463	440	360
Diesel and gasoline <sup>2</sup> .....	Mil. gal.....	26,544	32,462	32,084	32,527	36,853	38,946	41,293	41,882	41,226
Water transport:										
Fuel oil <sup>3</sup> .....	Mil. gal.....	4,593	5,006	4,864	5,158	6,123	6,825	8,194	9,634	10,135
Gasoline.....	Mil. gal.....	598	717	697	730	764	774	812	780	1,052
Transit:										
Electricity, total.....	Mil. kWh.....	2,561	2,331	2,630	2,646	2,576	2,303	2,223	2,473	2,446
Motor fuel <sup>4</sup> .....	Mil. gal.....	339	310	326	373	395	412	431	432	452
Pipe lines, natural gas.....	Mil. cu. ft.....	722,166	728,177	668,834	582,963	548,323	532,669	530,451	600,964	634,622
Non-highway use of gasoline, total.....	Mil. gal.....	4,003	3,896	3,623	3,642	3,778	3,725	3,577	3,845	3,655

<sup>1</sup>Includes small amounts of aviation gasoline. <sup>2</sup>Includes commercial and school buses and single-unit and combination trucks. <sup>3</sup>Includes residual and distillate fuel oil. <sup>4</sup>Includes gasoline, diesel oil, and propane.

Source: U.S. Department of Transportation, Transportation Systems Center, *National Transportation Statistics*, annual.

No. 1047. TRANSPORTATION ACCIDENTS, AND RESULTING DEATHS AND INJURIES, BY TYPE OF TRANSPORT: 1970 TO 1981

[Data for waterborne carriers are for years ending June 30 except, beginning 1977, ending Sept. 30; all other data for calendar year. For motor vehicle data, see also tables 1061-1063; for railroad data, see also tables 1088 and 1095; for air carrier and general aviation data, see tables 1099 and 1102]

YEAR AND CASUALTY	Total (1,000)	TYPE OF TRANSPORT							Hazardous materials <sup>8</sup>	
		Motor vehicle <sup>1</sup> (1,000)	Railroad <sup>2</sup>	Air carrier <sup>3</sup>	General aviation <sup>4</sup>	Recreational boating <sup>5</sup>	Gas pipelines <sup>6</sup>	Liquid pipelines <sup>7</sup>		Waterborne <sup>8</sup>
Accidents:										
1970.....	16,021	16,000	8,095	(NA)	(NA)	3,803	1,019	351	2,582	(NA)
1975.....	18,523	16,500	8,041	31	4,034	6,308	1,373	254	3,305	10,773
1976.....	18,827	16,600	10,248	22	4,005	7,199	1,579	212	4,211	11,898
1977.....	17,627	17,600	10,382	21	4,069	6,815	1,956	232	3,574	15,954
1978.....	18,328	18,300	11,277	21	4,223	6,829	1,088	256	4,268	18,022
1979.....	18,126	18,100	9,740	24	3,800	5,968	1,920	248	4,665	17,524
1980.....	17,924	17,900	8,451	15	3,599	5,513	1,996	219	4,496	16,115
1981.....	18,021	18,000	5,781	24	3,634	5,128	1,695	239	4,537	9,163
Deaths:										
1970.....	56.5	52.6	785	(NA)	(NA)	1,418	22	4	178	(NA)
1975.....	48.2	44.6	575	122	1,247	1,465	14	7	190	27
1976.....	48.8	45.5	510	36	1,187	1,264	63	5	269	18
1977.....	51.4	47.9	534	78	1,281	1,312	36	3	216	32
1978.....	54.1	50.3	582	160	1,563	1,321	31	3	179	46
1979.....	54.9	51.1	546	351	1,219	1,400	45	4	190	18
1980.....	54.5	51.1	584	-	1,264	1,360	11	3	198	19
1981.....	52.6	49.3	556	4	1,265	1,208	17	5	196	13
Injuries:										
1970.....	2,025	2,000	21,327	(NA)	(NA)	780	347	21	105	(NA)
1975.....	1,859	1,800	54,306	75	718	2,136	819	17	74	655
1976.....	1,870	1,800	65,331	133	718	1,838	340	4	153	920
1977.....	1,972	1,900	67,867	102	725	1,779	443	15	136	750
1978.....	2,077	2,000	72,545	89	747	1,761	452	9	118	1,132
1979.....	2,077	2,000	72,255	57	825	2,463	57	8	118	941
1980.....	(NA)	2,000	60,549	19	663	2,650	310	15	122	619
1981.....	(NA)	1,900	51,745	20	583	2,438	(NA)	(NA)	121	665

- Represents zero. NA Not available. <sup>1</sup>Data on deaths are from U.S. National Highway Traffic Safety Administration and are based on 30 day definition; see table 1061. Other data are from National Safety Council. <sup>2</sup>Number of accidents includes grade crossing accidents and covers only those accidents which result in damages to railroad property exceeding amounts specified by the U.S. Federal Railroad Administration. The reporting threshold was raised from \$750 to \$1,750 in 1975 to \$2,300 in 1977; to \$2,900 in 1978; and to \$3,700 in 1981. Deaths exclude fatalities in railroad-highway grade crossing accidents. <sup>3</sup>Includes only scheduled air carriers operating under 14 CFR 121 (airlines). Injuries include only serious injuries. <sup>4</sup>1975-1981 data excludes commuter and on-demand air taxis operating under 14 CFR 135. <sup>5</sup>Accidents are reported to U.S. Coast Guard whenever they result in a death; a person's losing consciousness or receiving medical treatment or being disabled for more than 24 hours; damages exceeding \$100; or a person's disappearance. <sup>6</sup>Accidents as reported on incident/accident reports filed during reporting year. Fatalities and injuries as reported in annual report. <sup>7</sup>Pipelines carrying hazardous materials, petroleum, and liquid petroleum products. <sup>8</sup>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 sea-worthiness or efficiency of a vessel; stranding or grounding; loss of life; or injury causing a person's incapacity for more than 3 days. <sup>9</sup>Accidents, deaths, and injuries involving hazardous materials cover all types of transport.

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

No. 1048. HIGHWAY MILEAGE—URBAN AND RURAL, BY TYPE OF CONTROL, AND FEDERAL-AID HIGHWAY SYSTEM: 1950 TO 1980

[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, p. 603. See also *Historical Statistics, Colonial Times to 1970*, series Q 50, 51, and 55]

TYPE AND CONTROL	1950	1955	1960	1965	1970	1975	1978	1979	1980
<b>Total mileage</b> .....	<b>3,313</b>	<b>3,418</b>	<b>3,546</b>	<b>3,690</b>	<b>3,730</b>	<b>3,838</b>	<b>3,885</b>	<b>3,918</b>	<b>3,955</b>
Urban mileage <sup>2</sup> .....	323	373	430	506	561	639	694	694	624
Under State control.....	36	42	50	65	74	84	87	86	79
Under local control.....	287	331	379	442	487	555	607	607	543
Rural mileage.....	2,990	3,045	3,116	3,183	3,169	3,199	3,190	3,224	3,331
Percent surfaced <sup>3</sup> .....	56.2	63.8	69.5	72.3	76.1	77.6	79.4	77.5	77.5
Under State control.....	580	620	659	687	707	711	704	697	701
Under local control.....	2,336	2,333	2,345	2,346	2,275	2,261	2,254	2,281	2,270
Under Federal control.....	73	93	112	150	188	227	232	244	262
Federal-aid highway system: <sup>4</sup>									
Primary.....	234	235	265	269	272	266	301	303	300
Interstate.....	(x)	(x)	10	21	32	37	42	40	41
Urban.....	(x)	(x)	(x)	(x)	(x)	65	126	124	124
Secondary.....	410	514	601	640	647	643	396	397	398

X Not applicable. <sup>1</sup>Includes 98,000 miles of nonpublic road mileage previously contained in other rural categories. <sup>2</sup>Prior to 1980; represents municipal mileage; see text p. 603. <sup>3</sup>Covers soil-surfaced roads and roads with slag, gravel, stone, bituminous, or concrete surfaces. <sup>4</sup>For definition, see text, p. 603. Beginning 1979, 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. 1049. HIGHWAY MILEAGE—URBAN, RURAL, AND FEDERAL-AID HIGHWAY SYSTEM: 1980

[As of Dec. 31. For definition of urban, rural, and Federal-aid highway system roads; see text, p. 603]

STATE	Urban (1,000)	Rural (1,000)	FEDERAL-AID HIGHWAY SYSTEM <sup>1</sup>				STATE	Urban (1,000)	Rural (1,000)	FEDERAL-AID HIGHWAY SYSTEM <sup>1</sup>				
			Primary		Urban	Secondary				Primary		Urban	Secondary	
			Total	Inter-state						Total	Inter-state			
<b>U.S.</b> .....	<b>624.1</b>	<b>3,331.3</b>	<b>300,456</b>	<b>41,216</b>	<b>124,115</b>	<b>398,108</b>								
Ala.....	13.0	74.3	7,711	793	2,134	10,893	Mo.....	13.6	104.9	7,908	1,102	2,149	18,110	
Alaska.....	.8	9.3	2,048		110	1,944	Mont.....	2.4	69.3	6,641	1,160	324	4,686	
Ariz.....	8.3	66.9	4,615	1,136	1,748	3,204	Nebr.....	4.2	92.2	7,733	483	961	11,385	
Ark.....	7.0	68.5	5,733	536	887	6,221	Nev.....	2.0	41.4	2,930	484	353	2,394	
Calif.....	62.2	118.5	13,507	2,288	15,484	10,716	N.H.....	2.1	12.3	1,345	204	585	1,267	
Colo.....	9.1	73.4	5,202	913	201	3,462	N.J.....	21.0	12.8	1,763	333	5,171	1,979	
Conn.....	10.0	8.4	1,574	293	2,777	895	N. Mex.....	4.3	71.1	5,252	984	619	3,259	
Del.....	1.3	3.9	464	41	270	632	N.Y.....	36.1	73.3	9,773	1,424	7,813	6,311	
D.C.....	1.1	-	92	12	317	-	N.C.....	15.0	78.0	5,092	765	1,678	10,654	
Fla.....	28.8	68.4	8,854	1,345	4,992	4,602	N. Dak.....	1.4	105.1	6,169	572	361	10,358	
Ga.....	15.6	88.9	11,850	1,161	2,880	14,115	Ohio.....	28.9	82.2	8,316	1,535	7,352	11,582	
Hawaii.....	1.5	3.0	546	48	194	440	Okla.....	11.4	98.4	6,223	810	2,127	8,723	
Idaho.....	2.2	65.3	3,218	609	551	4,221	Oreg.....	7.8	121.7	5,637	702	1,737	7,588	
Ill.....	28.4	108.3	11,392	1,708	6,042	12,792	Pa.....	29.3	88.3	11,336	1,516	6,401	8,192	
Ind.....	17.9	73.6	6,484	1,136	2,403	10,622	R.I.....	3.6	2.9	474	72	820	166	
Iowa.....	7.9	104.1	9,574	731	2,185	13,280	S.C.....	7.2	55.3	6,205	701	808	8,804	
Kan.....	7.9	130.6	8,908	800	1,378	22,514	S. Dak.....	1.4	81.7	6,498	659	336	10,865	
Ky.....	6.8	62.7	4,415	737	1,754	7,267	Tenn.....	11.4	72.4	6,741	1,080	2,435	9,791	
La.....	10.0	46.1	3,741	662	1,359	7,557	Tex.....	56.0	211.5	20,018	3,108	6,543	32,529	
Maine.....	2.2	19.7	2,314	310	639	2,741	Utah.....	4.3	45.4	3,429	784	746	2,605	
Md.....	10.3	18.8	2,708	381	2,041	2,054	Vt.....	.7	13.4	1,404	309	213	1,989	
Mass.....	19.7	14.0	2,730	517	5,625	2,109	Va.....	12.3	53.7	6,346	977	2,853	10,419	
Mich.....	25.3	92.0	7,007	1,087	4,668	18,738	Wash.....	14.8	74.0	5,692	766	4,543	7,099	
Minn.....	12.3	122.8	10,105	881	1,722	16,303	W. Va.....	3.2	34.2	2,898	477	779	6,313	
Miss.....	5.8	64.2	6,521	666	1,415	11,549	Wis.....	12.8	94.2	10,035	565	2,312	9,899	
							Wyo.....	1.6	34.6	3,865	923	310	2,280	

- Represents zero. <sup>1</sup>Highway mileage open to traffic.

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

Transportation—Land

**NO. 1050. HIGHWAY MILEAGE AND DAILY VEHICLE MILES OF TRAVEL (DVMT) BY TYPE OF ROAD: 1980**

[Based on data from the Highway Performance Monitoring System (HPMS)]

TYPE	Mileage (1,000)	DVMT (mil.)	PERCENT OF TOTAL		TYPE	Mileage (1,000)	DVMT (mil.)	PERCENT OF TOTAL	
			Mileage	DVMT				Mileage	DVMT
<b>Rural road systems</b> <sup>1</sup> .....	<b>3,233</b>	<b>1,845</b>	<b>100.0</b>	<b>100.0</b>	<b>Small urban—Con.</b>				
Principal arterial.....	115	736	3.6	39.9	Minor arterial.....	17	71	10.6	21.1
Interstate.....	32	369	1.0	20.1	Collector.....	19	40	12.0	11.7
Other.....	83	364	2.6	19.8	Local.....	108	69	67.4	20.4
Minor arterial.....	149	356	4.6	19.3	<b>Urbanized area road systems</b> .....	<b>469</b>	<b>1,994</b>	<b>100.0</b>	<b>100.0</b>
Collector.....	739	521	22.9	28.3	Principal arterial.....	44	1,123	9.5	56.3
Local.....	2,230	231	69.0	12.6	Interstate.....	8	417	1.7	20.9
<b>Small urban road systems</b> .....	<b>160</b>	<b>339</b>	<b>100.0</b>	<b>100.0</b>	Other freeway, expressway... Other.....	5 31	201 505	1.2 6.6	10.1 25.3
Principal arterial.....	16	159	10.0	46.8	Minor arterial.....	49	406	10.5	20.4
Interstate.....	1	24	.8	6.9	Collector.....	49	188	10.5	9.4
Other freeway, expressway... Other.....	1 13	16 119	.8 8.4	4.7 35.2	Local.....	326	277	69.6	13.9

<sup>1</sup> Includes only public road mileage.  
Source: U.S. Federal Highway Administration, unpublished data.

**NO. 1051. HIGHWAY MILEAGE—PAVEMENT CONDITION FOR URBAN AND RURAL AREAS, BY TYPE OF ROAD SYSTEM: 1970 TO 1980**

[Highway pavement condition is classified by the Present Serviceability Rating (PSR) system, which ranges from a high of 5.0 for new or nearly new pavement to 0 for completely deteriorated pavement. A "poor" rating of below 2.5 for high-use, high-speed facilities (or below 2.0 for other highways) indicates that such facilities are at or beyond their design life and in need of some type of capital improvement; a "fair" rating of 2.0 or 2.5 to 3.5 indicates some degree of serviceability remains, but that some type of capital improvement will be needed in the near future; a "good" rating indicates that capital improvements will not be needed for some time]

PAVEMENT CONDITION	INTERSTATE ROAD SYSTEMS			ARTERIAL ROAD SYSTEMS				COLLECTOR ROAD SYSTEMS			
	1975	1978	1980	1970	1975	1978	1980	1970	1975	1978	1980
<b>URBAN AREAS</b>											
Percent of road mileage rated—											
Poor (0 to 2 ).....	3	7	5	6	6	6	8	9	9	9	9
Fair (2 to 3.5).....	29	34	29	41	46	54	46	48	55	58	53
Good (3.5 to 5).....	68	59	66	53	48	40	46	43	36	33	38
<b>RURAL AREAS</b>											
Percent of road mileage rated—											
Poor (0 to 2 ).....	4	9	5	8	7	5	7	9	10	9	13
Fair (2 to 3.5).....	22	28	28	44	46	53	49	58	60	66	59
Good (3.5 to 5).....	74	63	67	48	47	42	44	33	30	25	28

<sup>1</sup> Rating for Interstate is 2.5.  
Source: U.S. Dept. of Transportation, report to the U.S. Congress, "The Status of the Nation's Highways: Conditions and Performance," January, 1981, and unpublished data. Also in U.S. Federal Highway Administration's, *Highway Statistics*, annual.

**NO. 1052. HIGHWAY CONSTRUCTION—CONTRACTS AWARDED: 1960 TO 1980**

[In millions of dollars. Covers contracts awarded and force-account work authorized by State agencies for highways, including Federal-State, Federal-State-Local, and State-Local cooperative work, and a small amount by the Federal government for National Park and Forest roads, etc. Work on local roads and streets is included only when contracted or performed by the State or when Federal funds are involved]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total</b> .....	<b>4,039</b>	<b>4,825</b>	<b>6,506</b>	<b>5,462</b>	<b>7,154</b>	<b>7,187</b>	<b>6,037</b>	<b>7,542</b>	<b>8,904</b>	<b>10,778</b>	<b>9,865</b>
Federally aided contracts.....	3,174	3,921	4,915	4,598	5,257	5,967	5,030	6,169	6,861	8,667	7,880
Federal funds.....	2,292	3,001	3,657	3,379	4,222	4,824	4,004	4,968	5,504	7,122	6,427
Non-federally aided contracts.....	865	904	1,592	1,864	1,897	1,220	1,007	1,373	2,043	2,111	1,985
Toll facilities.....	226	49	49	146	13	11	35	21	13	84	(NA)

NA Not available.  
Source: U.S. Federal Highway Administration, *Monthly Highway Construction Contracts*.

NO. 1053. RECEIPTS AND DISBURSEMENTS FOR HIGHWAYS, BY TYPE: 1970 TO 1980

[In millions of dollars. Data compiled from reports of State and local authorities. For Federal highway trust fund receipts, disbursements, and balances, see table 426, State data include District of Columbia]

TYPE	1970	1975	1976	1977	1978	1979	1980		
							Total <sup>1</sup>	Federal	State
<b>Total receipts</b> .....	<b>21,747</b>	<b>29,160</b>	<b>30,831</b>	<b>33,243</b>	<b>35,504</b>	<b>38,085</b>	<b>38,588</b>	<b>10,049</b>	<b>19,435</b>
Current income.....	19,861	26,921	28,610	31,013	33,621	36,181	36,570	10,049	18,307
Imposts on highway users <sup>2</sup> .....	15,311	18,578	19,811	21,339	22,360	22,763	22,469	6,415	15,455
Other taxes and fees.....	3,732	6,605	7,108	7,822	8,905	10,470	10,962	2,367	1,855
Investment income and other receipts.....	818	1,738	1,691	1,852	2,356	2,848	3,139	1,267	987
Bond issue proceeds <sup>3</sup> .....	1,886	2,239	2,221	2,230	1,883	1,904	2,018	-	1,128
Intergovernmental payments <sup>4</sup> .....	(x)	-11,092	5,954						
Funds drawn from (+) or placed in (-) reserves.....	-912	-461	-1,526	-3,411	-2,070	-641	+2,467	+1,994	+547
<b>Total funds available</b> .....	<b>20,835</b>	<b>28,699</b>	<b>29,305</b>	<b>29,832</b>	<b>33,434</b>	<b>37,444</b>	<b>41,055</b>	<b>951</b>	<b>25,936</b>
<b>Total disbursements</b> .....	<b>20,835</b>	<b>28,699</b>	<b>29,305</b>	<b>29,832</b>	<b>33,434</b>	<b>37,444</b>	<b>41,055</b>	<b>951</b>	<b>25,936</b>
Current disbursements.....	19,583	27,207	27,738	28,184	31,841	35,693	39,195	951	24,914
Capital outlay.....	11,575	14,388	13,927	13,079	14,938	17,612	19,967	531	15,386
Maintenance and traffic services.....	4,720	7,285	7,735	8,612	9,785	10,571	10,928	132	4,646
Administration and research.....	1,275	1,981	2,209	2,370	2,590	2,726	2,989	288	1,779
Law enforcement and safety.....	1,303	2,413	2,533	2,782	3,160	3,553	3,786	-	2,076
Interest on debt.....	710	1,129	1,234	1,281	1,368	1,425	1,515	-	1,025
Debt retirement <sup>5</sup> .....	1,252	1,492	1,567	1,648	1,593	1,751	1,860	-	1,022

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

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

NO. 1054. DISBURSEMENTS OF STATE HIGHWAY FUNDS—TOTAL, 1975 TO 1980, AND BY PURPOSE, 1980, BY STATES

[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	1975, total	1978, total	1979, total	1980			STATE	1975, total	1978, total	1979, total	1980		
				Total <sup>1</sup>	State highways						Total <sup>1</sup>	State highways	
					Capital outlays <sup>2</sup>	Main-tenance <sup>3</sup>						Capital outlays <sup>2</sup>	Main-tenance <sup>3</sup>
<b>U.S.</b> .....	<b>21,131</b>	<b>23,880</b>	<b>26,487</b>	<b>30,049</b>	<b>15,386</b>	<b>4,646</b>							
Ala.....	364	469	462	517	286	54	Mo.....	448	527	589	555	241	125
Alaska.....	254	227	(NA)	274	129	54	Mont.....	123	155	198	224	154	30
Ariz.....	270	315	345	365	188	83	Nebr.....	210	227	(NA)	274	197	30
Ark.....	283	317	339	425	198	31	Nev.....	65	118	132	169	109	24
					256	68	N.H.....	92	125	161	152	54	32
Calif.....	1,497	1,616	1,723	1,930	779	209	N.J.....	510	561	607	662	197	190
Colo.....	239	318	364	411	199	81	N. Mex.....	142	254	197	197	100	32
Conn.....	351	328	351	393	160	54	N.Y.....	1,129	1,582	1,694	1,650	832	242
Del.....	90	124	118	152	70	19	N.C.....	541	662	755	807	412	166
							N. Dak.....	97	120	137	143	83	21
D.C.....	77	83	42	57	12	20	Ohio.....	877	976	1,025	1,032	387	118
Fla.....	781	866	929	1,261	812	107	Okla.....	290	347	408	461	205	74
Ga.....	487	595	722	762	565	73	Oreg.....	318	325	391	462	255	69
Hawaii.....	105	105	129	134	83	13	Pa.....	1,485	1,247	1,235	1,557	470	516
							R.I.....	52	58	68	72	27	19
Idaho.....	119	144	161	153	64	34	S.C.....	255	277	306	309	165	75
Ill.....	1,189	1,130	1,352	1,652	974	163	S. Dak.....	98	119	150	151	91	23
Ind.....	529	528	682	688	192	205	Tenn.....	467	486	568	609	388	61
Iowa.....	409	469	566	504	247	57	Tex.....	984	1,112	1,313	1,882	1,463	229
							Utah.....	125	146	205	241	173	27
Kans.....	262	334	385	440	257	75	Vt.....	76	82	91	87	31	19
Ky.....	515	670	869	913	541	129	Va.....	574	843	870	894	512	199
La.....	545	549	594	682	467	50	Wash.....	417	554	708	787	407	121
Maine.....	117	154	169	164	69	55	W. Va.....	417	523	614	672	389	127
Md.....	443	465	612	663	147	66	Wis.....	371	413	452	468	196	73
							Wyo.....	116	130	155	192	136	30
Mass.....	415	358	554	704	306	70							
Mich.....	794	834	985	997	329	106							
Minn.....	358	532	557	611	344	79							
Miss.....	339	361	427	468	291	33							

NA Not available. <sup>1</sup>Includes funds for administration and miscellaneous, highway law enforcement, bond interest, bond redemption, and county and local roads and streets. <sup>2</sup>Outlays for roads and bridges. <sup>3</sup>Includes traffic services.

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

**NO. 1055. FEDERAL-AID PAYMENTS TO STATE AND LOCAL GOVERNMENTS FOR HIGHWAY CONSTRUCTION—STATES AND PUERTO RICO: 1970 TO 1981**

[In millions of dollars. For years ending June 30 except, beginning 1978, ending Sept. 30]

STATE	1970	1975	1980	1981	STATE	1970	1975	1980	1981	STATE OR OTHER AREA	1970	1975	1980	1981
<b>Total</b> .....	<b>4,524</b>	<b>4,874</b>	<b>9,246</b>	<b>8,847</b>	Ill.....	185	204	527	398	N.C.....	62	92	236	202
Highway					Ind.....	100	64	170	161	N. Dak.....	24	31	80	66
Trust fund.....	4,336	4,583	8,806	8,681	Iowa.....	63	88	143	137	Ohio.....	243	208	260	272
Other.....	188	291	440	166	Kans.....	50	68	151	130	Okla.....	56	57	108	96
U.S.....	4,520	4,860	9,204	8,820	Ky.....	96	98	172	166	Oreg.....	70	95	154	164
Ala.....	82	95	182	226	La.....	110	113	169	164	Pa.....	238	267	249	415
Alaska.....	40	80	105	119	Maine.....	21	23	47	42	R.I.....	28	17	25	33
Ariz.....	58	89	148	139	Md.....	66	122	246	269	S.C.....	35	47	96	84
Ark.....	43	50	158	110	Mass.....	94	72	172	175	S. Dak.....	39	36	137	124
Calif.....	503	350	502	556	Mich.....	160	174	263	231	Tenn.....	102	125	212	214
Colo.....	57	78	151	112	Minn.....	108	86	197	187	Tex.....	227	224	538	570
Conn.....	65	50	86	91	Miss.....	57	58	87	79	Utah.....	71	54	125	135
Del.....	10	13	35	41	Mo.....	106	122	223	196	Vt.....	28	25	33	33
D.C.....	32	13	9	22	Mont.....	62	45	133	126	Va.....	112	179	321	257
Fla.....	69	166	419	356	Nebr.....	38	58	78	78	Wash.....	93	113	273	308
Ga.....	64	115	270	241	Nev.....	35	26	89	106	W. Va.....	116	190	185	215
Hawaii.....	33	43	66	51	N.H.....	21	26	38	35	Wis.....	42	47	184	147
Idaho.....	37	42	64	57	N.J.....	110	97	174	136	Wyo.....	38	33	54	65
					N. Mex.....	55	60	77	83	Undist.....	-	3	27	32
					N.Y.....	256	229	580	437	P. Rico.....	4	14	142	27

- Represents zero. <sup>1</sup>Includes \$7 million in 1980 for other U.S. outlying areas.  
Source: U.S. Dept. of the Treasury, *Federal Aid to States*, annual.

**NO. 1056. FEDERAL AND STATE GASOLINE TAX—STATES: 1970 TO 1981**

[Cents per gallon. In effect Dec. 31. See also *Historical Statistics, Colonial Times to 1970*, series Q 233-234]

STATE	1970	1980	1981	STATE	1970	1980	1981	STATE	1970	1980	1981
<b>Total</b> .....	<b>11.0</b>	<b>12.2</b>	<b>12.3</b>	Iowa.....	7	10	13	N.C.....	9	9	12
Federal.....	4.0	4.0	4.0	Kans.....	7	8	8	N. Dak.....	7	8	8
State avg. <sup>2</sup> .....	7.0	8.2	8.3	Ky. <sup>4</sup> .....	7	9	10.1	Ohio.....	7	7	10.3
Ala.....	7	11	11	La.....	8	8	8	Okla.....	6.5	6.58	6.58
Alaska.....	8	8	8	Maine.....	8	9	9	Oreg.....	7	7	7
Ariz.....	7	8	8	Md.....	7	9	9	Pa.....	8	11	11
Ark.....	7.5	9.5	9.5	Mass.....	6.5	9.8	11.2	R.I.....	8	10	12
Calif.....	7	7	7	Mich.....	7	11	11	S.C.....	7	11	13
Colo.....	7	7	9	Minn.....	7	11	13	S. Dak.....	7	12	13
Conn.....	8	11	11	Miss.....	8	9	9	Tenn.....	7	7	9
Del.....	7	9	11	Mo.....	5	7	7	Tex.....	5	5	5
D.C.....	7	11	13	Mont.....	7	9	9	Utah.....	7	9	11
Fla.....	7	8	8	Nebr. <sup>5</sup> .....	8.5	13.6	13.9	Vl.....	8	9	11
Ga.....	6.5	7.5	7.5	Nev.....	6	6	10.5	Va. <sup>6</sup> .....	7	11	11
Hawaii.....	<sup>3</sup> 5	8.5	8.5	N.H.....	7	11	14	Wash.....	9	12	13.5
Idaho.....	7	9.5	11.5	N.J.....	7	8	8	W. Va.....	8.5	10.5	10.5
Ill.....	7.5	7.5	7.5	N. Mex.....	7	8	9	Wis.....	7	9	13.0
Ind.....	8	8.5	10.5	N.Y.....	7	8	8	Wyo.....	7	8	8

<sup>1</sup>Estimated. <sup>2</sup>Weighted average, based on net gallons taxed. <sup>3</sup>8 cents per gallon in Hawaii County; 5 cents elsewhere. <sup>4</sup>Trucks or combinations with more than 2 axles pay tax of 2 cents per gallon more. <sup>5</sup>.08 cents per gallon is for inspection fee.

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

**NO. 1057. PUBLIC HIGHWAY DEBT—STATE AND LOCAL GOVERNMENTS: 1960 TO 1982**

[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	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981, prel.	1982, est.
<b>Total debt issued</b> <sup>1</sup> .....	<b>1,206</b>	<b>1,070</b>	<b>1,886</b>	<b>2,239</b>	<b>2,224</b>	<b>2,230</b>	<b>1,883</b>	<b>1,904</b>	<b>2,094</b>	<b>1,770</b>	<b>1,850</b>
State.....	680	566	1,305	1,412	1,462	1,183	942	941	1,128	965	980
County and local rural.....	190	169	174	222	198	339	238	279	276	200	230
Municipal.....	336	315	407	605	564	708	703	684	690	605	640
<b>Total debt redeemed</b> <sup>2</sup> .....	<b>616</b>	<b>855</b>	<b>1,252</b>	<b>1,492</b>	<b>1,567</b>	<b>1,648</b>	<b>1,593</b>	<b>1,751</b>	<b>1,706</b>	<b>2,311</b>	<b>1,847</b>
State.....	300	459	782	908	920	960	954	960	1,022	1,579	1,027
County and local rural.....	96	123	152	166	172	178	170	177	209	230	200
Municipal.....	220	273	318	418	475	510	469	614	475	502	620
<b>Total debt outstanding</b> .....	<b>13,166</b>	<b>15,316</b>	<b>19,107</b>	<b>23,801</b>	<b>24,455</b>	<b>25,037</b>	<b>25,327</b>	<b>25,443</b>	<b>25,731</b>	<b>25,570</b>	<b>25,628</b>
State.....	9,384	10,905	13,903	17,422	17,964	18,187	18,175	18,156	18,262	17,848	18,142
County and local rural.....	1,280	1,363	1,685	1,822	1,846	2,007	2,075	2,090	2,157	2,068	2,227
Municipal.....	2,502	3,048	3,519	4,557	4,645	4,843	5,077	5,197	5,312	4,856	5,257

<sup>1</sup>Excludes refunding issues. <sup>2</sup>Excludes redemptions by refunding.

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

# Motor Vehicle Summary

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## No. 1058. MOTOR VEHICLES—SUMMARY: 1970 TO 1981

ITEM	Unit	1970	1974	1975	1976	1977	1978	1979	1980	1981
<b>SALES, EXPORTS, IMPORTS, AND SCRAPPAGE</b>										
Passenger car factory sales.....	1,000.....	6,547	7,331	6,713	8,500	9,201	9,165	8,419	6,400	6,255
Passenger car (new), retail sales <sup>1</sup> .....	1,000.....	8,405	8,867	8,640	10,110	11,185	11,312	10,671	8,979	8,536
Domestic <sup>2</sup> .....	1,000.....	7,116	7,449	7,050	8,607	9,104	9,308	8,341	6,581	6,209
Subcompact <sup>3</sup> .....	1,000.....	786	700	637	832	953	1,181	1,671	1,604	1,630
Compact <sup>4</sup> .....	1,000.....	1,338	1,781	2,336	2,804	2,364	2,391	2,130	1,659	1,568
Standard <sup>5</sup> .....	1,000.....	3,062	3,062	1,956	2,394	2,769	2,647	2,147	1,358	1,250
Intermediate <sup>6</sup> .....	1,000.....	1,819	1,819	2,058	2,778	3,018	3,079	2,393	1,957	1,757
Imports <sup>7</sup> .....	1,000.....	1,285	1,413	1,587	1,498	2,076	2,000	2,329	2,398	2,327
Passenger cars (new), exported <sup>15</sup> .....	1,000.....	285	601	640	660	697	706	793	617	548
Passenger cars (new), imported <sup>16</sup> .....	1,000.....	2,013	2,573	2,075	2,537	2,791	3,025	3,006	3,248	2,999
Canada.....	1,000.....	693	818	734	826	850	833	677	595	564
Germany, Federal Republic of.....	1,000.....	675	620	370	350	424	416	496	471	376
Japan.....	1,000.....	381	792	696	1,129	1,342	1,563	1,617	1,992	1,912
Truck and bus factory sales.....	1,000.....	1,692	2,727	2,272	2,979	3,441	3,705	3,037	1,667	1,701
Truck and bus retail sales <sup>8</sup> .....	1,000.....	1,746	2,587	2,351	3,044	3,486	3,914	3,236	2,232	1,972
Light duty (up to 14,000 GVW) <sup>9</sup> .....	1,000.....	(NA)	2,184	2,076	2,783	3,145	3,547	2,961	1,964	1,747
Med. duty (14,001-26,000 GVW) <sup>9</sup> .....	1,000.....	(NA)	224	169	162	172	164	152	92	74
Heavy duty (over 26,000 GVW) <sup>9</sup> .....	1,000.....	126	179	106	119	169	203	223	176	152
Imports, new passenger cars <sup>1</sup> .....	Mil. dol.....	3,719	7,544	7,483	9,399	11,077	14,072	14,852	16,935	17,939
Trucks and buses, new <sup>1</sup> .....	Mil. dol.....	361	646	620	834	1,258	2,146	1,841	1,985	4,217
Exports <sup>1</sup> .....	Mil. dol.....	3,871	6,804	10,658	12,046	12,544	14,548	16,590	16,015	18,121
Passenger cars (new) <sup>9</sup> .....	Mil. dol.....	822	2,303	2,852	3,228	3,568	3,623	4,642	3,932	3,928
Trucks and buses (new) <sup>9</sup> .....	Mil. dol.....	636	1,422	2,305	2,141	2,098	2,752	3,267	2,977	3,247
Parts and accessories <sup>10</sup> .....	Mil. dol.....	2,413	4,879	5,501	6,678	6,877	8,173	8,681	9,106	10,946
Vehicles retired from use <sup>11,12</sup> .....	1,000.....	8,298	8,241	6,576	7,926	9,902	9,333	11,228	10,137	9,061
Passenger cars.....	1,000.....	7,461	7,194	5,669	6,829	8,234	7,907	9,312	8,405	7,542
Trucks and buses.....	1,000.....	837	1,047	908	1,097	1,668	1,426	1,916	1,732	1,519
Average age of cars in use.....	Years.....	5.55	5.72	5.99	6.16	6.23	6.32	6.41	6.59	6.87
Average age of trucks in use.....	Years.....	7.33	6.97	6.94	6.97	6.93	6.86	6.89	7.13	7.45
Motorcycle registrations, new <sup>12,13</sup> .....	1,000.....	751	1,011	747	783	849	797	861	838	794
Motorcycle imports, total <sup>14</sup> .....	1,000.....	1,091	1,543	948	659	860	935	887	1,120	1,057
Value <sup>15</sup> .....	Mil. dol.....	308	911	713	467	589	797	870	1,142	1,314
Vehicle drivers licenses.....	Million.....	112	125	130	134	138	141	143	146	148
Percent male.....	Percent.....	56.8	54.7	54.3	54.1	53.9	53.7	53.5	53.2	53.0
Percent under 25 years old.....	Percent.....	22.1	22.5	22.6	22.4	22.1	21.9	21.8	21.5	20.7
<b>TIRES AND BATTERIES SHIPMENTS</b>										
Tires, passenger car, total <sup>16</sup> .....	Million.....	168.6	174.4	167.0	177.0	189.6	193.9	174.0	145.9	165.3
Replacement.....	Million.....	129.6	123.5	122.5	122.9	129.3	135.2	121.9	106.9	125.3
Tires, truck and bus, total <sup>16</sup> .....	Million.....	25.7	31.8	27.3	31.6	37.2	42.7	39.9	31.1	35.8
Replacement.....	Million.....	16.7	21.0	19.8	22.3	25.9	30.0	28.9	24.4	28.5
Replacement automobile batteries <sup>17</sup> .....	Million.....	37.9	43.8	39.3	42.3	54.8	58.4	53.7	50.1	53.6
<b>SPECIAL MOTOR VEHICLE TAXES<sup>18</sup></b>										
Federal excise.....	Bil. dol.....	6.8	5.8	5.6	6.0	6.5	7.0	7.1	6.4	6.5
State motor vehicle carrier receipts.....	Bil. dol.....	3.8	5.0	5.1	6.1	6.4	6.9	7.4	7.6	<sup>19</sup> 7.9
State motor fuel, net.....	Bil. dol.....	6.5	8.1	8.4	8.9	9.3	9.7	9.8	9.6	<sup>19</sup> 10.0
<b>MOTOR VEHICLE REGISTRATIONS</b>										
All vehicles, <sup>20</sup> world.....	Million.....	246.5	315.9	326.1	341.7	362.6	380.0	396.0	411.1	(NA)
United States.....	Million.....	108.4	129.9	132.9	138.5	143.8	148.8	154.1	155.9	(NA)
Other North and Central America.....	Million.....	11.3	14.9	15.7	17.0	18.2	19.0	19.0	19.6	(NA)
South America.....	Million.....	8.1	12.2	13.0	13.0	15.0	16.7	17.3	18.8	(NA)
Europe, non-communist area.....	Million.....	74.3	95.8	96.6	103.0	110.6	111.0	115.0	116.3	(NA)
Europe, communist area.....	Million.....	10.4	14.3	16.6	15.0	16.0	22.5	23.7	29.2	(NA)
Africa.....	Million.....	4.5	6.2	6.6	6.9	7.3	7.6	8.6	9.5	(NA)
Asia, non-communist.....	Million.....	22.9	34.4	36.2	39.1	42.7	45.3	48.5	51.4	(NA)
Asia, communist area.....	Million.....	.5	.7	.7	.7	.7	.7	.9	.9	(NA)
Oceania.....	Million.....	6.0	7.4	7.8	8.0	8.3	8.5	8.8	9.5	(NA)

NA Not available. <sup>1</sup>Based on data from U.S. Dept. of Commerce. <sup>2</sup>Includes domestic models produced in Canada. <sup>3</sup>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 1978 cars produced in U.S. by foreign manufacturer are included in subcompact. <sup>4</sup>Excludes domestic models produced in Canada. <sup>5</sup>1970-1977, covers assembled vehicles only. Beginning 1978, includes chassis. <sup>6</sup>Includes other countries, not shown separately. <sup>7</sup>Excludes motor coaches and imports from foreign manufacturers. Beginning 1974, includes imports made by U.S. manufacturers overseas. <sup>8</sup>Gross vehicle weight (fully loaded vehicle). <sup>9</sup>Covers assembled and unassembled vehicles. <sup>10</sup>Includes rubber tires and tubes and used vehicles. <sup>11</sup>For years ending June 30. Represents vehicles failing to re-register. <sup>12</sup>Source: R. L. Polk & Company, Detroit, Mich., *New Motorcycle Registrations by States*; vehicles retired from use published in source cited below. Reproduction prohibited without Polk permission. <sup>13</sup>Excludes Oklahoma. <sup>14</sup>Source: Motorcycle Industry Council, Inc., Irvine, Calif. Data from U.S. Dept. of Commerce. Excludes mopeds/motorized bicycles and three-wheel all-terrain vehicles. <sup>15</sup>Dutiable value for customs purposes prior to 1980 thereafter, C.I.F. value. <sup>16</sup>Includes original equipment. Also includes exports, not shown separately. Source: The Rubber Manufacturers Association, Inc., Washington, D.C., *RMA Monthly Tire Report*. <sup>17</sup>Source: Battery Council International, Chicago, Ill. <sup>18</sup>Special taxes on motor-vehicle users. Excludes income and property taxes on establishments engaged in the production, sale, and repairing of motor vehicles and their parts; and on truck operating companies. Source: U.S. Federal Highway Administration, *Highway Statistics*, annual, and *Estimates of State Highway-User Tax Receipts*, annual. <sup>19</sup>Estimated. <sup>20</sup>Cars, trucks, and buses. Source: 1970-1975, U.S. Bureau of Domestic Business Development, *World Motor Vehicle Production and Registration*, annual.

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

NO. 1059. MOTOR-VEHICLE REGISTRATIONS, 1960 TO 1981, AND DRIVERS LICENSES, 1980, BY STATES

[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 <sup>1</sup>									Motor-cycles (incl. official) <sup>1</sup> 1981, est.	DRIVERS LICENSES, 1980		
	1960, Total	1970, total	1975, total	1980, total	1981, est.		Percent change		Total <sup>3</sup>		Percent—		
					Total	Automobiles (incl. cabs)	1960-1970, total	1970-1981, total			Male	Under 25 yr. old	
													Total
<b>U.S.</b> .....	<b>73,858</b>	<b>108,418</b>	<b>132,949</b>	<b>155,796</b>	<b>159,760</b>	<b>124,336</b>	<b>542</b>	<b>46.8</b>	<b>47.4</b>	<b>5,972</b>	<b>145,299</b>	<b>53.1</b>	<b>21.0</b>
Ala.....	1,282	1,966	2,493	2,938	3,026	2,140	546	53.4	53.9	78	2,271	52.4	21.6
Alaska.....	81	139	226	262	259	158	383	71.6	86.3	8	221	66.9	23.5
Ariz.....	624	1,093	1,459	1,917	2,047	1,456	522	75.2	87.3	102	1,933	54.3	21.7
Ark.....	708	1,043	1,283	1,574	1,630	1,072	467	47.3	56.3	35	1,489	51.9	21.0
Calif.....	7,799	11,901	13,891	16,873	17,744	14,019	579	52.6	49.1	761	15,669	53.1	20.4
Colo.....	924	1,442	1,925	2,342	2,370	1,765	595	56.1	64.4	115	2,048	52.0	22.5
Conn.....	1,107	1,793	1,949	2,147	2,189	2,022	645	56.5	26.3	75	2,174	49.2	20.1
Del.....	192	312	351	397	402	324	542	62.5	26.8	12	417	51.7	21.8
D.C.....	206	257	255	288	279	257	407	24.8	8.6	5	344	54.6	16.3
Fla.....	2,367	4,120	5,995	7,614	7,882	6,986	628	74.1	81.3	222	7,288	52.2	19.0
Ga.....	1,512	2,584	3,211	3,818	3,950	2,938	527	70.9	49.0	114	3,424	52.2	21.8
Hawaii.....	231	405	462	570	562	525	535	75.3	43.7	7	542	55.7	18.7
Idaho.....	375	488	647	834	861	531	554	30.1	76.4	61	631	52.7	25.5
Ill.....	3,778	5,238	6,344	7,477	7,640	6,390	557	38.7	45.9	328	7,003	53.2	22.2
Ind.....	2,048	2,818	3,315	3,926	3,959	2,800	530	37.7	36.9	190	3,631	51.7	22.1
Iowa.....	1,325	1,760	2,099	2,329	2,331	1,670	576	35.1	30.2	233	2,107	52.6	23.1
Kans.....	1,163	1,548	1,805	2,007	2,038	1,404	589	33.1	31.7	110	1,675	51.4	22.7
Ky.....	1,198	1,783	2,245	2,593	2,604	1,813	495	47.2	47.7	66	2,055	53.8	23.0
La.....	1,177	1,742	2,188	2,779	2,863	2,016	468	48.0	64.4	81	2,259	52.5	23.0
Maine.....	374	510	648	724	744	525	463	36.4	45.9	50	730	52.3	20.0
Md.....	1,155	1,872	2,423	2,803	2,857	2,393	561	62.1	52.6	84	2,722	52.4	20.8
Mass.....	1,803	2,575	3,107	3,749	3,809	3,320	575	42.8	47.9	113	3,640	50.3	20.1
Mich.....	3,306	4,569	5,545	6,488	6,582	5,326	579	38.2	44.1	258	6,400	52.2	24.4
Minn.....	1,592	2,207	2,525	3,091	3,142	2,345	573	38.6	42.4	171	2,336	52.3	21.7
Miss.....	723	1,117	1,377	1,577	1,635	1,269	501	54.5	46.4	30	1,587	54.0	23.1
Mo.....	1,720	2,408	2,866	3,271	3,293	2,447	495	40.1	36.8	112	3,245	52.1	22.4
Mont.....	373	485	611	680	723	455	574	30.0	49.1	36	599	55.5	22.4
Nebr.....	734	974	1,185	1,254	1,280	849	538	32.7	31.4	87	1,093	52.1	23.7
Nev.....	176	355	464	655	667	492	582	102.9	93.5	21	626	53.4	21.2
N.H.....	256	390	485	704	724	604	645	92.3	85.6	43	652	52.3	20.7
N.J.....	2,401	3,586	4,155	4,761	4,871	4,360	589	49.4	35.8	109	4,928	52.7	18.5
N. Mex.....	426	637	827	1,088	1,097	702	529	49.5	72.2	55	855	49.0	25.0
N.Y.....	5,067	6,718	7,591	8,002	7,988	6,978	396	32.6	18.9	216	9,240	56.1	16.9
N.C.....	1,720	2,826	3,690	4,532	4,617	3,421	575	64.3	63.4	122	3,777	52.0	22.8
N. Dak.....	345	428	551	627	638	370	562	24.1	49.1	32	419	52.7	24.8
Ohio.....	4,087	5,974	7,179	7,771	7,990	6,536	606	46.2	33.7	283	7,031	60.4	19.7
Okla.....	1,184	1,713	2,113	2,583	2,729	1,844	595	44.7	59.3	133	1,965	50.6	21.6
Oreg.....	919	1,369	1,628	2,081	2,127	1,579	596	49.0	55.4	95	1,991	53.4	18.6
Pa.....	4,287	5,818	7,659	9,626	7,131	5,897	497	35.7	22.6	215	7,056	53.8	19.4
R.I.....	341	488	563	623	640	557	584	49.1	31.1	27	587	52.0	20.8
S.C.....	879	1,360	1,772	1,996	2,020	1,541	487	54.7	48.5	43	1,953	52.5	22.6
S. Dak.....	354	426	521	601	608	371	541	20.3	42.7	38	481	52.5	24.9
Tenn.....	1,307	2,050	2,727	3,271	3,335	2,597	563	56.8	62.7	85	2,810	52.1	20.7
Tex.....	4,457	6,693	8,396	10,475	10,787	7,606	515	50.2	61.2	331	9,288	52.8	21.7
Utah.....	417	664	845	992	1,000	682	449	59.2	50.6	65	845	50.0	26.2
Vt.....	152	223	287	347	360	280	543	50.7	57.2	29	344	52.8	20.9
Va.....	1,426	2,263	3,251	3,626	3,704	3,137	578	58.7	63.7	91	3,461	51.0	20.8
Wash.....	1,377	2,102	2,540	3,225	3,306	2,344	556	52.7	57.3	153	2,663	53.0	20.1
W. Va.....	601	801	966	1,320	1,384	978	501	33.3	72.8	43	1,506	56.7	19.4
Wis.....	1,600	2,182	2,591	2,941	3,017	2,449	516	36.4	38.3	176	2,962	52.3	22.6
Wyo.....	207	247	337	467	479	282	573	19.3	93.9	23	346	54.3	25.1

- Represents zero. <sup>1</sup>Excludes vehicles owned by military services. <sup>2</sup>Based on resident population as of July 1. <sup>3</sup>Estimated from data reported by States for current and previous years; allowance has been made for deaths, emigration, or revocation by some States.

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

NO. 1060. MOTOR VEHICLES—REGISTRATIONS, FACTORY SALES, AND RETAIL SALES: 1950 TO 1981

[Minus sign (–) denotes decrease. 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	REGISTRATIONS <sup>1</sup> (mil.)			Motor-cycle registrations <sup>1</sup> (1,000)	FACTORY SALES (1,000)			PASSENGER CARS RETAIL SALES (1,000)			AVERAGE ANNUAL PERCENT CHANGE	
	Total cars, trucks, buses	Pas-senger cars and taxis	Trucks and buses		Total cars, trucks, buses	Pas-senger cars	Trucks and buses <sup>2</sup>	Total	Do-mestic	Im-ports	Registra-tions <sup>3</sup>	Retail sales
1950	49.2	40.4	8.8	454	8,003	6,666	1,337	(NA)	(NA)	(NA)	7.4	(NA)
1955	62.7	52.1	10.6	412	9,169	7,920	1,249	7,466	7,408	58	5.0	(NA)
1960	73.9	61.7	12.2	574	7,869	6,675	1,194	6,641	6,142	499	3.3	-2.3
1965	90.4	75.3	15.1	1,382	11,057	9,306	1,752	9,332	8,763	569	4.1	7.0
1967	98.9	80.4	16.5	1,953	8,976	7,437	1,539	8,337	7,568	769	3.5	-5.5
1968	100.9	83.6	17.3	2,089	10,718	8,822	1,896	9,656	8,625	1,031	4.1	15.8
1969	105.1	86.9	18.2	2,316	10,147	8,224	1,923	9,583	8,464	1,118	4.2	-.8
1970	108.4	89.2	19.2	2,824	8,239	6,547	1,692	8,405	7,119	1,285	3.2	-12.3
1971	113.0	92.7	20.3	3,344	10,638	8,585	2,053	10,250	8,681	1,568	4.2	22.0
1972	118.8	97.1	21.7	3,760	11,271	8,824	2,447	10,950	9,327	1,623	5.1	6.8
1973	125.7	102.0	23.7	4,371	12,637	9,658	2,980	11,439	9,676	1,763	5.8	4.5
1974	129.9	104.8	25.1	4,966	10,059	7,331	2,727	8,867	7,454	1,413	3.4	-22.5
1975	132.9	106.7	26.2	4,964	8,985	6,713	2,272	8,640	7,053	1,587	2.3	-2.6
1976	138.5	110.4	28.2	4,989	11,480	8,500	2,979	10,110	8,611	1,498	4.2	17.0
1977	142.4	112.3	30.1	4,879	12,642	9,201	3,441	11,185	9,109	2,076	2.8	10.6
1978	148.4	116.6	31.8	4,867	12,871	9,185	3,706	11,312	9,312	2,000	4.2	1.1
1979	151.8	118.4	33.4	5,422	11,456	8,419	3,037	10,671	8,341	2,329	2.3	-5.7
1980	155.8	121.6	34.1	5,694	8,067	6,401	1,667	8,979	6,581	2,398	2.6	-15.9
1981	<sup>5</sup> 159.8	<sup>5</sup> 124.3	<sup>5</sup> 35.4	<sup>5</sup> 5,972	7,956	6,255	1,701	8,536	6,209	2,327	2.6	-4.9

NA Not available. <sup>1</sup>Excludes Alaska and Hawaii prior to 1960. Includes publicly owned vehicles. Excludes military services' vehicles. <sup>2</sup>Includes standard equipment. <sup>3</sup>Excludes motorcycles. <sup>4</sup>Change from 1945. <sup>5</sup>Estimate.

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

NO. 1061. MOTOR VEHICLE ACCIDENTS—NUMBER AND DEATHS: 1960 TO 1981

[1981 data preliminary. See also *Historical Statistics, Colonial Times to 1970*, series Q 208 and Q 224–232]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981
Motor-vehicle accidents <sup>1</sup>	Million	10.4	13.2	16.0	15.6	16.5	16.8	17.6	18.3	18.1	17.9	(NA)
Cars	Million	16.0	20.3	23.5	20.6	22.5	23.1	23.9	24.8	22.9	22.8	(NA)
Trucks	Million	2.0	2.6	3.2	3.4	3.8	4.1	4.7	5.5	5.4	5.5	(NA)
Motorcycles	1,000	100	235	305	376	372	402	460	480	480	560	(NA)
Motor vehicle deaths within 1 yr. <sup>2</sup>	1,000	38.1	49.2	54.6	46.4	45.9	47.0	49.5	52.4	52.8	52.6	50.7
Noncollision accidents <sup>3</sup>	1,000	11.9	14.9	15.4	12.8	12.7	13.0	13.7	14.5	15.2	15.5	15.5
Collision accidents:												
With other motor vehicles	1,000	14.8	20.8	23.2	19.7	19.5	20.1	21.2	22.4	22.2	21.2	20.2
With pedestrians	1,000	7.9	8.9	9.9	8.5	8.4	8.6	9.1	9.6	9.7	9.6	9.0
With fixed objects <sup>4</sup>	1,000	1.7	2.2	3.8	3.1	3.1	3.2	3.4	3.6	3.5	4.1	3.8
Deaths within 30 days <sup>4</sup>	1,000	36.4	47.1	52.6	45.2	44.5	45.5	47.9	50.3	51.1	51.1	49.3
Vehicle occupants	1,000	27.9	36.8	40.6	33.3	32.8	33.9	35.1	37.1	37.2	36.8	35.5
Pedestrians	1,000	7.2	8.0	9.0	7.5	7.5	7.4	7.7	7.8	8.1	8.1	7.8
Motorcyclists <sup>5</sup>	1,000	.8	1.7	2.3	3.4	3.2	3.3	4.1	4.6	4.9	5.1	4.9
Bicyclists	1,000	.5	.7	.8	1.0	1.0	.9	.9	.9	.9	1.0	.9
Traffic death rates: <sup>4,6</sup>												
Per 100,000 resident population	Rate	20.2	24.3	25.8	21.2	20.7	20.9	21.8	22.7	22.8	22.6	21.5
Per 100,000 registered vehicles	Rate	48.9	51.3	47.3	33.5	32.3	31.7	32.5	32.8	32.0	31.6	29.7
Per 100 million vehicle miles	Rate	5.1	5.3	4.7	3.5	3.4	3.3	3.3	3.3	3.3	3.3	3.2
Per 100,000 licensed drivers	Rate	41.7	47.8	47.2	36.0	34.3	34.0	34.7	35.7	35.7	35.2	33.3
Motor vehicle accidents <sup>7</sup>	Million	11.4	14.7	22.1	23.7	24.9	25.4	26.7	27.7	26.7	24.1	(NA)
Injuries <sup>7</sup>	1,000	3,078	3,982	4,983	4,634	4,978	5,268	5,575	5,798	5,681	5,230	(NA)
Economic loss <sup>7,8</sup>	Bill. dol.	10.2	14.2	23.5	30.4	36.1	40.9	46.5	52.6	56.4	57.1	(NA)

NA Not available. <sup>1</sup>Covers only accidents occurring on the road. <sup>2</sup>Deaths that occur within one year of accident. Includes collision categories not shown separately. <sup>3</sup>Beginning 1970, not comparable with previous years due to classification change. <sup>4</sup>Within 30 days of accident. Source: U.S. National Highway Traffic Safety Administration, unpublished data from Fatal Accident Reporting System. <sup>5</sup>Includes motor scooters and motorized bicycles (mopeds). <sup>6</sup>Based on 30-day definition of traffic deaths. Source: Insurance Information Institute, New York, N.Y., *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. <sup>7</sup>Wage loss; legal, medical, hospital, and funeral expenses; insurance administrative costs; and property damage.

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

NO. 1062. DEATHS FROM MOTOR-VEHICLE ACCIDENTS—BY STATES: 1970 TO 1979

[Data differ from table 1061 because data are based on date of death, not date of accident. Data reflect State where death occurred. Includes deaths of nonresidents of U.S. Deaths for 1979 classified according to the ninth revision of the *International Classification of Diseases*, for earlier years classified according to the revision in use at the time; see text, p. 57. Data based on Vital Registration System, see Appendix III]

STATE	1970	1972 <sup>1</sup>	1975	1977	1978	1979	STATE	1970	1972 <sup>1</sup>	1975	1977	1978	1979
<b>U.S.</b>	<b>54,845</b>	<b>56,528</b>	<b>46,032</b>	<b>49,740</b>	<b>52,653</b>	<b>53,786</b>	Miss.....	947	976	629	750	875	901
Ala.....	1,297	1,356	1,087	1,225	1,295	1,131	Mo.....	1,479	1,500	1,105	1,235	1,271	1,236
Alaska.....	107	64	120	127	119	87	Mont.....	340	408	294	321	278	346
Ariz.....	782	858	713	969	1,044	1,076	Nebr.....	495	504	385	359	357	341
Ark.....	595	750	577	540	585	550	Nev.....	278	290	236	290	332	405
Calif.....	5,114	5,300	4,414	5,127	5,680	5,917	N.H.....	182	172	155	150	165	182
Colo.....	697	746	621	738	735	751	N.J.....	1,289	1,352	1,099	1,089	1,148	1,179
Conn.....	448	444	404	455	460	565	N.Mex.....	588	583	556	648	578	688
Del.....	158	130	129	122	140	127	N.Y.....	3,117	3,140	2,277	2,351	2,549	2,500
D.C.....	140	100	91	86	68	71	N.C.....	1,801	2,026	1,560	1,477	1,568	1,580
Fla.....	2,181	2,570	2,067	2,104	2,332	2,695	N.Dak.....	194	206	183	199	205	157
Ga.....	1,825	1,940	1,420	1,484	1,548	1,608	Ohio.....	2,488	2,336	1,652	1,795	2,021	2,244
Hawaii.....	163	164	153	164	214	223	Okl.....	787	792	748	887	948	942
Ill.....	320	324	291	341	331	353	Oreg.....	739	774	582	696	754	720
Ind.....	2,267	2,216	1,816	2,151	2,172	2,059	Pa.....	2,349	2,320	2,102	2,035	2,119	2,282
Iowa.....	1,587	1,578	1,139	1,268	1,312	1,351	R.I.....	143	144	140	155	131	140
Kans.....	894	894	714	643	651	683	S.C.....	1,070	1,148	837	862	919	927
Ky.....	1,081	1,114	885	979	908	942	S.Dak.....	240	312	216	225	204	230
La.....	1,194	1,136	993	1,110	1,185	1,258	Tenn.....	1,825	1,526	1,280	1,351	1,387	1,366
Maine.....	288	252	235	216	246	256	Tex.....	3,570	3,714	3,472	3,638	3,976	4,213
Md.....	808	852	686	599	752	722	Utah.....	354	354	285	377	403	352
Mass.....	918	1,042	895	790	918	982	Vt.....	116	126	124	108	110	154
Mich.....	2,172	2,236	1,811	1,982	2,083	1,899	Va.....	1,251	1,256	1,068	1,182	1,109	1,070
Minn.....	1,028	1,052	798	864	993	914	Wash.....	902	836	804	981	1,052	1,113
							W.Va.....	561	578	489	527	507	579
							Wis.....	1,109	1,148	943	958	991	1,036
							Wyo.....	210	196	210	254	249	280

<sup>1</sup>Represents peak year for deaths from motor vehicle accidents.

Source: U.S. National Center for Health Statistics, *Vital Statistics of the United States*, annual, and unpublished data.

NO. 1063. ESTIMATED LICENSED DRIVERS AND DRIVERS INVOLVED IN FATAL ACCIDENTS, BY AGE-GROUP OF DRIVER: 1981

ITEM	Unit	Total	Under 20 years old	20-24 years old	25-34 years old	35-44 years old	45-54 years old	55-64 years old	65 years old and over
Licensed drivers.....	1,000.....	147,988	11,394	19,236	37,436	25,450	20,124	18,348	15,980
Percent distribution.....	Percent.....	100.0	7.7	13.0	25.3	17.2	13.6	12.4	10.8
Drivers involved in fatal accidents.....	1,000.....	62.1	9.3	13.1	16.9	8.6	5.7	4.4	4.0
Percent distribution.....	Percent.....	100.0	15.0	21.1	27.2	13.9	9.2	7.0	6.5

Source: U.S. Federal Highway Administration, *Drivers Licenses*, annual, and U.S. National Highway Traffic Safety Administration, unpublished data from Fatal Accident Reporting System.

NO. 1064. AUTOMOBILE INSURANCE: 1960 TO 1981

[In millions of dollars, except as indicated, 1960 and 1965, direct premiums earned and direct losses incurred; beginning 1970, premiums earned basis. See also *Historical Statistics, Colonial Times to 1970*, series Q 163-174]

ITEM	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981 <sup>1</sup>	
										Private passenger	Commercial
Companies reporting.....	(NA)	(NA)	925	1,275	1,315	1,363	1,381	1,399	1,470	1,507	
Total insurance:											
Premiums earned.....	6,448	8,358	14,612	23,860	23,970	29,074	32,399	35,386	37,621	35,578	4,174
Losses paid <sup>2</sup> .....	3,645	5,221	11,198	19,657	18,541	20,264	22,755	26,190	27,887	27,188	3,419
Percent of premiums.....	56.5	62.5	76.6	82.4	77.4	69.7	70.2	73.9	74.1	76.4	81.9
Bodily injury liability: <sup>3</sup>											
Premiums earned.....	4,060	5,515	9,559	15,150	15,087	18,130	19,997	21,544	22,480	21,028	2,595
Losses paid <sup>2</sup> .....	2,372	3,464	7,547	12,277	11,599	13,083	14,252	16,016	17,221	16,891	2,263
Percent of premiums.....	58.4	63.2	79.0	81.0	78.8	72.1	71.3	74.3	76.6	80.3	87.2
Physical damage: <sup>3</sup>											
Premiums earned.....	2,388	2,843	5,053	8,710	8,883	10,944	12,396	13,822	15,141	14,551	1,579
Losses paid <sup>2</sup> .....	1,273	1,737	3,651	7,380	6,941	7,201	8,503	10,114	10,665	10,295	1,157
Percent of premiums.....	53.3	61.1	72.3	84.7	78.1	65.8	68.6	73.3	70.4	70.8	73.3

NA Not available. <sup>1</sup>Beginning 1970, includes adjusting expenses. <sup>2</sup>Includes property damage. <sup>3</sup>Covers auto fire, theft, collision, and comprehensive.

Source: 1960 and 1965, *The Spectator*, Philadelphia, Pa., *Insurance by States*; thereafter, the National Underwriter Co., Cincinnati, Ohio, *Argus F. C. & S. Chart*, annual (copyright).

# Automobile Output—Cars and Trucks

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## NO. 1065. AUTOMOBILE OUTPUT—PRODUCTION AND VALUE: 1965 TO 1981

ITEM	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981 prel.
<b>New auto sales, total (mil. units) .....</b>	<b>9.3</b>	<b>8.4</b>	<b>11.4</b>	<b>8.8</b>	<b>8.5</b>	<b>10.0</b>	<b>11.0</b>	<b>11.2</b>	<b>10.6</b>	<b>9.0</b>	<b>8.5</b>
Domestic sales (mil. units) .....	8.8	7.1	9.6	7.4	7.0	8.5	9.0	9.2	8.2	6.6	6.2
Sales of imports (mil. units) .....	.6	1.3	1.8	1.4	1.6	1.5	2.1	2.0	2.3	2.4	2.3
Percent of total .....	6.1	15.3	15.5	16.1	18.6	15.0	18.8	17.9	22.1	26.7	27.3
VALUE IN CURRENT DOLLARS (bil.)											
<b>Gross auto output .....</b>	<b>31.2</b>	<b>28.7</b>	<b>46.2</b>	<b>39.2</b>	<b>40.7</b>	<b>55.9</b>	<b>65.1</b>	<b>69.5</b>	<b>68.0</b>	<b>59.8</b>	<b>69.2</b>
As percent of GNP <sup>1</sup> .....	4.5	2.9	3.5	2.7	2.6	3.3	3.4	3.2	2.8	2.3	2.4
Final sales .....	30.5	29.8	45.4	38.1	42.3	54.6	64.0	68.8	69.1	60.9	68.0
Personal consumption expenditures .....	25.3	27.3	41.2	34.8	38.2	50.0	57.5	63.1	64.8	60.6	67.2
New autos .....	21.4	21.9	33.9	27.0	29.3	38.1	44.3	48.2	49.1	45.7	49.2
Net purchases of used autos .....	3.9	5.3	7.3	7.8	8.9	11.9	13.2	14.9	15.7	14.9	18.0
Producers' durable equipment .....	5.1	4.9	8.9	7.6	7.6	9.6	12.6	14.7	13.4	12.1	13.6
New autos .....	6.5	7.6	11.6	11.4	12.5	15.4	19.1	22.2	22.5	21.1	24.1
Net purchases of used autos <sup>2</sup> .....	-1.5	-2.6	-3.3	-3.8	-4.9	-5.9	-6.5	-7.5	-9.1	-9.0	-10.5
Net exports .....	-3	-2.9	-4.7	-5.0	-4.2	-5.7	-7.0	-10.0	-10.1	-12.8	-13.8
Exports .....	.4	.8	1.8	2.3	2.9	3.3	3.6	3.7	4.7	4.0	4.0
Imports .....	.7	3.7	6.5	7.3	7.1	8.9	10.7	13.7	14.8	16.8	17.8
Govt. purchases of goods and services .....	.4	.5	.6	.7	.7	.7	1.0	1.0	1.0	1.0	1.0
Change in business inventories <sup>3</sup> .....	.8	-1.2	.8	1.1	-1.5	1.3	1.1	.6	-1.1	-1.1	1.2
Domestic output <sup>4</sup> .....	28.3	23.8	40.0	32.6	33.7	46.2	54.8	58.2	57.9	49.1	54.6
Sales of imports <sup>5</sup> .....	1.3	5.8	9.0	8.9	10.4	11.4	14.9	16.4	19.3	21.4	24.5
VALUE IN CONSTANT (1972) DOLLARS (bil.)											
<b>Gross auto output .....</b>	<b>35.7</b>	<b>29.8</b>	<b>46.4</b>	<b>37.1</b>	<b>35.7</b>	<b>45.3</b>	<b>50.7</b>	<b>50.3</b>	<b>47.0</b>	<b>38.7</b>	<b>41.8</b>
As percent of GNP <sup>1</sup> .....	3.8	2.7	3.7	3.0	2.9	3.5	3.7	3.5	3.2	2.6	2.5
Final sales .....	34.8	31.0	45.5	36.2	37.0	44.4	49.7	50.1	47.5	39.4	40.8
Personal consumption expenditures .....	29.2	28.8	40.7	32.2	32.0	38.7	42.1	42.9	41.0	35.8	36.0
New autos .....	23.5	22.7	33.9	25.5	25.4	31.1	34.4	34.8	33.0	28.3	28.8
Net purchases of used autos .....	5.7	6.2	6.8	6.7	6.6	7.5	7.7	8.0	8.1	7.5	7.2
Producers' durable equipment .....	5.6	5.0	8.5	7.3	7.2	8.7	10.9	11.6	10.1	8.3	9.5
New autos .....	7.3	7.8	11.8	10.7	10.9	12.6	14.8	16.0	15.1	13.0	14.1
Net purchases of used autos <sup>2</sup> .....	-1.7	-2.8	-3.1	-3.4	-3.7	-3.9	-3.9	-4.5	-5.0	-4.8	-4.6
Net exports .....	-4	-3.4	-4.3	-4.0	-2.8	-3.6	-4.0	-5.1	-4.3	-5.4	-5.3
Exports .....	.4	.9	1.8	2.2	2.5	2.7	2.8	2.7	3.2	2.5	2.3
Imports .....	.9	4.3	6.1	6.2	5.3	6.3	6.9	7.8	7.6	7.9	7.7
Govt. purchases of goods and services .....	.5	.5	.6	.6	.6	.6	.8	.8	.7	.7	.7
Change in business inventories <sup>3</sup> .....	.9	-1.2	.9	.9	-1.3	.9	1.0	.2	-.5	-.7	.7
Domestic output <sup>4</sup> .....	31.1	24.6	40.0	30.8	29.2	37.8	42.5	42.1	38.9	30.5	31.9
Sales of imports <sup>5</sup> .....	1.4	6.0	9.0	8.4	9.0	9.3	11.6	11.8	12.9	13.3	14.3

<sup>1</sup> For definition of gross national product (GNP), see text, p. 415. <sup>2</sup> Minus sign (-) denotes greater sales than purchases of used autos. <sup>3</sup> New and used autos. Minus sign (-) denotes decline in business inventories. <sup>4</sup> Consists of final sales and change in business inventories of new autos produced in the U.S. <sup>5</sup> 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, 1929-76*, and *Survey of Current Business*, July 1982.

## NO. 1066. CARS AND TRUCKS IN USE, BY AGE: 1965 TO 1981

(As of July 1. Excludes vehicles for which age was not known)

AGE	NUMBER (mil.)							PERCENT						
	1965	1970	1975	1978	1979	1980 <sup>1</sup>	1981	1965	1970	1975	1978	1979	1980 <sup>1</sup>	1981
<b>Total cars .....</b>	<b>68.9</b>	<b>80.4</b>	<b>95.2</b>	<b>102.9</b>	<b>104.7</b>	<b>104.6</b>	<b>105.8</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under 3 years .....	21.6	24.4	25.8	27.3	28.2	28.8	24.2	31.3	30.3	27.1	26.5	26.9	25.6	22.9
3-5 years .....	18.0	24.9	27.0	27.3	25.2	25.5	28.8	26.1	31.0	28.3	26.5	24.1	24.4	27.2
6-8 years .....	13.6	18.4	22.0	23.3	25.0	25.2	23.0	19.7	22.9	23.1	22.6	23.9	24.1	21.7
9-11 years .....	9.9	7.7	13.9	14.8	14.9	14.8	16.0	14.3	9.6	14.6	14.2	14.3	14.0	15.1
12 years and over .....	5.9	4.9	6.6	10.5	11.3	12.5	13.9	8.6	6.1	6.9	10.2	10.8	11.9	13.1
Average age .....	5.9	5.5	6.0	6.3	6.4	6.6	6.9	(x)	(x)	(x)	(x)	(x)	(x)	(x)
<b>Total trucks .....</b>	<b>13.1</b>	<b>17.7</b>	<b>24.8</b>	<b>30.5</b>	<b>32.6</b>	<b>35.2</b>	<b>36.1</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under 3 years .....	3.2	4.7	6.9	8.5	9.2	8.8	7.3	24.6	26.5	27.9	27.8	28.2	24.9	20.2
3-5 years .....	2.5	4.3	5.8	7.4	7.3	8.1	9.7	18.9	24.1	23.3	24.2	22.3	23.1	26.9
6-8 years .....	2.0	3.0	4.4	5.3	6.2	7.4	7.1	14.9	16.7	17.9	17.4	19.1	21.0	19.7
9-11 years .....	1.8	1.9	3.2	3.8	4.0	4.4	4.9	14.1	10.5	13.0	12.4	12.3	12.5	13.6
12 years and over .....	3.6	3.9	4.4	5.5	5.9	6.5	7.2	27.6	22.2	17.8	18.1	18.1	18.4	19.9
Average age .....	8.0	7.4	6.9	6.9	6.9	7.1	7.5	(x)	(x)	(x)	(x)	(x)	(x)	(x)

X Not applicable. <sup>1</sup> Beginning 1980, passenger vans (approx. 1.4 million) were reclassified from passenger cars to trucks.

Source: R. L. Polk & Co., Detroit, Mich. In Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, Mich., *Motor Vehicle Facts and Figures*, annual. (Copyright; further reproduction prohibited without Polk permission.)

## NO. 1067. AUTOMOBILES—FACTORY-INSTALLED EQUIPMENT: 1970 TO 1981

[Refers to model-year production. For certain items, such as air-conditioning, a significant number of units are installed on new vehicles after they leave the factory]

EQUIPMENT	UNITS INSTALLED (mil.)							PERCENT OF CARS PRODUCED						
	1970	1975	1977	1978	1979	1980	1981	1970	1975	1977	1978	1979	1980	1981
Transmission:														
Automatic.....	7.2	6.2	9.0	8.6	8.2	6.1	5.6	91.0	91.6	95.2	93.1	90.9	82.2	85.3
Manual.....	.7	.6	.5	.6	.8	1.3	1.0	8.9	8.4	4.8	6.6	9.0	17.8	14.6
V-8.....	6.7	4.9	7.2	6.1	5.6	2.3	1.9	84.2	71.4	76.0	65.8	61.7	31.6	29.0
6-cylinder engine.....	1.2	1.3	1.7	2.2	2.1	2.7	2.3	15.7	19.6	17.7	24.0	23.1	36.0	36.0
4-cylinder engine.....	(NA)	.6	.6	.9	1.4	2.4	2.2	(NA)	9.0	6.3	10.2	15.2	32.4	35.0
Power brakes.....	4.4	5.2	8.5	8.1	7.7	6.2	5.6	56.0	75.8	90.0	87.9	85.5	83.1	86.0
Power steering.....	6.4	6.1	9.0	8.6	8.2	6.2	5.7	81.2	89.7	95.1	92.6	90.8	82.9	87.1
Power windows <sup>1</sup> .....	1.3	1.6	2.8	2.8	2.7	1.6	1.7	16.7	24.1	29.3	30.5	29.5	22.3	26.6
Air-conditioning.....	4.8	4.9	7.7	7.5	7.3	5.4	5.1	60.9	73.1	81.8	80.7	81.0	72.6	78.4
Tinted glass <sup>2</sup> .....	5.5	5.5	8.2	7.9	8.0	5.9	5.6	69.5	80.6	86.7	85.7	88.6	80.8	85.3

NA Not available. <sup>1</sup>Includes station wagon power rear windows. <sup>2</sup>Covers windshield and other glass.

Source: Chilton Company, Radnor, Pa., *Annual Statistical Issue, Automotive Industries*. (Copyright.)

## NO. 1068. CARS IN OPERATION WITH EMISSION CONTROLS: 1965 TO 1981

[As of July 1. Figures show cars with emission controls whether or not the controls are in operation]

EMISSION CONTROLS	CARS (millions)								PERCENT		
	1965	1971	1975	1977	1978	1979	1980 <sup>1</sup>	1981	1971	1975	1981
Total cars.....	66.9	83.1	95.2	99.9	103.0	104.7	104.6	105.8	100.0	100.0	100.0
No emission controls.....	46.0	12.8	4.0	2.7	2.3	1.7	1.4	1.4	15.4	4.2	7.0
Crankcase control <sup>2</sup> .....	22.9	35.8	21.4	13.9	11.0	8.9	7.2	7.4	43.1	22.5	7.0
Exhaust and crankcase controls <sup>3</sup> .....	-	27.7	24.6	20.4	17.8	14.9	12.1	10.2	33.3	25.8	9.6
Fuel evaporation and above controls <sup>4</sup> .....	-	-	6.8	18.5	17.2	16.3	14.8	13.0	11.5	8.2	10.9
Nitrogen oxide and above controls <sup>5</sup> .....	-	-	22.0	21.4	21.0	19.8	18.5	17.3	-	23.1	16.3
Catalyst and above controls <sup>6</sup> .....	-	-	4.7	24.2	34.6	44.4	52.3	59.4	-	4.9	56.2

- Represents zero. <sup>1</sup>Beginning 1980, passenger vans (approx. 1.4 million) were reclassified from passenger cars to trucks. <sup>2</sup>Installed nationwide, starting with 1965 models, to reduce emissions of hydrocarbons. <sup>3</sup>Exhaust controls introduced nationwide on 1968 models to accelerate the reduction of hydrocarbon emissions and emissions of carbon monoxide. <sup>4</sup>Began on 1971 models to eliminate losses from gasoline tanks and carburetors. <sup>5</sup>Available on some 1971 and 1972 models and all 1973 and later models to lower emissions of nitrogen oxides. <sup>6</sup>Catalyst or equivalent control systems introduced on cars in 1975 to meet tougher emission levels for hydrocarbons and carbon monoxide.

Source: Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, Mich., *Motor Vehicle Facts and Figures*, annual. Computed from R. L. Polk & Co. data.

## NO. 1069. MOTOR VEHICLE SAFETY DEFECT RECALLS, BY DOMESTIC AND FOREIGN MANUFACTURERS: 1970 TO 1981

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

MANUFACTURER	Unit	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
Motor vehicles:											
Total recall campaigns <sup>1</sup> .....	Number.....	154	251	247	217	209	246	271	275	167	156
Domestic.....	Number.....	100	208	208	190	169	195	199	218	129	128
Foreign.....	Number.....	54	43	39	27	40	51	72	57	38	28
Total vehicles recalled.....	1,000.....	1,240	7,000	2,877	2,109	3,492	12,923	9,063	8,919	4,863	9,405
Domestic.....	1,000.....	738	6,867	2,345	1,829	3,019	10,693	7,921	6,997	3,939	7,379
Vehicles recalled by 4 leading auto manufacturers.....	1,000.....	563	6,477	2,194	1,602	2,854	10,331	7,670	6,989	3,730	7,247
Foreign.....	1,000.....	502	333	531	280	474	2,230	1,141	1,922	924	2,026
Motor vehicle tires:											
Recall campaigns <sup>1</sup> .....	Number.....	11	20	26	22	28	35	31	42	24	25
Tires recalled.....	1,000.....	160	132	1,094	72	464	471	14,686	235	7,070	125

<sup>1</sup>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.

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

No. 1070. RECREATIONAL VEHICLES—NUMBER AND VALUE OF SHIPMENTS: 1965 TO 1981

TYPE	NUMBER OF SHIPMENTS (1,000)								RETAIL VALUE OF SHIPMENTS (mil. dol.)							
	1965	1970	1975	1978	1979	1980	1981	1965	1970	1975	1978	1979	1980	1981		
<b>Total</b> .....	<b>192.8</b>	<b>380.3</b>	<b>339.6</b>	<b>526.3</b>	<b>307.7</b>	<b>181.4</b>	<b>239.1</b>	<b>308</b>	<b>1,122</b>	<b>2,320</b>	<b>5,683</b>	<b>3,538</b>	<b>1,952</b>	<b>2,775</b>		
Motorized homes.....	4.7	30.3	96.6	293.6	172.6	99.9	135.2	34	318	1,251	4,329	2,682	1,381	2,019		
Travel trailers.....	76.6	138.0	150.6	159.8	90.2	52.0	63.8	169	445	856	1,153	725	485	631		
Camping trailers.....	67.2	116.1	48.1	48.2	31.1	24.5	35.0	30	175	101	116	83	69	105		
Truck campers.....	44.3	95.9	44.3	24.7	13.8	5.0	5.1	75	183	112	85	48	17	20		

Source: Motor Vehicle Manufacturers Association of the United States, Inc., Detroit, Mich., *Motor Vehicle Facts and Figures*, annual. Data from Recreation Vehicle Industry Association, *RVs . . . The Family Camping Vehicle, A Year-End Report/1981*.

No. 1071. MOTOR-VEHICLE TRAVEL, BY TYPE OF VEHICLE, AND SPEED: 1960 TO 1980

[Travel in billions of vehicle-miles, except as indicated. Travel estimates based on automatic traffic recorder data. Urban travel includes all travel in municipalities and urbanized areas. All other travel is classed as rural. Speed trend data for 1960-1975 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. Minus sign (-) denotes decrease. For definition of average annual percent change, see Guide to Tabular Presentation. See also *Historical Statistics, Colonial Times to 1970*, series Q 199-207]

ITEM	1960	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total travel</b> .....	<b>719</b>	<b>888</b>	<b>1,121</b>	<b>1,268</b>	<b>1,309</b>	<b>1,286</b>	<b>1,330</b>	<b>1,412</b>	<b>1,477</b>	<b>1,548</b>	<b>1,529</b>	<b>1,521</b>
Average annual percent change.....	3.6	4.3	4.8	6.4	3.2	-1.8	3.5	6.2	4.6	4.8	-1.2	-5
Passenger cars <sup>2</sup> .....	588	712	901	1,004	1,037	1,013	1,051	1,098	1,141	1,194	1,163	1,130
Rural.....	303	333	406	436	444	427	441	462	475	501	478	459
Urban.....	285	378	495	568	592	586	610	637	666	694	684	671
Buses.....	4.4	4.8	5.0	5.1	5.0	5.1	5.1	5.8	5.9	6.1	6.1	6.4
Rural.....	2.3	2.6	2.8	3.0	2.9	3.0	3.0	3.2	3.2	3.2	3.2	3.3
Urban.....	2.1	2.2	2.2	2.1	2.1	2.1	2.2	2.6	2.7	2.9	2.9	3.1
Trucks and combinations.....	126	171	215	260	267	268	275	308	330	348	360	385
Rural.....	82	103	134	151	154	153	157	163	176	186	188	211
Urban.....	45	69	81	108	113	114	118	145	153	162	172	174
Average miles per vehicle (1,000):												
Passenger vehicles.....	9.5	9.3	9.8	10.0	9.8	9.2	9.4	9.5	9.6	9.8	9.3	8.9
Passenger cars <sup>2</sup> .....	9.4	9.3	9.8	10.0	9.8	9.2	9.4	9.5	9.6	9.8	9.2	8.9
Buses.....	16.0	15.2	13.3	12.6	11.7	11.3	11.1	12.0	12.0	12.1	11.7	12.1
Trucks.....	10.6	11.6	11.5	12.2	11.5	10.9	10.6	11.1	11.1	11.0	10.8	11.4
Motor vehicle speed: <sup>3</sup>												
Vehicles recorded (1,000).....	(NA)	(NA)	200	160	181	203	102	515	500	468	506	667
Avg. speed, all vehicles (miles per hr).....	54.8	60.6	63.8	64.9	65.0	57.6	57.6	58.2	58.8	58.8	58.3	57.5
Percent of vehicles exceeding—												
55 m.p.h.....	47	72	87	89	89	65	68	69	74	74	72	66
60 m.p.h.....	24	51	69	71	72	29	27	32	35	36	32	25
65 m.p.h.....	(NA)	(NA)	44	49	50	9	7	10	10	10	9	7

NA Not available. <sup>1</sup>Change from 1955. <sup>2</sup>Includes taxicabs and motorcycles. <sup>3</sup>For 1960-1979, based on free flow speed of vehicles recorded on level, straight sections of rural interstate highways during off-peak hours; beginning 1980, based on all vehicles on rural interstate highways. Beginning 1976, for year ending Sept. 30.

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

No. 1072. DOMESTIC MOTOR FUEL CONSUMPTION, BY USE: 1960 TO 1980

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

ITEM	Unit	1960	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total consumption</b> .....	<b>Bil. gal</b> .....	<b>57.9</b>	<b>71.1</b>	<b>92.3</b>	<b>105.1</b>	<b>110.5</b>	<b>106.3</b>	<b>109.0</b>	<b>115.7</b>	<b>119.6</b>	<b>125.1</b>	<b>122.1</b>	<b>115.0</b>
Avg. annual change.....	Percent.....	4.0	4.2	5.4	6.7	6.2	-3.8	2.5	6.2	3.4	4.6	-2.4	-5.8
Passenger vehicles.....	Bil. gal.....	42.0	51.2	66.7	74.3	78.9	75.1	77.4	79.8	81.7	84.8	81.2	74.8
Cars <sup>2</sup> .....	Bil. gal.....	41.2	50.3	65.8	73.5	78.0	74.2	76.5	78.8	80.7	83.8	80.2	73.7
Buses (incl. school).....	Bil. gal.....	.8	.9	.9	.9	.9	.9	.9	1.0	1.0	1.0	1.0	1.1
Trucks <sup>3</sup> .....	Bil. gal.....	15.8	19.9	25.6	30.7	31.8	31.2	31.6	35.9	38.0	40.3	40.9	40.1
Average per vehicle.....	Gallons.....	777	775	830	859	851	788	790	807	804	813	765	711
Cars <sup>2</sup> .....	Gallons.....	661	656	722	730	736	676	685	685	680	688	638	579
Buses (incl. school).....	Gallons.....	3,040	2,844	2,491	2,165	1,991	1,919	1,937	2,015	2,002	2,041	1,966	2,034
Trucks <sup>3</sup> .....	Gallons.....	1,330	1,347	1,365	1,446	1,361	1,268	1,227	1,292	1,284	1,270	1,225	1,194
Average per gallon.....	Miles.....	12.42	12.49	12.14	12.07	11.85	12.09	12.20	12.20	12.34	12.36	12.52	13.23
Cars <sup>2</sup> .....	Miles.....	14.28	14.15	13.58	13.67	13.29	13.65	13.74	13.93	14.15	14.26	14.49	15.32
Buses (incl. school).....	Miles.....	5.26	5.35	5.34	5.80	5.86	5.90	5.75	5.98	5.98	5.95	5.97	5.95
Trucks <sup>3</sup> .....	Miles.....	7.96	8.60	8.39	8.59	8.45	8.57	8.68	8.58	8.66	8.64	8.82	9.58

<sup>1</sup>Change from 1955. <sup>2</sup>Includes taxicabs and motorcycles. <sup>3</sup>Includes combinations.

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

## No. 1073. DOMESTIC MOTOR GASOLINE SUPPLY: 1973 TO 1982

YEAR	SUPPLY <sup>1</sup> (1,000 bbls. per day)		Pro- duction (1,000 bbls. per day)	Net im- ports (1,000 bbls. per day)	Stocks <sup>2</sup> (mil. barrels)	YEAR AND MONTH	SUPPLY <sup>1</sup> (1,000 bbls. per day)		Pro- duction (1,000 bbls. per day)	Net im- ports (1,000 bbls. per day)	Stocks (mil. barrels)
	Total	Un- leaded					Total	Un- leaded			
1973, avg.....	6,674	(NA)	6,535	130	209	1981, March.....	6,303	3,097	6,213	170	285
1974, avg.....	6,537	(NA)	6,360	202	218	June.....	7,028	3,419	6,220	165	242
1975, avg.....	6,675	(NA)	6,520	182	235	Sept.....	6,662	3,338	6,564	167	237
1976, avg.....	6,978	1,508	8,841	128	231	Dec.....	6,681	3,444	6,586	186	253
1977, avg.....	7,177	1,976	7,033	215	258						
1978, avg.....	7,412	2,521	7,169	189	238	1982, March.....	6,612	3,396	6,004	141	248
1979, avg.....	7,034	2,798	6,852	181	237	June <sup>3</sup> .....	6,472	(NA)	6,584	(NA)	217
1980, avg.....	6,579	3,067	6,506	139	261						
1981, avg.....	6,588	3,264	6,405	155	253						

NA Not available. <sup>1</sup> Production plus net imports less net increase in primary stocks. <sup>2</sup> As of Dec. 31. <sup>3</sup> Preliminary.  
Source: U.S. Energy Information Administration, *Monthly Energy Review*, Aug. 1982, and earlier issues.

## No. 1074. ESTIMATED COST OF OPERATING AN AUTOMOBILE: 1970 TO 1981

[1981 estimates based on a standard-size 4-door sedan, operated from the Baltimore, Md. area, costing \$9,232, with an assumed life-span of 12 years, 120,000 miles. Prior years based on life-span of 10 years, 100,000 miles. Similar specifications used in other years shown]

ITEM	TOTAL COSTS (\$1,000)				CENTS PER MILE COST, 1981 (January)						
	1970	1976	1979	1981	12- year average	1st year (14,500 miles)	3d year (12,500 miles)	5th year (10,300 miles)	7th year (9,200 miles)	10th year (7,800 miles)	12th year (6,700 miles)
<b>Total</b> .....	11.9	17.9	24.6	32.0	26.7	33.6	28.4	29.1	34.0	17.9	17.6
Costs excluding taxes.....	10.5	16.3	23.0	30.2	25.2	29.5	27.3	27.9	32.6	16.8	16.5
Depreciation.....	3.2	4.9	6.3	9.2	7.7	16.9	9.6	8.1	6.7	2.1	1.9
Repairs and maintenance <sup>1</sup> .....	1.5	3.7	4.8	6.2	5.2	1.1	5.7	6.4	14.8	2.0	1.5
Replacement tires <sup>2</sup> .....	4	4	6	9	7	.1	.2	1.0	1.0	1.0	1.0
Accessories <sup>3</sup> .....	(2)	1	1	2	1	1	1	1	2	2	2
Gasoline <sup>4</sup> .....	1.7	3.2	5.4	8.6	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Oil <sup>4</sup> .....	2	2	1	2	2	1	2	2	2	2	1
Insurance <sup>5</sup> .....	1.7	1.7	2.5	4.0	3.3	3.2	3.6	4.1	2.8	3.3	3.8
Garaging, parking, etc. <sup>6</sup> .....	1.8	2.2	3.2	9	.8	.8	.8	.8	.8	.8	.8
Taxes and fees <sup>7</sup> .....	1.4	1.6	1.6	1.8	1.5	4.1	1.1	1.2	1.4	1.1	1.1

Z Less than \$50. <sup>1</sup> For 1981, includes lubrications, repacking wheel bearings, flushing cooling system, aiming headlights; replacement of minor parts such as spark plugs, fan belts, radiator hoses, fuel filter, and pollution control equipment; minor repairs such as brake jobs, water pump, carburetor overhaul, and universal joints; and major repairs such as a complete "valve job." <sup>2</sup> For 1981, covers 8 new regular tires and 2 new snow tires during life of car. <sup>3</sup> For 1981, includes a set of vinyl floor mats, seat covers, and a pair of extra wheels. <sup>4</sup> For 1981, gasoline use set at 17 miles per gallon; associated oil use at 1 quart oil every 2,500 miles driven between 50,000 and 75,000 miles and 1 quart every 2,000 miles driven between 75,000 and 120,000 miles. <sup>5</sup> For 1981, includes \$20,000/40,000 bodily injury, and \$10,000 property damage, \$2,500 personal injury protection, uninsured motorist coverage, and full comprehensive coverage for the 12-year period; \$100 deductible collision insurance was assumed for the first 5 years. <sup>6</sup> For 1981, includes parking fee average of \$71 per year and toll average of \$7.49 per year. For 1981, excludes cost of home garage or parking facility which was included in prior years. <sup>7</sup> For 1981, includes Federal excise taxes on tires of 10 cents per lb., lubricating oil of 6 cents per gallon, and gasoline of 4 cents per gallon; plus the Maryland tax on gasoline of 9 cents per gallon, titling tax of 5 percent of retail price, and registration fee of \$20.00 for 3,700 lb. or less shipping weight, or \$30.00 for vehicles over 3,700 lb. State sales tax of 5 percent included on certain items.

## No. 1075. 12-YEAR COST OF OPERATING AN AUTOMOBILE, BY SIZE OF CAR: 1981

[For basis of estimates for components of cost, see footnotes, table 1074. Estimates based on vehicle operated in Baltimore, Md. area with an assumed life-span of 12 years, 120,000 miles]

ITEM	Total <sup>1</sup>	Taxes and fees	Costs, excl. taxes <sup>2</sup>	Depreci- ation	Repairs, main- tenance	Tires	Gasoline	Insur- ance	Parking
<b>Total costs (\$1,000):</b>									
Standard <sup>3</sup> .....	32.0	1.8	30.2	9.2	6.2	.9	8.6	4.0	.9
Compact <sup>3</sup> .....	25.7	1.4	24.3	7.1	5.2	.6	6.1	4.0	.9
Subcompact <sup>4</sup> .....	22.6	1.2	21.4	5.6	5.0	.5	5.2	3.7	.9
Passenger van <sup>5</sup> .....	40.0	2.3	37.7	12.9	6.6	.9	10.4	5.3	.9
<b>Cents per mile cost:</b>									
Standard <sup>3</sup> .....	26.68	1.49	25.19	7.69	5.20	.72	7.17	3.33	.78
Compact <sup>3</sup> .....	21.44	1.15	20.29	5.93	4.37	.48	5.08	3.33	.78
Subcompact <sup>4</sup> .....	18.79	.98	17.81	4.69	4.20	.43	4.35	3.05	.78
Passenger van <sup>5</sup> .....	33.33	1.93	31.40	10.73	5.52	.73	8.71	4.44	.78

<sup>1</sup> Includes accessories and oil. <sup>2</sup> Fully equipped 4-door sedan, price \$9,232. <sup>3</sup> 2-door sedan, price \$7,111. <sup>4</sup> 2-door sedan, price \$5,625. <sup>5</sup> Passenger van, price \$12,877.

Source of tables 1074 and 1075: U.S. Federal Highway Administration, *Cost of Operating an Automobile*, periodic.

## NO. 1076. GASOLINE FUEL—RETAIL PRICES, SELECTED COUNTRIES: 1973 TO 1980

[In U.S. cents per U.S. gallon, except percent. As of July, except as indicated. Price includes tax except as noted. For most countries, based on exchange rates in effect as of July 31 of year shown. For explanation of average annual percent change, see Guide to Tabular Presentation]

ITEM	1973	1974	1975	1976	1977	1978	1979	1980	Average annual percent change, 1973-1980
United States: <sup>1</sup> Regular.....	40	53	57	59	62	63	86	119	16.9
Premium.....	45	57	61	64	67	69	92	128	18.1
Tax.....	11	11	12	12	12	13	14	14	3.5
Unleaded.....	(NA)	55	60	61	66	67	90	125	<sup>2</sup> 14.7
France, Paris: Regular.....	106	132	156	140	170	215	243	297	15.9
Tax.....	82	81	94	81	110	130	167	170	11.0
Premium.....	115	143	169	151	184	232	262	317	15.6
Italy, Rome: Regular.....	99	169	166	174	206	216	244	308	17.6
Tax.....	79	120	115	116	153	160	166	189	13.3
Premium.....	105	177	171	181	215	225	253	315	17.0
United Kingdom: Regular.....	78	104	127	104	118	114	218	260	18.8
Tax.....	48	45	41	44	43	47	70	124	14.5
Premium.....	81	108	131	105	121	119	221	265	18.5
Germany, F.R., Bonn: Regular.....	118	127	125	139	144	168	209	246	11.1
Tax.....	72	65	65	65	73	81	91	123	8.0
Premium.....	131	137	134	148	154	176	219	257	10.1
Canada, Ottawa: Regular.....	49	57	66	66	69	67	71	81	7.4
Tax.....	19	19	23	29	28	25	24	25	4.0
Premium.....	53	62	67	72	75	73	78	89	7.7
Mexico, Mexico City: Regular.....	24	42	64	65	46	47	47	<sup>4</sup> 45	9.4
Tax.....	(NA)	(NA)	31	31	22	22	<sup>4</sup> 22	<sup>4</sup> 15	-13.5
Premium.....	36	61	91	92	66	67	67	<sup>4</sup> 113	17.8
Japan, Tokyo: Regular.....	83	136	136	136	163	201	227	272	18.5
Tax.....	42	45	45	57	61	87	95	93	12.0
Premium.....	98	155	163	151	178	223	246	289	16.7

NA Not available. <sup>1</sup>1973-1976 prices for regular and premium at Washington, D.C.; all other data are national averages.

<sup>2</sup>1974-1980. <sup>3</sup>Excludes value-added tax. <sup>4</sup>January 1981. <sup>5</sup>Excludes import duty.

Source: U.S. Energy Information Administration; Regular—*International Petroleum Annual*; Premium—*International Energy Annual*, August 1981; U.S.—*Monthly Energy Review*.

## NO. 1077. HOUSEHOLD MOTOR VEHICLE TRANSPORTATION, BY VEHICLE CHARACTERISTICS: 1981

[Excludes Alaska and Hawaii. Household vehicles include all motorized vehicles used for personal transportation, excluding motorcycles, mopeds, large trucks, and buses. Based on the Household Transportation Panel Survey; subject to sampling variability]

ITEM	Unit	Total <sup>1</sup>	VEHICLE SIZE				MODEL YEAR		
			Full size	Inter-mediate	Compact	Sub-compact	1969 and earlier	1970 to 1974	1975 to 1981
Miles driven.....	Billions.....	1,094.2	240.0	203.9	199.9	215.8	88.3	299.7	705.2
Average per vehicle per month.....	Number.....	717.9	682.2	725.4	717.2	847.4	371.4	593.7	904.4
<b>Fuel expenditures.....</b>	<b>Bill. dol.....</b>	<b>89.7</b>	<b>23.1</b>	<b>18.2</b>	<b>15.4</b>	<b>11.4</b>	<b>8.1</b>	<b>26.9</b>	<b>54.6</b>
Average per vehicle per month.....	Dollars.....	58.8	63.8	64.7	55.3	44.9	34.1	53.2	70.1
Leaded fuels.....	Bill. dol.....	40.0	9.8	6.2	5.1	4.7	6.6	21.7	11.8
Unleaded fuels.....	Bill. dol.....	43.8	11.7	10.9	9.4	6.1	.6	2.5	40.7
Diesel and unknown.....	Bill. dol.....	5.9	1.6	1.0	.9	.7	.9	2.6	2.3
<b>Fuel purchased.....</b>	<b>Bill. gal.....</b>	<b>74.9</b>	<b>19.3</b>	<b>15.0</b>	<b>12.8</b>	<b>9.5</b>	<b>6.9</b>	<b>22.8</b>	<b>45.1</b>
Average per vehicle per month.....	Gallons.....	49.1	53.1	53.5	45.9	37.3	28.9	45.2	57.9
Leaded fuels.....	Bill. gal.....	34.2	8.4	5.3	4.4	4.0	5.6	18.5	10.0
Unleaded fuels.....	Bill. gal.....	35.7	9.5	8.9	7.7	4.9	.5	2.1	33.1
Diesel and unknown.....	Bill. gal.....	5.0	1.4	.9	.8	.5	.8	2.2	2.0
Miles per gallon.....	Number.....	14.7	12.5	13.6	15.7	22.7	12.9	13.2	15.7

<sup>1</sup>Includes other and unknown, not shown separately.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption Patterns of Household Vehicles, June 1979 to December 1980*.

## No. 1078. HOUSEHOLD TRANSPORTATION, BY HOUSEHOLD CHARACTERISTICS: 1980

[Excludes Alaska and Hawaii. Household vehicles include all motorized vehicles used for personal transportation, excluding motorcycles, mopeds, large trucks, and buses. Based on the Household Transportation Panel Survey; subject to sampling variability]

ITEM	Unit	Total	HOUSEHOLD LOCATION		FAMILY INCOME		NUMBER OF VEHICLES USED BY HOUSEHOLD		NUMBER OF DRIVERS IN HOUSEHOLD <sup>1</sup>	
			Urban areas	Rural areas	Less than \$15,000	Above \$15,000	One vehicle	Two or more vehicles	1 or 2 drivers	3 or more drivers
Miles driven.....	Billions ...	1,094.2	719.8	374.4	355.2	738.9	239.7	854.5	796.8	294.9
Average per vehicle per month.....	Number ...	717.9	697.0	761.9	(NA)	(NA)	720.7	717.1	695.1	790.6
Fuel expenditures.....	Bil. dol....	89.7	59.5	30.1	29.8	59.9	20.2	69.4	65.0	24.4
Average per vehicle per month.....	Dollars....	58.8	57.7	61.3	(NA)	(NA)	60.9	58.3	56.7	65.5
Leaded fuels.....	Bil. dol....	40.0	25.3	14.7	14.4	25.7	7.5	32.5	28.1	11.8
Unleaded fuels.....	Bil. dol....	43.8	30.4	13.4	12.8	31.1	11.1	32.6	32.2	11.5
Diesel and unknown.....	Bil. dol....	5.9	3.9	2.0	2.6	3.2	1.6	4.2	4.7	1.2
Fuel purchased.....	Bil. gal....	74.9	49.5	25.4	24.9	50.0	16.7	58.2	54.2	20.5
Average per vehicle.....	Gallons....	45.1	47.9	51.7	(NA)	(NA)	50.3	48.8	47.3	55.0
Leaded fuels.....	Bil. gal....	34.2	21.5	12.6	12.2	21.9	6.3	27.8	23.9	10.1
Unleaded fuels.....	Bil. gal....	35.7	24.7	11.0	10.3	25.4	9.1	26.6	26.2	9.4
Diesel and unknown.....	Bil. gal....	5.0	3.3	1.7	2.3	2.7	1.4	3.6	4.0	1.0
Miles per gallon.....	Number....	14.7	14.6	14.8	(NA)	(NA)	14.4	14.7	14.8	14.4

NA Not available. <sup>1</sup> Excludes small number of unknown.

Source: U.S. Energy Information Administration, *Consumption Patterns of Household Vehicles, June 1979 to December 1980*, April 1982.

## NO. 1079. PRINCIPAL MEANS OF TRANSPORTATION TO WORK—SELECTED METROPOLITAN AREAS: 1980

[Workers 16 years old and over. As of April 1. Covers SMSA's with population of 1 million or more. Provisional data based on Early National Sample from the 1980 census, see text, pp. 1-4 and Appendix III]

METROPOLITAN AREA	Workers (1,000)	PERCENT USING—				METROPOLITAN AREA	Workers (1,000)	PERCENT USING—			
		Car, truck, or van		Public transportation <sup>1</sup>	Other means <sup>2</sup>			Car, truck, or van		Public transportation <sup>1</sup>	Other means <sup>2</sup>
		Drive alone	Car-pool					Drive alone	Car-pool		
Anaheim-Santa Ana-Garden Grove, Calif.....	948	75.1	16.1	1.9	6.9	Nassau-Suffolk, N.Y.....	1,157	63.4	18.1	12.2	6.3
Allanta, Ga.....	955	69.5	18.9	7.4	4.2	New Orleans, La.....	477	62.1	21.1	10.5	6.3
Baltimore, Md.....	959	60.4	22.4	10.6	6.7	New York, N.Y.-N.J.....	3,764	31.0	11.8	43.5	13.8
Boston, Mass.....	1,285	55.3	17.6	15.8	11.3	Newark, N.J.....	863	64.6	17.3	10.6	7.5
Buffalo, N.Y.....	501	67.2	18.8	6.5	7.5	Philadelphia, Pa.-N.J.....	1,934	59.2	17.7	14.4	8.8
Chicago, Ill.....	3,114	57.8	16.8	17.6	7.7	Phoenix, Ariz.....	663	71.1	18.8	1.9	8.2
Cincinnati, Ohio-Ky-Ind.....	590	68.0	18.2	7.0	5.9	Pittsburgh, Pa.....	922	61.0	18.7	11.7	8.6
Cleveland, Ohio.....	822	67.9	15.7	10.7	5.7	Portland, Oreg.-Wash.....	573	65.4	17.9	8.4	8.4
Columbus, Ohio.....	486	70.4	17.2	5.5	6.9	Riverside-San Bernardino-Ontario, Calif... Sacramento, Calif.....	624	70.9	19.2	1.0	8.9
Dallas-Fort Worth, Tex.....	1,464	71.2	20.2	3.6	5.0	St. Louis, Mo.-Ill.....	1,011	67.1	21.2	6.0	5.7
Denver-Boulder, Colo.....	803	65.1	20.1	6.9	7.9	San Antonio, Tex.....	444	66.9	20.4	5.1	7.7
Detroit, Mich.....	1,662	74.8	16.9	3.5	4.8	San Diego, Calif.....	865	63.3	17.8	3.1	15.8
Fort Lauderdale-Hollywood, Fla.....	424	74.4	17.2	2.4	6.0	San Francisco-Oakland, Calif.....	1,549	56.9	16.0	17.1	10.0
Houston, Tex.....	1,405	69.5	22.6	2.8	5.1	San Jose, Calif... Seattle-Everett, Wash.....	647	72.6	16.7	3.2	7.5
Indianapolis, Ind.....	524	71.7	20.4	2.9	5.0	Tampa-St. Petersburg, Fla.....	602	71.9	18.3	1.6	8.2
Kansas City, Mo.-Kans.....	621	69.8	21.1	4.4	4.7	Washington, D.C.-Md.-Va....	1,562	52.6	23.3	15.9	8.1
Los Angeles-Long Beach, Calif.....	3,395	68.7	17.5	6.3	7.5						
Miami, Fla.....	715	67.8	18.9	6.4	7.0						
Milwaukee, Wis.....	639	66.2	18.8	7.2	7.8						
Minneapolis-St. Paul, Minn.-Wis.....	1,048	63.8	19.2	8.2	8.8						

<sup>1</sup> Includes bus or streetcar, subway or elevated train, railroad, and taxicab.

<sup>2</sup> Includes motorcycle, bicycle, walked only, worked at home, and all other modes not specified.

Source: U.S. Bureau of the Census, *1980 Census of Population and Housing, Supplementary Report*, series PHC 80-S1-1.

NO. 1080. PASSENGER TRANSIT INDUSTRY—SUMMARY: 1960 TO 1980

[Beginning 1970, includes Puerto Rico. Comprises all privately and publicly owned organized local passenger transportation agencies except taxicabs, suburban railroads, and sightseeing and school buses. Covers (a) local motorbus lines, (b) light rail lines, (c) heavy rail lines, and (d) trolley coach lines. Based on financial and statistical reports received by American Public Transit Association from transit systems representing more than 85 percent of the industry. See also *Historical Statistics, Colonial Times to 1970*, series Q 238-250]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980, prel.
<b>Operating systems</b> .....	<b>Number</b> .....	<b>1,251</b>	<b>1,148</b>	<b>1,079</b>	<b>947</b>	<b>955</b>	<b>1,009</b>	<b>1,018</b>	<b>1,027</b>	<b>1,044</b>
Motorbus systems <sup>1</sup> .....	Number.....	1,236	1,145	1,075	941	950	1,004	1,014	1,023	1,044
Publicly owned systems <sup>1</sup> .....	Number.....	54	78	144	333	375	455	463	523	576
<b>Passenger vehicles owned</b> .....	<b>Number</b> .....	<b>65,292</b>	<b>61,717</b>	<b>61,350</b>	<b>62,226</b>	<b>63,787</b>	<b>63,287</b>	<b>64,013</b>	<b>65,739</b>	<b>70,983</b>
Motorbuses.....	Number.....	49,600	49,600	49,700	50,811	52,382	51,968	52,866	54,480	59,411
Electric railway cars <sup>2,3</sup> .....	Number.....	11,866	10,664	10,600	10,712	10,720	10,674	10,554	10,524	10,749
Heavy rail.....	Number.....	9,010	9,115	9,338	9,608	9,714	9,639	9,567	9,522	9,893
Trolley coaches.....	Number.....	3,826	1,453	1,050	703	685	645	593	725	823
Operating revenue <sup>4</sup> .....	Mil. dol.....	1,407	1,444	1,707	2,002	2,161	2,280	2,381	2,524	2,568
Motorbus.....	Mil. dol.....	956	1,036	1,236	1,438	1,486	1,584	1,671	1,781	1,791
Electric railway <sup>2,3</sup> .....	Mil. dol.....	369	366	440	549	660	681	695	726	751
Heavy rail.....	Mil. dol.....	282	310	384	517	631	653	665	695	717
Expenses.....	Mil. dol.....	1,377	1,454	1,996	3,752	4,082	4,366	4,789	5,611	6,514
Operating income <sup>5</sup> .....	Mil. dol.....	31	-11	-288	-1,750	-1,921	-2,086	-2,408	-3,087	-3,946
Operating assistance.....	Mil. dol.....	(NA)	(NA)	(NA)	1,408	1,647	1,904	2,232	2,910	3,618
Federal.....	Mil. dol.....	(NA)	(NA)	(NA)	302	423	585	690	856	1,093
State.....	Mil. dol.....	(NA)	(NA)	(NA)	407	367	478	568	638	820
Local.....	Mil. dol.....	(NA)	(NA)	(NA)	699	857	841	978	1,417	1,704
<b>Vehicle-miles operated</b> <sup>4</sup> .....	<b>Million</b> .....	<b>2,143</b>	<b>2,008</b>	<b>1,883</b>	<b>1,990</b>	<b>2,026</b>	<b>2,021</b>	<b>2,028</b>	<b>2,045</b>	<b>2,095</b>
Motorbus.....	Million.....	1,576	1,528	1,409	1,526	1,581	1,623	1,630	1,634	1,677
Electric railway <sup>2,3</sup> .....	Million.....	466	437	441	448	430	383	384	400	405
Heavy rail.....	Million.....	391	395	407	423	407	361	364	380	385
<b>Passengers carried</b> <sup>4</sup> .....	<b>Million</b> .....	<b>9,395</b>	<b>8,253</b>	<b>7,332</b>	<b>6,972</b>	<b>7,081</b>	<b>7,286</b>	<b>7,616</b>	<b>8,130</b>	<b>8,228</b>
Motorbus <sup>6</sup> .....	Million.....	6,425	5,814	5,034	5,084	5,247	4,949	5,142	5,552	5,731
Electric railway <sup>3,6</sup> .....	Million.....	2,313	2,134	2,116	1,810	1,759	2,267	2,404	2,503	2,412
<b>Revenue passengers carried</b> .....	<b>Million</b> .....	<b>7,521</b>	<b>6,798</b>	<b>5,932</b>	<b>5,643</b>	<b>5,673</b>	<b>5,723</b>	<b>5,963</b>	<b>6,370</b>	<b>6,358</b>
Motorbus.....	Million.....	5,069	4,730	4,058	4,095	4,168	4,246	4,406	4,746	4,774
Electric railway <sup>2,3</sup> .....	Million.....	2,005	1,882	1,746	1,493	1,450	1,425	1,506	1,569	1,513
Heavy rail.....	Million.....	1,670	1,678	1,574	1,388	1,353	1,335	1,415	1,474	1,420
Trolley coach.....	Million.....	447	186	128	56	54	51	51	55	71
<b>Average fares:</b>										
Motorbus.....	Cents.....	18.0	20.6	29.4	32.0	32.8	34.9	35.8	36.1	37.5
Light rail.....	Cents.....	22.1	23.8	27.0	29.9	29.9	30.2	33.4	33.6	37.9
Heavy rail.....	Cents.....	16.1	16.6	23.4	36.3	45.6	47.5	46.1	45.9	50.5
Trolley coach.....	Cents.....	18.1	21.8	23.8	27.5	27.8	28.2	26.1	28.7	36.6
<b>Employees, number (avg.)</b> <sup>7</sup> .....	<b>1,000</b> .....	<b>156</b>	<b>145</b>	<b>138</b>	<b>160</b>	<b>163</b>	<b>163</b>	<b>165</b>	<b>179</b>	<b>189</b>
Payroll, employees.....	Mil. dol.....	857	964	1,274	2,236	2,404	2,547	2,741	3,025	3,142

NA Not available. <sup>1</sup>Includes systems with combined services including motorbuses, heavy rail cars, light rail cars, trolley coaches, cable cars, and inclined plane cars. <sup>2</sup>Includes light rail. <sup>3</sup>Beginning 1975, includes cable car and inclined plane. <sup>4</sup>Includes trolley coach, not shown separately. <sup>5</sup>Minus sign (-) denotes deficit. <sup>6</sup>Data for 1960-1976 not comparable with later years. <sup>7</sup>Beginning 1978, includes part-time employees counted individually.

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

NO. 1081. FEDERAL GRANT APPROVALS FOR MASS TRANSPORTATION: 1965 TO 1981

[In millions of dollars. For years ending June 30 through 1976 except, beginning 1977, ending Sept. 30. Excludes direct Congressional authorizations to States or localities (major example is Washington, D.C.'s Metro System). Mass transportation is defined as transportation by bus, or rail or other conveyance, either publicly or privately owned which provides to the public general or special service (excluding school buses, charter and sightseeing service) on a regular and continuing basis]

TYPE OF GRANT	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
<b>Total grant approvals</b> .....	<b>51</b>	<b>133</b>	<b>864</b>	<b>956</b>	<b>1,430</b>	<b>1,843</b>	<b>2,296</b>	<b>2,722</b>	<b>2,970</b>	<b>3,908</b>	<b>4,076</b>
Capital grant approvals.....	51	133	864	956	1,287	1,479	1,724	2,037	2,102	2,787	2,946
Section 3 <sup>1</sup> .....	51	133	864	870	1,197	1,092	1,250	1,400	1,225	1,655	1,925
Section 5 <sup>1</sup> .....	(X)	(X)	(X)	(X)	(X)	9	26	39	50	256	431
Interstate and urban system <sup>2</sup> .....	(X)	(X)	(X)	86	81	361	434	587	621	701	660
Operating grant approvals, Section 5 <sup>1</sup> .....	(X)	(X)	(X)	(X)	143	364	572	685	868	1,121	1,130

X Not applicable. <sup>1</sup>Grants allowed under Urban Mass Transportation Act of 1964 as amended. Section 3 grants are discretionary grants awarded upon application by local authorities. Section 5 grants are formula grants awarded to cities meeting certain criteria. <sup>2</sup>Grants under Federal Highway Act of 1973.

Source: American Public Transit Association, *Transit Fact Book*, annual. Data from U.S. Urban Mass Transportation Administration.

## Transportation—Land

## NO. 1082. CLASS I INTERCITY MOTOR CARRIERS OF PROPERTY, BY CARRIER: 1975 AND 1980

[See headnote, table 1083. Common carriers are carriers offering regular scheduled service. Contract carriers provide service at request of user. Minus sign (-) denotes loss]

ITEM	Unit	COMMON CARRIER, GENERAL FREIGHT		COMMON CARRIER <sup>1</sup>		CONTRACT CARRIER <sup>1</sup>		CARRIERS OF HOUSEHOLD GOODS	
		1975	1980	1975	1980	1975	1980	1975	1980
Carriers reporting.....	Number.....	368	298	330	441	50	69	32	28
Number of employees, average.....	1,000.....	379	413	94	101	10	14	4	10
Compensation of employees.....	Mil. dol.....	5,726	9,803	1,046	1,931	175	336	70	157
Operating revenues.....	Mil. dol.....	11,116	19,725	3,907	8,792	453	1,272	866	1,824
Intercity freight.....	Mil. dol.....	10,511	19,480	3,717	8,339	411	1,172	765	1,676
Operating expenses.....	Mil. dol.....	10,571	18,870	3,758	8,426	432	1,207	849	1,781
Ordinary income before taxes.....	Mil. dol.....	432	701	109	230	17	48	32	74
Net income.....	Mil. dol.....	225	-72	65	14	9	28	18	42
Total power units, intercity service.....	1,000.....	78	102	69	95	8	13	18	25
Trucks, tractors owned in operation, average.....	1,000.....	49	73	25	33	5	7	(2)	1
Intercity vehicle-miles.....	Million.....	6,246	6,547	4,776	6,889	454	934	688	969
Tons of intercity revenue freight carried.....	Million.....	191	178	264	324	21	(NA)	3	(NA)

Z Less than 500.   <sup>1</sup> Other than general freight.

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

## NO. 1083. CLASS I INTERCITY MOTOR CARRIERS OF PASSENGERS: 1960 TO 1980

[Carriers subject to ICC regulations. See text, p. 604. See also *Historical Statistics, Colonial Times to 1970*, series Q 69-75]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980
Carriers reporting <sup>1</sup> .....	Number.....	143	156	71	81	77	78	42	43	45	48
Number of employees, average.....	1,000.....	35	35	34	36	31	32	27	26	27	31
Compensation of employees.....	Mil. dol.....	196	250	317	415	383	446	400	412	469	599
Operating revenue.....	Mil. dol.....	463	607	722	933	942	975	969	<sup>2</sup> 1,021	1,200	1,397
Passenger revenue <sup>3</sup> .....	Mil. dol.....	382	467	524	662	651	645	655	671	802	947
Special bus revenue and other.....	Mil. dol.....	81	141	198	271	291	(NA)	314	345	398	215
Expenses.....	Mil. dol.....	405	514	639	859	880	937	924	983	1,143	1,318
Net operating revenue.....	Mil. dol.....	58	90	83	74	61	37	45	38	57	79
Ordinary income:											
Before income taxes.....	Mil. dol.....	55	90	88	93	83	49	58	57	57	107
After income taxes.....	Mil. dol.....	28	52	52	61	56	32	40	41	57	90
Passenger vehicles in service <sup>4</sup> .....	1,000.....	12.7	13.3	13.3	13.8	9.7	(NA)	8.3	8.5	8.2	8.6
Vehicle-miles, passenger.....	Million.....	843	947	871	886	835	(NA)	754	726	754	781
Revenue passengers carried.....	Million.....	268	219	174	169	147	(NA)	122	118	122	134
Expense per vehicle-mile.....	Dollar.....	.48	.54	.73	.97	1.05	(NA)	1.23	1.35	1.52	(NA)

NA Not available.   <sup>1</sup> Excludes carriers preponderantly in local or suburban service and carriers engaged in transportation of both property and passengers.   <sup>2</sup> Includes \$4 million from Government authorities for current operations.   <sup>3</sup> Regular route, intercity and local.

Source: U.S. Interstate Commerce Commission, *Transport Statistics in the United States*, 1960-1970, Part 7, and 1974-1980, Part 2, annual; except 1976, *Financial and Operating Statistics, Class I Motor Carriers of Passengers*, statement No. 750, semiannual. (Discontinued in 1979.)

## NO. 1084. BUS AND TRUCK CARRIERS, BY KIND OF BUSINESS: 1977

[Includes only establishments with payroll and not subject to regulation by the Interstate Commerce Commission; excludes bus carriers operated by municipalities or other governmental bodies]

CARRIERS BY KIND OF BUSINESS	Estab-lishments	Operating revenue (mil. dol.)	Pay-roll (mil. dol.)	Paid employ-ees <sup>1</sup> (1,000)	TYPE OF TRUCK CARRIER	Estab-lishments <sup>1</sup>	OPERATING REVENUE <sup>2</sup> (mil. dol.)	
							Total <sup>3</sup>	Motor carrier <sup>4</sup>
<b>Passenger transport<sup>5</sup>:</b>	<b>1,360</b>	<b>467</b>	<b>242</b>	<b>25</b>	<b>Total truck carriers.....</b>	<b>58,335</b>	<b>12,619</b>	<b>11,577</b>
Local scheduled carriers.....	379	213	137	11	General freight.....	14,252	3,513	3,306
Airport bus or limo.....	119	47	20	3	Household goods.....	5,751	1,125	784
Sightseeing bus.....	318	70	26	4	Sand and gravel.....	10,579	2,211	2,083
Intercity scheduled bus.....	180	38	25	2	Trash or garbage.....	6,541	1,271	1,187
Charter or special bus.....	354	98	54	3	Package delivery.....	1,710	317	307
<b>Motor freight transport.....</b>	<b>58,335</b>	<b>12,619</b>	<b>3,641</b>	<b>334</b>	Agricultural products.....	10,725	2,088	1,970
Local truck or draying.....	41,770	8,234	2,983	219	Mail, contract.....	2,028	283	275
Trucking, except local.....	12,020	3,109	797	69	Timber.....	1,862	378	361
Local trucking, storage <sup>6</sup> .....	4,545	1,276	451	46	Other commodities.....	4,887	1,433	1,324

<sup>1</sup> For week including March 12.   <sup>2</sup> Excludes taxicabs, ambulance services, other nonscheduled carriers, school buses, and terminal and service facilities.   <sup>3</sup> Includes household goods.   <sup>4</sup> Establishments reporting represent 62 percent of all establishments.   <sup>5</sup> Revenue of establishments reporting its source represents 88 percent of total operating revenue of all establishments.   <sup>6</sup> Revenue of establishments reporting its source and type of carrier represents 66 percent of total operating revenue of all establishments.   <sup>7</sup> Includes revenue from warehousing and storage and other sources.   <sup>8</sup> Includes local trucking, moving, and storage.

Source: U.S. Bureau of the Census, *Census of Transportation*, 1977.

NO. 1085. INTERCITY BUS LINES—SUMMARY OF OPERATIONS: 1960 TO 1981

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
Operating companies.....	Number	1,150	1,100	1,000	950	1,000	1,050	1,100	1,200	1,330	1,470
Buses.....	1,000	21.0	19.8	22.0	20.5	20.1	20.1	20.4	21.3	21.4	21.2
Miles of highway served (Dec. 31) <sup>1</sup> .....	1,000	265	263	267	274	276	276	278	280	279	272
Employees (Dec. 31) <sup>2</sup> .....	1,000	45	45	50	47	46	46	46	48	49	49
Total bus miles.....	Millions	1,092	1,157	1,209	1,126	1,118	1,118	1,100	1,153	1,162	1,136
Revenue passengers.....	Millions	366	378	401	351	340	329	336	368	365	375
Revenue passenger-miles.....	Billions	19.3	23.8	25.3	25.4	25.1	26.0	25.6	27.7	27.4	26.9
Operating revenue, all services.....	Mil. dol	556	701	901	1,172	1,232	1,331	1,419	1,664	1,943	2,075
Operating expenses.....	Mil. dol	495	600	812	1,103	1,180	1,276	1,366	1,572	1,811	1,963
Net operating revenue <sup>3</sup> .....	Mil. dol	61	101	89	68	52	55	53	92	132	112

<sup>1</sup>Includes duplication between carriers. <sup>2</sup>Operating companies only. <sup>3</sup>Before income taxes.  
Source: American Bus Association, Washington, D.C., *Bus Facts*, annual.

NO. 1086. TRUCKS AND TRUCK-MILES, BY VEHICLE AND OPERATIONAL CHARACTERISTICS: 1977

[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 D.C.]

ITEM	TRUCKS (1,000)		TRUCK-MILES (bil.)		ITEM	TRUCKS (1,000)		TRUCK-MILES (bil.)	
	Total	Excluding pick-ups, panels	Total	Excluding pick-ups, panels		Total	Excluding pick-ups, panels	Total	Excluding pick-ups, panels
<b>Total trucks</b> .....	<b>26,213</b>	<b>4,062</b>	<b>312.5</b>	<b>74.2</b>	<b>Body type—Con.:</b>				
Major use:					Utility truck.....	201	201	2.2	2.2
Agriculture, forestry and lumbering.....	4,486	1,203	40.0	9.6	Dump truck.....	452	452	6.4	6.4
Construction.....	1,765	601	25.7	8.1	Tank truck.....	272	272	7.3	7.3
Manufacturing.....	368	197	8.8	6.2	All other.....	471	471	6.7	6.7
Wholesale and retail trade..	2,008	759	36.6	17.3	<b>Size-class: <sup>2</sup></b>				
For hire.....	547	453	23.7	22.0	Light.....	22,995	680	238.4	5.5
Personal transportation.....	14,261	35	143.4	.1	Medium.....	1,583	1,153	16.2	10.9
Utilities and services.....	2,122	536	26.1	5.7	Light-heavy.....	802	796	8.2	8.2
All other.....	676	278	8.3	5.2	Heavy-heavy.....	1,433	1,433	49.7	49.7
<b>Body type:</b>					<b>Annual miles:</b>				
Pickup.....	17,832	(x)	182.9	(x)	Less than 5,000 miles.....	6,280	1,422	13.1	2.6
Panel, multi-stop <sup>1</sup> .....	4,519	(x)	55.4	(x)	5,000-9,999 miles.....	6,298	735	43.5	4.9
Platform and catterlack.....	1,779	1,779	18.9	18.9	10,000-19,999 miles.....	9,691	810	122.7	10.7
Vans <sup>1</sup> .....	887	887	32.7	32.7	20,000-29,999 miles.....	2,408	358	54.1	8.2
					30,000-49,999 miles.....	980	302	34.2	11.2
					50,000 miles or more.....	557	435	44.9	36.6

X Not applicable. <sup>1</sup>Vans similar to panel trucks are included in panel, multi-stop. <sup>2</sup>Gross vehicle weight (empty-weight of the vehicle plus the maximum carried load). 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.

Source: U.S. Bureau of the Census, *U.S. Census of Transportation: 1977, TC77-T52*.

NO. 1087. RAILROADS, CLASS I LINE-HAUL—FINANCIAL SUMMARY: 1960 TO 1981

[In millions of dollars, except percent. Minus sign (–) denotes deficit. Data prior to 1978 have been restated to conform with revised Uniform System of Accounts. See also *Historical Statistics, Colonial Times to 1970, series Q 364-366 and Q 378*]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Operating revenues.....	9,514	10,208	11,992	16,823	16,402	18,536	20,090	21,721	25,219	28,109	30,904
Freight.....	8,456	9,223	11,106	15,863	15,390	17,400	18,892	20,236	23,447	26,200	28,925
Passenger.....	640	553	420	290	297	327	337	356	382	438	546
Other.....	417	431	466	770	715	809	861	1,190	1,390	1,464	1,433
Operating expenses.....	7,565	7,850	11,478	15,783	15,936	17,881	19,534	21,043	23,994	26,250	28,583
Net revenue from railway operations..	1,949	2,358	514	1,140	466	655	557	678	1,225	1,853	2,321
Total income.....	2,295	2,724	994	1,897	1,094	1,358	1,353	1,823	2,397	3,167	3,868
Income taxes on ordinary income <sup>1</sup> .....	203	164	88	217	58	163	60	183	199	291	48
Net income (ordinary).....	445	815	227	730	144	355	326	307	938	1,192	2,055
Net railway operating income.....	538	962	486	768	351	452	343	427	837	1,312	1,362
Rate of return (percent).....	2.13	3.69	1.73	2.70	1.20	1.60	1.24	1.52	2.87	4.13	4.08
Shareowners' equity.....	17,313	17,747	17,323	14,945	14,942	15,230	15,727	16,175	17,996	19,860	21,270
Net working capital <sup>2</sup> .....	678	172	-59	219	68	343	571	603	555	928	(NA)
Cash dividends.....	385	471	421	510	434	444	497	503	563	554	(NA)
Gross capital expenditures.....	919	1,831	1,351	1,565	1,790	1,725	2,290	2,798	3,324	3,621	2,851
Equipment.....	633	1,304	993	1,038	1,303	1,175	1,540	1,883	2,285	2,346	1,525
Roadway and structures.....	286	327	358	527	486	550	751	855	1,039	1,275	1,334

NA Not available. <sup>1</sup>Includes State income taxes beginning 1978. <sup>2</sup>Current assets minus current liabilities, including debt due within one year.

Source: Association of American Railroads, Washington, D.C., *Statistics of Railroads of Class I, annual, and Yearbook of Railroad Facts*.

## No. 1088. RAILROADS—SUMMARY STATISTICS: 1960 TO 1980

[As of Dec. 31, or calendar year data, except as noted. Covers class I and II railroads, excluding switching and terminal companies, except as noted. Includes intercorporate duplications. Minus sign (—) denotes deficit. See also *Historical Statistics, Colonial Times to 1970*, series Q 284-312, Q 330, Q 356-363, and Q 367-377.]

ITEM	Unit	1960	1965	1970	1975	1977	1978	1979	1980
Class I line-hauling companies <sup>1</sup> .....	Number.....	106	76	71	74	58	40	40	40
Class II line-hauling companies <sup>1</sup> .....	Number.....	304	302	273	245	251	19	23	28
Employees <sup>2</sup> .....	1,000.....	793	655	577	502	510	480	492	469
Compensation.....	Mil. dol.....	4,957	4,887	5,646	7,674	9,356	9,734	11,105	11,536
<b>Mileage:</b>									
Road owned, first track <sup>3</sup> .....	1,000.....	218	211	206	199	190	178	163	157
Track operated:									
Reporting railroads <sup>4</sup> .....	1,000.....	382	371	360	340	321	322	(NA)	(NA)
First track <sup>4</sup> .....	1,000.....	230	226	220	215	209	198	187	183
Other main tracks.....	1,000.....	35	31	29	21	21	26	26	26
Yardtrack, sidings.....	1,000.....	117	113	112	105	101	101	98	95
Operated by receivers <sup>5</sup> .....	1,000.....	1	2	23	27	(NA)	(NA)	(NA)	(NA)
<b>Equipment:</b> <sup>6</sup>									
Locomotives in service.....	1,000.....	31.2	30.1	29.1	30.2	29.7	27.0	27.9	28.9
Average tractive effort <sup>7</sup> .....	1,000 lb.....	61.3	63.1	<sup>8</sup> 1.9	<sup>8</sup> 2.1	<sup>8</sup> 2.2	<sup>8</sup> 2.1	<sup>8</sup> 2.2	<sup>8</sup> 2.3
Cars in service:									
Passenger-train.....	1,000.....	25.7	20.0	11.4	6.7	5.7	2.4	2.4	2.3
Freight train <sup>9</sup> .....	1,000.....	1,690	1,515	1,454	1,345	1,275	1,201	1,148	1,133
Average capacity <sup>10</sup> .....	Tons.....	55.4	59.8	67.1	73.0	75.5	77.8	79.7	79.3
<b>Capital and property investment:</b> <sup>11</sup>									
Road and equipment, book value <sup>12</sup> .....	Mil. dol.....	35,513	35,489	37,918	40,196	38,342	38,702	40,133	42,619
Depreciation reserve <sup>13</sup> .....	Mil. dol.....	8,532	9,342	9,930	10,650	9,994	10,377	10,487	10,929
Capitalization outstanding <sup>14</sup> .....	Mil. dol.....	16,134	14,857	14,339	13,473	14,781	16,343	17,089	17,808
Capital surplus and retained income.....	Mil. dol.....	11,356	12,945	13,002	11,297	12,039	<sup>15</sup> 12,565	<sup>15</sup> 14,055	<sup>15</sup> 15,823
Stock paying dividends.....	Mil. dol.....	5,617	4,845	3,595	3,402	3,745	-	-	-
Dividends declared.....	Mil. dol.....	412	533	486	458	629	521	610	646
Interest accrued on funded debt.....	Mil. dol.....	387	403	554	716	688	774	825	967
<b>Income and expenses:</b>									
Operating revenues.....	Mil. dol.....	9,642	10,425	12,209	16,929	20,800	22,138	25,732	28,708
Operating expenses.....	Mil. dol.....	7,857	8,003	9,806	13,967	17,398	21,424	24,447	26,761
Tax accruals.....	Mil. dol.....	1,020	949	1,104	1,684	2,040	2,097	2,277	2,107
Net railway operating income.....	Mil. dol.....	595	980	606	36	-136	451	873	1,364
Net income <sup>11</sup> .....	Mil. dol.....	473	866	<sup>16</sup> 126	<sup>16</sup> -12	<sup>16</sup> -158	<sup>16</sup> 284	<sup>16</sup> 1,018	<sup>16</sup> 1,261
<b>Passenger service:</b>									
Passengers carried.....	Mil.....	327	306	289	270	276	262	274	281
Passenger-miles.....	Mil.....	21,284	17,454	10,786	9,948	10,306	6,262	6,500	6,557
Commutation <sup>18</sup> .....	Mil.....	4,197	4,128	4,592	4,513	4,586	4,668	(NA)	(NA)
Coach <sup>18</sup> .....	Mil.....	13,422	11,069	5,414	4,750	5,185	5,088	(NA)	(NA)
Parlor and sleeping car <sup>18</sup> .....	Mil.....	3,643	2,191	765	502	524	467	(NA)	(NA)
Passenger revenue.....	Mil. dol.....	641	556	423	539	612	379	409	444
Revenue per passenger-mile.....	Cents.....	3.01	3.19	3.92	5.41	5.94	6.06	6.30	6.76
Average journey per passenger.....	Miles.....	65.05	57.07	37.26	36.81	37.31	23.89	23.75	23.29
<b>Freight service:</b>									
Freight revenue.....	Mil. dol.....	8,152	9,037	11,124	15,623	19,232	20,610	23,903	26,756
Revenue-tons originated.....	Mil.....	1,301	1,479	1,572	1,470	1,519	1,431	1,543	1,536
Tons carried one mile.....	Bil.....	575	706	771	759	834	888	916	933
Revenue ton-miles per mile of road.....	1,000.....	2,497	3,121	3,468	3,161	3,542	4,369	4,669	4,870
Revenue per ton-mile.....	Cents.....	1.417	1.281	1.443	2.060	2.306	2.374	2.608	2,869
Haul per ton, U.S. as a system.....	Miles.....	442	477	490	516	549	606	594	607
<b>Accidents:</b> <sup>17</sup>									
Persons killed.....	Number.....	2,248	2,399	2,225	1,560	1,530	1,646	1,429	1,417
Persons injured.....	Number.....	19,577	25,780	21,327	54,306	67,867	72,545	74,126	62,246

- Represents zero. NA Not available. <sup>1</sup>See text, p. 604 for definitions of class I and class II. <sup>2</sup>Average mid-month count. <sup>3</sup>For 1960, includes circular companies. Beginning 1978, excludes proprietary and unofficial companies. <sup>4</sup>Includes mileage in Canada. <sup>5</sup>Includes track operated by trustees. <sup>6</sup>Includes switching and terminal companies, except average tractive effort and average capacity. <sup>7</sup>Locomotives of class I railroads. <sup>8</sup>Represents horsepower, in thousands. <sup>9</sup>Excludes caboose cars. <sup>10</sup>Class I railroads only. <sup>11</sup>Includes lessors. <sup>12</sup>Increase in investment over a period of years cannot be obtained accurately by subtraction of 1 year's investment from that of another owing to reorganization, sale or abandonment, reclassification, etc. Also includes proprietary companies. <sup>13</sup>Includes amortization, applicable to proprietary companies. <sup>14</sup>Comprises common stock, preferred stock, and funded debt unmaturing. <sup>15</sup>Represents total retained earnings. <sup>16</sup>After extraordinary and prior period items. <sup>17</sup>Includes highway grade crossing casualties. Beginning 1975 not comparable with previous years due to change in requirements for reporting injuries.

Source: U.S. Interstate Commerce Commission, *Transport Statistics in the United States*, Part 1, annual, and 1960 and 1965, *Accident Bulletin*, annual. Beginning 1970, accident data from U.S. Federal Railroad Administration, *Accident Bulletin*, annual.

**NO. 1089. RAILROADS, CLASS I LINE-HAUL—SELECTED PASSENGER STATISTICS: 1960 TO 1980**

[See text, p. 604, for definition of class I. See also *Historical Statistics, Colonial Times to 1970*, series Q 313-315]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980
		Average miles of road operated.....	1,000.....	94	77	50	31	32	33	32	30
Passenger revenue.....	Mil. dol.....	640	553	420	538	536	592	606	608	703	807
Revenue per passenger-mile:											
Includes commutation passengers.....	Cents.....	3.01	3.18	3.90	5.22	5.50	5.59	5.91	5.95	6.27	7.34
Excludes commutation passengers.....	Cents.....	3.03	3.14	4.02	5.85	6.31	6.30	6.64	6.62	6.99	(NA)
Revenue passengers carried.....	Mil.....	326	299	284	274	269	268	275	281	285	300
Amtrak.....	(X).....	(X)	(X)	(X)	18	18	19	19	19	21	21
Revenue passenger-miles.....	Bil.....	21.3	17.4	10.8	10.3	9.9	10.6	10.3	10.2	11.2	11.0
Amtrak.....	(X).....	(X)	(X)	(X)	4.3	3.9	4.3	4.2	4.2	4.9	4.5
Average distance.....	Miles.....	65.2	58.2	37.9	37.7	36.8	39.6	37.5	36.3	38.0	36.6
Revenue passenger-miles per train-mile.....	Number.....	101	101	117	161	150	158	156	159	188	(NA)
Revenue passenger-miles per car-mile.....	Number.....	19.3	19.5	25.8	35.3	35.2	36.7	36.5	36.4	(NA)	(NA)
Passenger-train miles.....	Mil.....	209	172	92	64	66	67	66	64	60	(NA)
Passenger-carrying car-miles.....	Mil.....	1,101	885	417	293	281	289	282	280	(NA)	(NA)
Train-miles per train-hour.....	Miles.....	40.7	41.3	40.1	38.2	39.2	32.7	33.0	32.4	(NA)	(NA)

NA Not available. X Not applicable.

Source: U.S. Interstate Commerce Commission, *Annual Report; Transport Statistics in the United States*, Part 1, annual; and related quarterly reports, *Financial and Operating Statistics, Class I Railroads*, Statement No. 100, semiannual; and unpublished data.

**NO. 1090. RAILROADS, CLASS I LINE-HAUL—SELECTED FREIGHT STATISTICS: 1960 TO 1980**

[Excludes switching and terminal roads. See text, p. 604, for definition of class I. See *Historical Statistics, Colonial Times to 1970*, series Q 319, for train-miles per train-hour]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980
		Average miles of road operated.....	1,000.....	219	212	209	207	205	200	197	192
Freight revenue.....	Bil. dol.....	8.0	8.8	10.9	13.8	15.8	15.4	17.4	18.9	20.3	23.6
Per ton-mile.....	Cents.....	1.40	1.27	1.43	1.62	1.85	2.04	2.20	2.29	2.37	2.87
Per ton.....	Dol.....	3.51	3.48	4.18	5.10	5.91	6.32	7.42	8.00	9.17	9.55
Revenue freight:											
Tons originated.....	Mil.....	1,241	1,387	1,485	1,532	1,530	1,395	1,370	1,395	1,380	1,502
Tons carried.....	Mil.....	2,291	2,539	2,616	2,701	2,716	2,437	2,448	2,439	2,217	2,463
Net ton miles.....	Bil.....	572	698	777	883	851	764	804	839	856	904
Average distance.....	Miles.....	251	275	292	332	316	310	338	350	386	371
Train miles.....	Mil.....	405	421	427	469	469	402	425	428	433	438
Freight car miles, loaded <sup>1</sup> .....	Bil.....	17.3	17.9	17.3	18.0	17.6	15.1	15.8	16.3	15.9	15.8
Empty.....	Bil.....	10.9	11.4	12.6	13.2	13.1	12.5	12.7	12.4	11.1	11.5
Net ton-miles per train-mile <sup>1</sup> .....	Number.....	1,466	1,683	1,820	1,844	1,875	1,938	2,232	2,029	2,029	2,096
Net ton-miles per loaded car-mile <sup>1</sup> .....	Number.....	33.9	39.7	44.9	48.7	50.1	51.7	59.9	53.2	55.1	(NA)
Train-miles per train-hour.....	Miles.....	19.5	20.1	20.1	19.8	19.9	20.0	20.1	19.8	19.3	(NA)

NA Not available. <sup>1</sup>Revenue and nonrevenue freight.

Source: 1960-1978, U.S. Interstate Commerce Commission, *Annual Report; Transport Statistics in the United States*, Part 1, annual; and related quarterly reports, *Financial and Operating Statistics, Class I Railroads*, Statement No. 100, semiannual, and unpublished data; thereafter, Association of American Railroads, *Yearbook of Railroad Facts*, annual.

**NO. 1091. RAILROADS, CLASS I—CARS OF REVENUE FREIGHT LOADED, 1960 TO 1981, AND BY COMMODITY GROUP, 1980 AND 1981**

[In thousands. Figures are 52-week totals. Data for 1978-81 include 12 class II railroads which were class I in 1977. See text, p. 604, for definition of class I. N.e.c.=Not elsewhere classified]

YEAR	CARLOADS		COMMODITY GROUP	CARLOADS		COMMODITY GROUP	CARLOADS	
	Total	Piggy-back		1980	1981		1980	1981
1960.....	30,441	554	Coal.....	5,706	5,763	Crushed stone, gravel, sand.....	716	620
1965.....	29,248	1,077	Metallic ores.....	1,480	1,807	Nonmetallic minerals, n.e.c.....	770	675
1970.....	27,160	1,450	Chemicals, allied products.....	1,411	1,349	Waste and scrap materials.....	633	608
1973.....	27,338	1,631	Grain.....	1,573	1,352	Lumber, wood prod. (exc. furniture), n.e.c.....		469
1974.....	26,184	1,810	Motor vehicles and equipment.....	854	815	Forwarder and shipper association traffic.....	555	494
1975.....	23,217	1,308	Pulp, paper, allied products.....	1,060	996	Coke.....	276	330
1976.....	23,457	1,506	Primary forest products.....	1,002	939	Petroleum products.....	287	269
1977.....	23,173	1,689	Food and kindred products, n.e.c.....	925	803	Farm products, exc. grain.....	236	224
1978.....	23,355	1,841	Grain mill products.....	879	738	Metals and products.....	12	12
1979.....	23,692	1,858	Metals and products.....	620	795	Stone, clay, and glass products.....	2,130	2,138
1980.....	22,598	1,651	Stone, clay, and glass products.....	792	693	All other carloads.....		
1981.....	21,613	1,723						

Source: Association of American Railroads, Washington, D.C., *Cars of Revenue Freight Loaded*, annual.

**NO. 1092. RAILROADS, CLASS I LINE-HAUL—REVENUE FREIGHT ORIGINATED, BY COMMODITY GROUP:  
1975 TO 1980**

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

COMMODITY GROUP	CARLOADS (1,000)				TONS (mil.)				GROSS REVENUE (mil. dol.)			
	1975	1978	1979	1980	1975	1978	1979	1980	1975	1978	1979	1980
<b>Total</b> .....	<b>22,930</b>	<b>22,462</b>	<b>23,409</b>	<b>22,223</b>	<b>1,395.1</b>	<b>1,390.1</b>	<b>1,502.1</b>	<b>1,492.4</b>	<b>15,899</b>	<b>20,765</b>	<b>24,283</b>	<b>26,938</b>
Coal.....	4,844	4,372	5,329	5,789	407.6	383.1	473.8	522.1	2,146	2,813	3,872	4,956
Food and kindred products.....	2,154	1,922	1,348	1,767	100.2	95.4	93.2	91.9	1,822	2,158	2,421	2,837
Nonmetallic minerals <sup>2</sup> .....	1,895	1,650	1,592	1,474	150.6	135.0	123.3	124.8	596	723	829	948
Farm products.....	1,873	1,599	1,721	1,866	134.4	128.7	138.5	156.1	1,472	1,678	2,101	2,801
Metallic ores.....	1,338	1,405	1,480	1,258	106.4	112.5	119.9	105.4	468	553	621	597
Transportation equipment.....	1,135	1,352	1,278	1,004	27.3	32.2	30.6	23.9	1,283	2,089	2,167	1,917
Lumber and wood prod. <sup>3</sup> .....	1,615	1,629	1,565	1,384	88.6	95.1	93.1	85.5	1,066	1,461	1,546	1,543
Pulp, paper, allied products.....	1,015	975	977	954	40.6	41.4	42.4	42.1	977	1,260	1,445	1,652
Chemicals, allied products.....	1,313	1,426	1,471	1,385	91.4	106.7	112.4	108.3	1,681	2,342	2,739	2,946
Primary metal products.....	796	878	913	756	51.4	60.3	63.9	52.7	848	1,104	1,291	1,332
Petroleum and coal prod.....	787	734	716	596	45.8	44.4	43.9	38.1	573	713	835	865
Stone, clay, and glass prod.....	906	911	920	776	56.8	59.9	61.5	53.7	651	902	1,018	1,025
Fabricated metal prod. <sup>4</sup> .....	244	96	87	72	8.2	2.5	2.3	2.0	221	115	117	110
Machinery, exc. electrical.....	156	105	90	77	3.6	2.5	2.3	2.0	200	166	174	176
Waste and scrap materials.....	744	704	713	632	38.2	37.8	38.5	34.3	359	432	479	513

<sup>1</sup>Includes commodity groups and small packaged freight shipments, not shown separately.

<sup>2</sup>Except fuels.

<sup>3</sup>Except furniture.

<sup>4</sup>Except ordnance, machinery, and transport.

Source: 1975 and 1978 U.S. Interstate Commerce Commission, *Freight Commodity Statistics—Class I Railroads in the United States*, annual; thereafter, Association of American Railroads, *Freight Commodity Statistics*, annual.

**NO. 1093. PRODUCER PRICE INDEXES FOR TOTAL RAILROAD FREIGHT: 1970 TO 1981**

[1969 = 100. Reflects prices for shipping a fixed set of commodities under specified and unchanging conditions]

COMMODITY	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
<b>Total railroad freight</b> .....	<b>108.8</b>	<b>122.4</b>	<b>126.1</b>	<b>129.3</b>	<b>149.7</b>	<b>169.4</b>	<b>186.6</b>	<b>199.1</b>	<b>213.1</b>	<b>243.3</b>	<b>284.5</b>	<b>327.6</b>
Annual percent change.....	8.8	12.5	3.0	2.5	15.8	13.2	10.2	6.7	7.0	14.2	16.9	15.1
Farm products.....	108.3	120.8	123.5	125.2	145.3	165.0	182.7	191.3	204.9	235.9	275.6	315.0
Metallic ores.....	108.9	123.5	128.1	133.0	155.0	178.4	197.8	211.1	227.3	263.5	307.9	355.3
Coal.....	108.6	123.9	128.8	132.5	154.8	177.5	199.6	211.6	228.2	266.2	306.3	350.7
Nonmetallic minerals.....	108.0	120.7	125.6	130.0	150.5	172.4	191.7	205.5	221.2	257.5	308.1	368.8
Food products.....	108.9	122.4	126.2	128.8	148.9	168.6	185.1	195.3	210.1	239.2	283.1	329.4
Wood or lumber products.....	108.4	119.0	123.3	127.4	147.4	163.6	177.9	191.7	205.7	233.4	278.1	326.2
Pulp, paper, and allied products.....	108.9	122.4	124.1	124.5	143.5	162.7	176.1	186.5	197.1	223.7	264.8	305.3
Chemical or allied products.....	108.6	121.8	124.8	127.6	147.9	168.5	183.8	197.1	208.5	235.5	274.3	318.2
Clay, concrete, glass, or stone products.....	108.4	122.9	126.7	131.2	153.1	174.5	192.2	206.4	223.4	255.3	301.8	351.9
Primary metal products.....	108.5	124.3	128.5	132.1	153.3	174.8	191.6	205.0	217.9	247.1	284.3	323.5
Transportation equipment.....	108.4	123.7	127.3	131.9	153.5	173.5	190.2	204.3	217.6	246.2	281.9	316.2

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

**NO. 1094. CLASS I RAILROADS—EMPLOYMENT AND EQUIPMENT: 1960 TO 1980**

[For definition of class I, see text, p. 604. See also *Historical Statistics, Colonial Times to 1970*, Series Q 301–305 and Q 388–399]

ITEM	Unit	1960 <sup>1</sup>	1965 <sup>1</sup>	1970 <sup>1</sup>	1974	1975	1976	1977	1978	1979	1980
Employees, average.....	1,000.....	780	840	566	533	494	496	501	480	483	459
Compensation, total.....	Mil. dol.....	4,894	4,793	5,557	7,576	7,563	8,494	9,224	9,566	10,904	11,318
Average per hour.....	Dollars.....	2.66	3.06	4.04	7.12	7.74	8.62	9.34	10.34	11.48	12.52
Average per year.....	Dollars.....	6,170	7,490	9,841	14,214	15,310	17,125	18,411	20,267	21,592	24,658
Locomotives.....	1,000.....	31.2	30.1	27.1	28.1	28.2	27.6	27.7	27.4	28.1	28.4
New units installed.....	Number.....	389	1,387	271	649	588	146	(NA)	(NA)	1,680	1,466
Freight cars.....	1,000.....	1,690	1,515	1,454	1,375	1,359	1,332	1,287	1,227	1,217	1,168
Box.....	1,000.....	700	593	590	494	475	449	422	384	380	347
Gondola and hopper.....	1,000.....	831	754	724	675	680	675	662	647	645	636
Other.....	1,000.....	159	168	140	206	204	208	203	196	192	185
Aggregate capacity.....	Mil. tons.....	91.9	88.3	95.6	98.2	99.2	98.3	97.2	94.4	94.6	92.7
Average capacity.....	Tons.....	55.4	59.8	67.1	71.6	72.9	73.8	75.5	76.9	77.7	79.4
New units installed.....	1,000.....	54.0	62.9	56.0	36.3	41.7	30.8	27.1	28.0	28.6	30.9
Passenger-train cars.....	1,000.....	25.7	20.0	11.2	6.8	6.5	5.5	5.5	4.5	4.2	4.3

NA Not available. <sup>1</sup>Includes other classes.

Source: Association of American Railroads, Washington, D.C., *Yearbook of Railroad Facts*, and U.S. Interstate Commerce Commission, *Transport Statistics in the United States*, Part 1, annual, and *Statement No. A-300*, annual.

# Railroad Accidents—Petroleum and Natural Gas Pipeline Companies 629

## No. 1095. RAILROAD ACCIDENTS—DEATHS AND INJURIES: 1960 TO 1981

[Casualty data prior to 1975 cover only those cases where a person lost time from that person's job or other usual activity. Beginning 1975, covers cases with lost time, those requiring medical treatment beyond first aid, termination of employment, transfer to another job, loss of consciousness, and occupational illnesses. Prior to 1975, cases where death occurred more than 24 hours after the injury were classified as injuries; beginning 1975 they were classified as deaths. See also *Historical Statistics, Colonial Times to 1970*, series Q 395-397 and Q 400-401]

TYPE OF CASUALTY	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>Persons killed, total</b> .....	<b>2,248</b>	<b>2,399</b>	<b>2,225</b>	<b>1,560</b>	<b>1,630</b>	<b>1,530</b>	<b>1,646</b>	<b>1,429</b>	<b>1,417</b>	<b>1,284</b>
In highway grade crossing accidents <sup>1</sup> .....	1,364	1,534	1,440	979	1,114	944	1,021	834	788	697
Involving motor vehicles <sup>2</sup> .....	1,254	1,434	1,337	765	956	822	908	704	682	593
Passengers on trains.....	32	11	8	8	5	4	13	6	4	4
Railroad employees on duty.....	190	172	155	110	100	114	122	101	97	65
Trespassers and other.....	2,026	2,216	2,062	1,442	1,525	1,412	1,511	1,322	1,316	1,215
<b>Persons injured</b> .....	<b>19,577</b>	<b>25,789</b>	<b>21,327</b>	<b>54,306</b>	<b>65,331</b>	<b>67,867</b>	<b>72,545</b>	<b>74,126</b>	<b>62,246</b>	<b>53,003</b>
In highway grade crossing accidents <sup>1</sup> .....	3,424	3,801	3,336	4,168	4,831	4,649	4,256	4,172	3,662	3,121
Involving motor vehicles <sup>2</sup> .....	3,277	3,663	3,205	3,568	4,307	4,455	4,087	3,938	3,486	2,975
Passengers on trains.....	1,463	1,189	489	1,307	998	503	1,252	1,001	593	409
Railroad employees on duty.....	13,245	18,644	15,743	47,318	57,889	61,028	65,071	66,924	56,331	47,838
Trespassers and other.....	4,869	5,956	5,095	5,681	6,444	6,336	6,222	6,201	5,322	4,756

<sup>1</sup>Accidents at public crossings only. <sup>2</sup>Excludes motorcycles.

Source: 1960 and 1965, U.S. Interstate Commerce Commission and, thereafter, U.S. Federal Railroad Administration, *Accident Bulletin*, annual, and *Rail-Highway Crossing Accident/Incidental and Inventory Bulletin*, annual.

## No. 1096. PETROLEUM PIPELINE COMPANIES—CHARACTERISTICS: 1972 TO 1980

[Covers pipeline companies operating in interstate commerce and subject to jurisdiction of Interstate Commerce Commission from 1972 to 1976, and Federal Energy Regulatory Commission beginning 1977]

ITEM	Unit	1972	1973	1974	1975	1976	1977	1978	1979	1980
Miles of pipeline, total.....	1,000.....	172.1	170.1	169.0	170.7	169.9	154.5	161.6	169.8	172.7
Gathering lines.....	1,000.....	42.3	42.9	40.7	40.4	37.6	34.7	36.5	36.9	36.3
Trunk lines.....	1,000.....	129.8	127.2	128.3	130.3	132.3	119.8	125.1	132.9	136.4
Total deliveries.....	Mil. bbl.....	8,847	9,416	9,132	9,391	9,742	10,019	10,768	11,140	10,600
Crude oil.....	Mil. bbl.....	5,510	5,760	5,698	5,729	5,996	6,089	6,550	6,728	6,405
Products.....	Mil. bbl.....	3,337	3,656	3,434	3,662	3,746	3,930	4,218	4,412	4,195
Total trunk line traffic.....	Bil. bbl-miles.....	2,687	2,502	2,632	2,892	2,918	3,895	3,723	3,577	3,405
Crude oil.....	Bil. bbl-miles.....	1,520	1,262	1,456	1,551	1,639	2,267	2,031	1,946	1,948
Products.....	Bil. bbl-miles.....	1,167	1,240	1,176	1,341	1,279	1,627	1,691	1,631	1,456
Carrier property value.....	Mil. dol.....	6,749	7,000	8,038	10,740	13,684	16,736	17,654	18,980	19,752
Operating revenues.....	Mil. dol.....	1,338	1,438	1,579	1,869	2,132	2,818	4,980	5,781	6,356
Net income.....	Mil. dol.....	415	408	330	456	595	478	1,696	1,648	1,912

Source: PannWell Publishing Co., Tulsa Oklahoma, *Oil and Gas Journal*, November 23, 1981 and earlier issues. (Copyright.)

## No. 1097. INTERSTATE NATURAL GAS PIPELINE COMPANIES—SUMMARY: 1960 TO 1980

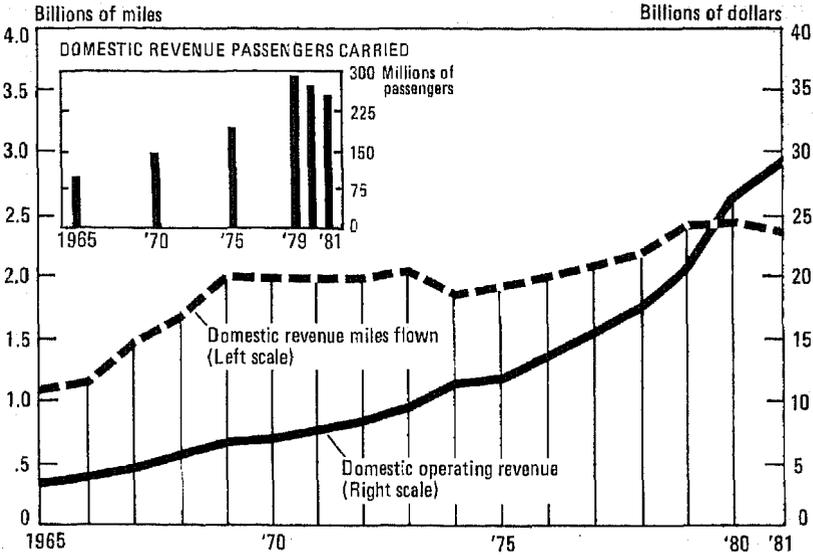
[Excludes companies whose operations are limited to production of natural gas and sales of gas at or near the point of production. Covers classes A and B interstate natural gas pipeline companies with annual gas operating revenues of \$1,000,000 or more]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980
Sales.....	Tril. cu. ft.....	11.8	14.7	19.9	16.5	16.2	15.7	16.2	17.7	17.3
Residential.....	Tril. cu. ft.....	.8	.8	.6	.5	.5	.6	.6	.6	.6
Commercial, industrial.....	Tril. cu. ft.....	2.4	2.5	2.9	1.9	1.8	1.9	1.9	2.1	2.3
For resale.....	Tril. cu. ft.....	8.7	11.6	16.3	14.0	13.8	13.2	13.6	14.8	14.4
Operating revenues.....	Mil. dol.....	4,571	5,584	7,955	14,278	17,317	22,289	25,966	35,509	45,271
From sales <sup>1</sup> .....	Mil. dol.....	4,352	5,346	7,576	13,451	16,361	21,126	24,832	33,980	43,222
Residential.....	Mil. dol.....	537	488	622	756	910	1,316	1,520	1,754	2,001
Commercial, industrial.....	Mil. dol.....	731	793	1,025	1,646	2,115	2,842	3,272	4,527	5,950
For resale.....	Mil. dol.....	3,046	4,043	5,898	11,003	13,277	16,912	19,977	27,597	35,271
From transportation of gas to others.....	Mil. dol.....	100	113	188	387	474	559	619	772	924
Other.....	Mil. dol.....	119	126	191	440	482	604	511	757	1,125
Operation, maintenance expenses.....	Mil. dol.....	3,091	3,873	5,602	10,374	12,796	17,596	20,954	29,867	39,154
Production.....	Mil. dol.....	2,472	3,142	4,546	8,573	10,721	15,096	18,048	26,157	34,742
Storage.....	Mil. dol.....	21	39	63	140	159	205	254	275	303
Transmission.....	Mil. dol.....	306	379	534	912	1,065	1,300	1,519	2,077	2,547
Distribution.....	Mil. dol.....	75	65	92	122	134	178	193	217	245
Administrative, general, and other.....	Mil. dol.....	216	248	368	627	717	817	940	1,141	1,317
Pipeline mileage:										
Transmission lines.....	1,000.....	135.5	154.4	182.0	187.2	189.9	189.9	190.7	193.4	192.4
Field lines.....	1,000.....	42.5	47.7	51.6	57.1	58.6	60.2	63.0	66.2	69.7
Storage.....	1,000.....	2.9	3.1	3.5	4.2	4.3	4.2	4.3	4.4	12.1

<sup>1</sup>Includes other ultimate customers not shown separately.

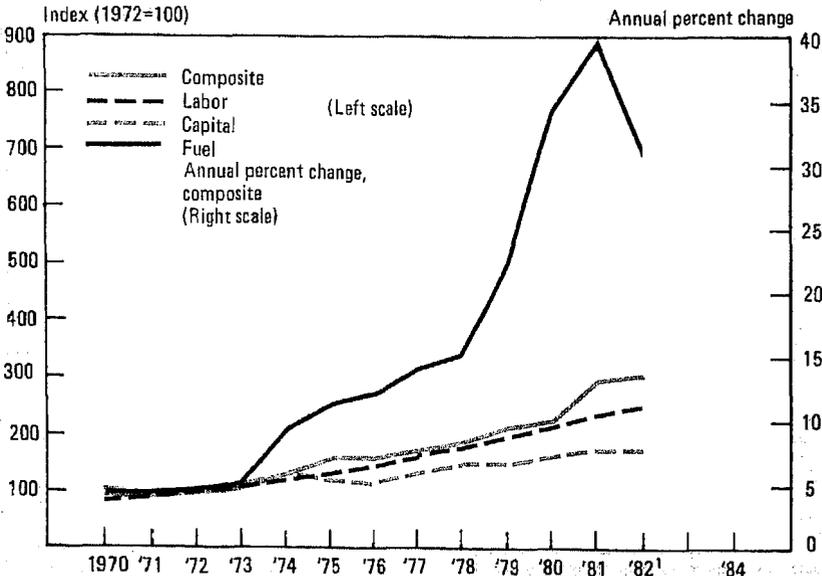
Source: 1960-1975, U.S. Federal Power Commission and, thereafter, U.S. Energy Information Administration, *Statistics of Interstate Natural Gas Pipeline Companies*, annual.

**Figure 23.1**  
**Domestic Scheduled Air Carriers—Revenues, Miles Flown, and**  
**Passengers Carried: 1965 to 1981**



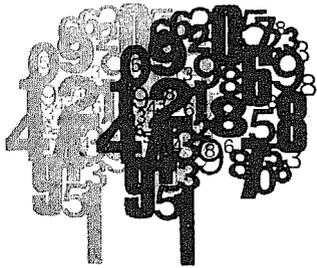
Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 1098 and 1099.

**Figure 23.2**  
**Airline Cost Indexes: 1970 to 1982**



1 January—March.

Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1103.



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## Section 23

# Transportation— Air and Water

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This section presents statistics 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 22.

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 *U.S. Airborne Exports and General Imports*, 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 five 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, D.C. in *Air Transport Facts and Figures*. Additional sources of data on water transportation include *A Statistical Analysis of the World's Merchant Fleets*, issued periodically by the U.S. Maritime Administration; *The Bulletin*, issued monthly by the American Bureau of Shipping, New York; 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 are carried out by the FAA and the Civil Aeronautics Board (CAB). The CAB promotes and regulates the civil air transportation industry within the United States and between the United States and foreign countries. The Board grants licenses to provide air transportation service, approves or disapproves proposed rates and fares, and approves or disapproves proposed agreements and corporate relationships involving air carriers. The responsibility for investigation of aviation accidents resides with the National Transportation Safety Board.

The principal activities of the FAA include: 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 communication equipment for the airways; development of general aviation; and promotion of air safety.

These agencies publish monthly and quarterly financial and traffic statistical 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 non-air carrier (general aviation) flying; and aircraft production and registration.

**Air carriers and service.**—The CAB issues "certificates of public convenience and necessity" in two categories: *Certificated route air carriers* (often referred to as "scheduled airlines") and *supplemental (or charter) air carriers* (see footnote 3, table 1105). Certificated route air carriers are passenger/cargo and all-cargo carriers which are authorized to perform *scheduled service* over specified routes according to published flight schedules. Certificated route carriers are, however, allowed to perform some *nonscheduled service* (i.e., revenue flights outside of the regular schedule, such as charter flights, and all nonrevenue flights incident to such flights).

**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 I.

**NO. 1098. CERTIFICATED ROUTE PASSENGER/CARGO AIR CARRIERS—NUMBER, OPERATING REVENUES, AND EXPENSES: 1960 TO 1981**

[In millions of dollars, except number of carriers. 1960-1979, includes scheduled and charter operations. Beginning 1980, includes all cargo carriers. Minus sign (-) denotes loss. See also headnote, table 1099, and *Historical Statistics, Colonial Times to 1970*, series Q 591-603]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Number of air carriers .....	55	50	39	32	33	33	33	35	49	63	63
<b>DOMESTIC</b>											
Revenue .....	2,129	3,609	7,131	11,448	11,911	13,788	15,690	17,943	21,337	26,404	29,013
Passenger .....	1,860	3,180	6,359	9,903	10,290	12,104	13,772	15,753	18,930	23,317	25,687
Mail (including subsidy) .....	113	158	205	260	247	292	355	334	413	530	609
Express and freight .....	103	231	472	679	702	835	978	1,107	1,184	1,582	1,664
Other .....	53	40	94	606	672	558	585	749	810	974	1,054
Expenses .....	2,091	3,165	7,128	10,649	11,781	13,213	15,036	16,948	21,213	26,409	29,277
Flying operations .....	601	855	2,098	3,297	3,869	4,401	5,229	5,577	7,867	11,029	12,137
Maintenance .....	438	640	1,127	1,500	1,595	1,802	1,986	2,125	2,421	2,758	2,843
General services and administration .....	824	1,354	3,157	4,689	5,050	5,774	6,536	7,556	9,120	10,545	12,027
Passenger service .....	(NA)	280	707	1,027	1,116	1,260	1,461	1,711	2,091	2,329	2,525
Aircraft and traffic servicing .....	(NA)	554	1,298	1,995	2,125	2,412	2,893	3,063	3,619	4,051	4,496
Promotion and sales .....	(NA)	374	809	1,173	1,265	1,490	1,708	2,028	2,547	3,096	3,708
General and administrative .....	(NA)	145	344	494	544	612	674	754	863	1,069	1,298
Depreciation and amortization .....	229	316	745	865	883	920	960	1,213	1,352	1,560	1,737
Transport related .....	(NA)	(NA)	(NA)	297	383	316	325	477	453	517	532
Net operating income .....	38	444	3	799	129	576	654	995	123	-6	-263
<b>INTERNATIONAL</b>											
Revenue .....	685	1,211	1,913	2,922	3,063	3,316	3,774	4,332	5,191	6,543	6,390
Passenger .....	528	954	1,553	2,332	2,435	2,638	3,019	3,494	4,226	4,984	4,921
Mail (including subsidy) .....	56	91	110	92	97	85	88	92	107	175	165
Express and freight .....	59	140	209	359	381	403	444	457	534	1,011	971
Other .....	42	26	41	139	150	190	224	288	325	372	333
Expenses .....	639	1,001	1,894	2,995	3,059	3,182	3,552	4,008	5,105	6,766	6,595
Flying operations .....	180	263	515	1,037	1,050	1,089	1,170	1,211	1,795	2,775	2,754
Maintenance .....	102	146	241	356	363	368	414	458	521	616	662
General services and administration .....	280	493	950	1,312	1,345	1,431	1,609	1,888	2,289	2,811	2,750
Passenger service .....	(NA)	98	223	292	287	296	347	422	531	600	580
Aircraft and traffic servicing .....	(NA)	162	332	491	510	536	598	676	820	1,049	933
Promotion and sales .....	(NA)	172	293	367	399	451	506	599	749	917	945
General and administrative .....	(NA)	61	103	162	149	148	158	191	189	246	292
Depreciation and amortization .....	76	100	188	214	212	193	238	303	327	395	386
Transport related .....	(NA)	(NA)	(NA)	75	88	101	120	148	173	178	144
Net operating income .....	45	210	19	-73	4	133	222	324	86	-223	-205

NA Not available.

Source: U.S. Federal Aviation Administration. From data supplied by U.S. Civil Aeronautics Board, *CAB Air Carrier Financial Data*, annual.

## NO. 1099. CERTIFICATED ROUTE AIR CARRIERS—SUMMARY: 1960 TO 1981

[As of Dec. 31 or for calendar years. See text, p. 631. Operations between conterminous U.S. and Hawaii (through 1965), Puerto Rico, and outlying areas included with international. Intra-Alaska included with domestic carriers and Mainland Alaska with international, as follows: Number of operators and traffic data, fuel and financial data, and personnel data, 1960 and 1965. Beginning 1970, Alaska and Hawaii included in domestic. See also *Historical Statistics, Colonial Times to 1970*, series Q 577-590 and Q 624-633]

ITEM	Unit	1960	1965	1970	1975	1977	1978	1979	1980	1981
Domestic operators <sup>1</sup> .....	Number.....	43	39	35	33	35	34	52	63	63
International operators <sup>1</sup> .....	Number.....	12	11	6	2	2	2	341	371	350
Employment, total <sup>2</sup> .....	1,000.....	166	211	297	290	308	329	341	371	350
Pilots, copilots, and other flight personnel.....	1,000.....	17	22	33	32	34	36	37	39	37
Flight attendants.....	1,000.....	11	17	34	39	45	48	53	57	55
Mechanics.....	1,000.....	34	42	48	45	45	44	45	45	46
Aircraft and traffic servicing personnel.....	1,000.....	43	58	84	83	90	96	98	122	95
Other.....	1,000.....	61	72	98	91	94	104	108	108	117
Aircraft in operation <sup>3</sup> .....	Number.....	1,867	2,437	2,267	2,267	2,234	2,348	2,466	2,505	2,523
Fixed-wing.....	Number.....	1,842	1,875	2,421	2,260	2,231	2,345	2,466	2,505	2,523
Turbojet.....	Number.....	202	712	2,041	2,022	2,064	2,184	2,308	2,336	2,295
Two-engine.....	Number.....	-	41	519	500	529	579	621	652	731
Three-engine.....	Number.....	-	168	631	961	1,035	1,140	1,232	1,311	1,284
Four-engine.....	Number.....	202	503	891	561	500	465	455	373	280
Turbo-prop.....	Number.....	227	296	316	193	156	155	152	163	223
Piston.....	Number.....	1,413	867	64	45	11	6	6	6	5
Helicopters.....	Number.....	25	21	16	7	3	3	-	-	-
Average available seats: <sup>4,5</sup>										
Domestic.....	Number.....	65.5	89.2	110.4	130.4	136.9	140.0	139.9	143.1	147.3
International.....	Number.....	89.9	129.1	154.9	224.8	236.7	244.1	259.1	274.5	280.3
Average/hr. speed: <sup>5</sup>										
Domestic.....	Mi. per hr.....	235	314	403	403	408	409	406	405	403
International.....	Mi. per hr.....	303	445	482	482	487	489	493	494	495
Fuel consumed: <sup>6</sup>										
Gasoline.....	Mil. gal.....	1,189	519	14	6	(?)	(?)	(?)	(?)	(?)
Jet fuel:										
Domestic.....	Mil. gal.....	988	3,420	7,842	7,558	8,339	8,621	9,376	9,218	8,650
International.....	Mil. gal.....	343	1,236	2,241	1,949	1,957	1,913	1,993	2,093	2,032
Revenue-miles flown <sup>7</sup> .....	Millions.....	998	1,354	2,426	2,241	2,419	2,520	2,791	2,816	2,700
Domestic.....	Millions.....	829	1,099	2,027	1,909	2,104	2,201	2,435	2,471	2,394
International.....	Millions.....	168	255	399	332	315	319	355	345	306
Revenue passengers enplaned <sup>8</sup> .....	Millions.....	62	103	169	205	240	275	317	297	286
Domestic.....	Millions.....	56	92	153	189	222	254	293	273	265
International.....	Millions.....	6	11	16	16	18	21	24	24	21
Revenue passenger-miles flown: <sup>8</sup>										
Domestic.....	Billions.....	30.6	51.9	104.1	131.7	156.6	182.7	208.9	200.8	198.6
International.....	Billions.....	8.3	16.8	27.6	31.1	36.6	44.1	53.1	54.4	50.1
Average passenger-mile rate: <sup>9</sup>										
Domestic.....	Dollars.....	.061	.061	.060	.077	.086	.085	.091	.113	.127
International.....	Dollars.....	.064	.053	.050	.072	.076	.075	.077	.075	.081
Express and freight revenue, ton-miles flown <sup>8</sup> .....	Millions.....	702	1,820	3,515	4,796	5,427	5,818	5,964	5,742	5,665
Domestic.....	Millions.....	476	1,112	2,216	2,747	3,125	3,505	3,466	3,277	3,350
International.....	Millions.....	226	708	1,299	2,049	2,301	2,313	2,498	2,465	2,335
Mail, ton-miles flown: <sup>8</sup>										
Domestic.....	Millions.....	135	228	715	683	752	807	853	949	998
International.....	Millions.....	107	265	549	428	408	374	372	393	376
Accidents (scheduled passenger service):										
Domestic, total <sup>8,10</sup> .....	Number.....	62	55	32	21	15	18	14	19	<sup>9</sup> 24
Fatal.....	Number.....	<sup>9</sup> 10	6	1	2	2	4	4	2	<sup>9</sup> 4
Fatalities <sup>11</sup> .....	Number.....	363	223	1	122	75	16	279	14	<sup>9</sup> 4
Passenger-fatalities per 100 million passenger miles flown <sup>12</sup> .....	Number.....	.9	.4	-	.081	.038	.006	.125	.005	.002
International, total.....	Number.....	5	8	7	7	3	1	4	( <sup>9</sup> )	( <sup>9</sup> )
Fatal.....	Number.....	2	1	1	-	-	-	1	( <sup>9</sup> )	( <sup>9</sup> )
Fatalities <sup>11</sup> .....	Number.....	15	30	2	-	-	-	73	( <sup>9</sup> )	( <sup>9</sup> )
Passenger-fatalities per 100 million passenger miles flown.....	Number.....	.1	.1	.007	-	-	-	.115	( <sup>9</sup> )	( <sup>9</sup> )

- Represents zero. <sup>1</sup>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. <sup>2</sup>Scheduled airlines only. Source: Air Transport Association of America, Washington, D.C., *Air Transport Facts and Figures*. <sup>3</sup>Excludes those used for crew training and general utility purposes, or held for disposal. Beginning 1973, includes aircraft operated by the scheduled all-cargo certificated route air carriers. <sup>4</sup>Passenger seat-miles divided by revenue-miles flown in passenger service. <sup>5</sup>Scheduled services of all certificated route air carriers; includes all cargo. <sup>6</sup>Includes air cargo. <sup>7</sup>Included in "Jet fuel." <sup>8</sup>Beginning 1980, international data included with domestic. <sup>9</sup>Preliminary. <sup>10</sup>Includes mid-air collisions nonfatal to air carrier occupants (excluded in computation of fatal accidents). <sup>11</sup>Includes crew members. <sup>12</sup>Excludes passenger deaths in dynamite accidents (29 in 1960).

Source: Except as noted, U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual. Includes data from U.S. Civil Aeronautics Board and U.S. National Transportation Safety Board.

## NO. 1100. CERTIFICATED ROUTE AIR CARRIERS—SERVICE AND TRAFFIC: 1960 TO 1981

(In millions, except as indicated)

ITEM	1960	1965	1970	1975	1977	1978	1979	1980	1981
Revenue ton-miles, all services .....	5,024	9,895	20,186	23,534	27,583	31,095	34,551	34,656	33,875
Revenue ton-miles, scheduled .....	4,729	8,985	18,166	22,186	25,909	29,679	33,390	32,603	31,934
Passenger <sup>1</sup> .....	3,777	6,672	13,171	16,281	19,322	22,678	26,202	25,519	24,876
U.S. mail .....	241	483	1,470	1,097	1,147	1,168	1,206	1,318	1,347
Foreign mail .....	9	10	10	12	13	14	18	24	26
Express .....	59	90	107	29	41	56	56	56	68
Freight .....	843	1,730	3,408	4,768	5,385	5,763	5,908	5,686	5,617
Revenue ton-miles, charter <sup>2</sup> .....	296	909	2,020	1,348	1,674	1,416	1,161	2,053	1,941
Available ton-miles, all services .....	9,384	19,661	44,298	49,289	54,789	56,869	62,546	66,163	64,150
Ton-mile load factor (percent) .....	53.5	50.3	45.6	47.7	50.3	54.7	55.2	52.4	52.8
Scheduled services total:									
Revenue passengers enplaned, scheduled .....	62	103	170	205	240	275	317	297	286
Revenue passenger-miles (bil.) .....	39	69	132	163	193	237	262	255	249
Available seat-miles (bil.) .....	66	124	265	303	346	369	416	433	425
Passenger load factor (percent) .....	59.3	55.2	49.7	53.7	55.9	61.5	63.0	59.0	58.6
Revenue passenger-miles per gallon of fuel (number) .....	(NA)	(NA)	(NA)	19.5	21.2	23.8	23.2	23.1	23.7
Revenue plane-miles .....	998	1,354	2,418	2,241	2,419	2,520	2,791	2,816	2,700

NA Not available. <sup>1</sup>A passenger ton-mile represents 1 ton of passenger weight, including free and excess baggage, transported 1 mile. <sup>2</sup>Passenger and cargo.

Source: Air Transport Association of America, Washington, D.C., *Air Transport Facts and Figures*, annual. Data from Civil Aeronautics Board.

## NO. 1101. AIRPORTS AND FEDERAL AIRPORT DEVELOPMENT AID PROGRAM, 1981, AND GENERAL AVIATION AIRCRAFT, BY STATE, 1980

[As of Dec. 31. General aviation comprises all civil flying (including such commercial operations as small demand air taxis, agricultural application, powerline patrol, etc.), but excludes certificated route air carriers, supplemental operators, large-aircraft commercial operators and commuter airlines]

STATE	AIRPORTS, 1981 <sup>1</sup>		AIRPORT DEVELOPMENT AID <sup>2</sup> (mil. dol.)		General aviation aircraft, 1980	STATE	AIRPORTS, 1981 <sup>1</sup>		AIRPORT DEVELOPMENT AID <sup>2</sup> (mil. dol.)		General aviation aircraft, 1980
	Public	Private	Total funds, 1970-1981	1981 funds			Public	Private	Total funds, 1970-1981	1981 funds	
<b>Total</b> .....	<b>4,768</b>	<b>10,654</b>	<b>4,331.7</b>	<b>431.5</b>	<b>211,045</b>	Mo .....	118	275	98.5	16.5	4,099
Ala .....	97	68	59.5	5.5	2,093	Mont .....	118	72	49.2	3.8	2,289
Alaska .....	477	212	215.8	16.4	6,465	Neb .....	94	240	54.4	3.4	1,809
Ariz .....	96	128	91.3	11.3	4,881	Nev .....	62	66	66.1	13.6	2,145
Ark .....	81	76	35.2	2.8	2,612	N.H. ....	15	37	9.1	.8	1,100
Calif .....	295	537	367.0	39.5	29,855	N.J. ....	35	236	82.3	16.2	4,137
Colo .....	90	222	120.9	11.3	4,768	N. Mex ..	66	90	36.9	5.0	2,041
Conn .....	15	90	23.2	2.9	1,615	N.Y. ....	83	403	195.4	13.2	6,278
Del .....	3	34	5.0	.1	548	N.C. ....	90	198	95.4	4.1	3,542
D.C. ....	7	9	-	-	59	N. Dak ..	97	268	35.5	4.0	1,684
Fla .....	132	374	226.6	25.7	11,347	Ohio .....	133	541	98.5	11.1	8,282
Ga .....	125	168	150.5	12.7	4,412	Okla .....	126	171	79.5	10.1	4,812
Hawaii ..	18	33	107.2	8.1	385	Oreg .....	96	222	70.3	5.8	5,967
Idaho .....	126	70	33.3	5.6	2,094	Pa .....	77	621	162.3	15.6	6,167
Ill .....	98	831	173.1	14.9	8,990	R.I. ....	8	10	12.7	2.8	358
Ind .....	78	287	105.5	7.9	4,248	S.C. ....	66	71	42.8	4.6	1,907
Iowa .....	117	153	45.3	4.2	4,194	S. Dak ..	74	88	35.8	3.2	1,986
Kans .....	129	247	52.5	5.3	4,190	Tenn .....	77	87	82.7	8.9	2,824
Ky .....	62	55	59.5	5.1	1,810	Tex .....	322	1,109	298.1	27.4	18,674
La .....	74	218	101.2	7.9	3,825	Utah .....	57	45	45.9	3.6	1,466
Maine .....	45	113	28.5	4.8	1,341	Vt .....	20	25	6.5	1.3	471
Md .....	24	121	40.1	3.5	2,755	Va .....	58	202	69.4	9.1	3,013
Mass .....	35	101	56.5	6.8	3,044	Wash .....	118	245	93.7	9.9	6,483
Mich .....	133	284	142.0	12.5	7,243	W. Va .....	28	62	43.5	2.3	1,060
Minn .....	145	348	63.5	6.6	5,287	Wis .....	102	306	79.4	8.1	4,389
Miss .....	82	98	46.0	1.9	2,199	Wyo .....	44	61	36.6	3.8	1,143

- Represents zero. <sup>1</sup>Includes military airports with joint civil and military use, heliports, seaplane bases, etc. <sup>2</sup>Represents funds obligated. Excludes contributions by State and local governments and by airport operators provided under various agreements. "Total" is cumulative since enactment of Airport Development Aid Program, July 1, 1970-Sept. 30, 1981. <sup>3</sup>Includes aircraft based outside the United States, but registered in the U.S. Based on survey and subject to sampling error. Small estimates especially should be interpreted with caution.

Source: U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual.

## NO. 1102. CIVIL FLYING—SUMMARY: 1960 TO 1981

[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	1960	1965	1970	1975	1977	1978	1979	1980	1981
Airports in operation <sup>1</sup> .....	Number.....	6,881	9,566	11,281	13,251	14,117	14,574	14,746	15,161	15,476
Heliports.....	Number.....	66	401	790	1,524	1,850	1,986	2,108	2,386	2,507
Public.....	Number.....	2,780	3,570	4,260	4,573	4,708	4,751	4,961	4,814	4,798
Private.....	Number.....	4,101	5,996	7,001	8,678	9,409	9,823	9,985	10,377	10,678
Airports with runway lights.....	Number.....	2,139	2,878	3,554	4,171	4,483	4,587	4,631	4,738	4,795
Airports with paved runways.....	Number.....	1,893	2,747	3,805	4,865	5,313	5,484	5,618	5,833	5,002
Miles of Federal airways.....	1,000.....	(NA)	(NA)	324.7	403.9	623.9	605.7	615.5	615.5	569.6
Airport Development Aid Program: <sup>2</sup>										
Air carrier airports.....	Mill. dol.....	73.3	44.3	39.4	28.8	434.3	465.0	506.6	540.1	379.6
General aviation airports.....	Mill. dol.....	8.7	15.2	11.1	52.1	72.0	74.8	117.6	98.9	63.0
Total civil aircraft.....	1,000.....	111.6	142.1	154.5	198.3	215.3	236.8	251.5	259.4	261.6
Active aircraft <sup>3</sup> .....	1,000.....	78.8	97.7	134.5	171.2	186.8	201.3	213.9	214.8	(NA)
Air carriers, total <sup>4</sup> .....	1,000.....	2.2	2.3	2.8	2.5	2.5	2.6	3.6	3.8	4.0
General aviation aircraft <sup>5</sup> .....	1,000.....	76.5	95.4	131.7	168.5	184.3	198.7	210.3	211.0	(NA)
Fixed-wing aircraft:										
Multi-engine.....	1,000.....	7.2	12.0	18.4	24.6	26.6	28.9	31.3	31.7	(NA)
Single-engine:										
4-place and over.....	1,000.....	34.8	49.8	64.6	82.6	91.3	101.5	106.0	107.9	(NA)
3-place and less.....	1,000.....	33.5	31.4	44.9	54.4	57.3	59.2	62.4	60.5	(NA)
Rotorcraft <sup>6</sup> .....	1,000.....	.6	1.5	2.2	4.1	4.7	5.1	5.9	4.9	(NA)
Balloons, blimps, gliders, etc.....	1,000.....	.4	.8	1.6	2.8	4.4	4.0	4.8	5.0	(NA)
Airman certificates held.....	1,000.....	518	684	1,023	1,052	1,133	1,161	1,192	1,221	1,163
Pilot <sup>7</sup> .....	1,000.....	348	480	733	728	784	799	815	827	764
Held by women.....	Percent.....	2.9	3.7	4.0	5.2	6.0	6.2	6.4	6.4	6.2
Held by men.....	1,000.....	18	22	34	43	50	56	64	70	70
Commercial.....	1,000.....	90	117	187	189	189	186	182	183	169
Private.....	1,000.....	139	196	304	306	327	338	343	367	329
Student.....	1,000.....	99	139	196	177	204	205	210	200	180
Nonpilot <sup>8</sup> .....	1,000.....	170	204	290	324	349	362	377	393	398
Ground technicians <sup>9</sup> .....	1,000.....	151	175	241	271	291	302	307	321	336
General aviation: <sup>5</sup>										
Hours flown <sup>10</sup> .....	Million.....	13.1	16.7	26.0	32.0	35.8	39.4	43.3	41.0	(NA)
Fuel consumed: <sup>11</sup>										
Gasoline.....	Mill. gal.....	(NA)	304	362	397	465	518	570	520	(NA)
Jet fuel <sup>12</sup> .....	Mill. gal.....	(NA)	183	415	510	711	763	736	766	(NA)
Domestic air cargo, revenue										
ton-miles flown <sup>13</sup> .....	Million.....	724	1,661	2,581	3,049	3,430	3,824	3,794	3,579	3,660
Certificated route carriers:										
Scheduled service <sup>14</sup> .....	Million.....	476	1,112	2,215	2,747	3,125	3,505	3,466	3,277	3,350
Nonscheduled service <sup>14</sup> .....	Million.....	135	330	80	39	70	57	88	<sup>15</sup> 302	<sup>15</sup> 310
Supplemental carriers <sup>16</sup> .....	Million.....	112	220	285	263	235	262	240	( <sup>15</sup> )	( <sup>15</sup> )
Aircraft accidents: <sup>17</sup>										
General aviation <sup>5</sup> .....	Number.....	4,793	5,196	4,712	4,237	4,286	4,494	4,051	3,599	3,634
Fatal.....	Number.....	429	538	641	675	702	793	682	629	662
Fatalities.....	Number.....	787	1,029	1,310	1,345	1,436	1,770	1,382	1,264	1,265
Air carrier <sup>18</sup> .....	Number.....	90	83	55	45	26	24	32	15	24
Fatal.....	Number.....	17	9	8	3	5	6	6	-	4
Fatalities.....	Number.....	499	261	146	124	655	163	355	-	4
Commuter air carriers, total.....	Number.....	(NA)	(NA)	(NA)	46	42	54	57	37	28
Fatal.....	Number.....	(NA)	(NA)	(NA)	12	9	13	14	7	9
Fatalities.....	Number.....	(NA)	(NA)	(NA)	26	32	47	65	36	35
Passenger fatalities per 100 million										
passenger miles flown.....	Number.....	(NA)	(NA)	(NA)	1.47	2.01	2.90	3.69	(NA)	(NA)
Hijacking incidents, worldwide.....	Number.....	-	5	83	25	29	31	27	40	32
U.S.-registered aircraft.....	Number.....	-	4	27	12	3	13	13	22	8
Successful <sup>19</sup> .....	Number.....	-	1	18	4	-	2	6	13	2
Foreign-registered aircraft.....	Number.....	-	1	56	13	26	18	14	18	24
Successful <sup>19</sup> .....	Number.....	-	-	37	3	16	6	8	9	13

- Represents zero. NA Not available. <sup>1</sup>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.

<sup>2</sup>Obligated Federal funds only; fiscal year data. Includes U.S. outlying areas. Prior to July 1, 1970, data are for Federal-Aid Airport Program (FAAP). <sup>3</sup>Registered aircraft that flew 1 or more hours during the year. <sup>4</sup>Includes helicopters. <sup>5</sup>See headline, table 1101. <sup>6</sup>Includes autogyros; excludes air carrier helicopters. <sup>7</sup>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. <sup>8</sup>Includes dispatchers, control tower operators, flight navigators and engineers, and ground technicians—mechanics, parachute riggers, and ground instructors. <sup>9</sup>No medical examinations are required; therefore, data represent all certificates on record and include retired or otherwise inactive technicians. <sup>10</sup>Hours flown for 1975 and 1976 are revised. In 1980, the 41.0 million flight hours comprised 13.7 hours of business and executive flying, 11.5 hours of commercial flying (including air taxi, aerial applicator, rental aircraft), 5.7 hours of instructional flying, 8.9 hours of personal flying, and 1.0 hours of flying for other purposes. Detail does not add to total due to independent estimating technique. <sup>11</sup>Source: 1965-1975, U.S. Bureau of Mines; 1977, U.S. Energy Information Administration, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids* (Final Summary); 1978-1980 FAA General Aviation Activity and Avionics Survey. <sup>12</sup>Includes kerosene-type and naphtha-type jet fuels. <sup>13</sup>Total domestic, includes freight and air express. <sup>14</sup>Includes civilian and military freight and other revenue ton-miles. <sup>15</sup>Beginning 1980, supplementals included in nonscheduled service. <sup>16</sup>Civil and military. <sup>17</sup>Data from National Transportation Safety Board. Beginning 1970, data not strictly comparable due to change of definition. <sup>18</sup>Beginning 1975, includes commercial operators. Beginning 1980, includes only aircraft operating under Federal Aviation Regulation 14 CFR 121 (large aircraft in scheduled service). <sup>19</sup>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. Civil Aeronautics Board.

## NO. 1103. AIRLINE COST INDEXES: 1968 TO 1982

[Covers U.S. trunk and local service carriers. Does not include cargo carriers, Hawaiian carriers, or Alaskan carriers]

ITEM	INDEX (1972 = 100)								PERCENT OF CASH OPERATING EXPENSES <sup>2</sup>			
	1968	1970	1975	1978	1979	1980	1981	1982 <sup>1</sup>	1968	1975	1980	1982 <sup>1</sup>
<b>Composite</b> .....	<b>76.5</b>	<b>87.9</b>	<b>141.4</b>	<b>182.9</b>	<b>210.5</b>	<b>261.4</b>	<b>295.9</b>	<b>302.9</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Labor.....	67.8	83.0	129.2	178.1	190.5	212.8	235.8	248.0	45.2	41.4	36.1	36.6
Capital <sup>3</sup> .....	100.3	106.7	116.8	142.5	140.1	159.8	176.3	175.1	4.0	2.9	2.9	3.7
Fuel.....	87.2	93.7	249.7	336.8	496.0	766.1	892.7	876.7	13.8	19.1	30.5	29.1
Passenger food.....	87.5	95.8	118.1	125.1	135.8	153.9	167.9	172.5	4.1	3.5	3.0	2.9
Advertising and promotion.....	102.9	99.7	100.0	100.6	105.7	133.1	167.0	173.2	3.2	1.9	1.6	1.8
Landing fees.....	68.7	81.0	134.2	159.1	175.8	194.4	213.0	222.3	2.2	2.4	1.7	1.6
Craft maintenance.....	116.9	97.9	129.1	147.9	149.6	164.0	172.2	163.2	4.2	2.9	2.1	1.8
Passenger traffic commissions.....	66.5	82.2	152.5	198.7	229.3	321.0	399.4	413.6	2.7	3.9	5.5	6.1
All other.....	82.7	91.5	125.5	150.0	162.8	177.4	193.8	202.0	20.6	22.1	16.6	16.3

<sup>1</sup>Jan.-Mar. <sup>2</sup>Total operating expenses plus interest on long term debt, less depreciation and amortization. <sup>3</sup>Beginning 1978, includes imputed interest for capitalized leases.

Source: Air Transport Association of America, Washington, D.C. *Air Transport*, 1982, annual, and unpublished data.

## NO. 1104. COMMUTER/REGIONAL AIRLINE OPERATIONS—SUMMARY: 1970 TO 1981

[Calendar year data, except as indicated. Commercial/regional airlines operate primarily aircraft of predominately 60 passengers or less and 18,000 pounds payload of cargo serving short haul and small community markets. Represents operations within all North America by U.S. regional carriers]

ITEM	Unit	1970	1975	1976	1977	1978	1979	1980	1981
Carriers <sup>1</sup> .....	Number.....	159	235	252	242	252	258	237	277
All cargo carriers.....	Number.....	(NA)	(NA)	31	34	36	53	59	59
Aircraft in service <sup>2</sup> .....	Number.....	743	1,073	1,009	1,130	1,200	1,350	1,606	1,743
Communities served.....	Number.....	(NA)	(NA)	(NA)	717	677	630	571	738
Airports served.....	Number.....	463	747	781	764	702	660	605	766
Revenue passengers enplaned.....	1,000.....	4,270	7,243	7,914	9,185	11,026	13,972	14,810	17,012
By 50 largest carriers.....	1,000.....	(NA)	(NA)	6,282	7,259	8,422	11,349	12,167	13,693
Revenue passenger miles.....	Millions.....	(NA)	733	834	946	1,279	1,724	1,917	2,330
Cargo pounds.....	Millions.....	43.5	129.2	151.8	196.2	298.6	345.6	472.0	(NA)

NA Not available. <sup>1</sup>As of June 30. <sup>2</sup>Fiscal year data.

Source: Regional Airline Association, Washington, D.C., *Annual Report*.

## NO. 1105. CHARTER PASSENGERS, BY FLAG OF AIR CARRIER AND BY AREA OF TRAVEL: 1970 TO 1980

[In thousands. Covers charter flights to, from, or within the U.S. 1970-1975 estimates derived by multiplying available seats by passenger load factors; thereafter, based on actual passengers]

ITEM	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980 <sup>1</sup>
<b>Total passengers</b> .....	<b>3,862</b>	<b>5,725</b>	<b>6,640</b>	<b>6,236</b>	<b>5,745</b>	<b>7,390</b>	<b>9,038</b>	<b>8,309</b>	<b>6,500</b>	<b>3,329</b>
U.S.: Route carriers <sup>2</sup> .....	1,355	2,684	3,179	3,040	2,835	4,109	4,597	3,871	2,854	794
Charter (supplemental) carriers <sup>3</sup> .....	1,647	2,013	2,474	2,129	1,470	1,631	2,229	2,405	1,643	790
Foreign: Route carriers <sup>1</sup> .....	390	516	674	476	589	721	845	1,023	803	777
Charter (supplemental) carriers <sup>3</sup> .....	470	512	313	591	851	929	1,367	1,010	1,000	968
Domestic travelers.....	1,397	2,168	2,575	2,348	1,989	2,859	3,524	3,102	2,159	109
International travelers <sup>4</sup> .....	2,465	3,557	4,065	3,888	3,776	4,531	5,514	5,207	4,341	3,220
Transatlantic.....	1,816	2,495	2,786	2,366	2,321	2,716	3,539	2,821	1,908	1,144
Latin America <sup>5</sup> .....	444	789	816	806	684	1,001	1,130	1,416	1,267	688

<sup>1</sup>The compilation of domestic, and consequently total passengers, no longer includes charter passengers within the contiguous 48 States. In 1979, such passengers were 2,049,000 of the domestic total of 2,159,000. In 1980, domestic travelers represent mainland to Hawaii and Alaska passengers only. <sup>2</sup>Covers charter service of scheduled airlines. See text, p. 631 for definition. <sup>3</sup>Covers charter service of charter airlines. Previously known as the U.S. Supplemental Airlines, with certificated charter authority from the Civil Aeronautics Board, charter airlines, as a result of the 1978 Deregulation Act, have authority to engage in both charter and scheduled services. <sup>4</sup>Includes other, not shown separately. <sup>5</sup>Includes Caribbean.

Source: National Air Carrier Association, Washington, D.C., *Annual Report*.

## NO. 1106. AEROSPACE—SALES, NEW ORDERS, AND BACKLOG: 1970 TO 1981

[Reported by establishments in which the principal business is the development and/or production of aerospace products]

ITEM	TOTAL (bil. dol.)						PERCENT U.S. GOVERNMENT					
	1970	1975	1978	1979	1980	1981, prel.	1970	1975	1978	1979	1980	1981, prel.
	Net sales .....	24.8	29.5	38.0	46.2	58.4	68.9	66.3	58.6	57.6	50.3	45.7
Complete aircraft and parts <sup>1</sup> .....	10.4	11.3	14.7	19.1	22.6	26.7	54.8	46.9	46.5	33.4	29.6	32.2
Aircraft engines and parts .....	3.1	3.4	4.6	5.6	6.9	8.2	61.5	47.0	40.9	40.6	(NA)	(NA)
Missiles and parts .....	5.9	6.3	(NA)	7.2	8.4	9.8	96.9	93.7	(NA)	47.0	(NA)	(NA)
Other products, services .....	5.9	8.5	*18.7	14.3	20.5	24.2	(X)	(X)	(X)	(X)	(X)	(X)
Net new orders .....	21.2	29.0	49.8	65.2	70.4	72.7	71.4	64.1	52.2	43.1	47.6	56.1
Backlog, Dec. 31 .....	24.7	35.0	57.2	78.3	90.5	94.3	52.1	63.2	52.9	46.2	41.1	48.1

NA Not available. X Not applicable. <sup>1</sup>Except engines sold separately. <sup>2</sup>Includes missiles and parts.Source: U.S. Bureau of the Census, *Current Industrial Reports*, series MQ-37D.

## NO. 1107. CIVIL AIRCRAFT SHIPMENTS: 1960 TO 1980

[Represents manufacturers' shipments of non-military complete aircraft. Includes both domestic and export output]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980
Total .....	8,181	12,646	8,190	14,748	15,117	15,196	16,446	18,159	18,882	17,924	13,130
Transports .....	238	221	311	295	263	314	238	(NA)	(NA)	(NA)	(NA)
General aviation .....	7,726	12,053	7,384	13,671	14,026	14,043	15,648	17,175	18,049	16,893	11,777
Single-engine: 1- to 3-place .....	1,366	3,545	1,981	3,137	3,346	3,047	3,175	3,986	4,881	3,293	
4-place and over .....	5,072	6,478	4,048	7,681	8,124	8,460	9,864	10,372	9,501	9,751	8,175
Multi-engine .....	1,288	2,030	1,352	2,853	2,556	2,536	2,619	2,817	3,667	3,839	3,602
Rotorcraft .....	217	372	496	782	828	839	560	984	833	1,041	1,353

NA Not available.

Source: Through 1977, U.S. Federal Aviation Administration, *FAA Statistical Handbook of Aviation*, annual. Beginning 1978, U.S. Bureau of the Census, *Current Industrial Reports*, series M-37G.

## NO. 1108. EMPLOYMENT AND EARNINGS IN AIRCRAFT INDUSTRIES: 1960 TO 1981

[Annual averages of monthly figures. Covers industries as defined by the 1972 Standard Industrial Classification Manual]

ITEM	Unit	1960	1965	1970	1975	1977	1978	1979	1980	1981
Employment, total .....	1,000 .....	624	620	664	607	564	621	713	763	771
Aircraft .....	1,000 .....	337	333	371	293	270	288	333	349	346
Aircraft engines and engine parts .....	1,000 .....	(NA)	(NA)	(NA)	126	121	134	152	163	163
Guided missiles, space vehicles, and parts .....	1,000 .....	(NA)	(NA)	(NA)	93	83	93	102	111	122
Aircraft equipment, N.e.c. .....	1,000 .....	(NA)	(NA)	(NA)	95	90	106	126	140	140
Average weekly earnings: Aircraft .....	Dollars .....	110	131	169	256	296	324	360	404	444
Aircraft engines and parts .....	Dollars .....	(NA)	(NA)	(NA)	247	292	325	361	394	422
Guided missiles, space vehicles, and parts .....	Dollars .....	(NA)	(NA)	(NA)	245	288	317	347	378	410
Average hourly earnings: Aircraft .....	Dollars .....	2.71	3.15	4.17	6.21	7.07	7.70	8.50	9.66	10.74
Aircraft engines and parts .....	Dollars .....	(NA)	(NA)	(NA)	6.04	7.05	7.80	8.53	9.42	10.41
Guided missiles, space vehicles, and parts .....	Dollars .....	(NA)	(NA)	(NA)	6.02	7.04	7.56	8.25	9.22	10.06

NA Not available. <sup>1</sup>N.e.c.=Not elsewhere classified.Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly.

## NO. 1109. AIRBORNE IMPORTS AND EXPORTS—SHIPPING WEIGHT AND VALUE: 1975 TO 1981

[Weight in millions of pounds, value in millions of dollars. Includes trade of Puerto Rico]

CONTINENT	IMPORTS						EXPORTS					
	Weight			Value			Weight			Value		
	1975	1980	1981	1975	1980	1981	1975	1980	1981	1975	1980	1981
All carriers <sup>1</sup> .....	1,063	1,344	1,603	8,917	28,044	23,968	1,420	2,269	2,253	14,554	46,093	47,231
North America .....	141	171	179	775	3,546	3,722	293	400	433	1,552	5,380	5,112
South America .....	118	140	205	412	1,168	1,418	196	362	380	1,225	3,284	3,576
Europe .....	413	526	629	4,266	11,459	11,825	592	963	853	7,432	24,194	22,868
Asia .....	377	483	559	3,026	9,882	11,414	246	416	436	3,445	10,419	12,182
U.S. carriers <sup>1</sup> .....	456	516	566	3,860	8,988	10,165	480	743	675	5,481	15,013	13,729
North America .....	51	55	65	329	1,002	1,671	110	157	195	711	3,239	2,860
South America .....	46	28	28	152	294	364	61	122	92	346	1,028	937
Europe .....	169	210	227	1,941	3,978	4,005	195	290	228	2,377	6,779	5,651
Asia .....	187	214	236	1,352	3,577	3,999	87	144	125	1,291	3,117	3,219

<sup>1</sup>Includes shipments of special category and shipments to other continents, not shown separately.Source: U.S. Bureau of the Census, *United States Airborne Exports and General Imports*, FT 966, annual.

## No. 1110. EXPORTS OF U.S. AEROSPACE PRODUCTS: 1970 TO 1981

PRODUCT	NUMBER OF UNITS					VALUE (mil. dol.)				
	1970	1975	1979	1980	1981	1970	1975	1979	1980	1981
<b>Total</b> .....	(x)	(x)	(x)	(x)	(x)	3,191	7,456	11,654	15,397	13,267
<b>Civilian:</b>										
Complete aircraft.....	2,902	4,371	5,115	4,434	3,826	1,527	3,169	6,178	8,257	6,612
Transports.....	180	186	200	237	255	1,272	2,368	4,998	6,727	7,180
General aviation <sup>1</sup> .....	2,029	3,268	3,878	3,178	2,617	111	307	651	740	789
Helicopters.....	332	336	459	525	453	27	105	207	299	346
Other, incl. used.....	361	581	578	494	501	117	389	322	491	297
Engines.....	3,811	4,678	4,917	4,606	970	118	232	375	556	849
Turbines.....	649	876	996	1,393	1,749	99	187	323	514	739
<b>Military:</b>										
Complete aircraft.....	634	942	332	462	508	467	1,303	838	949	1,712
Transports.....	81	51	17	23	22	82	235	162	232	158
Helicopters.....	67	116	65	89	68	23	123	61	88	177
Fighters, bombers.....	217	469	133	90	113	331	902	494	449	1,006
Other <sup>2</sup> .....	269	306	117	260	305	31	43	121	180	371
Engines.....	611	873	504	364	504	33	92	67	63	83
<b>Civilian and military:</b>										
Parts <sup>3</sup> .....	(x)	(x)	(x)	(x)	(x)	1,027	2,610	3,899	5,232	1,477
Rockets, guided missiles.....	65,001	112,908	74,942	127,685	47,444	8	47	291	327	530
Missiles and rocket engines.....	39,615	7,400	1,731	7,042	6,147	11	3	6	13	4

X Not applicable. <sup>1</sup>Includes transports under 33,000 pounds. <sup>2</sup>Includes trainers, general aviation, and used aircraft.  
<sup>3</sup>Parts of engines, turbines, airframes, rockets, and missiles.

Source: U.S. Bureau of the Census, *United States Exports—Commodity by Country*, FT 446, annual.

## No. 1111. U.S. RECEIPTS AND PAYMENTS FOR INTERNATIONAL TRANSPORTATION: 1960 TO 1981

[In millions of dollars. Data are international transportation transactions recorded for balance of payment purposes (see table 1466). 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 (-) denotes excess of payments over receipts. See *Historical Statistics, Colonial Times to 1970*, series U 3 and U 10, for totals.]

ITEM	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>Total receipts</b> .....	1,782	2,446	3,669	6,879	7,976	8,630	10,002	12,184	14,079	15,159
Ocean transportation <sup>1</sup> .....	1,337	1,731	2,256	4,065	4,804	5,080	5,850	6,925	7,593	7,953
Export freight earnings.....	428	519	604	1,183	1,373	1,237	1,432	1,729	2,071	2,232
Freight earnings on shipments between foreign countries.....	136	153	209	328	353	395	412	480	588	561
Port expenditures.....	746	1,041	1,406	2,481	3,067	3,413	3,963	4,654	4,841	5,049
Charter hire.....	8	9	37	73	11	35	43	62	93	111
Air transportation.....	358	591	1,240	2,515	2,837	3,190	3,772	4,811	5,967	6,729
Export freight earnings.....	55	91	187	390	390	427	507	577	742	752
Passenger fares.....	156	262	541	1,039	1,229	1,365	1,603	2,156	2,582	2,991
Port expenditures.....	147	238	512	1,086	1,218	1,398	1,662	2,078	2,643	2,986
Other transportation.....	87	124	173	299	335	360	380	448	519	477
<b>Total payments</b> .....	1,915	2,668	4,058	7,971	9,420	10,622	11,836	13,641	14,679	16,098
Ocean transportation.....	1,333	1,803	2,380	4,465	5,448	6,178	6,991	7,930	7,719	8,008
Import freight payments.....	780	1,083	1,444	3,047	3,963	4,622	5,325	6,039	5,619	5,722
Passenger fares.....	212	207	245	278	270	261	252	258	268	287
Port expenditures.....	167	281	316	755	871	943	1,041	1,203	1,367	1,513
Charter hire.....	174	232	375	365	344	352	373	430	465	486
Air transportation.....	504	775	1,581	3,346	3,781	4,206	4,600	5,448	6,705	7,820
Import freight payments.....	22	40	115	246	301	362	448	506	562	706
Passenger fares.....	301	510	970	1,985	2,298	2,487	2,844	2,926	3,309	4,200
Port expenditures.....	181	225	496	1,115	1,161	1,357	1,508	2,016	2,804	2,914
Other transportation.....	78	90	97	160	212	238	245	263	255	270
<b>Receipts balance</b> .....	-133	-222	-389	-1,092	-1,444	-1,992	-1,834	-1,457	-600	-939

<sup>1</sup>Through 1965, includes small amount for passenger fares, not shown separately.

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

**NO. 1112. EXPORTS AND IMPORTS, BY METHOD OF TRANSPORT: 1960 TO 1981**

[Export data include both domestic and foreign; import data for general imports only. For details, see source]

ITEM	Unit	EXPORTS						IMPORTS					
		1960	1965	1970	1975	1980	1981	1960	1965	1970	1975	1980	1981
All methods <sup>1</sup> .....	Bil. dol.....	20.6	27.5	43.2	107.6	220.7	233.7	14.7	21.4	40.0	96.9	240.8	261.3
Vessel.....	Bil. dol.....	13.1	16.9	24.6	63.4	120.9	125.8	11.1	14.9	24.8	63.5	165.1	177.6
Air.....	Bil. dol.....	(NA)	2.3	6.1	15.2	46.1	47.2	(NA)	1.3	3.4	8.9	28.0	30.0
Shipping weight:													
Vessel.....	Bil. lb.....	248.5	343.5	480.5	538.5	801.8	815.0	398.1	511.5	598.4	855.3	976.8	932.5
Air.....	Bil. lb.....	(NA)	.5	.9	1.4	2.3	2.3	(NA)	.2	.6	1.1	1.3	1.6

NA Not available. <sup>1</sup>Includes types other than vessel and air.

Source: U.S. Bureau of the Census, *Highlights of U.S. Export and Import Trade*, FT 990, monthly.

**NO. 1113. WATERBORNE COMMERCE—CARGO TONNAGE: 1950 TO 1980**

[In millions of short tons. Includes Puerto Rico and outlying areas. Import and export figures differ slightly from those shown in tables 1119 and 1120 due to minor differences in basic concepts. See source for details. See also *Historical Statistics, Colonial Times to 1970*, series Q 530-541]

CLASS	1950	1955	1960	1965	1970	1975	1977	1978	1979	1980
<b>Net total</b> .....	<b>821</b>	<b>1,016</b>	<b>1,100</b>	<b>1,273</b>	<b>1,532</b>	<b>1,695</b>	<b>1,908</b>	<b>2,021</b>	<b>2,074</b>	<b>1,999</b>
<b>Domestic commerce</b> <sup>1</sup> .....	<b>651</b>	<b>745</b>	<b>761</b>	<b>829</b>	<b>951</b>	<b>946</b>	<b>973</b>	<b>1,075</b>	<b>1,080</b>	<b>1,077</b>
Coastwise, between ports.....	183	196	209	202	238	232	248	305	305	330
Great Lakes, between ports.....	170	185	155	154	157	129	109	143	144	115
Intra—										
Seaports, Great Lakes ports, and inland waterways ports.....	107	113	104	103	81	78	83	90	93	94
Ports and river ports <sup>2</sup> .....	192	252	292	371	474	507	532	538	539	539
<b>Foreign commerce</b> .....	<b>169</b>	<b>271</b>	<b>339</b>	<b>444</b>	<b>581</b>	<b>749</b>	<b>935</b>	<b>946</b>	<b>993</b>	<b>922</b>
Imports, through seaports.....	96	144	198	245	313	455	625	616	608	502
Imports, Great Lakes ports.....	6	9	13	25	26	21	33	27	25	16
Exports, through seaports.....	44	95	105	142	206	237	241	259	312	359
Exports, Great Lakes ports.....	24	23	23	32	36	35	36	44	49	45

<sup>1</sup>Includes traffic among ports of outlying areas. <sup>2</sup>Represents traffic mainly utilizing inland waterways.

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

**NO. 1114. FREIGHT CARRIED ON INLAND WATERWAYS, BY SYSTEM: 1950 TO 1980**

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

SYSTEM	1950	1955	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980
<b>Total</b> .....	<b>163.3</b>	<b>216.5</b>	<b>220.3</b>	<b>262.4</b>	<b>318.6</b>	<b>354.9</b>	<b>342.2</b>	<b>372.9</b>	<b>368.3</b>	<b>409.3</b>	<b>424.6</b>	<b>406.9</b>
Atlantic coast waterways.....	6.5	27.0	28.6	27.8	28.6	35.4	31.8	32.1	30.4	30.5	31.9	30.4
Gulf coast waterways.....	1.2	13.9	16.9	21.8	26.6	33.5	30.8	34.3	37.6	37.1	38.1	36.6
Pacific coast waterways <sup>1</sup> .....	1.7	4.7	6.0	6.6	8.4	10.3	9.7	11.3	12.8	13.6	14.1	14.9
Mississippi River system <sup>2</sup> .....	33.6	52.0	69.3	96.6	138.5	168.3	170.7	189.5	196.9	209.3	218.8	228.9
Great Lakes System <sup>3</sup> .....	120.3	118.9	99.5	109.6	114.5	107.5	99.2	105.6	90.7	118.9	121.7	96.0

<sup>1</sup>Beginning 1960, includes Alaskan waterways. <sup>2</sup>Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers. <sup>3</sup>Does not include traffic between foreign ports.

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

**NO. 1115. FEDERAL EXPENDITURES FOR CIVIL FUNCTIONS OF THE CORPS OF ENGINEERS, UNITED STATES ARMY: 1950 TO 1981**

[In millions of dollars. Through 1976, for years ending June 30; beginning 1977, years ending Sept. 30. Includes Puerto Rico and other U.S. outlying areas. Represents funds expended for maintenance and improvement of rivers and harbors, flood control, etc. See also *Historical Statistics, Colonial Times to 1970*, series Q 559]

YEAR	Total	Rivers and harbors	YEAR	Total	Rivers and harbors	YEAR	Total	Rivers and harbors
1950.....	635	190	1972.....	1,535	1,522	1977.....	2,560	2,244
1955.....	512	456	1973.....	1,737	1,614	1978.....	2,805	2,479
1960.....	869	801	1974.....	1,936	1,859	1979.....	3,259	3,130
1965.....	1,211	1,093	1975.....	2,199	2,121	1980.....	3,527	3,406
1970.....	1,186	1,051	1976.....	2,266	2,080	1981.....	3,850	3,471

Source: U.S. Corps of Engineers, *Performance Measurement Systems*, annual.

## NO. 1116. FREIGHT CARRIED ON MISSISSIPPI RIVER SYSTEM: 1950 TO 1980

[Net traffic. Comprises main channels and all tributaries of the Mississippi, Illinois, Missouri, and Ohio Rivers]

ITEM	Unit	1950	1955	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980
<b>Total</b> .....	Mil. sh. tons.....	136	194	234	302	391	443	453	498	537	553	582	584
Inland.....	Mil. sh. tons.....	115	164	188	238	297	330	330	346	352	355	371	365
Coastwise.....	Mil. sh. tons.....	14	16	22	28	44	28	30	26	30	32	33	42
Foreign:													
Imports.....	Mil. sh. tons.....	4	6	11	13	17	37	46	67	96	99	106	91
Exports.....	Mil. sh. tons.....	5	8	13	23	34	47	48	60	60	67	73	86
<b>Total</b> .....	Bil. ton-miles.....	33.5	52.0	69.3	96.6	138.5	168.2	170.7	189.5	196.8	209.3	218.8	228.9
Inland.....	Bil. ton-miles.....	30.3	47.4	62.4	87.4	125.9	150.9	151.3	164.8	166.9	176.5	184.4	193.5
Coastwise.....	Bil. ton-miles.....	2.1	2.5	3.2	3.6	4.9	4.2	4.5	4.1	4.8	5.4	5.7	7.4
Foreign:													
Imports.....	Bil. ton-miles.....	.6	1.0	1.8	2.3	2.8	6.5	8.0	11.7	16.2	16.8	17.6	15.1
Exports.....	Bil. ton-miles.....	.6	1.1	1.9	3.3	4.9	6.6	6.9	8.8	8.8	10.1	11.1	13.0

<sup>1</sup> Total reflects adjustment not available by type of traffic.Source: U.S. Corps of Engineers, *Waterborne Commerce of the United States*, annual.

## NO. 1117. U.S. FREIGHT CARRIED ON GREAT LAKES SYSTEM: 1950 TO 1980

(in billions of ton-miles)

ITEM	1950	1955	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980
<b>Total</b> .....	111.7	118.8	99.5	109.6	114.5	125.9	107.5	99.2	105.6	90.7	118.9	121.7	96.0
Domestic.....	100.1	104.9	80.6	76.7	80.1	84.5	79.7	69.2	71.3	53.0	76.8	78.5	62.3
Lakewise.....	99.6	104.1	79.7	75.9	79.4	83.8	78.9	68.5	70.7	52.4	76.3	78.0	61.7
Internal.....	.3	.6	.7	.7	.6	.6	.6	.6	.5	.4	.4	.4	.5
Local <sup>1</sup> .....	.2	.2	.2	.1	.1	.2	.1	.1	.1	.1	.1	.1	.1
Foreign.....	11.6	13.9	18.9	32.9	34.3	41.4	27.8	29.9	34.3	37.7	42.1	43.1	33.7
Canadian.....	11.4	13.4	13.8	23.5	23.8	26.2	19.4	20.7	23.7	23.1	23.1	26.9	23.6
Overseas.....	.2	.5	5.1	9.4	10.5	15.2	8.4	9.3	10.7	14.7	19.0	16.2	10.1

<sup>1</sup> Includes coastwise traffic.Source: U.S. Corps of Engineers, *Waterborne Commerce of the United States*, annual.

## NO. 1118. DOMESTIC AND FOREIGN WATERBORNE COMMERCE, BY TYPE OF COMMODITY: 1970 TO 1980

[In millions of short tons. Domestic trade includes all commercial movements between U.S. ports and on inland rivers, canals, and connecting channels of U.S., Puerto Rico, and Virgin Islands. See also headnote, table 1113]

COMMODITY	1970		1975		1979		1980			
	Total	Do- mestic	Total	Do- mestic	Total	Do- mestic	Total	Do- mestic	Foreign	
									Imports	Exports
<b>Net total</b> .....	1,531.7	950.7	1,695.0	946.3	2,073.8	1,080.3	1,998.9	1,077.5	517.5	403.9
Petroleum products <sup>1</sup> .....	394.7	287.3	407.6	328.5	452.9	346.6	423.2	339.2	67.4	16.6
Gasoline.....	89.3	68.7	95.7	92.2	91.0	83.5	87.3	81.0	6.1	.3
Distillate fuel oil.....	78.8	76.9	93.4	87.0	84.4	79.5	74.6	72.1	2.3	.1
Residual fuel oil.....	170.5	78.8	172.1	111.5	192.2	136.7	188.0	141.3	45.6	1.1
Crude petroleum.....	210.5	118.3	333.8	77.9	528.0	148.9	480.2	174.2	306.0	-
Coal and lignite.....	225.4	154.1	219.0	152.8	227.4	160.5	256.4	164.1	.9	91.3
Nonmetallic minerals <sup>1,2</sup> .....	166.6	132.6	159.2	123.3	175.9	125.6	157.1	111.6	22.1	23.4
Sand and gravel <sup>3</sup> .....	78.4	73.9	72.4	67.9	74.1	69.9	65.1	60.8	3.1	1.2
Limestone.....	42.0	34.1	37.8	29.1	40.5	28.6	34.2	23.9	7.6	2.6
Phosphate rock.....	16.6	5.8	20.1	9.4	23.7	8.3	23.7	9.5	.6	13.6
Iron and concentrates.....	129.3	75.2	121.4	69.3	125.2	83.3	98.4	64.9	27.2	6.3
Farm products <sup>1</sup> .....	90.4	28.5	144.3	43.1	199.7	55.0	216.8	63.4	4.9	148.5
Corn.....	27.2	11.7	56.8	20.8	93.4	20.4	96.6	30.8	-	67.8
Wheat.....	25.0	5.8	44.4	10.4	48.0	11.6	53.4	14.3	-	39.1
Soybeans.....	21.2	8.3	23.2	9.4	36.1	13.3	39.6	16.1	-	23.5
Chemicals and allied products.....	62.0	39.7	66.5	40.0	90.8	50.9	91.9	49.4	9.9	32.6
Food and kindred products.....	35.0	11.0	35.5	13.3	50.5	17.5	54.8	20.4	10.5	23.9
Lumber and wood products <sup>1</sup> .....	49.9	27.3	48.2	24.7	56.3	23.1	52.0	22.7	4.1	25.2
Primary metal products.....	42.4	10.8	38.1	9.3	31.3	10.5	28.9	9.0	15.5	4.4
Waste and scrap.....	25.9	16.0	28.0	18.8	29.1	17.0	31.1	18.8	.4	11.9
Other.....	99.7	51.9	93.5	45.5	106.7	40.8	108.1	39.8	48.6	19.8

<sup>1</sup> Represents zero.<sup>2</sup> Includes categories not shown separately.<sup>3</sup> Excludes fuels.<sup>4</sup> Includes crushed rock.Source: U.S. Corps of Engineers, *Waterborne Commerce of the United States*, annual.

**NO. 1119. WATERBORNE IMPORTS AND EXPORTS—CARGO TONNAGE, BY FLAG OF CARRIER VESSEL:  
1960 TO 1981**

[In millions of short tons, except percent. Excludes 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 U.S. See Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Q 524-529]

ITEM	DRY CARGO							TANKER CARGO						
	1960	1965	1970	1975	1979	1980	1981	1960	1965	1970	1975	1979	1980	1981
Total trade.....	202	274	358	387	482	521	510	120	153	181	311	473	403	402
Percent by U.S. flag.....	15.2	9.3	6.4	5.5	4.7	4.6	4.9	7.5	5.9	4.2	5.2	4.0	2.5	4.0
Imports, total.....	95	123	138	137	159	144	148	104	132	161	201	438	363	342
U.S. flag.....	14	10	10	10	10	10	11	6	5	6	13	18	9	15
Foreign flag.....	81	113	128	127	149	134	137	98	127	156	278	420	354	327
Exports, total.....	108	151	220	250	323	362	348	16	21	20	21	35	39	58
U.S. flag.....	17	15	13	11	13	14	14	3	4	2	3	1	1	1
Foreign flag.....	91	135	207	238	310	348	334	13	17	18	16	34	38	57

Source: U.S. Bureau of the Census, through 1965, *Foreign Commerce and Navigation of the United States*; thereafter, *U.S. Waterborne Exports and General Imports*, FT 985, annual; and unpublished data.

**NO. 1120. WATERBORNE IMPORTS AND EXPORTS—CARGO TONNAGE AND VALUE, BY COASTAL  
DISTRICT: 1960 TO 1981**

[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 U.S. See Appendix III]

DISTRICT	CARGO TONNAGE (mil. sh. tons)							VALUE (bil. dol.)						
	1960	1965	1970	1975	1979	1980	1981	1960	1965	1970	1975	1979	1980	1981
<b>Imports:</b>														
Atlantic.....	135	164	219	232	220	183	195	7.8	9.7	15.0	34.7	62.1	71.5	78.7
Gulf.....	27	37	47	134	296	243	214	1.3	1.8	2.9	14.3	43.8	58.4	56.9
Pacific.....	23	27	31	64	62	56	48	1.6	2.4	5.5	15.2	36.6	45.0	51.3
Great Lakes.....	13	25	26	22	25	16	20	.5	1.0	1.3	1.7	2.9	1.9	2.5
<b>Exports:</b>														
Atlantic.....	45	55	79	80	91	117	116	7.0	8.4	11.9	28.7	42.1	51.0	53.4
Gulf.....	37	59	78	106	149	163	171	3.7	5.0	6.9	21.4	33.4	41.5	43.9
Pacific.....	19	26	48	49	70	78	78	1.8	2.4	4.1	10.0	19.5	25.2	27.1
Great Lakes.....	23	32	36	35	49	45	43	.7	1.2	1.4	2.8	4.6	4.6	4.1

Source: U.S. Bureau of the Census, through 1965, *Foreign Commerce and Navigation of the United States*; thereafter, *U.S. Waterborne Exports and General Imports*, FT 985, annual.

**NO. 1121. CONTAINERIZED CARGO—TONNAGE AND TWENTY-FOOT EQUIVALENT UNITS (TEU'S), BY  
SELECTED U.S. PORTS: 1979 AND 1980**

[Based on reports filed for any vessel of 1,000 or more gross registered tonnage carrying 25 or more 8x8x20 foot TEU cargo container/trailer units]

PORT	LONG TONS (1,000)						TEU'S (1,000)					
	Total		Import		Export		Total		Import		Export	
	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980	1979	1980
<b>Total 1</b> .....	<b>31,577</b>	<b>34,492</b>	<b>13,831</b>	<b>12,862</b>	<b>17,746</b>	<b>21,630</b>	<b>3,330</b>	<b>3,686</b>	<b>1,531</b>	<b>1,505</b>	<b>1,799</b>	<b>2,181</b>
New York.....	6,962	7,021	4,152	3,434	2,810	3,587	736	750	442	381	294	369
Los Angeles.....	3,659	4,053	1,568	1,484	2,091	2,569	384	445	185	180	199	256
Oakland.....	2,654	3,084	688	638	1,866	2,446	287	342	78	83	209	259
Seattle.....	2,241	2,873	981	974	1,250	1,899	260	329	141	153	119	176
Long Beach.....	1,705	2,416	929	1,142	776	1,274	186	295	115	171	71	124
Baltimore.....	2,469	2,629	990	913	1,479	1,818	235	262	92	81	143	181
Norfolk.....	1,802	1,924	637	428	1,156	1,396	199	201	72	51	127	150
Houston.....	1,389	1,455	513	606	876	849	157	136	58	60	99	76
Miami.....	1,289	1,289	376	398	600	891	94	132	34	38	60	94
Charleston.....	976	1,205	337	309	935	896	121	118	32	29	89	89
New Orleans.....	1,163	1,001	393	396	770	605	127	93	40	35	87	58
Savannah.....	556	826	208	274	348	552	83	92	26	34	37	58
San Francisco.....	945	906	285	226	660	680	95	90	33	24	62	66
Philadelphia.....	793	760	420	444	373	316	76	69	38	36	38	33
San Juan.....	347	345	143	141	204	204	41	46	17	19	24	27
Boston.....	363	357	227	157	136	200	40	40	25	18	15	22

<sup>1</sup> Includes other ports, not shown separately.

Source: U.S. Maritime Administration, *Containerized Cargo Statistics*, annual.

**NO. 1122. VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY FLAG OF CARRIER VESSEL: 1961 TO 1981**

[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.	Per cent U.S.	Foreign	Total	U.S.	Foreign	Total	U.S.	Foreign
<b>Entered:</b>											
1961-1965	49,670	188	33	17.9	155	166	30	136	128	19	109
1966-1970	53,459	232	29	12.5	203	206	27	180	157	18	139
1971-1975	53,760	319	30	9.5	290	292	28	264	220	24	196
1976-1980	53,700	458	40	8.7	418	425	38	387	316	30	286
1970	53,293	254	26	10.3	228	227	24	202	171	19	152
1975	51,443	355	32	9.9	323	326	30	297	240	26	215
1979	53,288	499	45	9.0	454	462	42	420	343	33	310
1980	53,645	492	52	10.6	440	460	50	410	310	34	276
1981	52,768	470	56	11.9	414	439	54	385	294	39	255
<b>Cleared:</b>											
1961-1965	48,098	189	34	17.9	155	168	30	137	96	20	76
1966-1970	52,415	232	30	12.8	202	206	27	179	122	23	99
1971-1975	53,039	324	31	9.9	293	296	29	267	149	21	127
1976-1980	52,931	453	41	9.1	412	420	38	382	203	26	177
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
1979	52,642	497	48	9.7	449	459	44	415	223	28	195
1980	52,928	487	54	11.1	433	456	51	405	246	33	213
1981	52,637	477	56	11.7	420	446	54	392	251	33	218

Source: U.S. Bureau of the Census, through 1965, *Foreign Commerce and Navigation of the United States*; thereafter, *Vessel Entrances and Clearances*, FT 975, annual.

**NO. 1123. VESSELS ENTERED AND CLEARED IN FOREIGN TRADE—NET REGISTERED TONNAGE, BY CUSTOMS DISTRICTS: 1970 TO 1981**

[In millions of net tons. Excludes domestic trade, Virgin Islands and Puerto Rico included in South Atlantic Coast, Hawaii in South Pacific Coast, Alaska in North Pacific Coast]

CUSTOMS DISTRICT	VESSELS ENTERED						VESSELS CLEARED					
	1970	1975	1978	1979	1980	1981	1970	1975	1978	1979	1980	1981
North Atlantic Coast	102.1	114.2	112.8	118.2	118.6	113.4	99.9	116.6	112.4	119.9	115.2	111.4
With cargo	85.4	92.3	97.3	95.2	82.1	83.0	43.7	50.6	41.6	50.7	57.8	54.5
South Atlantic Coast	36.1	48.0	62.1	66.6	65.3	65.0	31.3	46.0	58.3	62.2	60.1	61.4
With cargo	27.1	33.8	41.9	45.6	41.9	40.1	11.9	14.3	19.2	21.6	22.4	24.8
Gulf Coast	36.1	89.1	161.5	182.1	172.7	162.3	42.8	96.1	155.1	179.0	175.0	169.2
With cargo	29.0	60.8	128.5	141.7	122.8	113.3	36.8	54.2	71.2	78.3	85.0	88.9
South Pacific Coast	27.5	38.4	44.0	47.6	53.3	53.4	27.7	41.2	43.6	44.7	45.1	48.9
With cargo	21.8	32.4	36.9	36.5	36.0	34.2	20.9	24.0	27.7	30.2	31.7	38.7
North Pacific Coast	24.9	36.8	41.9	47.8	50.6	44.8	24.3	33.8	42.6	53.6	60.3	54.4
With cargo	13.6	21.1	23.8	24.4	25.6	23.4	19.0	24.5	30.7	42.1	49.0	44.3
Great Lakes	27.5	28.8	34.3	36.3	31.1	31.0	27.2	29.4	34.5	36.9	31.5	31.4
With cargo	15.2	14.0	17.6	17.1	11.3	13.5	20.2	21.2	24.5	26.8	23.7	23.4

Source: U.S. Bureau of the Census, 1965, *Foreign Commerce and Navigation of the United States*; thereafter, *Vessel Entrances and Clearances*, FT 975, annual.

**NO. 1124. DOMESTIC MERCHANT VESSELS COMPLETED BY U.S. SHIPYARDS: 1960 TO 1981**

[Vessels of 1,000 gross tons and over. See also *Historical Statistics, Colonial Times to 1970*, series Q 438-448]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981
Merchant vessels	Number	26	13	13	20	15	16	17	14	15	10	11
Gross tons	1,000	410	173	342	697	452	615	884	912	1,149	375	274
Cargo	Number	15	11	6	11	3	4	2	2	4	6	2
Gross tons	1,000	134	121	120	314	65	57	25	27	53	105	53
Deadweight tons	1,000	163	154	134	402	71	76	37	30	47	114	73
Tankers	Number	11	2	7	9	12	12	15	12	11	4	9
Gross tons	1,000	276	52	222	383	387	558	859	885	1,096	270	221
Deadweight tons	1,000	456	92	427	759	742	1,176	1,585	1,392	1,901	354	355

Source: 1960, American Bureau of Shipping, New York, N.Y., annually in *The Bulletin*; thereafter, U.S. Maritime Administration, *New Ship Construction*, annual.

NO. 1125. UNITED STATES FLAG MERCHANT VESSELS, STEAM AND MOTOR: 1970 TO 1981

[Deadweight tonnage in thousands. As of June 30 except, beginning 1978, as of Sept. 30. Covers oceangoing 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 467-502]

ITEM	CARGO <sup>1</sup>						TANKER					
	1970	1975	1978	1979	1980	1981	1970	1975	1978	1979	1980	1981
<b>Number of vessels</b> .....	1,479	612	552	566	553	550	301	279	289	305	310	313
<b>Active:</b>												
Foreign trade .....	354	228	204	204	195	184	32	39	62	72	32	32
Domestic trade <sup>2</sup> .....	70	49	46	40	46	40	175	158	175	168	211	195
Coastwise .....	10	17	6	8	12	11	132	136	113	114	103	87
Noncontiguous .....	43	29	40	31	34	27	35	12	41	40	45	44
Special service .....	146	34	43	45	44	49	42	26	24	23	23	39
<b>Inactive:</b>												
Temporarily .....	41	38	47	36	31	39	22	31	16	22	24	32
Reserve fleet .....	888	263	212	241	237	238	30	27	12	20	20	15
<b>Tons carried</b> .....	15,445	8,175	7,807	7,844	7,872	7,919	7,835	9,433	13,446	15,153	16,107	16,558
<b>Active:</b>												
Foreign trade .....	4,699	3,901	3,829	3,866	3,826	3,530	1,076	2,303	4,655	6,223	2,793	1,611
Domestic trade <sup>2</sup> .....	850	832	685	597	713	667	4,518	4,855	7,036	7,032	10,546	10,284
Coastwise .....	116	354	111	120	200	216	3,483	4,299	3,428	3,363	3,078	2,668
Noncontiguous .....	482	424	574	468	479	424	870	338	3,091	3,239	3,659	3,807
Special service .....	1,741	459	530	565	550	793	1,189	755	914	645	661	1,676
<b>Inactive:</b>												
Temporarily .....	472	541	733	499	451	555	691	1,173	677	952	1,806	2,748
Reserve fleet .....	7,684	2,442	2,030	2,297	2,322	2,374	361	347	164	301	301	239

<sup>1</sup>Includes combination passenger and cargo vessels, not shown separately. <sup>2</sup>Includes intercoastal, not shown separately.

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. 1126. SHIPBUILDING IN PRIVATE SHIPYARDS—SUMMARY: 1970 TO 1981

[Steel self-propelled vessels of 1,000 tons or over. See also *Historical Statistics, Colonial Times to 1970*, series Q 449-458]

TYPE OF VESSEL AND STATUS OF CONSTRUCTION	NUMBER						TONS (1,000)					
	1970	1975	1978	1979	1980	1981	1970	1975	1978	1979	1980	1981
<b>Commercial (gross tons):</b>												
Under construction <sup>1</sup> .....	49	96	60	70	69	49	1,388	5,064	3,467	2,835	1,816	937
Contracted for .....	13	14	30	21	7	9	580	599	394	487	116	154
Launched .....	11	18	22	20	23	21	322	759	1,170	720	442	334
Delivered .....	13	19	19	21	23	22	370	469	1,027	1,298	788	347
Cancelled .....	(NA)	12	1	1	4	-	(NA)	545	199	8	207	-
<b>Naval (light displacement tons):</b>												
Under construction <sup>1</sup> .....	108	63	91	102	99	91	621	663	652	677	630	628
Contracted for .....	6	16	25	13	11	28	132	106	119	61	101	97
Launched .....	23	8	19	25	22	16	117	110	127	142	183	73
Delivered .....	32	3	14	16	19	26	166	79	95	108	102	152

- Represents zero. NA Not available. <sup>1</sup>As of Jan. 1.

Source: Shipbuilders Council of America, Washington, D.C., *Annual Report*, and unpublished data.

NO. 1127. VESSELS REPAIRED OR CONVERTED IN PRIVATE SHIPYARDS: 1960 TO 1981

[Covers both shipbuilding and ship repair yards. See also *Historical Statistics, Colonial Times to 1970*, series Q 467-472]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981
<b>All vessels: Volume</b> .....	Mil. dol. ....	396	718	790	1,246	1,242	1,359	1,507	1,719	1,967	2,143	2,374
Commercial ships <sup>1</sup> .....	Mil. dol. ....	274	383	431	713	688	715	789	808	998	1,048	1,148
Naval ships .....	Mil. dol. ....	122	335	359	533	554	644	718	911	969	1,095	1,226
<b>Over 1,000 gross tons:</b>												
Yards reporting .....	Number .....	93	93	75	65	72	70	70	65	(NA)	(NA)	(NA)
Commercial vessels .....	1,000 .....	12.8	12.7	12.4	8.5	7.9	8.0	8.2	8.2	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup>Includes Military Sealift Command work.

Source: Shipbuilders Council of America, Washington, D.C., *Annual Report*, and unpublished data.

## NO. 1128. EMPLOYEES IN GOVERNMENT AND PRIVATE SHIPYARDS: 1960 TO 1981

[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]

YEAR	Total	Private yards <sup>1</sup>	Navy yards	YEAR	Total	Private yards <sup>1</sup>	Navy yards	YEAR	Total	Private yards <sup>1</sup>	Navy yards
1960.....	208	112	96	1974.....	225	161	64	1978.....	243	172	71
1965.....	213	129	84	1975.....	217	154	65	1979.....	244	173	71
1970.....	216	134	83	1976.....	233	168	65	1980.....	251	178	73
1972.....	216	146	70	1977.....	242	174	68	1981.....	262	185	77
1973.....	214	149	65								

<sup>1</sup>Includes all full- and part-time employees.

Source: U.S. Bureau of Labor Statistics, unpublished data. (Current data for private yards published monthly in *Employment and Earnings*.)

## NO. 1129. EMPLOYMENT ON U.S. FLAG MERCHANT VESSELS, 1960 TO 1981, AND BASIC MONTHLY (JANUARY) WAGE SCALE FOR ABLEBODIED SEAMEN, 1970 TO 1982

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

YEAR	Employment <sup>1</sup>	YEAR	Employment <sup>1</sup>	YEAR	East coast wage rate <sup>2</sup>	West coast wage rate <sup>2</sup>	YEAR	East coast wage rate <sup>2</sup>	West coast wage rate <sup>2</sup>
1960.....	49.2	1977.....	20.9	1970.....	\$470	\$652	1978.....	\$804	\$1,172
1965.....	<sup>2</sup> 39.1	1978.....	19.9	1974.....	583	856	1979.....	865	1,287
1970.....	37.6	1979.....	19.7	1975.....	612	900	1980.....	967	1,414
1975.....	20.5	1980.....	19.6	1976.....	688	1,001	1981.....	1,120	1,535
1976.....	21.1	1981.....	18.3	1977.....	737	1,072	1982.....	1,204	1,686

<sup>1</sup>As of June 30, except beginning 1978, 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. <sup>2</sup>Decrease due to seafaring strike. <sup>3</sup>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, 1960-1965, *Seafaring Wage Rates*; thereafter, unpublished data.

## NO. 1130. WORLDWIDE TANKER CASUALTIES: 1973 TO 1982

[Covers tankers, ore/oil carriers, and bulk/oil vessels of 6,000 deadweight tons and over; excludes liquid gas carriers. 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	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982 <sup>1</sup>
Number of incidents: <sup>2</sup> Partial and total.....	1,273	1,168	906	819	834	685	772	(NA)	(NA)	(NA)
Total.....	12	14	22	20	20	17	28	15	21	7
Personnel loss: Deaths.....	70	94	90	226	113	148	306	132	73	39
Injuries.....	159	62	14	87	102	109	135	(NA)	(NA)	(NA)
Oil spills: Number.....	36	48	45	29	49	35	65	32	33	-
Amount (1,000 tons).....	84.5	67.1	188.0	204.2	213.1	260.5	723.5	135.6	45.3	-

- Represents zero. NA Not available. <sup>1</sup>Jan.-Mar. <sup>2</sup>Includes actual and constructive (cost to repair damage exceeds value of vessel) total losses.

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

## NO. 1131. MERCHANT VESSELS—WORLD AND UNITED STATES: 1960 TO 1981

[Vessels of 100 gross tons and over. 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.: OWNED	
	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)	Number	Gross tons (1,000)
1960.....	2,005	8,382	36,311	129,770	49	379	4,059	24,837
1965.....	2,202	11,763	41,865	160,392	116	218	3,416	21,527
1970.....	2,814	20,980	52,444	227,490	156	375	2,983	18,463
1975.....	2,730	34,203	63,724	342,162	127	476	4,346	14,587
1978.....	2,618	18,194	69,020	406,002	151	1,033	4,746	16,188
1979.....	2,466	14,289	71,129	413,021	182	1,352	5,088	17,542
1980.....	2,412	13,101	73,882	419,911	205	555	5,579	18,464
1981.....	2,269	16,932	73,864	420,835	223	360	5,869	18,908

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

## NO. 1132. MERCHANT VESSELS—SHIPS AND TONNAGE LOST WORLDWIDE, BY TYPE OF SHIP: 1977 TO 1980

TYPE OF SHIP	SHIPS LOST					GROSS TONNAGE LOST (1,000)				
	1977	1978	1979	1980		1977	1978	1979	1980	
				Total	Percent of total				Total	Percent of total
<b>Total</b> <sup>1</sup> .....	<b>336</b>	<b>473</b>	<b>465</b>	<b>387</b>	<b>100.0</b>	<b>1,073</b>	<b>1,711</b>	<b>2,210</b>	<b>1,804</b>	<b>100.0</b>
Tankers.....	19	28	29	24	6.2	373	703	939	707	39.2
Ore/bulk carriers <sup>2</sup> .....	9	13	17	21	5.4	82	186	374	458	25.4
General cargo.....	194	286	273	211	54.5	412	756	785	478	26.5
Passenger <sup>3</sup> .....	2	2	5	9	2.3	10	3	46	112	6.2
Fishing.....	82	99	110	96	24.8	26	27	35	30	1.7

<sup>1</sup>Includes types not shown separately. <sup>2</sup>Includes ore/bulk/oil carriers. <sup>3</sup>Includes cargo-passenger ships.

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

## NO. 1133. MERCHANT FLEETS OF THE WORLD: 1970 TO 1980

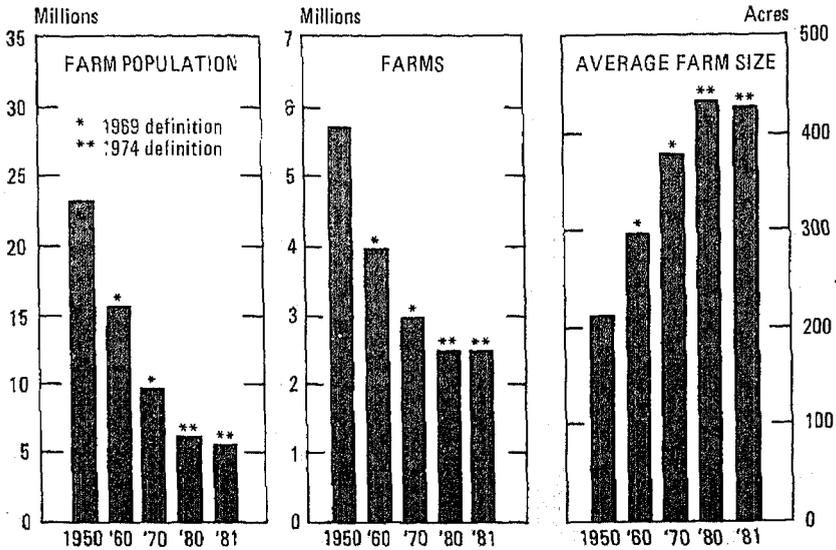
[Vessels of 1,000 gross tons and over. 1970-1979 as of Dec. 31, 1980 as of Jan. 1 of the following year. Specified countries have 100 or more ships]

YEAR AND COUNTRY OF REGISTRY, 1980	TOTAL		PASSENGER/ CARGO COMB.		FREIGHTERS		BULK CARRIERS <sup>1</sup>		TANKERS	
	Num- ber	Avg. age (yr.)	Num- ber	Avg. age (yr.)	Num- ber	Avg. age (yr.)	Num- ber	Avg. age (yr.)	Num- ber	Avg. age (yr.)
<b>1970, world total</b> .....	<b>19,980</b>	<b>13</b>	<b>895</b>	<b>21</b>	<b>11,899</b>	<b>13</b>	<b>2,954</b>	<b>8</b>	<b>4,232</b>	<b>11</b>
United States.....	1,579	22	171	25	1,076	23	38	25	294	19
Foreign.....	18,401	12	724	20	10,823	13	2,916	8	3,938	10
<b>1975, world total</b> .....	<b>22,872</b>	<b>12</b>	<b>714</b>	<b>21</b>	<b>12,575</b>	<b>13</b>	<b>4,272</b>	<b>9</b>	<b>5,311</b>	<b>11</b>
United States.....	857	21	60	29	511	21	19	25	267	19
Foreign.....	22,015	12	654	21	12,064	13	4,253	9	5,044	11
<b>1979, world total</b> .....	<b>24,797</b>	<b>12</b>	<b>495</b>	<b>23</b>	<b>14,328</b>	<b>13</b>	<b>4,714</b>	<b>9</b>	<b>5,280</b>	<b>12</b>
United States.....	855	22	68	33	469	23	21	22	307	19
Foreign.....	23,932	12	427	22	13,859	13	4,693	9	4,953	11
<b>1980, world total</b> .....	<b>24,867</b>	<b>13</b>	<b>468</b>	<b>24</b>	<b>14,242</b>	<b>14</b>	<b>4,796</b>	<b>10</b>	<b>5,359</b>	<b>12</b>
United States.....	864	23	65	34	471	23	20	22	288	20
Privately-owned.....	578	17	7	22	263	16	20	(x)	268	18
Government-owned.....	286	33	58	35	208	16	-	-	20	37
<b>Foreign</b> .....	<b>24,003</b>	<b>12</b>	<b>403</b>	<b>22</b>	<b>13,771</b>	<b>13</b>	<b>4,778</b>	<b>10</b>	<b>5,051</b>	<b>11</b>
Argentina.....	203	19	1	29	115	16	25	16	62	23
Brazil.....	313	13	3	34	197	15	49	5	64	12
British Colonies.....	202	12	2	18	124	13	62	10	14	17
Bulgaria.....	108	12	2	11	50	13	39	9	17	12
Canada.....	102	19	7	24	35	19	13	18	47	19
China: Mainland.....	695	15	18	14	495	16	95	13	87	15
Taiwan.....	170	12	3	14	115	12	39	10	13	12
Cyprus.....	395	21	7	32	344	21	25	18	19	15
Denmark.....	275	6	6	20	167	5	33	6	69	8
Finland.....	175	11	8	15	91	11	40	7	36	12
France.....	345	9	2	18	178	8	48	7	117	10
Germany Dem. Rep.....	158	11	2	26	129	10	19	16	8	13
Germany, Fed. Rep of.....	473	7	3	15	359	7	47	7	64	7
Greece.....	2,928	16	55	30	1,515	18	943	12	415	17
India.....	370	12	7	15	230	14	102	10	31	8
Indonesia.....	254	18	12	22	196	19	10	8	36	15
Italy.....	622	16	19	25	229	18	144	14	230	16
Japan.....	1,762	7	8	11	717	8	511	7	526	6
Korea, Rep. of.....	385	11	-	(x)	232	12	103	9	50	13
Liberia.....	2,271	9	7	25	522	9	853	9	889	10
Netherlands.....	444	8	3	17	350	7	28	8	63	13
Norway.....	616	7	23	16	194	7	151	7	248	7
Panama.....	2,437	15	36	27	1,701	16	406	11	294	14
Philippines.....	235	16	14	18	153	16	29	10	39	19
Poland.....	318	11	4	16	220	12	81	8	13	5
Romania.....	191	7	1	42	139	7	44	6	7	10
Singapore.....	622	14	8	23	431	15	85	10	98	11
Soviet Union.....	2,530	13	55	21	1,847	13	161	9	467	14
Spain.....	509	9	6	25	315	9	71	7	117	11
Sweden.....	232	7	2	9	133	7	30	7	67	8
Turkey.....	178	13	11	32	116	12	22	10	29	11
United Kingdom.....	1,056	9	12	14	450	8	216	8	378	9
Yugoslavia.....	268	15	8	16	184	16	52	9	14	15
All others.....	2,171	13	48	23	1,498	14	202	9	423	12

- Represents zero. X Not applicable. <sup>1</sup>Includes bulk/oil, ore/oil, and ore/bulk/oil carriers.

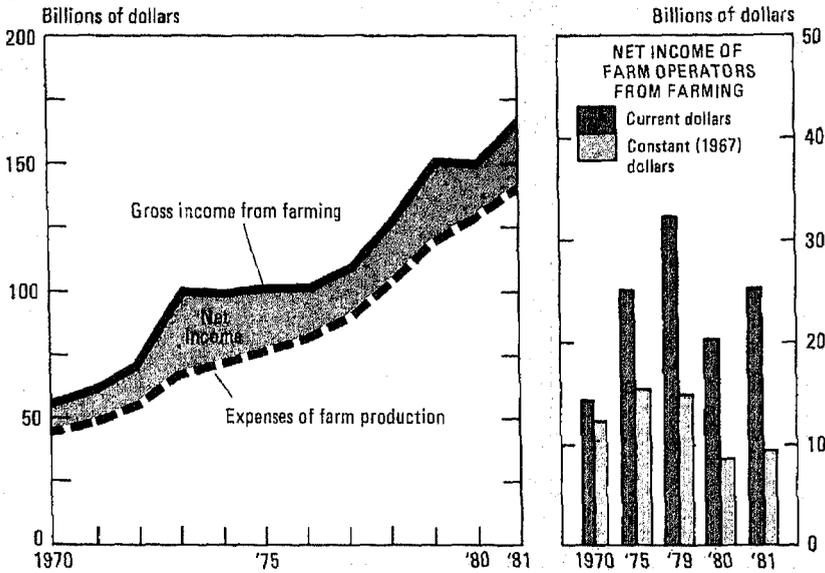
Source: U.S. Maritime Administration, *A Statistical Analysis of the World's Merchant Fleets*, annual.

Figure 24.1  
Changes in Farming: 1950 to 1981

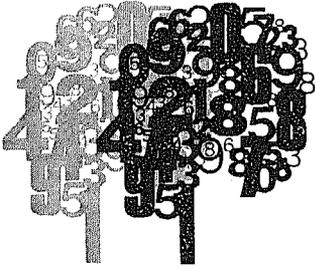


Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 1134 and 1140.

Figure 24.2  
Farm Income and Expenses: 1970 to 1981



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 1166.



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## Section 24

# Agriculture

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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 of these data are the reports issued by the U.S. Bureau of the Census and by the Statistical Reporting Service (SRS) 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 roughly every 5 years from 1925 to 1978. The 1978 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: *Income and Balance Sheet Statistics*, *State Income and Balance Sheet Statistics*, *Production and Efficiency Statistics*, *Costs of Production*, and *Farm Sector Review*. Situation reports issued periodically by the ERS present current data on a variety of 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. General Imports, Schedule A, Commodity by Country*, and *U.S. Exports, Schedule B, Commodity by Country*. In addition, the SRS provides agricultural employment estimates and wage rates in the periodic *The Hired Farm Working Force*. Also reported are days employed, earnings from farm and nonfarm work, personal characteristics of hired farm workers, and other pertinent information.

Agricultural statistics have been issued by the Department of Agriculture for over 100 years. The 44 field offices of the SRS collect data on crops, livestock products, agricultural prices, farm employment, and other related subjects mainly through sample surveys. Information is obtained on some 110 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 Crop Reporting Board of SRS which reviews the estimates and issues reports containing State and national data. Among these reports are two annual summaries, *Crop Production and Crop Values*.

**Farms and farmland.**—Over time, the Bureau of the Census has used varying definitions of a farm. Data shown from the census of agriculture reflect the changes in definition since figures are presented for "farms" as defined during the years indicated. For the Census of Agriculture for 1974 and 1978, a farm was defined to include all land on which agricultural operations were conducted under the day-to-day control of an individual management and from which \$1,000 or more of agricultural products were, or potentially could be, sold during the census year. Control may have been exercised through ownership or management, or through a lease, rental, or cropping arrangement. Volume I census reports for 1974 and 1978 provide a detailed explanation of the new definition along with measures of the effect of the change for each State and county. The effect of the change in definition must be considered when comparing coverage estimates for all farms in the 1974 and 1978 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. In the 1950 and 1954 censuses, places of 3 or more acres were counted as farms if the annual value of agricultural products, exclusive of homegarden products, amounted to \$150 or more; places of less than 3 acres were counted as farms only if the annual sales amounted to \$150 or more. For definitions used in earlier censuses, see *U.S. Census of Agriculture: 1974*, vol. II, Part I, General Information.

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.

Currently included as farms are such diverse enterprises as nurseries, greenhouses, sod farms, mushroom operations, cranberry bogs, feedlots, fish farms, and hatcheries; excluded are business enterprises exclusively engaged in forest production and in production of fish, oysters, fowl, etc., from the ocean, game preserves, parks, and the like, when not grown in captivity. In the case of landowners who had one or more tenants, or renters, the land operated by each was counted as a separate farm.

Farmland refers to all land under the control of a farm operator and considered as part of his farm, including land not actually under cultivation or not used for pasture or grazing. Rent-free land was included as part of the farm only if the operator had sole use of it. Land used for pasture or grazing on a per head basis that was neither owned nor leased by the farm operator is not included except for grazing lands controlled by grazing associations leased on a per acre basis.

State totals for 1978 are not directly comparable with totals for 1974 or earlier censuses because of changes in the procedures of collecting data. For details, see 1978 census reports. Coverage estimates for 1978 indicate about 3.4 percent of all farms were not included in census totals. Coverage evaluation studies for the 1974 census indicated that 10.7 percent of all farms were not included in the census. Farms missed in the census were usually small and accounted for less than 2 percent of the total value of agricultural products sold and less than 2 percent of the land in farms. The proportion of farms missed in the 1974 census was generally higher in States having a large proportion of small farms and urbanized areas having a sizable number of part-time farms. For more explanation about data comparability, see Appendixes A and C, *Census of Agriculture: 1978*, volume I reports.

**Farm population.**—Farm population consists of all persons living on farms in rural areas. Data prior to 1960 are based on self-identification by respondents as to whether they live on a farm, and are not based on any criterion for the definition of a farm. Except as noted, farm population data shown for 1960 to 1976 are based on the definition of a farm used for the 1969 Census of Agriculture. Farm population data for 1977 to 1981 are shown on the bases of both the 1969 and 1974 census farm definitions and are so indicated.

**Irrigation.**—Irrigated land is defined by the Bureau of the Census as the acreage in farms to which water is artificially applied during the census year. In addition to collecting information on irrigation from individual farms in the census of agriculture, the Bureau of the Census collects data on the operation of irrigation water supply organizations at 10-year intervals. In 1978, irrigation information was collected from both individual farms and irrigation organizations.

**Farm income.**—Cash income comprises cash receipts from farm marketings and Federal payments made directly to farmers for farm related activities. Farm marketings represent agricultural products sold by farmers multiplied by prices received per unit of production at the local market. Gross farm income includes cash income, value of farm products consumed in farm homes, rental value of farm homes, etc.

Information on prices received for farm products is generally obtained by the SRS Crop Reporting Board from surveys of firms (such as grain elevators, packers, and processors) purchasing agricultural commodities direct from producers. In some cases, the price information is obtained directly from the producers. Season average prices received by farmers are calculated by weighting monthly prices by monthly sales during the crop marketing season, beginning with the first month in which a particular crop harvest begins.

**Crops.**—Estimates of crop acreage and production by the SRS are based on current sample survey data obtained from individual reporters and objective yield counts which are supplemented by State assessors' enumerations of agricultural information, reports of carlot shipments, market records, personal field observations by field statisticians, and reports from other sources. Cotton acreage and production are based on sample survey data and on ginning information gathered by the Bureau of the Census.

**Price supports.**—Under law, farm incomes are supported through two basic Government-supported 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 (currently nine months), 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. Volume II of *U.S. Census of Agriculture: 1974* gives a complete history of the enumeration of livestock and analyzes comparability from census to census. Comparability of livestock inventories over time is seriously affected by changes in date of enumeration.

**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 I.

### NO. 1134. FARM POPULATION AND EMPLOYMENT: 1930 TO 1981

[In thousands, except percent. Prior to 1959, excludes Alaska and 1960, Hawaii. Minus sign (—) denotes decrease. For definition of farm population, see text, p. 648. See also *Historical Statistics, Colonial Times to 1970*, series C 76-78 and K 1-3 and K 174.]

YEAR	FARM POPULATION <sup>1</sup>		NET AVERAGE ANNUAL CHANGE <sup>3</sup>		Farm employment <sup>5</sup>	YEAR	FARM POPULATION <sup>1</sup>		NET AVERAGE ANNUAL CHANGE <sup>3</sup>		Farm employment <sup>5</sup>
	Total	Percent of total population <sup>2</sup>	Births and deaths	Migration <sup>4</sup>			Total	Percent of total population <sup>2</sup>	Births and deaths	Migration <sup>4</sup>	
1930.....	30,529	24.9	461	-593	12,497	1969 DEFINITION—Con					
1935.....	32,161	25.3	384	-58	12,733	1970.....	9,712	4.8	47	-642	4,523
1940.....	30,547	23.2	386	-708	10,879	1971.....	9,425	4.6	43	-330	4,436
1945.....	24,420	17.5	377	-1,602	10,000	1972.....	9,510	4.6	29	156	4,373
1950.....	23,048	15.3	403	-677	9,926	1973.....	9,472	4.5	28	-184	4,337
1955.....	19,078	11.8	321	-1,115	8,391	1974.....	9,264	4.4	25	-233	4,389
1956.....	18,712	11.2	261	-627	7,852	1975.....	8,864	4.2	25	-425	4,342
1957.....	17,656	10.4	239	-1,295	7,600	1976.....	8,253	3.8	24	-635	4,374
1958.....	17,128	9.9	220	-748	7,503	1977.....	7,806	3.6	27	-474	4,170
1959.....	16,592	9.4	203	-740	7,342	1978.....	8,005	3.7	27	172	3,957
1969 DEFINITION						1979.....	7,553	3.4	(NA)	(NA)	3,774
1960.....	15,835	8.7	184	-1,142	7,057	1980.....	7,241	3.3	(NA)	(NA)	3,705
1961.....	14,803	8.1	168	-1,000	6,919	1981.....	6,942	3.1	(NA)	(NA)	*3,330
1962.....	14,313	7.7	156	-646	6,700	1974 DEFINITION					
1963.....	13,367	7.1	140	-1,086	6,518	1977.....	6,194	2.8	(NA)	(NA)	4,170
1964.....	12,954	6.8	121	-533	6,110	1978.....	6,501	3.0	(NA)	(NA)	3,957
1965.....	12,363	6.4	112	-703	5,610	1979.....	6,241	2.8	(NA)	(NA)	3,774
1966.....	11,595	5.9	90	-858	5,214	1980.....	6,051	2.7	(NA)	(NA)	3,705
1967.....	10,875	5.5	73	-793	4,903	1981.....	5,790	2.6	(NA)	(NA)	*3,330
1968.....	10,454	5.3	60	-481	4,749						
1969.....	10,307	5.1	51	-198	4,596						

NA Not available. <sup>1</sup>As of April 1 except, beginning 1960, April-centered annual averages. <sup>2</sup>Includes Armed Forces abroad. <sup>3</sup>Change from preceding year shown. For 1930, change from 1925. <sup>4</sup>Beginning 1940, includes inductions and enlistments into Armed Forces, and persons returning from Armed Forces. For all years, includes persons who did not move but who were in and out of the farm population because agricultural operations began or ceased, respectively, on the place where they were living. <sup>5</sup>Covers hired workers farm operators, and family members doing farm work without wages. See headnote and footnote 2, table 1188. <sup>6</sup>See footnote 1, table 1188.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Farm Population, Estimates for 1910-70; Farm Population Estimates, annual; and Farm Labor, quarterly*.

## NO. 1135. FARM POPULATION, BY CHARACTERISTICS: 1960 TO 1981

[1960, as of April; beginning 1970 April-centered annual averages. For definition of farm population, see text, p. 648]

CHARACTERISTIC	FARM POPULATION (1,000)						PERCENT DISTRIBUTION				
	1969 definition			1974 definition			1969 definition		1974 definition		
	1960	1970	1980	1980	1981			1960	1970	1980	1981
					Total	Male	Female				
<b>Total</b> .....	<b>15,689</b>	<b>9,712</b>	<b>7,241</b>	<b>6,051</b>	<b>5,790</b>	<b>2,999</b>	<b>2,791</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
White.....	13,092	8,775	6,828	5,714	5,486	2,843	2,644	83.6	80.4	94.4	94.7
Black and other races.....	2,577	938	413	337	303	156	147	16.4	9.7	5.6	5.2
Under 14 years of age.....	4,995	2,490	1,391	1,146	1,116	577	538	31.9	25.6	18.9	19.3
14 years of age and over.....	10,674	7,222	5,851	4,905	4,674	2,422	2,252	68.1	74.4	81.1	80.7
14-19 years.....	1,868	1,316	926	790	705	373	332	11.9	13.6	13.1	12.2
20-24 years.....	763	502	502	444	415	232	163	4.9	5.2	7.3	7.2
25-34 years.....	1,461	770	735	606	605	319	285	9.3	7.9	10.0	10.4
35-44 years.....	1,803	1,061	862	712	694	340	354	11.5	10.9	11.8	12.0
45-64 years.....	3,453	2,452	1,892	1,607	1,525	777	749	22.0	25.2	26.6	26.3
65 years and over.....	1,326	1,122	934	746	731	381	349	8.5	11.6	12.3	12.6
In labor force <sup>1</sup> .....	6,266	4,293	3,682	3,139	3,008	1,955	1,053	58.7	59.4	64.0	64.4
Employed, agriculture.....	4,025	2,393	1,722	1,642	1,628	1,285	342	37.7	32.3	33.5	34.8
Percent of total.....	64.2	54.3	46.8	52.3	54.1	65.7	32.5	(x)	(x)	(x)	(x)
Self-employed.....	2,405	1,411	1,069	1,034	1,037	909	128	22.5	19.5	21.1	22.2
Wage and salary workers.....	782	395	344	326	338	283	55	7.3	5.5	6.6	7.2
Unpaid family workers.....	838	526	295	282	252	93	159	7.9	7.3	5.7	5.4
Employed, nonagriculture.....	2,064	1,878	1,853	1,415	1,296	632	664	19.3	26.0	28.8	27.7
Self-employed.....	(NA)	159	210	161	125	70	55	(NA)	2.2	3.3	2.7
Wage and salary workers.....	(NA)	1,698	1,624	1,239	1,156	556	600	(NA)	23.5	25.3	24.7
Unpaid family workers.....	(NA)	21	19	16	15	6	10	(NA)	.3	.3	.3
Unemployed.....	177	82	106	82	84	38	46	1.7	1.1	1.7	1.8
Not in labor force <sup>1</sup> .....	4,408	2,929	2,169	1,766	1,666	467	1,199	41.3	40.6	36.0	35.6

NA Not available. X Not applicable. <sup>1</sup>14 years old and over.Source: U.S. Bureau of the Census, *Current Population Reports*, series P-27, Nos. 42 and 55.

## NO. 1136. FARM POPULATION, BY CHARACTERISTICS OF FARM: 1975 AND 1980

[In thousands. As of June. Excludes Alaska and Hawaii. Based on 1974 census farm definition; see text, p. 647]

FARM CHARACTERISTIC	1975					1980				
	Total <sup>1</sup>	White	Black	North and West	South	Total <sup>1</sup>	White	Black	North and West	South
<b>Total</b> .....	<b>7,217</b>	<b>6,888</b>	<b>271</b>	<b>4,689</b>	<b>2,528</b>	<b>7,045</b>	<b>6,775</b>	<b>236</b>	<b>4,483</b>	<b>2,562</b>
Farm operator's household.....	6,537	6,357	147	4,353	2,184	6,588	6,392	164	4,225	2,363
Other dwelling units.....	680	531	124	337	343	457	383	71	258	199
Full owner.....	3,817	3,692	97	2,383	1,434	3,528	3,413	97	2,168	1,359
Part owner.....	2,582	2,454	109	1,786	797	2,822	2,695	113	1,837	985
Tenant or manager.....	818	743	64	521	297	696	667	26	478	218
Value of products sold: <sup>2</sup>										
Less than \$2,500.....	1,272	1,213	54	582	690	1,024	960	61	442	582
\$2,500-\$9,999.....	1,757	1,666	77	965	792	1,644	1,561	73	846	798
\$10,000-\$19,999.....	1,017	992	21	706	312	865	835	26	504	361
\$20,000-\$39,999.....	1,053	1,031	15	840	213	901	880	19	655	246
\$40,000-\$99,999.....	1,341	1,284	48	1,044	297	1,316	1,285	19	1,032	284
\$100,000-\$199,999.....						725	711	12	584	141
\$200,000 and over.....	777	703	57	553	225	570	543	25	421	149
Type of farm: <sup>3</sup>										
Cash grain.....	2,206	2,112	82	1,683	523	1,874	1,819	51	1,472	402
Tobacco.....	554	484	82	21	533	405	350	49	18	387
Cotton.....	158	119	34	34	123	92	75	16	15	77
Livestock.....	2,472	2,418	41	1,511	961	2,775	2,666	82	1,516	1,259
Dairy.....	1,013	1,009	( <sup>1</sup> )	894	118	922	918	( <sup>1</sup> )	805	117
Other.....	815	766	31	547	268	976	928	37	657	321

<sup>1</sup>Includes other races not shown separately. <sup>2</sup>Based on gross income received from sale of crops, livestock, poultry, and other agricultural products. Includes all government payments received. <sup>3</sup>Classification based on product having largest percentage of total sales. <sup>4</sup>Included in other.

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

# Farm Population and Families

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## No. 1137. FARM POPULATION, BY REGIONS AND DIVISIONS: 1950 TO 1981

[As of April 1 except, beginning 1960, April-centered annual averages. For definition of farm population, see text, p. 648. For composition of divisions, see fig. 1, inside front cover. See also *Historical Statistics, Colonial Times to 1970*, series K 17-81]

REGION AND DIVISION	FARM POPULATION (1,000)							PERCENT DISTRIBUTION						
	1950	1969 definition			1974 definition			1950	1969 definition			1974 definition		
		1960	1970	1977	1977	1980	1981		1960	1970	1977	1977	1980	1981
<b>U.S.</b> .....	<b>23,048</b>	<b>15,635</b>	<b>9,712</b>	<b>7,806</b>	<b>6,194</b>	<b>6,051</b>	<b>5,790</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Northeast.....	1,791	1,119	699	561	418	443	356	7.8	7.2	7.2	7.2	6.7	7.3	6.1
New England.....	403	232	128	126	89	89	(NA)	1.8	1.5	1.3	1.6	1.4	1.5	(NA)
Middle Atlantic.....	1,388	887	571	434	329	354	(NA)	6.0	5.7	5.9	5.6	5.3	5.9	(NA)
North Central.....	7,433	5,836	4,305	3,598	2,946	2,730	2,717	32.3	37.3	44.3	46.1	47.6	45.1	46.9
East North Central.....	3,703	2,821	2,063	1,652	1,337	1,207	(NA)	16.1	18.0	21.1	21.2	21.6	20.0	(NA)
West North Central.....	3,729	3,015	2,252	1,946	1,610	1,522	(NA)	16.2	19.3	23.2	24.9	26.0	25.2	(NA)
South.....	11,896	7,160	3,754	2,684	2,118	2,162	1,959	51.6	45.8	38.6	34.4	34.2	35.7	33.8
South Atlantic.....	4,633	2,638	1,357	924	702	744	(NA)	20.1	18.2	14.0	11.8	11.3	12.3	(NA)
East South Central.....	4,048	2,494	1,329	1,007	762	717	(NA)	17.6	15.9	13.7	12.9	12.3	11.9	(NA)
West South Central.....	3,215	1,828	1,069	753	653	701	(NA)	13.9	11.7	11.0	9.6	10.5	11.6	(NA)
West.....	1,929	1,520	954	963	712	716	758	8.3	9.7	9.8	12.3	11.5	11.8	13.1
Mountain.....	859	678	446	410	325	310	(NA)	3.7	4.3	4.6	5.3	5.2	5.1	(NA)
Pacific.....	1,070	842	508	553	388	406	(NA)	4.6	5.4	5.2	7.1	6.3	6.7	(NA)

NA Not available.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Farm Population Estimates, 1910-70* (Statistical Bulletin No. 523) and *U.S. Farm Population*, annual.

## No. 1138. CHARACTERISTICS OF FARM AND NONFARM FAMILIES: 1970 TO 1981

[As of March. 1970 based on 1969 census farm definition, 1980 and 1981 based on 1974 definition; see text, p. 648. Based on Current Population Survey, see text, p. 2 and Appendix III. 1980 and 1981 data are based on population controls from 1970 and 1980 census respectively; see text, p. 2]

CHARACTERISTIC	1970			1980			1981		
	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	60,309	1,631	58,678
Persons per family.....	3.62	3.77	3.61	3.28	3.35	3.27	3.27	3.31	3.26
With own children under 18 (1,000).....	28,665	1,169	27,496	30,517	745	29,772	31,228	694	30,534
Mean number of own children.....	2.33	2.81	2.32	1.89	2.00	1.89	1.88	2.04	1.88
Percent with: 1 or 2 children.....	63.6	57.2	63.9	77.0	71.5	77.2	77.9	71.6	78.1
3 or 4 children.....	28.5	29.3	28.5	20.4	24.8	20.3	19.8	24.2	19.7
5 or more children.....	7.8	13.5	7.6	2.5	3.5	2.5	2.3	4.2	2.2
Percent distribution:									
Husband-wife.....	86.7	90.5	86.5	82.5	92.3	82.2	81.7	93.3	81.4
Male householder, no wife present.....	2.4	4.2	2.3	2.9	3.4	2.9	3.2	2.7	3.2
Female householder, no husband present.....	10.9	5.3	11.2	14.6	4.4	14.9	15.1	4.0	15.4
2-person families.....	34.5	37.0	34.3	39.2	42.7	39.1	39.4	41.1	39.4
3 to 5 person families.....	52.7	48.4	53.1	53.7	47.1	53.9	53.9	50.4	54.0
6-or-more person families.....	12.9	16.6	12.6	7.1	10.9	7.0	6.7	8.5	6.7

Source: U.S. Bureau of the Census, *Current Population Reports*, series P-20, No. 218, and series P-27, Nos. 54 and 55.

## No. 1139. MONEY INCOME OF FARM AND NONFARM FAMILIES, BY RACE: 1970 TO 1980

[Number of families as of March 1981. Data are based on population controls from 1980 census. See headnote, tables 713 and 1138. For definition of median, see Guide to Tabular Presentation]

ITEM	All families, 1981 (1,000)	MEDIAN FAMILY INCOME (CONSTANT 1980 DOLLARS)			PERCENT FAMILIES WITH 1980 INCOME OF—				
		1970	1975	1980	Under \$10,000	\$10,000-\$14,999	\$15,000-\$19,999	\$20,000-\$24,999	\$25,000 or more
All families.....	60,309	20,929	20,995	21,023	18.9	14.2	14.0	13.7	39.3
Farm.....	1,631	14,381	16,804	15,755	30.5	17.4	13.0	12.4	26.6
Nonfarm.....	58,678	21,244	21,172	21,151	18.5	14.1	14.0	13.7	39.6
White.....	52,710	21,722	21,844	21,904	16.2	13.9	14.1	14.2	41.6
Farm.....	1,565	14,897	17,206	16,076	29.7	17.3	13.1	12.7	27.0
Nonfarm.....	51,146	22,054	22,033	22,060	15.8	13.8	14.2	14.2	42.0
Black.....	6,317	13,324	13,440	12,674	40.4	18.8	12.8	10.2	19.8
Farm.....	48	6,424	7,567	(a)	(b)	(b)	(b)	(b)	(b)
Nonfarm.....	6,269	13,569	13,582	12,701	40.3	16.8	12.8	10.3	19.8

B Base less than 75,000.

Source: U.S. Bureau of the Census, *Current Population Reports*, series P-27, No. 55.

No. 1140. FARMS—NUMBER AND ACREAGE: 1930 TO 1982

[Estimated. Prior to 1959, excludes Alaska and Hawaii. For definition of farms and farmland, see text, pp. 647 and 648. 1930-1954, farms and farmlands as defined in census year shown, beginning 1959 based on census year definition indicated. 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 (-) denotes decrease. See also *Historical Statistics, Colonial Times to 1970*, series K 4-7]

YEAR	FARMS				YEAR	FARMS			
	Number (1,000)	Annual change <sup>1</sup> (1,000)	Total (mil. acres)	Average per farm (acres)		Number (1,000)	Annual change <sup>1</sup> (1,000)	Total (mil. acres)	Average per farm (acres)
1930.....	6,546	15	987	151	1969 DEFINITION—Con.				
1935.....	6,814	54	1,055	155	1971.....	2,902	-47	1,097	378
1940.....	6,350	-93	1,061	167	1972.....	2,860	-42	1,092	382
1945.....	5,967	-77	1,142	191	1973.....	2,823	-37	1,088	385
1950.....	5,648	-64	1,202	213	1974.....	2,795	-28	1,084	388
1954.....	4,798	-213	1,206	251					
1969 DEFINITION					1975.....	2,767	-28	1,081	391
1959.....	4,105	-139	1,183	288	1976.....	2,738	-29	1,078	394
1960.....	3,963	-142	1,176	297	1977.....	2,708	-32	1,075	397
1961.....	3,825	-138	1,168	305	1978.....	2,672	-34	1,072	401
1962.....	3,692	-133	1,159	314	1974 DEFINITION				
1963.....	3,572	-120	1,152	322	1975.....	2,521	(x)	1,059	420
1964.....	3,457	-115	1,146	332	1976.....	2,497	-24	1,054	422
1965.....	3,355	-101	1,140	340	1977.....	2,456	-41	1,048	427
1966.....	3,257	-99	1,132	348	1978.....	2,436	-20	1,045	429
1967.....	3,162	-95	1,123	355	1979.....	2,430	-6	1,043	429
1968.....	3,071	-91	1,115	363	1980.....	2,428	-2	1,042	429
1969.....	3,000	-71	1,108	369	1981.....	2,434	6	1,042	428
1970.....	2,949	-51	1,102	374	1982, prel.....	2,400	-34	1,039	433

X Not applicable. <sup>1</sup>Average annual change from preceding year shown. For 1930, change from 1925.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Number of Farms, 1910-1959*; *Land in Farms 1950-1959*, by States (Statistical Bulletin No. 316); *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*, annual supplements; and *Crop Production* (August release).

No. 1141. FARMS—NUMBER AND ACREAGE, BY STATES: 1975 AND 1982

[1982 data preliminary. Based on 1974 census definition of farms and farmland; see text, p. 647. 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	
	1975	1982	1975	1982	1975	1982		1975	1982	1975	1982	1975	1982
	U.S.....	2,521	2,400	1,059	1,039	420		433	Mo.....	127	117	32	31
Ala.....	63	57	13	12	213	216	Mont.....	23	24	62	62	2,658	2,588
Alaska.....	(z)	(z)	2	2	5,567	3,732	Nebr.....	67	63	48	48	715	756
Ariz.....	6	7	40	39	6,349	5,417	Nev.....	2	3	9	9	4,086	3,069
Ark.....	60	57	17	16	283	288	N.H.....	3	3	1	1	198	169
Calif.....	73	80	34	34	470	421	N.J.....	9	10	1	1	120	108
Colo.....	28	26	38	36	1,359	1,377	N. Mex.....	12	14	47	47	3,917	3,511
Conn.....	4	4	(z)	(z)	123	114	N.Y.....	49	50	11	10	216	190
Del.....	4	3	1	1	186	194	N.C.....	105	88	12	11	117	126
Fla.....	36	41	14	13	399	317	N. Dak.....	42	38	42	42	1,007	1,087
Ga.....	60	58	15	15	250	262	Ohio.....	101	93	17	16	165	174
Hawaii.....	4	4	2	2	551	456	Okla.....	75	71	36	34	473	483
Idaho.....	24	24	15	15	639	629	Oreg.....	30	36	19	18	620	508
Ill.....	113	104	29	29	258	276	Pa.....	66	60	10	9	145	147
Ind.....	94	89	17	17	182	181	R.I.....	1	1	(z)	(z)	121	107
Iowa.....	130	117	34	34	262	289	S.C.....	37	33	7	6	184	185
Kans.....	79	76	49	49	616	638	S. Dak.....	43	37	45	45	1,056	1,203
Ky.....	107	101	15	15	138	144	Tenn.....	106	95	14	13	132	141
La.....	38	38	10	10	274	272	Tex.....	189	185	140	138	741	748
Maine.....	7	8	2	2	233	197	Utah.....	13	13	13	12	1,000	953
Md.....	17	18	3	3	179	153	Vt.....	6	8	2	2	281	227
Mass.....	6	5	1	1	121	119	Va.....	62	60	10	10	163	163
Mich.....	70	65	12	12	164	177	Wash.....	34	39	16	16	474	418
Minn.....	104	103	30	30	290	295	W. Va.....	22	21	4	4	195	209
Miss.....	64	53	16	15	242	274	Wis.....	100	92	19	19	193	201
							Wyo.....	8	9	35	35	4,333	3,879

Z Less than 500 farms or 500,000 acres.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Farm Numbers*, annual and *Crop Production* (August release).

NO. 1142. FARMS—NUMBER, 1950 TO 1978, AND ACREAGE, 1974 AND 1978, BY SIZE OF FARM

[See *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, 1978		
	1950	1959	1969	1974	1978	1974	1978	1974	1978	Number of farms	All land in farms	Crop- land har- vested
Total.....	5,388	3,711	2,730	2,314	2,479	1,017.0	1,029.7	303.0	320.7	100.0	100.0	100.0
Under 10 acres.....	489	244	162	128	215	.5	.8	.2	.3	8.7	.1	.1
10-49 acres.....	1,480	813	473	380	475	10.8	13.0	4.3	5.1	19.2	1.3	1.6
50-99 acres.....	1,048	658	460	385	387	28.1	28.1	10.5	10.7	15.6	2.7	3.3
100-179 acres.....	1,103	773	542	443	428	60.5	58.1	25.1	24.0	17.3	5.6	7.5
180-259 acres.....	487	414	307	253	242	54.8	52.3	25.1	24.2	9.8	5.1	7.5
260-499 acres.....	478	472	419	363	354	129.8	127.0	65.9	65.1	14.3	12.3	20.3
500-999 acres.....	182	200	216	207	215	142.3	147.9	70.1	75.5	8.7	14.4	23.5
1,000-1,999 acres.....	79	91	93	99	99	125.7	134.0	51.7	58.4	4.0	13.0	18.2
2,000 acres and over.....	121	57	60	62	64	464.7	468.5	50.1	57.4	2.6	45.5	17.9

Source: U.S. Bureau of the Census, *Census of Agriculture: 1969*, vol. II; and 1974 and 1978, vol. I.

NO. 1143. FARMS—NUMBER, ACREAGE, AND VALUE, BY TYPE OF ORGANIZATION: 1969 TO 1978

ITEM	Unit	Total	Individual or family	Part- nership	Corpo- ration	Other	PERCENT DISTRIBUTION				
							Total	Individual or family	Part- nership	Corpo- ration	Other
ALL FARMS, 1978 <sup>1</sup>											
Number of farms.....	1,000.....	2,476	2,175	241	51	8	100.0	87.8	9.7	2.1	.3
Land in farms.....	Mil. acres.....	974	667	159	120	8	100.0	70.5	16.3	12.3	.8
Value of land and buildings.....	Mil. dol.....	641,698	480,508	100,115	57,379	3,696	100.0	74.9	15.6	8.9	.6
Value of farm products sold.....	Mil. dol.....	107,869	66,451	17,388	23,353	677	100.0	61.6	16.1	21.6	.6
FARMS WITH SALES OF \$2,500 AND OVER											
Number of farms:											
1969.....	1,000.....	1,734	1,481	222	22	10	100.0	85.4	12.8	1.3	.6
1974.....	1,000.....	1,695	1,518	145	29	4	100.0	89.5	8.6	1.7	.2
1978.....	1,000.....	1,865	1,599	210	50	6	100.0	85.7	11.2	2.7	.3
Land in farms:											
1969.....	Mil. acres.....	918	665	163	81	8	100.0	72.4	17.8	8.8	.9
1974.....	Mil. acres.....	906	678	124	97	6	100.0	74.9	13.7	10.7	.7
1978.....	Mil. acres.....	927	644	156	120	7	100.0	69.5	16.8	12.9	.8
Value of farm products sold: <sup>2</sup>											
1969.....	Mil. dol.....	44,478	30,179	7,748	6,295	254	100.0	67.8	17.4	14.1	.6
1974.....	Mil. dol.....	80,593	54,511	11,232	14,426	424	100.0	67.6	13.9	17.9	.5

<sup>1</sup>Excludes abnormal farms (see footnote 2, table 1147). <sup>2</sup>1978 total value of farm products sold, \$107,164,000,000.  
Source: U.S. Bureau of the Census, *Census of Agriculture: 1974 and 1978*, vol. I.

NO. 1144. CHARACTERISTICS OF CORPORATE FARMS, BY TYPE: 1978

ITEM	Unit	All corpo- rations	FAMILY HELD CORPORATIONS		OTHER CORPORATIONS				
			Total	1-10 stock- holders	11 or more stock- holders	Total	1-10 stock- holders	11 or more stock- holders	
Farms.....	Number.....	51,270	45,418	44,143	1,275	5,852	4,707	1,145	
Percent distribution.....	Percent.....	100.0	88.6	86.1	2.5	11.4	9.2	2.2	
Land in farms.....	Mil. acres.....	120.2	104.0	93.0	11.0	16.1	10.6	5.5	
Average per farm.....	Acres.....	2,345	2,292	2,107	8,681	2,755	2,248	4,837	
Value of—									
Land and buildings <sup>1</sup> .....	Bil. dol.....	57.4	47.9	44.6	3.3	9.5	5.6	3.9	
Average per farm <sup>1</sup> .....	\$1,000.....	1,100	1,038	993	2,695	1,571	1,139	3,445	
Farm products sold.....	Bil. dol.....	23.4	16.3	15.0	1.3	7.0	3.9	3.2	
Average per farm.....	\$1,000.....	456	359	340	1,038	1,203	819	2,784	

<sup>1</sup>Based on a sample of farms.  
Source: U.S. Bureau of the Census, *Census of Agriculture: 1978*, vol. I.

## NO. 1145. FARMS—NUMBER AND ACREAGE, BY TENURE OF OPERATOR: 1959 TO 1978

[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
<b>Number of farms:</b>									
1959.....	1,000	1,371	2,119	811	760	100.0	57.1	21.9	20.5
1969.....	1,000	2,730	1,706	672	353	100.0	62.5	24.6	12.9
1974.....	1,000	2,314	1,424	628	262	100.0	61.5	27.2	11.3
1978.....	1,000	2,479	1,451	714	314	100.0	58.6	28.8	12.7
Under 50 acres.....	1,000	690	532	74	84	100.0	77.1	10.8	12.2
50-179 acres.....	1,000	814	553	157	94	100.0	69.2	19.3	11.5
180-499 acres.....	1,000	596	262	247	87	100.0	43.9	41.4	14.7
500-999 acres.....	1,000	215	57	128	30	100.0	26.5	59.5	14.0
1,000 acres or more.....	1,000	161	36	107	18	100.0	22.4	66.2	11.4
<b>Land in farms:</b>									
1959.....	Mil. acres.....	1,124	349	498	167	100.0	31.0	44.3	14.9
1969.....	Mil. acres.....	1,063	375	550	138	100.0	35.2	51.8	13.0
1974.....	Mil. acres.....	1,017	359	536	122	100.0	35.4	52.6	12.0
1978.....	Mil. acres.....	1,030	341	565	124	100.0	33.1	54.9	12.0

<sup>1</sup> Includes managers. In subsequent censuses, managers were included under other tenure categories. <sup>2</sup> Data by size of farm exclude abnormal farms; see footnote 2, table 1147.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1959, 1969, and 1974*, vol. II; and 1978, vol. I.

## NO. 1146. FARM OPERATORS—TENURE AND CHARACTERISTICS: 1974 AND 1978

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

TENURE AND CHARACTERISTIC	ALL FARMS		FARMS WITH SALES OF \$2,500 AND OVER		CHARACTERISTIC	ALL FARMS		FARMS WITH SALES OF \$2,500 AND OVER	
	1974 <sup>1</sup>	1978	1974 <sup>1</sup>	1978		1974 <sup>1</sup>	1978	1974 <sup>1</sup>	1978
	<b>Total operators.....</b>	<b>2,314</b>	<b>2,479</b>	<b>1,695</b>		<b>1,865</b>			
White.....	2,220	2,399	1,632	1,825	Principal occupation:				
Black and other.....	59	80	31	40	Farming.....	1,427	1,327	1,236	1,190
					Other.....	852	1,152	427	675
Under 25 years old.....	52	79	41	63	Place of residence: <sup>2</sup>				
25-34 years old.....	240	323	176	247	On farm operated.....	1,502	1,785	1,125	1,338
35-44 years old.....	400	465	291	354	On another farm.....	94		69	
45-54 years old.....	577	596	493	456	In rural area, not on a farm.....	67	442	45	340
55-64 years old.....	589	588	442	458	In urban area.....	210		146	
65 years old and over.....	421	408	280	286	Days worked off farm: <sup>2</sup>				
Average age (years).....	51.7	50.1	51.4	49.8	None.....	830	1,001	691	854
Full owner.....	1,424	1,451	904	962	Less than 100 days.....	197	264	147	222
Part owner.....	828	714	566	640	100-199 days.....	157	196	102	143
Tenant.....	262	314	225	263	200 days or more.....	658	905	347	547

<sup>1</sup> Except for tenure, data apply only to individual or family operations and partnerships. <sup>2</sup> Excludes not reported.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1974 and 1978*, vol. I.

## NO. 1147. FARMS—NUMBER, ACREAGE, AND VALUE OF SALES, BY SIZE OF SALES: 1978

ECONOMIC CLASS OF FARM (value of farm products sold)	Farms (1,000)	ACREAGE		VALUE OF SALES		PERCENT DISTRIBUTION		
		Total (mil.)	Average per farm	Total (mil. dol.)	Average per farm (\$1,000)	Farms	Acre- age, total	Value of sales, total
Sales of \$2,500 or more.....	1,865	927	497	107,164	57.5	100.0	100.0	100.0
\$2,500-\$4,999.....	332	37	112	1,191	9.6	17.8	4.0	1.1
\$5,000-\$9,999.....	331	56	168	2,361	7.1	17.7	6.0	2.2
\$10,000-\$19,999.....	310	84	272	4,425	14.3	16.6	9.1	4.1
\$20,000-\$39,999.....	306	133	435	8,788	28.7	16.4	14.3	6.2
\$40,000-\$99,999.....	364	245	675	23,059	63.5	19.5	26.4	21.5
\$100,000 and over.....	223	372	1,689	67,359	302.0	12.0	40.1	62.8
Sales less than \$2,500.....	612	47	77	705	1.2	100.0	100.0	100.0
Occupation—Farming <sup>1</sup> .....	135	(NA)	(NA)	(NA)	(NA)	22.1	(NA)	(NA)
Occupation—Other than farming <sup>1</sup> .....	476	(NA)	(NA)	(NA)	(NA)	77.8	(NA)	(NA)
Abnormal farms <sup>2</sup> .....	2	56	24,309	245	106.4	100.0	100.0	100.0

NA Not available. <sup>1</sup> Occupation determined by 50 percent or more of work time on farm or other occupation. <sup>2</sup> Represents institutional farms, experimental and research farms, Indian reservations, etc.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1978*, vol. I.

**NO. 1148. FARMS—NUMBER, ACREAGE, AND VALUE OF SALES, BY TYPE OF FARM: 1974 AND 1978**

[Covers farms with sales of \$2,500 or more. Farm was classified in a particular group if its sales for that product group amounted to 50 percent or more of the total value of farm products sold. The Standard Industrial Classification (SIC) code for each farm type is shown in parentheses]

ITEM AND YEAR	Unit	Total	Cash grain <sup>1</sup> (011)	Cotton (0131)	Tobacco (0132)	Live-stock <sup>2</sup> (021)	Dairy (024)	Poultry, eggs (025)	Fruit and nut (017)	Vegetable (016)	All other
<b>1974</b>											
Number of farms.....	1,000.....	1,695	580	31	85	494	196	43	51	20	185
Land in farms.....	Mil. acres.....	905.6	281.1	17.8	12.3	442.4	54.1	5.5	7.6	4.7	80.1
Products sold, value.....	Mil. dol.....	80,593	23,673	1,850	1,652	22,125	9,592	6,352	2,868	2,144	10,347
<b>Percent distribution:</b>											
Number of farms.....	Percent.....	100.0	34.2	1.8	5.6	29.1	11.6	2.5	3.0	1.2	10.9
Land in farms.....	Percent.....	100.0	31.0	2.0	1.4	48.9	6.0	.6	.8	.5	8.8
Products sold, value.....	Percent.....	100.0	29.4	2.3	2.0	27.4	11.9	7.9	3.5	2.7	12.8
<b>1978</b>											
Number of farms.....	1,000.....	1,865	526	30	108	705	167	42	58	26	204
With sales between \$2,500 and \$39,999.....	Percent.....	68.8	65.1	49.8	86.6	78.0	38.1	17.5	67.9	71.1	73.3
With sales of \$40,000 or more.....	Percent.....	31.4	34.9	50.2	13.4	22.0	61.9	82.5	32.1	28.9	26.7
Land in farms.....	Mil. acres.....	926.9	256.6	23.0	12.7	500.2	49.4	5.3	8.1	5.4	66.2
Products sold, value.....	Mil. dol.....	107,164	24,461	3,030	2,324	36,793	12,548	8,814	4,528	3,116	11,531
On farms with sales between \$2,500 and \$39,999.....	Percent.....	15.6	21.6	8.6	43.9	16.5	11.7	1.4	11.5	6.7	15.5
On farms with sales of \$40,000 or more.....	Percent.....	84.4	78.4	91.4	56.1	83.5	88.3	98.6	88.5	93.3	84.5
<b>Percent distribution:</b>											
Number of farms.....	Percent.....	100.0	28.2	1.6	5.8	37.8	9.0	2.3	3.1	1.4	10.9
Land in farms.....	Percent.....	100.0	27.7	2.5	1.4	54.0	5.3	.8	.9	.6	7.1
Products sold, value.....	Percent.....	100.0	22.8	2.8	2.2	34.3	11.7	8.2	4.2	2.9	10.8

<sup>1</sup>Includes wheat, rice, corn for grain, soybeans, and other cash grains not elsewhere classified. <sup>2</sup>Excludes dairy, poultry, and animal specialty farms.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1974* and *1978*, vol. I, and unpublished data.

**NO. 1149. FARMS—NUMBER, BY VALUE OF PRODUCTS SOLD, BY STATES: 1978**

DIVISION AND STATE	With sales less than \$2,500	WITH SALES OF—				DIVISION AND STATE	With sales less than \$2,500	WITH SALES OF—						
		\$2,500-\$9,999	\$10,000-\$39,999	\$40,000-\$99,999	\$100,000 or more			\$2,500-\$9,999	\$10,000-\$39,999	\$40,000-\$99,999	\$100,000 or more			
<b>U.S.</b> .....	<b>612,340</b>	<b>663,199</b>	<b>616,135</b>	<b>363,713</b>	<b>223,285</b>	<b>S.A.—Con.</b>								
<b>N.E.</b> .....	<b>11,267</b>	<b>6,527</b>	<b>4,960</b>	<b>4,364</b>	<b>2,918</b>	W. Va.....	10,955	6,818	1,897	506	356			
Maine.....	3,205	1,850	1,340	1,051	912	N.C.....	24,516	25,517	21,512	10,716	7,006			
N.H.....	1,507	855	406	318	202	S.C.....	14,478	9,115	5,442	2,347	2,048			
Vt.....	2,426	1,200	1,202	1,675	770	Ga.....	19,769	15,198	10,510	6,524	6,847			
Mass.....	2,013	1,565	1,126	698	489	Fla.....	15,949	11,824	8,432	3,638	4,225			
R.I.....	344	226	159	88	52	<b>E.S.C.</b> .....	<b>106,885</b>	<b>115,310</b>	<b>63,119</b>	<b>19,675</b>	<b>13,713</b>			
Conn.....	1,772	1,031	727	537	493	Ky.....	26,831	43,825	29,847	7,237	2,640			
<b>M.A.</b> .....	<b>33,248</b>	<b>29,845</b>	<b>24,861</b>	<b>21,417</b>	<b>9,739</b>	Tenn.....	33,496	39,171	17,174	4,609	2,586			
N.Y.....	14,293	10,751	9,721	10,033	4,475	Ala.....	22,892	17,215	9,789	4,488	4,119			
N.J.....	3,189	2,623	2,072	1,084	927	Miss.....	23,866	15,099	7,508	3,341	4,369			
Pa.....	15,766	16,471	13,068	10,300	4,337	<b>W.S.C.</b> .....	<b>115,156</b>	<b>119,958</b>	<b>74,859</b>	<b>34,039</b>	<b>27,316</b>			
<b>E.N.C.</b> .....	<b>86,251</b>	<b>110,825</b>	<b>128,434</b>	<b>83,965</b>	<b>42,995</b>	Ark.....	18,115	17,967	9,301	6,287	7,096			
Ohio.....	22,063	28,269	28,099	13,034	6,472	La.....	16,287	9,818	5,894	3,645	3,389			
Ind.....	16,765	23,710	25,422	14,020	8,510	Okla.....	20,707	26,969	20,410	7,574	3,728			
Ill.....	13,378	20,268	32,730	26,301	17,247	Tex.....	60,047	65,204	39,264	16,633	13,105			
Mich.....	20,421	19,882	15,817	7,810	4,307	<b>Mt.</b> .....	<b>29,996</b>	<b>29,169</b>	<b>33,237</b>	<b>20,300</b>	<b>14,996</b>			
Wis.....	13,624	18,696	28,366	22,800	6,459	Mont.....	3,487	4,645	7,502	5,700	2,735			
<b>W.N.C.</b> .....	<b>67,074</b>	<b>119,765</b>	<b>193,023</b>	<b>131,707</b>	<b>63,684</b>	Idaho.....	5,582	5,895	7,182	4,558	3,261			
Minn.....	15,224	18,540	33,336	24,900	9,963	Wyo.....	1,449	1,702	2,533	1,657	1,154			
Iowa.....	8,673	18,260	39,540	37,555	22,428	Colo.....	7,031	6,743	7,808	4,932	3,559			
Mo.....	24,054	39,656	35,664	15,624	6,957	N. Mex.....	5,025	3,718	2,781	1,378	1,351			
N. Dak.....	2,257	6,223	18,366	10,861	3,442	Ariz.....	2,593	1,578	1,222	701	1,566			
S. Dak.....	2,740	6,637	15,904	10,758	3,626	Utah.....	4,013	4,150	3,229	1,458	983			
Nebr.....	4,423	10,073	22,909	18,176	10,335	Nev.....	816	738	580	356	387			
Kans.....	9,703	18,376	27,284	13,833	6,933	<b>Pac.</b> .....	<b>52,901</b>	<b>37,294</b>	<b>29,480</b>	<b>17,486</b>	<b>21,608</b>			
<b>S.A.</b> .....	<b>109,562</b>	<b>94,506</b>	<b>64,163</b>	<b>30,758</b>	<b>26,284</b>	Wash.....	13,042	8,542	6,318	4,987	4,841			
Del.....	444	783	836	622	947	Oreg.....	13,798	9,068	5,742	3,146	2,888			
Md.....	5,041	5,249	3,868	2,367	2,202	Calif.....	24,503	18,194	16,409	9,022	13,578			
Va.....	18,410	20,002	11,566	4,038	2,853	Alaska.....	156	124	63	18	21			
						Hawaii.....	1,402	1,366	948	314	280			

Source: U.S. Bureau of the Census, *Census of Agriculture: 1978*, vol. I.

## NO. 1150. FARMS—NUMBER, ACREAGE, AND VALUE, BY STATES: 1969 TO 1978

[For composition of regions, see fig. 1, inside front cover. See also *Historical Statistics, Colonial Times to 1970*, series K 17-18]

REGION AND STATE	NUMBER OF FARMS (1,000)			ALL LAND IN FARMS (mil. acres)			AVERAGE ACREAGE PER FARM			TOTAL VALUE <sup>1</sup> (mil. dol.)		
	1969	1974	1978	1969	1974	1978	1969	1974	1978	1969	1974	1978
<b>U.S.</b> .....	<b>2,730</b>	<b>2,314</b>	<b>2,479</b>	<b>1,062.9</b>	<b>1,017.0</b>	<b>1,029.7</b>	<b>389</b>	<b>440</b>	<b>415</b>	<b>206,751</b>	<b>342,099</b>	<b>650,025</b>
Northeast.....	152	128	149	25.7	23.4	24.9	169	183	167	9,025	15,460	25,607
North Central.....	1,152	1,017	1,028	373.3	362.9	366.1	324	357	356	86,392	150,978	309,210
South.....	1,181	930	1,015	332.8	305.7	312.6	287	329	308	69,684	110,362	194,616
West.....	285	239	286	331.1	325.1	326.1	1,249	1,360	1,138	41,668	65,299	120,592
<b>N.E.</b> .....	<b>29</b>	<b>23</b>	<b>30</b>	<b>5.6</b>	<b>4.8</b>	<b>5.2</b>	<b>195</b>	<b>206</b>	<b>172</b>	<b>1,803</b>	<b>2,915</b>	<b>4,847</b>
Maine.....	8	6	8	1.8	1.5	1.6	221	237	197	283	519	883
N.H.....	3	2	3	.6	.5	.5	211	210	164	146	286	496
Vt.....	7	6	7	1.9	1.7	1.8	279	282	241	429	770	1,177
Mass.....	6	4	6	.7	.6	.7	123	134	115	396	578	995
R.I.....	1	1	1	.1	.1	.1	98	102	86	50	92	182
Conn.....	4	3	5	.5	.4	.5	121	129	110	499	671	1,114
<b>M.A.</b> .....	<b>123</b>	<b>104</b>	<b>119</b>	<b>20.1</b>	<b>18.6</b>	<b>19.7</b>	<b>163</b>	<b>178</b>	<b>165</b>	<b>7,222</b>	<b>12,545</b>	<b>20,760</b>
N.Y.....	52	44	49	10.1	9.4	9.9	196	215	201	2,772	4,800	6,701
N.J.....	8	7	10	1.0	1.0	1.0	122	130	106	1,131	1,737	2,828
Pa.....	63	53	60	8.9	8.2	8.7	142	154	146	3,319	6,008	11,232
<b>E.N.C.</b> .....	<b>513</b>	<b>445</b>	<b>452</b>	<b>94.6</b>	<b>90.0</b>	<b>92.4</b>	<b>184</b>	<b>202</b>	<b>204</b>	<b>36,683</b>	<b>61,400</b>	<b>133,193</b>
Ohio.....	111	92	96	17.1	15.7	16.1	154	170	168	6,819	11,056	23,922
Ind.....	101	88	88	17.6	16.8	17.0	173	191	193	7,136	12,078	27,163
Ill.....	124	111	110	29.9	29.1	29.7	242	262	270	14,643	24,628	55,529
Mich.....	78	64	68	11.9	10.8	11.4	153	169	168	3,883	5,989	11,144
Wis.....	99	89	90	18.1	17.6	18.1	183	197	201	4,201	7,655	15,435
<b>W.N.C.</b> .....	<b>639</b>	<b>573</b>	<b>575</b>	<b>278.7</b>	<b>272.9</b>	<b>273.7</b>	<b>436</b>	<b>477</b>	<b>476</b>	<b>49,711</b>	<b>89,572</b>	<b>176,017</b>
Minn.....	111	99	103	28.8	27.6	28.7	260	280	279	6,512	11,855	26,063
Iowa.....	140	126	126	33.6	33.0	33.6	289	262	266	13,150	23,754	52,395
Mo.....	137	116	122	32.4	29.3	30.8	237	258	253	7,269	11,811	22,805
N. Dak.....	46	43	41	43.1	42.4	42.0	930	992	1,021	4,045	8,268	14,689
S. Dak.....	46	43	40	45.6	46.0	44.5	997	1,074	1,123	3,815	6,656	11,529
Nebr.....	72	68	66	46.8	46.2	46.3	634	683	702	7,076	13,017	24,572
Kans.....	86	79	77	49.4	47.9	47.7	574	605	619	7,843	14,211	24,164
<b>S.A.</b> .....	<b>371</b>	<b>296</b>	<b>326</b>	<b>68.0</b>	<b>60.9</b>	<b>61.9</b>	<b>184</b>	<b>206</b>	<b>190</b>	<b>20,513</b>	<b>34,987</b>	<b>60,785</b>
Del.....	4	3	4	.7	.6	.7	182	185	187	336	612	982
Md.....	17	15	19	2.8	2.6	2.7	163	174	145	1,793	2,791	5,041
Va.....	65	59	57	10.7	9.7	10.0	165	184	175	3,047	5,396	9,922
W. Va.....	23	17	21	4.3	3.5	3.9	188	207	188	589	1,050	2,317
N.C.....	119	91	89	12.7	11.2	11.4	107	123	127	4,244	6,634	12,073
S.C.....	40	29	33	7.0	6.2	6.3	177	211	189	1,826	2,887	4,888
Georgia.....	67	55	59	15.8	13.9	13.7	234	253	234	3,701	6,576	10,666
Fla.....	36	32	44	14.0	13.2	13.3	394	407	302	4,976	9,041	15,496
<b>E.S.C.</b> .....	<b>392</b>	<b>306</b>	<b>319</b>	<b>60.7</b>	<b>53.7</b>	<b>53.6</b>	<b>155</b>	<b>175</b>	<b>168</b>	<b>14,540</b>	<b>22,006</b>	<b>41,194</b>
Ky.....	125	102	110	16.0	14.4	15.0	128	141	137	4,041	6,158	13,078
Tenn.....	121	94	97	15.1	13.1	13.2	124	140	136	4,028	6,117	11,342
Ala.....	72	57	58	13.7	11.9	11.5	188	209	201	2,725	4,310	7,376
Miss.....	73	54	54	16.0	14.3	13.9	221	267	256	3,746	5,421	9,399
<b>W.S.C.</b> .....	<b>399</b>	<b>328</b>	<b>371</b>	<b>204.1</b>	<b>191.0</b>	<b>197.1</b>	<b>511</b>	<b>582</b>	<b>531</b>	<b>34,611</b>	<b>53,369</b>	<b>92,637</b>
Ark.....	60	51	59	15.7	14.6	15.6	260	287	265	4,081	6,135	11,931
La.....	42	33	39	9.8	9.1	9.6	232	275	247	3,145	4,679	9,604
Okla.....	83	70	79	36.0	33.1	34.3	434	475	433	6,214	9,992	17,674
Tex.....	214	174	194	142.6	134.2	137.5	668	771	708	21,170	32,563	53,428
<b>Mt.</b> .....	<b>120</b>	<b>112</b>	<b>128</b>	<b>256.5</b>	<b>253.0</b>	<b>254.3</b>	<b>2,139</b>	<b>2,262</b>	<b>1,991</b>	<b>17,444</b>	<b>32,028</b>	<b>58,110</b>
Mont.....	25	23	24	62.9	62.2	62.3	2,522	2,665	2,545	3,749	6,952	12,264
Idaho.....	25	24	26	14.4	14.3	14.6	566	603	562	2,545	4,933	8,712
Wyo.....	9	8	8	35.5	34.3	33.7	4,014	4,274	3,989	1,445	2,751	4,880
Colo.....	28	26	30	36.7	35.9	35.5	1,313	1,408	1,197	3,471	6,734	11,496
N. Mex.....	12	11	14	46.8	47.0	48.3	4,020	4,170	3,989	1,960	3,649	6,869
Ariz.....	6	6	8	38.2	37.9	38.7	6,486	6,539	5,034	2,864	4,197	7,682
Utah.....	13	12	14	11.3	10.6	10.5	867	871	760	1,040	1,998	4,202
Nev.....	2	2	3	10.7	10.6	10.5	5,070	5,209	3,641	571	915	2,005
<b>Pac.</b> .....	<b>145</b>	<b>127</b>	<b>159</b>	<b>74.6</b>	<b>72.0</b>	<b>71.8</b>	<b>514</b>	<b>567</b>	<b>452</b>	<b>24,224</b>	<b>33,271</b>	<b>62,482</b>
Wash.....	34	29	38	17.6	16.7	17.0	516	567	451	3,930	5,928	11,858
Oreg.....	29	27	35	18.0	18.2	18.4	620	662	532	2,707	4,552	9,255
Calif.....	78	68	82	35.3	33.4	33.1	454	493	405	16,956	21,793	39,446
Alaska.....	(2)	(2)	(2)	1.6	1.6	1.3	4,832	5,612	3,859	20	69	140
Hawaii.....	4	3	4	2.1	2.1	2.0	528	702	461	611	1,029	1,784

Z Less than 500.

<sup>1</sup> Value of land and buildings. For 1978, based on reports for a sample of farms.Source: U.S. Bureau of the Census, *Census of Agriculture: 1974 and 1978*, vol. 1.

NO. 1151. FARMS, LAND IN FARMS AND DEBT STATUS, BY OPERATOR CHARACTERISTICS: 1979

[Based on the 1979 Survey of Farm Finance, a sample survey conducted as part of the 1978 Census of Agriculture. Survey was taken in 1980 to cover calendar year 1979]

CHARACTERISTIC	Number of farms (1,000)	LAND IN FARMS (millions)			Percent of operators with debt	Real estate debt as percent of value of land and bldgs. <sup>1</sup>	Non-real estate debt as percent of net cash farm income <sup>2</sup>
		Total acres	Acres owned	Acres rented			
<b>Total</b> .....	<b>2,354</b>	<b>928.4</b>	<b>552.9</b>	<b>375.5</b>	<b>53.8</b>	<b>27.1</b>	<b>248.4</b>
Full owner.....	1,424	279.0	279.0	(x)	45.9	25.0	193.1
Part owner.....	647	542.4	273.9	268.4	71.8	29.0	254.3
Tenant <sup>3</sup> .....	283	107.0	(x)	107.0	52.2	(x)	386.4
Cash.....	108	45.0	(x)	45.0	53.0	(x)	369.5
Share-cash <sup>4</sup> .....	41	25.5	(x)	25.5	73.4	(x)	1,234.7
Share <sup>5</sup> .....	102	31.0	(x)	31.0	51.4	(x)	267.3
Individual or family.....	2,079	657.1	393.8	263.3	52.7	26.8	267.5
Partnership.....	217	152.7	84.4	88.2	60.0	27.0	229.7
Corporation.....	52	113.9	71.6	42.4	72.8	29.3	206.3
Other.....	7	4.7	3.1	1.6	31.0	16.5	136.9
Less than 50 acres.....	655	13.3	11.4	1.9	42.1	31.9	212.8
50-99 acres.....	380	27.6	22.9	4.7	44.3	28.7	243.4
100-179 acres.....	401	54.5	42.2	12.3	49.1	27.3	221.8
180-259 acres.....	220	47.7	34.1	13.6	54.9	28.6	225.2
260-499 acres.....	347	124.9	74.6	50.3	66.7	25.4	238.2
500-999 acres.....	198	136.3	72.5	63.9	76.7	26.9	233.9
1,000-1,999 acres.....	94	128.0	65.9	62.1	78.9	27.5	370.2
2,000 acres or more.....	59	396.2	229.4	166.8	79.0	25.8	239.5

X Not applicable. <sup>1</sup>For operators with real estate debt. Only owned land and buildings operated are included. <sup>2</sup>For operators with non-real estate debt. <sup>3</sup>Includes other types, not shown separately. <sup>4</sup>Share-cash tenants pay part of the rent in cash and part in a share of the crops and/or of the livestock and livestock products. <sup>5</sup>Share tenants pay a share of the crops and/or a share of the livestock or livestock products.

Source: U.S. Bureau of the Census, 1978 Census of Agriculture, Volume 5, Special Reports, Part 6, 1979 Farm Finance Survey.

NO. 1152. IRRIGATION OF AGRICULTURAL LAND—SUMMARY: 1950 TO 1978

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

ITEM	Unit	17 WESTERN STATES AND LA.					ALL STATES		
		1950	1959	1969	1974	1978	1969	1974	1978
Approximate land area.....	Mil. acres.....	1,191	1,189	1,187	1,187	1,187	2,264	2,264	2,266
Farms, total.....	1,000.....	1,430	1,044	850	745	798	2,730	2,314	2,479
Irrigated.....	1,000.....	289	267	210	197	239	257	237	303
Percent irrigated of total farms.....	Percent.....	20.2	25.6	24.7	26.4	29.9	9.4	10.2	12.2
Land in farms, total.....	Mil. acres.....	699	715	700	680	685	1,063	1,017	1,030
In irrigated farms.....	Mil. acres.....	168	213	218	211	228	238	229	253
Land irrigated, total.....	Mil. acres.....	25	31	35	37	44	39	41	51
Percent irrigated of total farms.....	Percent.....	3.6	4.3	5.0	5.4	6.4	3.7	4.0	4.9

Source: U.S. Bureau of the Census, Census of Agriculture: 1950, 1959, 1969, 1974, and 1978, Irrigation of Agricultural Lands.

NO. 1153. FEDERAL IRRIGATION PROJECTS, BY TYPE OF SERVICE: 1960 TO 1980

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980
All projects: Irrigable acreage.....	1,000.....	8,171	9,612	10,198	10,930	11,061	11,234	11,409	12,236	11,944
Irrigated acreage.....	1,000.....	6,900	8,012	9,570	9,309	9,463	9,132	9,576	10,234	10,093
Gross crop value.....	Mil. dol.....	1,158	1,557	1,882	4,419	4,336	4,395	4,993	6,909	7,438
Full service: <sup>1</sup> Irrigable acreage.....	1,000.....	4,326	4,540	4,844	4,925	4,957	4,974	5,012	5,076	5,082
Irrigated acreage.....	1,000.....	3,488	3,731	4,037	4,213	4,249	4,206	4,222	4,254	4,275
Gross crop value.....	Mil. dol.....	581	675	847	1,858	1,846	1,771	2,036	2,348	2,658
Supplemental and temporary service: <sup>2</sup>										
Irrigable acreage.....	1,000.....	3,845	5,072	5,354	6,005	6,104	6,260	6,397	7,160	6,862
Irrigated acreage.....	1,000.....	3,412	4,281	4,533	5,096	5,214	4,926	5,354	5,980	5,818
Gross crop value.....	Mil. dol.....	577	882	1,035	2,561	2,480	2,624	2,957	4,561	4,770

<sup>1</sup>Applies to irrigable land receiving its sole irrigation supply through Bureau of Reclamation-constructed facilities and to previously irrigated land in non-Federal projects where a substantial part of the facilities was constructed, rehabilitated, or replaced by the Bureau. <sup>2</sup>Applies to irrigable land receiving irrigation water through Bureau projects in addition to supply from non-project sources and to land for which water is delivered under temporary arrangements.

Source: U.S. Bureau of Reclamation, Annual Report.

No. 1154. LAND UTILIZATION, BY TYPE: 1950 TO 1978

[1950 excludes Alaska and Hawaii. See *Historical Statistics, Colonial Times to 1970*, series J 50-65, for similar data]

TYPE	LAND (mil. acres)					PERCENT				
	1950	1959	1969	1974	1978	1950	1959	1969	1974	1978
<b>Total land area</b> .....	<b>1,904</b>	<b>2,271</b>	<b>2,264</b>	<b>2,264</b>	<b>2,264</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Cropland used for crops <sup>1</sup> .....	377	359	333	361	369	19.8	15.8	14.7	16.0	16.3
Idle cropland.....	32	33	51	21	28	1.7	1.5	2.3	.9	1.1
Cropland used only for pasture.....	69	66	88	83	76	3.6	2.9	3.9	3.7	3.4
Grassland pasture <sup>2</sup> .....	631	693	604	588	587	33.1	27.9	26.7	26.4	25.9
Forest land <sup>3</sup> .....	601	728	723	718	703	31.6	32.1	31.9	31.7	31.1
Special uses.....	115	146	172	182	158	6.0	6.4	7.6	8.0	7.0
Urban areas <sup>4</sup> .....	15	24	31	35	( <sup>5</sup> )	.8	1.1	1.4	1.5	( <sup>6</sup> )
Transportation areas <sup>6</sup> .....	24	25	26	26	27	1.2	1.1	1.2	1.2	1.2
Recreation areas <sup>7</sup> .....	32	44	49	52	57	1.7	1.9	2.2	2.3	2.5
Wildlife areas <sup>8</sup> .....	9	17	32	36	41	.5	.8	1.4	1.6	1.8
National defense and industrial <sup>9</sup> .....	23	26	26	25	25	1.2	1.1	1.1	1.1	1.1
Farmsteads, farm roads, and lanes.....	12	10	8	8	8	.6	.4	.4	.4	.4
Other land <sup>10</sup> .....	79	306	293	301	<sup>5</sup> 345	4.2	13.5	12.9	13.2	<sup>4</sup> 15.2

<sup>1</sup>Cropland harvested, crop failure, and cultivated summer fallow. <sup>2</sup>Grassland and other nonforest pasture and range. <sup>3</sup>Excludes reserve forest land in parks and other special uses of land. Includes forest grazing land. <sup>4</sup>Estimated area in urbanized areas and places of 2,500 or more population outside urbanized areas. <sup>5</sup>Data for urban areas included in other land. <sup>6</sup>Represents rural highway, road, and railroad rights-of-way, and airports. <sup>7</sup>Area in National and State parks and related recreation areas, including area in national wilderness and primitive areas. <sup>8</sup>Acres administered by Federal and State agencies primarily for wildlife protection and propagation. <sup>9</sup>Areas administered by the Dept. of Defense for military purposes and by the Energy Research and Development Administration. <sup>10</sup>Miscellaneous areas such as marshes, open swamps, bare rock area, deserts, and tundra, and various other uses not inventoried.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Major Uses of Land in the United States: 1978*, AER 487.

No. 1155. AVAILABILITY OF NONFEDERAL LAND FOR AGRICULTURE: 1977

[In millions of acres. Agricultural lands represent lands currently used to produce agricultural commodities. Data are based on National Agricultural Lands Study; for details, contact source]

STATE	LAND AVAILABLE FOR AGRICULTURE				Land not available for agriculture	STATE	LAND AVAILABLE FOR AGRICULTURE				Land not available for agriculture
	Total <sup>1</sup>	Crop-land	Range-land	Forest land			Total <sup>1</sup>	Crop-land	Range-land	Forest land	
<b>U.S.</b> .....	<b>1,359</b>	<b>413</b>	<b>414</b>	<b>376</b>	<b>153</b>	Mo.....	39	15	(z)	11	3
Ala.....	29	4	-	20	3	Mont.....	64	15	39	6	2
Alaska.....	13	(z)	6	7	1	Nebr.....	47	21	22	(z)	2
Ariz.....	38	1	35	2	2	Nev.....	9	1	7	(z)	2
Ark.....	28	8	(z)	14	2	N.H.....	4	(z)	-	4	1
Calif.....	39	10	18	10	15	N.J.....	3	1	-	2	2
Colo.....	40	11	24	3	3	N. Mex.....	48	2	42	3	3
Conn.....	2	(z)	-	1	1	N.Y.....	25	6	-	15	6
Del.....	1	1	-	(z)	(z)	N.C.....	25	6	-	17	4
Fla.....	24	3	3	12	8	N. Dak.....	41	27	11	(z)	2
Ga.....	32	6	-	22	4	Ohio.....	21	12	-	6	5
Hawaii.....	3	(z)	-	1	1	Okla.....	40	12	15	5	2
Idaho.....	18	6	7	4	1	Oreg.....	27	5	10	10	2
Ill.....	31	24	-	3	4	Pa.....	23	6	-	14	6
Ind.....	20	13	-	4	3	R.I.....	(z)	(z)	-	(z)	(z)
Iowa.....	33	26	-	1	2	S.C.....	15	3	-	11	3
Kans.....	49	29	16	1	2	S. Dak.....	44	18	22	(z)	2
Ky.....	22	5	-	11	2	Tenn.....	22	5	-	12	3
La.....	22	6	(z)	13	6	Texas.....	155	30	95	9	10
Maine.....	18	1	-	17	2	Utah.....	13	2	9	1	4
Md.....	4	2	-	2	2	Vt.....	5	1	-	4	1
Mass.....	3	(z)	-	3	2	Va.....	20	3	-	13	3
Mich.....	27	9	-	15	6	Wash.....	28	8	6	12	2
Minn.....	41	23	(z)	14	6	W. Va.....	13	1	-	10	1
Miss.....	26	7	(z)	14	3	Wis.....	29	12	(z)	13	4
						Wyo.....	31	3	26	1	2

- Represents zero. Z Less than 500,000 acres. <sup>1</sup>Includes pastureland and other land in farms not shown separately.  
Source: U.S. Dept. of Agriculture, Soil Conservation Service, *Resources Conservation Act Appraisal*, 1980.

NO. 1156. FARM AND RANCH LAND—OWNERS AND ACREAGE BY CHARACTERISTICS: 1978

[Covers cropland, pastureland, woodland, wasteland, and farmsteads. Based on a land area sample and subject to sampling variability; for details, see source, Estimate of number of owners is more nearly an estimate of number of individual ownership units or entities that owned land with certain characteristics]

CHARACTERISTIC	OWNERS		ACREAGE		CHARACTERISTIC	OWNERS		ACREAGE	
	Number (1,000)	Per cent	Amount (mil.)	Per cent		Number (1,000)	Per cent	Amount (mil.)	Per cent
<b>Total</b> .....	<b>6,877</b>	<b>100.0</b>	<b>938.0</b>	<b>100.0</b>	<b>Size of holding:</b>				
Sole proprietor.....	3,032	44.1	336.0	35.8	1-9 acres.....	2,015	29.3	7.3	.8
Husband-wife.....	3,016	43.9	334.8	35.7	10-49 acres.....	1,926	28.0	48.0	5.1
Family partnership.....	423	6.2	113.9	12.1	50-99 acres.....	989	14.4	71.0	7.6
Family corporation.....	107	1.5	61.7	6.6	100-179 acres.....	880	12.8	120.3	12.8
Nonfamily partnership.....	97	1.4	18.4	2.0	180-499 acres.....	770	11.2	221.6	23.6
Nonfamily corporation.....	71	1.0	36.9	3.9	500 acres or more.....	297	4.3	469.8	50.1
Other.....	131	1.9	36.3	3.9	<b>Method of acquisition:</b>				
Occupation: <sup>1</sup>					Purchase from nonrelative.....	4,355	63.3	535.6	57.1
Farmer.....	1,702	24.7	478.3	51.0	Purchase from relative.....	1,333	19.4	172.6	18.4
White collar worker.....	1,440	20.9	119.8	12.8	Inherited or gift.....	1,142	16.6	211.9	22.6
Blue collar worker.....	1,517	22.1	67.6	7.2	Other.....	47	.7	17.8	1.9
Retired.....	1,593	23.2	140.7	15.0					
Other.....	381	5.5	36.4	3.9					

<sup>1</sup> Excludes corporations and other business entities.  
Source: U.S. Dept. of Agriculture, Economic Research Service, unpublished data.

NO. 1157. FOREIGN OWNERSHIP OF U.S. AGRICULTURAL LAND: 1981

[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" because another "foreign person" holds at least a 5 percent or more 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, 1981]

CHARACTERISTIC	ACREAGE OWNED <sup>1</sup>		ACREAGE ACQUIRED <sup>2</sup>		CHARACTERISTIC	ACREAGE OWNED <sup>1</sup>		ACREAGE ACQUIRED <sup>2</sup>	
	Total	Percent	Total	Percent		Total	Percent	Total	Percent
<b>Total</b> <sup>3</sup> .....	<b>12,710</b>	<b>100.0</b>	<b>2,888</b>	<b>100.0</b>	<b>Country of foreign owner:</b>				
Type of owner:					Canada.....	1,382	10.9	57	2.0
Corporation.....	10,763	84.7	2,458	85.1	Germany, Fed. Rep.....	605	4.8	108	3.7
Partnership.....	1,073	8.4	319	11.0	Hong Kong.....	175	1.4	-	-
Individual.....	744	5.9	96	3.3	Mexico.....	206	1.6	-	-
Other.....	129	1.0	15	.5	Netherlands Antilles.....	526	4.1	27	1.0
Size of holding:					Switzerland.....	180	1.4	31	1.1
Less than 100 acres.....	106	.8	10	.3	United Kingdom.....	328	2.6	8	.3
100-299 acres.....	235	1.9	33	1.1	Through U.S. interest: <sup>4</sup>				
300-999 acres.....	673	5.3	85	2.9	Canada.....	2,653	20.9	2,121	73.4
1,000 acres or more.....	11,696	92.0	2,760	95.6	France.....	1,974	15.5	17	.6
Land use:					Germany, Fed. Rep.....	435	3.4	18	.6
Cropland.....	1,664	13.1	147	5.1	Luxembourg.....	243	1.9	3	.1
Pasture.....	2,787	21.9	269	9.3	Netherlands.....	221	1.7	85	2.9
Forest.....	7,164	56.4	2,400	83.1	Netherlands Antilles.....	463	3.6	15	.5
Other agriculture.....	518	4.1	42	1.5	United Kingdom.....	1,443	11.4	67	2.3
Other nonagriculture.....	574	4.5	30	1.0					

- Represents zero. <sup>1</sup> Landholdings by foreign interests as of Dec. 31. <sup>2</sup> Acquisitions by foreign interests from Jan. 1-Dec. 31, 1981. <sup>3</sup> Includes other items not shown separately. <sup>4</sup> 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, 1981* (Economic Research Service Staff Report AGES 820409), 1982.

NO. 1158. AGRICULTURAL SERVICES—SUMMARY: 1974 AND 1978

SIC code <sup>1</sup>	TYPE OF SERVICE	ESTABLISHMENTS		GROSS RECEIPTS (mil. dol.)		PAID EMPLOYEES (1,000)		PAYROLL (mil. dol.)	
		1974	1978	1974	1978	1974	1978	1974	1978
		07	<b>Agricultural services</b> .....	<b>61,347</b>	<b>93,120</b>	<b>3,555</b>	<b>7,251</b>	<b>501</b>	<b>994</b>
071	Soil preparation services.....	730	1,478	41	85	3	9	11	31
072	Crop services.....	5,140	9,850	720	1,676	109	199	197	498
074	Veterinary services.....	10,452	15,551	888	1,549	52	88	259	510
0741	Cattle, hogs, sheep, goats, and poultry.....	3,081	4,021	206	331	10	15	47	84
0742	Dogs, cats, horses, bees, fish, rabbits, other pets <sup>2</sup> .....	7,371	11,530	682	1,218	42	73	211	426
075	Animal services, except veterinary.....	10,502	10,890	298	634	29	57	88	178
078	Farm labor and management services.....	905	2,769	286	667	161	361	166	386
078	Landscape and horticultural services.....	33,618	46,584	1,342	2,640	146	280	487	947

<sup>1</sup> Standard Industrial Classification Code. <sup>2</sup> Includes birds (exc. poultry) and other furbearing animals.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1978*, vol. III.

No. 1159. FARM REAL ESTATE—SUMMARY: 1960 TO 1982

[Through 1975, value data as of Mar. 1, 1976-1981, as of Feb. 1, 1982, as of April 1. Excludes Alaska and Hawaii. 1960-1970, value data based on 1969 census definition of farms and farmland; beginning 1975, based on 1974 census definition, see text, p. 647]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981	1982
Total value	Bil. dol.	136.8	167.0	215.0	358.6	416.8	495.0	553.0	653.1	753.6	827.6	821.5
Land	Bil. dol.	104.5	132.6	175.5	296.8	345.7	410.8	459.7	544.3	630.2	693.6	692.0
Buildings	Bil. dol.	32.3	34.4	39.5	61.8	71.1	84.2	93.3	108.8	123.4	134.0	129.5
Avg. value per acre <sup>1</sup>	Dollars	117	147	196	340	397	474	531	628	725	795	788
Index	1977 = 100	24	31	42	75	86	100	109	125	145	158	157
Avg. value, operating unit	\$1,000	34.6	49.9	73.0	142.5	167.2	201.9	227.4	269.3	311.0	340.4	337.7
Farm real estate sales <sup>2</sup>	1,000	(NA)	<sup>3</sup> 113.6	89.0	88.9	76.0	74.5	70.8	68.2	68.3	61.4	(NA)
Acres sold	Million	(NA)	<sup>3</sup> 26.5	22.0	24.7	21.0	20.6	22.5	22.8	21.1	18.1	(NA)
Value	Bil. dol.	(NA)	<sup>3</sup> 5.3	5.4	10.6	11.0	13.4	12.9	14.1	16.5	15.4	(NA)

NA Not available. <sup>1</sup>Land and buildings. <sup>2</sup>Voluntary and estate sales of 10 acres or more. <sup>3</sup>1966 data.  
Source: U.S. Dept. of Agriculture, Economic Research Service, *Farm Real Estate Market Developments*, annual.

No. 1160. FARM REAL ESTATE—VALUE OF LAND AND BUILDINGS, BY STATES: 1975 TO 1982

[See headnote, table 1159, See also *Historical Statistics, Colonial Times to 1970*, series K 18]

STATE	VALUE OF LAND AND BUILDINGS (mil. dol.)				AVERAGE VALUE OF LAND AND BUILDINGS, PER ACRE				INDEXES OF AVERAGE VALUE PER ACRE (1977 = 100)			
	1975	1980	1981	1982	1975	1980	1981	1982	1975	1980	1981	1982
U.S.	358,640	753,608	827,621	821,455	\$340	\$725	\$795	\$788	75	145	158	157
Ala.	4,878	10,055	11,594	11,248	364	792	935	922	85	149	176	174
Ariz.	4,440	10,260	10,998	11,642	111	264	282	294	93	167	179	186
Ark.	7,123	15,201	17,294	17,885	419	921	1,061	1,104	80	163	188	196
Calif.	22,398	48,345	68,990	65,151	653	1,426	1,735	1,905	98	166	201	221
Colo.	7,050	13,737	15,244	15,587	188	376	412	419	73	147	161	164
Conn. <sup>1</sup>	747	1,173	1,266	1,343	1,524	2,394	2,533	2,634	85	135	143	149
Del.	670	1,141	1,198	1,078	971	1,755	1,843	1,859	72	151	158	143
Fla. <sup>2</sup>	9,590	18,112	19,591	18,616	685	1,352	1,507	1,432	89	141	157	149
Ga.	7,110	13,460	14,182	13,051	474	868	915	842	93	132	139	128
Idaho	5,221	10,301	10,827	11,370	339	669	717	753	82	134	144	151
Ill.	24,619	57,976	61,857	56,260	846	2,013	2,133	1,940	59	135	144	131
Ind.	12,312	30,791	33,327	29,155	720	1,833	1,972	1,715	62	150	161	140
Iowa	24,518	61,207	65,606	60,908	719	1,811	1,941	1,802	59	139	150	139
Kans.	14,415	27,685	28,615	28,372	296	573	590	585	80	134	137	136
Ky.	6,320	13,942	14,469	14,442	427	955	991	996	72	147	153	154
La.	5,325	13,007	15,342	15,261	512	1,288	1,519	1,511	88	169	200	199
Maine <sup>1</sup>	540	934	979	1,018	341	578	612	636	85	135	143	149
Md.	3,127	6,190	7,157	6,886	1,060	2,251	2,555	2,416	79	166	188	178
Mass. <sup>1</sup>	673	1,055	1,083	1,092	961	1,551	1,641	1,707	85	135	143	149
Mich.	6,360	12,331	14,168	13,827	553	1,082	1,232	1,192	72	138	157	152
Minn.	12,956	31,832	37,669	36,628	429	1,061	1,231	1,197	65	154	179	174
Miss.	5,875	12,050	15,286	14,600	379	825	1,047	1,000	94	156	198	189
Mo.	12,830	27,660	30,112	28,253	396	878	941	872	75	154	165	153
Mont.	6,966	14,230	14,961	16,053	112	229	239	254	74	142	148	157
Nebr.	13,508	28,623	31,482	29,860	282	600	660	626	70	137	151	143
Nev.	764	2,276	2,412	2,510	85	253	271	282	97	178	190	199
N.H. <sup>1</sup>	290	539	570	592	563	989	1,045	1,087	85	135	143	149
N.J.	1,870	2,984	3,088	3,212	1,807	2,925	2,998	3,118	90	120	123	128
N. Mex.	3,666	8,870	9,683	10,065	78	190	203	211	87	166	178	185
N.Y.	5,408	6,656	7,415	7,781	510	708	749	786	88	119	126	132
N.C.	7,257	14,221	15,173	14,252	590	1,215	1,331	1,284	88	141	155	149
N. Dak.	8,249	16,627	17,639	18,181	195	399	423	436	76	136	145	149
Ohio	11,790	27,347	28,150	29,879	706	1,678	1,727	1,474	63	156	160	137
Okl.	10,721	20,899	22,707	23,734	302	804	862	896	82	143	156	164
Oreg.	4,650	10,067	11,011	11,181	250	556	605	611	90	132	144	145
Pa.	7,046	12,633	12,878	11,855	734	1,404	1,447	1,332	75	140	144	133
R.I. <sup>1</sup>	113	191	216	224	1,507	2,547	2,696	2,804	85	135	143	149
S.C.	3,176	5,627	5,859	5,600	467	879	930	918	88	130	137	136
S. Dak.	6,583	12,271	13,050	13,095	145	273	290	291	75	141	150	150
Tenn.	6,538	12,959	13,824	13,025	467	953	1,024	972	86	136	146	138
Tex.	34,020	62,120	68,142	79,718	243	448	492	576	85	144	158	185
Utah	2,369	6,680	7,031	7,257	188	530	567	590	80	169	181	188
Vt. <sup>1</sup>	818	1,235	1,352	1,414	462	710	751	781	85	135	143	149
Va.	5,636	9,891	10,584	10,192	558	1,009	1,080	1,040	83	139	149	143
Wash.	5,835	11,671	14,006	14,652	350	725	854	888	72	124	146	152
W. Va.	1,290	2,959	3,192	3,565	300	705	751	829	76	150	160	177
Wis.	8,376	18,232	20,553	19,850	434	980	1,105	1,073	75	159	179	174
Wyo.	2,808	5,357	5,789	6,035	80	153	164	170	80	126	135	140

<sup>1</sup>Dollar values based on average rate of change for region. For New England States, index based on weighted average.

<sup>2</sup>Indexes based on percentage change in Georgia and Alabama. Dollar value based on the resulting index.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Farm Real Estate Market Developments*, annual.

NO. 1161. BALANCE SHEET OF THE FARMING SECTOR: 1960 TO 1982

[In billions of dollars, except percent. As of January 1, includes farm households. See also *Historical Statistics, Colonial Times to 1970*, series K 204-219, for data before revisions]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981	1982, pref.
<b>Assets</b> .....	<b>210.3</b>	<b>243.8</b>	<b>314.9</b>	<b>478.5</b>	<b>502.6</b>	<b>576.3</b>	<b>664.2</b>	<b>736.3</b>	<b>873.4</b>	<b>1,004.8</b>	<b>1,091.1</b>	<b>1,091.8</b>
Annual percent increase <sup>1</sup> .....	4.5	3.0	5.3	11.0	5.3	14.4	15.2	11.0	18.5	15.0	8.6	.1
<b>Physical assets:</b>												
Real estate.....	137.2	167.5	215.8	327.7	359.7	418.1	496.4	554.7	655.0	755.9	830.0	823.8
Non-real estate:												
Livestock <sup>2</sup> .....	15.3	14.5	23.5	42.4	24.5	29.4	29.0	31.9	51.3	61.4	60.8	53.6
Machinery, motor vehicles.....	22.7	24.8	32.3	44.2	54.7	64.0	71.0	76.9	85.1	96.8	102.8	111.4
Crops stored <sup>3</sup> .....	7.7	9.2	10.9	22.0	23.3	21.3	22.1	24.4	28.0	33.5	35.9	36.5
Household furnishings, equipment.....	9.2	8.4	9.6	12.3	11.2	11.7	12.1	13.8	16.0	17.2	19.4	21.7
<b>Financial assets:</b>												
Deposits and currency.....	9.2	9.6	11.9	14.9	14.0	14.5	14.8	15.2	15.5	15.9	16.2	16.8
United States savings bonds.....	4.7	4.2	3.7	4.2	3.8	3.9	3.8	3.9	4.2	4.0	3.8	3.6
Investments in cooperatives.....	4.2	5.6	7.2	10.8	11.4	13.4	14.9	15.2	18.3	20.2	22.2	24.4
<b>Claims</b> .....	<b>210.3</b>	<b>243.8</b>	<b>314.9</b>	<b>478.5</b>	<b>502.6</b>	<b>576.3</b>	<b>664.2</b>	<b>736.3</b>	<b>873.4</b>	<b>1,004.8</b>	<b>1,091.1</b>	<b>1,091.8</b>
<b>Liabilities</b> .....	<b>24.8</b>	<b>36.8</b>	<b>53.0</b>	<b>74.1</b>	<b>81.8</b>	<b>90.8</b>	<b>102.7</b>	<b>119.3</b>	<b>136.5</b>	<b>158.5</b>	<b>175.2</b>	<b>194.9</b>
Real estate debt.....	12.1	18.9	29.2	41.3	46.3	51.1	56.6	63.6	70.8	82.7	92.0	102.0
Non-real estate debt to—												
Commodity Credit Corp. <sup>4</sup> .....	1.2	1.5	2.7	.8	.3	.4	1.0	4.5	5.7	5.1	5.0	8.0
Other reporting agencies <sup>5</sup> .....	6.6	10.0	15.8	26.2	29.2	33.1	37.8	42.7	49.6	59.0	64.2	69.8
Non-reporting creditors <sup>6</sup> .....	4.9	6.3	5.3	5.9	6.0	6.3	7.3	8.4	10.4	11.7	14.0	15.0
Proprietors' equities.....	185.4	207.0	261.9	404.4	420.8	485.5	561.6	617.0	736.9	846.3	915.9	896.9

<sup>1</sup>Average change from prior year shown; for 1960, change from 1955. For explanation of average annual percent change, see Guide to Tabular Presentation. <sup>2</sup>Beginning 1965, excludes horses and mules. <sup>3</sup>Includes all crops held on farms and crops held off farms by farmers as security for CCC loans. <sup>4</sup>Nonrecourse CCC loans secured by crops owned by farmers are included as assets in this balance sheet. <sup>5</sup>Loans of all operating banks, production credit associations, and Farmers Home Administration, and discounts of Federal intermediate credit banks for agricultural credit corporations and livestock loan companies. <sup>6</sup>Loans and credits extended by dealers, merchants, finance companies, individuals, and others. Estimates based on fragmentary data.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

NO. 1162. GROSS FARM PRODUCT—SUMMARY: 1960 TO 1981

[In billions of dollars. For definition of gross product and current and constant dollars, see text, pp. 415-417. Minus sign (–) denotes decrease. See *Historical Statistics, Colonial Times to 1970*, series K 220-239, for single-year figures prior to minor revisions issued in 1981]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981	
<b>CURRENT DOLLARS</b>												
<b>Total value of farm output</b> <sup>1</sup> .....	<b>38.2</b>	<b>44.1</b>	<b>54.9</b>	<b>97.8</b>	<b>99.5</b>	<b>101.1</b>	<b>106.8</b>	<b>124.2</b>	<b>149.9</b>	<b>149.3</b>	<b>164.8</b>	
Farm marketings cash receipts <sup>2</sup> .....	34.4	39.4	50.4	92.7	88.1	94.5	96.0	112.5	131.7	139.5	143.5	
Farm products consumed <sup>3</sup> .....	1.2	.8	.8	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2	
Change in farm inventories.....	.3	1.0	.1	–1.8	3.5	–2.0	1.1	1.1	5.7	–4.3	5.5	
Gross rental value of farm housing.....	2.1	2.5	3.0	4.7	5.4	6.0	7.3	8.2	9.8	11.4	12.7	
Less: Intermediate products purchased.....	18.0	22.2	29.1	50.1	50.7	55.2	58.4	65.5	78.4	84.0	89.0	
<b>Equals: Gross farm product</b> .....	<b>20.2</b>	<b>21.9</b>	<b>25.8</b>	<b>47.7</b>	<b>48.9</b>	<b>45.9</b>	<b>48.4</b>	<b>58.7</b>	<b>71.6</b>	<b>65.4</b>	<b>75.8</b>	
Less: Capital consumption allowances <sup>4</sup> .....	3.7	4.2	5.9	8.5	10.1	11.1	12.6	14.2	16.3	18.3	20.8	
Indirect business taxes.....	1.3	1.5	2.0	2.3	2.5	2.7	2.8	3.0	3.2	3.5	3.5	
Plus: Subsidies to farm operators.....	.6	2.1	3.3	.5	.7	.6	1.6	2.7	1.2	1.1	1.7	
<b>Equals: Income</b> .....	<b>15.8</b>	<b>18.4</b>	<b>21.2</b>	<b>37.4</b>	<b>37.0</b>	<b>32.7</b>	<b>34.6</b>	<b>44.4</b>	<b>53.4</b>	<b>44.4</b>	<b>53.2</b>	
<b>CONSTANT (1972) DOLLARS</b>												
<b>Total value of farm output</b> <sup>1</sup> .....	<b>51.9</b>	<b>56.9</b>	<b>63.1</b>	<b>65.1</b>	<b>65.9</b>	<b>66.7</b>	<b>69.6</b>	<b>71.2</b>	<b>74.4</b>	<b>72.2</b>	<b>76.0</b>	
Farm marketings cash receipts <sup>2</sup> .....	45.4	50.2	57.6	60.4	59.8	63.7	65.4	67.0	67.9	70.6	70.4	
Farm products consumed <sup>3</sup> .....	1.7	1.1	.8	1.0	1.0	1.0	.8	.7	.7	.6	.6	
Change in farm inventories.....	.3	1.2	.4	–.3	1.2	–1.9	–.3	–	2.4	–2.1	2.1	
Gross rental value of farm housing.....	4.1	3.9	3.7	3.3	3.2	3.1	3.0	2.8	2.8	2.4	2.1	
Less: Intermediate products purchased.....	22.7	27.1	32.0	33.3	32.3	34.6	36.5	38.6	40.3	38.0	37.6	
<b>Equals: Gross farm product</b> .....	<b>29.2</b>	<b>29.8</b>	<b>31.1</b>	<b>31.8</b>	<b>33.6</b>	<b>32.1</b>	<b>33.1</b>	<b>32.6</b>	<b>34.2</b>	<b>34.2</b>	<b>38.4</b>	

– Represents zero. <sup>1</sup>Includes other farm income not shown separately. <sup>2</sup>Includes net CCC loans. <sup>3</sup>In households where raised. <sup>4</sup>With capital consumption adjustment.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-76*, and *Survey of Current Business*, July 1982.

## NO. 1163. FARM BALANCE SHEET ASSETS: 1960 TO 1982

[As of January 1. Assets, excluding farm households, represent farm real estate less value of operators' dwellings; livestock; machinery less the personal use of automobiles and trucks; all crops; currency and demand deposits; and the net worth of farmer cooperatives]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981	1982, prel.
<b>Total assets</b> .....	<b>Bil. dol.</b> .....	<b>172.8</b>	<b>205.5</b>	<b>271.3</b>	<b>419.6</b>	<b>442.5</b>	<b>510.2</b>	<b>589.6</b>	<b>655.3</b>	<b>781.8</b>	<b>904.6</b>	<b>983.3</b>	<b>983.6</b>
Average—													
Per farm <sup>1</sup> .....	\$1,000.....	43.6	61.2	92.0	150.1	175.5	204.3	240.1	269.0	321.7	372.6	403.7	403.6
Per farm worker.....	\$1,000.....	23.7	33.8	59.3	97.2	100.7	117.2	134.4	157.6	197.5	239.7	264.5	(NA)

NA Not available. <sup>1</sup>1960-1974 based on 1969 census farm definition; beginning 1975, based on 1974 census farm definition. See text, p. 847.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

## NO. 1164. FARM DEBT OUTSTANDING, BY TYPE OF LENDER: 1960 TO 1982

[In billions of dollars, except percent. As of Jan. 1. See also *Historical Statistics, Colonial Times to 1970*, series K 361-367 and K 376-380]

LENDER	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981	1982, prel.
<b>Farm debt, total</b> .....	<b>24.8</b>	<b>36.8</b>	<b>53.0</b>	<b>74.1</b>	<b>81.8</b>	<b>90.8</b>	<b>102.7</b>	<b>119.3</b>	<b>136.5</b>	<b>158.5</b>	<b>175.2</b>	<b>194.9</b>
Annual percent change <sup>1</sup> .....	7.1	8.2	7.6	8.7	10.4	11.0	13.0	16.2	14.4	16.1	10.5	11.2
Farm debt/asset ratio (percent).....	11.8	15.1	16.8	15.5	16.2	15.7	15.5	16.2	15.6	15.8	16.1	17.9
<b>Real estate debt</b> .....	<b>12.1</b>	<b>18.9</b>	<b>29.2</b>	<b>41.3</b>	<b>46.3</b>	<b>51.1</b>	<b>56.6</b>	<b>63.6</b>	<b>70.8</b>	<b>82.7</b>	<b>92.0</b>	<b>102.0</b>
Federal land banks.....	2.3	3.7	6.7	10.9	13.4	16.0	18.5	21.4	24.6	29.6	35.9	43.6
Life insurance companies.....	2.8	4.3	5.7	6.0	6.3	6.7	7.4	8.8	10.5	12.2	12.9	13.1
Commercial and savings banks.....	1.5	2.4	3.5	5.5	6.0	6.3	6.8	7.8	8.6	8.6	8.7	8.4
Farmers Home Administration <sup>2</sup> .....	7	1.3	2.3	3.0	3.2	3.4	3.7	4.0	4.1	7.1	7.7	8.7
Individuals and others <sup>3</sup> .....	4.8	7.2	11.0	15.9	17.4	18.7	20.3	21.7	23.1	25.1	26.7	28.3
<b>Non-real estate debt</b> .....	<b>12.7</b>	<b>17.9</b>	<b>23.8</b>	<b>32.8</b>	<b>35.5</b>	<b>39.8</b>	<b>46.1</b>	<b>55.6</b>	<b>65.7</b>	<b>75.8</b>	<b>83.1</b>	<b>92.8</b>
Commercial and savings banks.....	4.8	7.0	10.3	17.2	18.2	20.2	23.3	25.7	28.3	31.0	31.6	32.9
Production credit associations <sup>4</sup> .....	1.4	2.4	4.7	8.2	9.9	11.1	12.6	13.9	15.5	19.0	20.8	22.4
Farmers Home Administration.....	4	6	8	9	1.0	1.8	1.9	3.1	5.8	9.0	11.8	14.5
Individuals and others <sup>5</sup> .....	4.9	6.3	5.3	5.9	6.1	6.4	7.3	8.4	10.4	11.7	14.0	15.0
Commodity Credit Corporation.....	1.2	1.5	2.7	.8	.3	.4	1.0	4.5	5.7	5.1	5.0	8.0

<sup>1</sup>Annual change from prior year shown; for 1960, change from 1955. For explanation of average annual percent change, see Guide to Tabular Presentation. <sup>2</sup>Includes direct and insured farm ownership, farm housing, soil and water and recreation loans secured by farm real estate. <sup>3</sup>Includes seller and other individual financing of farm real estate sales and unclassified credit sources. <sup>4</sup>Also includes Federal intermediate credit bank loans to financial groups other than production credit associations.

<sup>5</sup>Includes merchants and dealers, individuals, Small Business Administration, and all other unclassified credit sources.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

## NO. 1165. CASH SOURCES AND USES OF FUNDS FOR THE FARM SECTOR: 1970 TO 1982

[In billions of dollars. Excludes funds from sale of real estate to nonfarm sector. Gross farm operating expenses have been deducted from gross farm income. Changes in the definition of "farm" starting in 1977 caused a significant reduction in the level of nonfarm income of farm firms]

SOURCE AND USE	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.	1982, prel.
<b>Total funds</b> .....	<b>39.9</b>	<b>73.3</b>	<b>69.3</b>	<b>74.5</b>	<b>68.9</b>	<b>85.1</b>	<b>99.8</b>	<b>93.3</b>	<b>96.4</b>	<b>97.7</b>
<b>Sources:</b>										
Net cash farm and nonfarm income.....	37.6	65.1	60.3	63.5	55.7	69.1	77.2	76.5	77.8	80.0
Net flow of real estate loans.....	1.1	5.0	4.8	5.4	7.2	7.1	11.9	9.3	11.4	8.3
Net flow of non-real estate loans <sup>1</sup> .....	1.2	3.2	4.2	5.6	6.0	8.9	10.7	7.5	7.2	9.4
<b>Uses:</b>										
Personal consumption <sup>2</sup> .....	26.3	49.4	44.8	45.7	38.2	48.8	61.8	56.6	62.5	61.4
Purchased capital.....	13.6	23.9	24.5	28.8	30.7	36.3	38.0	36.7	33.9	36.3
Purchases of real estate <sup>3</sup> .....	4.1	8.6	8.8	10.8	10.4	11.3	13.2	11.6	11.5	11.3
Purchases of machinery and motor vehicles.....	4.9	8.2	8.7	10.0	10.6	12.7	14.3	13.2	11.1	12.1
Capital improvement to real estate assets.....	2.4	4.4	4.7	5.0	5.8	6.9	6.7	6.9	6.9	7.0
Other capital purchases <sup>4</sup> .....	2.2	2.7	2.3	3.0	3.9	5.4	3.8	5.0	4.4	5.9

<sup>1</sup>Excludes CCC loans. <sup>2</sup>Includes other cash uses and nonfarm investment. <sup>3</sup>Covers purchases from discontinuing proprietors. <sup>4</sup>Includes net additions to household furnishings, commercial bank deposits and currency, and purchases of breeding livestock.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Agricultural Finance Outlook*, annual.

# Farm Income and Expenses

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## No. 1166. FARM INCOME AND EXPENSES: 1960 TO 1981

[In billions of dollars, except as indicated. Minus sign (-) denotes decrease. See also *Historical Statistics, Colonial Times to 1970*, series K 192, K 259-260, K 264-265, and K 326]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
<b>Gross income from farming</b> .....	<b>38.9</b>	<b>46.5</b>	<b>58.7</b>	<b>98.8</b>	<b>98.0</b>	<b>101.0</b>	<b>102.0</b>	<b>108.6</b>	<b>127.2</b>	<b>151.3</b>	<b>150.6</b>	<b>166.8</b>
Marketings, cash receipts.....	34.2	39.4	50.5	86.9	92.4	88.9	95.4	98.2	112.5	131.7	139.5	143.5
Crops.....	15.3	17.5	21.0	41.1	51.1	45.8	49.0	48.6	53.7	63.1	71.7	75.0
Livestock.....	19.0	21.9	29.5	45.8	41.3	43.1	46.3	47.6	58.8	68.6	67.8	68.5
Government payments.....	.7	2.5	3.7	2.6	.5	.8	.7	1.8	3.0	1.4	1.3	1.9
Value of home consumption.....	1.2	.8	.8	1.1	1.2	1.5	1.2	1.2	1.2	1.3	1.2	1.2
Rental value of dwellings.....	2.1	2.5	3.1	4.0	4.7	5.4	6.0	7.3	8.2	9.8	11.4	12.7
Other farm income.....	.2	.4	.6	.8	.8	1.0	1.0	1.2	1.2	1.5	1.6	1.9
Value of change in inventories.....	.4	1.0	(2)	3.4	-1.6	3.4	-2.4	1.0	1.1	5.6	-4.3	5.5
<b>Expenses of farm production</b> .....	<b>27.4</b>	<b>33.7</b>	<b>44.4</b>	<b>65.4</b>	<b>72.0</b>	<b>75.8</b>	<b>83.3</b>	<b>90.2</b>	<b>100.6</b>	<b>119.0</b>	<b>130.5</b>	<b>141.6</b>
Operating expenses <sup>1</sup> .....	16.7	20.1	26.8	40.4	44.3	45.5	50.5	54.0	61.4	74.5	80.8	86.8
Feed purchased.....	4.6	5.7	8.0	13.2	14.5	12.9	14.4	14.0	14.5	17.8	18.6	18.9
Livestock purchased.....	2.5	2.9	4.3	8.1	5.1	5.0	5.9	7.1	10.2	12.7	10.5	8.9
Seed purchased <sup>2</sup> .....	.5	.7	.9	1.6	1.9	2.1	2.4	2.5	2.6	3.0	3.4	4.0
Fertilizer and lime.....	1.3	2.0	2.4	3.5	6.1	6.7	6.5	6.5	6.6	7.5	9.9	10.1
Repairs and maintenance <sup>3</sup> .....	4.0	3.9	4.5	5.2	6.7	7.8	9.1	10.1	11.2	13.5	16.1	17.7
Miscellaneous <sup>4</sup> .....	3.8	4.9	6.6	8.8	10.0	11.0	12.2	13.8	16.3	20.0	22.3	27.2
Depreciation <sup>5</sup> .....	4.3	5.1	6.8	9.0	10.6	12.6	13.8	15.7	17.4	19.7	22.0	23.8
Taxes on farm property.....	1.5	1.9	2.6	2.9	3.1	3.2	3.5	3.7	3.6	3.9	4.2	4.5
Interest, farm mortgage debt.....	.6	1.1	1.8	2.5	3.0	3.4	3.9	4.4	5.1	6.1	7.3	8.9
Wages paid hired farm labor.....	3.1	3.6	4.3	5.2	6.1	6.6	7.5	8.0	8.3	9.4	10.4	11.1
Net rent to nonoperator landlords.....	1.1	1.9	2.1	5.5	5.0	4.5	4.2	4.6	4.8	5.3	5.7	6.5
<b>Net income of farm operators</b>												
<b>from farming</b> .....	<b>11.5</b>	<b>12.9</b>	<b>14.2</b>	<b>33.4</b>	<b>26.0</b>	<b>25.2</b>	<b>18.7</b>	<b>18.4</b>	<b>26.7</b>	<b>32.3</b>	<b>20.1</b>	<b>25.1</b>
In constant (1967) dollars.....	13.0	13.7	12.2	25.1	17.6	15.7	10.9	10.2	13.6	14.9	8.2	9.2
Avg. income per farm <sup>6</sup> (dol.).....	2,907	3,843	4,827	11,840	9,303	10,015	7,476	7,506	10,942	13,312	8,289	10,311

Z Less than \$50 million. <sup>1</sup>Excluding hired labor. <sup>2</sup>Includes bulbs, plants, and trees. <sup>3</sup>Includes expenditures for repairs and maintenance of farm buildings, petroleum fuel and oil, other motor-vehicle operations, and repairs on other machinery. <sup>4</sup>Includes interest on non-real estate debt, pesticides, ginning, electricity and telephones (business share), livestock marketing charges, containers, milk hauling, irrigation, grazing, binding materials, tolls for sirup, horses and mules, harness and saddlery, miscellaneous hardware (incl. blacksmithing), veterinary services and medicines, net insurance premiums (crop, fire, wind, and hail), machine hire and custom work, miscellaneous livestock and poultry, small hand tools, dairy supplies, nursery and greenhouse, apiary, and other miscellaneous. <sup>5</sup>Includes other consumption of farm capital. <sup>6</sup>1960-1974 based on 1969 census farm definition; beginning 1975, based on 1974 census definition. See text, p. 647.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

## No. 1167. PERSONAL INCOME OF THE FARM POPULATION: 1965 TO 1981

[In billions of dollars, except as indicated. Through 1974 based on 1969 census farm definition; beginning 1975 based on 1974 census definition. See text, p. 647. See *Historical Statistics, Colonial Times to 1970*, series K 256-258 and K 261-263, for data prior to revisions]

ITEM	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
<b>Net income of farm operators</b> <sup>1</sup> .....	<b>12.9</b>	<b>14.2</b>	<b>33.4</b>	<b>26.0</b>	<b>25.2</b>	<b>18.7</b>	<b>18.4</b>	<b>26.7</b>	<b>32.3</b>	<b>20.1</b>	<b>25.1</b>
Less: Net income of nonresident operators.....	2.0	2.2	5.2	4.1	3.8	2.9	2.9	4.4	5.3	3.3	4.1
Plus: Wages, salaries, and other labor income of workers <sup>2</sup> .....	1.3	1.5	1.6	1.9	1.9	1.9	2.4	2.2	2.1	1.8	2.0
Less: Contributions of operators and workers to social insurance <sup>2</sup> .....	.2	.4	.7	.7	.7	.7	.8	.9	1.0	1.0	1.1
Equals: Personal income of farm population from farm sources.....	12.0	13.1	29.2	23.1	22.7	16.9	17.1	23.6	28.1	17.6	21.8
Plus: Personal income of farm population from nonfarm sources.....	10.6	14.7	20.5	23.1	19.8	20.3	21.3	25.0	27.0	29.7	31.4
Equals: Personal income of farm population.....	22.6	27.8	49.6	46.2	42.5	37.2	38.4	48.6	55.1	47.3	53.3
Per capita personal income:											
From all sources (dol.).....	1,828	2,857	5,240	4,991	5,264	4,946	6,202	7,476	8,835	7,827	9,201
From farm sources (dol.).....	968	1,348	3,079	2,496	2,807	2,251	2,768	3,630	4,502	2,916	3,770
From nonfarm sources (dol.).....	860	1,509	2,160	2,495	2,457	2,695	3,434	3,846	4,333	4,912	5,431
Per capita disposable personal income:											
Of farm population (dol.).....	1,606	2,446	4,490	4,257	4,559	4,239	5,284	6,355	7,466	6,598	7,720
Of nonfarm population (dol.).....	2,505	3,438	4,307	4,687	5,095	5,222	5,974	6,579	7,290	8,040	8,800
Percent farm of nonfarm.....	65.6	72.1	104.0	91.2	89.8	77.4	88.7	96.7	102.3	82.5	88.0

<sup>1</sup>Income from farming; includes government payments. <sup>2</sup>Farm residents only.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

**NO. 1168. GOVERNMENT PAYMENTS TO FARMS BY PROGRAM, AND BY VALUE OF FARM SALES:  
1960 TO 1981**

[See also *Historical Statistics, Colonial Times to 1970*, series K 326-329]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>Total<sup>1</sup></b>	<b>Mil. dol.</b>	<b>702</b>	<b>2,463</b>	<b>3,717</b>	<b>807</b>	<b>734</b>	<b>1,819</b>	<b>3,030</b>	<b>1,375</b>	<b>1,286</b>	<b>1,932</b>
Feed grain	.....	-	1,391	1,504	279	186	187	1,172	494	382	243
Wheat	.....	-	525	871	77	135	887	963	114	211	625
Cotton	.....	-	70	919	138	108	89	127	185	172	222
Conservation	.....	223	224	208	181	195	197	194	179	198	186
Soil Bank	.....	370	160	2	-	-	-	-	-	-	-
Sugar Act	.....	59	75	88	61	-	65	-	-	-	-
Wool	.....	51	18	49	-	-	-	-	-	-	35
<b>Payments to farms with sales of:</b>											
Less than \$2,500	.....	100	288	355	31	26	62	82	29	24	34
\$2,500-\$4,999	.....	81	208	227	18	16	39	59	25	23	34
\$5,000-\$9,999	.....	144	396	400	64	56	138	214	90	82	122
\$10,000-\$19,999	.....	159	627	671	103	89	215	317	125	112	165
\$20,000-\$39,999	.....	111	487	828	153	131	319	466	184	163	239
\$40,000-\$99,999	.....	77	310	708	209	187	463	752	333	309	462
\$100,000 to \$199,999	.....			265	96	94	238	449	225	218	332
\$200,000 and over	.....	30	147	264	133	135	345	691	363	355	544
<b>Avg. payment per farm<sup>2</sup></b>	<b>Dollar</b>	<b>177</b>	<b>734</b>	<b>1,260</b>	<b>320</b>	<b>294</b>	<b>741</b>	<b>1,244</b>	<b>566</b>	<b>530</b>	<b>793</b>
<b>Farms with sales of—</b>											
Less than \$2,500	.....	54	194	251	38	33	83	125	51	46	67
\$2,500-\$4,999	.....	131	451	631	57	50	124	188	76	69	101
\$5,000-\$9,999	.....	218	780	1,074	207	181	448	677	276	248	385
\$10,000-\$19,999	.....	320	1,351	1,855	328	286	711	1,073	439	393	578
\$20,000-\$39,999	.....	489	1,739	2,734	487	425	1,056	1,594	650	584	859
\$40,000-\$99,999	.....	856	2,480	4,305	692	578	1,435	2,167	884	793	1,168
\$100,000 to \$199,999	.....			7,331	1,012	884	2,194	3,313	1,351	1,213	1,796
\$200,000 and over	.....	1,304	4,083	15,153	2,737	2,394	5,941	8,977	3,663	3,289	4,842

- Represents zero. <sup>1</sup>Data by type of program include cropland adjustment beginning 1970, and miscellaneous programs beginning 1975, not shown separately. <sup>2</sup>1960-1970 based on 1969 census definition; beginning 1975 based on 1974 census definition.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

**NO. 1169. FARM INCOME—CASH RECEIPTS FROM FARM MARKETINGS: 1970 TO 1981**

[Represents gross receipts from commercial market sales as well as net Commodity Credit Corporation loans. See also *Historical Statistics, Colonial Times to 1970*, series K 286-302]

ITEM	TOTAL MARKET SALES (mil. dol.)								PERCENT			
	1970	1975	1976	1977	1978	1979	1980	1981	1970	1975	1980	1981
<b>Farm marketings</b> .....	<b>50,509</b>	<b>88,902</b>	<b>95,355</b>	<b>96,203</b>	<b>112,486</b>	<b>131,711</b>	<b>139,535</b>	<b>143,466</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
All crops	20,977	45,813	49,032	48,588	53,676	63,128	71,799	74,984	41.5	51.5	51.4	52.3
Cotton lint, seed	1,254	2,311	3,477	3,470	3,465	4,305	4,489	4,552	2.5	2.6	3.2	3.2
Tobacco	1,388	2,155	2,310	2,331	2,604	2,271	2,872	3,253	2.7	2.4	1.9	2.3
Food grains	2,542	8,195	7,112	6,055	5,839	9,047	10,386	12,398	5.0	9.2	7.4	8.6
Oilbearing crops	3,591	7,480	9,443	9,722	13,023	14,328	15,456	14,106	7.1	8.4	11.1	9.8
Feed crops	5,109	12,183	13,127	11,906	11,427	14,042	18,295	18,267	10.1	13.7	13.1	12.7
Vegetables <sup>1</sup>	2,814	5,346	5,231	5,609	5,941	6,452	7,023	8,467	5.6	6.0	5.1	5.9
Fruits, tree nuts <sup>1</sup>	2,071	3,563	3,714	4,603	5,764	6,467	6,575	6,542	4.1	4.0	4.7	4.6
Other <sup>2</sup>	2,208	4,579	4,619	4,872	5,614	6,219	6,865	7,459	4.4	5.2	4.9	5.2
All livestock and products	29,532	43,089	46,323	47,635	58,810	68,584	67,796	68,483	58.5	48.5	48.6	47.7
Hogs	4,478	7,916	7,488	7,281	8,754	9,027	8,921	9,799	8.9	8.9	6.4	6.8
Cattle and calves	13,633	17,520	19,294	20,225	28,111	34,400	31,484	28,936	27.0	19.7	22.5	20.2
Sheep and lambs	334	386	393	386	453	474	469	411	0.7	0.4	0.3	0.3
Wool	57	54	73	77	76	91	83	104	0.1	0.1	0.1	0.1
Dairy products	6,527	9,823	11,428	11,752	12,509	14,659	16,605	18,106	12.9	11.2	11.9	12.6
Eggs	2,109	2,814	3,135	2,919	2,939	3,316	3,247	3,640	4.2	3.2	2.3	2.5
Broilers and farm chickens	1,564	3,063	3,050	3,235	3,845	4,189	4,432	4,760	3.1	3.4	3.2	3.3
Turkeys, other poultry <sup>3</sup>	576	933	970	1,058	1,326	1,407	1,479	1,517	1.1	1.1	1.1	1.1
Other <sup>4</sup>	254	480	492	702	797	1,019	1,086	1,210	0.5	0.5	0.8	0.8

<sup>1</sup>Melons included with vegetables. <sup>2</sup>Sugar crops, greenhouse and nursery products, forest products, legume and grass seeds, hops, mint, broom-corn, popcorn, hemp fiber and seed, and flax products. <sup>3</sup>Ducks, geese, guineas, pigeons, quail, pheasants, and turkey hatching eggs. <sup>4</sup>Mohair, honey, beeswax, bees, goats, rabbits, and fur animals.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

NO. 1170. FARM INCOME—FARM MARKETINGS, 1975 TO 1981, AND PRINCIPAL COMMODITIES IN ORDER OF MARKETING RECEIPTS, 1981, BY STATES

[In millions of dollars. Cattle include calves; sheep include lambs; and greenhouse includes nursery. See table 1166]

STATE	FARM MARKETINGS			1981, prel.			Government payments	State rank for total farm marketings and principal commodities in order of marketing receipts, 1981
	1975	1979	1980	Farm marketings				
				Total	Crops	Live-stock and products		
<b>U.S.</b>	<b>86,902</b>	<b>131,711</b>	<b>139,535</b>	<b>143,466</b>	<b>74,984</b>	<b>68,483</b>	<b>1,932.2</b>	<b>Cattle, dairy products, corn, soybeans.</b>
<b>N.E.</b>	<b>1,117</b>	<b>1,449</b>	<b>1,499</b>	<b>1,614</b>	<b>561</b>	<b>1,053</b>	<b>6.0</b>	
Maine.....	367	448	418	465	185	280	2.3	40—Potatoes, eggs, dairy prod., apples.
N.H.....	74	96	97	97	27	70	.7	48—Dairy prod., eggs, greenhouse, apples.
Vt.....	231	355	379	396	30	366	1.6	42—Dairy prod., cattle, maple prod., eggs.
Mass.....	204	253	263	294	157	137	.8	45—Dairy prod., greenhouse, cranberries, eggs.
R.I.....	27	31	32	34	20	14	.2	49—Greenhouse, dairy prod., eggs, potatoes.
Conn.....	214	266	310	328	142	186	.4	44—Dairy prod., eggs, greenhouse, tobacco.
<b>M.A.</b>	<b>3,488</b>	<b>5,141</b>	<b>5,661</b>	<b>6,088</b>	<b>1,956</b>	<b>4,130</b>	<b>20.3</b>	
N.Y.....	1,562	2,241	2,551	2,721	845	1,876	6.9	24—Dairy prod., cattle, greenhouse, apples.
N.J.....	326	414	435	459	353	106	1.5	41—Greenhouse, dairy prod., soybeans, tomatoes.
Pa.....	1,600	2,486	2,675	2,906	758	2,148	11.9	17—Dairy prod., cattle, eggs, mushrooms.
<b>E.N.C.</b>	<b>15,037</b>	<b>20,941</b>	<b>24,355</b>	<b>23,418</b>	<b>12,804</b>	<b>10,613</b>	<b>135.4</b>	
Ohio.....	2,551	3,370	4,182	3,450	2,021	1,429	24.1	13—Soybeans, corn, dairy prod., cattle.
Ind.....	2,945	3,980	4,717	4,318	2,616	1,702	27.9	9—Corn, soybeans, hogs, cattle.
Ill.....	5,213	6,967	7,971	7,645	5,420	2,225	49.2	4—Corn, soybeans, hogs, cattle.
Mich.....	1,657	2,321	2,768	2,789	1,678	1,111	17.3	22—Dairy prod., corn, dry beans, cattle.
Wis.....	2,671	4,303	4,717	5,216	1,069	4,146	16.8	8—Dairy prod., cattle, corn, hogs.
<b>W.N.C.</b>	<b>24,211</b>	<b>35,927</b>	<b>38,659</b>	<b>39,311</b>	<b>18,725</b>	<b>20,586</b>	<b>796.9</b>	
Minn.....	3,865	5,537	6,803	6,912	3,522	3,390	79.1	5—Dairy prod., corn, soybeans, cattle.
Iowa.....	6,525	9,250	10,490	10,715	4,990	5,725	58.2	2—Corn, cattle, hogs, soybeans.
Mo.....	2,657	4,261	4,180	4,224	1,910	2,314	105.4	11—Cattle, soybeans, hogs, dairy prod.
N. Dak.....	1,940	2,330	2,510	2,803	2,209	594	130.7	20—Wheat, cattle, sunflower, barley.
S. Dak.....	1,993	2,322	2,706	2,789	924	1,865	90.7	21—Cattle, wheat, hogs, dairy prod.
Nebr.....	3,860	5,919	6,466	6,376	2,855	3,521	101.0	6—Cattle, corn, hogs, wheat.
Kans.....	3,371	6,308	5,724	5,492	2,315	3,177	231.8	7—Cattle, wheat, sorghum grain, hogs.
<b>S.A.</b>	<b>10,150</b>	<b>14,035</b>	<b>14,259</b>	<b>16,062</b>	<b>9,265</b>	<b>6,796</b>	<b>99.0</b>	
Del.....	267	360	339	393	121	272	1.8	43—Broilers, soybeans, corn, dairy prod.
Md.....	682	899	930	1,061	364	697	3.0	35—Broilers, dairy prod., corn, soybeans.
Va.....	983	1,319	1,450	1,644	733	911	10.8	32—Dairy prod., tobacco, cattle, broilers.
W. Va.....	138	232	232	218	54	163	3.0	46—Cattle, dairy prod., broilers, apples.
N.C.....	2,626	3,401	3,594	4,236	2,651	1,585	15.5	10—Tobacco, broilers, hogs, soybeans.
S.C.....	809	1,047	1,147	1,118	719	399	15.9	34—Tobacco, soybeans, dairy prod., eggs.
Ga.....	2,141	2,931	2,692	3,346	1,606	1,740	38.0	15—Broilers, peanuts, eggs, hogs.
Fla.....	2,504	3,846	3,875	4,046	3,017	1,029	11.0	12—Oranges, greenhouse, cattle, dairy prod.
<b>E.S.C.</b>	<b>5,213</b>	<b>8,264</b>	<b>8,623</b>	<b>9,093</b>	<b>4,769</b>	<b>4,326</b>	<b>75.9</b>	
Ky.....	1,439	2,256	2,751	2,783	1,424	1,359	14.3	23—Tobacco, cattle, horses and mules, dairy prod.
Tenn.....	1,116	1,796	1,757	1,836	997	839	20.7	28—Soybeans, dairy prod., cattle, tobacco.
Ala.....	1,340	2,074	1,886	2,228	865	1,264	21.4	27—Broilers, cattle, soybeans, eggs.
Miss.....	1,318	2,138	2,229	2,246	1,383	864	19.5	26—Cotton lint, soybeans, broilers, cattle.
<b>W.S.C.</b>	<b>11,043</b>	<b>18,121</b>	<b>17,031</b>	<b>18,140</b>	<b>8,822</b>	<b>9,318</b>	<b>501.3</b>	
Ark.....	2,126	3,082	3,063	3,436	1,825	1,611	40.1	14—Broilers, rice, soybeans, cattle.
La.....	1,131	1,663	1,627	1,714	1,261	452	15.4	30—Soybeans, rice, cotton lint, dairy prod.
Okla.....	1,876	3,335	3,187	2,855	1,024	1,832	124.5	19—Cattle, wheat, dairy prod., cotton lint.
Tex.....	5,910	10,041	9,154	10,135	4,712	5,423	321.3	3—Cattle, cotton lint, wheat, sorghum grain.
<b>Mt.</b>	<b>6,866</b>	<b>10,735</b>	<b>11,042</b>	<b>10,783</b>	<b>4,905</b>	<b>5,877</b>	<b>216.3</b>	
Mont.....	1,060	1,391	1,405	1,483	854	629	85.1	33—Wheat, cattle, barley, sugar beets.
Idaho.....	1,280	1,822	2,047	2,278	1,322	956	29.5	25—Cattle, potatoes, wheat, dairy prod.
Wyo.....	376	720	666	616	153	463	10.7	37—Cattle, sugar beets, wheat, hay.
Colo.....	1,929	3,206	3,207	3,085	1,073	2,012	47.6	16—Cattle, wheat, corn, dairy prod.
N. Mex.....	726	1,128	1,196	843	301	542	26.0	36—Cattle, dairy prod., hay, wheat.
Ariz.....	1,038	1,736	1,725	1,707	979	727	5.9	31—Cattle, cotton lint, dairy prod., wheat.
Utah.....	326	513	560	555	142	413	7.8	38—Cattle, dairy prod., hay, wheat.
Nev.....	131	219	236	216	81	135	3.7	47—Cattle, hay, dairy prod., potatoes.
<b>Pac.</b>	<b>11,777</b>	<b>17,096</b>	<b>18,404</b>	<b>18,961</b>	<b>13,178</b>	<b>5,781</b>	<b>81.1</b>	
Wash.....	1,867	2,132	2,642	2,855	1,969	896	37.3	18—Wheat, dairy prods., cattle, apples.
Oreg.....	1,046	1,566	1,583	1,715	1,143	571	19.3	29—Cattle, dairy prod., greenhouse, potatoes.
Calif.....	8,474	12,964	13,721	13,896	9,675	4,221	23.4	1—Dairy prod., cattle, grapes, greenhouse.
Alaska.....	10	12	11	13	8	5	.4	50—Greenhouse, dairy prod., hay, potatoes.
Hawaii.....	380	422	447	472	383	88	.7	39—Sugar cane, pineapples, greenhouse, dairy prod.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics*, annual.

**NO. 1171. FARM INCOME—GROSS AND NET FARM INCOME AND DEBT/ASSET RATIO, BY STATES:  
1975 TO 1981**

[Farm income data are before inventory adjustment. Includes farm households]

DIVISION AND STATE	GROSS FARM INCOME (mil. dol.)				NET FARM INCOME (mil. dol.)				DEBT/ASSET RATIO (percent)			
	1975	1979	1980	1981	1975	1979	1980	1981	1975	1979	1980	1981
<b>U.S.</b> .....	<b>97,604</b>	<b>145,707</b>	<b>154,902</b>	<b>161,225</b>	<b>21,847</b>	<b>28,734</b>	<b>24,417</b>	<b>19,589</b>	<b>16.3</b>	<b>15.6</b>	<b>15.8</b>	<b>16.1</b>
<b>N.E.</b> .....	<b>1,234.5</b>	<b>1,653.3</b>	<b>1,715.8</b>	<b>1,843.8</b>	<b>230.9</b>	<b>278.0</b>	<b>196.3</b>	<b>220.5</b>	(NA)	(NA)	(NA)	(NA)
Maine.....	392.7	488.3	459.5	507.6	77.6	64.5	.9	26.4	18.3	19.4	21.6	22.8
N.H.....	87.7	117.6	120.5	121.4	13.5	12.9	4.7	.8	11.5	9.4	10.3	10.6
Vt.....	260.2	394.9	423.1	443.7	51.1	91.3	81.0	70.7	17.6	14.4	14.7	15.1
Mass.....	228.2	320.7	332.7	369.4	38.0	48.1	31.8	45.2	13.5	13.6	15.7	16.3
R.I.....	30.3	36.1	37.9	39.8	8.8	6.8	4.8	4.7	10.7	6.9	8.1	8.7
Conn.....	235.4	295.7	342.1	361.9	41.9	54.4	73.1	72.7	13.8	10.9	13.1	13.4
<b>M.A.</b> .....	<b>4,373.2</b>	<b>5,819.8</b>	<b>6,391.6</b>	<b>6,883.3</b>	<b>1,033.7</b>	<b>1,056.6</b>	<b>921.9</b>	<b>866.1</b>	(NA)	(NA)	(NA)	(NA)
N.Y.....	2,164.9	2,496.3	2,814.6	3,016.4	639.9	378.2	430.9	325.4	15.1	19.1	20.8	22.2
N.J.....	366.7	469.2	493.9	532.0	83.1	77.9	53.0	60.3	12.8	10.1	10.9	12.6
Pa.....	1,841.6	2,854.3	3,083.1	3,334.9	330.7	600.5	465.0	480.4	11.7	11.3	11.9	13.5
<b>E.N.C.</b> .....	<b>16,787.7</b>	<b>24,175.4</b>	<b>27,937.0</b>	<b>27,425.4</b>	<b>3,209.4</b>	<b>4,192.6</b>	<b>5,382.3</b>	<b>3,316.6</b>	(NA)	(NA)	(NA)	(NA)
Ohio.....	2,890.4	4,032.7	4,320.3	4,230.6	524.5	601.3	1,008.8	267.1	12.7	12.0	12.0	12.8
Ind.....	3,328.8	4,743.3	5,576.6	5,281.8	684.5	865.7	1,131.1	649.5	15.3	14.5	14.4	14.8
Ill.....	5,717.7	7,944.1	9,030.9	8,807.3	864.7	1,111.7	1,643.2	757.1	12.4	11.3	11.7	12.1
Mich.....	1,871.7	2,665.0	3,138.8	3,231.8	435.8	417.0	492.8	338.5	16.4	17.6	18.1	18.1
Wis.....	2,979.1	4,790.3	5,270.4	5,873.9	719.9	1,196.9	1,106.4	1,304.4	18.2	17.0	17.5	17.8
<b>W.N.C.</b> .....	<b>26,127.4</b>	<b>39,355.8</b>	<b>42,466.1</b>	<b>43,809.1</b>	<b>5,823.5</b>	<b>6,459.2</b>	<b>6,556.8</b>	<b>5,447.0</b>	(NA)	(NA)	(NA)	(NA)
Minn.....	4,244.0	6,236.0	7,410.8	7,873.0	1,059.7	1,318.0	1,683.9	1,569.3	16.5	17.7	18.1	17.1
Iowa.....	6,978.2	10,146.9	11,437.6	11,815.2	1,233.6	1,190.2	1,574.6	1,591.6	16.0	16.2	15.3	15.4
Mo.....	2,985.9	4,736.5	4,739.4	4,874.6	620.2	1,109.4	792.1	396.9	15.3	14.7	14.1	14.6
N. Dak.....	2,089.2	2,588.3	2,868.8	3,200.4	649.1	498.9	675.2	566.5	12.1	14.7	15.3	16.2
S. Dak.....	2,122.9	2,541.0	2,960.2	3,075.5	713.3	375.8	567.2	461.8	16.9	18.7	20.3	20.1
Nebr.....	4,098.7	6,349.7	6,874.1	6,880.2	926.6	690.4	707.7	293.9	18.9	18.9	18.9	19.1
Kans.....	3,610.5	6,757.4	6,174.1	6,110.2	621.0	1,276.5	616.1	575.0	15.9	17.3	16.8	17.7
<b>S.A.</b> .....	<b>11,175.3</b>	<b>15,569.9</b>	<b>16,076.0</b>	<b>17,997.7</b>	<b>3,138.8</b>	<b>3,431.9</b>	<b>2,569.2</b>	<b>2,742.9</b>	(NA)	(NA)	(NA)	(NA)
Del.....	279.7	378.8	360.5	417.4	71.5	99.4	53.9	77.6	12.7	12.7	14.0	15.5
Md.....	761.9	1,018.9	1,081.1	1,239.8	182.1	185.1	129.2	159.0	13.0	11.7	11.2	11.4
Va.....	1,161.2	1,603.1	1,781.4	1,984.7	211.0	166.3	161.2	144.5	11.9	12.4	12.9	13.6
W. Va.....	190.2	316.6	330.6	328.9	8.5	19.0	.8	.9	9.1	8.9	8.4	8.6
N.C.....	2,915.3	3,826.3	4,083.8	4,960.9	963.2	911.7	845.1	1,104.9	12.8	15.0	16.0	17.0
S.C.....	905.3	1,179.8	1,266.8	1,286.7	184.2	147.3	108.5	12.6	13.4	16.4	17.1	18.7
Ga.....	2,330.1	3,209.3	3,027.4	3,623.0	517.5	569.0	125.4	309.7	17.2	19.6	21.0	23.4
Fla.....	2,631.6	4,037.1	4,164.6	4,276.3	982.8	1,334.1	1,145.1	933.7	15.9	14.6	14.6	14.6
<b>E.S.C.</b> .....	<b>5,980.6</b>	<b>9,455.9</b>	<b>9,962.8</b>	<b>10,603.4</b>	<b>1,150.0</b>	<b>2,033.3</b>	<b>1,695.7</b>	<b>1,189.2</b>	(NA)	(NA)	(NA)	(NA)
Ky.....	1,677.1	2,661.5	3,182.1	3,247.8	375.5	638.8	909.2	674.9	17.4	12.5	13.3	13.9
Tenn.....	1,319.8	2,109.0	2,103.5	2,216.2	183.5	322.4	128.1	37.3	16.2	16.3	16.9	17.4
Ala.....	1,500.5	2,314.9	2,174.8	2,548.0	343.0	560.3	250.1	392.2	14.1	15.8	15.0	15.7
Miss.....	1,483.2	2,371.5	2,502.4	2,591.4	248.0	511.8	408.3	139.8	16.7	17.2	17.7	17.3
<b>W.S.C.</b> .....	<b>12,065.5</b>	<b>19,860.1</b>	<b>18,810.7</b>	<b>20,277.2</b>	<b>2,705.0</b>	<b>3,646.4</b>	<b>2,006.8</b>	<b>1,410.6</b>	(NA)	(NA)	(NA)	(NA)
Ark.....	2,293.6	3,386.4	3,408.2	3,817.5	693.6	739.7	526.7	555.4	17.7	16.3	15.9	16.1
La.....	1,237.9	1,845.1	1,836.1	1,957.1	360.2	434.2	189.0	63.4	14.1	14.6	14.8	14.7
Okla.....	2,060.1	3,627.8	3,504.8	3,326.5	364.2	627.0	383.2	1.0	17.2	16.4	15.9	17.0
Tex.....	6,473.9	11,000.8	10,061.6	11,176.1	1,287.0	1,845.5	897.9	790.8	14.9	13.4	12.6	13.1
<b>Mt.</b> .....	<b>7,433.8</b>	<b>11,721.3</b>	<b>12,180.3</b>	<b>12,083.3</b>	<b>1,557.9</b>	<b>1,608.9</b>	<b>1,357.5</b>	<b>1,106.9</b>	(NA)	(NA)	(NA)	(NA)
Mont.....	1,164.6	1,580.1	1,638.5	1,759.5	246.8	98.0	40.1	.8	17.2	15.9	16.0	16.6
Idaho.....	1,389.4	2,016.9	2,250.8	2,517.4	325.3	325.8	344.1	504.8	19.0	18.5	19.1	19.1
Wyo.....	423.5	795.0	743.4	711.3	43.4	105.5	43.7	1.2	17.9	14.0	14.8	14.9
Colo.....	2,053.7	3,403.2	3,433.1	3,337.5	467.2	416.0	311.7	379.9	19.7	21.2	21.2	20.3
N. Mex.....	792.2	1,243.8	1,337.4	1,001.0	196.6	146.2	264.1	1.0	15.3	12.1	10.7	10.5
Ariz.....	1,101.0	1,840.6	1,847.4	1,838.5	208.1	386.1	241.4	171.0	14.8	13.3	12.6	13.2
Utah.....	386.0	596.1	662.8	669.0	51.9	90.3	79.4	40.9	13.0	11.6	9.4	9.4
Nev.....	143.4	245.6	266.9	249.1	18.6	40.0	33.0	7.8	15.9	12.9	11.4	12.0
<b>Pac.</b> .....	<b>12,426.1</b>	<b>18,155.8</b>	<b>19,692.2</b>	<b>20,366.8</b>	<b>2,997.9</b>	<b>4,086.8</b>	<b>4,060.9</b>	<b>3,255.8</b>	(NA)	(NA)	(NA)	(NA)
Wash.....	2,009.7	2,433.6	2,980.3	3,256.7	670.1	390.7	672.7	545.6	17.4	17.2	18.7	17.4
Oreg.....	1,173.0	1,784.0	1,893.0	2,002.1	232.5	294.9	226.5	210.2	18.6	17.5	18.9	19.5
Calif.....	8,828.9	13,482.2	14,325.7	14,595.3	1,952.8	3,327.4	3,137.5	2,461.0	22.8	21.5	21.4	19.7
Alaska.....	10.5	14.3	13.8	15.9	3.4	3.7	.5	.1	23.5	2.7	4.8	12.9
Hawaii.....	404.0	441.7	469.4	496.8	139.1	70.1	23.7	38.9	5.9	6.3	6.5	7.2

NA Not available. <sup>1</sup>Data for some States have been revised; consequently addition of States will not equal U.S. total. Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: State Income and Balance Sheet Statistics*, annual.

**NO. 1172. INDEXES OF PRICES RECEIVED AND PAID BY FARMERS: 1960 TO 1981**

[1977 = 100, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series K 344-353]

ITEM	1960	1965	1970	1972	1973	1974	1975	1976	1978	1979	1980	1981, prel.
<b>Prices received, all products</b> .....	52	54	60	69	98	105	101	102	115	132	134	138
Crops .....	51	53	52	60	91	117	105	102	105	116	125	134
Livestock and products .....	53	54	67	77	104	94	98	101	124	147	144	143
<b>Prices paid, total</b> .....	44	47	55	62	71	81	89	95	108	123	138	150
Production .....	46	48	54	62	73	83	91	97	108	125	138	148
Interest payable per acre .....	13	22	38	46	54	65	76	87	118	141	168	195
Taxes payable per acre .....	37	46	68	75	77	81	87	94	100	107	117	124
Wage rates <sup>2</sup> .....	33	38	57	63	69	79	85	93	107	118	127	136
<b>Parity ratio (1910-14=100)</b> <sup>3</sup> .....	80	76	72	74	91	86	76	71	70	71	65	61

<sup>1</sup>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, pp. 451 and 452, and table 757. <sup>2</sup>Straight average of seasonally adjusted indexes. <sup>3</sup>Ratio of prices received by farmers to prices paid.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Agricultural Prices: Annual Summary*.

**NO. 1173. INCOME PER FARM, BY VALUE OF SALES: 1975 TO 1981**

[In thousands of dollars. Net income data are before inventory adjustment. Minus sign (-) denotes loss. See also footnote 1, table 1174]

VALUE OF SALES	1975			1979			1980			1981		
	Total	Off-farm	Net									
<b>Total, all farms</b> .....	18.2	9.5	6.7	24.9	13.9	11.0	25.1	15.1	10.0	24.2	16.2	8.0
Less than \$2,500 .....	11.6	12.2	-6	18.2	19.0	-8	19.9	20.8	-9	21.4	22.4	-1.0
\$2,500-\$4,999 .....	11.2	12.2	-1.0	18.1	18.9	-8	19.6	20.7	-1.1	20.8	22.2	-1.4
\$5,000-\$9,999 .....	10.9	10.2	.7	15.7	15.6	.1	16.6	17.1	-5	17.4	18.4	-1.0
\$10,000-\$19,999 .....	10.8	7.9	2.9	13.1	12.0	1.1	13.1	13.1	-	13.0	14.0	-1.0
\$20,000-\$39,999 .....	12.9	5.8	7.1	12.1	8.7	3.4	10.7	9.5	1.2	9.3	10.2	-9
\$40,000-\$99,999 .....	21.2	5.1	16.1	19.3	7.3	12.0	15.8	8.0	7.8	12.4	8.5	3.8
\$100,000 or more .....	106.7	8.1	98.6	93.3	11.7	81.6	89.5	12.8	76.7	80.6	13.8	66.8

- Represents zero.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

**NO. 1174. FARMS, FARM INCOME, AND ASSETS, BY VALUE OF SALES: 1980 AND 1981**

[Minus sign (-) denotes loss]

FARMS WITH VALUE OF SALES OF--	Num-ber of farms <sup>1</sup> (1,000)	Gross in-come <sup>2</sup> (bil. dol.)	Cash re-ceipts <sup>3</sup> (bil. dol.)	Net in-come <sup>2</sup> (bil. dol.)	As-sets <sup>4</sup> (bil. dol.)	Debt to asset ratio (percent)	PERCENT DISTRIBUTION			
							Num-ber of farms <sup>1</sup>	Gross in-come <sup>2</sup>	Net in-come <sup>2</sup>	As-sets <sup>4</sup>
<b>1980: Less than \$2,500</b> .....	525	3.0	.7	-5	54.0	11.6	21.6	1.9	-1.9	5.4
\$2,500-\$4,999 .....	329	2.8	1.4	-4	41.7	12.0	13.6	1.8	-1.5	4.2
\$5,000-\$9,999 .....	332	4.2	2.7	-2	54.3	12.5	13.7	2.7	-7	5.4
\$10,000-\$19,999 .....	286	5.9	4.6	-	68.0	13.4	11.8	3.8	-	6.8
\$20,000-\$39,999 .....	279	10.3	9.0	.3	103.9	14.2	11.5	6.7	1.3	10.3
\$40,000-\$99,999 .....	389	29.6	27.3	3.1	242.8	14.8	16.0	19.1	12.5	24.2
\$100,000-\$199,999 .....	180	28.4	27.1	4.2	193.5	15.6	7.4	18.3	17.2	19.3
\$200,000 or more .....	108	70.7	69.6	17.9	246.6	20.5	4.4	45.7	73.1	24.5
<b>1981: Less than \$2,500</b> .....	511	3.2	.7	-5	56.6	11.6	21.0	2.0	-2.6	5.2
\$2,500-\$4,999 .....	332	3.0	1.4	-5	45.1	12.2	13.6	1.8	-2.4	4.1
\$5,000-\$9,999 .....	335	4.4	2.8	-3	58.7	12.7	13.8	2.7	-1.7	5.4
\$10,000-\$19,999 .....	286	6.1	4.7	-3	72.5	13.6	11.7	3.8	-1.5	6.6
\$20,000-\$39,999 .....	278	10.5	9.0	-2	110.2	14.4	11.4	6.5	-1.2	10.1
\$40,000-\$99,999 .....	396	30.5	28.0	1.5	263.1	15.1	16.3	19.0	7.7	24.1
\$100,000-\$199,999 .....	186	29.7	28.1	2.9	213.1	16.0	7.6	18.4	15.1	19.5
\$200,000 or more .....	112	73.8	72.6	17.0	271.7	20.7	4.6	45.8	66.6	24.9

- Represents zero or rounds to zero. <sup>1</sup>Based on 1974 census definition. See text, pp. 647 and 648. <sup>2</sup>Data are before inventory adjustment. For components of income, see table 1166. <sup>3</sup>Includes government payments and other farm income. <sup>4</sup>Data as of January 1. Includes farm households.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual.

## No. 1175. FARM INCOME AND EXPENSES BY SELECTED CHARACTERISTICS OF FARM: 1979

[See headnote, table 1151]

CHARACTERISTIC OF FARM	AMOUNT (mil. dol.)						PERCENT DISTRIBUTION			
	Value of agri. products sold	Rent <sup>1</sup>	Value of contractor's share <sup>2</sup>	Operating expenses	Net cash farm income	Off-farm income	Value of agri. products sold	Operating expenses	Net cash farm income	Off-farm income
<b>Total</b> <sup>3</sup> .....	<b>122,751</b>	<b>10,896</b>	<b>9,978</b>	<b>77,273</b>	<b>27,228</b>	<b>32,754</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Full owners.....	46,325	1	7,123	28,703	11,748	22,080	37.7	37.1	43.1	67.4
Part owners.....	60,034	7,114	2,270	39,058	12,695	7,892	48.9	50.5	46.6	24.1
Tenants.....	16,392	3,781	585	9,512	2,785	2,782	13.4	12.3	10.2	8.5
Individual or family.....	74,606	7,590	5,593	45,684	17,593	29,075	60.8	59.1	64.6	88.8
Partnership.....	19,426	2,166	802	12,276	4,627	2,628	15.8	15.9	17.0	8.0
Corporations.....	28,106	1,103	3,551	18,906	4,860	960	22.9	24.5	17.8	2.9
Under 50 acres.....	10,641	189	2,306	6,179	2,252	11,419	8.7	8.0	8.3	34.9
50-179 acres.....	18,827	750	3,121	11,168	4,252	10,970	15.3	14.5	15.6	33.5
180-499 acres.....	33,876	3,457	2,491	20,530	8,020	6,145	27.6	26.6	29.5	18.8
500-999 acres.....	22,624	2,974	948	14,026	5,082	1,938	18.4	18.2	18.7	5.9
1,000 acres or more.....	36,783	3,526	1,112	25,370	7,622	2,281	30.0	32.8	28.0	7.0

<sup>1</sup>Covers cash rent paid plus landlords' share of the value of agricultural products sold. <sup>2</sup>Value of contractor's share of production contracts. Represents total market value of products produced under contract minus the amount paid to the producer.

<sup>3</sup>Includes other type of organization, not shown separately.

## No. 1176. CAPITAL PURCHASES AND OPERATING EXPENSES BY FARM CHARACTERISTICS: 1979

[Covers purchases and expenses of farm operators only. See headnote, table 1151]

CHARACTERISTIC OF FARM	TOTAL			CAPITAL PURCHASES			OPERATING EXPENSES		
	Total (mil. dol.)	Percent paid in cash	Percent financed	Total (mil. dol.)	Percent paid in cash	Percent financed	Total (mil. dol.)	Percent paid in cash	Percent financed
<b>Total</b> .....	<b>107,506</b>	<b>69.9</b>	<b>30.1</b>	<b>30,233</b>	<b>47.6</b>	<b>52.4</b>	<b>77,273</b>	<b>78.6</b>	<b>21.4</b>
Full owners.....	39,319	76.7	23.3	10,617	55.1	44.9	28,703	84.7	15.3
Part owners.....	55,943	65.1	34.9	16,885	42.3	57.7	39,058	74.9	25.1
Tenants.....	12,243	69.9	30.1	2,732	51.5	48.5	9,512	75.2	24.8
Individual or family.....	68,197	68.2	31.8	22,514	47.0	53.0	45,684	78.6	21.4
Partnership.....	16,764	70.0	30.0	4,488	46.8	53.2	12,276	78.5	21.5
Corporations.....	22,060	74.6	25.4	3,154	52.7	47.3	18,906	78.2	21.8
Other.....	485	87.8	12.2	77	64.9	35.1	408	92.2	7.8
Under 50 acres.....	8,410	80.3	19.7	2,231	53.9	46.1	6,179	89.9	10.1
50-179 acres.....	16,430	74.0	26.0	5,262	49.1	50.9	11,168	85.8	14.2
180-499 acres.....	29,008	72.6	27.4	8,478	48.7	51.3	20,530	82.5	17.5
500-999 acres.....	19,873	67.3	32.7	5,647	46.5	53.5	14,026	75.7	24.3
1,000 acres or more.....	33,985	64.4	35.6	8,615	44.8	55.2	25,370	71.1	28.9

## No. 1177. CAPITAL PURCHASES AND OPERATING EXPENSES BY METHOD OF PAYMENT: 1979

[Covers purchases and expenses of farm operators only. See headnote, table 1151]

TYPE	AMOUNT (mil. dol.)			PERCENT DISTRIBUTION		
	Total	Paid in cash	Financed	Total	Paid in cash	Financed
<b>Total</b> .....	<b>107,506</b>	<b>75,106</b>	<b>32,400</b>	<b>100.0</b>	<b>69.9</b>	<b>30.1</b>
Capital purchases.....	30,233	14,396	15,837	100.0	47.6	52.4
Land, incl. buildings.....	7,954	2,192	5,762	100.0	27.6	72.4
Land and irrigation improvements.....	1,791	1,222	569	100.0	68.2	31.8
Buildings and structures.....	4,701	2,125	2,577	100.0	45.2	54.8
Tractors and machinery.....	8,515	4,661	3,854	100.0	54.7	45.3
Trucks and autos.....	3,224	2,109	1,115	100.0	65.4	34.6
Breeding livestock, dairy cows, heifers.....	3,267	1,609	1,659	100.0	49.3	50.7
All other.....	780	479	301	100.0	61.4	38.6
Operating expenses.....	77,273	60,710	16,563	100.0	78.6	21.4
Feed purchased.....	15,998	12,800	2,597	100.0	83.1	16.9
Livestock and poultry <sup>2</sup> .....	11,789	6,306	5,482	100.0	53.5	46.5
Fertilizer purchased.....	8,162	6,066	2,095	100.0	74.3	25.7
Hired and contract labor.....	9,008	7,999	1,009	100.0	88.8	11.2
Fuel purchased.....	5,540	4,712	827	100.0	85.1	14.9
All other.....	27,376	22,825	4,551	100.0	83.4	16.6

<sup>1</sup>Includes funds borrowed for unspecified purposes, not shown separately.

<sup>2</sup>Excludes breeding stock, dairy cows and heifers purchased.

Source of tables 1175-1177: U.S. Bureau of the Census, 1978 Census of Agriculture, volume 5, Special Reports, part 6, 1979 Farm Finance Survey.

## NO. 1178. COMMODITY CREDIT CORPORATION—SUMMARY: 1960 TO 1981

[In millions of dollars. Through 1976, as of or for years ending June 30; beginning 1977, as of or for years ending Sept. 30. The Commodity Credit Corporation (CCC) is a wholly government-owned corporation established by Congress in 1933. 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	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
Loans made.....	1,507	2,144	2,388	1,580	1,256	852	1,131	3,621	6,385	4,576	4,228	5,849
Loans outstanding <sup>1</sup> .....	1,347	2,534	2,952	1,418	720	335	837	3,245	5,030	5,210	5,119	5,193
Wheat.....	163	136	576	77	10	4	24	1,814	1,318	816	837	1,871
Corn.....	646	616	632	451	115	39	61	239	1,280	1,301	1,617	629
Cotton.....	9	775	170	26	34	143	24	13	153	80	35	76
Tobacco.....	417	826	845	481	250	119	353	652	751	903	815	764
Storage facilities, equipment <sup>2</sup> .....	45	40	164	274	271	189	157	236	799	1,324	1,470	1,403
Cost of acquisitions <sup>1,3,4</sup> .....	4,021	2,005	1,518	576	402	835	657	997	911	1,007	2,759	2,506
Wheat.....	371	169	217	56	130	4	14	72	135	40	601	28
Corn.....	361	140	49	4	6	2	5	2	31	195	416	21
Cotton.....	2,507	952	304	(2)	(2)	(2)	(2)	(2)	(2)	(2)	1	1
Dairy products.....	223	325	253	160	55	480	115	721	445	247	1,282	1,991
Wheat flour and products.....	79	124	109	140	177	123	80	89	112	149	124	161
Vegetable oil products.....	-	16	28	58	67	44	(2)	24	50	117	136	181
Commodities owned <sup>1,3</sup> .....	6,021	3,892	1,858	479	114	416	659	985	1,029	1,162	2,737	3,727
Wheat.....	2,452	1,297	405	194	26	2	(2)	23	119	118	705	679
Corn.....	1,700	595	293	99	11	(2)	1	(2)	27	209	596	555
Cotton.....	880	1,123	225	1	-	(2)	-	(2)	(2)	(2)	1	1
Dairy products.....	107	137	134	65	25	290	259	703	751	570	1,266	2,395
Sorghum.....	731	648	173	14	2	(2)	(2)	(2)	28	92	83	79
Sales and donations, cost <sup>3</sup> .....	3,234	2,458	902	1,190	766	530	457	640	895	901	1,216	1,537
Other expenses <sup>3</sup> .....	529	393	289	131	34	34	35	49	62	100	224	290

- Represents zero. Z Less than \$500,000. <sup>1</sup>Includes amounts for commodities not shown separately. <sup>2</sup>Loans for purchase, construction, erection or installation of storage and drying equipment. <sup>3</sup>Data comparable for 1960-1970; price support commodities only. Thereafter, includes Commodity Export and Special Activities programs. <sup>4</sup>Value of commodities purchased and acquired as collateral from loans.

Source: U.S. Agricultural Stabilization and Conservation Service, *Commodity Credit Corporation Report of Financial Condition and Operations*, annual.

## NO. 1179. FARMER MARKETING AND FARM SUPPLY COOPERATIVES—SUMMARY: 1960 TO 1980

[1960-1977, for fiscal years of cooperatives ending between July 1 of preceding year and June 30 of year shown. Beginning 1978, reports of cooperatives are for the calendar year. Memberships and business are estimated. Comprises independent local associations, federations, large-scale centralized associations, and sales agencies. See also *Historical Statistics, Colonial Times to 1970*, series K 195-203]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980, prel.
<b>Cooperatives listed.....</b>	<b>9,345</b>	<b>8,583</b>	<b>7,790</b>	<b>7,755</b>	<b>7,645</b>	<b>7,535</b>	<b>6,736</b>	<b>6,500</b>	<b>6,445</b>	<b>6,293</b>
Marketing <sup>1</sup> .....	6,048	5,498	5,015	4,977	4,916	4,804	4,143	4,050	3,938	3,924
Farm supply.....	3,297	3,085	2,775	2,778	2,729	2,731	2,593	2,550	2,507	2,369
<b>Memberships <sup>2</sup> (1,000).....</b>	<b>7,273</b>	<b>7,082</b>	<b>6,355</b>	<b>6,106</b>	<b>6,123</b>	<b>5,906</b>	<b>5,758</b>	<b>5,695</b>	<b>5,627</b>	<b>5,579</b>
Marketing <sup>1</sup> (1,000).....	3,673	3,531	3,133	3,133	3,151	2,850	2,692	2,632	2,567	2,574
Farm supply (1,000).....	3,600	3,251	3,222	2,973	2,972	3,056	3,066	3,063	3,060	2,804
<b>Business <sup>3</sup> (mil. dol.).....</b>	<b>12,036</b>	<b>14,742</b>	<b>19,080</b>	<b>35,366</b>	<b>41,342</b>	<b>40,104</b>	<b>43,584</b>	<b>47,305</b>	<b>56,268</b>	<b>66,254</b>
Marketing <sup>1</sup> (mil. dol.).....	9,628	11,832	15,207	27,602	32,682	30,692	33,027	36,253	42,747	50,120
Farm supply (mil. dol.).....	2,408	2,910	3,873	7,764	8,660	9,412	10,557	11,052	13,521	16,134

SELECTED PRODUCTS OR SUPPLIES	COOPERATIVES HANDLING					BUSINESS <sup>3</sup> (mil. dol.)					
	1965	1970	1978	1979	1980, prel.	1965	1970	1975	1978	1979	1980, prel.
<b>Products marketed:</b>											
Grain, soybeans.....	2,596	2,539	2,470	2,488	2,434	2,465	3,006	12,744	13,066	14,948	17,790
Dairy products.....	1,346	971	530	495	487	3,770	5,128	8,376	9,828	11,592	13,666
Fruits and vegetables.....	592	499	415	405	400	1,232	1,776	2,730	3,378	3,925	4,209
Livestock and livestock products.....	479	546	465	449	449	1,433	2,154	2,614	3,743	5,141	5,637
Sugar products.....	67	66	55	46	45	530	634	2,065	1,173	1,209	1,712
Cotton and cotton products.....	581	554	485	473	470	830	434	935	1,067	1,436	1,860
<b>Supplies purchased:</b>											
Feed.....	4,363	4,214	3,810	3,796	3,613	1,035	1,279	2,587	2,865	3,189	3,544
Fertilizer.....	4,409	4,294	3,940	3,972	3,802	507	657	1,913	2,518	2,755	3,454
Petroleum products.....	2,773	2,774	3,045	3,062	2,921	643	864	1,675	2,674	3,827	5,069
Farm chemicals.....	3,329	3,721	3,785	3,877	3,697	82	165	502	650	948	1,048
Seed.....	3,962	4,007	3,740	3,805	3,620	121	142	337	408	456	495

<sup>1</sup>Includes cooperatives whose major activity is providing services related to marketing and farm-supply activities. <sup>2</sup>Excludes nonvoting patrons. <sup>3</sup>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. 1180. FOOD MANUFACTURING INDUSTRY—SUMMARY: 1970 TO 1981

[Covers manufacturers of food and kindred products (Standard Industrial Classification Code 20); based on various editions of the Standard Industrial Classification Manual, see text, p. 372]

ITEM	Unit	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total employees <sup>1</sup>	1,000	1,786	1,715	1,707	1,658	1,689	1,711	1,724	1,733	1,708	1,674
Production workers	1,000	1,207	1,167	1,164	1,120	1,145	1,161	1,174	1,191	1,175	1,151
Avg. hourly earnings, prod. workers	Dollars	3.16	3.85	4.19	4.61	4.98	5.37	5.80	6.27	6.85	7.43
Salaries and wages	Bil. dol.	11.7	13.7	14.8	15.9	17.3	18.5	20.3	21.7	23.2	(NA)
Supplemental labor cost <sup>2</sup>	Bil. dol.	(NA)	(NA)	(NA)	2.6	3.0	3.6	4.1	4.5	4.9	(NA)
Value added by manufacture <sup>3</sup>	Bil. dol.	32.3	39.7	44.9	48.1	52.8	56.1	62.9	68.7	75.3	(NA)
Cost of materials	Bil. dol.	66.5	97.4	118.3	123.8	128.6	137.0	154.0	168.0	181.3	(NA)
Value of shipments <sup>4</sup>	Bil. dol.	98.5	135.6	162.1	172.2	180.9	192.9	216.1	236.0	255.9	(NA)
Total assets	Bil. dol.	23.8	28.4	30.1	33.0	35.1	38.4	41.7	44.6	48.6	(NA)
Capital expenditures, new <sup>5</sup>	Bil. dol.	2.1	2.4	3.0	3.4	3.8	4.2	4.8	5.0	5.9	(NA)
Funds for research and development <sup>6</sup>	Bil. dol.	230	269	298	335	353	395	429	459	517	(NA)
Corporate profits before taxes <sup>7</sup>	Bil. dol.	4.8	6.8	7.9	8.8	9.7	9.2	10.2	11.5	13.0	14.3
Corporate profits after taxes <sup>7</sup>	Bil. dol.	2.6	3.8	4.6	5.2	5.8	5.6	6.2	7.3	8.2	9.1
Ratio of profits to stockholders' equity	Percent	10.8	12.8	13.8	14.4	14.9	13.3	13.8	14.7	14.7	14.0
Profits per dollar of sales	Cents	2.5	2.6	2.9	3.2	3.5	3.1	3.2	3.3	3.4	3.2

NA Not available. <sup>1</sup> See headnote, table 667. Source: U.S. Bureau of Labor Statistics, *Employment and Earnings*, monthly. <sup>2</sup> Employers' expenses for legally required labor supplements (e.g., Social Security) and for voluntary programs (e.g., pension funds). <sup>3</sup> See footnote 6, table 1377. <sup>4</sup> See footnote 7, table 1377. <sup>5</sup> Includes expenditures for plants in operation and plants under construction but not yet in operation. <sup>6</sup> Source: U.S. National Science Foundation, *Research and Development in Industry*, annual. <sup>7</sup> Source: U.S. Federal Trade Commission, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*. Data are not necessarily comparable from year to year due to change in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source.

Source: Except as noted, U.S. Bureau of the Census, *Census of Manufactures, 1977, General Summary*; and *Annual Survey of Manufactures*.

## No. 1181. U.S. TOTAL FOOD AND ALCOHOLIC BEVERAGE EXPENDITURES, BY TYPE OF USE AND TYPE OF SELLER: 1960 TO 1981

[Covers all food and alcohol purchased by civilians and military, including businesses and institutions. Based on sales of food by different types of seller. Data are primarily based on current sales figures from the *Monthly Retail Trade Report* of the U.S. Bureau of the Census. For further detail, see source]

TYPE OF USE AND SELLER	EXPENDITURES (bil. dol.)									PERCENT		
	1960	1965	1970	1975	1977	1978	1979	1980	1981 <sup>1</sup>	1960	1970	1981 <sup>1</sup>
Total food expenditures.....	72.2	85.5	115.8	185.7	216.9	239.8	267.5	293.5	320.7	100.0	100.0	100.0
Food for off-premise use.....	53.0	59.9	77.0	119.8	134.9	148.4	165.2	182.9	200.6	73.4	66.5	62.6
Sales, total.....	49.4	56.8	73.5	114.6	129.3	142.4	158.8	176.0	192.5	68.4	63.5	60.1
Food stores <sup>2</sup> .....	42.1	49.1	65.5	104.1	117.6	129.7	145.1	161.1	176.6	58.3	56.6	55.1
Other stores <sup>3</sup> .....	2.0	2.3	2.4	4.1	5.5	6.1	6.8	7.6	8.2	2.8	2.1	2.6
Farmers, manufacturers, wholesalers.....	1.6	1.6	1.8	2.2	2.3	2.6	2.9	3.3	3.6	2.2	1.5	1.1
Commissary stores, exchanges.....	.5	1.0	1.4	2.2	2.2	2.4	2.5	2.6	2.8	.7	1.2	.9
Home delivered <sup>4</sup> .....	3.2	2.6	2.4	2.0	1.7	1.6	1.5	1.4	1.3	4.4	2.1	.4
Home production, donations.....	3.6	3.3	3.5	5.2	5.6	6.0	6.4	6.9	8.1	5.0	3.0	2.5
Meals and snacks.....	19.2	25.6	38.8	65.9	82.0	91.4	102.3	110.6	120.1	26.6	33.5	37.4
Eating and drinking places <sup>5</sup> .....	10.5	14.4	22.6	40.5	51.9	58.1	65.3	70.3	77.2	14.5	19.5	24.0
Schools and colleges <sup>6</sup> .....	2.1	3.1	4.5	7.1	8.4	9.0	10.0	10.9	11.0	2.9	3.9	3.4
Retail stores, direct selling <sup>7</sup> .....	1.7	2.2	3.3	5.1	5.9	6.3	6.9	7.5	7.9	2.4	2.9	2.5
Hotels and motels <sup>8</sup> .....	1.1	1.4	1.9	3.1	4.0	4.8	5.6	6.0	6.8	1.5	1.6	2.1
Recreational places <sup>9</sup> .....	.4	.5	.7	1.4	1.8	2.0	2.3	2.7	2.8	.6	.6	.9
Other.....	3.4	4.0	5.8	8.7	10.0	11.2	12.2	13.4	14.4	4.7	5.0	4.5
Total alcoholic beverage sales.....	12.9	15.6	21.9	32.0	36.8	40.4	45.0	48.7	52.8	100.0	100.0	100.0
Off-premise use.....	7.2	9.0	12.9	19.4	22.2	23.8	26.6	28.6	31.1	55.8	58.9	58.9
Liquor stores.....	4.1	5.5	7.7	11.1	12.2	12.9	14.4	15.2	16.5	31.8	35.1	31.3
Food stores.....	2.4	2.9	4.2	6.7	8.0	8.7	9.8	10.8	11.8	18.6	19.2	22.3
Other.....	.7	.8	1.0	1.6	2.0	2.1	2.4	2.6	2.8	5.4	4.6	5.3
On-premise use.....	5.7	6.6	9.0	12.6	14.6	16.6	18.4	20.1	21.7	44.2	41.1	41.1
Eating and drinking places <sup>5</sup> .....	5.0	5.7	7.7	10.4	11.9	13.4	14.7	16.1	17.3	38.8	35.2	32.8
Hotels and motels <sup>8</sup> .....	.4	.5	.8	1.3	1.7	2.0	2.3	2.5	2.8	3.1	3.6	5.3
Other.....	.3	.4	.6	.9	1.0	1.2	1.4	1.5	1.6	2.3	2.3	3.0

<sup>1</sup> Preliminary. <sup>2</sup> Excludes sales to restaurants and institutions. <sup>3</sup> Includes eating and drinking establishments and trailer parks. <sup>4</sup> Includes mail order. <sup>5</sup> Includes tips. <sup>6</sup> Includes school food subsidies. <sup>7</sup> Includes vending machine operators. <sup>8</sup> Motion picture theaters, sports arenas, camps, golf and country clubs, etc.

Source: U.S. Dept. of Agriculture, Economic Research Service, *U.S. Food Expenditures* (Agricultural Economic Report No. 431), 1979 and unpublished data.

No. 1182. CIVILIAN CONSUMER EXPENDITURES FOR FARM FOODS—FARM VALUE AND MARKETING BILL: 1960 TO 1981

[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	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981, prel.
<b>Consumer expenditures, total</b> .....	<b>66.9</b>	<b>81.1</b>	<b>110.6</b>	<b>169.0</b>	<b>183.7</b>	<b>192.3</b>	<b>214.3</b>	<b>241.2</b>	<b>260.8</b>	<b>284.5</b>
Farm value, total.....	22.3	27.1	35.5	55.6	58.3	58.0	69.4	78.4	81.1	82.4
Marketing bill, total <sup>1</sup> .....	44.6	54.0	75.1	113.4	125.4	134.3	144.9	162.8	179.7	202.1
Percent of total consumer expenditures.....	66.7	66.6	68.0	67.1	68.4	69.8	67.7	67.5	68.9	71.0
<b>At-home expenditures<sup>2</sup></b> .....	<b>50.0</b>	<b>60.5</b>	<b>78.0</b>	<b>116.7</b>	<b>126.6</b>	<b>130.7</b>	<b>149.8</b>	<b>170.7</b>	<b>179.5</b>	<b>193.7</b>
Farm value.....	18.7	22.6	29.1	43.8	47.7	47.3	56.6	64.8	65.0	66.6
Marketing bill <sup>1</sup> .....	31.3	37.9	48.9	72.9	78.9	83.4	93.2	106.0	113.5	127.1
Percent of at-home expenditures.....	62.6	62.8	62.8	62.5	62.3	63.8	63.0	62.1	63.2	65.6
<b>Away-from-home expenditures</b> .....	<b>16.9</b>	<b>20.8</b>	<b>32.6</b>	<b>52.3</b>	<b>57.1</b>	<b>61.6</b>	<b>64.5</b>	<b>70.4</b>	<b>81.3</b>	<b>90.7</b>
Farm value.....	3.7	4.5	6.4	11.8	10.6	10.7	12.8	13.7	15.1	15.8
Marketing bill <sup>1</sup> .....	13.2	16.1	26.2	40.5	46.5	50.9	51.7	56.8	66.2	74.9
Percent of away-from-home expenditures.....	78.1	78.2	80.5	77.4	81.4	82.6	80.2	80.7	81.4	82.6
<b>Marketing bill cost components:</b>										
Labor cost <sup>3</sup> .....	19.7	23.3	32.2	48.7	53.7	58.4	65.3	73.8	80.7	90.7
Packaging materials.....	5.4	6.2	8.2	13.5	14.6	15.2	16.3	18.4	21.1	22.9
Rail and truck transport <sup>4</sup> .....	4.1	4.2	5.2	8.5	9.1	9.8	10.3	11.6	12.7	14.1
Corporate profits before taxes.....	2.1	3.0	3.6	7.5	7.6	8.0	9.0	9.9	11.0	12.0
Fuels and electricity.....			2.2	4.6	5.0	5.6	6.2	7.8	9.0	10.9
Other <sup>5</sup> .....	13.3	17.3	23.7	30.6	35.4	37.3	37.8	41.5	45.2	51.5
Processing.....	15.1	16.8	23.1	41.5	47.1	51.6	55.8	62.3	71.1	77.6
Wholesaling.....	5.5	6.6	9.7	13.6	14.4	14.7	16.9	19.2	20.6	23.8
Transportation.....	4.1	4.3	5.2	8.5	9.1	9.8	10.3	11.6	12.7	14.1
Retailing.....	19.9	26.3	37.1	49.9	54.7	58.1	61.9	69.7	75.3	86.6
<b>SELECTED FOOD COMMODITY GROUPS</b>										
<b>Beef: Total expenditures</b> .....	<b>10.0</b>	<b>13.0</b>	<b>19.9</b>	<b>28.7</b>	<b>33.8</b>	<b>34.0</b>	<b>42.3</b>	<b>47.3</b>	<b>49.2</b>	<b>53.1</b>
Farm value.....	5.0	6.2	9.5	12.8	14.0	14.1	19.1	22.1	21.8	22.1
Percent of total.....	50.0	47.7	47.4	44.6	41.4	41.5	45.2	46.7	44.3	41.6
Marketing bill <sup>1</sup> .....	5.0	6.8	10.4	15.9	19.8	19.8	23.2	25.2	27.4	31.0
<b>Pork: Total expenditures</b> .....	<b>7.2</b>	<b>8.0</b>	<b>12.4</b>	<b>16.9</b>	<b>18.7</b>	<b>20.2</b>	<b>21.6</b>	<b>27.4</b>	<b>28.6</b>	<b>29.6</b>
Farm value.....	2.7	3.5	4.3	7.3	7.1	6.7	8.0	8.2	8.1	8.1
Percent of total.....	37.5	43.8	34.7	43.2	38.0	33.2	37.0	29.9	28.3	27.4
Marketing bill <sup>1</sup> .....	4.5	4.5	8.1	9.6	11.6	13.5	13.6	19.2	20.5	21.5
<b>Poultry and eggs:</b>										
Total expenditures.....	5.2	6.2	9.1	12.7	13.9	14.3	15.0	17.3	18.1	19.6
Farm value.....	2.9	3.1	4.0	6.3	6.6	6.6	7.4	8.1	8.3	8.8
Percent of total.....	55.9	49.5	44.0	49.6	47.5	45.2	49.3	46.8	45.9	44.9
Marketing bill <sup>1</sup> .....	2.3	3.1	5.1	6.4	7.3	7.7	7.6	9.1	9.8	10.8
<b>Fluid milk and cream:</b>										
Total expenditures.....	7.0	7.4	8.9	11.3	12.4	12.7	12.4	14.8	16.1	17.1
Farm value.....	2.8	3.0	3.9	5.3	5.8	5.6	5.9	7.2	7.6	8.0
Percent of total.....	39.4	40.5	43.8	46.9	46.8	44.1	47.6	48.6	48.0	46.8
Marketing bill <sup>1</sup> .....	4.3	4.4	5.0	6.0	6.6	7.1	6.5	7.6	8.5	9.1
<b>Other dairy products:</b>										
Total expenditures.....	5.0	5.6	7.8	12.1	14.0	14.7	17.2	18.4	21.5	23.2
Farm value.....	1.9	2.1	3.0	4.7	5.4	5.4	7.0	7.4	8.4	8.8
Percent of total.....	38.0	37.5	38.5	38.8	38.6	36.7	40.7	40.2	40.9	37.9
Marketing bill <sup>1</sup> .....	3.1	3.5	4.8	7.4	8.6	9.3	10.2	11.0	13.1	14.4
<b>Fresh fruit, vegetables:</b>										
Total expenditures.....	7.5	8.7	11.0	16.3	17.2	18.9	22.0	25.1	26.0	27.5
Farm value.....	2.3	2.7	3.1	5.0	5.1	5.0	5.9	6.3	5.9	7.2
Percent of total.....	30.7	31.0	28.2	30.7	29.7	26.5	26.8	25.1	29.5	26.2
Marketing bill <sup>1</sup> .....	5.2	6.0	7.9	11.3	12.1	13.9	16.1	18.9	19.0	20.3
<b>Processed fruits and vegetables:</b>										
Total expenditures.....	7.3	9.1	11.6	19.3	21.4	22.7	23.2	26.0	27.6	32.8
Farm value.....	1.2	1.8	2.0	3.4	3.8	3.7	4.3	4.5	4.7	6.1
Percent of total.....	16.4	19.8	17.2	17.6	17.8	16.3	18.5	17.3	17.0	18.6
Marketing bill <sup>1</sup> .....	6.0	7.3	9.6	15.9	17.6	19.0	18.9	21.5	22.9	26.7
<b>Bakery, grain mill products:</b>										
Total expenditures.....	9.4	11.2	13.6	24.2	24.9	25.9	28.7	30.4	33.6	37.4
Farm value.....	1.4	1.9	2.0	4.2	3.6	3.2	3.7	4.8	5.1	4.9
Percent of total.....	14.5	16.7	14.7	17.4	14.5	12.4	12.9	15.8	15.2	13.1
Marketing bill <sup>1</sup> .....	8.0	9.4	11.6	19.9	21.3	22.7	25.0	25.6	28.5	32.5

<sup>1</sup> The difference between civilian expenditures for domestic farm-originated food products and the farm value or payment farmers received for the equivalent farm products. <sup>2</sup> Food primarily purchased from retail food stores for use at home. <sup>3</sup> 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. <sup>4</sup> Excludes local hauling. <sup>5</sup> Represents advertising, rents, depreciation, interest on borrowed capital, taxes other than income, and other costs.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Developments in Farm to Retail Price Spreads for Food Products in 1981*, AER No. 486, Sept. 1982; *Agricultural Outlook*, periodic; and *Agricultural Statistics*, annual.

### No. 1183. FOOD PRICES—DISTRIBUTION OF RETAIL PRICE ACCORDING TO FARM VALUE AND MARKETING FUNCTION: 1979 TO 1981

[In cents per retail unit indicated. The farm value is the payment to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. Because of losses from processing, waste, and spoilage, the farm value represents larger quantities than the retail unit]

FOOD ITEM	Unit	1979		1980		1981						
		Farm value	Retail price	Farm value	Retail price	Farm value	As-sembly and pro-curement	Pro-cessing or pack-ing	Inter-city trans-portion	Who-le-saling	Retail-ing	Retail price
Beef, choice	Lb	140.8	226.3	145.0	237.6	138.5	(1)	7.0	3.8	25.3	64.1	238.7
Pork	Lb	66.6	144.1	63.2	139.5	70.3	(1)	32.9	3.5	9.5	36.2	152.4
Broilers	Lb	35.7	68.0	38.8	72.0	37.6	1.6	10.3	1.7	4.3	18.2	73.7
Eggs, grade A	Doz	53.7	85.9	51.0	84.4	56.1	1.2	12.2	1.9	4.1	15.1	90.6
Milk, sold in stores	½ gal	52.5	96.0	58.1	104.9	61.8	4.1	14.9	(2)	15.0	15.9	111.7
Butter	Lb	111.6	168.6	125.5	187.8	132.5	4.7	20.2	4.1	7.3	30.5	199.3
Bread, white	Lb	4.9	46.7	5.3	50.9	5.5	(NA)	(NA)	(NA)	(NA)	(NA)	52.5
Potatoes, russet	10 lb	34.7	182.2	54.9	209.9	72.1	(1)	59.8	45.3	26.3	99.5	303.0
Oranges, Calif	Lb	13.2	43.8	7.4	36.6	8.3	.5	5.6	5.1	3.6	16.3	39.4
Lettuce, Calif	Lb	6.9	47.6	6.4	45.8	6.3	.4	12.0	8.5	3.1	19.0	47.3
Orange juice, frozen	12 oz	41.2	89.4	35.7	87.4	39.9	1.7	24.6	4.8	10.8	20.0	101.8
Tomatoes, Calif.	Lb	5.1	41.9	4.5	42.2	4.7	.8	30.5	5.3	1.6	7.0	49.9

NA Not available. <sup>1</sup>Included in farm value. <sup>2</sup>Includes breaking the carcass into principal parts such as loin and chuck.  
<sup>3</sup>Included in wholesaling. <sup>4</sup>Includes value for wheat, lard, soybean oil, high fructose corn syrup, and soy-whey blend.  
<sup>5</sup>Includes some potatoes for processing. <sup>6</sup>Value in the field. Harvesting and packing, a contract operation, appears as assembly cost. <sup>7</sup>Whole tomatoes.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Developments in Farm to Retail Price Spreads for Food Products in 1981*, AER No. 488, August 1982.

### No. 1184. AGRICULTURAL CHEMICALS USED ON FARMS: 1974 AND 1978

[Farms with sales of \$2,500 or more. 1978 data based on sample]

TYPE OF CHEMICAL	1974			1978		
	Farms reporting (1,000)	Acres treated (1,000)	Cost (mil. dol.)	Farms reporting (1,000)	Acres treated (1,000)	Cost (mil. dol.)
Total	1,363	(X)	6,769	1,568	(X)	9,144
Commercial fertilizer	1,278	184,643	5,028	1,427	224,186	6,275
Lime	145	8,240	104	301	16,057	
Chemicals for—						
Defoliation or growth control of crops	37	5,174	34	78	9,240	2,859
Insect control in livestock and poultry	132	(X)	19	511	(X)	
Sprays, dusts, etc. for—						
Insects on hay and other crops	418	56,642	596	544	75,737	
Nematodes in crops	27	1,754	29	100	8,795	
Crop diseases	37	4,183	84	112	11,339	
Weeds or grass in crops	549	110,793	784	884	163,492	
Weeds or brush in pasture	44	4,003	13			

X Not applicable. <sup>1</sup>If more than 1 subentry was applicable, the farm was tabulated in each. <sup>2</sup>Includes categories not shown separately.

Source: U.S. Bureau of the Census, *Census of Agriculture: 1974 and 1978*, vol. I.

### No. 1185. COMMERCIAL FERTILIZERS CONSUMED: 1960 TO 1981

[In millions of tons, except percent. For years ending June 30. Includes Puerto Rico. Percent nutrient content excludes secondary and micronutrients. See *Historical Statistics, Colonial Times to 1970*, series K 193, for related but not comparable data]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981
All fertilizers	24.9	31.8	39.6	47.1	42.5	49.2	51.6	47.5	51.5	52.8	53.3
Percent: Nitrogen	11.7	15.3	19.5	20.4	21.2	22.2	21.7	21.8	21.7	22.6	23.0
Phosphoric oxide	10.9	11.6	11.9	11.3	11.1	11.2	11.5	11.2	11.4	10.8	10.6
Potash	9.2	9.4	10.5	11.3	11.0	11.1	11.9	12.1	12.7	12.4	12.2
Mixed fertilizers	15.7	18.6	21.0	24.1	20.6	23.0	24.0	22.1	23.7	23.3	23.3
Percent: Nitrogen	6.5	7.8	9.3	10.1	10.2	10.5	10.6	10.7	10.8	10.8	11.0
Phosphoric oxide	13.0	15.2	17.7	17.7	18.0	19.3	19.9	19.6	20.1	19.6	19.9
Potash	12.1	12.4	12.7	12.7	12.5	12.5	12.8	12.8	12.8	13.1	12.9
Primary nutrient materials	7.9	11.8	17.3	20.9	20.0	23.9	25.0	23.5	25.6	27.2	27.9
Secondary and micronutrients	1.4	1.5	1.3	2.1	1.9	2.3	2.5	1.9	2.1	2.3	2.1

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Commercial Fertilizers, Consumption in the United States*, annual. Also in *Agricultural Statistics*, annual.

# Farm Indexes—Machinery and Equipment—Employment

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## No. 1186. SELECTED INDEXES OF FARM INPUTS: 1950 TO 1981

[1967 = 100. Inputs based on physical quantities of resources used in production. See also *Historical Statistics, Colonial Times to 1970*, series K 486-495 for data before revisions]

INPUT	1950	1955	1960	1965	1970	1975	1977	1978	1979	1980	1981, prl.
<b>Total</b> .....	<b>104</b>	<b>105</b>	<b>101</b>	<b>98</b>	<b>100</b>	<b>100</b>	<b>105</b>	<b>105</b>	<b>108</b>	<b>105</b>	<b>106</b>
Farm labor.....	217	185	145	110	89	76	71	67	66	65	64
Farm real estate <sup>1</sup> .....	105	105	100	99	101	96	99	97	96	95	97
Mechanical power and machinery.....	84	97	97	94	100	113	120	126	130	129	127
Agricultural chemicals <sup>2</sup> .....	29	39	49	75	115	127	154	161	184	174	175
Feed, seed, and livestock purchases <sup>3</sup> .....	63	72	84	93	104	101	112	115	120	119	120
Taxes and interest.....	82	86	94	100	101	101	100	93	92	96	96
Miscellaneous.....	87	94	105	109	109	104	128	135	145	117	125

<sup>1</sup>Includes service buildings, improvements. <sup>2</sup>Includes fertilizer, lime, and pesticides. <sup>3</sup>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 Advisors, *Economic Report of the President*, 1982.

## No. 1187. FARM MACHINERY AND EQUIPMENT: 1960 TO 1981

[See also *Historical Statistics, Colonial Times to 1970*, series K 184-191]

ITEM	Unit	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
Value of farm implements and machinery <sup>1</sup> .....	Bill. dol.....	22.7	24.8	32.3	39.3	44.2	54.7	64.0	71.0	76.9	85.1	96.7	102.8
Number on farms, Jan. 1: <sup>2</sup>													
Tractors <sup>3</sup> .....	1,000	4,688	4,787	4,619	4,518	4,493	4,469	4,434	4,402	5,050	4,989	4,880	4,740
Horsepower.....	Mill.	153	176	203	212	219	222	228	232	264	266	269	275
Motortrucks.....	1,000	2,834	3,030	2,984	3,013	3,023	3,032	3,043	3,044	3,450	3,555	3,734	3,972
Grain combines.....	1,000	1,042	910	790	701	698	524	527	535	660	664	669	671
Corn pickers <sup>4</sup> .....	1,000	792	690	635	621	618	615	610	605	695	684	680	687
Pickup balers.....	1,000	680	751	708	684	674	667	641	615	770	769	766	761
Field forage harvesters.....	1,000	291	316	304	292	285	255	269	270	302	301	301	300
Farmers' expenditures:													
Motor vehicles <sup>5</sup> .....	Mill. dol.....	1,344	1,940	2,030	3,066	3,405	3,833	4,604	4,927	5,580	6,284	5,877	5,861
Machinery, equipment.....	Mill. dol.....	1,458	2,239	2,888	4,581	4,790	4,820	5,393	5,535	7,158	8,002	7,314	6,746
Retail sales: <sup>6</sup>													
Tractors, total <sup>7</sup> .....	1,000	(NA)	162.5	197.0	173.8	161.1	153.2	130.9	139.6	139.0	119.3	119.3	103.8
2-wheel drive.....	1,000	(NA)	162.5	135.5	190.8	165.5	150.5	142.7	123.2	130.9	127.5	108.4	94.2
4-wheel drive.....	1,000	(NA)	(NA)	(NA)	6.2	8.3	10.6	10.5	7.7	8.7	11.5	10.9	9.7
Combines.....	1,000	(NA)	37.6	26.7	35.1	31.6	33.1	32.5	28.8	31.5	32.3	25.7	26.8
Corn heads.....	1,000	(NA)	22.9	18.5	26.7	25.1	25.4	25.4	20.7	21.2	22.4	17.2	15.7
Field forage harvesters.....	1,000	(NA)	(NA)	15.0	17.7	16.1	13.1	13.3	13.2	11.5	12.5	9.5	7.6

NA Not available. <sup>1</sup>Farm inventory valuations at beginning of year. Includes family automobiles. <sup>2</sup>1978 data are not directly comparable with totals for 1974 or earlier agriculture census years; see text, p. 547. For all non-census years, data are estimated using prior census as reference point. <sup>3</sup>Excludes garden tractors. <sup>4</sup>Includes picker-shellers. <sup>5</sup>For farm business use. <sup>6</sup>Source: Farm and Industrial Equipment Institute, Chicago, Illinois, unpublished data. <sup>7</sup>Beginning 1977, covers tractors over 40 hp. only.

Source: Except as noted, U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Income and Balance Sheet Statistics*, annual. Also in *Agricultural Statistics*, annual.

## No. 1188. FARM EMPLOYMENT AND INDEX OF WAGE RATES: 1960 TO 1981

[Excludes Alaska and Hawaii, except beginning 1978 includes Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 174-181]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981 <sup>1</sup>
Employment <sup>2</sup> .....	1,000	7,057	5,610	4,523	4,389	4,342	4,374	4,170	3,957	3,774	3,705	3,330
Family <sup>3</sup> .....	1,000	5,172	4,128	3,348	3,075	3,025	2,997	2,863	2,689	2,501	2,402	2,236
Hired <sup>4</sup> .....	1,000	1,885	1,482	1,175	1,314	1,317	1,377	1,307	1,268	1,273	1,303	1,094
Farm wage rates index.....	1977 = 100	33	38	57	79	85	93	100	107	118	127	136

<sup>1</sup>Quarterly survey discontinued after April 1981. Averages based on employment data from Jan. and April quarterly surveys. <sup>2</sup>1960-1973, averages of monthly estimates of employed during last full calendar week ending at least one day before end of month; beginning 1974, annual quarterly averages. <sup>3</sup>Includes farm operators doing 1 or more hours of farm work and unpaid family members doing 15 or more hours of farm work during survey week. <sup>4</sup>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: U.S. Dept. of Agriculture, Statistical Reporting Service, *Farm Labor*, quarterly (discontinued in 1981).

**NO. 1189. HIRED FARMWORKERS—WORKERS AND EARNINGS: 1970 TO 1979**

[Represents persons 14 years old and over in the civilian noninstitutional population who did hired farmwork at any time during the year. Based on Current Population Survey; see text, p. 2 and Appendix III. For composition of regions, see fig. 1, inside front cover. For definition of median, see Guide to Tabular Presentation.]

ITEM	WORKERS (1,000)								MEDIAN EARNINGS PER DAY		
	1970	1975	Total	1979					1970	1975	1979
				Duration of farmwork							
				Under 25 days	25-74 days	75-149 days	150-249 days	250 days and over			
<b>All workers</b> .....	<b>2,408</b>	<b>2,638</b>	<b>2,652</b>	<b>898</b>	<b>672</b>	<b>323</b>	<b>335</b>	<b>423</b>	<b>\$9.30</b>	<b>\$14.80</b>	<b>\$20.99</b>
White.....	1,040	1,907	1,976	746	481	244	199	306	9.70	14.75	20.24
Black and other <sup>1</sup> .....	547	446	355	99	116	40	59	41	8.00	13.90	22.85
Hispanic.....	(NA)	285	320	53	75	39	77	76	(NA)	17.10	27.13
Male.....	1,889	2,036	2,075	669	475	245	282	405	9.75	15.45	21.88
Female.....	599	602	576	229	198	78	53	18	7.65	12.35	19.95
Region:											
North.....	241	227	198	58	48	26	24	32	9.95	14.00	16.63
North Central.....	590	674	785	340	179	80	60	125	9.20	14.45	20.01
South.....	1,093	1,074	1,071	312	318	143	144	154	8.35	14.10	20.33
West.....	564	664	607	188	127	74	107	112	11.75	18.00	25.27
Migratory.....	196	188	217	56	80	33	31	17	(NA)	(NA)	(NA)
Nonmigratory.....	2,291	2,450	2,435	843	592	290	304	405	(NA)	(NA)	(NA)
14-17 years old.....	819	835	707	353	241	72	17	25	(NA)	10.35	16.63
18-24 years old.....	539	733	802	272	223	97	104	107	(NA)	17.75	23.16
25-34 years old.....	322	393	458	140	89	35	65	68	(NA)	21.95	23.17
35-44 years old.....	254	219	281	47	57	50	65	63	(NA)	21.70	24.34
45-54 years old.....	247	193	163	24	28	26	30	54	(NA)	19.40	25.69
55-64 years old.....	173	144	128	29	17	18	28	37	(NA)	19.60	20.25
65 years and over.....	133	120	114	32	18	25	23	14	(NA)	11.70	19.84

NA Not available. <sup>1</sup>Beginning 1975, excludes persons of Hispanic origin. 1970 data not comparable with later years. Source: U.S. Dept. of Agriculture, Economic Research Service, *The Hired Farm Working Force*, periodic.

**NO. 1190. FARM PRODUCTIVITY—LABOR-HOURS AND INDEXES OF FARM OUTPUT PER HOUR: 1950 TO 1981**

[Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 407-413, K 430-444, and W 67-81]

ITEM	1950	1955	1960	1965	1970	1973	1974	1975	1976	1978	1979	1980, prel.	1981, prel.
<b>Hours of labor required on farms<sup>1</sup> (bil.)</b> .....	<b>15.1</b>	<b>12.8</b>	<b>9.8</b>	<b>7.3</b>	<b>5.9</b>	<b>5.3</b>	<b>5.2</b>	<b>5.0</b>	<b>4.8</b>	<b>4.4</b>	<b>4.3</b>	<b>4.3</b>	<b>4.2</b>
All productive livestock (bil.).....	5.5	4.9	3.8	3.0	2.3	2.0	1.8	1.7	1.6	1.4	1.3	1.3	1.2
All crops <sup>2</sup> (bil.).....	6.9	6.0	4.6	3.4	2.8	2.7	2.7	2.6	2.6	2.4	2.4	2.4	2.4
Farm maintenance <sup>3</sup> (bil.).....	2.7	1.9	1.4	.9	.8	.6	.7	.7	.6	.6	.6	.5	.6
<b>INDEX (1977=100)</b>													
<b>Farm output per hour</b> .....	<b>19</b>	<b>26</b>	<b>37</b>	<b>52</b>	<b>66</b>	<b>81</b>	<b>79</b>	<b>89</b>	<b>94</b>	<b>109</b>	<b>119</b>	<b>112</b>	<b>129</b>
All livestock and products.....	19	24	32	45	64	76	82	85	93	109	118	129	138
Meat animals.....	32	35	40	51	67	78	84	87	94	108	117	127	135
Milk cows.....	16	19	27	39	57	70	75	81	91	109	122	135	150
Poultry.....	10	15	25	40	55	70	76	81	92	112	124	134	149
All crops.....	22	28	41	56	70	87	80	89	91	105	118	104	121
Feed grains.....	13	17	33	52	62	88	75	90	95	111	125	107	132
Hay and forage.....	28	32	43	60	74	89	87	94	90	109	115	109	120
Food grains.....	31	39	73	79	93	100	89	101	98	104	115	116	127
Vegetables.....	44	54	69	79	91	96	97	93	100	104	109	113	117
Fruits and nuts.....	54	60	61	76	84	91	96	97	101	103	104	112	107
Sugar crops.....	25	35	52	58	79	85	82	96	100	103	103	105	114
Cotton.....	6	9	13	23	31	51	47	57	70	100	132	103	147
Tobacco.....	35	40	46	51	79	91	98	97	101	109	99	104	116
Oil crops.....	29	38	52	59	72	84	76	88	84	98	110	89	110
<b>Crop land used for crops<sup>4</sup></b> .....	<b>100</b>	<b>100</b>	<b>94</b>	<b>89</b>	<b>88</b>	<b>93</b>	<b>96</b>	<b>97</b>	<b>98</b>	<b>97</b>	<b>100</b>	<b>102</b>	<b>103</b>
Crop production per acre.....	59	63	77	85	88	99	88	96	94	105	113	99	114

<sup>1</sup>Represents labor used on crops, livestock, and farm maintenance. <sup>2</sup>Beginning 1965, excludes work on farm gardens. <sup>3</sup>Beginning 1965, excludes work on horses and mules. <sup>4</sup>Harvested acreages plus acreages of crop failure and summer fallow.

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. 1191. FARM OUTPUT INDEXES AND ACREAGE OF PRINCIPAL CROPS: 1960 TO 1981

[Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 414-429]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981, prel.
INDEX, 1967 = 100												
Farm output <sup>1</sup> .....	91	98	101	112	106	114	117	119	122	129	122	134
Per unit of total input.....	90	100	102	111	105	115	115	114	116	119	115	126
Gross production:												
Livestock and products <sup>2</sup> .....	87	95	105	105	106	101	105	106	106	109	113	115
Meat animals.....	85	92	108	108	110	102	105	105	104	106	111	112
Dairy products.....	100	104	99	98	99	98	103	105	104	105	110	113
Poultry and eggs.....	76	90	105	106	106	103	110	112	118	127	128	132
Crops <sup>3</sup> .....	93	99	100	119	110	121	121	129	131	144	131	152
Feed grains.....	87	88	89	115	95	114	120	126	135	148	123	154
Hay and forage.....	90	98	100	109	104	108	102	107	113	117	107	116
Food grains.....	87	88	91	114	120	142	141	132	125	144	157	188
Vegetables.....	89	96	98	100	102	101	101	104	107	110	105	111
Fruits and nuts.....	94	100	110	126	128	137	136	136	138	145	164	155
Sugar crops.....	74	100	114	112	104	130	128	116	116	107	114	127
Cotton.....	196	205	139	175	158	112	142	191	145	194	150	211
Tobacco.....	99	94	97	88	101	110	108	98	102	77	90	104
Oil crops.....	68	95	117	155	127	153	132	175	182	219	171	199
ACREAGE, PRINCIPAL CROPS (millions of acres)												
Planted or grown.....	324	297	293	319	326	333	336	345	337	347	357	365
Harvested.....	316	288	283	310	316	324	326	334	327	338	341	356

<sup>1</sup>Annual production available for eventual human use. <sup>2</sup>Includes livestock products not shown separately and excludes horses and mules. <sup>3</sup>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 Statistics*, annual.

NO. 1192. FARM LABOR—ANNUAL AVERAGE LABOR-HOURS PER UNIT OF PRODUCTION, SELECTED CROPS AND LIVESTOCK: 1950-1954 TO 1976-1980

[Excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 445-485]

CROP, LIVESTOCK, AND ITEM	1950-1954	1955-1959	1960-1964	1965-1969	1970-1974	1975-1979	1976-1980
Corn for grain: Hours per acre <sup>1</sup> .....	13.3	9.9	7.0	5.8	4.3	3.6	3.5
Yield per acre (bu.).....	39.4	48.7	62.2	78.5	84.0	95.3	96.1
Hours per 100 bushel.....	3.4	2.0	1.1	0.7	5	4	3
Wheat: Hours per acre <sup>1</sup> .....	4.6	5.8	3.0	2.9	2.9	2.8	2.8
Yield per acre (bu.).....	17.3	22.3	25.2	27.5	31.0	31.3	32.0
Hours per 100 bushel.....	27	17	12	11	9	9	9
Hay: Hours per acre <sup>1</sup> .....	6.3	6.0	5.0	3.8	3.7	3.4	3.4
Yield per acre (sh. tons).....	1.43	1.61	1.77	1.97	2.12	2.21	2.22
Hours per sh. ton.....	4.4	3.7	2.8	1.9	1.8	1.6	1.5
Potatoes: Hours per acre <sup>1</sup> .....	63.1	53.1	48.0	45.1	41.6	37.6	36.8
Yield per acre (cwt).....	151	178	195	213	234	263	264
Hours per sh. ton.....	8	6	5	4	4	3	3
Cotton: Hours per acre <sup>1</sup> .....	66	66	47	30	18	8	7
Yield per acre (lb.).....	296	428	475	484	470	485	472
Hours per bale.....	107	74	47	30	18	8	6
Tobacco: Hours per acre <sup>2</sup> .....	464	475	493	427	298	254	248
Yield per acre (1,000 lb.).....	1.3	1.5	1.9	2.0	2.0	2.0	2.0
Hours per 100 lb.....	36	31	26	22	14	13	12
Milk cows: Hours per cow.....	121	109	93	78	62	45	42
Milk per cow (cwt).....	54	63	75	88	101	110	113
Hours per cwt of milk.....	2.2	1.7	1.2	.9	.6	.4	.4
Cattle, exc. milk cows:							
Hours per cwt of beef produced <sup>3</sup> .....	3.6	3.2	2.6	2.1	1.7	1.3	1.3
Hogs: Hours per cwt produced <sup>3</sup> .....	2.7	2.4	1.9	1.4	1.0	.5	.5
Chickens: <sup>4</sup> Hours per 100 layers.....	232	175	126	97	78	57	53
Rate of lay <sup>5</sup> .....	181	200	212	219	225	236	238
Hours per 100 eggs produced.....	1.3	.9	.6	.4	.3	.2	.2
Chickens (farm raised): Hours per 100 birds.....	27	23	17	14	13	12	11
Hours per cwt produced <sup>3</sup> .....	7.3	6.7	4.7	3.7	3.3	2.9	2.8
Chickens (broilers): Hours per 100 birds.....	8	4	3	2	1	.6	.5
Hours per cwt produced <sup>3</sup> .....	2.4	1.3	.8	.5	.3	.2	.1
Turkeys: Hours per cwt produced <sup>3</sup> .....	6.8	4.4	2.4	1.3	.8	.5	.4

<sup>1</sup>Labor-hours per acre harvested, including preharvest work on acreages abandoned, grazed, and turned under. <sup>2</sup>Per acre planted and harvested. <sup>3</sup>Liveweight production. <sup>4</sup>Laying flocks and eggs. <sup>5</sup>Eggs produced during year divided by average number of hens and pullets of laying age on hand during year.

Source: U.S. Dept. of Agriculture, Economic Research Service. In *Agricultural Statistics*, annual.

## NO. 1193. AGRICULTURAL EXPORTS AND IMPORTS—VALUE: 1960 TO 1981

[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.]

ITEM	1960-1964, avg.	1965-1969, avg.	1970-1974, avg.	1975-1979, avg.	1960	1965	1970	1975	1977	1978	1979	1980	1981
Exports, domestic products.....	5.4	6.3	12.8	26.5	4.8	6.2	7.3	21.9	23.6	29.4	34.7	41.2	43.3
Percent of all exports.....	24	20	20	20	24	23	17	21	20	20	19	19	19
Imports for consumption.....	3.9	4.6	7.3	13.1	3.8	4.1	5.8	9.3	13.4	14.8	16.7	17.4	16.8
Percent of all imports.....	24	16	12	9	25	19	15	10	9	9	8	7	6

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. 1194. AGRICULTURAL EXPORTS—VALUE, BY PRINCIPAL COMMODITIES AND SELECTED COUNTRIES OF DESTINATION: 1970 TO 1981

[See headnote, table 1193. Data by country of destination not adjusted for transshipments.]

COMMODITY AND COUNTRY	VALUE (mil. dol.)										PERCENT	
	1970	1974	1975	1976	1977	1978	1979	1980	1981	1970	1981	
<b>Total agricultural exports</b> <sup>1</sup> .....	<b>7,259</b>	<b>21,945</b>	<b>21,859</b>	<b>22,978</b>	<b>23,636</b>	<b>29,384</b>	<b>34,749</b>	<b>41,233</b>	<b>43,337</b>	<b>100.0</b>	<b>100.0</b>	
Grains and preparations <sup>2</sup> .....	2,582	10,311	11,619	10,875	8,713	11,585	14,406	17,991	19,389	35.6	44.7	
Feed grains and products.....	1,093	4,698	5,283	6,024	4,907	5,909	7,796	9,831	9,492	15.1	21.9	
Corn.....	818	3,751	4,422	5,194	4,100	5,257	6,977	8,492	7,935	11.3	18.3	
Wheat and products.....	1,136	4,634	5,353	4,086	2,932	4,602	5,586	6,660	8,157	15.6	18.8	
Rice.....	313	852	858	629	730	932	854	1,289	1,527	4.3	3.5	
Oilseeds and products <sup>2</sup> .....	1,931	5,709	4,452	5,070	6,615	8,175	8,887	9,393	9,555	26.6	22.0	
Soybeans.....	1,228	3,537	2,865	3,315	4,393	5,208	5,701	5,880	6,186	16.9	14.3	
Soybean oil cake and meal.....	344	944	639	864	920	1,242	1,416	1,665	1,589	4.7	3.7	
Vegetable oils and waxes.....	295	883	635	586	834	970	1,155	1,216	1,077	4.1	2.5	
Soybean oil.....	194	522	269	240	443	569	769	689	474	2.7	1.1	
Animals and animal products <sup>2</sup> .....	865	1,776	1,688	2,380	2,667	3,032	3,765	3,768	4,236	11.9	9.8	
Hides and skins, incl. furskins.....	187	462	407	694	786	914	1,332	1,046	1,024	2.6	2.4	
Cattle hides.....	130	297	260	471	525	629	906	623	617	1.8	1.4	
Meats and meat products.....	132	302	432	617	611	743	853	890	997	1.8	2.3	
Fats, oils, and greases.....	246	585	360	443	593	599	740	769	760	3.4	1.8	
Poultry and poultry products.....	82	135	157	261	309	341	409	603	770	1.1	1.8	
Cotton, excluding linters.....	372	1,335	991	1,049	1,529	1,740	2,198	2,864	2,260	5.1	5.2	
Tobacco, unmanufactured.....	517	832	852	922	1,094	1,356	1,183	1,334	1,457	7.1	3.4	
Fruits and preparations.....	334	596	699	770	835	1,014	1,127	1,335	1,497	4.6	3.5	
Fresh fruits.....	164	326	404	434	458	565	646	739	855	2.3	2.0	
Feeds and fodders.....	138	272	313	449	592	609	838	1,126	1,066	1.9	2.5	
Vegetables and preparations.....	219	473	505	674	631	703	764	1,188	1,553	3.0	3.6	
Nuts and preparations.....	69	156	169	198	240	324	584	757	581	1.0	1.3	
Other.....	232	485	573	591	720	846	997	1,477	1,743	3.2	4.0	
<b>Asia</b> <sup>1</sup> .....	<b>2,670</b>	<b>8,356</b>	<b>7,620</b>	<b>7,575</b>	<b>8,042</b>	<b>10,295</b>	<b>12,109</b>	<b>14,886</b>	<b>15,777</b>	<b>36.8</b>	<b>36.4</b>	
Japan.....	1,214	3,478	3,082	3,563	3,857	4,435	5,255	6,111	6,562	16.7	15.1	
Korea, Rep. of.....	224	743	830	830	919	1,148	1,441	1,797	2,008	3.1	4.6	
China:												
Mainland.....	(2)	653	80	(2)	64	873	990	2,210	1,956	(2)	4.5	
Taiwan.....	134	430	565	474	612	825	1,074	1,095	1,145	1.8	2.6	
<b>Western Europe</b> <sup>1</sup> .....	<b>2,527</b>	<b>6,995</b>	<b>7,142</b>	<b>7,878</b>	<b>8,358</b>	<b>9,073</b>	<b>9,872</b>	<b>11,685</b>	<b>11,836</b>	<b>34.8</b>	<b>27.3</b>	
European Economic Community <sup>2</sup> .....	2,193	5,618	5,704	6,563	6,785	7,312	7,849	9,236	9,059	29.4	20.9	
Netherlands.....	528	1,600	1,722	1,885	2,124	2,346	2,624	3,412	3,301	7.2	7.6	
Germany, Fed. Rep. of.....	529	1,587	1,564	1,826	1,656	1,497	1,389	1,831	1,759	7.3	4.1	
United Kingdom.....	411	654	588	698	874	1,023	1,057	928	960	5.7	2.2	
Italy.....	210	763	798	877	807	985	1,005	1,094	1,161	2.9	2.7	
France.....	164	492	406	458	466	565	726	748	824	2.3	1.4	
Spain.....	143	707	776	615	634	822	930	1,129	1,267	2.0	2.9	
<b>Latin America</b> <sup>1</sup> .....	<b>688</b>	<b>2,558</b>	<b>2,274</b>	<b>1,938</b>	<b>2,217</b>	<b>3,158</b>	<b>3,697</b>	<b>6,150</b>	<b>6,367</b>	<b>9.5</b>	<b>14.7</b>	
Mexico.....	155	863	586	370	564	903	1,024	2,468	2,432	2.1	5.6	
Venezuela.....	98	323	277	274	304	387	494	701	893	1.4	2.1	
Soviet Union.....	16	300	1,133	1,487	1,037	1,687	2,655	1,047	1,665	2.2	3.8	
Eastern Europe.....	169	625	616	925	603	1,120	1,933	2,071	1,652	2.3	3.8	
Canada.....	826	1,281	1,304	1,484	1,534	1,621	1,650	1,852	1,989	11.4	4.6	
Africa.....	259	1,132	1,156	1,178	1,362	1,598	1,620	2,238	2,836	3.6	6.5	

<sup>1</sup> Less than \$500,000 or .05 percent. <sup>2</sup> Includes areas not shown separately. <sup>3</sup> Includes commodities not shown separately. <sup>4</sup> Includes data for Belgium, Luxembourg, Denmark, Greece, and Ireland. 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. For consistency, data for all years are shown on same basis.

Source: U.S. Dept. of Agriculture, Economic Research Service, *U.S. Foreign Agricultural Trade Statistical Report*, annual. Also in *Agricultural Statistics*, annual.

**NO. 1195. U.S. SALES AND DONATIONS UNDER FOOD FOR PEACE (PUBLIC LAW 480) PROGRAMS,  
TOTAL, 1954 TO 1981, AND BY SELECTED COUNTRY, 1975 TO 1981**

[In millions of dollars. For years ending June 30, except beginning 1977, ending Sept. 30]

TITLE AND PROGRAM	Total, 1954- 1981	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
	<b>Total</b> .....	<b>32,039</b>	<b>1,142</b>	<b>1,119</b>	<b>973</b>	<b>1,328</b>	<b>1,300</b>	<b>1,193</b>	<b>1,228</b>	<b>1,287</b>	<b>1,436</b>
<b>Title I sales (loans) <sup>1</sup></b> .....	<b>19,850</b>	<b>711</b>	<b>724</b>	<b>577</b>	<b>868</b>	<b>902</b>	<b>735</b>	<b>767</b>	<b>746</b>	<b>843</b>	<b>774</b>
Repayable in dollars.....	10,019	485	724	577	868	902	735	767	746	843	774
Repayable in foreign currencies.....	9,831	226	-	-	-	-	-	-	-	-	-
<b>Title II donations</b> .....	<b>12,188</b>	<b>432</b>	<b>394</b>	<b>396</b>	<b>461</b>	<b>398</b>	<b>458</b>	<b>461</b>	<b>541</b>	<b>593</b>	<b>768</b>
Voluntary relief agencies.....	7,382	181	177	196	266	299	326	319	374	340	471
Emergency relief and other <sup>2</sup> .....	4,806	250	217	200	194	99	132	143	167	253	297

REGION AND COUNTRY	1975		1977		1978		1979		1980		1981	
	Sales	Donations										
<b>Total</b> .....	<b>867.5</b>	<b>460.6</b>	<b>735.3</b>	<b>458.4</b>	<b>767.4</b>	<b>481.1</b>	<b>746.0</b>	<b>541.0</b>	<b>843.0</b>	<b>593.0</b>	<b>774.3</b>	<b>768.3</b>
<b>Near East and South Asia <sup>3</sup></b> .....	<b>603.8</b>	<b>163.6</b>	<b>398.4</b>	<b>158.0</b>	<b>413.7</b>	<b>162.3</b>	<b>401.4</b>	<b>218.6</b>	<b>432.9</b>	<b>165.2</b>	<b>387.8</b>	<b>268.6</b>
Bangladesh.....	237.3	4.5	63.8	19.3	78.0	20.5	88.1	29.0	74.4	2.6	50.5	21.6
Egypt.....	104.5	12.8	196.8	11.7	179.7	12.5	230.7	22.4	285.3	16.1	272.5	28.9
India.....	121.6	106.1	24.7	101.3	26.4	109.8	-	137.6	-	118.3	-	170.6
Pakistan.....	79.5	5.4	35.3	2.0	56.4	1.3	38.0	3.2	47.5	10.6	47.5	28.8
Sri Lanka.....	24.5	5.4	39.9	4.0	34.4	3.4	16.3	4.6	23.8	5.1	17.3	7.4
<b>East Asia <sup>3</sup></b> .....	<b>180.7</b>	<b>36.1</b>	<b>172.3</b>	<b>43.5</b>	<b>183.7</b>	<b>23.7</b>	<b>135.7</b>	<b>24.4</b>	<b>124.8</b>	<b>75.9</b>	<b>70.6</b>	<b>56.0</b>
Indonesia.....	34.8	11.5	85.3	6.4	115.4	7.3	88.7	7.5	96.3	17.4	46.0	16.2
Kampuchea.....	91.5	2.9	-	-	-	-	-	-	-	38.3	-	14.1
Korea, Rep. of.....	8.7	5.7	75.1	-	56.3	-	38.0	-	28.5	-	25.6	-
Philippines.....	-	10.8	11.9	37.0	12.0	15.1	9.0	14.8	-	18.8	-	24.1
<b>Africa <sup>3</sup></b> .....	<b>16.2</b>	<b>118.8</b>	<b>57.2</b>	<b>97.8</b>	<b>73.8</b>	<b>133.9</b>	<b>99.9</b>	<b>122.6</b>	<b>155.6</b>	<b>171.3</b>	<b>179.6</b>	<b>195.4</b>
Ghana.....	-	2.8	-	6.5	-	3.0	9.5	5.1	12.1	3.6	12.1	6.9
Kenya.....	-	-	-	1.5	-	.8	-	1.2	16.1	3.2	15.0	10.4
Morocco.....	-	12.7	8.0	15.1	8.8	15.7	9.7	11.2	5.8	9.9	25.0	16.2
Somalia.....	-	4.6	-	.8	7.0	8.8	10.7	7.3	17.7	32.3	15.0	29.9
Sudan.....	-	8.2	4.6	1.8	9.8	2.5	19.0	1.8	25.0	1.3	30.0	4.9
Zaire.....	-	.4	22.7	1.1	18.0	.5	17.0	4.4	15.7	.6	10.0	3.5
<b>Latin America <sup>3</sup></b> .....	<b>66.8</b>	<b>61.0</b>	<b>40.9</b>	<b>71.8</b>	<b>58.2</b>	<b>47.0</b>	<b>71.3</b>	<b>66.9</b>	<b>92.1</b>	<b>59.9</b>	<b>88.7</b>	<b>90.7</b>
Dominican Rep.....	-	5.5	2.5	9.4	-	3.9	13.9	6.8	15.0	4.7	14.4	4.4
El Salvador.....	-	1.6	-	2.7	-	1.7	-	2.9	3.0	2.5	26.2	9.1
Haiti.....	2.3	3.3	10.7	8.6	10.5	8.0	8.6	6.8	8.6	7.2	8.6	15.9
Jamaica.....	1.4	.2	13.4	(z)	10.0	5.0	10.0	.2	10.0	(z)	17.1	(z)
Peru.....	-	6.4	-	5.3	25.0	6.9	20.0	15.3	19.0	14.0	19.0	23.5
<b>Europe</b> .....	-	.1	66.5	.4	38.0	-	38.0	-	38.0	-	47.6	-
Poland.....	-	-	-	-	-	-	-	-	-	-	47.6	-
Portugal.....	-	-	66.5	-	38.0	-	38.0	-	38.0	-	-	-
<b>All other <sup>4</sup></b> .....	-	<b>81.0</b>	-	<b>88.7</b>	-	<b>94.3</b>	-	<b>107.8</b>	-	<b>121.1</b>	-	<b>157.6</b>

- Represents zero. Z Less than \$50,000. <sup>1</sup>Includes Title II, Food For Development program. <sup>2</sup>Includes economic development and world food programs. <sup>3</sup>Includes countries not shown separately. <sup>4</sup>Includes undistributed transportation cost.

Source: U.S. Agency for International Development, *U.S. Overseas Loans and Grants and Assistance From International Organizations*, annual.

**NO. 1196. AGRICULTURAL EXPORTS UNDER SPECIFIED GOVERNMENT-FINANCED PROGRAMS—VALUE,  
BY SELECTED COMMODITIES: 1960 TO 1981**

[In millions of dollars, except percent. Includes Puerto Rico. Sources of values for Government-financed programs are different from those for total exports; therefore, not fully comparable in regard to valuation, shipping period, etc. Entries for "Outside-Government programs" are the residuals of the other two series]

ITEM	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>Agricultural exports</b> .....	<b>4,832</b>	<b>6,229</b>	<b>7,259</b>	<b>21,859</b>	<b>22,978</b>	<b>23,636</b>	<b>29,384</b>	<b>34,749</b>	<b>41,233</b>	<b>43,337</b>
Outside Government programs <sup>1</sup> .....	3,371	4,880	6,226	20,431	21,537	22,164	27,813	33,255	39,811	42,009
Under Government programs <sup>2</sup> .....	1,461	1,349	1,033	1,428	1,441	1,472	1,571	1,494	1,422	1,328
Percent of total.....	30.2	21.7	14.2	6.5	6.3	6.2	5.3	4.3	3.4	3.1
Wheat.....	638.4	739.0	313.3	556.6	478.5	374.6	426.8	478.5	423.6	377.2
Wheat flour.....	118.4	87.5	86.2	68.1	94.9	108.5	138.1	168.6	145.1	148.6
Corn.....	65.5	56.0	26.5	14.8	108.1	213.2	207.8	177.8	169.7	164.5
Rice.....	86.5	72.1	171.3	311.6	224.4	144.5	175.6	161.5	171.5	163.0
Cotton.....	230.4	114.6	115.4	32.5	28.1	17.8	15.2	17.6	12.6	3.2
Soybean oil.....	72.2	109.6	92.2	36.3	10.7	99.1	157.0	142.0	151.9	162.5
Milk, nonfat, dried.....	40.7	58.8	91.4	60.3	48.0	81.0	32.1	21.0	27.3	34.5

<sup>1</sup> Exports outside specified Government-financed programs include, in addition to unassisted commercial transactions, shipments of some commodities with governmental assistance in the form of (a) short-term credits extended by the Commodity Credit Corporation and the Export-Import Bank, (b) sales of Government-owned commodities below domestic market prices, and (c) export payments in cash or in kind through 1974. <sup>2</sup>Includes commodities not shown separately.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Foreign Agricultural Trade of the United States*, monthly. Also in *Agricultural Statistics*, annual.

NO. 1197. SELECTED FARM PRODUCTS—U.S. AND WORLD PRODUCTION AND EXPORTS: 1978 TO 1980

[In metric tons, except cotton. Production year, except as indicated. Metric ton=1,102 short tons or .984 long tons]

ITEM	Unit	1978			1979			1980		
		U.S.	World	U.S. as percent of world	U.S.	World	U.S. as percent of world	U.S.	World	U.S. as percent of world
<b>PRODUCTION</b>										
Wheat <sup>1</sup>	Mil.	248	3447	10.7	258	3423	13.7	264	3439	14.6
Corn for grain	Mil.	1185	3391	47.3	1202	3423	47.8	1169	3405	41.7
Soybeans <sup>2</sup>	Mil.	50.9	77.4	65.8	61.7	93.7	65.8	48.8	80.6	60.5
Rice, rough <sup>3</sup>	Mil.	6.0	386	1.6	6.0	377	1.6	6.6	396	1.7
Tallow and greases	1,000	2,638	5,644	46.7	3,058	5,974	51.2	3,157	6,103	51.7
Tobacco, unmanufactured <sup>4</sup>	1,000	920	5,900	15.6	693	5,416	12.8	811	5,259	15.4
Vegetable oils <sup>5</sup>	Mil.	10.3	37.2	27.7	12.9	41.2	31.3	9.9	39.2	25.2
Cotton <sup>6</sup>	1,000 bales <sup>7</sup>	10,856	60,048	18.0	14,629	65,555	22.3	11,122	65,561	17.0
<b>EXPORTS</b>										
Wheat <sup>1</sup>	Mil.	232	272	44.0	237	286	43.0	241	294	43.6
Corn	Mil.	451	266	77.3	461	374	82.4	459	278	75.6
Soybeans	Mil.	520.1	24.9	81.4	523.8	28.5	83.5	519.7	25.1	78.5
Rice, rough <sup>8,10</sup>	Mil.	112.3	11.6	20.8	123.0	11.6	25.9	123.0	13.0	23.1
Tallow and greases	1,000	1,228	2,263	54.3	1,290	2,134	60.4	1,520	2,380	63.9
Tobacco, unmanufactured <sup>11</sup>	1,000	321	1,409	22.8	259	1,362	19.0	272	1,307	20.8
Vegetable oils <sup>9</sup>	Mil.	1.5	11.1	13.5	1.8	12.5	14.4	1.5	12.3	12.2
Cotton <sup>6</sup>	1,000 bales <sup>7</sup>	6,180	19,805	31.2	9,229	22,733	40.6	5,926	20,140	29.4

<sup>1</sup>Includes wheat flour in grain equivalent. <sup>2</sup>Year beginning June 1. <sup>3</sup>Year beginning July 1. <sup>4</sup>Year beginning Oct. 1. <sup>5</sup>Year beginning Sept. 1. <sup>6</sup>Year beginning Aug. 1. <sup>7</sup>Farm sales weight basis. <sup>8</sup>Various crop years. <sup>9</sup>Bales of 480 lb. net weight. <sup>10</sup>Includes milled rice. <sup>11</sup>Calendar year 1979. <sup>12</sup>Calendar year 1980. <sup>13</sup>Calendar year 1981. <sup>14</sup>Redried weight basis.

Source: U.S. Foreign Agricultural Service, *Foreign Agriculture Circular*, periodic.

NO. 1198. SELECTED FARM PRODUCTS—PRODUCTION AND EXPORTS: 1970 TO 1981

ITEM	Unit	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Wheat: Production	Mil. bu.	1,352	1,711	1,782	2,127	2,149	2,046	1,776	2,134	2,374	2,793
Exports <sup>1</sup>	Mil. bu.	741	1,217	1,018	1,173	950	1,124	1,194	1,375	1,510	1,773
Percent of production	Percent	54.8	71.1	57.1	55.2	44.2	54.9	67.2	64.4	63.6	63.5
Corn for grain: Production	Mil. bu.	4,152	5,671	4,701	5,841	6,289	6,505	7,268	7,939	6,645	8,201
Exports <sup>1</sup>	Mil. bu.	517	1,243	1,149	1,711	1,684	1,948	2,133	2,433	2,352	2,517
Percent of production	Percent	12.5	21.9	24.4	29.3	26.8	29.9	29.3	30.6	35.4	26.5
Soybeans, for beans: Production	Mil. bu.	1,127	1,548	1,216	1,548	1,289	1,767	1,869	2,268	1,792	2,030
Exports <sup>1</sup>	Mil. bu.	434	539	421	555	564	700	739	875	724	910
Percent of production	Percent	38.5	34.8	34.6	35.9	43.8	39.6	39.5	38.6	40.4	44.8
Cotton: Production	Mil. bales <sup>2</sup>	10.2	13.0	11.5	8.3	10.6	14.4	10.9	14.6	11.1	15.6
Exports <sup>1</sup>	Mil. bales <sup>2</sup>	3.9	6.1	3.9	3.3	4.8	5.5	6.2	9.2	5.9	6.8
Percent of production	Percent	38.2	46.9	33.9	39.8	45.3	38.2	56.9	63.0	53.2	43.6
Tobacco: Production <sup>4</sup>	Mil. lb.	1,906	1,742	1,990	2,182	2,137	1,914	2,025	1,527	1,786	2,062
Exports <sup>1</sup>	Mil. lb.	639	732	653	654	678	693	765	694	631	675
Percent of production	Percent	33.5	42.0	32.8	30.0	31.8	36.2	37.8	45.4	35.3	32.7

<sup>1</sup>Represents marketing year for each product. <sup>2</sup>Based on inspections for export. <sup>3</sup>480 lb. net weight bales.

<sup>4</sup>Farm sales weight.

Source: U.S. Dept. of Agriculture, Economic Research Service. In *Agricultural Statistics*, annual.

NO. 1199. ACREAGES OF CROPS HARVESTED FOR SPECIFIED PURPOSES: 1960 TO 1981

[See also *Historical Statistics, Colonial Times to 1970*, series K 496-499]

ITEM	Unit	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981 <sup>1</sup>
Crops harvested <sup>2</sup>	Mil. acres	324	298	293	321	328	336	337	345	338	349	352	367
Domestic use	Mil. acres	255	222	221	225	229	236	240	233	224	224	214	231
Per capita <sup>3</sup>	Acres	1.41	1.14	1.08	1.06	1.07	1.09	1.10	1.06	1.00	1.00	.94	1.00
Exports	Mil. acres	64	76	72	96	99	100	97	112	114	125	138	136
Percent of total	Percent	19.8	25.5	24.6	29.9	30.2	29.8	28.8	32.5	33.7	35.8	39.2	37.1
Crop failure	Mil. acres	6	6	5	5	8	6	9	9	7	7	12	7

<sup>1</sup>Preliminary. <sup>2</sup>Area in principal crops harvested as reported by Economic Research Service plus acreage in vegetables, fruits, tree nuts, and farm gardens. <sup>3</sup>Includes feed for horses and mules, not shown separately. <sup>4</sup>Based on Bureau of the Census estimated total population, including Armed Forces overseas, as of July 1.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Economic Indicators of the Farm Sector: Production and Efficiency Statistics*, annual.

## NO. 1200. PRINCIPAL CROPS—ACREAGE, PRODUCTION, AND VALUE: 1961 TO 1981

[Acreage, production, and yield of all crops revised on basis of census data. See *Historical Statistics, Colonial Times to 1970*, series K 506-563, for acreage harvested, production, and price data for all crops listed except sorghum]

ITEM	Unit	1961-1965, avg.	1966-1970, avg.	1971-1975, avg.	1975	1976	1977	1978	1979	1980	1981, prel.
<b>Corn for grain:</b>											
Acreage harvested.....	1,000 acres.....	56,670	57,121	53,362	67,825	71,506	71,614	71,930	72,400	73,030	74,624
Production.....	Mil. bu.....	3,762	4,463	5,488	5,841	6,289	6,505	7,268	7,939	8,645	8,201
Farm value <sup>1</sup> .....	Mil. dol.....	4,251	5,194	11,671	14,819	13,524	13,107	16,281	19,904	20,571	20,001
Yield per acre.....	Bu.....	68.4	78.1	86.6	86.4	88.0	90.8	101.0	109.7	110.0	109.9
Price <sup>2</sup> .....	Dol. per bu.....	1.13	1.16	2.15	2.54	2.15	2.02	2.25	2.52	3.11	2.45
<b>Soybeans for beans:</b>											
Acreage harvested.....	1,000 acres.....	29,894	40,265	49,809	53,617	49,401	57,830	63,663	70,566	67,856	66,688
Production.....	Mil. bu.....	719	1,054	1,352	1,548	1,289	1,767	1,869	2,268	1,792	2,030
Farm value <sup>1</sup> .....	Mil. dol.....	1,770	2,711	6,720	7,622	8,776	10,383	12,450	14,250	13,560	12,943
Yield per acre.....	Bu.....	24.2	26.2	27.1	28.9	26.1	30.6	29.4	32.1	26.4	30.4
Price <sup>2</sup> .....	Dol. per bu.....	2.46	2.57	4.97	4.92	6.81	5.88	6.66	6.28	7.57	6.37
<b>Wheat:</b>											
Acreage harvested.....	1,000 acres.....	48,017	50,688	56,801	69,499	70,927	66,886	56,495	62,454	70,984	80,948
Production.....	Mil. bu.....	1,214	1,433	1,757	2,127	2,149	2,046	1,776	2,134	2,374	2,793
Farm value <sup>1</sup> .....	Mil. dol.....	2,027	1,950	5,291	7,550	5,868	4,765	5,281	8,070	9,278	10,228
Yield per acre.....	Bu.....	25.3	28.3	30.9	30.6	30.3	30.7	31.4	34.2	33.4	34.5
Price <sup>2</sup> .....	Dol. per bu.....	1.67	1.36	3.03	3.55	2.73	2.33	2.97	3.78	3.91	3.66
<b>Hay:</b>											
Acreage harvested.....	1,000 acres.....	67,248	61,953	60,882	61,353	60,377	60,988	62,113	61,666	59,362	60,212
Production.....	Mil. tons <sup>3</sup> .....	120	125	130	132	120	132	144	148	131	143
Farm value <sup>1</sup> .....	Mil. dol.....	2,680	2,918	4,864	6,458	6,815	6,826	6,664	7,363	8,104	9,212
Yield per acre.....	Short tons.....	1.79	2.01	2.14	2.16	1.99	2.17	2.32	2.40	2.21	2.38
Price <sup>2</sup> .....	Dol. per ton.....	22.30	23.40	40.93	52.10	60.20	53.70	49.80	59.50	71.00	66.90
<b>Cotton:</b>											
Acreage harvested.....	1,000 acres.....	14,616	9,983	11,554	8,796	10,914	13,275	12,400	12,831	13,215	13,841
Production <sup>3</sup> .....	Mil. bales <sup>4</sup> .....	14.9	9.6	11.4	8.3	10.6	14.4	10.9	14.6	11.1	15.6
Farm value <sup>1</sup> .....	Mil. dol.....	2,312	1,068	2,083	2,044	3,255	3,615	3,045	4,391	3,987	4,109
Yield per acre.....	Lb.....	510	463	474	453	465	520	420	547	404	543
Price <sup>2</sup> .....	Cents per lb.....	31.0	23.1	38.1	51.3	64.1	52.3	58.4	62.5	74.7	54.7
<b>Tobacco:</b>											
Acreage harvested.....	1,000 acres.....	1,126	926	923	1,087	1,047	966	964	827	921	974
Production.....	Mil. lb.....	2,160	1,854	1,874	2,182	2,137	1,914	2,025	1,527	1,786	2,062
Farm value <sup>1</sup> .....	Mil. dol.....	1,311	1,288	1,752	2,238	2,404	2,270	2,680	2,154	2,721	3,514
Yield per acre.....	Lb.....	1,919	2,004	2,030	2,008	2,041	1,982	2,101	1,845	1,940	2,116
Price <sup>2</sup> .....	Dol. per lb.....	.61	.69	.93	1.03	1.13	1.19	1.32	1.41	1.52	1.71
<b>Sorghum for grain:</b>											
Acreage harvested.....	1,000 acres.....	12,131	13,739	14,853	15,403	14,466	13,797	13,410	12,901	12,522	13,726
Production.....	Mil. bu.....	548	723	794	754	711	781	731	809	579	880
Farm value <sup>1</sup> .....	Mil. dol.....	548	743	1,494	1,777	1,431	1,412	1,464	1,880	1,696	2,032
Yield per acre.....	Bu.....	45.1	52.6	53.5	49.0	49.1	56.6	54.5	62.7	46.3	64.1
Price <sup>2</sup> .....	Dol. per bu.....	1.00	1.03	1.89	2.36	2.03	1.82	2.01	2.34	2.94	2.32
<b>Rice, rough:</b>											
Acreage harvested.....	1,000 acres.....	1,742	2,047	2,231	2,818	2,480	2,249	2,970	2,869	3,312	3,804
Production.....	Mil. cwt.....	68	91	101	128	116	99	133	132	146	185
Farm value <sup>1</sup> .....	Mil. dol.....	340	455	929	1,072	811	941	1,087	1,384	1,873	1,783
Yield per acre.....	Lb.....	3,903	4,439	4,525	4,558	4,663	4,412	4,484	4,599	4,413	4,873
Price <sup>2</sup> .....	Dol. per cwt.....	5.00	5.01	9.20	8.35	7.02	9.49	8.16	10.50	12.80	9.62
<b>Potatoes:</b>											
Acreage harvested.....	1,000 acres.....	1,361	1,428	1,321	1,260	1,371	1,380	1,375	1,270	1,154	1,232
Production.....	Mil. cwt.....	272	309	316	322	358	355	366	342	303	334
Farm value <sup>1</sup> .....	Mil. dol.....	580	652	1,154	1,445	1,283	1,254	1,224	1,172	1,979	1,786
Yield per acre.....	Cwt.....	200	217	239	256	261	261	257	270	262	271
Price <sup>2</sup> .....	Dol. per cwt.....	2.13	2.11	3.67	4.48	3.59	3.55	3.38	3.43	6.55	5.40
<b>Oats:</b>											
Acreage harvested.....	1,000 acres.....	21,170	17,652	13,706	13,038	11,834	13,485	11,126	9,679	8,652	9,411
Production.....	Mil. bu.....	954	886	693	639	540	753	582	527	458	508
Farm value <sup>1</sup> .....	Mil. dol.....	604	560	732	924	835	823	689	714	812	933
Yield per acre.....	Bu.....	45.1	50.2	50.6	49.0	45.7	55.8	52.3	54.4	53.0	54.0
Price <sup>2</sup> .....	Dol. per bu.....	.63	.63	1.05	1.45	1.56	1.09	1.20	1.36	1.79	1.86
<b>Sugar beets:</b>											
Acreage harvested.....	1,000 acres.....	1,212	1,329	1,323	1,517	1,479	1,216	1,269	1,120	1,190	1,229
Production.....	Mil. tons <sup>3</sup> .....	20.7	23.8	25.4	29.7	29.4	25.0	25.8	22.0	23.5	27.4
Farm value <sup>1</sup> .....	Mil. dol.....	248	323	691	821	617	604	650	745	1,109	(NA)
Yield per acre.....	Short tons.....	17.1	17.9	19.9	19.6	19.9	20.6	20.3	19.6	19.8	22.3
Price <sup>2</sup> .....	Dol. per ton.....	11.98	13.57	26.20	27.60	21.00	24.20	25.20	33.90	47.20	(NA)

NA Not available. <sup>1</sup>Values are based on season average prices; see footnote 2. <sup>2</sup>Season average price received by farmers. State prices weighted by sales to obtain U.S. prices. For certain years, prices for wheat, rice, corn for grain, grain sorghums, oats, soybeans, and cotton include an allowance for unredeemed loans and purchase agreement deliveries.

<sup>3</sup>In short tons. <sup>4</sup>Prices are for hay sold baled. <sup>5</sup>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. <sup>6</sup>Bales of 500 pounds, gross weight. Beginning 1970, bales of 480 lb., net weight. <sup>7</sup>Based on reported price of grain sorghum.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service. In *Agricultural Statistics*, annual; *Crop Production*, annual; and *Crop Values*, annual.

## NO. 1201. COSTS OF PRODUCING SELECTED CROPS: 1975 TO 1981

[Costs shown here are national averages for crop production on an average acre of land. They are indicators of year-to-year changes in production costs and are not adequate for assessing total farm income or farmers' current cash situation]

CROP	UNIT	TOTAL, INCLUDING LAND <sup>1</sup>					TOTAL, EXCLUDING LAND				
		1975	1978	1979	1980	1981 <sup>2</sup>	1975	1978	1979	1980	1981 <sup>2</sup>
		Dol. per bu.....	2.23	1.98	2.13	3.05	2.90	1.60	1.49	1.63	2.35
Soybeans.....	Dol. per bu.....	4.42	5.14	5.15	7.18	7.01	2.97	3.39	3.61	4.93	4.90
Wheat.....	Dol. per bu.....	3.21	3.29	3.74	4.81	5.21	2.36	2.48	2.81	3.66	4.00
Cotton.....	Dol. per lb.....	.59	.77	.72	1.06	.90	.45	.67	.63	.94	.80
Sorghum.....	Dol. per bu.....	2.48	2.25	2.48	4.07	3.25	1.93	1.84	1.96	3.24	2.58
Rice.....	Dol. per cwt.....	7.80	7.61	8.29	10.07	10.06	6.66	6.31	7.06	8.68	8.74
Oats.....	Dol. per bu.....	1.70	1.91	2.30	2.81	3.07	1.13	1.46	1.69	2.17	2.25

<sup>1</sup>Includes land at average of share rent, cash rent, and a charge for owner-operated land based on acquisition value. Acquisition value is assumed to be the average of the last 35 years. <sup>2</sup>Preliminary.

Source: U.S. Dept. of Agriculture, Economic Research Service. Data published by U.S. Senate, Committee on Agriculture, Nutrition, and Forestry in "Costs of Producing Selected Crops, Final 1979 and 1980 and Preliminary 1981" (97th Congress, 2nd session) June 1982.

## NO. 1202. CROPS—ACREAGE AND VALUE, 1979 TO 1981, AND ORDER OF VALUE, 1980, BY STATES

STATE	ACREAGE HARVESTED (1,000)			FARM VALUE (mil. dol.)			Crops in order of value, 1980	
	1979	1980	1981, prel.	1979	1980	1981, prel.		
						Value		Rank
U.S. <sup>1</sup>	337,686	340,893	356,265	77,622	81,860	82,507	(x) <b>Corn, soybeans, wheat, hay.</b>	
Ala.....	4,136	4,096	4,665	794	628	908	33 Soybeans, cotton lint, peanuts, hay.	
Ark.....	1,083	1,194	1,227	867	1,005	971	31 Cotton lint, hay, lettuce, cottonseed.	
Ariz.....	8,333	8,398	9,658	1,805	1,573	1,899	17 Rice, soybeans, cotton lint, wheat.	
Calif.....	6,455	6,662	6,890	8,193	9,116	7,984	1 Grapes, cotton lint, hay, rice.	
Colo.....	6,262	6,928	6,669	932	1,256	1,074	26 Wheat, corn, hay, potatoes.	
Conn.....	144	145	146	68	77	69	47 Tobacco, hay, apples, sweet corn.	
Del.....	519	526	547	132	124	132	42 Corn, soybeans, potatoes, wheat.	
Fla.....	1,537	1,522	1,549	2,528	2,762	2,367	12 Oranges, sugarcane <sup>2</sup> , grapefruit, tomatoes.	
Ga.....	5,374	5,635	6,391	1,399	1,071	1,509	20 Peanuts, corn, soybeans, tobacco.	
Hawaii.....	108	105	106	332	519	138	41 (NA).	
Idaho.....	4,594	4,681	4,918	1,173	1,651	1,318	21 Potatoes, wheat, hay, barley.	
Ill.....	23,827	24,004	24,110	6,619	6,319	6,576	3 Corn, soybeans, wheat, hay	
Ind.....	12,553	12,878	13,086	3,123	3,549	2,979	7 Corn, soybeans, wheat, hay.	
Iowa.....	25,342	25,646	25,744	6,418	7,222	6,834	2 Corn, soybeans, hay, oats.	
Kans.....	20,856	21,645	21,868	3,062	2,868	2,744	8 Wheat, sorghum, corn, hay.	
Ky.....	5,223	5,447	5,938	1,421	1,564	1,955	15 Tobacco, corn, soybeans, hay.	
La.....	5,129	5,272	5,560	1,275	1,243	1,042	28 Soybeans, rice, sugarcane <sup>2</sup> , cotton lint.	
Maine.....	411	405	407	137	229	183	40 Potatoes, hay, apples, blueberries.	
Md.....	1,562	1,593	1,847	376	394	479	35 Corn, soybeans, tobacco, hay.	
Mass.....	162	164	164	89	107	112	44 Cranberries, hay, apples, tobacco.	
Mich.....	6,909	7,066	7,369	1,581	1,930	1,785	18 Corn, soybeans, dry edible beans, hay.	
Minn.....	21,653	21,831	22,277	3,647	4,344	4,298	5 Corn, soybeans, wheat, hay.	
Miss.....	6,404	6,403	6,702	1,463	1,192	1,314	22 Soybeans, cotton lint, rice, cottonseed.	
Mo.....	14,338	14,624	14,786	2,535	2,296	2,659	9 Soybeans, corn, wheat, hay.	
Mont.....	8,613	8,566	9,719	799	958	1,058	27 Wheat, hay, barley, sugarbeets.	
Nebr.....	18,213	18,951	19,291	3,434	3,578	3,865	6 Corn, wheat, hay, soybeans.	
Nev.....	562	571	534	122	145	115	43 Hay, potatoes, alfalfa seed, wheat.	
N.H.....	116	118	117	22	21	24	48 Hay, apples, maple sirup.	
N.J.....	549	541	546	227	240	274	37 Corn, soybeans, peaches, hay.	
N. Mex.....	1,323	1,393	1,371	261	299	300	36 Hay, cotton lint, wheat, sorghum.	
N.Y.....	4,311	4,331	4,240	885	1,103	1,030	30 Hay, corn, apples, potatoes.	
N.C.....	5,263	5,414	5,620	1,842	2,088	2,475	10 Tobacco, corn, soybeans, peanuts.	
N. Dak.....	20,726	18,350	22,926	2,077	1,733	2,472	11 Wheat, sunflowers, hay, barley.	
Ohio.....	11,023	11,041	10,898	2,624	3,110	2,255	13 Corn, soybeans, wheat, hay.	
Okla.....	9,630	9,969	10,020	1,446	1,153	1,190	24 Wheat, hay, cotton lint, sorghum.	
Oreg.....	2,646	2,740	2,753	858	1,094	1,034	29 Wheat, hay, potatoes, ryegrass seed.	
Pa.....	4,496	4,564	4,648	995	1,071	1,137	25 Corn, hay, mushrooms, apples.	
R.I.....	16	18	18	5	7	7	49 Potatoes, hay, apples.	
S.C.....	2,858	2,886	3,148	734	617	801	34 Tobacco, soybeans, corn, peaches.	
S. Dak.....	15,121	14,898	15,812	1,350	1,360	1,583	19 Corn, hay, wheat, soybeans.	
Tenn.....	5,211	5,396	5,726	979	919	1,192	23 Soybeans, tobacco, corn, hay.	
Tex.....	22,760	22,581	24,384	4,617	4,033	4,891	4 Cotton lint, sorghum, wheat, hay.	
Utah.....	1,149	1,144	1,127	213	258	244	38 Hay, wheat, barley, sweet cherries.	
Vt.....	544	549	540	67	70	79	46 Hay, apples, maple sirup, potatoes.	
Va.....	2,849	3,009	3,165	667	618	918	32 Tobacco, corn, hay, soybeans.	
Wash.....	4,556	4,843	5,099	1,549	1,850	1,941	15 Wheat, apples, hay, potatoes.	
W. Va.....	714	721	755	82	105	94	45 Hay, apples, corn, tobacco.	
Wis.....	9,476	9,559	9,524	1,573	2,108	1,989	14 Corn, hay, potatoes, oats.	
Wyo.....	1,853	1,860	1,860	225	283	240	39 Hay, sugar beets, wheat, barley.	

NA Not available. X Not applicable. <sup>1</sup>Excludes Alaska. <sup>2</sup>For sugar and seed.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production; Commercial Vegetables; Field Seeds*; and *Crop Values*; all annual.

No. 1203. CORN—SUPPLY, DISAPPEARANCE, AND PRICE SUPPORT: 1960 TO 1981

[In millions of bushels, except as noted. For years beginning October]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Supply, total.....	5,695	5,251	5,161	5,187	6,204	6,692	7,394	8,381	9,244	8,263	9,236
Production.....	3,907	4,103	4,152	4,701	5,841	6,289	6,505	7,268	7,939	6,645	8,201
Imports <sup>1</sup> .....	1	1	4	2	2	3	3	1	1	1	1
Carryover stocks, Oct. 1.....	1,787	1,147	1,005	484	361	400	886	1,111	1,304	1,617	1,034
Disappearance, total.....	3,679	4,409	4,495	4,826	5,804	5,805	6,282	7,077	7,627	7,229	7,600
Domestic.....	3,387	3,722	3,978	3,677	4,093	4,121	4,334	4,944	5,194	4,874	5,250
Feed and residual.....	3,092	3,362	3,593	3,226	3,570	3,571	3,744	4,324	4,519	4,139	4,400
Food, industry, and seed.....	295	360	365	451	523	550	590	620	675	735	850
Exports <sup>1</sup> .....	292	687	517	1,149	1,711	1,684	1,948	2,133	2,433	2,355	2,350
Price support operations: <sup>2</sup>											
Support or target price (dol. per bu.) <sup>3</sup> .....	1.06	1.25	1.35	1.38	1.38	1.57	2.00	2.10	2.20	2.35	2.40
National avg. loan rate (dol. per bu.).....	1.08	1.05	1.10	1.10	1.10	1.80	2.00	2.00	2.10	2.25	2.40
Quantity placed under loan.....	637	215	323	77	147	275	1,155	642	558	840	1,965
Percent of production.....	16	5	8	2	3	4	18	9	7	13	24

<sup>1</sup>Includes grain equivalent of corn products. <sup>2</sup>See text, p. 648. <sup>3</sup>Guaranteed on normal production from participating farms. <sup>4</sup>Target price was \$2.05 if producer was not in compliance with his normal crop acreage. <sup>5</sup>National average loan rate for corn put into farmer-owned reserve because of grain embargo was \$2.40 per bushel. <sup>6</sup>National average loan rate for corn put into farmer-owned reserve was \$2.55 per bushel.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Feed Situation*, quarterly, and *Agricultural Supply and Demand Estimates*, annual. Also in *Agricultural Statistics*, annual.

No. 1204. CORN FOR GRAIN—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981

[See *Historical Statistics, Colonial Times to 1970*, series K 502-505, for U.S. data on corn for all purposes]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bu.) <sup>1</sup>			PRODUCTION (mil. bu.) <sup>1</sup>		FARM VALUE (mil. dol.)			PRICE <sup>2</sup> (dol. per bu.)		
	1979	1980	1981, prel.	1979	1980	1981, prel.	1979	1980	1979	1980	1981, prel.	1980	1981, prel.	
Total.....	72,400	73,030	74,624	110	91	110	7,939	6,645	8,201	19,904	20,571	20,001	3.11	2.45
Ala.....	502	423	620	61	36	55	31	15	34	90	55	95	3.60	2.80
Calif.....	260	270	275	117	135	130	30	36	36	99	148	122	4.05	3.40
Colo.....	760	760	790	127	118	137	97	90	108	244	274	271	3.05	2.50
Del.....	159	177	181	102	72	83	16	13	15	47	47	48	3.68	3.20
Fla.....	339	328	327	53	47	55	18	15	18	51	52	51	3.40	2.85
Ga.....	1,550	1,300	1,380	65	42	50	101	55	69	288	188	190	3.45	2.75
Ill.....	11,050	11,460	11,260	128	93	129	1,414	1,066	1,453	3,635	3,347	3,631	3.14	2.50
Ind.....	6,030	6,280	6,000	112	96	109	675	603	654	1,722	1,905	1,537	3.16	2.35
Iowa.....	13,100	13,300	13,700	127	110	127	1,664	1,463	1,740	4,026	4,345	4,089	2.97	2.35
Kans.....	1,470	1,180	1,260	117	94	126	172	111	159	432	366	405	3.32	2.55
Ky.....	1,300	1,480	1,490	102	70	100	133	104	149	361	347	373	3.35	2.50
Md.....	595	640	690	99	72	105	59	46	72	167	169	239	3.66	3.30
Mich.....	2,500	2,600	2,850	95	95	96	238	247	274	584	753	643	3.05	2.35
Minn.....	6,060	6,290	6,770	100	97	110	606	610	745	1,370	1,739	1,676	2.85	2.25
Mo.....	2,330	2,070	1,940	103	53	110	240	110	213	583	358	512	3.26	2.40
Nebr.....	7,150	7,100	6,980	115	85	115	822	604	803	1,990	1,835	2,007	3.04	2.50
N.Y.....	650	730	800	92	93	93	60	68	74	162	293	186	3.43	2.50
N.C.....	1,690	1,730	1,830	76	80	77	128	104	141	365	351	373	3.38	2.65
N. Dak.....	313	290	513	76	58	81	24	17	42	51	48	96	2.87	3.30
Ohio.....	3,630	3,900	3,750	115	113	96	417	441	360	1,090	1,379	882	3.13	2.45
Pa.....	1,280	1,280	1,400	95	75	95	122	96	134	361	348	349	3.62	2.60
S.C.....	509	515	570	80	48	58	41	25	33	118	77	81	3.12	2.45
S. Dak.....	2,850	2,300	2,580	74	53	70	211	122	161	437	346	397	2.84	2.20
Tenn.....	620	640	640	65	46	86	53	29	55	150	103	149	3.49	2.70
Tex.....	1,260	1,300	1,090	105	90	117	132	117	128	373	402	370	3.44	2.70
Va.....	615	595	625	63	55	90	51	33	56	144	114	152	3.48	2.90
Wis.....	3,080	3,350	3,500	103	104	108	317	348	378	771	1,031	851	2.96	2.25
Other.....	748	742	813	90	77	95	67	57	77	193	209	228	(x)	(x)

X Not applicable. <sup>1</sup>56 pounds per bushel. <sup>2</sup>Season average price received by farmers. State prices weighted by sales to obtain U.S. prices. Includes an allowance for loans outstanding and purchases by the government valued at the average loan and purchase rate, by States.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

## NO. 1205. WHEAT—SUPPLY, DISAPPEARANCE, AND PRICE SUPPORT: 1960 TO 1981

[In millions of 60-pound bushels, except as noted. For years beginning June 1. For explanation of price support operations, see text, p. 648. See *Historical Statistics, Colonial Times to 1970*, series K 507 and 509-510, for production and stocks]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.
<b>Supply</b> .....	2,747	2,238	2,336	2,125	2,564	2,817	3,161	2,955	3,060	3,279	3,785
Production.....	1,355	1,316	1,352	1,782	2,127	2,149	2,046	1,776	2,134	2,374	2,793
Imports <sup>1</sup> .....	8	1	1	3	2	2	2	1	2	3	3
Stocks, June 1, total.....	1,384	921	983	340	435	666	1,113	1,178	924	902	989
<b>Disappearance</b> .....	1,245	1,577	1,513	1,690	1,898	1,704	1,983	2,031	2,158	2,290	2,626
Domestic use.....	591	725	772	672	726	754	859	837	783	780	853
Food <sup>2</sup> .....	496	518	517	545	589	588	586	592	596	611	611
Seed and feed <sup>3</sup> .....	95	207	255	127	137	166	273	245	167	169	242
Exports <sup>1</sup> .....	653	652	741	1,018	1,173	950	1,124	1,194	1,375	1,510	1,773
<b>Price support operations:</b>											
Support or target price per bushel <sup>4</sup> .....	\$1.78	\$2.00	\$2.82	\$2.05	\$2.05	\$2.29	\$2.80	\$3.40	\$3.40	\$3.63	\$3.81
Loan rate.....	1.76	1.25	1.25	1.37	1.37	2.25	2.25	2.35	2.50	3.00	3.20
Quantity under support.....	424	173	254	37	52	499	591	257	182	331	445
Percent of production.....	31.3	13.1	18.8	2.1	2.4	23.2	26.9	14.5	8.5	13.9	16.0

<sup>1</sup>Imports and exports include flour and other products expressed in wheat equivalent. Compiled from reports of the U.S. Bureau of the Census. <sup>2</sup>Used for food in the U.S., U.S. Territories, and by the military. <sup>3</sup>Residual; approximates feed use and includes negligible quantities used for distilled spirits and beer. <sup>4</sup>Beginning 1974, target price on allotted production.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Wheat Situation*, quarterly. Also in *Agricultural Statistics*, annual.

## NO. 1206. WHEAT—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981

[See *Historical Statistics, Colonial Times to 1970*, series K 506-508, for U.S. acreage, production, and price]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bushels) <sup>3</sup>			PRODUCTION (mil. bushels) <sup>2</sup>			FARM VALUE (mil. dol.)			PRICE <sup>3</sup> (dol. per bu.)	
	1979	1980	1981 <sup>1</sup>	1979	1980	1981 <sup>1</sup>	1979	1980	1981 <sup>1</sup>	1979	1980	1981 <sup>1</sup>	1980	1981 <sup>1</sup>
<b>Total</b> .....	62,454	70,984	80,948	34	33	35	2,134	2,374	2,793	8,070	9,278	10,226	3.91	3.66
Ariz.....	125	215	258	76	80	85	9.5	17.2	21.8	35	70	93	4.06	4.28
Ark.....	420	855	1,650	35	38	41	14.7	32.9	67.6	54	124	233	3.78	3.45
Calif.....	800	1,150	1,365	71	74	79	56.5	85.5	107.1	228	365	440	4.27	4.10
Colo.....	2,641	3,400	3,101	27	32	28	70.2	110.3	87.4	245	398	310	3.61	3.54
Ga.....	175	600	1,070	35	33	43	6.1	19.8	46.0	23	72	152	3.66	3.30
Idaho.....	1,470	1,550	1,510	50	62	60	74.1	98.0	89.8	260	351	390	3.56	3.67
Ill.....	1,250	1,570	1,850	43	48	50	53.8	75.4	92.5	213	296	319	3.93	3.45
Ind.....	945	1,100	1,350	47	49	46	44.4	53.9	62.1	177	208	220	3.85	3.55
Kans.....	10,800	12,000	12,200	38	35	25	410.4	420.0	305.0	1,527	1,588	1,159	3.78	3.80
Ky.....	290	350	680	38	40	42	11.0	13.8	28.6	44	53	99	3.85	3.45
Md.....	90	97	137	37	38	41	3.3	3.7	5.6	14	15	18	4.04	3.25
Mich.....	735	800	830	43	44	50	31.6	35.2	41.5	121	127	147	3.80	3.55
Minn.....	2,578	3,169	3,610	35	32	40	90.4	102.6	144.0	395	415	539	4.04	3.74
Miss.....	115	300	600	32	31	40	3.7	9.3	24.0	15	39	78	4.20	3.25
Mo.....	1,600	2,070	2,750	44	43	42	70.4	89.0	115.5	268	336	387	3.77	3.35
Mont.....	5,125	5,100	5,820	23	24	30	116.5	119.8	172.8	414	496	635	4.14	3.67
Nebr.....	2,550	2,850	2,950	34	38	36	86.7	108.3	106.2	316	403	393	3.72	3.70
N. Mex.....	410	500	500	22	21	18	9.0	10.5	9.0	35	39	33	3.76	3.70
N.Y.....	180	150	160	41	40	44	6.6	6.0	7.0	25	24	22	3.93	3.15
N.C.....	210	300	410	36	35	39	7.6	10.5	16.0	20	39	52	3.75	3.25
N. Dak.....	9,600	9,820	11,690	26	19	28	252.2	179.7	331.7	964	790	1,174	4.40	3.54
Ohio.....	1,320	1,370	1,650	48	49	44	63.4	67.1	72.6	258	273	285	4.06	3.65
Okla.....	5,700	6,500	6,400	38	30	27	216.6	195.0	172.8	847	747	665	3.83	3.85
Oreg.....	1,245	1,350	1,310	46	57	59	57.3	77.4	77.4	217	308	298	3.98	3.85
Pa.....	235	250	270	31	37	36	7.3	9.3	9.7	31	38	33	4.10	3.95
S. Dak.....	2,805	3,245	3,820	21	19	23	60.1	62.4	89.0	219	265	319	4.24	3.58
Tenn.....	250	450	850	34	38	44	8.5	17.1	37.4	32	65	131	3.80	3.50
Tex.....	4,600	5,200	6,550	30	25	28	138.0	130.0	183.0	528	482	669	3.71	3.65
Utah.....	282	272	257	25	33	35	7.4	8.9	8.9	27	34	32	3.85	3.84
Va.....	180	286	390	35	37	44	6.3	10.6	17.2	26	41	58	3.87	3.40
Wash.....	2,980	3,160	3,050	40	51	55	118.0	160.2	168.4	460	638	665	3.98	3.95
Wyo.....	267	315	284	22	27	30	6.4	8.6	8.4	22	32	29	3.72	3.40
Other.....	481	830	1,626	34	34	41	16.1	28.3	67.2	62	107	229	(x)	(x)

X Not applicable. <sup>1</sup>Preliminary. <sup>2</sup>60 pounds per bushel. <sup>3</sup>See footnote 2, table 1204.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

## NO. 1207. SOYBEANS—SUPPLY, DISAPPEARANCE, AND PRICE SUPPORT: 1960 TO 1981

[For years beginning Sept. 1. See *Historical Statistics, Colonial Times to 1970*, series K 521, for production]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981, est.
Supply, total	Mil. bu.	607	875	1,357	1,736	1,533	1,865	2,030	2,442	2,151	2,348
Production	Mil. bu.	555	846	1,127	1,548	1,289	1,762	1,869	2,268	1,792	2,030
Stocks, Sept. 1	Mil. bu.	52	30	230	188	245	103	161	174	359	318
Disappearance, total	Mil. bu.	580	840	1,258	1,491	1,430	1,704	1,856	2,083	1,833	2,078
Crushed	Mil. bu.	406	538	760	865	790	927	1,018	1,123	1,020	1,050
Seed	Mil. bu.	33	43	48	54	62	69	80	66	89	118
Feed and residual <sup>1</sup>	Mil. bu.	6	9	16	17	14	8	19	17		
Net exports	Mil. bu.	135	251	434	555	564	700	739	875	724	910
Percent of total	Percent	23.2	29.8	34.5	37.2	39.5	41.1	39.8	42.0	39.0	44.0
Ending stocks	Mil. bu.	27	36	99	245	103	161	174	359	318	270
Price support:											
Support price per bushel	Dollars	1.85	2.25	2.25	( <sup>2</sup> )	2.50	3.50	4.50	4.50	5.02	5.02
Quantity under support	Mil. bu.	26	87	146	( <sup>2</sup> )	22	97	64	122	133	222
Percent of production	Percent	4.7	10.3	13.0	(X)	1.7	5.5	3.4	5.4	7.4	10.9

X Not applicable. <sup>1</sup> Residual represents adjustment for statistical discrepancy. <sup>2</sup> Price support not authorized for the 1975 crop.Source: U.S. Dept. of Agriculture, Economic Research Service, *Fats and Oils Situation*, quarterly. Also in *Agricultural Statistics*, annual.

## NO. 1208. SOYBEANS FOR BEANS—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981

[See *Historical Statistics, Colonial Times to 1970*, series K 521, for U.S. totals]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (bu.)			PRODUCTION (mil. bu.)			PRICE (dol. per bu.)			FARM VALUE (mil. dol.)		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
Total <sup>1</sup>	70,566	67,856	66,688	32.1	26.4	30.4	2,268	1,792	2,030	6.28	7.57	6.37	14,250	13,560	12,943
Ala.	2,150	2,100	2,050	25.0	15.0	23.0	54	32	47	6.15	7.63	6.25	331	240	295
Ark.	5,150	4,350	4,500	28.0	15.0	22.0	144	65	99	6.44	7.91	6.50	929	516	644
Ga.	2,100	2,140	2,180	28.0	11.0	19.0	59	24	41	6.32	7.58	6.40	372	178	265
Ill.	9,720	9,250	9,330	39.0	33.5	38.0	379	310	355	6.46	7.62	6.50	2,449	2,361	2,305
Ind.	4,420	4,380	4,600	36.0	36.0	33.0	159	158	152	6.32	7.58	6.35	1,006	1,195	964
Iowa	8,170	8,270	8,150	37.5	38.5	40.5	306	318	330	6.17	7.39	6.35	1,890	2,353	2,096
Kans.	1,580	1,450	1,510	26.5	16.5	30.0	41	24	45	5.97	7.55	6.10	247	181	276
Ky.	1,660	1,600	1,700	32.5	22.5	29.5	54	36	50	6.42	7.75	6.70	346	279	336
La.	3,350	3,350	3,130	28.0	20.0	21.0	94	67	66	6.42	7.67	6.55	602	527	431
Mich.	1,010	950	970	30.0	32.0	30.0	30	30	29	6.13	7.47	6.35	186	227	185
Minn.	5,080	4,760	4,400	32.0	31.5	33.0	163	150	145	6.00	7.23	6.30	975	1,084	915
Miss.	4,100	3,850	3,600	29.0	16.0	21.0	119	62	76	6.37	7.81	6.50	757	481	491
Mo.	5,830	5,530	5,050	31.5	24.5	31.5	184	135	159	6.22	7.59	6.30	1,142	1,028	1,002
Nebr.	1,610	1,770	2,120	34.0	30.0	39.0	55	53	83	5.93	7.18	6.15	325	381	508
N.C.	1,950	1,930	1,880	23.5	18.0	25.0	46	35	47	6.45	7.83	6.35	296	272	298
O.Hio.	4,080	3,760	3,500	35.5	36.0	28.5	145	135	100	6.38	7.66	6.50	917	1,037	648
S.C.	1,660	1,600	1,550	24.0	13.0	21.0	40	21	33	6.51	7.85	6.45	259	163	210
Tenn.	2,620	2,550	2,350	27.0	18.0	26.0	71	46	61	6.35	7.88	6.25	449	362	382
Tex.	805	630	480	26.0	22.0	22.0	21	14	11	6.00	7.89	6.00	126	107	63
Va.	536	610	635	28.5	15.0	27.0	15	9	17	6.28	7.89	6.25	96	72	107

<sup>1</sup> Includes States not shown separately.Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

## NO. 1209. SORGHUM GRAIN—SUPPLY, DISAPPEARANCE, AND PRICE SUPPORT: 1960 TO 1981

[In millions of bushels, except as noted. For years beginning Oct. For explanation of price supports, see p. 649]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Total supply	1,201	1,239	927	996	664	789	762	872	922	969	726	989
Production	620	673	683	923	623	754	711	781	731	809	579	880
Carryover stocks	581	566	244	73	61	35	51	91	191	160	147	109
Disappearance	499	848	837	935	649	738	671	682	763	822	617	736
Domestic, total	428	582	693	701	437	509	425	468	556	497	318	461
Feed and residual	415	569	680	690	426	498	414	456	545	484	307	450
Exports	71	266	144	234	212	229	246	214	207	325	209	275
Price support operations:												
Support or target price per cwt.	\$1.52	\$2.00	\$2.14	\$2.61	\$2.34	\$2.34	\$2.66	\$4.07	\$4.07	\$4.18	\$4.46	\$4.55
National avg. loan rate per cwt.	\$1.52	\$1.65	\$1.61	\$1.79	\$1.88	\$1.88	\$2.55	\$3.39	\$3.39	\$3.57	\$3.82	\$4.07
Placed under loan (mil. cwt)	109.3	59.4	17.1	10.4	2.2	4.9	11.9	121.4	51.6	35.6	18.1	155.0
Percent of production	10	20	1	1	1	1	1	28	13	8	5	33

<sup>1</sup> Target price was \$4.38 per cwt, if producer was not in compliance with his normal crop acreage. <sup>2</sup> National average loan rate for grain sorghum put into the farmer-owned reserve was \$4.07 per cwt in 1980 and \$4.32 per cwt in 1981.Source: U.S. Dept. of Agriculture, Economic Research Service, *Feed Situation*, quarterly, and *Agricultural Supply and Demand Estimates*, periodic. Also in *Agricultural Statistics*, annual.

## NO. 1210. RICE, ROUGH EQUIVALENT—SUPPLY, DISAPPEARANCE, AND PRICE SUPPORT: 1960 TO 1981

[In millions of hundredweight, except as noted. For years beginning August. Milled rice converted to a rough rice basis. See *Historical Statistics, Colonial Times to 1970*, series K 539, for production]

ITEM	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981, prel.
Supply, total.....	87.0	84.6	101.7	98.1	120.3	135.5	152.6	139.8	160.7	163.6	172.1	202.2
Farm production.....	54.6	76.3	83.8	92.8	112.4	128.4	115.6	99.2	133.2	131.9	146.2	185.4
Beginning stocks.....	12.1	7.7	16.4	5.1	7.8	7.1	36.9	40.5	27.4	31.6	25.7	16.5
Imports.....	3	7	1.4	.2	(z)	(z)	.1	.1	.1	.1	.2	3
Disappearance, total.....	56.9	76.4	83.0	90.2	113.2	98.6	112.1	112.4	129.1	137.9	155.6	148.0
Domestic.....	26.9	30.8	34.4	37.8	41.0	40.3	42.7	37.7	49.2	49.2	54.5	56.5
Food.....	19.9	23.4	25.1	26.1	28.6	27.7	29.2	23.5	33.7	33.2	38.4	(NA)
Industry.....	4.9	4.7	6.6	8.1	8.4	9.1	10.3	9.9	11.2	11.2	11.0	(NA)
Seed.....	2.1	2.7	2.5	3.6	4.0	3.5	3.2	4.3	4.3	4.8	5.1	(NA)
Exports.....	29.5	43.9	46.5	49.7	69.5	56.5	65.6	72.8	75.7	82.6	91.4	86.5
Residual ?.....	+5	+2.2	+2.1	+2.7	+2.7	+1.8	+3.8	+1.9	+4.2	+6.1	+9.7	+5.0
Price support operations:												
Target price per cwt. <sup>1</sup> .....	(x)	(x)	(x)	(x)	(x)	(x)	\$8.25	\$8.25	\$8.53	\$9.05	\$9.49	\$10.68
Loan rate per cwt.....	\$4.42	\$4.50	\$4.86	\$6.07	\$7.54	\$8.52	\$8.19	\$6.19	\$6.40	\$6.79	\$7.12	\$8.01
Quantity under support.....	13.1	10.0	20.8	19.1	9.3	21.5	23.4	18.5	27.1	25.9	25.0	42.8
Percent of production.....	24.0	13.1	24.8	20.6	8.3	16.7	20.2	19.7	20.3	19.6	17.1	23.1

NA Not available. X Not applicable. Z Less than 50,000. <sup>1</sup>Adjusted on basis of bills of lading presented to U.S. Dept. of Agriculture.

<sup>2</sup>Results from losses in drying, storage, handling, and milling and errors in estimation. <sup>3</sup>Represents target price on allotted production.

Source: U.S. Dept. of Agriculture, *Agricultural Statistics*, annual.

## NO. 1211. POTATOES—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981

[Excludes Alaska and Hawaii, 1981 preliminary. Price is season average received by farmers; State prices weighted by sales. See *Historical Statistics, Colonial Times to 1970*, series K 532-534, for U.S. acreage, production, price]

STATE	ACREAGE HARVESTED (1,000 acres)			YIELD PER ACRE (cwt)			PRODUCTION (mil. cwt)			PRICE (dol. per cwt)			FARM VALUE (mil. dol.)		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
Total.....	1,270	1,154	1,232	270	262	271	342	303	334	3.43	6.55	5.40	1,172	1,979	1,786
Calif.....	56	51	56	372	370	374	21	19	21	5.00	9.00	10.50	105	169	216
Colo.....	46	42	47	288	297	297	13	13	14	2.91	6.70	4.30	39	84	59
Fla.....	28	27	30	215	194	220	6	5	7	5.06	6.85	11.10	30	36	73
Idaho.....	330	300	325	258	266	246	85	80	80	2.95	5.65	4.55	251	451	364
Maine.....	113	104	104	245	240	255	28	25	27	3.25	7.25	4.80	90	181	127
Mich.....	41	40	38	235	227	222	10	9	9	4.44	6.65	6.65	42	60	56
Minn.....	74	69	76	198	166	196	15	11	15	3.11	8.00	5.30	46	92	79
Nev.....	15	13	12	330	340	290	5	4	3	2.75	5.20	5.20	14	23	18
N.Y.....	45	44	44	285	252	281	13	11	12	4.14	8.85	6.30	54	98	77
N. Dak.....	114	112	115	160	140	175	18	16	20	3.25	6.85	4.50	59	107	91
Oreg.....	63	47	54	402	420	402	25	20	22	2.83	4.60	4.40	72	91	95
Pa.....	24	22	21	250	190	250	6	4	5	5.00	7.90	6.50	30	33	34
Wash.....	102	87	108	475	505	485	48	44	52	2.55	4.40	3.80	124	193	199
Wis.....	54	50	54	315	320	340	17	16	18	4.30	10.10	4.40	73	162	80
Other.....	165	146	148	194	178	196	32	26	29	(x)	(x)	(x)	143	199	218

X Not applicable.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

## NO. 1212. PEANUTS—ACREAGE, PRODUCTION, VALUE, AND PRICE SUPPORT: 1960 TO 1981

[Years beginning August. See also *Historical Statistics, Colonial Times to 1970*, series K 547-549]

ITEM	Unit	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981 <sup>1</sup>
Acreage harvested.....	1,000.....	1,395	1,438	1,469	1,472	1,500	1,518	1,512	1,509	1,520	1,399	1,499
Production for nuts.....	Mil. lb.....	1,718	2,390	2,983	3,668	3,847	3,739	3,715	3,952	3,968	2,301	3,988
Farmers' stock <sup>2</sup> .....	Mil. lb.....	7.2	7.4	2.8	38.4	227.0	250.0	54.4	28.7	13.5	63.4	28.3
Yield per acre.....	Lb.....	1,232	1,661	2,030	2,491	2,564	2,464	2,456	2,619	2,611	1,645	2,670
Average price per lb.....	Cents.....	10.0	11.4	12.8	17.9	19.6	20.0	21.0	21.1	20.6	25.1	26.8
Value of production.....	Mil. dol.....	172	272	383	658	755	747	781	834	819	578	1,070
Support price per lb.....	Cents.....	10.1	11.2	12.8	18.3	19.7	20.7	21.5	<sup>3</sup> 21.0	<sup>3</sup> 21.0	<sup>3</sup> 22.8	<sup>3</sup> 22.8
Quantity under support.....	Mil. lb.....	352	733	1,084	1,072	1,136	854	536	520	709	337	840
Percent of production.....	Percent.....	20.5	30.7	36.3	29.2	29.5	22.8	14.4	13.2	17.9	14.6	21.1

<sup>1</sup>Preliminary.

<sup>2</sup>Stocks on hand as of beginning of year. Excludes shelled peanuts and cleaned peanuts (roasting stocks).

<sup>3</sup>Quota peanuts were supported at 21.0 cents per lb. in 1978 and 1979 and 22.8 cents in 1980 and 1981. Additional peanuts were supported at 12.5 cents per lb. in 1978, 15.0 cents in 1979, and 12.5 cents in 1980 and 1981.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Fats and Oils Situation*, quarterly. Also in *Agricultural Statistics*, annual.

## NO. 1213. COTTON—SUMMARY: 1960 TO 1981

[In thousands of net weight 480 lb. bales, except as indicated. For years beginning Aug. 1. Excludes linters. Excludes Alaska, Hawaii, and Puerto Rico except for imports and exports. Production figures are compiled from reports of individual ginners. Price per pound is average price received by farmers. For stocks, see *Historical Statistics, Colonial Times to 1970*, series K 554-556]

YEARLY AVERAGE OR YEAR	PRODUCTION		Consumption <sup>1</sup>	Net exports	Net imports	Beginning carry-over	Average price per pound of upland cotton (cents)	PRICE SUPPORT OPERATIONS <sup>2</sup>		
	Running bales	Equivalent 480-lb. bales						Price per lb. <sup>3</sup> (cents)	Total under support	Per cent of production
1960-1964	14,779	14,794	8,676	5,062	134	9,232	31.2	32.8	7,044	48.8
1965-1969	10,557	10,571	8,920	3,586	98	11,358	23.7	32.6	3,917	37.5
1970-1974	11,511	11,777	7,513	4,528	45	4,267	33.3	37.6	1,932	16.8
1975-1979	11,465	11,751	6,653	5,798	29	4,324	57.6	43.6	1,555	13.2
1970	10,112	10,192	8,204	3,897	37	5,843	21.9	37.1	2,386	23.7
1975	8,151	8,302	7,250	3,311	92	6,708	51.1	36.1	691	8.5
1976	10,347	10,581	6,674	4,784	38	3,681	63.6	38.9	941	9.2
1977	14,018	14,389	6,493	5,484	5	2,928	52.1	44.6	4,518	31.6
1978	10,549	10,655	6,352	6,180	4	5,247	58.1	48.0	1,524	14.2
1979	14,252	14,629	6,506	9,229	5	3,958	62.3	50.2	1,720	11.8
1980	10,826	11,122	5,991	5,926	28	3,000	74.4	48.0	2,276	21.0
1981, prel.	15,150	15,646	5,270	6,567	26	2,668	54.5	52.5	6,025	38.8

<sup>1</sup>Adjusted to cotton season. <sup>2</sup>Data from U.S. Dept. of Agriculture, Agricultural Stabilization and Conservation Service.

<sup>3</sup>For 1960-63, support loan for middling 1-1/8; 1964-74, support loan plus direct support payment; 1975-81, loan rate for strict low middling 1 1/8", mic. 3.5-4.9. For text on price supports, see p. 648. <sup>4</sup>Average for the first eight months of marketing year.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Cotton and Wool Outlook Statistics*, periodic.

## NO. 1214. COTTON—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981

[Cotton production excludes linters. Values shown are for marketing season or crop year and should not be confused with calendar-year income. See *Historical Statistics, Colonial Times to 1970*, series K 553-558 for U.S. totals]

STATE	ACREAGE HARVESTED (1,000)			YIELD PER ACRE (lb.)			PRODUCTION (1,000 bales) <sup>1</sup>			FARM VALUE <sup>2</sup> (mil. dol.)			FARM PRICE PER LB. <sup>2</sup> (cents)		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
<b>Total<sup>3</sup></b>	<b>12,831</b>	<b>13,215</b>	<b>13,841</b>	<b>547</b>	<b>404</b>	<b>543</b>	<b>14,629</b>	<b>11,122</b>	<b>15,646</b>	<b>4,391</b>	<b>3,987</b>	<b>4,109</b>	<b>62.5</b>	<b>74.7</b>	<b>54.7</b>
Ala.....	305	321	372	510	411	545	324	275	422	102	105	115	65.3	79.2	57.0
Ariz.....	618	591	633	1,046	1,158	1,221	1,347	1,426	1,610	418	520	440	68.1	75.9	57.0
Ark.....	530	645	560	549	330	518	606	444	604	190	163	165	65.3	76.7	57.0
Calif.....	1,635	1,540	1,530	1,000	969	1,109	3,408	3,109	3,555	1,127	1,161	1,076	68.9	77.8	63.4
Ga.....	150	160	175	486	258	436	152	86	159	48	32	43	65.5	77.9	55.7
La.....	465	560	695	712	394	512	690	460	742	212	172	197	64.0	77.8	55.4
Miss.....	1,050	1,125	1,200	657	488	626	1,437	1,143	1,565	438	419	428	63.5	76.4	57.0
Mo.....	137	241	183	550	353	441	157	177	168	47	62	45	62.4	72.7	56.0
N. Mex.....	141	127	113	380	430	600	112	114	141	34	45	41	68.5	82.4	60.4
N.C.....	45	65	82	455	381	558	43	52	95	13	20	26	64.7	79.5	58.0
Okla.....	580	565	640	432	174	330	522	205	440	150	75	88	59.7	76.6	41.9
S.C.....	109	120	118	510	309	667	116	77	164	37	29	46	66.2	79.6	57.9
Tenn.....	230	275	305	357	349	496	171	200	315	52	75	82	62.9	78.3	54.3
Tex.....	6,831	6,873	7,218	389	234	377	5,539	3,345	5,683	1,474	1,105	1,308	55.7	68.7	48.2

<sup>1</sup>Bales of 480 lb net weight. <sup>2</sup>Includes allowance for unredeemed loans in 1979 and 1980. For 1981, average price to Apr. 1, 1982, with no allowance for unredeemed loans. <sup>3</sup>Includes States not shown separately.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

## NO. 1215. TOBACCO—PRODUCTION, DISAPPEARANCE, AND STOCKS: 1961 TO 1981

[In millions of pounds. Flue-cured and cigar wrapper, crop year, July-June; all other types, October-September. Excludes Alaska, Hawaii, and Puerto Rico, except for imports and exports. Farm-sales-weight basis, except as noted. See *Historical Statistics, Colonial Times to 1970*, series K 562, for production]

ITEM	1961-1965, avg.	1966-1970, avg.	1971-1975, avg.	1976-1980, avg.	1970	1975	1976	1977	1978	1979	1980	1981
Production	2,161	1,854	1,874	1,878	1,906	2,182	2,137	1,914	2,025	1,527	1,786	2,062
Domestic disappearance <sup>1</sup>	1,468	1,340	1,308	1,186	1,278	1,290	1,229	1,202	1,193	1,175	1,130	1,137
Exports	563	650	650	692	639	654	678	693	765	694	631	675
Imports <sup>2</sup>	170	220	329	369	219	391	366	322	376	415	366	335
Stocks, end of year <sup>3</sup>	4,182	4,016	3,290	3,444	3,678	3,297	3,540	3,560	3,601	3,259	3,260	3,460

<sup>1</sup>U.S. tobacco only. <sup>2</sup>Source: U.S. Bureau of the Census. Calendar year, declared weight; includes stems, trimmings, and scrap. <sup>3</sup>Marketing year.

Source: Except as noted, U.S. Dept. of Agriculture, Economic Research Service, *Tobacco Situation*, quarterly.

**NO. 1216. TOBACCO—ACREAGE, PRODUCTION, AND VALUE, BY STATES: 1979 TO 1981**

[See *Historical Statistics, Colonial Times to 1970*, series K 561-563, for U.S. acreage, production, and price]

STATE	ACREAGE HARVESTED (1,000)			YIELD PER ACRE (pounds)			PRODUCTION (mil. lb.)			PRICE <sup>1</sup> (dol. per lb.)			FARM VALUE (mil. dol.)		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
<b>Total<sup>2</sup>.....</b>	<b>827</b>	<b>921</b>	<b>974</b>	<b>1,845</b>	<b>1,940</b>	<b>2,116</b>	<b>1,527</b>	<b>1,786</b>	<b>2,062</b>	<b>1.41</b>	<b>1.52</b>	<b>1.71</b>	<b>2,154</b>	<b>2,721</b>	<b>3,514</b>
Conn.....	3	3	3	1,539	1,595	1,764	5	5	6	5.74	6.61	5.80	28	35	33
Fla.....	10	10	10	2,250	2,130	2,380	23	20	23	1.35	1.45	1.67	31	30	36
Ga.....	53	55	55	1,905	2,010	2,200	101	111	121	1.41	1.40	1.63	142	154	197
Ind.....	6	7	8	1,950	2,300	2,265	12	17	19	1.45	1.66	1.81	17	28	34
Ky.....	174	201	235	1,976	2,094	2,172	343	421	510	1.43	1.84	1.79	490	669	913
Md.....	20	23	23	1,130	1,100	1,300	22	25	30	1.40	1.69	1.75	31	43	52
N.C.....	338	384	374	1,840	1,987	2,132	621	762	797	1.40	1.47	1.67	867	1,119	1,330
Ohio.....	10	11	13	1,435	1,768	1,745	14	20	23	1.38	1.59	1.71	19	32	39
Pa.....	11	13	13	1,580	1,900	2,050	18	25	27	.72	.87	.80	13	21	22
S.C.....	57	65	69	2,065	1,930	2,168	118	125	150	1.42	1.40	1.65	167	175	247
Tenn.....	60	66	79	1,745	1,728	2,053	105	112	161	1.38	1.81	1.78	144	180	287
Va.....	67	65	73	1,630	1,635	2,153	110	107	158	1.40	1.46	1.67	153	156	264
Wis.....	13	13	13	1,942	2,013	1,946	25	26	26	1.17	1.25	1.10	29	32	29

<sup>1</sup> See footnote 2, table 1200. <sup>2</sup> Includes States not shown separately.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Crop Production*, annual, and *Crop Values*, annual.

**NO. 1217. SUGAR, BEET AND CANE—SUPPLY AND DISAPPEARANCE: 1960 TO 1981**

[In thousands of short tons, raw value. Minus sign (-) denotes decrease]

ITEM	1960	1965	1970	1974	1975	1976	1977	1978	1979	1980	1981, prel.
<b>Total supply.....</b>	<b>11,877</b>	<b>13,025</b>	<b>14,392</b>	<b>14,235</b>	<b>13,132</b>	<b>14,515</b>	<b>15,827</b>	<b>14,628</b>	<b>14,621</b>	<b>14,110</b>	<b>14,350</b>
United States production.....	4,009	5,370	5,874	5,662	6,300	6,798	6,089	5,602	5,793	5,736	6,206
Beet.....	2,439	3,044	3,511	3,221	3,473	4,003	3,423	3,067	3,066	3,052	3,184
Mainland cane <sup>1</sup> .....	634	1,108	1,201	1,400	1,720	1,745	1,832	1,506	1,567	1,661	1,985
Hawaii.....	936	1,218	1,162	1,041	1,107	1,050	1,034	1,029	1,060	1,023	1,037
Imports.....	4,885	4,027	5,296	5,770	3,882	4,658	6,138	4,683	5,027	4,495	5,014
Puerto Rico..... <sup>2</sup>	903	834	353	157	96	203	102	52	47	178	48
Beginning stocks.....	2,080	2,784	2,869	2,646	2,854	2,856	3,498	4,491	3,754	3,701	3,082
<b>Total disappearance.....</b>	<b>9,447</b>	<b>10,220</b>	<b>10,926</b>	<b>11,381</b>	<b>10,276</b>	<b>11,017</b>	<b>11,336</b>	<b>11,074</b>	<b>10,920</b>	<b>11,028</b>	<b>10,921</b>
U.S. consumption.....	9,022	10,080	10,532	10,945	10,302	10,893	11,099	10,889	10,756	10,189	9,770
Exports.....	46	89	66	72	216	76	22	16	18	650	1,048
Other <sup>3</sup> .....	379	51	328	364	-242	48	215	169	146	189	103

<sup>1</sup> Florida, Louisiana, and, beginning 1974, Texas. <sup>2</sup> Includes minor quantities from Virgin Islands. <sup>3</sup> Includes net change in invisible stocks, balancing items, and minor quantities of sugar for livestock feed and alcohol.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Sugar and Sweetener Outlook and Situation*, quarterly.

**NO. 1218. SUGAR, BEET AND CANE—U.S. AND WORLD PRODUCTION AND U.S. PRICES: 1960 TO 1981**

[Production in thousands of short tons, raw value]

CROP YEAR	WORLD PRODUCTION		UNITED STATES PRODUCTION			CANE (cents per lb.)			
	Total	Percent U.S.	Beet	Cane		Wholesale, N.Y.		Retail, U.S., granulated	
				Mainland <sup>1</sup>	Hawaii	Raw, 96° <sup>2</sup>	Refined		
1960.....	59,970	6.7	2,475	630	936	6.3	9.3	11.6	
1965.....	68,467	7.5	2,816	1,104	1,218	6.8	10.0	11.8	
1970.....	77,907	7.4	3,322	1,252	1,162	8.1	11.7	13.0	
1972.....	82,760	7.7	3,532	1,620	1,119	9.1	13.1	13.9	
1973.....	88,184	6.5	3,216	1,420	1,129	10.3	14.1	15.1	
1974.....	86,557	6.4	3,021	1,461	1,041	29.5	34.4	32.3	
1975.....	90,035	7.7	4,019	1,627	1,107	22.5	31.4	37.2	
1976.....	95,089	7.0	3,895	1,674	1,050	13.3	19.2	24.0	
1977.....	102,131	5.7	3,108	1,650	1,034	11.0	17.3	21.6	
1978.....	100,801	5.9	3,289	1,583	1,029	13.9	20.9	23.7	
1979.....	93,211	6.0	2,879	1,640	1,060	15.6	23.2	24.9	
1980.....	96,006	6.1	3,149	1,705	1,023	30.1	41.0	42.7	
1981, prel.....	106,236	5.8	3,290	1,785	1,037	18.7	28.2	40.0	

<sup>1</sup> Florida, Louisiana, and, beginning 1974, Texas. <sup>2</sup> Centrifugal. Duty-paid.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Sugar and Sweetener Outlook and Situation*, quarterly.



## NO. 1222. CANNED FOODS—PRODUCTION: 1960 TO 1980

[In millions of standard cases of 24 No. 303 cans, except as noted. Excludes Alaska and Hawaii, except as noted. See Historical Statistics, Colonial Times to 1970, series P 233-234, for corn and tomatoes in cases of 24 No. 2 cans]

PRODUCT	1960	1965	1970	1972	1973	1974	1975	1976	1977	1978	1979	1980
<b>Fruits</b> <sup>1</sup>	<b>97.9</b>	<b>103.9</b>	<b>99.4</b>	<b>87.9</b>	<b>96.2</b>	<b>103.7</b>	<b>91.2</b>	<b>88.2</b>	<b>93.7</b>	<b>85.3</b>	<b>96.9</b>	<b>93.6</b>
Apples <sup>2</sup>	3.1	4.1	2.3	2.2	3.2	2.2	1.1	1.9	2.0	2.1	2.4	1.6
Applesauce <sup>2</sup>	11.8	15.9	14.1	11.9	15.2	16.6	9.6	8.9	10.7	11.6	12.7	10.6
Apricots	6.1	5.1	3.8	3.0	4.1	2.0	4.4	2.4	2.3	2.1	2.9	3.0
Berries	.8	.7	.4	.4	.3	.4	.4	.3	.1	.3	.2	.2
Cherries, red, pitted	1.6	2.4	1.0	1.3	.6	1.2	1.3	.4	.6	.6	.5	.5
Cherries, sweet	.6	.7	.7	.4	.5	.6	.4	.5	.5	.5	.7	.4
Cranberry sauce <sup>2</sup>	2.2	3.4	3.9	3.5	4.7	4.3	3.4	3.5	3.4	3.7	3.6	3.6
Fruit cocktail <sup>2</sup>	12.8	14.5	13.1	11.9	13.4	14.9	13.7	13.6	13.0	11.7	13.8	14.8
Fruit salad/mixed fruits <sup>2</sup>	1.2	1.2	1.2	1.5	1.5	1.8	1.3	1.2	2.2	2.2	3.1	3.2
Grapefruit sections <sup>2,4</sup>	3.0	2.8	2.3	1.9	2.1	1.5	1.1	1.2	1.2	1.3	1.4	(NA)
Peaches	30.8	30.0	29.6	24.0	24.5	32.4	29.0	24.8	29.2	21.4	25.8	25.8
Pears	8.5	8.4	8.6	9.1	9.8	10.7	9.8	11.5	9.6	9.0	10.8	10.7
Pineapple <sup>2,5</sup>	15.0	15.0	17.8	16.5	15.0	13.9	14.2	17.3	18.4	18.3	18.5	17.1
Plums <sup>2</sup>	.4	1.7	.8	.4	1.3	1.2	1.4	1.0	1.8	.9	.7	1.1
<b>Juices</b> <sup>2,7</sup>												
Apple	6.2	9.6	14.1	13.8	14.8	15.4	15.3	15.4	18.2	24.1	25.8	26.4
Grapefruit	11.0	13.8	26.0	28.3	29.0	21.6	25.8	27.7	26.4	25.1	23.6	(NA)
Orange	11.5	12.1	15.4	17.1	13.8	13.3	13.5	14.4	15.8	18.2	17.8	(NA)
Orange-grapefruit	3.2	2.9	2.5	2.1	1.9	1.7	2.8	1.6	1.9	1.4	1.5	(NA)
Pineapple <sup>2</sup>	14.4	15.4	13.7	12.3	11.4	8.6	8.7	10.2	12.0	11.3	13.6	(NA)
Tomato <sup>8</sup>	33.0	32.8	30.1	25.7	27.8	29.6	29.0	26.5	22.9	27.9	26.0	23.7
<b>Seasonal vegetables</b>	<b>175.3</b>	<b>204.1</b>	<b>208.7</b>	<b>221.8</b>	<b>235.3</b>	<b>242.3</b>	<b>249.8</b>	<b>217.5</b>	<b>237.1</b>	<b>233.3</b>	<b>265.5</b>	<b>230.5</b>
Asparagus	8.0	7.2	5.9	5.9	5.8	5.6	3.6	3.6	3.7	3.4	2.8	2.5
Beans, green and wax	33.2	45.6	47.6	47.6	55.0	62.3	55.4	47.4	54.5	57.1	66.3	58.2
Beans, lima	3.8	3.0	2.8	2.1	3.2	2.5	3.7	2.8	2.7	3.4	3.1	2.8
Beets <sup>2</sup>	8.8	10.0	11.3	10.0	10.9	15.1	13.1	9.2	11.3	13.0	15.1	10.9
Carrots <sup>2</sup>	5.0	4.5	5.4	5.5	6.4	6.9	4.7	5.2	6.6	6.3	7.3	4.4
Corn, sweet	35.3	39.1	47.0	53.0	55.2	46.4	57.5	54.7	56.3	57.9	60.0	50.6
Greens, leafy	2.9	2.7	3.5	2.8	4.0	4.6	3.0	3.1	2.6	2.9	3.2	2.6
Peas, field	2.1	1.8	2.4	2.6	2.8	2.8	2.0	1.9	2.2	2.4	2.5	2.0
Peas, green	28.7	37.6	28.7	33.1	29.6	33.1	35.2	31.9	30.2	25.3	36.5	30.1
Pimientos	.9	.8	.6	.7	.3	.4	.5	.7	.4	.4	.5	.5
Pumpkin and squash	5.0	3.9	4.0	4.1	4.6	4.2	5.8	5.5	3.0	3.4	4.0	3.7
Spinach <sup>2</sup>	7.8	6.4	7.3	8.2	8.9	10.8	8.3	6.3	7.1	6.2	8.1	6.3
Tomatoes	31.0	36.0	39.0	43.3	45.4	43.8	53.5	42.8	54.1	49.2	52.9	53.1
Other vegetable packs <sup>9</sup>	2.8	5.5	3.2	2.9	3.2	3.8	3.4	2.4	2.4	2.4	3.3	2.8
<b>Nonseasonal vegetables:</b>												
Sweet potatoes <sup>2</sup>	6.9	11.1	9.8	9.5	11.4	12.8	7.7	8.0	7.2	9.4	9.2	5.9
White potatoes <sup>2</sup>	4.2	5.0	6.6	5.0	5.7	8.1	6.8	6.2	7.1	6.7	6.5	5.9
<b>Chili sauce</b>	<b>1.4</b>	<b>1.5</b>	<b>1.5</b>	<b>1.7</b>	<b>1.8</b>	<b>1.6</b>	<b>1.7</b>	<b>2.0</b>	<b>1.8</b>	<b>2.8</b>	<b>2.0</b>	<b>2.0</b>
<b>Tomato puree</b>	<b>5.4</b>	<b>6.5</b>	<b>5.9</b>	<b>9.7</b>	<b>9.9</b>	<b>10.3</b>	<b>13.8</b>	<b>8.4</b>	<b>9.8</b>	<b>8.4</b>	<b>10.4</b>	<b>7.9</b>
<b>Seafood, salmon</b> <sup>10</sup>	<b>(NA)</b>	<b>3.6</b>	<b>3.8</b>	<b>1.9</b>	<b>1.5</b>	<b>1.8</b>	<b>1.6</b>	<b>2.7</b>	<b>3.1</b>	<b>3.3</b>	<b>3.3</b>	<b>4.4</b>

NA Not available. <sup>1</sup>Basis: 24 No. 2½ cans. <sup>2</sup>Pack beginning in year shown. <sup>3</sup>California only. <sup>4</sup>Florida only. <sup>5</sup>Represents U.S. pack and foreign operations. <sup>6</sup>Beginning 1965, purple plums only. <sup>7</sup>Basis: 24 No. 2 cans. <sup>8</sup>Beginning 1970, excludes combination vegetable-tomato juices. <sup>9</sup>Succotash, carrots and peas, okra, okra and tomatoes, and for 1965, mushrooms. <sup>10</sup>Basis: 48-1 lb. cans. Includes Alaska.

Source: National Food Processors Association, Washington, D.C., *Canned Food Pack Statistics*, annual.

## NO. 1223. PRINCIPAL FROZEN FOODS—PRODUCTION: 1960 TO 1981

PRODUCT	Unit	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total fruits and vegetables	Mil. lb.	2,618	3,672	4,937	5,808	6,077	5,780	6,120	6,933	7,103	7,450	6,923	7,598
Vegetable, excl. potatoes	Mil. lb.	1,407	1,800	1,912	2,467	2,488	2,212	2,156	2,623	2,712	2,785	2,416	2,736
Potato products	Mil. lb.	551	1,219	2,404	2,691	2,985	3,001	3,335	3,623	3,849	4,090	3,853	4,236
Fruits and berries	Mil. lb.	660	653	621	650	604	567	629	687	543	575	653	626
Concentrates, juices and purees	Mil. gal.	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	201	174	184	197	261	215
Seafood	Mil. lb.	284	402	388	410	340	300	552	566	617	605	549	167
Poultry	Mil. lb.	2,000	2,231	2,160	2,209	2,222	2,070	2,359	2,238	2,318	2,606	2,765	3,029

NA Not available. <sup>1</sup>Covers fish filets and sticks and shrimp only.

Source: American Frozen Food Institute, Burlingame, Calif., *Frozen Food Pack Statistics*, annual. (Copyright.)

**NO. 1224. LIVESTOCK—NUMBER ON FARMS AND VALUE: 1950 TO 1982**

[Alaska and Hawaii excluded from census data prior to 1959 and from annual data prior to 1965. Prior to 1960, data for sheep refer to stock sheep. See also *Historical Statistics, Colonial Times to 1970*, series K 564-569]

YEAR	ALL CATTLE			HOGS AND PIGS			SHEEP AND LAMBS		
	Number (mil. head)	Total value (bil. dol.)	Value per head (dol.)	Number (mil. head)	Total value (bil. dol.)	Value per head (dol.)	Number (mil. head)	Total value (mil. dol.)	Value per head (dol.)
<b>CENSUS DATA</b>									
1950 (Apr. 1)	76.9	9.1	119	55.8	1.1	19.70	31.4	555	17.69
1954 (Oct.-Nov.)	95.0	8.2	87	57.1	1.9	33.13	31.6	472	14.93
1959 (Oct. 1)	92.5	12.5	135	67.9	1.4	20.18	33.9	556	16.38
1964 (Nov.-Dec.)	105.6	11.9	113	54.1	1.3	24.48	25.5	409	16.06
1969 (Dec. 31)	106.4	19.0	179	55.5	2.2	38.85	21.6	532	24.63
1974 (Dec. 31)	113.2	18.5	163	45.5	2.1	45.37	15.4	474	30.79
1978 (Dec. 31)	105.7	42.7	404	58.8	4.9	83.40	12.4	892	72.08
<b>ANNUAL DATA (Jan. 1)<sup>2</sup></b>									
1950	78.0	9.6	124	58.9	1.6	27.10	26.2	466	17.80
1955	96.6	8.5	88	50.5	1.5	30.60	27.1	404	14.90
1960	96.2	13.2	137	59.0	1.1	18.50	33.2	546	16.50
1965	109.0	12.4	113	58.0	1.2	24.50	25.1	401	16.00
1970	112.4	20.2	179	56.7	2.2	39.00	20.4	513	25.10
1971	114.6	21.1	184	67.3	1.6	23.50	19.7	465	23.80
1972	117.9	24.5	208	62.4	1.8	28.50	18.7	429	22.90
1973	121.5	30.6	252	59.0	2.5	42.00	17.6	471	26.70
1974	127.8	37.5	293	60.6	3.7	60.40	16.3	535	32.80
1975	132.0	21.0	159	54.7	2.5	44.90	14.5	442	30.50
1976	128.0	24.3	190	49.3	4.0	80.40	13.3	496	37.30
1977	122.8	25.2	206	54.9	2.6	47.00	12.7	540	42.50
1978	116.4	27.0	232	56.5	3.6	63.20	12.4	641	51.60
1979	110.9	44.7	403	60.4	5.0	83.20	12.4	881	72.10
1980	111.2	55.8	502	67.4	3.8	56.00	12.7	992	78.20
1981	114.3	54.3	475	64.5	4.8	74.70	12.9	903	69.80
1982, prel	115.7	48.0	415	58.7	4.1	70.10	13.1	747	56.90

<sup>1</sup> Excludes Fla., Ga., and S.C. <sup>2</sup> Beginning 1970, data for hogs and pigs as of Dec. 1, preceding year.

Source: Census data—U.S. Bureau of the Census, *Census of Agriculture: 1969*, vol. II; *1974 and 1978*, vol. I. Annual data—U.S. Dept. of Agriculture, Statistical Reporting Service, annual livestock summaries. Also in *Agricultural Statistics*, annual.

**NO. 1225. MEATS—SLAUGHTERING, PRODUCTION, AND TRADE: 1960 TO 1981**

[Quantities represent carcass weight equivalent. 1960-1970 exclude Alaska and Hawaii except for exports and imports. Covers inspected, noninspected, retail, and farm slaughter. Excludes edible byproducts. Excludes USDA exports, military civilian feeding, and voluntary relief feeding. See also *Historical Statistics, Colonial Times to 1970*, series K 583-594]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
<b>All meats:</b>											
Animals slaughtered, total	Mil. head	135.0	130.7	137.3	124.8	130.6	133.1	128.2	132.3	139.7	136.8
Under Federal inspection	Percent	78	82	89	91	92	93	93	94	94	94
Production, total <sup>1</sup>	Bil. lb	28.2	31.5	36.2	36.8	39.5	39.7	38.6	37.6	39.0	39.0
Federally inspected	Percent	78	82	89	90	92	93	93	94	94	94
Exports of U.S. production <sup>2</sup>	Mil. lb	223	250	305	449	598	586	646	673	642	715
Imports for consumption	Mil. lb	1,048	1,347	2,429	2,248	2,600	2,424	2,856	2,974	2,664	2,334
<b>Beef:</b>											
Animals slaughtered, total	Mil. head	26.0	33.2	35.4	41.5	43.2	42.4	40.0	34.0	34.1	35.3
Under Federal inspection	Percent	75	80	87	89	90	92	93	94	94	94
Production, total	Bil. lb	14.7	18.7	21.7	24.0	26.0	25.3	24.2	21.4	21.6	22.4
Federally inspected	Percent	78	82	88	90	91	92	93	94	94	94
Exports of U.S. production <sup>2</sup>	Mil. lb	55	91	101	110	158	167	214	215	220	252
Imports for consumption	Mil. lb	760	923	1,792	1,758	2,079	1,939	2,297	2,405	2,064	1,743
<b>Veal:</b>											
Animals slaughtered, total	Mil. head	8.6	7.8	4.2	5.4	5.5	5.7	4.3	2.9	2.7	2.9
Under Federal inspection	Percent	61	65	72	72	80	85	87	89	89	89
Production, total	Mil. lb	1,109	1,020	588	873	853	834	632	434	400	436
Federally inspected	Percent	56	56	57	57	66	68	71	73	74	74
<b>Lamb and mutton:</b>											
Animals slaughtered, total	Mil. head	16.2	13.3	10.8	8.1	6.9	6.6	5.5	5.2	5.7	6.2
Under Federal inspection	Percent	86	88	93	94	94	96	96	96	96	96
Production, total	Mil. lb	768	651	551	410	371	351	309	293	318	338
Federally inspected	Percent	87	88	93	94	94	94	94	94	94	94
<b>Pork:</b>											
Animals slaughtered, total	Mil. head	84.2	76.4	87.0	69.8	74.9	78.4	78.4	90.2	97.2	92.5
Under Federal inspection	Percent	79	83	90	93	94	96	96	96	96	96
Production, total <sup>1</sup>	Bil. lb	11.8	11.1	13.4	11.5	12.4	13.2	13.4	15.5	16.6	15.9
Federally inspected	Percent	79	84	90	93	94	94	95	95	95	95

<sup>1</sup> Excludes lard. <sup>2</sup> Includes shipments to territories.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Livestock and Meat Statistics*, annual.

**NO. 1226. LIVESTOCK ON FARMS, LIVEWEIGHT PRODUCTION, VALUE, AND ANNUAL AVERAGE PRICE  
RECEIVED BY FARMERS: 1960 TO 1981**

[Data for sheep exclude Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 575-582]

PRODUCTION AND PRICE	Unit	1960 <sup>1</sup>	1965	1970	1975	1976	1977	1978	1979	1980	1981
All cattle: On farms.....	Mil.	96.2	109.0	112.4	132.0	128.0	122.8	116.4	110.9	111.2	114.3
Production <sup>2</sup> .....	Bil. lb.	28.8	34.0	39.4	40.9	41.4	40.7	40.0	38.4	40.1	40.9
Beef, price per 100 lb.....	Dol.	20.40	19.90	27.10	32.20	33.70	34.40	48.50	66.10	62.40	58.60
Calves, price per 100 lb.....	Dol.	22.90	22.00	34.50	27.20	34.10	36.90	59.10	88.70	76.80	64.00
Value of production.....	Bil. dol.	5.9	6.8	10.9	12.8	13.8	14.0	19.6	26.0	25.4	23.5
Hogs and pigs: On farms.....	Mil.	59.0	50.8	67.3	49.3	54.9	56.5	60.4	67.4	64.5	58.7
Production <sup>2</sup> .....	Bil. lb.	19.2	18.3	21.8	16.8	18.2	19.0	19.5	22.6	23.4	21.8
Price per 100 lb.....	Dol.	15.30	19.60	22.70	46.10	43.30	39.40	46.60	41.80	38.00	43.90
Value of production.....	Mil. dol.	2,946	3,573	4,955	7,756	7,856	7,485	9,066	9,416	8,847	9,537
Sheep: On farms.....	Mil.	33.2	25.1	20.4	14.5	13.3	12.7	12.4	12.4	12.7	12.9
Production <sup>2</sup> .....	Mil. lb.	1,628	1,217	1,089	785	733	706	687	709	744	771
Sheep, price per 100 lb.....	Dol.	5.60	6.34	7.52	11.30	13.10	13.50	21.80	25.80	21.10	21.20
Lambs, price per 100 lb.....	Dol.	17.90	22.80	26.40	42.10	46.90	51.30	62.80	66.70	63.60	54.90
Value of production.....	Mil. dol.	253	257	260	303	316	320	392	410	401	358

<sup>1</sup> Alaska and Hawaii excluded. <sup>2</sup> Includes adjustment for livestock shipped in and changes in inventory.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Meat Animals—Farm Production, Disposition, and Income, by States*, annual summary. Also in *Agricultural Statistics*, annual.

**NO. 1227. LIVESTOCK ON FARMS—NUMBER, BY STATES: 1979 TO 1982**

[In thousands. As of Jan. 1, except for hogs and pigs, Dec. 1]

STATE	ALL CATTLE			MILK COWS <sup>1</sup>			SHEEP AND LAMBS			HOGS AND PIGS		
	1980	1981	1982	1980	1981	1982	1980	1981	1982	1979	1980	1981
<b>U.S.</b> .....	<b>111,192</b>	<b>114,321</b>	<b>115,691</b>	<b>10,779</b>	<b>10,860</b>	<b>10,998</b>	<b>12,687</b>	<b>12,936</b>	<b>13,116</b>	<b>67,353</b>	<b>64,512</b>	<b>58,691</b>
Alabama.....	1,730	1,925	1,950	72	64	63	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	880	800	540
Arizona.....	1,050	1,075	1,000	72	75	79	385	372	377	149	180	170
Arkansas.....	2,050	2,200	2,100	81	80	84	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	600	720	600
California.....	4,550	4,760	5,000	878	909	940	1,175	1,205	1,210	180	180	160
Colorado.....	2,975	3,125	3,025	72	71	75	870	810	710	430	310	330
Florida.....	2,300	2,480	2,350	184	187	190	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	425	370	257
Georgia.....	1,600	1,870	1,950	130	130	131	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	2,360	2,300	1,520
Idaho.....	1,860	1,990	1,850	148	159	168	468	512	496	135	175	150
Illinois.....	2,700	2,850	2,800	235	230	234	173	184	195	6,950	6,600	6,450
Indiana.....	1,850	1,900	1,750	200	207	207	120	135	139	4,850	4,600	4,100
Iowa.....	7,150	7,350	6,850	372	378	389	409	437	485	16,200	16,100	16,300
Kansas.....	6,200	6,450	6,000	120	123	124	235	220	200	2,090	1,900	1,770
Kentucky.....	2,700	2,600	2,600	244	243	240	21	26	25	1,470	1,220	1,040
Louisiana.....	1,300	1,360	1,450	116	112	102	12	11	10	140	160	130
Michigan.....	1,310	1,340	1,450	400	390	396	132	124	130	1,040	850	690
Minnesota.....	3,750	3,800	3,880	860	880	905	264	295	335	4,900	5,100	4,300
Mississippi.....	1,810	1,800	1,950	99	97	97	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	405	410	370
Missouri.....	5,400	5,550	5,400	262	250	245	123	138	133	4,650	3,980	3,400
Montana.....	2,645	2,675	2,900	28	29	29	574	595	616	209	250	200
Nebraska.....	6,400	6,850	7,250	120	121	122	210	255	225	4,150	3,900	4,100
Nevada.....	595	640	700	15	15	16	122	134	129	11	12	13
New Mexico.....	1,600	1,400	1,500	39	49	55	660	650	610	87	74	62
New York.....	1,780	1,831	1,959	912	915	921	65	69	70	139	175	165
North Carolina.....	1,080	1,160	1,160	133	135	133	8	8	8	2,650	2,460	1,980
North Dakota.....	2,000	1,850	2,000	93	93	92	236	272	280	370	265	280
Ohio.....	1,825	1,815	1,900	375	375	392	320	310	313	2,120	2,150	2,050
Oklahoma.....	5,500	5,400	5,800	110	112	110	83	95	105	370	350	245
Oregon.....	1,575	1,750	1,900	94	96	97	485	520	560	120	120	78
Pennsylvania.....	1,950	2,000	2,100	712	718	730	105	105	125	870	980	750
South Carolina.....	625	625	700	50	48	48	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	650	700	490
South Dakota.....	4,010	4,100	3,900	155	155	155	783	780	780	2,000	1,860	1,710
Tennessee.....	2,300	2,350	2,500	214	215	215	12	11	10	1,400	1,140	900
Texas.....	13,200	13,700	13,700	315	320	325	2,400	2,360	2,500	910	930	700
Utah.....	840	875	920	75	80	86	625	650	636	55	58	40
Virginia.....	1,750	1,750	1,850	170	172	170	160	160	170	850	750	640
Washington.....	1,579	1,450	1,580	199	200	207	83	80	83	100	100	60
Wisconsin.....	4,280	4,550	4,450	1,813	1,820	1,830	113	127	125	1,830	1,680	1,380
Wyoming.....	1,340	1,350	1,390	12	12	12	1,050	1,110	1,130	32	30	33
Other.....	2,033	2,075	2,177	600	595	594	187	181	190	576	593	538

<sup>1</sup> Represents cows and heifers that have calved, kept for milk. <sup>2</sup> Estimates discontinued.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, annual livestock summaries.

NO. 1228. DAIRYING—COWS AND DAIRY PRODUCTS: 1960 TO 1981

[In millions of pounds, except as indicated. See also *Historical Statistics, Colonial Times to 1970*, series K 595-608]

ITEM	1960	1965	1970	1975	1977	1978	1979	1980	1981
Cows and heifers, that have calved kept for milk,									
Jan. 1 <sup>1</sup> (mil. head).....	19.5	17.0	13.3	11.1	11.0	10.9	10.8	10.8	10.9
Milk produced on farms (bil. lb.).....	123	124	117	115	123	122	123	129	133
Whole milk sold from farms <sup>2</sup> (bil. lb.).....	114	118	113	112	120	119	121	126	130
Sales to plants and dealers (bil. lb.).....	104	113	110	110	118	117	119	125	128
Cash receipts from marketing of milk and cream <sup>3</sup> (bil. dol.).....	4.8	5.0	6.5	9.9	11.7	12.7	14.7	16.6	18.1
Sales to plants and dealers (bil. dol.).....	4.6	4.8	6.3	9.7	11.5	12.4	14.4	16.3	17.7
Manufactured dairy products:									
Butter (incl. whey butter).....	1,373	1,325	1,137	984	1,086	994	985	1,145	1,228
Cheese, total <sup>4</sup> .....	1,478	1,755	2,201	2,811	3,359	3,520	3,717	3,984	4,229
American (excl. full-skim American).....	1,003	1,167	1,428	1,660	2,047	2,079	2,190	2,376	2,608
Swiss (including block) <sup>5</sup> .....	121	123	144	174	189	209	213	219	214
Muenster, Brick, and Limburger.....	54	56	59	74	73	78	80	87	82
Cream and Neufchatel.....	106	123	126	160	176	198	212	229	241
All Italian varieties.....	158	244	394	672	793	876	929	983	994
Cottage cheese: Creamed <sup>6</sup> .....	799	865	1,038	991	1,017	1,024	998	825	773
Curd, pot, and bakers <sup>7</sup> .....	594	630	726	701	684	688	669	667	648
Condensed bulk milk.....	1,205	1,346	1,237	1,041	1,091	987	975	952	972
Evaporated and condensed canned milk.....	2,256	1,799	1,293	938	827	798	810	740	758
Dry whole milk.....	98	89	69	63	69	75	85	83	93
Nonfat dry milk solids <sup>8</sup> .....	1,844	2,013	1,456	1,009	1,115	927	915	1,161	1,314
Dry whey <sup>9</sup> .....	277	404	621	596	628	711	733	690	784
Dry buttermilk.....	96	87	60	43	53	48	45	44	44
Ice cream of all kinds (mil. gal.).....	700	757	762	837	810	815	811	830	832
Milk sherbat (mil. gal.).....	41	45	49	49	50	48	45	45	46
Ice milk (mil. gal.).....	145	231	287	299	308	310	297	293	292
Wholesale prices (cents per lb.):									
Cheese, American:									
40-lb. blocks, Wis. assembly points.....	(NA)	38.4	55.0	86.6	96.8	107.1	123.8	133.0	139.4
Single daisies, Chicago.....	41.4	45.0	64.9	104.4	118.7	130.1	141.4	156.2	167.2
Butter, N.Y. (Grade A).....	59.9	61.0	70.4	81.8	101.5	114.1	127.2	144.8	(NA)
Prices received by farmers:									
Milkfat in cream (cents per lb.).....	60.5	61.1	70.0	70.3	92.0	102.0	(NA)	(NA)	(NA)
Whole milk: Wholesale, per 100 lb. (dol.).....	4.21	4.23	5.71	8.75	9.20	10.60	12.00	13.00	13.80
Sold directly to consumers (cents per qt.)....	21.7	22.3	27.0	35.4	36.7	38.8	42.3	45.3	48.4

NA Not available. <sup>1</sup>Prior to 1975, cows and heifers 2 years old and over. <sup>2</sup>Comprises sales to plants and dealers, and retail sales by farmers direct to consumers. <sup>3</sup>Includes varieties not shown separately. Beginning 1975, includes full-skim. <sup>4</sup>Includes partially creamed (low fat). <sup>5</sup>Includes dry skim milk for animal feed. <sup>6</sup>Includes animal but excludes modified whey production.

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Production of Manufactured Dairy Products*, annual; *Milk Production, Disposition, and Income*, annual.

NO. 1229. WHOLE MILK SOLD—QUANTITY AND CASH RECEIPTS, BY STATES: 1979 TO 1981

[Covers sales of milk to plants and dealers]

STATE	QUANTITY (mil. lb.)			CASH RECEIPTS (mil. dol.)			STATE	QUANTITY (mil. lb.)			CASH RECEIPTS (mil. dol.)		
	1979	1980	1981	1979	1980	1981		1979	1980	1981	1979	1980	1981
U.S.....	119,440	124,717	128,809	14,354	16,274	17,739	Mo.....	2,665	2,780	2,840	312	350	381
Ala.....	570	575	550	76	83	81	Neb.....	1,215	1,281	1,370	145	163	184
Ariz.....	885	1,020	1,120	111	137	157	N.H.....	325	330	328	42	45	48
Ark.....	685	712	758	86	96	110	N.J.....	463	466	467	58	62	66
Calif.....	12,145	13,170	13,810	1,385	1,696	1,855	N.Y.....	10,305	10,670	10,770	1,226	1,387	1,486
Colo.....	770	775	845	99	109	126	N.C.....	1,480	1,540	1,560	188	216	234
Conn.....	580	585	595	74	80	86	N. Dak.....	830	904	929	91	107	117
Fla.....	1,970	2,009	2,069	286	317	348	Ohio.....	4,170	4,220	4,310	505	549	595
Ga.....	1,315	1,346	1,376	170	188	202	Okla.....	1,015	1,065	1,105	128	145	159
Idaho.....	1,645	1,875	2,090	188	229	268	Oreg.....	1,025	1,070	1,125	124	140	156
Ill.....	2,355	2,507	2,569	280	323	355	Pa.....	7,610	7,930	8,365	966	1,078	1,187
Ind.....	2,135	2,178	2,249	263	283	310	S.C.....	495	515	525	65	75	82
Iowa.....	3,800	4,000	4,205	441	504	559	S. Dak.....	1,505	1,635	1,730	170	203	223
Kans.....	1,295	1,300	1,365	155	170	191	Tenn.....	1,990	2,150	2,205	243	286	306
Ky.....	2,090	2,130	2,191	247	273	298	Tex.....	3,310	3,540	3,575	434	492	529
La.....	985	975	955	130	137	142	Utah.....	895	985	1,060	105	123	139
Maine.....	620	645	680	81	90	101	Vt.....	2,130	2,240	2,255	266	300	322
Md.....	1,485	1,495	1,543	187	203	221	Va.....	1,900	1,952	1,986	234	260	280
Mass.....	525	530	540	67	73	79	Wash.....	2,660	2,785	2,870	317	354	387
Mich.....	4,715	4,870	4,995	566	643	689	W. Va.....	319	322	330	39	42	46
Minn.....	9,065	9,465	9,990	1,026	1,174	1,307	Wis.....	21,320	21,845	22,165	2,505	2,768	2,966
Miss.....	790	795	825	100	110	119	Other.....	1,388	1,535	1,619	178	214	240

Source: U.S. Dept. of Agriculture, Statistical Reporting Service, *Milk: Production, Disposition, and Income*, 1979-81.

## NO. 1230. POULTRY—NUMBER ON FARMS, VALUE, EGGS PRODUCED, AND PRICES: 1960 TO 1981

[Beginning 1970, data for chickens, eggs, and broilers are for Dec. 1 of previous year to Nov. 30 of year stated, except as noted. 1960 excludes Alaska and Hawaii. See also *Historical Statistics, Colonial Times to 1970*, series K 609-623]

ITEM	Unit	1960	1965	1970	1975	1976	1977	1978	1979	1980	1981
Chickens: <sup>1</sup> Number <sup>2</sup> .....	Million.....	369	394	433	380	378	387	397	401	392	383
Value, total <sup>2</sup> .....	Mill. dol.....	391	482	525	660	644	652	696	726	739	725
Value per head <sup>2</sup> .....	Dollars.....	1.06	1.17	1.21	1.74	1.70	1.69	1.75	1.81	1.88	1.89
Number produced.....	Million.....	260	240	264	233	229	245	242	251	241	240
Production value.....	Mill. dol.....	199	101	107	105	145	145	142	171	129	134
Price per lb.....	Cents.....	12.2	8.9	9.1	9.9	13.0	12.3	12.4	13.9	11.0	11.1
Eggs: Number produced.....	Mill. doz.....	5,134	5,463	5,684	5,386	5,376	5,384	5,596	5,767	5,807	5,800
Price per dozen.....	Cents.....	36.1	33.7	39.1	52.4	58.3	55.6	52.2	58.3	56.3	63.1
Gross income.....	Mill. dol.....	1,848	1,841	2,221	2,819	3,133	2,995	2,921	3,380	3,268	3,663
Broilers: <sup>3</sup> Number produced.....	Million.....	1,795	2,334	2,987	2,950	3,273	3,394	3,614	3,951	3,964	4,149
Price per lb.....	Cents.....	16.9	15.0	13.6	26.3	23.6	23.6	26.3	26.0	27.7	28.5
Gross income.....	Mill. dol.....	1,014	1,217	1,475	2,915	2,945	3,059	3,676	4,032	4,304	4,698
Turkeys: <sup>4</sup> Number <sup>2</sup> .....	1,000.....	5,633	6,100	3,173	3,014	3,069	3,038	3,370	3,705	3,749	3,415
Value, total <sup>2</sup> .....	Mill. dol.....	28	27	18	33	34	35	42	50	53	52
Value per head <sup>2</sup> .....	Dollars.....	4.89	4.40	5.82	10.81	11.13	11.39	12.53	13.58	14.11	15.32
Turkeys, number raised.....	Million.....	84	106	116	124	140	136	139	156	165	171
Gross income.....	Mill. dol.....	377	424	498	793	825	910	1,157	1,214	1,268	1,246
Price per lb.....	Cents.....	25.4	22.2	22.6	34.8	31.7	35.5	43.6	41.1	41.3	39.2

<sup>1</sup>Excludes commercial broilers. <sup>2</sup>1960 and 1965, as of Jan. 1; beginning 1970, as of Dec. 1. <sup>3</sup>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 production of chickens. <sup>4</sup>Beginning 1970, data are for breeder hens only and cover the 26 major producing States.

Source: U.S. Dept. of Agriculture, *Agricultural Statistics*, annual.

## NO. 1231. POULTRY—PRODUCTION, BY STATES: 1979 TO 1981

[In millions. See *Historical Statistics, Colonial Times to 1970*, series K 611, 614, 617, and 621 for U.S. totals]

STATE	CHICKENS PRODUCED			BROILERS PRODUCED			CHICKS HATCHED COMMERCIALY <sup>1</sup>			TURKEYS RAISED		
	1979	1980	1981	1979	1980	1981	1979	1980	1981	1979	1980	1981
U.S.....	250.7	241.2	240.5	3,951.3	3,964.5	4,149.2	4,716.7	4,767.3	4,870.8	156.5	164.7	170.7
Ala.....	15.4	13.3	13.2	493.1	494.7	519.3	568.9	600.8	620.4	-	-	-
Ark.....	21.3	19.6	19.1	678.2	634.9	675.1	769.8	741.8	775.5	13.3	14.5	15.1
Calif.....	20.7	21.2	19.5	137.6	152.4	158.8	203.5	209.0	214.7	18.9	20.8	21.8
Conn.....	3.4	3.3	2.9	-	-	-	(d)	-	(d)	-	-	-
Del.....	5	.8	.8	175.9	166.7	169.6	141.9	124.4	126.7	.3	.3	.2
Fla.....	11.1	8.8	9.8	78.7	87.1	92.4	142.7	151.0	155.4	-	-	-
Ga.....	24.5	20.3	20.0	561.3	573.9	614.7	650.4	670.1	683.7	2.5	2.4	2.7
Ill.....	4.0	4.0	3.8	-	-	-	13.0	11.9	10.4	.5	.5	.4
Ind.....	12.8	14.7	14.9	15.8	(d)	(d)	60.9	60.6	40.0	5.6	6.2	6.6
Iowa.....	6.6	8.3	7.4	3.0	3.0	3.1	20.0	18.0	24.5	6.2	6.6	7.1
Ky.....	2.5	1.9	1.9	3.3	3.2	3.1	(d)	(d)	(d)	-	-	-
La.....	2.4	2.3	2.2	91.3	99.0	104.3	(d)	(d)	(d)	-	-	-
Maine.....	6.1	4.7	5.2	87.8	(d)	(d)	98.3	83.6	(d)	-	-	-
Md.....	1.7	1.7	2.4	244.8	236.9	253.3	295.5	303.1	321.3	.1	.1	.1
Mass.....	1.1	1.2	1.5	-	-	-	(d)	(d)	(d)	.1	.1	.1
Mich.....	4.4	4.6	5.0	2.6	1.6	1.1	7.4	9.5	9.3	1.2	1.5	1.6
Minn.....	8.5	7.9	7.3	17.0	19.4	21.5	47.3	44.8	39.3	24.7	25.5	25.7
Miss.....	7.0	6.1	5.8	276.9	276.0	290.1	287.2	292.0	291.1	-	-	-
Mo.....	5.4	5.4	5.6	25.3	23.6	26.1	18.4	17.8	16.9	11.0	12.4	12.0
N.Y.....	7.1	7.3	7.1	.5	.6	.5	12.2	10.5	7.5	.2	.3	.3
N.C.....	11.9	12.4	11.8	376.6	399.6	423.2	423.9	452.2	450.0	23.1	24.3	26.8
Ohio.....	7.1	7.9	8.5	19.1	14.8	15.8	(d)	(d)	(d)	2.4	2.3	2.5
Okl.....	2.3	1.5	2.4	40.3	45.0	50.9	1.0	1.2	1.3	1.9	2.2	1.6
Oreg.....	2.1	2.3	1.8	17.3	17.1	17.6	35.9	37.3	8.7	1.3	1.2	1.3
Pa.....	14.6	14.9	16.6	109.2	111.6	115.1	162.6	160.1	162.8	4.7	5.5	5.7
S.C.....	7.0	5.3	4.9	43.7	43.1	43.4	51.0	49.2	51.1	3.0	3.2	2.9
Tenn.....	3.6	3.9	2.0	57.7	66.9	64.5	27.8	28.7	28.2	-	-	-
Tex.....	11.2	9.3	10.0	229.4	221.1	231.7	269.4	268.1	292.9	8.0	7.8	7.3
Va.....	3.6	3.4	3.2	111.6	126.4	133.8	149.3	160.4	171.1	9.2	10.1	10.0
Wash.....	4.8	4.8	4.6	19.8	20.6	21.9	21.7	22.4	(d)	-	-	-
W. Va.....	.8	.9	.6	18.7	21.8	25.0	(d)	(d)	(d)	2.6	2.3	2.1
Wis.....	3.5	2.9	3.3	11.8	11.4	12.5	(d)	(d)	(d)	5.6	5.0	6.0
Other.....	11.5	14.3	15.2	4.0	92.3	60.8	(d)	(d)	368.0	10.1	9.6	10.6

- Represents zero. D Withheld to avoid disclosure. <sup>1</sup>By commercial hatcheries.

Source: U.S. Dept. of Agriculture, *Agricultural Statistics*, annual.