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POPULATION COUNTS AND ESTIMATES: PLANS AND PROSPECTS

Throughout the country newly-opened offices are bustling with activity as preparations take place for the largest head count in history. Next month forms will go into the mail, and the 1970 census will be under way. Despite plans for much greater use of the mail-out, mail-in system, press reports indicate that 12,000 census leaders, 160,000 census takers, 393 district managers, and 100 office workers will be needed to do the job nationally.

Elaborate plans have been made to make this also the most accurate census in history. The Census Bureau recognizes that there has been substantial under-enumeration in previous counts, and every effort is being made to overcome this problem. There are nearly 4,000 pages of instructional and reference material in the form of manuals and handbooks which will be used by those involved in conducting the census. There are also 60 training guides that contain another 10,000 pages, plus hundreds of practice exercises, sample questionnaires, and review tests.

April 1 has been designated as the actual census date. An attempt will be made to count each person as of his place of permanent residence on that date. Students away from home will be counted at their place of residence while attending school. Transients without a place of permanent residence will be counted where they are found.

If everything goes according to schedule, this will not only be the largest and most accurate census in history, but the results will be available more promptly than ever before. Most of the preliminary figures for Nebraska should be ready for use within six weeks after the census date.

Such greater promptness will be possible because this time it will not be necessary to wait for printed booklets. The data will be available first in computer tape form, and much of the information on the tape will never appear in printed form. Plans are under way on both the Lincoln and Omaha campuses of the University for acquisition and immediate utilization of these tapes. Numerous meetings have already taken place to plan methods of handling the new census data. One of these was a Regional Workshop held at the University of Kansas last March, at which Nebraska was represented by William Ho of the State Department of Economic Development, Robert Robinson, Director of the Computer Center at the University campus in Omaha, and Alfredo Roldan, Assistant Director for the Bureau of Business Research, who is the author of the article on the inside pages of this issue describing the detailed aspects of the 1970 Census.

As the American population becomes ever more mobile, as the rate of advances in technology accelerates, and as the need for accurate, up-to-date information for use in planning by private business and government agencies becomes more acute, the rapid

obsolescence of census data becomes more obvious. With the lengthening of the years since the 1960 census our Bureau, for example, has found itself less and less capable of responding with meaningful figures to the daily requests for information that come from business, government, and the general public. Thus the 1970 data are eagerly awaited, and serious consideration is being given to the necessity of taking a national census every five, instead of every ten years.

The problems stemming from the lack of recent official data, including in our own state the problem of legislative reapportionment, have been met to some extent in recent years by annual population estimates of state totals by the Census Bureau and of county and city totals by state and local agencies. In some states conflicting estimates are being made by different agencies, and there is no agreement between state and Federal estimates.

To overcome this problem of lack of uniformity the Census Bureau has initiated a Federal-State Cooperative Program for Local Population estimates. The objective is the development of state-prepared county population figures using methods mutually agreed upon by the states and the Census Bureau. The program calls for a large-scale test and evaluation study to be carried out when the 1970 census results become available and for publication by the Census Bureau of the state-prepared annual county estimates.

Thus far 45 of the 50 states have begun active participation in this program. In Nebraska the Governor has designated the Department of Economic Development as the coordinating agency and the Bureau of Business Research as the agency to carry out the technical phases of the program. Representatives of the Bureau were in attendance at a week-long Workshop in Washington last November to consider and experiment with the different methods available for making the county estimates.

The Bureau is now engaged in collection of data and calculations of its regular annual population estimates for cities and counties as of the end of 1969, using the same methods uniformly applied during the sixties. In recent years these methods have resulted in a state total substantially higher than that estimated by the Census Bureau. Our figures will be published in April, and within a few months thereafter we will know how well they conform with the actual 1970 census.

In this connection it is interesting to note that the most recent revised estimates of the Census Bureau are higher than those previously published and thus reduce the discrepancy between their figures and ours for the state total. The estimates are:

Census Bureau, July 1, 1968	1,453,000
Bureau of Business Research, December 31, 1968	1,501,516
Census Bureau, July 1, 1969	1,449,000

E. S. WALLACE

THE 1970 CENSUS OF POPULATION AND HOUSING

The first U.S. census of population was taken in 1790, and a census has been taken every ten years since, undergoing a constant process of change and improvement. No census has been a mere repetition of the previous one, and the 1970 census will have its own peculiar features. An explanation of the next census can best be given by means of comparisons with the others, in particular with respect to the 1960 census. These comparisons will be made in terms of items included in the questionnaire, methods used to collect data, and processing and delivering of these data.

Items in the Questionnaire. In terms of these items there will be rather slight differences between the 1970 and the 1960 censuses: The dominant tone through most discussions of improvement of the 1970 product by users was for a greater exploitation of the existing (1960) items on the schedule, by more intensive cross-tabulation, and by providing additional data for small areas.¹ In 1960 there will be relatively few items in the complete-count schedule and more in the fractional sample schedules. Tables I and II list population and housing items included in the 1960 and 1970 schedules.

Collection of Data. With the idea of reducing the number of enumerators, heavy reliance will be put in 1970 on the "mail-out, mail-back" or "census-by-mail" system attempting to cover about 50 to 65 percent of the U.S. population living in larger metropolitan areas and some adjacent counties. Enumerators will interview only the nonrespondents or those respondents who have returned incomplete questionnaires. The rest of the country, the "non-mail areas," will be covered by personal interviews. Even in the non-mail areas, however, the mail carrier will make an advance distribution of unaddressed complete-count schedules in order to make use of the self-enumeration technique. The enumerator will have to complete only the supplementary schedules, which will be presented at a carefully selected representative sample of residences.

Processing the Data. One of the most striking developments of recent censuses has been opened by the computer revolution. The first attempt to use electronic computers in the processing of census data goes back to the early 1940s. As far as reproduction of data is concerned, the 1960 census was fully computerized. For the 1970 census the purpose is to speed up this process and make it more reliable. With this idea, the respondent of the complete-count questionnaire will have only to blacken circles that can be read and converted into bit patterns of magnetic tape by FOSDIC (Film Optical Sensing Device for Input to Computers) machines. Once in magnetic tape the data will be electronically edited (spotting missing or inconsistent information). Edited data will go in basic record tapes which will not be available for public use because they will contain confidential information. Any subsequent tabulations, whether general or specially ordered, will have first to pass releasability tests to assure confidentiality and reliability.

Delivering the Data. As stated in the Users Guide (p. 43), one tendency is that the censuses of population and housing become more a flexible data base, from which a variety of data products and services may be obtained, than a set of standard tabulations. In the spirit of the computer revolution, moreover, another tendency

is to simplify the work of the census users with access to electronic computers. To achieve this purpose, greater emphasis than in 1960 will be put on magnetic tapes as delivery media. No doubt the cost of a tape will be substantially higher than that of a printed report, the former "ranging from a few hundred to a few thousand dollars, depending on the number of tapes desired" (p. 51), as compared to the cost of a few dollars for a printed report. But for investigators who are going to work with electronic computers anyway, there will be a considerable saving of time, work, errors, and money, using tapes rather than printed reports, because the former are machine readable and the time-consuming and error-prone step of preparing cards is avoided.

An additional advantage of tapes over printed reports is their earlier availability:

1970 Census summary tapes will become available very soon after Census Day. The first tapes provided will be the First Count Summary Tapes containing final complete-count population and housing data for states, counties, congressional districts, minor civil divisions, places, census tracts in tracted areas and enumeration districts in non-mail census areas or blockgroups in mail census areas... There will be about one reel of tape for each state, the summary tape for the first state processed becoming available by July, 1970, and the last state by the end of 1970 (p. 50). (Continued on page 3)

TABLE I
POPULATION ITEMS IN 1970 CENSUS

	Percentage of Households Sampled for Each Item	
	1960	1970
Relationship to head of household	100	100
Color or race	100	100
Age (month and year of birth)	100	100
Sex	100	100
Marital status	100	100
State or country of birth	25	20
Years of school completed	25	20
Number of children ever born	25	20
Activity 5 years ago	-	20
Employment status	25	20
Hours worked last week	25	20
Weeks worked last year	25	20
Last year in which worked	25	20
Occupation, industry, and class of worker	25	20
Income last year:		
Wage and salary income	25	20
Self-employment income	25	20 ¹
Other income	25	20 ²
Country of birth of parents	25	15
Mother tongue	25	15
Year moved into this house	25	15
Place of residence 5 years ago	25	15 ³
School or college enrollment (public or private)	25	15
Veteran status	25	15
Place of work	25	15 ⁴
Means of transportation to work	25	15
Occupation-Industry 5 years ago	-	5
Citizenship	-	5
Year of immigration	-	5
Marital history	25	5 ⁵
Vocational training completed	-	5
Presence and duration of disability	-	5
Mexican or Spanish origin or descent	-	5

¹Single item in 1960; two-way separation in 1970 by farm and non-farm income.

²Single item in 1960; three-way separation in 1970 by social security, public welfare, and all other receipts.

³This item is also in the 5-percent sample but limited to state of residence 5 years ago.

⁴Item will be expanded to include street address where the appropriations for the 1970 censuses make this possible.

⁵In 1960, whether married more than once and date of first marriage; in 1970 also includes whether first marriage ended by death of spouse.

1970 Census Users Guide, Data Access and Use Laboratory, Bureau of the Census, U.S. Department of Commerce, p. 15. All further references are to the same publication.

State tapes will become available in increasing order of population, so that on this basis Nebraska will have the priority of its small population.

Still another advantage of the tapes over the printed reports is the fact that they will contain a substantially greater amount of information:

The First Count Summary Tapes contain substantially more data than printed (or available tape) in 1960 or to be printed in 1970, and include summaries for much smaller geographic areas (tracts, enumeration districts, or blockgroups). Also the tapes have the advantage of carrying both population and housing characteristics (p. 54).

Delivery media other than tape and printed booklets will be microforms (microfilms or microfiches), which were introduced in 1960, although they were not then the generally available media they are meant to become in 1970. Because of the small storage space required, microforms will be especially advantageous for libraries.

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Business firms and other agencies that plan to make detailed use of 1970 Census data will find the following readily available publications highly informative and useful: 1970 Census Users Guide and Guide to Census Bureau Data Files and Special Tabulations. Both were prepared by the Census Bureau in 1969 and may be ordered from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402, or from any of the Field Offices of the Department of Commerce. The December, 1969, issue of the Monthly Labor Review may also be helpful.

ALFREDO ROLDAN

TABLE II HOUSING ITEMS IN 1970 CENSUS

Table with 3 columns: Item, 1960, 1970. Rows include: Number of units at this address, Telephone, Access to unit, Kitchen or cooking facilities, Complete kitchen facilities, Condition of housing unit, Rooms, Water supply, Flush toilet, Bathtub or shower, Basement, Heating equipment, Tenure, Commercial establishment on property, Value, Contract rent, Vacancy status, Months vacant, Components of gross rent, Year structure built, Number of units in structure, Whether a trailer, Farm residence (acreage and sales of farm products), Land used for farming, Source of water, Sewage disposal, Bathrooms, Air conditioning, Automobiles, Stories, elevator in structure, Fuel--heating, cooking, water heating, Bedrooms, Second home, Clothes washing machine, Clothes dryer, Dishwasher, Home food freezer, Television, Radio.

1 To be collected only for coverage check purposes; will not be tabulated. 2 Required on 100-percent basis for field follow-up purposes in mail areas. 3 100-percent in places of 50,000 or more inhabitants, 25-percent elsewhere. 4 Omitted in places of 50,000 or more inhabitants. 5 For renter-occupied and vacant-for-rent units outside places of 50,000 or more inhabitants. 6 20-percent in places of 50,000 or more inhabitants, 5-percent elsewhere. 7 Collected only in places of 50,000 or more inhabitants.

BEST WISHES TO MRS. SCHIEFEN

The many readers who have known Mrs. Katherine Schiefen in her more than 42 years of service as secretary to successive deans of the College of Business Administration will no doubt be pleased to join Business in Nebraska in this expression of appreciation to her on the occasion of her retirement. Mrs. Schiefen's years of devotion assure her continued interest in the College and the University. As she leaves her post she takes with her the best wishes of a host of friends and associates as well as of the students and faculty members who have known and worked with her through the years.

CENSUS DATA AS A PLANNING TOOL

The following excerpts from an article by Mr. Robert T. Perdue, Vice-President of the South Carolina National Bank, are reprinted by permission from the October, 1969, issue of the South Carolina Business and Economic Review. E. S. W.

During the 1960s there has been a growing emphasis on formal planning as a means of organizing and directing the use of resources. Planning by business enterprises in one form or another probably always has been done, although often on an informal basis. Recent studies conducted by the National Industrial Conference Board and the American Management Association indicate a sharp increase in the number of firms engaged in a deliberate and systematic planning process. Due to the long lead time required to purchase, construct, and assemble the necessary plant and equipment to produce a good or service, most industries must formulate plans which stretch over a considerable time span.

There are several inputs to the planning process. Estimates concerning technological change, future availability and sources of capital, manpower resources, and the potential political, economic, and social environment in which the company must operate are typical of the range of inquiry required in any long-range planning effort. One of the basic

Business Summary

Nebraska's business activity indexes for November, 1969, showed very little gain over those of the previous year. The Dollar Volume index rose about 1 percent above that recorded in November, 1968. The Physical Volume index increased by about one-half of one percent for the same period. The "slowdown" was due primarily to the much lower level of Construction activity in November, 1969, than in November, 1968. Other indicators showing year-to-year declines were Bank Debits, Retail Sales, and Newspaper Advertising. Cash Farm Marketings showed a 30 percent

increase for the period, for the largest gain among the individual indicators.

The United States Physical Volume and Dollar Volume indexes rose 3 percent and 8 percent, respectively, for the period November, 1968, to November, 1969. However, the indexes for both the United States and Nebraska showed seasonally adjusted declines from the previous month.

December Retail Sales were 15 percent higher than in the same month a year ago, with all categories showing increases for the period. Hard Goods were strong as a group with a level 24 percent above that of last year.

All figures on this page are adjusted for seasonal changes, which means that the month-to-month ratios are relative to the normal or expected changes. Figures in Table I (except the first line) are adjusted where appropriate for price changes. Gasoline sales for Nebraska are for road use only; for the United States they are production in the previous month.

R. W. WHITE

I. NEBRASKA and the UNITED STATES

II. PHYSICAL VOLUME OF BUSINESS
Percentage of 1948 Average

NOV Business Indicators	Percent of 1948 Average		Percent of Same Month a Year Ago		Percent of Preceding Month	
	Nebraska	U.S.	Nebraska	U.S.	Nebraska	U.S.
	Dollar Volume of Business	309.9	395.2	101.3	108.0	91.8
Physical Volume of Business	206.4	238.1	100.6	103.2	96.2	97.9
Bank debits (checks, etc.)	202.4	415.8	99.0	108.7	81.3	98.1
Construction activity	201.3	171.2	65.9	98.6	94.6	100.0
Retail sales	144.2	183.2	97.1	96.4	90.6	99.2
Life insurance sales	426.9	433.1	112.1	101.4	98.4	86.0
Cash farm marketings	205.5	153.5	130.1	99.4	103.1	101.9
Electricity produced	423.5	520.8	103.2	106.7	100.5	99.8
Newspaper advertising	164.5	165.0	96.0	107.5	97.2	105.1
Manufacturing employment	179.7	130.7	105.4	101.0	102.5	99.3
Other employment	150.2	174.3	103.2	103.4	100.9	100.3
Gasoline sales	203.0	244.5	102.0	104.2	102.6	101.4

Month	Nebraska	U.S.
	1968-69	1968-69
November	201.4	231.1
December	203.6	232.9
January	216.1	232.7
February	231.1	239.6
March	223.9	238.1
April	224.8	240.0
May	219.6	240.7
June	225.0	243.3
July	219.1	243.7
August	218.2	240.1
September	218.0	239.9
October	214.6	243.1
November	206.4	238.1

III. RETAIL SALES for Selected Cities. Total, Hard Goods, and Soft Goods Stores. Hard Goods include automobile, building material, furniture, hardware, equipment. Soft Goods include food, gasoline, department, clothing, and miscellaneous stores.

DEC City	No. of Reports	Percent of Same Month a Year Ago			Percent of Preceding Month	DEC City	No. of Reports	Percent of Same Month a Year Ago			Percent of Preceding Month
		Total	Hard Goods	Soft Goods				Total	Hard Goods	Soft Goods	
THE STATE	664	115.5	123.8	113.0	111.5	Fremont	25	113.2	122.4	104.9	105.5
Omaha	47	111.8	122.0	103.4	100.4	Fairbury	24	126.5	144.4	106.4	101.8
Lincoln	62	104.3	104.1	104.5	96.1	Norfolk	25	124.4	131.2	118.3	133.4
Grand Island	27	121.9	128.6	115.7	126.9	Scottsbluff	35	117.3	130.7	105.9	112.6
Hastings	27	113.4	122.7	105.4	91.7	Columbus	26	120.8	124.8	116.1	115.8
North Platte	19	118.3	123.0	111.8	147.5	McCook	16	106.7	106.5	107.0	101.0
						York	21	111.5	129.7	99.3	109.3

IV. RETAIL SALES, Other Cities and Rural Counties

V. RETAIL SALES, by Subgroups, for the State and Major Divisions

DEC Locality	No. of Reports	Percent of Same Month A Year Ago	Percent of Preceding Month
Kearney	16	113.5	121.1
Alliance	26	117.2	129.8
Nebraska City	17	104.3	98.7
Broken Bow	13	109.9	107.3
Falls City	16	112.8	117.1
Holdrege	16	116.6	129.5
Chadron	20	125.5	126.8
Beatrice	16	106.6	103.7
Sidney	22	108.8	143.4
So. Sioux City	9	121.2	96.7
Antelope	5	114.4	112.0
Cass	17	112.7	110.8
Cuming	9	125.2	126.8
Sand Hills**	21	108.6	108.7
Dodge***	10	122.8	148.2
Franklin	9	111.2	107.4
Holt	13	119.4	131.6
Saunders	12	121.1	106.7
Thayer	8	115.0	112.8
Misc. Counties	35	121.6	109.6

DEC Type of Store	Percent of Same Month a Year Ago			
	Nebraska	Omaha and Lincoln	Other Cities	Rural Counties
ALL STORES****	115.5	110.3	115.6	120.6
Selected Services	116.8	119.6	124.7	106.2
Food stores	111.8	109.4	113.3	112.8
Groceries and meats	108.0	107.2	108.9	107.9
Eating and drinking pl.	117.1	110.1	120.5	120.8
Dairies and other foods	118.8	120.5	117.5	118.5
Equipment	129.4	136.3	126.2	125.8
Building material	128.4	129.8	126.7	128.8
Hardware dealers	115.6	122.3	110.7	113.8
Farm equipment	164.6	216.1	140.6	137.0
Home equipment	111.5	110.1	126.3	98.0
Automotive stores	113.1	99.3	115.5	124.6
Automotive dealers	116.7	100.7	119.4	129.9
Service stations	104.3	93.6	100.1	119.2
Miscellaneous stores	115.9	108.7	114.8	124.2
General merchandise	112.2	111.5	110.0	115.0
Variety stores	114.7	113.0	115.1	115.9
Apparel stores	119.9	88.0	114.7	157.1
Luxury goods stores	116.1	114.1	115.6	118.5
Drug stores	105.1	103.4	106.0	105.9
Other stores	131.1	137.4	136.7	119.1

**Hooker, Grant, Dawes, Cherry, and Sheridan Counties.

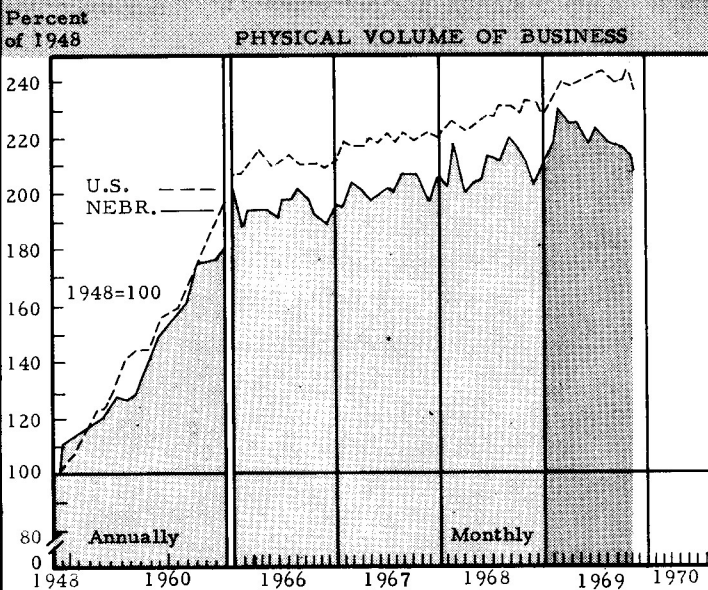
****Not including Selected Services.

UNADJUSTED CITY INDEXES

Percentage Change, Dec. 1968 to Dec. 1969

-10 -5 0 +5 +10 +15 +20

PHYSICAL VOLUME OF BUSINESS



City	Percentage Change, Dec. 1968 to Dec. 1969
COLUMBUS	15.0
MCCOOK	14.0
FAIRBURY	13.0
HASTINGS	12.0
SIDNEY	11.0
ALLIANCE	10.0
GRAND ISLAND	9.0
HOLDREGE	8.0
FREMONT	7.0
FALLS CITY	6.0
LINCOLN	5.0
(STATE)	4.0
NORFOLK	3.0
NEBRASKA CITY	2.0
YORK	1.0
CHADRON	0.0
BEATRICE	-1.0
OMAHA	-2.0
NORTH PLATTE	-3.0
BROKEN BOW	-4.0
SCOTTSBLUFF	-5.0
KEARNEY	-6.0
SO. SIOUX CITY	-7.0

Figures on this page are not adjusted for seasonal changes nor for price changes. Building activity includes the effects of past as well as present building permits, on the theory that not all building is completed in the month the permit is issued. R. W. W.

VI. CITY BUSINESS INDICATORS

Percent of Same Month a Year Ago

City	City Index	Bank Debits	Building Activity	Retail Sales	Electricity Consumed	Gas Consumed	Water Pumped	Postal Receipts	Newspaper Advertising
The State	106.6	115.8	81.7	115.5	107.4	91.1	107.1	108.5	103.2
Beatrice	103.6	125.6	52.5	106.6	102.0	90.3	107.8	123.8	98.2
Omaha	103.4	114.8	67.0	111.8	108.0	88.8	100.4	117.7	93.3
Lincoln	107.4	123.9	133.9	104.3	106.8	87.7	108.5	92.5	110.1
Grand Island	110.0	118.2	65.3	121.9	104.7	111.3	113.9	100.4	- - -
Hastings	112.1	120.4	137.7	113.4	108.5	88.9	131.7	106.0	106.1
Fremont	108.6	114.7	91.7	113.2	106.0	NA	104.7	110.6	NA
North Platte	103.4	110.7	48.0	118.3	106.7	78.6	99.7	120.8	96.7
Kearney	NA	NA	NA	113.5	113.2	NA	NA	NA	NA
Scottsbluff	97.4	93.6	63.2	117.3	112.9	102.6	96.8	93.5	96.4
Norfolk	105.6	108.7	50.5	124.4	108.0	91.1	93.7	111.8	115.6
Columbus	114.2	122.9	157.8	120.8	116.6	92.7	99.1	111.2	108.0
McCook	114.1	123.9	197.6	106.7	104.3	81.2	NA	156.0	111.7
Sidney	111.1	116.0	104.7	108.8	109.8	114.6	142.6	96.9	114.6
Alliance	110.4	134.4	71.4	117.2	103.9	104.3	116.0	126.7	89.2
Nebraska City	104.8	113.4	87.0	104.3	106.7	89.6	128.1	103.3	NA
So. Sioux City	NA	NA	NA	121.2	NA	NA	NA	NA	NA
York	104.4	129.4	59.6	111.5	116.0	91.6	96.3	96.1	113.8
Falls City	108.2	100.5	950.9	112.8	114.0	105.5	116.6	96.6	98.0
Fairbury	114.1	96.4	129.5	126.5	104.5	NA	111.4	95.2	162.1
Holdrege	109.8	116.1	195.1	116.6	109.3	109.2	99.4	104.6	85.5
Chadron	103.8	101.0	35.7	125.5	74.5	108.7	130.1	101.6	NA
Broken Bow	99.4	90.1	168.9	109.9	101.6	89.2	100.7	82.1	105.4

DEC Percent of Preceding Month (Unadjusted)

City	City Index	Bank Debits	Building Activity	Retail Sales	Electricity Consumed	Gas Consumed	Water Pumped	Postal Receipts	Newspaper Advertising
The State	108.7	124.5	99.7	135.8	107.2	111.5	102.3	83.6	113.8
Beatrice	114.1	121.2	106.2	122.7	106.0	124.7	93.1	106.4	149.5
Omaha	109.8	122.7	107.4	116.6	110.5	100.9	104.7	143.2	94.0
Lincoln	110.6	127.9	106.8	110.7	104.2	110.1	98.0	114.6	118.1
Grand Island	115.8	129.3	88.1	144.5	104.5	142.9	108.9	100.8	- - -
Hastings	115.8	134.2	78.3	105.6	NA	NA	108.5	125.0	124.2
Fremont	107.5	114.3	95.8	122.5	117.4	NA	101.7	96.9	NA
North Platte	118.5	116.1	102.4	172.4	106.6	122.5	100.2	139.8	128.9
Kearney	NA	NA	NA	140.5	114.7	NA	NA	NA	NA
Scottsbluff	117.0	136.0	83.5	130.1	91.4	119.4	97.1	121.4	132.6
Norfolk	116.4	126.8	81.8	152.6	80.1	138.0	104.9	113.0	121.0
Columbus	116.2	125.6	95.5	134.0	100.6	120.9	106.3	124.5	112.9
McCook	123.2	128.8	86.6	118.7	102.3	128.2	NA	206.0	122.8
Sidney	108.1	111.2	92.7	167.7	89.2	120.3	59.8	141.5	NA
Alliance	117.0	119.2	89.8	147.9	113.3	118.4	97.6	221.6	117.0
Nebraska City	103.5	127.6	68.5	113.5	100.0	97.1	77.5	137.2	NA
So. Sioux City	NA	NA	NA	116.5	NA	NA	NA	NA	NA
York	110.8	134.3	93.9	126.9	98.9	129.9	95.2	91.2	122.4
Falls City	118.1	117.8	84.2	136.3	115.6	140.9	94.5	139.5	102.7
Fairbury	113.9	125.9	83.4	117.3	116.2	NA	108.2	96.6	137.3
Holdrege	122.8	151.2	111.2	148.9	93.4	127.5	88.4	172.9	103.7
Chadron	111.6	83.6	65.0	149.5	104.7	114.4	115.7	153.7	NA
Broken Bow	115.5	103.6	68.1	125.9	110.5	134.3	100.0	142.3	121.9

ned from page 3) informational inputs to the planning process is data derived from the census. Without this information, the output of the best planners would tend to be largely irrelevant and, perhaps, irrelevant.

ough the findings of each census are of considerable value to the private sector, the basic need for a 10-year enumeration from the public sector, specifically, the United States Commission which sets forth that representatives to Congress are proportioned among the several states according to the number of people in residence. The greater involvement of the Federal Government in the economic and social life of the nation, however, created the need to obtain more information than is provided by the few simple questions stemming from the constitutional requirement.

is not to imply that questions are included in the census questionnaire without rhyme or reason or at the request of any other agency. Before inclusion, questions must conform to the guidelines established by Congress and the Federal Reports Act of 1942. In order to insure validity and appropriateness, potential questions must be submitted to the Bureau of the Budget for recommendation and approval.

Use by the Public Sector

The Federal Government has first priority with respect to questions should be included in the census. Congress and the Administration cannot begin to formulate an intelligent approach to the problems of poverty, unemployment, racial discrimination, urban blight, inadequacy of housing, manpower training and other related economic and social problems without knowledge of the size and scope of the problem as provided by census data. Population, education, and housing characteristics generated by census returns provide a basis for defining the nature and cost of solving these problems. For example, age data are used for planning major government programs in health, education, and social security. Replies to a question this year relating to the respondent's occupation five years ago are needed as planning input to programs for manpower development and can be viewed also as an indication of employability. Information on the condition of homes and apartments is needed by the Federal government if it is to deal effectively with the nation's vital and pressing needs in the housing area.

Their planning efforts, state and local governments, of course, are more interested in data on relatively small geographic areas. The Census Bureau provides information on Standard Metropolitan Statistical Areas, on a county basis and, for many areas, on levels smaller than that of a county, e.g., on the basis of census tracts (which are small, well-defined geographic areas). In cities of 50,000 or more, statistics will be published on a block-by-block basis. This permits a detailed analysis of wards, subdivisions, and school districts. Population statistics for small areas are particularly important as indices of need when planning for water and sewage treatment, urban redevelopment, and manpower retraining. In making planning efforts, school districts are interested in the size and age composition of the school-age population. With this information it is possible to project school enrollment and faculty building requirements.

Some statistics are equally as important as population statistics to governmental agencies. Some Federal grants are allocated to lower levels of government under the Economic Oppor-

tunity Act of 1964 and the Elementary and Secondary Education Act of 1965 on the basis of income data developed from the census. Population size, age composition, occupation, occupation five years ago, and distance and means of transportation to place of employment provide information of considerable significance to every level of government involved in transportation planning. The above data, along with other census-based information, such as educational levels and vocational training completed, also assist state development boards as they attempt to find the best locations for new industries.

Use by the Private Sector

Census data are of inestimable value to market researchers, specialists and planners in private industry. If these people desire, their wish, the questionnaire for each household would be more lengthy.

General census population data, such as size and location (inner-city, suburb, and rural), are basic inputs to almost every business's planning process. Consumer goods manufacturers, retailers, and service groups, however, need to know the social and economic characteristics of the various strata of the population. Census data on age, sex, marital status, years of school completed, number of children, family income, senior or college enrollment, place of work, and means of transportation to work provide this information. It is easy to understand how a merchant contemplating opening an additional outlet in a suburban shopping center would need to know such information. Beside helping the merchant to decide whether or not to locate there, the data could assist him in deciding the general terms of credit to be extended and what the store hours should be. Census information also is valuable to an oil company attempting to locate a service station, to a bank seeking to establish a branch and to a supermarket or discount house considering expansion. Of particular help to the research effort of such organizations is that data are available for areas as small as census tract blocks.

The food processing industry made extensive use of census data in its marketing decision to develop convenience foods. Population items relating to age and sex, marital status, education level, number of children, employment status, hours worked, occupation and income, along with certain housing items such as data on type of fuel used for domestic purposes, and ownership of automobiles, home freezers, washing machines, dryers, and television sets were particularly relevant. Another significant factor was the number of working wives. Women with limited time to prepare family meals were a logical market for prepackaged, frozen, and precooked food products. The concept was field tested and refined; today the growing variety of convenience foods is evidence of its success.

Concluding Comments

It is difficult to speculate on the degree of influence that census data have had upon America's economic and social environment via its utilization in the planning process. Certainly, the quality of life has been improved because of the availability of census data to public and private planners. Although there have been some complaints voiced recently about the possible infringement upon a family's privacy because of the apparent personal nature of some census questions, it still seems that the potential benefits from the census data justify the request for detailed information from American citizens.