

101st Edition



U.S. Department of Commerce

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Preface

The Statistical Abstract of the United States, published since 1878, is the standard summary of statistics on the social, political, and economic organization of the United States. It is designed to serve as a convenient volume for statistical reference and as a guide to other statistical publications and sources. The latter function is served by the introductory text to each section, the source note appearing below each table, and Appendix IV, which comprises the Guide to Sources of Statistics and the Guide to State Statistical Abstracts.

This volume includes a selection of data from many statistical publications, both governmental and private. Publications cited as sources usually contain additional statistical detail and more comprehensive discussions of definitions and concepts than can be presented here. Data not available in publications issued by the contributing agency but obtained from unpublished records are identified in the source notes as "unpublished data." More information on the subjects covered in tables so noted may generally by obtained from the source.

Except as indicated, figures are for the United States as presently constituted. Although emphasis in the *Statistical Abstract* is given primarily to national data, many tables present data for regions and individual States and a smaller number for metropolitan areas and cities. Appendix II, Metropolitan Area Concepts and Components, presents explanatory text and a complete current listing of official standard metropolitan statistical areas (SMSA's), standard consolidated statistical areas (SCSA's), and New England county metropolitan areas (NECMA's). Statistics for the Commonwealth of Puerto Rico and for outlying areas of the United States are included in many State tables and are supplemented by information in section 32. Additional information for cities, counties, metropolitan areas, congressional districts, and other small units, as well as more historical data, are available in various supplements to the *Abstract* (see inside back cover).

USA Statistics in Brief, 1980, the pocket-size loose insert in front of the book is also available separately as a reprint. This insert contains population data for the States from the 1980 Census, which became available too late for inclusion in the tables in the book. Price information can be obtained from, and orders sent to, the Superintendent of Documents, Washington, D.C. 20402, or any U.S. Department of Commerce district office located in certain large cities. A 25-percent discount will be allowed on orders of 100 copies or more sent to the same address.

Changes in the 1980 edition.—Some users may notice the Abstract has a different look this year. Reflecting the increasingly advanced technology within the printing industry, this edition has been composed entirely by the electronic photocomposition process, rather than by the more traditional monotype method. The Statistical Abstract is one of the first major Federal publications to be produced by the Government Printing Office's tabular program for electronic photocomposition. Not surprisingly, in the short run, technical difficulties in the adaptation of this new method resulted in some production delay as problem areas were identified and modifications made. For the long term, however, the conversion to this advanced method offers the potential of faster, more streamlined production. It is our hope that future editions will reflect such advancement.

Statistics in this edition are for the most recent year or period available by early November 1980. The results of the 1980 elections are featured in section 16. Each year more than 1,600 tables and charts are reviewed and evaluated; new tables and charts of current interest are added, continuing series are updated, and less timely data are condensed or eliminated. Text notes and appendixes are revised as appropriate.

In all, there are 98 new tables, distributed among 28 of the 34 sections. Section 34 is presented as a supplement to the current section on Energy and contains data specifically

Preface

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related to residential energy consumption. In addition, graphic charts have been revised or updated and many sections have undergone tabular rearrangement and format changes designed to improve the organization of subject matter. Of the tables included in the 1979 edition, 82 were omitted from this issue. The omissions represent primarily tables for which comparable details appear in other tables or for which no recent data are available, or tables for which the subject matter shown was considered relatively less important in the light of the space required for presentation.

Among the new tables relating to people and their concerns are:

U.S. population living abroad, p. 15 Unmarried couples, p. 44

Persons with elevated blood pressure, by race, sex, and age, p. 128

Persons using special health aids, p. 128
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Victimization rates of crimes against persons and households, p. 186

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Government and economic activities are reflected in new tables on:

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Traffic and financial characteristics of petroleum pipeline companies, p. 665

Airline cost indexes, p. 672

Historical statistics.—Specific headnote references in this *Abstract* link many tables to earlier data shown in *Historical Statistics of the United States, Colonial Times to 1970.* (See Appendix I, pp. 940–942.)

Statistical reliability and responsibility.—The contents of this volume were taken from many sources. All data from either censuses and surveys or from administrative records are subject to error arising from a number of factors: Sampling variability (for statistics based on samples), reporting errors in the data for individual units, incomplete coverage, nonresponse, imputations, and processing error. (See also Appendix III, pp. 953–971.) The Bureau of the Census cannot accept the responsibility for the accuracy or limitations of the data presented here, other than for those which it collects. The responsibility for selection of the material and for proper presentation, however, rests with the Bureau.

For additional information on data presented.—Please consult the source publications available in local libraries or write to the agencies indicated in the source notes. Write to the Bureau of the Census only if it is cited as the source.

Suggestions and comments.—Users of the *Statistical Abstract* and its supplements (see inside back cover) are urged to make their data needs known for consideration in planning future editions. Suggestions and comments for improving coverage and presentation of data should be sent to the Director, U.S. Bureau of the Census, Washington, D.C. 20233.

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Customary and Metric Weights and Measures

[For information regarding conversion, call or write the Metric Information Office, National Bureau of Standards, Washington, D.C. 20234 (301–921–2401)]

APPROXIMATE CONVERSIONS

	AFFIIOAMATE	CONTENSIONS	
Customary	Metric	Metric	Customary
Inches (in)	× 25.4 = millimeters	Millimeters (mm) ×	04 = inch
inches (in) Feet (ft)			3.3 = feet
Yards (yd)			1.1 = yards .6 = mile
Miles (mi)			
Square inches (in 2)		Sq centimeters (cm 2) ×	.2 = sq inch
Square feet (ft 2)	X .1 = sq meter	Square meters (m ²) ×	10.8 = sq feet
Square yards (yd 2)	× .8 = sq meter	Square meters (m ²) ×	1.2 = sq yards
Acres	X .4 = hectare X .03 = cu meter	Hectares (ha) ×	2.5 = acres 35.3 = cu feet
Cubic feet (ft 3)		Cu meters (m 3) ×	
Cord (cd)	 3.6 = cu meter 9 = liter 	Liters (I) X	1.1 = quarts (lq)
Quarts (Iq) (qt)		Cu meters (m 3) X	264.2 = gallons
Gallons (gal)	× .004 = cu meters	Grams (g) ×	.04 = ounce (avdp)
Ounces (avdp) (oz)	× 28.4 ≈ grams	Kilograms (kg) X	2.2 = pounds (avdp)
Pounds (avdp) (lb)	× .5 = kilogram	Kilowatts (kW) ×	1.3 = horsepower
Horsepower (hp)	\times .7 = kilowatt	Degrees Celsius X	9/5+32 = degrees Fahrenhe
Degrees Fahrenheit (-32)	× 5/9 = degrees Celsius		
	UNITS OF LEN	GTH AND AREA	
Customary	Metric	Metric	Customary
		.,	
Inch (in)	= 25.4 millimeters	Millimeter (mm) =	.001 meter = .039 inch
Foot (ft)	= 12 in = .305 meter	Centimeter (cm) =	.01 meter = .394 inch
Yard (yd)	= 36 in or 3 ft = .914 meter	Decimeter (dm) =	.1 meter = 3,937 inches
Mile (mi)	= 5,280 ft = 1,609 kilometers	Meter (m)	= 3,281 feet
In 2 (sq in)	= 6.452 cm ²		1,000 meters = .621 mile
Ft 2 (sq ft)	= 144 sq in = .093 m ²	Sq millimeter (mm 2) =	
Yd 2 (sq yd)	= 1,296 sq in = .836 m ²	Sq centimeter (cm 2) =	.000001 m ² = .002 sq in .0001 m ² = .155 sq in
ra (og ya)	or 9 sq ft		.0001 III = ,135 sq III
Acre		Sq decimeter (dm 2) =	.01 m ² = 15.5 sq in
	= 43,560 sq ft = .405 ha	Sq meter (m 2)	= 10.764 sq ft
Mile 2 (sq ml)	= 640 acres = 2.59 km ²	Hectare (ha) =	10,000 m ² = 2.471 acres
		od viigilietei (viii 1) =	1,000,000 m ² = .386 sq mi
	UNITS OF WEI	GHT (OR MASS)	
Customary	Metric	Metric	Customary
	Aveleduncia 1		
Grain	Avoirdupois ¹ = .065 gram	Gram (g)	005 am aud-
Ounce (oz avdp)		Grain (g)	= .035 oz avdp
Curice (oz avap)	= 437.5 grains = 28.350 grams or 16 drams	B-b (1-)	or .032 oz troy
Dougld (Ib ands)		Dekagram (dag) =	$qbvs \ xo \ 828, = 0 \ 01$
Pound (lb avdp)	= 7,000 grains = .454 kilogram		or .322 oz troy
Hundradwalakt /at	or 16 ounces	Hectogram (hg) =	10 g = 3.527 oz avdp
Hundredweight (cwi			or 3.215 oz troy
Ton, short (tn)	= 2,000 pounds = .907 metric ton		
Ton, long=	2,240 pounds = 1,016 metric tons	Kilogram (kg) =	1,000 g = 2,205 lb avdp
	Troy ²		or 2.679 lb troy
Ounce (oz troy) 3	= 480 grains = 31.104 grams	Metric ton =	1,000 kg = 1.102 short tons
Pound (lb troy)	 5,760 grains = .373 kilogram or 12 ounces 		or .984 long ton
15			
¹ For weighing ordin	rary commodities, ² For weighing pr	ecious metals, jewels, etc.	³ Also known as fine ounces
	UNITS OF	CAPACITY	and the second
Customary	Metric	Customary	Metric
	Liquid		Dry
Fluid ounce (fl oz)	= 29.573 mi	Pint (pt)	
Pint (pt)	= 25.373 iiii = 16 fl oz = ,473 liter		= .551 dm ³
Quart (qt)	= 32 fl oz or 2 pt = .946 liter	Quart (qt) =	2 pints = 1.101 dm ³
Gallon (gal)		Peck (pk) =	8 quarts = 8.810 dm ³
Canon (gai)	8 pt or 4 qt = 3.785 liters	Bushel (bu) =	32 quarts = 35.238 dm ³
	Metric	Customary	

Milliter (ml)

Liter (I)

= .001 liter

Hectoliter (ht) = 100 liters

= .034 fl oz (liquid) = .002 pt (dry) = 1.057 qt (liquid) = .908 qt (dry) = 26.418 gal (liquid) = 2.838 bu (dry) The following symbols, used in the tables throughout this book, are explained in condensed form in footnotes to the tables where they appear:

- Represents zero or rounds to less than half the unit of measurement shown.
- B Base figure too small to meet statistical standards for reliability of derived figure.
- D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual.
- NA Data not enumerated, tabulated, or otherwise available separately.
- NS Percent change irrelevant or insignificant.
 - S Figure does not meet publication standards for reasons other than that covered by symbol B, above.
 - X Figure not applicable because column heading and stub line make an entry impossible, absurd, or meaningless.
 - Z Entry would amount to less than half the unit of measure shown.

In many tables, details will not add to the totals shown because of rounding.

Example of table structure:

	or Item	Total	Total 1	<u> </u>						FEMALE			
Household heads 1 77,300 57,342 4,122 24,541 19,487 6,837 19,987 16,13 5,783 5,382			·otar				and	Total ¹				65 yr. and over	Colum heads
Shib Married, spouse present 47,682 47,682 2,888 20,828 17,152 7,037 (X)	Household heads 1	77,330	57,342	4,122	24,541	19,487	8,837	19,987	1,613	5,783	5,382	13,627 6,958	
Percent distribution 100.0	Married, spouse present	47,682	47,662	2,888	20,628	17,152	7,037	(X)	(X)	(X)	(X)	592 (X) 6,669	Field
[Single	Household heads 1	45.8		42.4				22.6				100.0 51.1 4.3	
Single 53 56 13.1 7.3 3.2 3.4 5.0 11.7 6.0 2.7 Marriod, spouse present 5 28.1 58.9 27.7 72.0 82.5 73.7 (x) (x) (x) (x) (x) Not household head 54.4 29.2 57.6 14.4 62 7.4 77.4 84.1 80.7 76.3	Married, spouse present	28.1	58.9	27.7	72.0	82.5	73.7	. (x)	(x)	(x)	(x)	(x) 48.9	

Headnotes immediately below table titles provide information important for correct interpretation or evaluation of the table as a whole or for a major segment of it.

Footnotes below the bottom rule of tables give information relating to specific items or figures within the table.

Unit indicators ("In thousands," "In millions of dollars," etc.) are usually given in boldface type as the first element of the headnote. In tables where several units are used, the unit indicators are generally given in the stub or unit column or in the column headings.

Parallel vertical rules are used to the right of a total column to indicate-

- (1) that the components which follow add to the total (e.g., tables 1, 6, 33, etc.);
- (2) in the case of derived figures, that the underlying data are additive to their total (e.g., table 32 for ratios, table 52 for percentages, table 91 for medians, and table 92 for rates).

Heavy vertical rules are used-

- (1) in tables where the stub is continued into one or more additional columns across the table to separate each segment of stub and its accompanying data columns from the continued segments (e.g., tables 2, 3, 30, etc.);
- (2) to set off independent sections of a table (e.g., tables 1, 4, 7, etc.).

Averages. An average is a single number or value that is often used to represent the "typical value" of a group of numbers. It is regarded as a measure of "location" or "central tendency" of a group of numbers.

The arithmetic mean is the type of average used most frequently. It is derived by summing the individual item values of a particular group and dividing the total by the number of items. The arithmetic mean is often referred to as simply the "mean" or "average."

The *median* of a group of numbers is the middle number or value when each item in the group is arranged according to size (lowest to highest or vice versa); it generally has the same number of items above it as below it. If there is an even number of items in the group, the median is taken to be the average of the two middle items.

Per capita (or per person) quantities. A per capita figure represents an average computed for every person in a specified group (or population). It is derived by taking the total for an item (such as income, taxes, or retail sales) and dividing it by the number of persons in the specified population.

Index numbers. An index number is a measure of difference or change, usually expressed as a percent, relating one quantity (the variable) of a specified kind to another quantity of the same kind. Index numbers are widely used to express changes in prices over periods of time but may also be used to express differences between related subjects for a single point in time.

To compute a price index, a base year or period is selected. The base year price (of the commodity or service) is then designated as the base or reference price to which the prices for other years or periods are related. Many price indexes use the year 1967 as the base year; in tables, this is shown as "1967 = 100." A method of expressing the price relationship is:

Price of a set of one or more items for related year

Price of the same set of items for base year

The result multiplied by 100 provides the index number. When 100 is substracted from the index number, the result equals the percent change in price from the base year.

Average annual percent change. Unless otherwise stated in the *Abstract* (as in Section 1, Population), average annual percent change is computed by use of a *compound interest formula*. This formula assumes that the rate of change is constant throughout a specified compounding period (one year for average annual rates of change). The formula is similar to that used to compute the balance of a savings account which receives compound interest. According to this formula, at the end of a compounding period the amount of accrued change (e.g., school enrollment or bank interest) is added to the amount which existed at the beginning of the period. As a result, over time (e.g., with each year or quarter), the same rate of change is applied to a larger and larger figure.

The exponential formula, which is based on continuous compounding, is often used to measure population change. It is preferred by population experts because they view population and population-related subjects as changing without interruption, ever ongoing. Both exponential and compound interest formulas assume a constant rate of change. The former, however, applies the amount of change continuously to the base rather than at the end of each compounding period.

When the average annual rates are small (e.g., less than 5 percent), both formulas give virtually the same results. For an explanation of these two formulas as they relate to population, see U.S. Bureau of the Census, *The Methods and Materials of Demography*, vol. 2, 3d printing (rev.), 1975, pp. 372–381.