8-1972

kaleidoSCOPE Newsletter, Vol. 01, No. 02

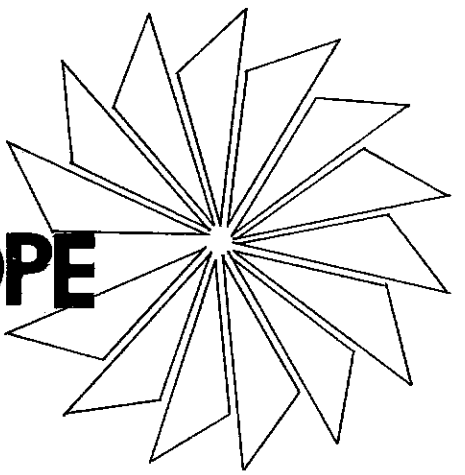
Center for Public Affairs Research (CPAR)
University of Nebraska at Omaha

urban affairs kaleidoSCOPE

CAUR
Publication

The Urban Affairs Kaleidoscope is a publication of the School of Public Affairs and Community Service at the University of Nebraska at Omaha.

The School of Public Affairs and Community Service (SPACS) was organized at UNO in 1972 for the purpose of expanding the role of the university in the community. The School has three major areas of activity: (1) Degree and new degree programs in urban affairs; (2) Training and Service, including Cooperative Education, Nebraska Opportunity for Volunteer Action, and Manpower for Urban Progress; (3) Center for Applied Urban Research, the major research unit of the School.



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vol. 1 no. 2

Contents

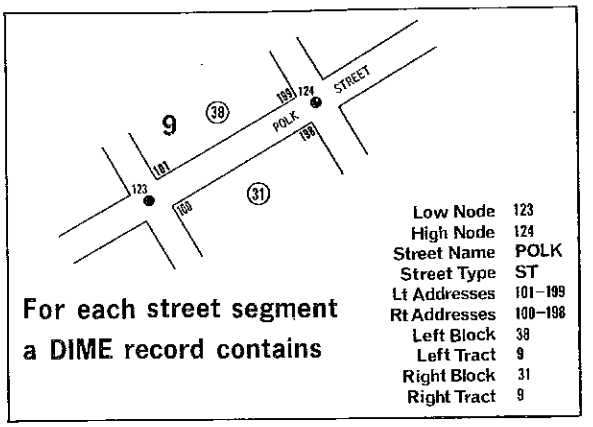
DIME File and ADMATCH: Geographic Keys to an Urban Information System

by John P. Zipay

The 1970 Census of Population and Housing will undoubtedly be considered a milestone in American census efforts. Procedural changes associated with census enumeration and delivery, particularly in large urban areas, have dramatically altered the traditional Bureau of the Census role as data provider. The Small-Area Data Notes, Census Use Study series, SCRIS Reports, and Technical and Working Papers have documented Bureau involvement with the local data user. Moreover, ready access to the Users' Service Staff, Data Access and Use Laboratory, the revamped Geography Division, and the Clearinghouse and Laboratory for Census Data has been a most welcome development. With Bureau activities of printed report and computer summary tape release nearing an end, increased attention will now be paid to applications of 1970 Census by-products, particularly the Geographic Base (DIME) File. The DIME file promises to be the most comprehensive and dynamic geographic identification and retrieval system yet devised.

The most far-reaching of the census procedural changes was the use of the mail-back questionnaire. The decision to use this as the primary means of enumeration, rather than the conventional personal interview, necessitated a complete restructuring of the census delivery system. To prepare mailing labels for the proposed canvass of 60% of the American households, the Census Bureau was compelled to look to local sources for assistance. Commercial mailing lists, city directories, telephone address registers, and utilities records formed the nucleus for the creation of the Address Coding Guide (ACG). The ACG consisted of block-side, street segment records which were hand-coded to indicate census tract

and block, zip code, and a myriad of other census area codes. While involved in the preparation of ACGs for mail-back areas, the Census Bureau devised an improvement technique called Dual Independent Map Encoding (DIME). The DIME procedure affixed uniquely numbered nodes or reference points at each street intersection, non-street feature intersection (railroad, water body, political boundary), or any vertex change in the above. Areas could then be checked by computer topological edits to ensure completeness and accuracy of street segment records. The nodes also allow for digitizing, i.e. the process of assigning x-y coordinates, and thereby open the DIME file to the most advanced techniques of computer graphics display.



The DIME file received from the Census Bureau is an untested census index of a city's street geography. It contains street address ranges, small-area identifiers such as map node and census block, high-level coding such as county and place, and, if digitized, three unique x-y coordinate descriptors. If prepared prior to the mail-back census, as was the case for Omaha and 146 other areas, the DIME file is at least three years out-dated. If completed subsequent to the 1970 Census, as were DIME files for Lincoln, Sioux City and Des Moines, the contemporaneity of the file is greatly enhanced. Internal errors of omission and inaccuracy are present in both types of files, but are a normal part of any unused data file.

To gain the maximum benefits from an accurate and up-to-date DIME file, the file must be used. The most elemental method of accessing the DIME file (and thereby isolating a portion of the DIME errors) is through a computer interface package called ADMATCH. The ADMATCH program rapidly, inexpensively, and accurately matches individual street address records to any or all DIME codes

for data aggregation purposes. Local incidence records containing street addresses such as birth records, hospital admissions, motor vehicle registrations, code violations, assessors records, fires, and bank depositors can be matched to census tract and block, for example, and then aggregated for analysis.

ADDRESS MATCHING of local records to the ACG-Dime File provides geographic identifiers for Tabulations and Computer Mapping of local data

ACG-DIME FILE (SPECIAL FORMAT)

	NAME	ADDRESS RANGE	BLOCK	TRACT	SCHOOL DISTRICT	COORDINATES X	COORDINATES Y
	LADD CT	2-98	116	13	09	22300	19800
	LAKE ST	1-99	403	21	04	15200	22800
	LAKE ST	2-98	401	21	04	15300	22900
145 LAKE ST	LAKE ST	101-199	402	21	04	15600	23400
	LAKE ST	100-198	406	21	04	15500	23200
	LAWN AVE	1-99	109	4	01	11300	15800

Experimentation by the Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) and the Center for Applied Urban Research (CAUR) has demonstrated the utility of the DIME file and the ADMATCH program. The MAPA metropolitan housing file, containing approximately 180,000 addresses, was 86% successfully ADMATCHed using a medium address-acceptance level. CAUR research has encountered the following match rates, all at high address-acceptance levels: 6,800 Omaha Senior Transportation Service records at 94%; 3,100 Omaha non-residential building permits at 83%; 7,950 Douglas County 1967-1971 residential building permits at 70%; and 1,200 Omaha 1972 residential building permits at 45%. Although incorrect or incomplete street addresses and internal DIME file errors account for a portion of the rejected records, the overwhelming reason for non-matched records is imperfect areal correlation between input data and the DIME file. The Omaha DIME file has begun to deteriorate rapidly.

Success of DIME as a geographic identifier in an urban information system depends on the following: 1) use of the DIME file by both public and private organizations, and 2) an aggressive policy of DIME file maintenance. In addition to the variety of ADMATCH uses, the DIME file, especially with digitized coordinates, can have the following applications -- computation of area and density, calculation of data centroids, determination of origin-destination direction and distance (intra-urban migration), and aggregation of areas to

pre-determined size (reapportionment to voting districts). Other uses include geographic ordering of data by street intersection (traffic accidents), simulation of least time/distance flows using minimum path algorithms (transit and trash disposal routes), allocation of resources to facilities (allocating children to schools or determining logical service areas for community health facilities), clustering of similar areas (determination of homogeneous areas for action programs), development of land parcel files, random or stratified geographic sampling, time series analyses, and spatial comparisons.

DIME files have been prepared for approximately 200 metropolitan areas in the United States representing a federal investment of close to $15 million. All of these files face obsolescence unless maintained and promoted by local interests. The Census Bureau has embarked on an extensive advisory program of correction, update, and expansion (CUE), but without direct grant assistance from the Bureau or other federal agency. An innovative DIME/CUE program, however, could obtain funds for addition of police cruiser districts, school attendance areas, neighborhood planning areas, or voting precincts to DIME records and thereby maintain the file. DIME, in conjunction with new computer file management software already in existence locally, can help pave the way for a functional urban information system. The time for planning and action is now.

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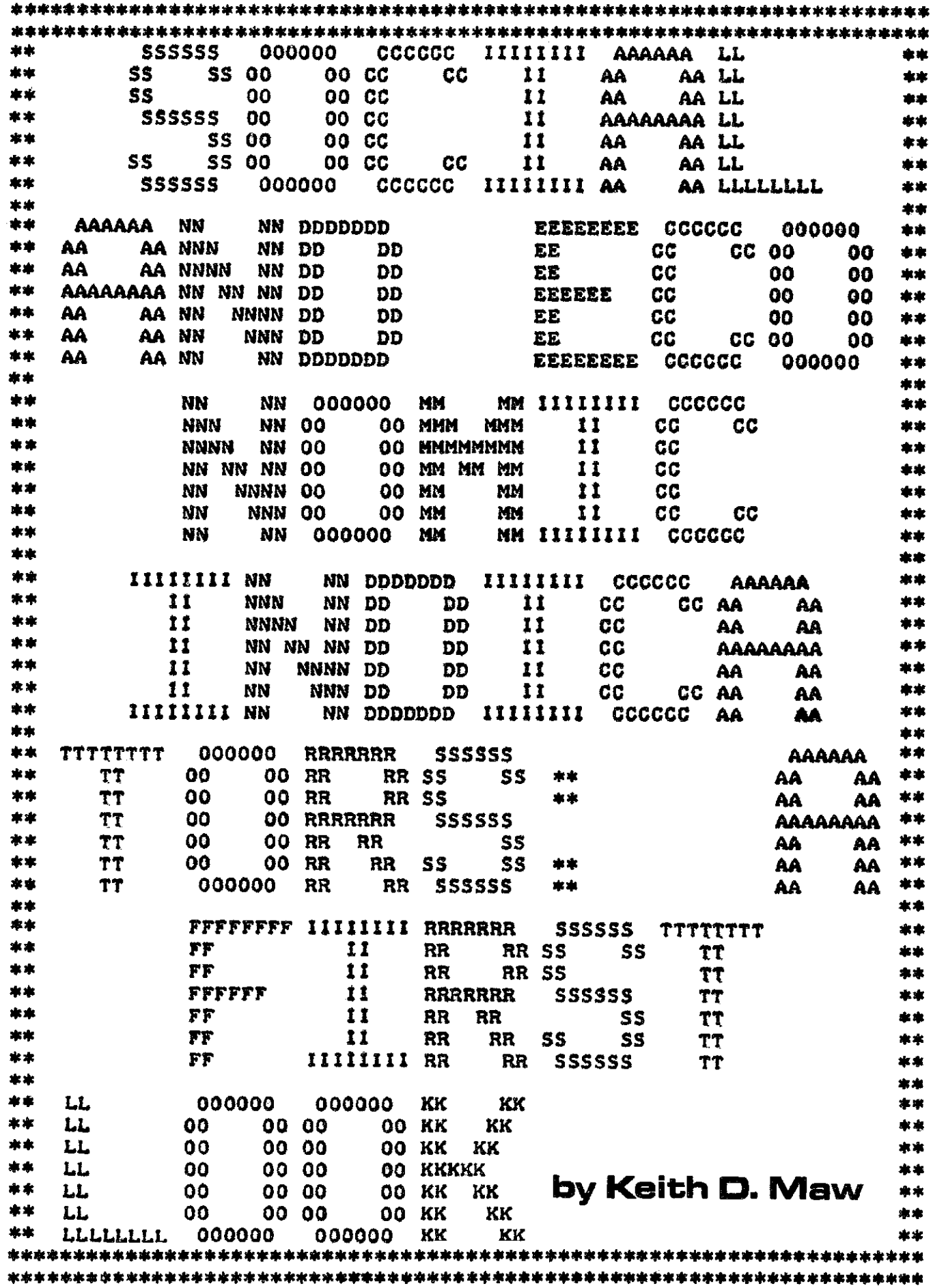
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by Keith D. Maw

During recent months the Center has put forth considerable effort in the parallel realms of Census Summary Tape processing and computer-assisted map generation. Census Summary Tape work has been carried out in cooperation with the Metropolitan Census Data Use Consortium (McDUC) of which the Center is an active member. The bulk of the computer mapping has involved a program called SYMAP (for SYnagraphic MAPping), developed by the Harvard University Laboratory for Computer Graphics and Spatial Analysis.

One project carried out through the Consortium is indicative of the type of project that has become feasible through cooperative processing of Census Summary Tapes. Thirty-six social and economic indicators have been computed for the Omaha NE-IA SMSA at both the tract and block group/enumeration district levels. Cost was shared by participating Consortium members, with resultant billing of substantially less than $100 each. Programming for the effort was a direct spin-off of a general purpose program prepared by Susan Owicki of the Center and used to "dump" the First Count tape. A number of these indicators also have been completed at the tract and county levels for 1960. Figure 1 shows the changes observed in a number of these indicators over the decade. Although it is not possible to include figures at the tract level in this issue of Kaleidoscope, a report will soon be issued including these figures.[1]

Through the utilization of the "Contour-Line" mapping option provided through the SYMAP program, the beginning of a series of indicator maps is being produced. The data points used in the map plotting are the population-weighted centroids of the 1960 and 1970 census tracts. Although slightly more definition should be available from the 1970 data points (There are more of them, and consequently they are spaced closer.) this method will provide decade comparison maps which are more easily used than those produced by the "Conformoline" (conformal-zone,

[1] Social and Economic Indicators: A Preview is to be published Fall 1972.

FIGURE 1

SOCIAL AND ECONOMIC INDICATORS
FOR THE OMAHA NE-IA SMSA AND COMPONENT COUNTIES, 1960-1970

Indicator Name*	Omaha NE-IA SMSA		Douglas County		Sarpy County		Pottawattamie County	
	1960	1970	1960	1970	1960	1970	1960	1970
POPULATION CHARACTERISTICS/ AGE COMPOSITION								
1. Minor Population Pct	40.43	42.36	39.70	41.44	45.44	48.39	41.53	42.06
2. Elderly Population Pct	8.98	8.86	9.19	9.46	4.09	2.86	9.92	10.56
3. Black Elderly Pct	6.80	5.99	6.71	6.16	1.97	0.61	13.68	9.67
4. Pct Children Pre-School	41.03	30.50	41.41	31.00	43.32	29.99	38.72	28.79
5. Dependency Ratio	.8356	.8553	.8180	.8359	.7954	.8825	.9291	.9270
6. Overcrowded Children	NA	27.73	NA	27.17	NA	26.57	NA	31.11
7. Sex Ratio M/F	96.25	93.94	94.60	92.00	117.30	107.43	95.96	93.49
8. Fertility Ratio	366.36	428.48	316.57	422.04	717.37	462.61	641.46	431.21
9. School Load Index	.3932	.4803	.3814	.4569	.4067	.5801	.4379	.5152
10. Normal Family Life	90.18	84.91	89.29	83.28	96.30	92.50	90.97	85.37
11. Children Extended Family	NA	3.27	NA	3.47	NA	1.53	NA	3.93
MARITAL AND FAMILY CHARACTERISTICS/RACIAL COMPOSITION								
12. Marital Unrest Index	.0594	.0796	.0651	.0907	.0295	.0323	.0469	.0657
13. Matriarchy Index I	NA	.0627	NA	.0684	NA	.0402	NA	.0532
14. Matriarchy Index II	NA	.1035	NA	.1164	NA	.0538	NA	.0901
15. Fatherless Children	NA	9.92	NA	11.30	NA	5.09	NA	8.23
16. No Child Rearing	NA	39.38	NA	41.20	NA	25.30	NA	40.91
17. Chances for Marriage	.7063	.7744	.7620	.7332	.7003	1.3330	.5253	.7447
18. Black Marriage Chance	.8849	.8054	.8768	.7781	3.6667	3.3288	1.0137	.5565
19. Classroom Req Index	1.1597	.8249	1.1664	.8587	1.2626	.7268	1.0935	.7744
20. Average Household Size**	3.26	3.14	3.21	3.05	3.70	3.78	3.29	3.17
21. Family Depend Load	NA	63.12	NA	61.53	NA	75.71	NA	61.62
22. Percent Non-White	5.97	7.40	7.70	9.54	0.63	3.10	0.83	0.98
23. Percent Black	5.74	6.81	7.35	8.91	1.35	2.33	0.71	0.69
24. Roomers, Boarders Pct Unit	NA	1.92	NA	2.11	NA	1.03	NA	1.56
HOUSING CHARACTERISTICS								
25. Overcrowding Rate	11.20	7.87	10.68	7.20	15.58	10.77	11.96	9.20
26. Incomplt Plumbing Rate	NA	3.65	NA	3.35	NA	2.10	NA	3.35
27. Low Rent Index	.5224	.3662	.5331	.3690	.2270	.0960	.5521	.5290
28. Average Monthly Rent**	$76	$103	$75	$103	$99	$136	$73	$83
29. Low Value Index	.3738	.2400	.3427	.2417	.3354	.0958	.5099	.3072
30. Average Owner Value**	$11,600	$17,063	$12,100	$17,607	$12,400	$18,649	$9,999	$13,897
31. Owner Occupant Rate	64.88	63.31	62.64	61.84	71.44	58.58	72.12	72.84
32. Black Owner Rate	3.97	3.07	5.16	6.44	0.43	0.71	0.71	0.65
33. Black Occupant Rate	5.36	6.25	6.82	8.05	0.62	1.90	0.71	0.66
34. Vacancy Rate	4.88	5.23	4.83	5.61	4.73	3.07	5.15	4.74
35. Single Family Units	77.30	72.34	73.98	69.96	90.14	73.35	87.11	82.77
36. Average Unit Size**	4.8	5.10	4.8	5.00	4.8	5.33	4.9	5.10
37. Pct Black Owners	48.00	49.06	47.39	49.49	50.00	21.78	71.75	71.59

*Definitions for these indicators are found in Figure 2.
**Slightly different base or procedure used in 1960 and 1970

Source: U.S. Bureau of the Census, 1970 Census of Population and Housing, First Count Summary Tapes for Nebraska and Iowa

FIGURE 2

INDICATOR DEFINITIONS

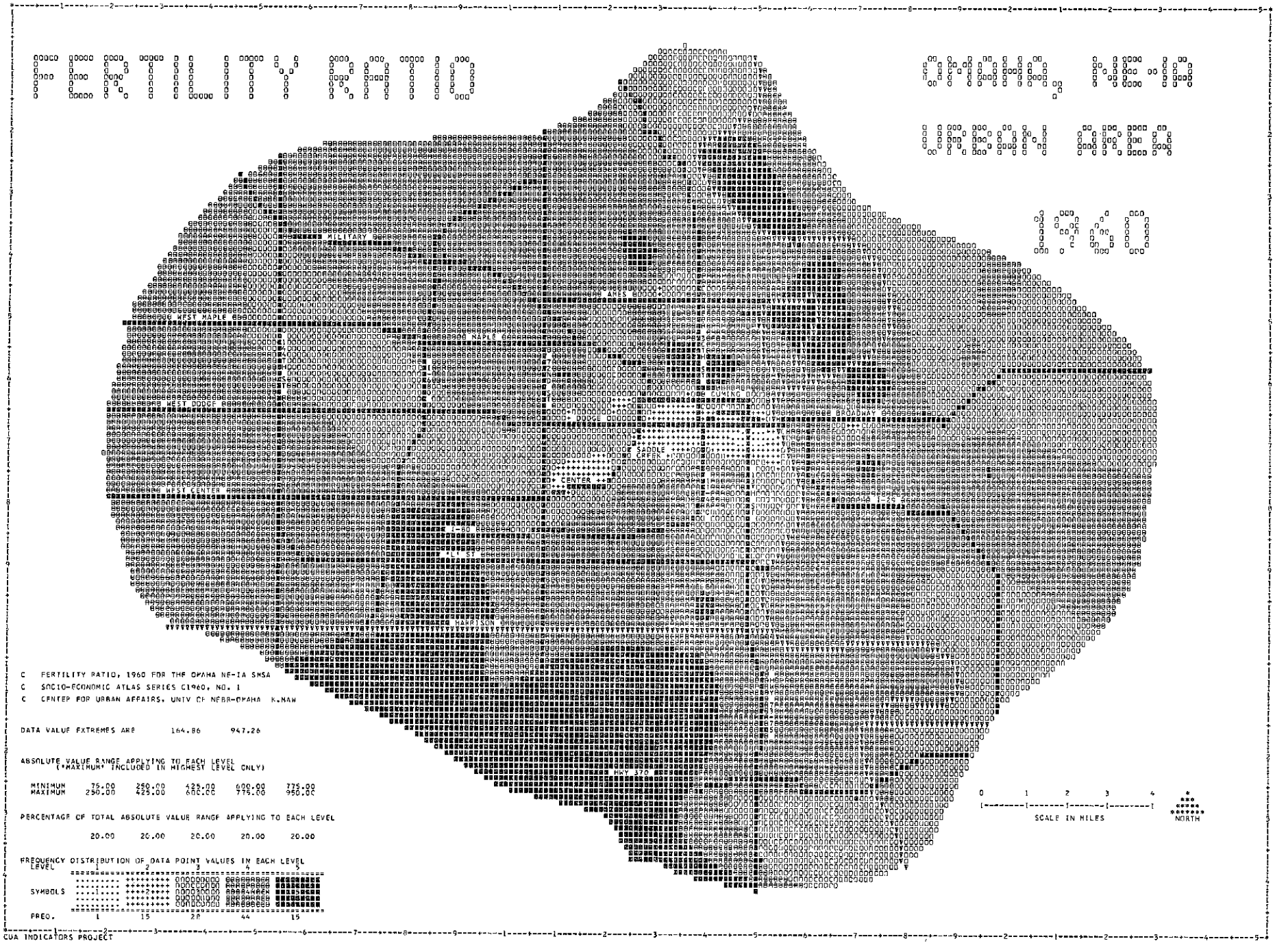
MINOR POPULATION PCT	Minor Population - percent of total population under 21 years
ELDERLY POPULATION PCT	Elderly Population - percent of total population 65 and over
BLACK ELDERLY PCT	Black Elderly Population - percent of Black population 65 and over
PCT CHILDREN PRE-SCHOOL	Pre-School Children - percent of children and youth (under 18) who are pre-school age (under 6 years)
DEPENDENCY RATIO	Dependency Ratio - ratio of population under 18 and 65 and over to the population 18-64 years
OVERCROWDED CHILDREN	Overcrowded Children - percentage of children under 18 in units with 1.01 or more persons per room
SEX RATIO M/F	Sex Ratio - number of males per 1,000 females
FERTILITY RATIO	Fertility Ratio - number of children under 5 years per 1,000 women 15-44 years
SCHOOL LOAD INDEX	School Load Index - ratio of children 6-17 to the adult population 18-64
NORMAL FAMILY LIFE	Normal Family Life Index - percentage of children under 18 living with both parents
CHILDREN EXTENDED FAMILY	Children in Extended Families - percentage of children in families who are "other relative" of head
MARITAL UNREST INDEX	Marital Unrest Index - ratio of divorced and separated persons to now married persons (including separated)
MATRIARCHY INDEX I	Matriarchy Index I - ratio of female-headed families with members less than 18 to all families
MATRIARCHY INDEX II	Matriarchy Index II - ratio of female-headed families with members less than 18 to all families
FATHERLESS CHILDREN	Fatherless Children - percentage of children under 18 living with their family, but father is not present as head
NO CHILD REARING	No Child Rearing - percentage of families with no members under 18
CHANCES FOR MARRIAGE	Chances for Marriage - male/female ratio for unmarried population over 14
BLACK MARRIAGE CHANCE	Black Chances for Marriage - male/female ratio for unmarried Black population over 14
CLASSROOM REQ INDEX	Classroom Requirements Index - ratio of children under 5 years to children 5-9 (under 10)
AVERAGE HOUSEHOLD SIZE	Household Size - average number of persons per household
FAMILY DEPEND LOAD	Family Dependency Load - percentage of families with members under 18 or over 64
PERCENT NON-WHITE	Racial Composition - percent of total population that is non-white
PERCENT BLACK	Percent Black - percent of total population that is Black
ROOMERS, BOARDERS PCT UNIT	Roomers and Boarders - percentage of occupied units with roomers and boarders
OVER-CROWDING RATE	Over-crowding Rate - percentage of occupied housing units having 1.01 or more persons per room
INCOMPLT PLUMBING RATE	Incomplete Plumbing - percentage of housing units that lack complete plumbing facilities
LOW RENT INDEX	Low Rent Index - ratio of occupied rental housing units with a monthly contract rent less than $80 to all rental units
AVERAGE MONTHLY RENT	Average Monthly Rent - mean rent for renter-occupied housing
LOW VALUE INDEX	Low Value Index - ratio of owner-occupied housing with value less than $10,000 to all owner-occupied
AVERAGE OWNER VALUE	Average Value - mean value of owner-occupied housing
OWNER OCCUPANT RATE	Owner Occupancy Rate - percentage of occupied housing units that are owner-occupied
BLACK OWNER RATE	Black Home Ownership - percentage of owner-occupied housing units that are Black-occupied
BLACK OCCUPANT RATE	Black Occupancy - percentage of occupied housing units that are Black-occupied
VACANCY RATE	Vacancy Rate - percentage of housing units that are vacant
SINGLE FAMILY UNITS	Single Family Dwellings - percent of housing units that are one-unit structures
AVERAGE UNIT SIZE	Average Housing Unit Size - average number of rooms per unit
PCT BLACK OWNERS	Black Owner Occupancy - percentage of Black-occupied units that are Black-owner-occupied

or choropleth) option. Comparison of Conformoline maps would be more difficult because of the exaggerated gain in compositional detail from the subdivision of tracts in the western portion of Omaha and in Council Bluffs. Contour maps, however, have no predetermined "zones", the data shaping its own zones within value ranges. In addition, contour maps are somewhat less expensive to produce. The maps included in this report ranged from $22 to $37 each, the average being around $25. A "barriers" option, used to prevent unrealistic interpolation of data across the Missouri River and related low-population areas, also raised costs some $8 to $15 per map.

The first of the three sets of maps deals with fertility ratio, which is defined as the number of children less than five years of age per 1000 women in the child-bearing age group (15-44 years). The most obvious difference between the 1960 and 1970 maps is the large overall change in fertility ratio. (See Figure 1.) Nearly all tracts in the SMSA have dropped, many substantially. There are some notable exceptions: the core of the near north area, northwest suburban areas, and portions of the southwest suburban areas. The largest drop seems to have occurred in the area southeast of 42nd and Center. Large drops have also occurred in Pottawattamie County rural areas, the Carter Lake-East Omaha area, and the northern part of the Benson area.

Further analysis is invited by the maps: What was the situation in 1965? Are the areas of relative increase the result of higher reproduction rates, or are families with children tending to locate in certain areas? What implications do the changes in Sarpy County have on continued population growth? What are the overall policy implications -- for example, location of new elementary schools?

The Percent Pre-School maps offer a slightly different perspective on the same general segment of the population. Percent Pre-School is defined as the percentage of the population under 18 years of age that is less than six years



C FERTILITY RATIO, 1960 FOR THE OMAHA NE-IA SMSA
C SOCIO-ECONOMIC ATLAS SERIES C1960, NO. 1
C CENTER FOR URBAN AFFAIRS, UNIV OF NEBR-OMAHA K.NAW

DATA VALUE EXTREMES ARE 164.86 947.26

ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
('MAXIMUM' INCLUDED IN HIGHEST LEVEL ONLY)

	1	2	3	4	5
MINIMUM	75.00	250.00	425.00	600.00	775.00
MAXIMUM	250.00	425.00	600.00	775.00	950.00

PERCENTAGE OF TOTAL ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL

1	2	3	4	5
20.00	20.00	20.00	20.00	20.00

FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL

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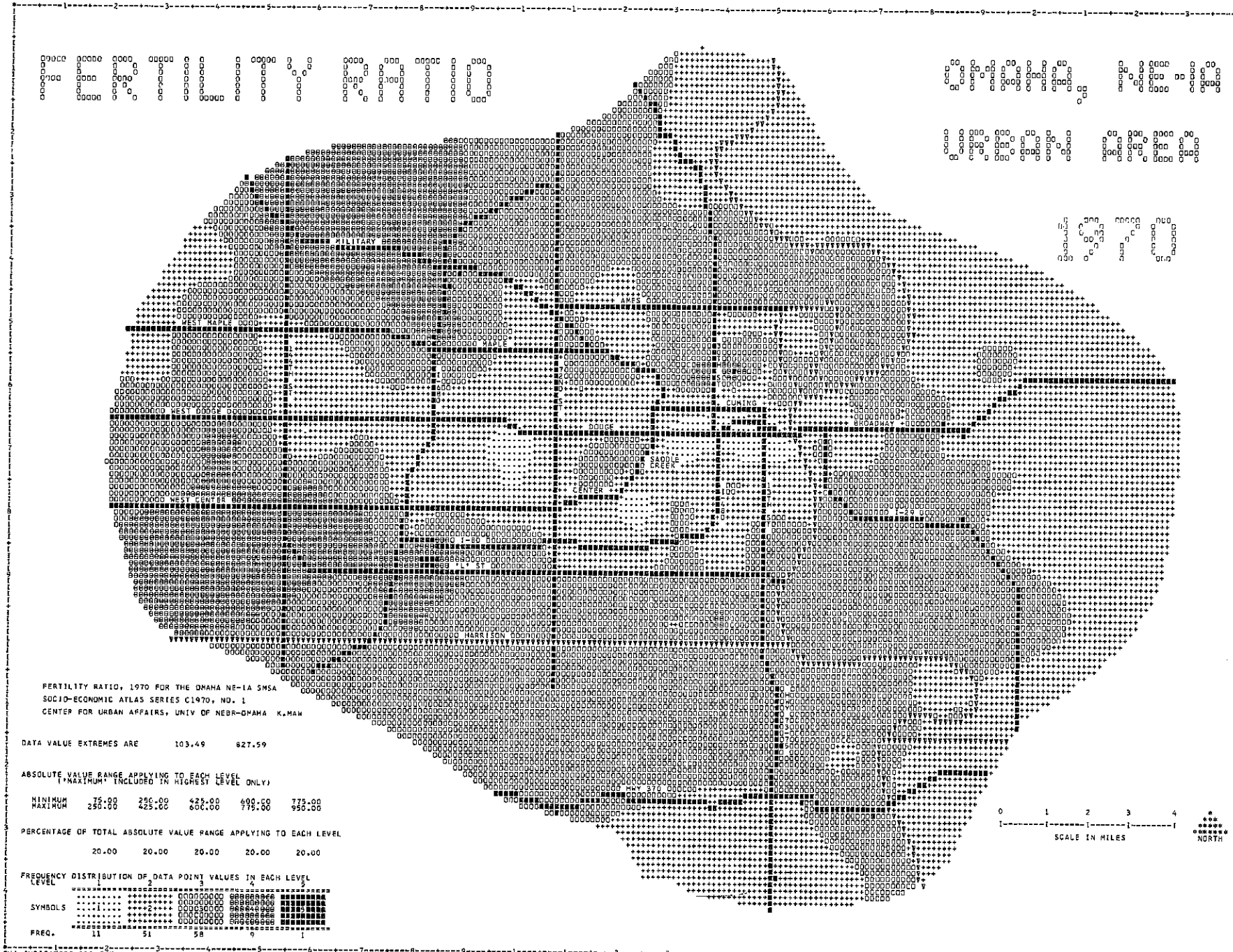
SYMBOLS	.	1	2	3	4
FREQ.	1	15	28	44	15



FERTILITY RATIO, 1970 FOR THE OMAHA NE-IA SMSA

SOCIO-ECONOMIC ATLAS SERIES C1970, NO. 1

CENTER FOR URBAN AFFAIRS, UNIV OF NEBR-OMAHA K.MAW

DATA VALUE EXTREMES ARE 103.49 827.59

ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
('MAXIMUM' INCLUDED IN HIGHEST LEVEL ONLY)

	1	2	3	4	5
MINIMUM	75.00	250.00	425.00	600.00	775.00
MAXIMUM	250.00	425.00	600.00	775.00	950.00

PERCENTAGE OF TOTAL ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL

1	2	3	4	5
20.00	20.00	20.00	20.00	20.00

FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL

LEVEL	1	2	3	4	5
SYMBOLS	.	1	2	3	4
FREQ.	11	51	58	9	1

of age. The 1960 map strongly parallels the 1960 Fertility Ratio map. Areas that are high in Fertility Ratio (southwest suburban, near north, 48th and Redick) are also high in Percent Pre-School. However, this covariance does not hold for all areas. Both the downtown area and the apartment areas around Mutual of Omaha have a high percentage of pre-school children, but low fertility ratios. A possible explanation for this is a high percentage of single persons and young marrieds.

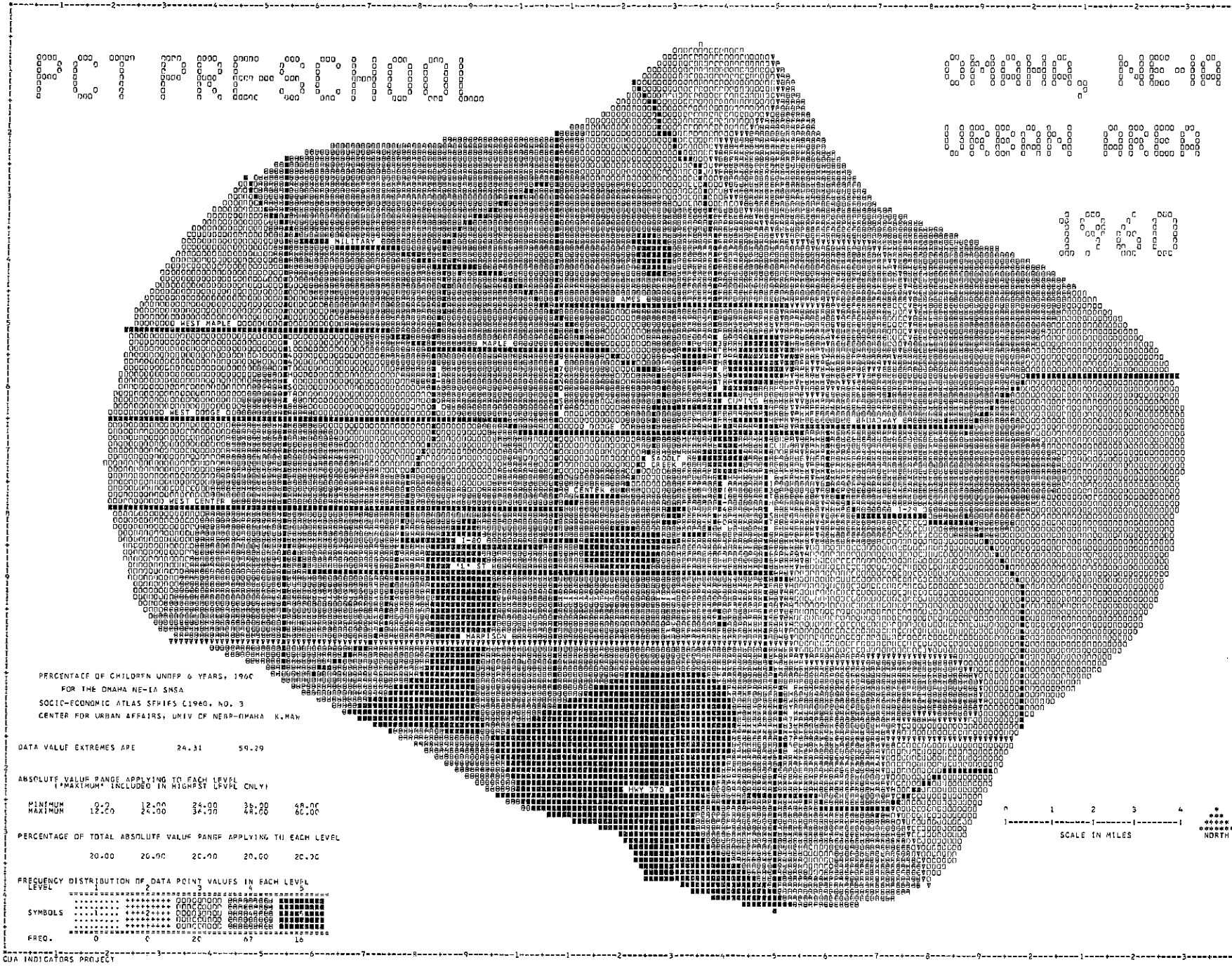
While the same basic pattern of covariance appears on the 1970 maps, it is not as pronounced, due in part to considerable variation in the fertility ratio data. More than 75 percent of the 1970 pre-school data values fall between 24 and 36 percent, as opposed to 21 percent in this category in 1960. The same anomolous areas, downtown and Mutual, appear in 1970.

The 1970 Pre-School map also offers some insight into the shortcomings of this particular mapping process. It is possible for one data point to have rather undesirable effects on the map. For example, the census tract containing Boys Town has a low pre-school percentage due to the lack of pre-school age children in residence. Because of the spacing of data points in this area, the corresponding map zone is much larger than should be properly inferred from the data.

Another problem appears when considering the location of child care facilities as a policy application for the map. These indicators are just indicators of characteristics. They do not necessarily bear a strong resemblance to the actual number of persons or housing units being measured for these characteristics. In this policy example, researcher needs could be better satisfied with some other type of map -- for example, a density map showing the number of pre-school children per acre, or better yet, the number of pre-school children with working mothers per acre. Both of these maps could be constructed from currently existing census and local data.

The last set of maps included here illustrates changes in the Low Rent Index, defined as the ratio of units with rents less than $80 to all units for which rent is tabulated. Most areas of low rent grew slightly during the decade. A large part of the lack of change over the decade may be explained by another potential source of difficulty with this type of mapping -- the lack of directly comparable decade data. Although the same rent categories have been applied to the data for both years, an $80 rent in 1970 (the cut-off point for low rent units for this indicator) is not really the same as an $80 rent in 1960, but rather a "deflated" rent for 1960 of around $70. However, neither the 1960 or currently available portions of the 1970 Census allows aggregating units within these deflated rent categories. Another problem, which was mentioned earlier, is the potentially misleading effect of anomolous data -- in this case a small pocket of very low-rental units in a tract which make up nearly all of the rental units in that tract. The large "bump" in the vicinity of 120th and Dodge is caused by fewer than ten low-rent units completely surrounded by an area where the average value of owner-occupied housing is over $40,000 and the remaining five rental units command rents in excess of $250. This type of misrepresentation can be eliminated either through some type of density mapping (discussed earlier) or by using a finer grid size -- in this case block group and enumeration district data. Maps at a finer grid size would be more expensive, but would offer greater and more accurate compositional detail and tend to deemphasize areas with potentially misleading values.

Despite these difficulties, the map presents several very interesting situations. Although the low-rent areas have generally increased in size, there has been very little westward movement. New high-rise apartments have noticeably lowered the index in the downtown area. The low-rent areas with the largest geographic change occurred in the Council Bluffs and East Omaha, areas with some



PERCENTAGE OF CHILDREN UNDER 6 YEARS, 1960
FOR THE OMAHA NE-IA SMSA
SOCIO-ECONOMIC ATLAS SERIES (1960, NO. 3
CENTER FOR URBAN AFFAIRS, UNIV OF NEBR-OMAHA K.MAW

DATA VALUE EXTREMES ARE 24.31 59.29

ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
(*MAXIMUM* INCLUDED IN HIGHEST LEVEL ONLY)

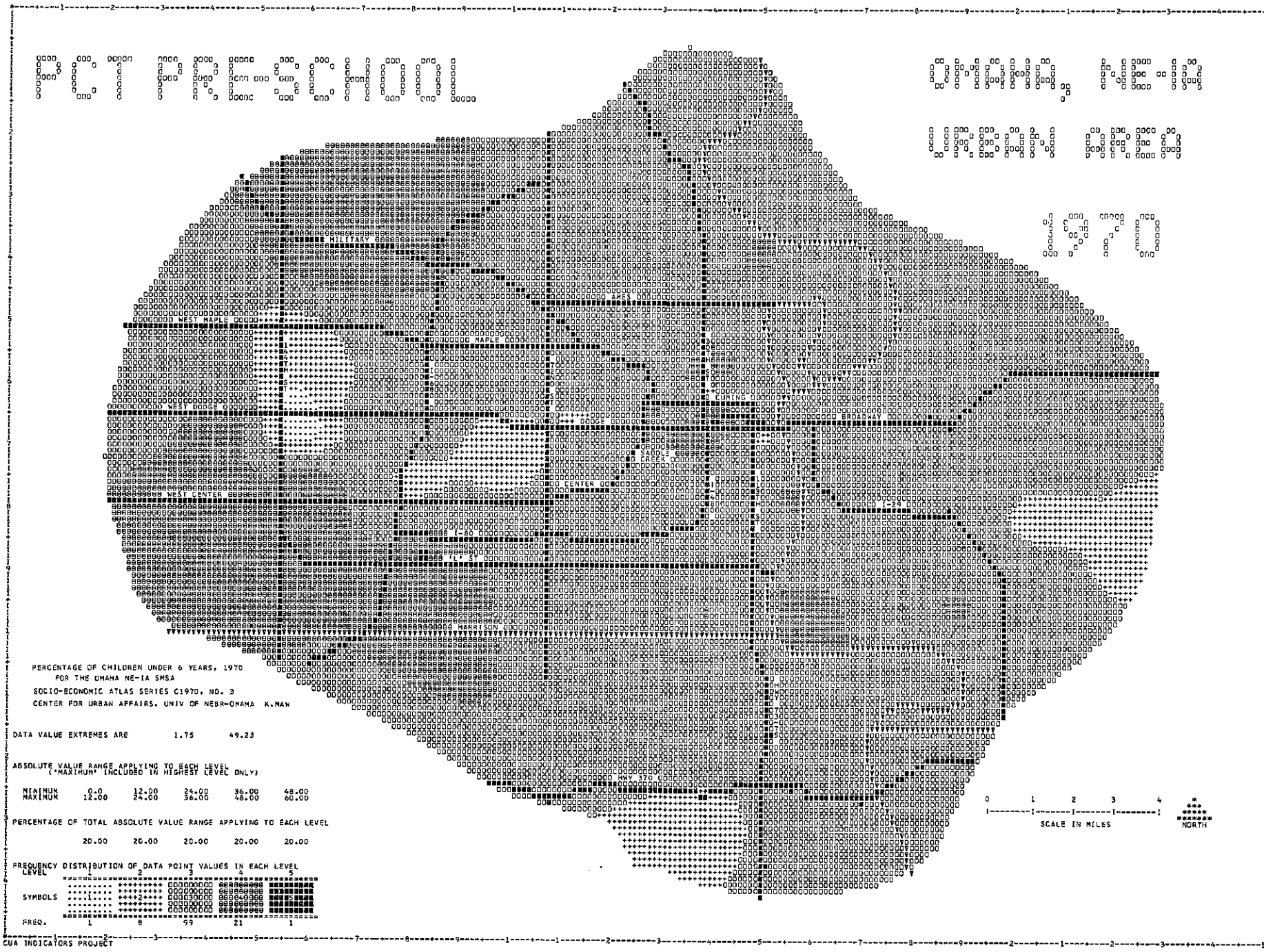
	1	2	3	4	5
MINIMUM	0.0	12.00	24.00	36.00	48.00
MAXIMUM	12.00	24.00	36.00	48.00	60.00

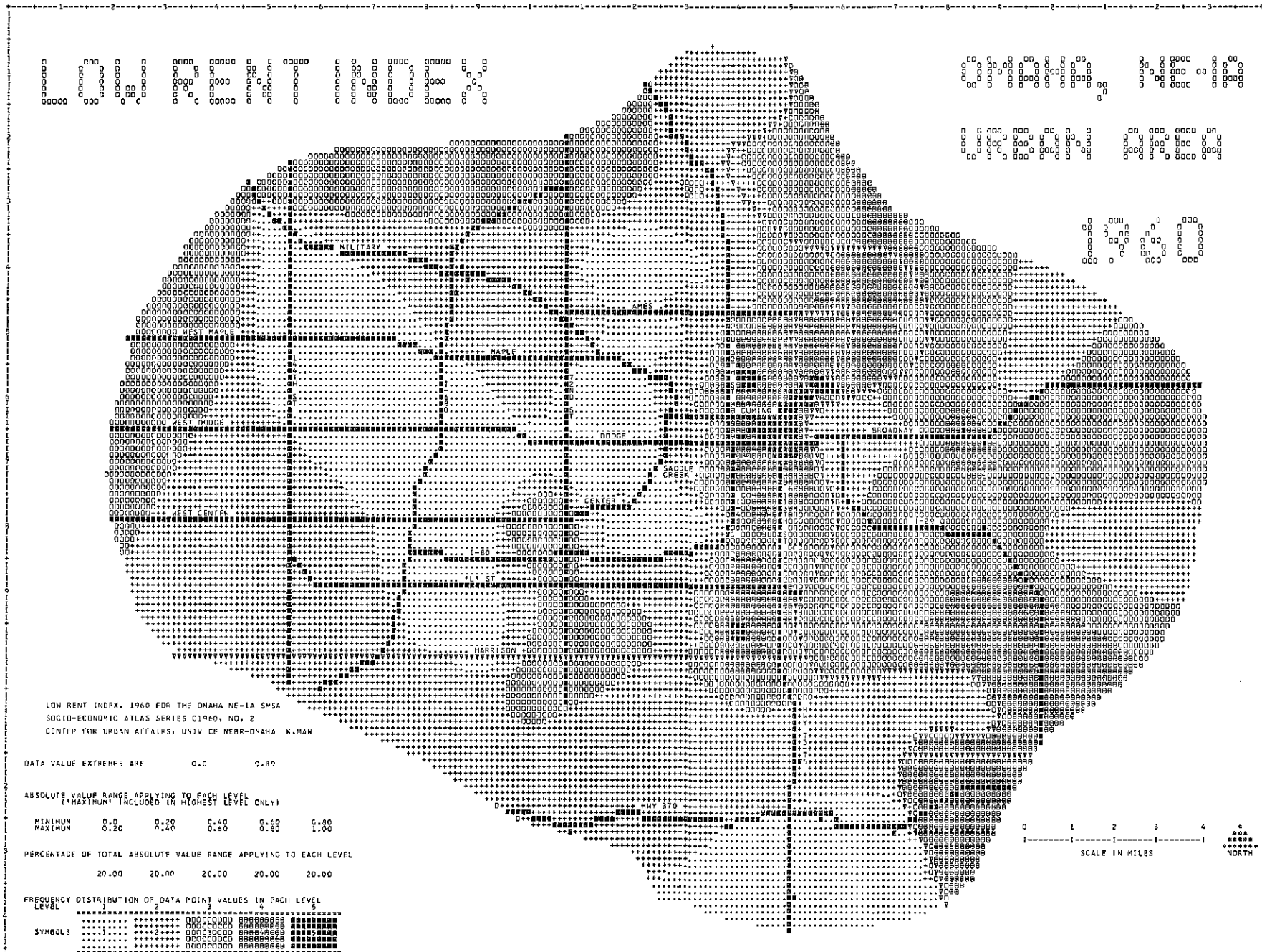
PERCENTAGE OF TOTAL ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL

1	2	3	4	5
20.00	20.00	20.00	20.00	20.00

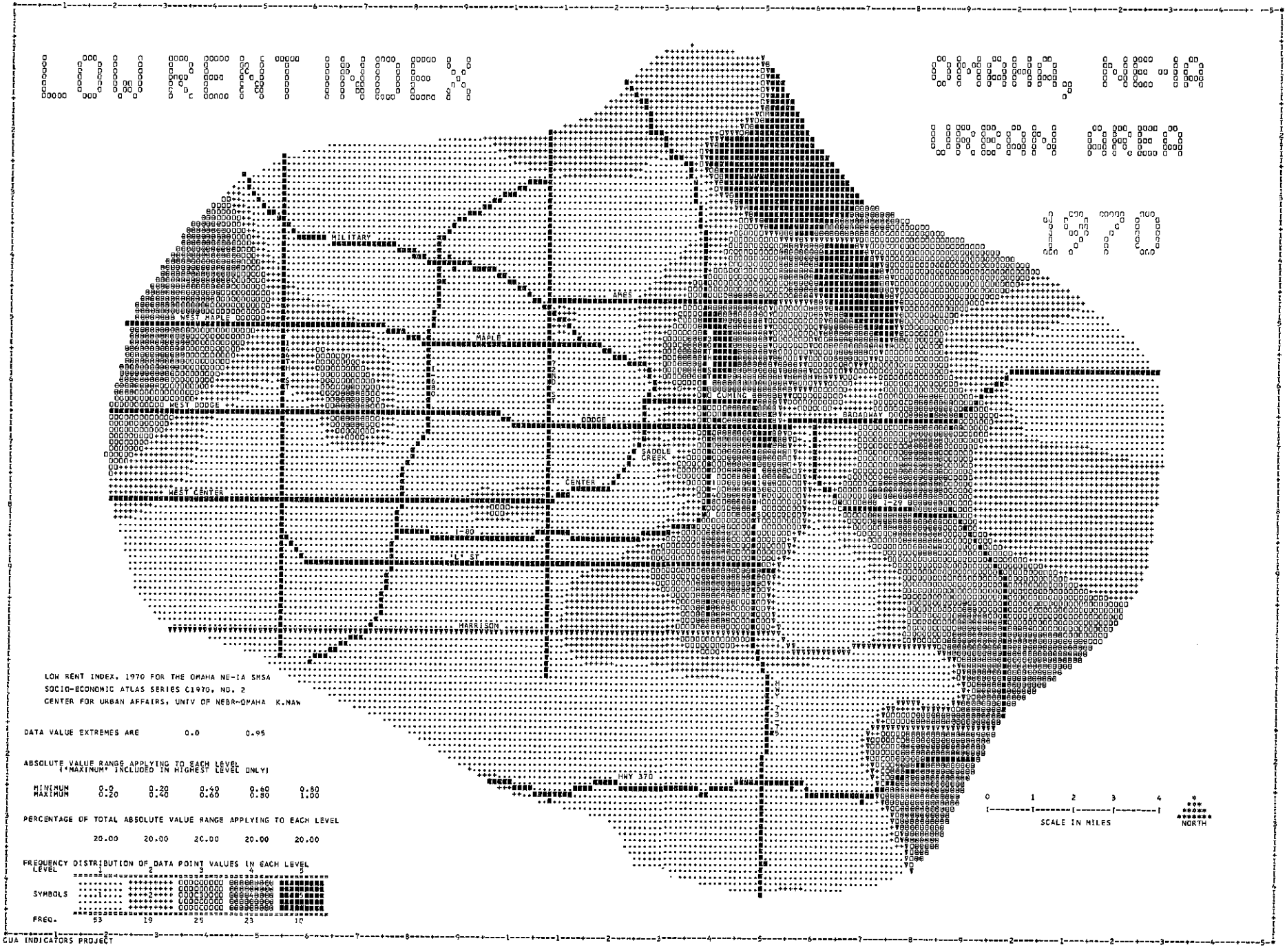
FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL

LEVEL	1	2	3	4	5
SYMBOLS	.	+	O	#	@
FREQ.	0	0	20	67	16


PERCENTAGE OF CHILDREN UNDER 6 YEARS, 1970
FOR THE OMAHA NE-IA SMSA
SOCIO-ECONOMIC ATLAS SERIES C1970, NO. 3
CENTER FOR URBAN AFFAIRS, UNIV OF NEBR-OMAHA K.MAW
DATA VALUE EXTREMES ARE 1.75 49.23
ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
('MAXIMUM' INCLUDED IN HIGHEST LEVEL ONLY)
MINIMUN 0.0 12.00 24.00 36.00 48.00
MAXIMUN 12.00 24.00 36.00 48.00 60.00
PERCENTAGE OF TOTAL ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
20.00 20.00 20.00 20.00 20.00
FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL
LEVEL 1 2 3 4 5
SYMBOLS
FREQ. 1 8 99 21 1
MILITARY
WEST MAPLE
MAPLE
WEST DODGE
DODGE
BROADWAY
CUMING
CREEK
WEST CENTER
CENTER
I-29
I-80
HWY. 370
SCALE IN MILES
NORTH



CUA INDICATORS PROJECT



LOW RENT INDEX, 1970 FOR THE OMAHA NE-IA SMSA
SOCIO-ECONOMIC ATLAS SERIES C1970, NO. 2
CENTER FOR URBAN AFFAIRS, UNIV OF NEBR-OMAHA K.MAW

DATA VALUE EXTREMES ARE 0.0 0.95

ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL
('MAXIMUM' INCLUDED IN HIGHEST LEVEL ONLY)

	1	2	3	4	5
MINIMUM	0.0	0.20	0.40	0.60	0.80
MAXIMUM	0.20	0.40	0.60	0.80	1.00

PERCENTAGE OF TOTAL ABSOLUTE VALUE RANGE APPLYING TO EACH LEVEL

1	2	3	4	5
20.00	20.00	20.00	20.00	20.00

FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL

LEVEL	1	2	3	4	5
SYMBOLS	.	+	0	8	#
FREQ.	53	19	25	23	10

CUA INDICATORS PROJECT

of the SMSA's lowest family incomes. Another point of interest is the steep gradient between the Near North Side and the Dundee area, where the index drops from more than .8000 to less than .2000 over a distance of less than one and one-half miles. In 1960, it took more than two miles for the same change in the area. The mapping process has in this case pinpointed an area deserving further study.

SYMAP, Census Summary Tapes, and other data processing developments will be of great assistance to both urban planners and social scientists in the future. One must be careful not be believe that "the computers can do everything", but instead learn to understand the dimensions of these new tools, both to encourage their use and discourage their misuse. The author hopes this "first look" will spur interest among local planners and researchers to consider the use of these tools in future efforts.

Revenue Receipts of School Districts in Douglas and Sarpy Counties 1970-1971
A Comparative Analysis

by Ralph H. Todd

This study examines the revenue receipts of the major school districts[1] located in Douglas and Sarpy Counties in an effort to answer the following questions. First, to what extent is there inequality of resources devoted to the education of students living in different school districts in Douglas and Sarpy Counties? Second, what is the relative tax effort made by residents of each district in support of education? Third, to what extent do the state and federal governments equalize the amount of revenue available per pupil?

Method

In order to arrive at some tentative conclusions about comparative financing of education in Douglas and Sarpy Counties, data have been reported and analyzed in terms of per pupil amounts. This study does not attempt a financial analysis within districts, but focuses only on the comparison of finances between districts. It is hoped that the information provided will be useful and will stimulate further inquiries into the problems of urban school finance in the Omaha metropolitan area.

Background

In the 1970-1971 school year, local and county receipts in Douglas and Sarpy Counties supplied 65 percent of the cost of education, almost all of which was

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[1] Includes all Class 2 through Class 5 districts. Excludes districts maintaining only the elementary grades from kindergarten through the 8th grade (Class 1) and districts which are organized to maintain high school education only (Class 6).

derived from property taxes. State funds supplied 19 percent, federal funds 11.5 percent, and 4.5 percent came from other local sources. In comparison, national averages show that localities provide about half of the cost of education, states about 40 percent, and the federal government less than 10 percent.

Comparison of Assessed Property Values Per Pupil

The local property tax base varies widely among school districts in Douglas and Sarpy Counties. In fiscal 1970, assessed valuation per pupil ranged from $3,492 in Bellevue to $19,235 in the Springfield school district, a ratio of 1 to 5.5. The average assessed value of property per pupil in the 12 districts was $10,641.

In Bennington, Elkhorn, Valley, Waterloo, Bellevue, and Papillion, the assessed values per pupil were considerably less than the combined average. For these six districts, the average tax base per student was $4,590. The school population of these districts represented approximately 17 percent of the total school population for all 12 districts.

In contrast, the Omaha, Westside, Millard, Ralston, Gretna, and Springfield districts each had greater assessed values per pupil than the combined average. The average tax base in these districts was $11,862 per pupil, or $7,272 more per student than the $4,590 average of the other six districts. When the average school levy of $38.87 per $1,000 of assessed valuation is applied to the $7,272 difference between the averages of the two groups, a disparity of $283 per pupil is found.

A comparison of the districts shows that because the average value of property per pupil is greater residents of the wealthier jurisdictions can pay lower taxes to support higher per pupil expenditures. To the extent that there is a correlation this could also mean a better quality education.[2]

Revenue Receipts and Effort

Revenue receipts available from assessed property valuation vary widely among the school districts of Douglas and Sarpy Counties. When the school district tax levy for 1971 is applied to assessed property valuations within each district one finds a range of revenue receipts per pupil from $169.01 in Bellevue to $606.99 in Waterloo. The inter-district average is $500.75.

A district's commitment to education might well be measured by the rate at which its citizens are willing to tax themselves to support their schools. Yet by this standard it is apparent that some school districts can enjoy relatively high per pupil yields with a low tax rate while in other districts a high tax rate yields a relatively low return. For example, one might assume that the Papillion school district is far more devoted to learning than Springfield, since Papillion citizens levied a school tax of $7.38 per $100 of assessed valuation, while residents of Springfield paid only $3.35. However, the maximum revenue available from the property tax in Papillion is $259.75 per student less than that available in Springfield. This type of comparison is not limited to Papillion and Springfield. Ralston, Westside, and Millard school districts, like Springfield, have a relatively lower tax and yet provide more revenue per student than do such school districts as Omaha, Elkhorn, Bennington and Gretna. This comparison shows that to the relatively less wealthy school districts, the financing of local education is a tax more, spend less system.

The table accompanying this report shows revenue receipts available per pupil both before and after state aid to each school district. A comparison of the

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[2]Although it appears reasonable to assume quality of education and money spent per student are related, this proposition is at least debatable. The Coleman Report and other recent educational research cause substantial doubt about the validity of this quite plausible hypothesis. For a review of the relevant research, see Schoettle, "The Equal Protection Clause in Public Education," Columbia Law Review, (1971) 1378-87.

FINANCIAL COMPARISONS OF 12 SCHOOL DISTRICTS -

District Name	District Number	Number of Pupils Enrolled 1970-71*	Assessed Value of Property per Pupil Enrolled**	School District Tax Rate***	Maximum General Fund Revenue per Pupil Available from Property Tax	Local & County Receipts per Pupil	Deviation of Local & County Receipts per Pupil from Inter-district Average
Inter-District Average	-	N.A.	$10,641.00	$38.87	$500.75	$516.89	-
Bennington	59	420	10,000.88	53.07	530.75	587.88	+ 71.0
Elkhorn	10	843	9,702.31	51.06	495.40	532.37	+ 15.5
Millard	17	4,576	13,410.43	41.16	551.97	514.14	- 2.8
Omaha	1	63,514	11,167.86	42.45	474.08	509.85	- 7.0
Ralston	54	3,537	14,923.84	39.92	595.76	566.65	+ 49.8
Valley	33	709	7,188.21	72.53	521.36	490.30	- 26.6
Waterloo	11	253	9,015.22	67.33	606.99	742.92	+226.0
Westside	66	10,005	13,949.95	40.60	566.37	590.97	+ 74.1
Bellevue	81	10,864	3,491.95	48.40	169.01	193.38	-323.5
Gretna	37	905	11,200.58	41.78	467.96	460.94	- 56.0
Papillion	27	3,738	5,229.79	73.58	384.81	383.83	-133.1
Springfield	46	795	19,234.97	33.51	644.56	629.47	+122.6

*Enrollment last Friday in September
**Based on assessed valuation, 1970
***General Fund, rate per $1,000 of assessed value

- DOUGLAS AND SARPY COUNTIES, 1970-1971

State Receipts per Pupil	State, Local & County Receipts per Pupil	Deviation of State, Local & County Receipts per Pupil from Inter-district Average	Federal Receipts per Pupil	Current Loans & Other Non-revenue Receipts per Pupil	Total Receipts per Pupil	Deviation of Total Receipts per Pupil from District Average	Average Teacher Salary K-12	Student Teacher Ratio	Average Teacher Salary per Pupil
$135.39	$652.28	-	$ 58.68	$ 71.22	$782.19	-	$8124	20.6	$404.6
141.65	729.53	+ 77.3	11.51	116.11	857.15	+ 75.0	7505	17.5	428.9
136.11	668.48	+ 16.2	17.54	3.27	689.29	- 92.9	7953	21.1	376.9
118.97	663.11	- 19.2	36.65	38.26	708.02	- 74.2	8490	20.8	408.2
136.67	646.52	- 5.8	81.35	8.84	736.71	- 45.5	8972	25.5	351.8
113.92	680.57	+ 28.3	30.62	207.13	918.32	+136.1	8667	20.0	433.4
134.81	625.11	- 27.2	24.27	.93	650.31	-131.8	7634	20.3	376.1
136.29	879.21	+226.9	3.83	11.25	894.29	+112.1	6678	12.0	556.5
136.40	727.37	+ 75.1	27.01	147.99	902.37	+120.2	9016	20.2	446.3
166.08	359.46	-292.8	288.38	1.51	649.34	-132.9	8411	23.4	359.4
133.41	594.35	- 57.9	41.66	92.24	728.25	- 53.9	7828	21.5	364.1
141.59	525.42	-126.9	104.42	41.87	671.71	-110.5	7918	26.5	298.8
128.78	758.25	+106.0	36.97	185.31	980.53	+198.5	8418	18.5	455.0

Source: Compiled by CUA. From School Finance Statistics obtained from the Nebraska State Department of Education

interdistrict average per pupil receipts with individual district per pupil receipts reveals that in 7 of the 12 districts, the disparity is greater after state aid than it is before. Disparities in the other five districts were eased to some extent. Although the state of Nebraska attempts to "equalize" aid to education via equalization grants, this type of aid is diluted by basic flat grants to all districts, rich and poor, and in fact, produces a bonus to some of the wealthier districts, e.g. Bennington, Westside, and Waterloo.[3]

When all local, state, and federal revenue receipts and non revenue receipts are combined, there is still a sizeable difference in total receipts per pupil among districts, from $980.53 in Springfield to $694.34 in Bellevue. The total amounts, however, in no way appear to reflect the effort made by the taxpayers of the respective communities. It should be pointed out that the measure of taxpayer effort, in this instance, is made with respect to the assessed property valuation in the district rather than per capita personal income.

In conclusion, one can state, that in most cases, the relatively wealthier districts receive more money per pupil than those districts with relatively less wealth. They also tend to spend more money on teachers' salaries per pupil and have a more favorable pupil-teacher ratio (see table). All of this is accomplished with tax rates that are lower than those imposed in the less wealthy districts, and this despite equalizing aid from the state of Nebraska.

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[3] In Nebraska equalization does not rest on grounds of different treatment for school districts with varying resource capabilities but is based on number of pupils in average daily membership at various grade levels; payment for gifted and culturally and educationally deprived pupils; transportation of school pupils; population density factor; enrollment increase factor; college preparation of faculty, and summer school programs.

Child Care Facilities in Omaha

by Carol Lunbeck Logan

The following article is from Child Care in Omaha, Part I: Facilities, published by the Center for Urban Affairs in December 1971, as the initial study in continuing child care research. The original study also includes tabulation of survey data for individual day care centers. Copies of the original study may be obtained on request from the Center for Applied Urban Research at UNO.

Care for the children of working mothers is rapidly developing into one of the major issues of the '70's. Today there are eight times as many working mothers as there were in 1940; the number has doubled since 1950.[1] It has been estimated that 41% of working wives are mothers of children under eighteen.[2]

Although licensed child care facilities have proliferated in recent years, lack of adequate care for children still presents a major problem to women who work, or who want to work. According to the 1970 census figures, there are 147,774 children under 18 in Omaha. Of these 35,512 are under five years of age. At present the number of working mothers with children under eighteen is not available. There are, however, a total of 4,241 children enrolled in the City's 119 licensed child care facilities.

This report is part of a Center for Urban Affairs project which also involved the development of a system for assisting individuals in locating suitable child care facilities (Child Care Facility Locator System). The report consists of the results of the survey which was a prerequisite to planning the locator sys-

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[1] Child Care Arrangements of Working Mothers in the United States, Children's Bureau publication No. 461, U.S. Department of Health, Education and Welfare, and U.S. Department of Labor, 1968.

[2] See Appendix I.

tem, and provides a summary of licensed child care facilities as they exist in Omaha.

In the spring of 1971 a telephone survey of all licensed child care facilities in the Omaha area was conducted. The area included the City of Omaha, Millard, Ralston, Papillion, Bellevue and Sarpy County. The total area was then broken into smaller units according to the map on the next page.

Child care facilities were defined as in Article 19, Board and Care of Children, Section 71-1901 which states that

> Child care shall mean engaged in the business of exercising the care, supervision, custody or control over children under sixteen years of age, for compensation or hire, in lieu of the care or supervision normally exercised by parents in their own home but shall not include casual care at irregular intervals...

The facilities were classified according to the following criteria:

(a) Day care center--provides care for pay for more than seven (7) children, none of whom may be under two years of age for any part of the day from 6:00 A.M. to 7:00 P.M. located in the operator's home or in a setting away from home.

(b) Day care home--provides care in the operator's own home for pay for not more than seven (7) children, two (2) of whom may be under two years of age, and for any part of the day from 6:00 A.M. to 12:00 midnight.

(c) Boarding home--provides 24-hour care for pay in a family home for two (2) but not more than four (4) children under sixteen years of age and from different families.[3]

The study done by CUA also included a category for nursery or pre-schools which do not require the same licensing and defined them as follows:

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[3]Minimum Standards for Licensing Day Care Centers for Children, State Department of Public Welfare, Division of Children and Family Services, Lincoln, June 1967.

(d) Pre-school--provides care for children of pre-school age (0-5) on a limited basis, usually either morning or afternoon sessions.

Not included in the study were baby sitting services, infant schools, casual sitters, or any service providing casual care at irregular intervals.

Each facility was questioned regarding the following:

1. Address.
2. Tuition charged.
3. Ages accepted.
4. Maximum capacity.
5. Present enrollment.
6. Sponsoring agency, if any.
7. Number on waiting list, if any.
8. Date of beginning operation.
9. Hours of operation.
10. Teacher (or staff) to child ratio.
11. Special emphasis, if any, of program.
12. Special qualifications and/or training of operator and/or staff.
13. Racial composition of children's groups.

The results were tabulated and are presented in the tables which follow.

TABLE I

NUMBER OF CHILD CARE FACILITIES BY TYPE AND GEOGRAPHICAL AREA

LOCATION	Homes	Centers	Pre-schools	Boarding Homes	Total
Central	6	5	7	0	18
Dundee-Happy Hollow	2	0	3	1	6
Benson	7	4	3	2	16
North	8	9	6	7	30
Northwest	3	2	1	1	7
West	0	1	6	2	9
Southwest	0	0	6	1	7
South	5	3	6	1	15
Millard, Ralston, Papillion	1	0	4	0	5
Bellevue, Sarpy Co.	2	0	4	0	6
TOTALS	34	24	46	15	119

CONCLUSIONS:

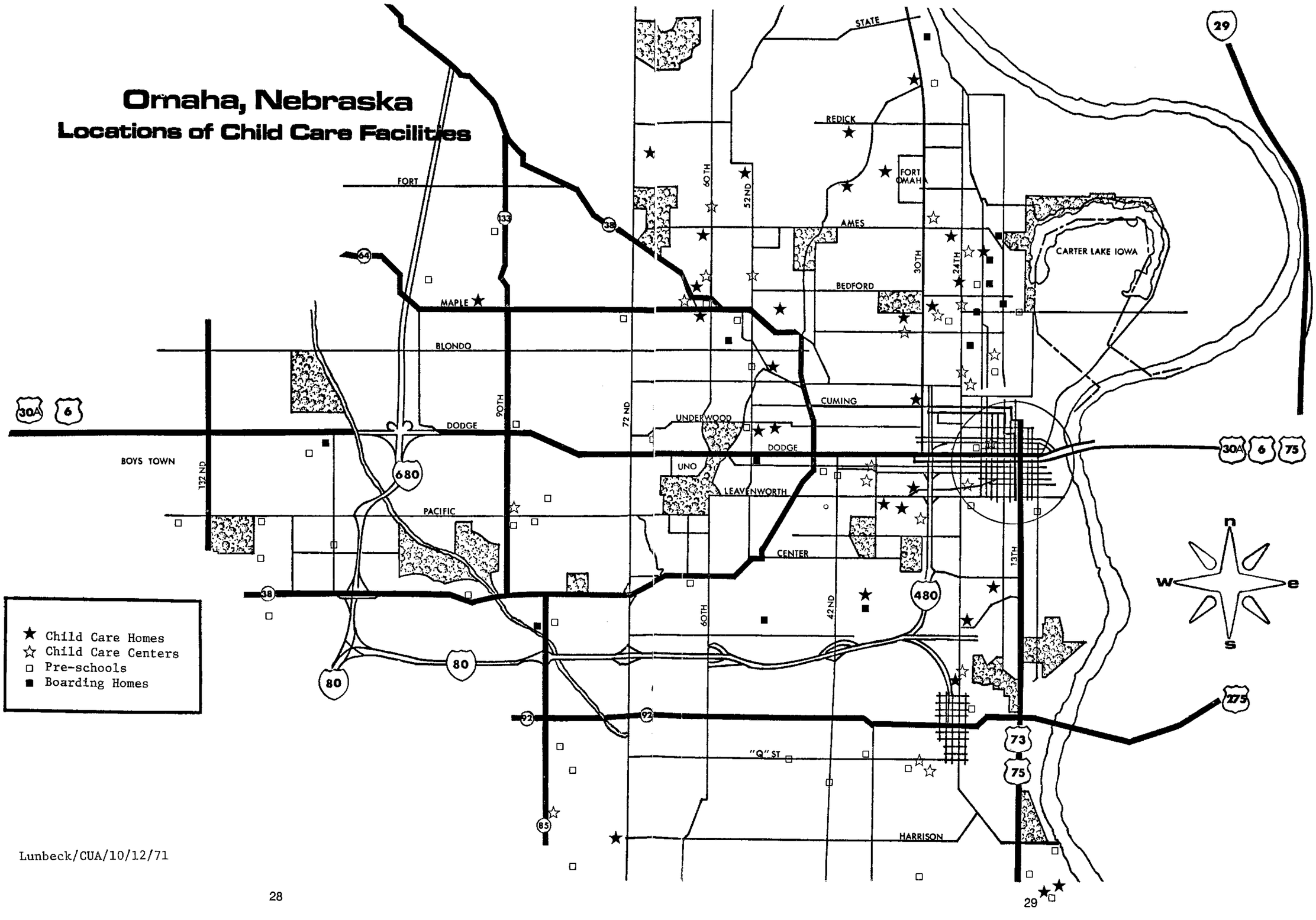
1. The poverty areas contain the most facilities.

2. Pre-schools far outnumber the other categories in most areas.

3. Homes outnumber centers but are more prevalent in poverty areas.

Omaha, Nebraska

Locations of Child Care Facilities



Lunbeck/CUA/10/12/71

TABLE II

ENROLLMENT AND CAPACITY OF CHILD CARE FACILITIES BY TYPE AND LOCATION

LOCATION	Homes		Centers		Pre-schools		Boarding		Total		
	Cap.	Enroll.	Cap.	Enroll.	Cap.	Enroll.	Cap.	Enroll.	Cap.	Enroll.	Vacancies
Central	48	42	205	157	830	774	-	-	1083	973	110
Dundee-Happy Hollow	12	10	-	-	185	181	5	5	202	196	6
Benson	61	56	323	287	126	124	7	6	517	473	44
North	86	50	352	271	510	328	24	18	972	664	308
Northwest	19	13	104	55	120	80	2	1	245	149	96
West	-	-	12	7	472	418	6	4	490	429	61
Southwest	-	-	-	-	548	533	2	1	550	534	16
South	31	21	49	45	365	360	4	1	449	427	22
Millard, Ralston, Papillion	7	3	-	-	214	148	-	-	221	151	70
Bellevue, Sarpy Co.	11	7	-	-	256	238	-	-	267	245	22
TOTALS	275	202	1045	822	3626	3181	50	36	4996	4241	755
Vacancies	73		223		445		14		755		

CONCLUSIONS:

1. In every area the facilities appear to be operating below the stated capacity.

2. There are 1,060 children in total child care programs (day care homes, centers and boarding homes) as opposed to 3,181 in pre-schools. Twenty-five percent of all children in child care facilities are in total care; 75% in pre-school or nursery schools.

TABLE III

FACILITIES HAVING WAITING LISTS BY NUMBER ON WAITING LIST

Facility	Number on Waiting List					Total Facilities	Total Waiting	No Waiting List
	(1-3)	(4-6)	(7-10)	(11-14)	(15+)			
Day Care Home	3	1	1	-	-	5	22	29
Day Care Center	1	1	2	1	1	6	55	18
Pre-school	2	4	3	1	4	14	753	31
Boarding Home	0	0	0	0	0	0	-	15
Totals	6	6	6	2	5	25	830	93

CONCLUSIONS:

1. Although a comparison of total enrollment and capacity figures seems to show that the facilities are not operating at capacity, 25 facilities had a total waiting list of 830 at the time of the survey. Seventy-seven of these were in need of total day care.

2. From Table II: All centers together are 755 below capacity (Table II) but there is also a total of 830 (Table III) on waiting lists for entrance. Possible explanations could be discrepancies existing between needs and supply in terms of location of facilities, ages accepted, fees charged, type of program offered, or any of the criteria variables.

TABLE IV

NUMBER OF NEW FACILITIES BY YEAR OF LICENSING AND GEOGRAPHICAL AREA

LOCATION	1946	'48	'50	'52	'54	'56	'58	'60	'62	'64	'66	'68	1971	TOTALS
Central	0	1	2	0	0	1	2	0	2	2	3	1	4	18
Dundee-Happy Hollow	0	0	1	1	0	0	1	0	0	0	0	2	1	6
Benson	0	0	0	1	0	2	1	0	0	3	1	3	5	16
North	0	0	4	0	2	1	0	2	0	4	5	6	5	29*
Northwest	0	0	0	0	0	0	0	0	2	1	1	0	3	7
West	0	1	0	0	0	0	0	0	0	4	0	2	1	8*
Southwest	0	0	0	0	0	0	1	0	0	0	3	1	2	7
South	1	0	1	0	0	0	0	1	2	1	1	4	4	15
Millard/Ralston/ Papillion	0	0	1	0	0	0	0	1	0	0	2	1	0	5
Bellevue/Sarpy County	0	0	0	0	0	0	0	0	1	0	1	4	0	6
Total	1	2	9	2	2	4	5	4	7	15	17	24	25	117
Cumulative Total		3	12	14	16	20	25	29	36	51	68	92	117	

1. Care has grown most rapidly in the areas designated as poverty or target areas: North Omaha, Central City, South Omaha.

*Child care centers without license not included.

TABLE V

NUMBER OF FACILITIES BY FEES CHARGED

FACILITY	Dollars Per Week					No	No	
	0-4	5-9	10-14	15-19	20+	Chg.	Ans.	TOTAL
Day Care Homes	0	0	4	23	6	0	1	34
Day Care Centers	2	1	3	9	4	8	0	27
Pre-schools	18	16	2	1	0	9	1	47
Boarding Homes	0	0	0	3	1	7	4	15
TOTALS	20	17	9	36	11	24	6	123*

Fees range from 0 to $25 per week.

*Explanation of discrepancy in total number of facilities:

One center had a sliding scale from 0-18, thus it has been included in all four categories.

One pre-school charges $5 for children not sponsored by OIC; no charge for those sponsored by OIC. Therefore, this facility has been placed in both categories.

GRAPH I
GROWTH OF CHILD CARE FACILITIES

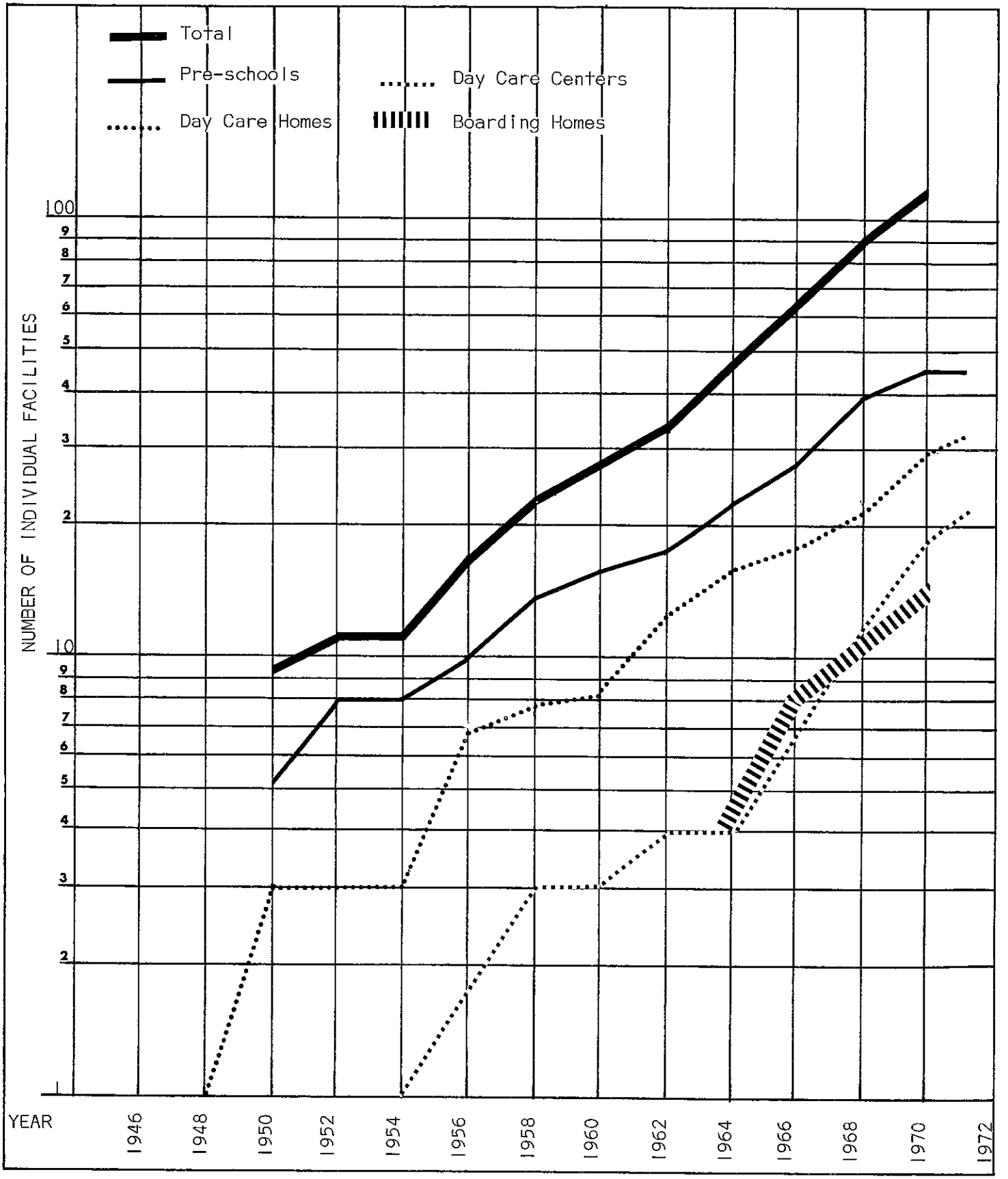


TABLE VI

TOTAL ENROLLMENT AND WEEKLY FEES BY LOCATION & TYPE

LOCATION	Homes	Centers	Pre-schools	Boarding	Total
Central					
Enrollment	42	102	634	0	778
Tuition	$698.00*	$1,970.00	$162.50	0	$2,830.50
Dundee-Happy Hollow					
Enrollment	10	0	106	5	121
Tuition	$190.00	0	$262.50	$75.00	$527.50
Benson					
Enrollment	49	287	102	6	444
Tuition	$860.00	$5,912.50	$351.50	0	$7,124.00
North					
Enrollment	50	277	275	13	615
Tuition	$749.00	$1,179.00	$1,746.00	$58.00	$2,732.00
Northwest					
Enrollment	13	55	80	0	148
Tuition	$235.00	$740.50	$800.00	0	$1,775.50
South					
Enrollment	14	45	360	1	420
Tuition	$197.00	$333.50	$986.00	$15.00	$1,531.50
West					
Enrollment	0	7	206	1	214
Tuition	0	$175.00	$1,102.75	0	$1,277.75
Southwest					
Enrollment	0	0	418	1	419
Tuition	0	0	$2,490.00	0	$2,490.00
Millard/Ralston					
Enrollment	3	0	148	0	151
Tuition	$45.00	0	$897.21	0	$942.21
Bellevue					
Enrollment	7	0	238	0	245
Tuition	$114.00	0	$2,434.00	0	$2,548.00
TOTALS	188	773	2,567	27	3,555
Total Weekly Fees	$3,088.00	$10,310.50	$11,232.46	$148.00	$24,778.96
Av. Weekly Fee per child	$\bar{x}$ = $16.00	$\bar{x}$ = $13.34	$\bar{x}$ = $5.30	$\bar{x}$ = $4.37	

The figures do not reflect the total enrollment and fees; some facilities not included are those with sliding fee scales and those not responding to the questions.

*The total fees for each cell were arrived at by multiplying the enrollment by the weekly fee for each facility in the category.

TABLE VII*

MEDIAN WEEKLY FEES BY LOCATION AND TYPE

LOCATION	Homes Median Fee	Number Homes	Centers Median Fee	Number Centers	Pre-schools Median Fee	Number Facilities	Boarding Median Fee	Number Facilities
Central	$15.00	6	$16.25	4	0	4	--	--
Dundee-Happy Hollow	$18.50	2	--	--	$ 2.63	2	$15.00	1
Benson	$16.25	6	$18.50	4	$ 3.50	2	0	1
North	$15.00	8	0	8	$ 4.75	4	0	6
Northwest	$20.00	3	$17.75	2	$10.00	1	--	--
West	--	--	$25.00	1	$ 5.50	3	0	1
Southwest	--	--	--	--	$ 5.25	5	0	1
South	$15.00	4	0	3	$ 3.13	6	$15.00	1
Millard/Ralston Papillion	$15.00	1	--	--	$ 6.13	4	--	--
Bellevue	$16.50	2	--	--	$ 6.25	4	--	--

-- indicates no information

* The number of facilities included in Table VII varies from the total because all facilities did not respond to the question regarding fees charged.

TABLE VIII

TOTAL HOURS OF OPERATION PER DAY

TYPE OF FACILITY	TOTAL HOURS ALL FACILITIES	AVERAGE HOURS PER DAY PER TYPE
Homes	348.50	$\bar{x}$ = 10.25
Centers	258.25	$\bar{x}$ = 10.76
Pre-schools	198.25	$\bar{x}$ = 4.30
Boarding	--	--
TOTAL	805.00	

TABLE IX

HOURS OF OPENING AND CLOSING BY TYPE OF FACILITY

HOURS	OPENING			CLOSING			TOTALS
	Homes	Centers	Pre-schools	Homes	Centers	Pre-schools	
4:30	1						1
6:00	5						5
6:30	4	9					13
7:00	11	12					23
7:30	9	1					10
8:00	3						3
8:30		1	2				3
9:00		1	42				43
9:15			1				1
9:30			1				1
11:00						7	7
11:15						2	2
11:30						12	12
12:00						3	3
1:30						1	1
2:30						3	3
3:00				1		7	8
3:15				1		4	5
3:30						4	4
3:45						1	1
4:00						1	1
5:00				10	7		17
5:30				13	7		20
6:00				10	5		15
6:30				1			1
7:00				1			1
9:00				1			1
2:00AM				1			1
Any	1						1
2 shifts			20				20

TABLE X

UPPER AND LOWER AGE LIMITS OF CHILD CARE FACILITIES

AGES	LOWER LIMIT No. of Facilities	UPPER LIMIT No. of Facilities	TOTALS
Below 1	25		25
1	6		6
2	30	2	32
3	46	1	47
4	1	11	12
5	4	50	54
6	1	12	13
7		5	5
8		10	10
9		1	1
10		2	2
11		0	0
12		3	3
13		4	4
14		1	1
15		2	2
16		15	15

TABLE XI

NUMBER OF FACILITIES BY SPECIAL EMPHASIS

Facility	Retarded	Handi-capped	Blind	Monte-ssori	Crea-tive	General	Other*	Total	Total No. of Facil.
Day Care Homes	-	-	-	-	1	-	-	1	34
Day Care Centers	1	3	-	1	1	9	1	16	24
Pre-Schools	3	1	1	2	2	45	3	57	46
Boarding Homes	-	-	-	-	-	-	-	-	15
Totals	4	4	1	3	4	54	4	74	119

*"Other" includes: (1) physical and educational for brain damage; (2) pre Head Start; (3) low income pre-school; (4) non-sectarian, physical education.

CONCLUSIONS:

1. Of the 34 Day Care Homes, only one attempted any special training for the children.
2. Sixteen of the 24 Day Care Centers attempted more than custodial care.
3. Pre-schools seemed to provide more special programs to the extent that some mentioned more than one area of specialization.

TABLE XII

ENROLLMENT AND CAPACITY IN SPECIAL PROGRAMS BY TYPE OF FACILITY AND TYPE OF PROGRAM

FACILITY	No. of Fac.	Retarded Cap.	Retarded Enroll.	Handicapped Cap.	Handicapped Enroll.	Blind Cap.	Blind Enroll.	Montessori Cap.	Montessori Enroll.	Creative Cap.	Creative Enroll.	TOTAL Cap.	TOTAL Enroll.	Vacan-cies
Day Care Homes	1	-	-	-	-	-	-	-	-	7	10	7	10	3
Day Care Centers	16	12	7	112	105	-	-	200	159	200	159	524	430	94
Pre-schools	46	80	35	60	56	25	22	245	195	80	74	490	382	108
TOTALS	63	92	42	172	161	25	22	445	354	287	243	1021	822	199
Vacancies		50		11		3		91		44		199		

TABLE XIII

QUALIFICATIONS OF STAFF MEMBERS
BY TYPE OF FACILITY

STAFF	Home	Center	Pre-school	Boarding	Total
Teachers	4	-	-	-	4
Nurses	3	7	5	-	15
Child Care Trained	1	5	-	-	6
First Aid Trained	-	2	1	-	3
Mothers	26	-	-	-	40
Volunteers	-	87	-	14	87
TOTALS	34	101	6	14	155

TABLE XIV

NUMBER OF FACILITIES BY SPONSOR* AND TYPE

Major Sponsor	Home	Center	Pre-school	Boarding	Total
Catholic	-	1	4+	-	5
Protestant	1	3	13	-	17
Jewish	-	-	2	-	2
County	2	4	2	11	19
GOCA	-	1	1	-	2
UCS	-	3	6	-	9
Other#	-	1	9	-	10
Private	31	11	13	1	56
No Answer	-	-	-	3	3
TOTAL	34	24	46	15	

*Those facilities which receive aid or support from sources other than the fees charged are considered to be under sponsorship. Usually these are non-profit organizations. Those facilities where fees charged are the only source of revenue are considered private, and may be profit-making.

+These four pre-schools are also sponsored by the UCS and have been included also in that category.

#The "other" category includes the following: YMCA/YWCA, OIC, Omaha Parks and Recreation, District 66, Federal, Indian Community Center.

A national survey of child care arrangements showed that 49.3 percent of children of working mothers were cared for in their own homes, 19.7 percent were cared for in someone else's home, while only 2.9 percent were cared for in group day care centers (1968:90). Despite a rapid proliferation of licensed facilities in recent years, Omaha's group day care centers with a total enrollment of 1,060 are accommodating an estimated 2.2 percent of the children of working mothers. While these statistics reveal existing patterns, they do not explain whether they exist by design, or as a result of lack of alternative choices.

Prevailing values and attitudes can impede efforts to provide child care services to those who need it most. Reality must be separated from myth. At present there is very little substantive sociological knowledge upon which to make policy and plans. Answers must therefore be sought to a number of questions.

(1) How are children of working mothers cared for if they are not in licensed facilities?

(2) What provisions are made for after school care for children of working mothers?

(3) How many working mothers would prefer group day care for their children if it were possible?

(4) What income levels most need day care, and what should they be expected to pay?

(5) In what geographic area does the greatest need for facilities exist?

(6) How many working mothers with children under 18 are also heads of households?

(7) Should day care services be available to children of working mothers only?

Finding some answers to these and other pertinent questions may be vital to practical considerations of decision making, funding, program planning and

evaluation. Such answers may provide insight into the value-attitude sets which underlie our present child care arrangements, as well as point out the deficiencies of the system.

There are at present no comprehensive studies of the need for day care in Omaha. Of the three existing studies, one (Western Electric) is based on twenty-one replies from a sample of 17,000; another (District 66) is based on a sample of parents of school children in one goegraphical area alone, and the third (Jewish) consists of a very limited number of interviews which are not at all conclusive.

Several areas of study need to be pursued:

(1) Child care arrangements and needs of the general population (sample survey).

(2) Measurement of parents' views of present child care arrangements (survey or census of parents of children in child care).

(3) Quality study of existing child care centers. (Interviews with personnel-operators or directors of centers.)

(4) Population and age group breakdown by census tract and/or block group.

(5) Resource collection of day care literature, for program development for all program components: health, education, child development, physical plant, nutrition, social and psychological evaluation.

A coordinated community effort in the above areas of study can produce results which will give a factual foundation to the development of child care services where they are most needed and will be the most beneficial.

APPENDIX. CALCULATIONS FOR FIGURES USED IN TEXT

A. Percent of Working Mothers =
(based on U.S. Census, CPS)

29,304 ever married women with children under 18 in sample
12,122 ever married working women with children under 18 in sample

= 41%

B. Number of Working Mothers in Omaha

Of 53,164 working wives (Omaha-World Herald retail market analysis sample)
× 41% (See above)

= 21,797 are working mothers with children under 18.

Error: National sample of ever married women includes divorcees, widows, etc. -- which World-Herald study may not.

C. Number of children of Working Mothers in Omaha.

2.2 average number of children per family (World Herald)

× 21,797 working mothers (see B above)

= 47,953 children of working mothers in Omaha

D. Percent of Children of Working Mothers in Omaha in Day Care:

4,241 children in child care facilities (CUA survey)

47,953 children of working mothers (See C above)

= 9%

Error: Not all children in child care are necessarily children of working mothers, since pre-school centers were included.

E. Adjusted Percent of Children of Working Mothers in Day Care.

1,060 children (excluding pre-schools)
47,953 children of working mothers

= 2.2% of children of working mothers in child care

F. Population 18 and under for Omaha (U.S. Census, First Count, 1970)

Total 18 and under = 136,692

under 5 = 32,585

References:

1. U.S. Department of Health, Education and Welfare, and U.S. Department of Labor
   1968 Children's Bureau publication No. 461, Child Care Arrangements of Working Mothers in the United States.

2. U.S. Department of Labor
   1971 Marital and Family Characteristics of Workers, March 1970, Special Labor Force Report 130.

3. Omaha World Herald
   1971 Omaha; Profile of a Prosperous Market: 27th Annual Consumer Analysis.

4. State Department of Public Welfare
   1967 Minimum Standards for Licensing Day Care Centers Caring for Children, Division of Children and Family Services.

5. State Department of Public Welfare
   1967 Minimum Standards for Licensing Day Care Homes Caring for Children, Division of Family and Child Services.

A Çompari$on of Food Ço$t, Quality, and $tore A¢¢e$$ibility in Omaha, Nebra$ka

by William Anthes

Introduction

In recent years there has been a growing awareness of one of the basic incongruities that exists in the American economy. This awareness was probably crystallized in Michael Harrington's book, The Other America,[1] in which he pointed out quite vividly the existence of another America, unseen by the great majority, and yet all too real to the great minority. One aspect of this other America, and the thrust of this article, is the disadvantaged position in which low income families and individuals find themselves when they purchase goods and services.

Following the publication of Harrington's work, other books appeared which dealt quite specifically with the problems facing low-income consumers. Probably no book was quite as thorough and revealing as The Poor Pay More by David Caplovitz.[2] The Caplovitz book dealt with the many purchases made by the poor and the many problems facing the low income consumers who have few shopping alternatives. In addition to this and other publications from the private sector, hearings were conducted by a subcommittee of the House of Representatives and a study was undertaken by the Bureau of Labor Statistics.[3] These and other writings prompted the research which culminated in this article.

While it is recognized that the low-income consumer faces problems with re-

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[1]Michael Harrington, The Other America (New York: Macmillan, 1962).

[2]David Caplovitz, The Poor Pay More (New York: The Free Press, 1967). See also Frederick D. Sturdivant, The Ghetto Marketplace (New York: The Free Press, 1969).

spect to many purchases, such as hard goods, automobiles, personal services, and others, the emphasis of this study was the cost, quality, and availability of food in low-income areas. The decision to limit the current effort to food items was based on the availability of prices, sanitation ratings, and quality estimates, and on the importance and regularity of grocery purchases to the budgets of low-income individuals and families.

A prior study of food cost and quality in Omaha, completed in the summer of 1967, was conducted by Orian B. Captain and Matilda S. McIntire, M.D. of the Omaha-Douglas County Health Department.[4] Among the several conclusions of the Captain and McIntire study were the following. First, with few exceptions, explainable differences were found between food stores in poverty and non-poverty areas. The most striking differences, however, occurred between neighborhood and chain stores, rather than between areas of poverty and affluence. Neighborhood stores in the poverty area had poorer sanitation standards and charged higher prices. Quality items, when available, cost more. On the average, chain stores provided lower prices for quality food items and sanitation. Second, neighborhood stores were abundant in number and widely distributed in the poverty area while chain stores were sparsely located. Lack of transportation to increase their shopping alternatives presented a major problem for residents in the poverty area interested in obtaining better value for their food dollar. Third, the data gathered by Captain and McIntire tended to support the view that, on the average, food did cost more for some items in the poverty area.

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[3]United States Congress, House of Representatives, Consumer Problems of the Poor: Supermarket Operations in Low-income Areas and the Federal Response, Hearings before Subcommittee of the Committee on Government Operations, 90th Congress, 2nd Session, 1968. National Commission of Food Marketing, "Prices Charged in Food Stores in Low and High Income Areas of Six Large Cities," Technical Study #10, (Washington: Bureau of Labor Statistics, 1966).

[4]Orian B. Captain and Matilda S. McIntire, M.D., "Cost and Quality of Food in Poverty and Non-poverty Urban Areas," Journal of the American Dietetic Association, 55:6, (December, 1969) 569-571.

Methodology of the Current Study

The present study was completed during the summer of 1971.[5] The list of Omaha food stores was taken from the ratings of sanitary conditions published by the Omaha-Douglas County Health Department.[6] In May, 1971 there were 172 food stores in Omaha, excluding food departments within department stores, rated as to sanitary conditions.[7] The food stores were rated either excellent, excellent-good, good, or good-fair. None of the 172 stores were listed in the excellent category. Table I provides a breakdown of the food stores into the remaining three categories. The highest percentage of stores, both chain and neighborhood, were rated "good". The next highest percentage for chain stores (approximately 40 per cent) was in the "excellent-good" category, while the next highest percentage for neighborhood stores (slightly more than 41 percent) was in the "good-fair" category. There appeared to be a tendency for chain stores to be rated somewhat higher on the sanitary scale than neighborhood stores.

TABLE I

SANITARY CONDITION BY STORE TYPE

Sanitary Condition	Chain		Neighborhood	
	Number	Per Cent	Number	Per Cent
Excellent-Good	23	37.7	15	13.5
Good	32	52.4	50	45.0
Good-Fair	6	9.8	46	41.4
	61	100.0	111	100.0

[5]The data for this study was compiled by David Langhery under supervision of the author.

[6]Omaha-Douglas County Health Department, Sanitary Ratings of Eating Establishments and Retail Food Stores in Omaha (Omaha: May 1, 1971).

[7]Chain stores in this study include part of three or more stores owned and operated by individuals, partnerships, or corporations. A neighborhood store was defined as one or two stores owned and operated by individuals, partnerships, or corporations. Poverty and non-poverty definitions were based on first count information from the 1970 Census provided by the Center for Urban Affairs.

Eighteen stores were sampled in the study, representing slightly more than 10 per cent of the total number of chain and neighborhood food stores included in the Health Department report of May 1, 1971. Seven chain stores were sampled, with three located in or close to poverty areas and four in non-poverty areas. Eleven neighborhood stores were sampled, with seven in poverty areas and four in non-poverty areas.

Thirty-five food items in six food categories were selected for price sampling. The food categories were: canned goods, dairy products, baby foods, fresh fruits and vegetables, miscellaneous dried foods, and meats and poultry. Where applicable, the price of each item was noted for particular brand names and package size. Fruits and vegetables were priced and rated as to size, color, physical appearance, and condition.

Findings of the Study

When this study was conducted there were 172 food stores operating in Omaha, approximately 111 neighborhood stores and 61 chain stores. Two chain stores were operating in poverty areas while three other chain stores were operating on the boundaries of poverty areas. In total, only five, or slightly more than 8 percent, of all chain stores operating in Omaha were doing business in or close to poverty areas. The number of chain stores in poverty areas has been declining slowly. In 1967, there were six chain stores located in poverty areas, in 1969 there were four, and by 1971 the number had fallen to two. On the other hand, twenty-six neighborhood stores, approximately 23 per cent of the total number of neighborhood stores, operated in poverty areas. It therefore appears that poverty area residents are limited as to the choice of grocery shopping alternatives since neighborhood stores are more accessible than chain stores.

Table II summarizes the cost data for chain and neighborhood stores in both poverty and non-poverty areas. The figures within the table represent the average cost of purchasing one of each of the thirty-five sample items in the selected stores.

TABLE II

FOOD PURCHASE COSTS BASED UPON
THIRTY-FIVE ITEMS IN AN EIGHTEEN STORE SAMPLE

	Chain	Neighborhood
Poverty	$15.51	$15.30
Non-poverty	$15.32	$15.21

The average cost of purchasing the thirty-five items from chain stores in poverty areas was $15.51 while these same items in non-poverty chain stores had an average cost of $15.32, or nineteen cents less. The neighborhood stores had an average cost of $15.30 in poverty areas as opposed to $15.21 in non-poverty areas, or nine cents less. The data would tend to indicate higher food costs in poverty areas. The somewhat surprising finding was the lower average cost of purchasing the thirty-five items in neighborhood stores regardless of location. This finding does not agree with the results of the Captain and McIntire study which found that chain stores on the average provided lower prices.

These cost figures may be somewhat misleading without considering two other important factors. First, the quality of the food goods offered to low-income families and, second, the sanitary conditions of the stores in poverty and non-poverty areas.

The evaluation of fresh fruits and vegetables, and meats and poultry indicated that neighborhood stores in general had somewhat lower quality items than chain stores. In addition, the selection of goods in neighborhood stores was more limited than that in chain stores. Some stores which were initially selected for study had to be eliminated because they did not have a sufficient number of items selected for price sampling. In general, chain stores tended to have higher quality produce, meats, and poultry than did neighborhood stores, regardless of location.

The sanitation data seemed to indicate that neighborhood stores in general tended to have a lower rating than chain stores. This variation tended to become more pronounced when poverty areas were compared with non-poverty areas.

Conclusions of the Study

The conclusions reached by this research project tended to affirm those of other studies on the national scene and the earlier study in Omaha.

The cost differences were not as high as anticipated or as high as indicated by other studies. The data, however, did tend to support the hypothesis that food costs are higher in poverty areas than comparable purchases in non-poverty areas. This was true for both chain and neighborhood stores. It should be added that this is not generally the result of conscious or overt actions on the part of retailers to discriminate against low-income consumers.

The surprising finding was the lower cost of items in neighborhood stores compared to chain stores, regardless of location. In many instances, however, this lower cost was more than matched by lower quality food items, lower sanitation conditions, and reduced selection.

There was a tendency for poverty area residents to have somewhat limited access to shopping alternatives. This is due in part to the fact that most chain stores are outside the neighborhood area, and residents have limited transportation. The reasons for the lack of chain stores in low-income areas might well be a topic for further study.

The general finding was that poverty area residents tended to get less for their food expenditures than did non-poverty area residents. Low-income consumers faced somewhat higher prices, lower sanitation, reduced selection, and lower quality items, particularly in fresh fruits and vegetables, and meats and poultry.

It should be added that many of the findings of this study can be called tentative at best. The sample of stores and items was small and the resources for the study were quite limited. There is a need for a larger, more complete and comprehensive study. But if the results of such a study again show that low-income families and individuals do pay more for less, the time must come for some decisions as to possible solutions.

1971-1972

ANNUAL REPORT

CENTER FOR URBAN AFFAIRS

Introduction: The First Six Years

The brief discussion that follows is offered as a prelude to this annual report. Hopefully it will provide a perspective from which to view the Center's progress in the broad field of urbanism.

The development of reliable socio-economic data has become one of the most pressing needs of the urban community. The University of Nebraska at Omaha has responded to this need through the development of its Center for Applied Urban Research (CAUR). The Center, now a component of the newly created School of Public Affairs and Community Service, has experienced a pattern of growth which closely parallels the increasing recognition of the need for these data in the Omaha metropolitan area.

In 1966, the Economic Development Council of the Omaha Chamber of Commerce accepted the proposal of the Municipal University of Omaha for the creation of an Omaha Area Urban Research and Data Center. During the next two years, the Urban Research and Data Center generated a series of trade area studies and population projections, and also began the development of an urban data depository. The EDC financial support was largely responsible for these efforts.

The initial two-year project sponsored by EDC expired June 30, 1968; so too did the Municipal University of Omaha, but in name only. On July 1, 1968, the University of Omaha was merged with the University of Nebraska System, and was renamed the University of Nebraska at Omaha. The Omaha Area Urban Research and Data Center also was renamed and reorganized. The resultant Urban Studies Center was defined as a joint undertaking of UNO, the Lincoln campuses of the University of Nebraska, and the College of Medicine in Omaha. The Center was governed by a Policy and Advisory Committee representing the three main campuses, with each campus having a Campus Urban Affairs Committee, for communication and coordination of urban concerns. The designated mission of the Urban Studies

Center was urban-related teaching, research and service.

In 1969, the Center was again renamed, and then called the Center for Urban Affairs (CUA). During the past three years CUA has become a major source of urban data for the Omaha metropolitan area while providing specialized research services for many public and private clients. Also during this period, despite definition, CUA was under the jurisdiction of UNO. This arrangement seemed reasonable in that the home campus was located in a large urban setting and that its financial support came from the budget allocation of the UNO campus.

Finally in 1972, with the Nebraska Board of Regents' authorization of a School of Public Affairs and Community Service to be located on the UNO campus, CUA was moved under an interdisciplinary umbrella of urban related degree programs, research activities, service and training. The Center by this reorganization and alliance with related academic programs has been given new direction and purpose. The challenges before it to provide both client-oriented research and SPACS' support services have instilled a new vitality to its role in the community and the University System. It once again has acquired a new name, The Center for Applied Urban Research (CAUR).

The elderly unit with the new name has retained its original functions, namely the collection, analysis and dissemination of urban data, while undertaking major new projects in areas such as manpower research and highway corridor route selection. Ahead lies the great potential to be derived from the Riverfront Development Project.

The Annual Report indicates where we have been. We know only too well how far we have yet to go.

Robert McCune

Robert McCune

Major Projects

CENSUS AND RELATED

First Count Census

The Center has access to all Nebraska and Iowa First Count Census files, and in February 1971, produced initial output from these files. Data by block groups and enumeration districts, and expandable into tracts, have been extensively mapped and social indicators have been initiated from this tape. All early population and housing summaries were based on the CUA effort.

Social Indicators

The Center, in cooperation with the Metropolitan Census Data Use Consortium (McDUC) produced three sets of socio-economic indicators from the First Count Census tapes. Tabular presentation was by block groups, with totals for either split block groups or tracts. Indicators included were:

A. Minor Population
Elderly Population
Black Elderly Population
Pre-School Children
Dependency Ratio
Children in Extended Families
Overcrowded Children
Sex Ratio
Fertility Ratio
School Load
Normal Family Life

B. Marital Unrest
Matriarchy Index I
Matriarchy Index II
Fatherless Children
No Child-Rearing
Chances for Marriage
Black Chances for Marriage
Classroom Requirements
Average Household Size
Family Dependency Load
Non-White Population
Black Population
Roomers and Boarders

C. Overcrowded Housing
Incomplete Plumbing
Low Rent Units
Average Monthly Rent
Owner Occupancy
Low Value Units
Average Owner Occupied Value
Black Owner Rate
Black Owners
Vacancy Rate
Single-Family Units
Average Unit Size
Black Occupancy

Second Count Census

The Center has processed only a limited number of requests for detailed population and housing characteristics from the Second Count tapes, but has access to all Nebraska files. The File A Iowa tape is on order.

Third Count Census

CUA has produced, and maintains on microfiche, sale items of all data items for Nebraska and Iowa metropolitan and contract area blocks. This microfiche contains approximately ten times the information found in PHC(3) block reports. Third Count tapes for the two states are also available to the Center.

Fourth Count Census

The Fourth Count Census is in two parts: Population and Housing. A program now exists which uses the Mark IV computer system to access the population information and social indicators have been produced from this information. A similar effort is now underway to access the housing information. CUA has access to all Nebraska and Iowa tapes.

SOUTH OMAHA EXPRESSWAY STUDY

The Center has completed work on a study of South Omaha neighborhoods which was carried out through an agreement with the Ken R. White Company of Denver. The purpose of the study was the consideration of social and cultural characteristics in the determination of the most reasonable corridor of the South Omaha Expressway.

The work was completed in two phases. Phase I included research design, information-gathering, data tabulation, and preliminary analysis of data. On completion of Phase I, a report establishing three alternate corridors was submitted to the White Company. Phase II of the study included final analysis of the data gathered and selection of the single most reasonable corridor for the highway.

DUAL INDEPENDENT MAP ENCODING (DIME) FILE

The Dual Independent Map Encoding or DIME, File is a computer file also referred to as the Geographic Base File and Address Coding Guide. It is a master record of metropolitan street segments with such items as address range, census tract and block, high level codes (state, place, and zip area), map nodes and map node coordinates. The file makes possible the aggregation of all address-coordinated local files into one compatible system.

The DIME File was originally developed for the 1970 Census mail-back questionnaire and is perhaps the most important planning tool for the 1970's. It was developed under federal contract by the Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) in a format consistent with that of over 200 metropolitan cities. CUA will use the program experimentally and set preliminary guidelines for correction, update, and expansion.

BUILDING PERMITS

CUA maintains ADMATCHed* records of three building permit files for Omaha, Ralston, Millard, and unincorporated Douglas County. These include apartment permits from 1950 to 1971; residential permits from 1967 to 1971; and nonresidential permits for 1971. This file is to interface Omaha City Planning Department records of 1960 to 1966 with computerized records from the Omaha Permits and Inspection Division. The analysis will also be coordinated with McDUC's Committee on Population Projections.

HIGHER EDUCATION CONSORTIUM

The Nebraska Department of Economic Development allotted $21,650 for a project sponsored jointly by the Community Development Department, UN-L, and the Center for Urban Affairs, UNO. The project is titled "A Consortium of Nebraska State Institutions of Higher Education for the Purpose of Inventory and Analysis of Community Service Programs". Initially, the Consortium will compile and publish a directory of community service functions of state educational institutions, which will complement the Directory of State Agencies published by the Nebraska Department of Economic Development.

The Consortium will bring together the community service officers of the Nebraska state institutions of higher education and establish a dialogue among them. This dialogue will provide a method for determining the advisability of continuing the consortium concept as a practical means of facilitating future community service evaluation, program modification and/or program implementation.

KWIC INDEX

A major programming effort during the 1971-72 year was the rewriting of the Key Word in Context (KWIC) Index from NCR to ANS COBOL. As the Center is a main user of KWIC, the CUA programming staff was used extensively. The new indexing system is greatly improved over the older version.

In connection with the reprogramming effort, major modifications were made to the Data and Documents Library. A new shelving arrangement, an entirely rewritten manual, and a descriptor thesaurus have been added.

HARD DATA FILE

Of continuing interest is a new indexing effort exclusively for "hard data" -- that is, strictly documented numeric data having a specific, and usually small, geographic base. A substantial number of man hours have gone into planning this project, with actual indexing to commence in 1972-73. The Key Word in Context/ Center for Urban Affairs Data and Documents (KWIC/CUADD) Thesaurus will be utilized extensively, and various computer-assisted information retrieval systems will be examined, including Informatics Mark IV and KWIC.

*See Information and Data Services, "ADMATCH".

NEWSCLIPPING INDEX

The index of all topics covered in the Data Bank newsclipping file has been revised and updated. The listing is alphabetical and includes cross references. New subject heading terms relate to both the Newsbank/Urban Affairs service* and the KWIC/CUADD Thesaurus. The revision is intended to simplify access to clipping files for Data Bank users.

TAX MODEL

A computerized tax model has been prepared which allows direct intercity comparisons of state and local taxes on industrial firms. The objective of the model is to provide prospective new industries, and industries contemplating expansion, an estimate of differentials in tax bills among selected metropolitan areas.

The study relies primarily upon the technique of the hypothetical firm, by which tax bills are computed for a selected plant on the assumption that the firm is located successively at each of a number of different sites. The model was constructed with enough flexibility to take into consideration several alternative circumstances in which a corporation might find itself. Comparisons can be made for any one of 13 (four-digit) industrial classifications. The amount of corporate investment to which state and local taxes are to apply may be specified. In addition, the legal status of the firm (domestic or foreign) and the percentage of income, sales, property, and payroll in and out of state may be specified.

EDUCATION AND MANPOWER RESEARCH

A major outgrowth of CUA's urban information and data system is the detailed and systematic study of education and manpower training in the greater Omaha metropolitan area. This kind of research was first examined by the Center in Education and Manpower in the Omaha SMSA, published in April 1971. The research potential developed by this report has attained such importance that the areas of education and manpower have been given individual attention in 1972. Educational data was published by CUA in "Education Profile: Omaha and the State", Urban Affairs Kaleidoscope, April 1972, and the collection and dissemination of relevant edcuational data is now a continuing activity of the Center. The needs for research in the manpower field have been discussed with the Nebraska State Department of Labor, the Mayor's Manpower Planning Office, the Subcommittee on Manpower and Training of the Mayor's Committee for Economic Development, the State Employment Service, the Metropolitan Area Planning Agency, and the Economic Development Council of the Omaha Chamber of Commerce. As a result, a series of research projects have been initiated. The projects include the development of projections on the potential labor force in in the Omaha SMSA, labor migration patterns, manpower training program evaluation models, and a framework for an in-depth labor profile for the greater Omaha Metropolitan area. Funds have been made available by the Omaha Chamber of Commerce, the Mayor's Manpower Planning Office, and UNO for the employment of a new CUA staff member who will supervise this research, essential to manpower planning. Information obtained from the 1970 Census will facilitate greatly this research.

*Newsbank/Urban Affairs service is a newspaper clipping service to which Eppley Library subscribes.

McDUC POPULATION PROJECTION COMMITTEE

The Population Projection Committee of the Metropolitan Census Data Use Consortium (McDUC) is currently involved in two related projects. The first, a study of population changes since 1940 in Nebraska metropolitan areas, is a joint project of the Metropolitan Area Planning Agency (MAPA) and CUA. CUA and MAPA staff members are conducting the study of metropolitan counties including Dakota, Douglas, Lancaster, and Sarpy in Nebraska, and Pottawattamie and Woodbury in Iowa. To date, most background information has been gathered. Related to this project is a preliminary plan for organizing a formal ongoing system of demographic projections and estimates as an adjunct to a municipal information system.

The second project, a survey concerning the needs for population estimates and projections and other social and economic data was conducted by the Center in cooperation with McDUC. Questionnaires were distributed to many public and private agencies, real estate and investment firms, and land developers to determine their needs for information as well as the extent of possible input to the project.

COUNCIL BLUFFS BUS STUDY

The Center for Urban Affairs processed approximately 2,400 questionnaires for the Council Bluffs Urban Renewal Authority. The questionnaires, distributed in late August 1971, were completed by Council Bluffs city bus passengers. Questions concerned origin-destination, trip purpose, frequency of travel, and bus utilization. Results were made available in November 1971.

SENIOR TRANSPORTATION SERVICE

At the request of the City Office of Urban Resources, the Center for Urban Affairs has begun an analysis of the utilization of the Omaha Senior Transportation Service. Information obtained from the sale of approximately 7,000 tickets in February 1972 will be tabulated to determine the percentage of eligible persons participating in the program and the correlation between participants and income statistics. The data will also be used as an Informatics Mark IV test file at Douglas County Systems and Data Processing and will be run against the DIME file.

DATA USERS' SURVEY

In late August 1971, a CUA Data Users' Survey was mailed to Data Bank users. The questionnaire represented an additional step in determining the data needs and data production capabilities of Omaha area agencies. The completed survey provided information needed to analyze possibilities arising from the interaction of local data gathering efforts and the 1970 Census. It also provided information necessary for the Center's planning and budgeting for the 1972-73 fiscal year. This data has been complemented by information from the McDUC population survey.

LIFE STYLE STUDY

The Urban Housing Foundation has requested the assistance of the Center in a study of the effects of home ownership on the life style of its clients. A sample of the families assisted by the Urban Housing Foundation will be interviewed by the Foundation staff and results will be analyzed and reported by the CUA staff.

MILLER PARK

The Center was asked by the Miller Park Area Community Council to help in procuring child care services in the area. CUA assisted the Council in formulating a questionnaire which will be administered by volunteers from the community. The data will be analyzed and results will be used to assist the community in planning for and implementing community services and improvements. The project is intended to be a prototype community development effort for the Omaha area.

SENIOR CITIZENS STUDY

The Center designed a questionnaire for a senior citizens study to be performed by the staff of the South Omaha Settlement House.

SOUTH OMAHA NEIGHBORHOOD ANALYSIS

The Center is further analyzing data collected from the study of South Omaha neighborhoods. A correlation of variables is being performed to discover neighborhood generalizations.

CONTINUING OMAHA AREA TRANSPORTATION SURVEY (COATS)

The Center assisted in providing MAPA with census-compatible traffic zone populations as part of the Continuing Omaha Area Transportation Survey. Third Count Census tapes were used to aggregate required data.

SOUTH CENTRAL GOCA

The Center tested a system which would automate Greater Omaha Community Action (GOCA) records to provide a working base for social agencies in South Omaha, and would provide aggregate statistics for social planning. This project has been currently in a state of transformation.

SOUTH OMAHA EXPRESSWAY STUDY

See Major Projects.

EDUCATION AND MANPOWER RESEARCH

See Major Projects.

DRUG ABUSE INFORMATION FILES

The Center is participating in a pilot program sponsored by the National Clearinghouse for Drug Abuse Information (NCDAI). The operations of the drug abuse information system are centered around DOCPROC (Document Processing), an IBM software package, which allows searching for documents by occurence keywords in abstracts. The NCDAI files contain thousands of abstracts concerned with all phases of the drug abuse problem, with special files on both federally and locally sponsored programs and projects. Access to the system is gained via a Model 33 teletype terminal over long distance telephone lines to Rockville, Maryland. The only cost to NCDAI information system users for searches is for long distance toll charges. Users are provided with a print-out of relevant abstracts usually within three to five days. Copies will be maintained at the Center and added to the Drug Abuse file. Although preliminary steps have been completed, funding and staffing difficulties have prevented full scale operations.

DOUGLAS COUNTY SYSTEMS AND DATA PROCESSING

A new file management system, Mark IV, developed by Informatics, Inc., has been purchased recently by Douglas County Systems and Data Processing (DCSDP). The Mark IV concept, in effect, reduces the two-step process of system design and programming to a one-step system analysis from which Mark IV automatically produces the required information. It will greatly facilitate the handling of computerized information. One CUA staff member attended a one-week school at DCSDP to learn the new system, and two others attended a one-day seminar on the use of Mark IV.

CENREP

The purpose of this computer program is the retrieval of data from the First Count Census. The program gives information by county for each census tract within the county, will give totals, and calculate percentages and ratios. Output can be obtained in either print-out form or magnetic tape form.

OTHER CENSUS PROGRAMS

A computer program was established for retrieval of data items for the Second Count Census, which allows the display of actual data items with category titles included on the listing. A similar program is now being developed for Third Count information.

Also in progress is a computer program for the Fourth Count Census. It will be the same as CENREP for First Count data, but the new Mark IV computer system will be used.

SPSS COMPUTER PACKAGE

By an agreement with the Bureau of Sociological Research on the Lincoln Campus

of the University of Nebraska, the Center has access to a series of computer programs named the Statistical Package for the Social Sciences (SPSS). There are approximately 15 programs in this package including frequency distributions, crosstabulations, regression analysis and factor analysis. The use of these programs will greatly extend the computer capabilities of the Center, especially in survey research.

DUAL INDEPENDENT MAP ENCODING (DIME) FILE

See Major Projects.

ADMATCH

ADMATCH is a computer program designed to match street addresses on local files with a master geographic base file, or DIME file.

COMPUTER MAPPING

CUA is currently using the SYMAP (SYnagraphic MAPping System) developed by the Harvard Laboratory for Computer Graphics and Spatial Analysis. SYMAP is available through the University of Nebraska computer network. Base maps have been digitized for the Omaha SMSA and urban area, and by block, block group, and census tract for portions of the metropolitan counties.

TAXES, TAXAVE

Two related computer programs were written for the intercity comparison of taxes on industry.* The first, named TAXES, is designed to compute a balance sheet and average tax values of a particular firm (given asset size) in a particular industry. The second program TAXAVE, uses an output tape generated by TAXES as a source of tax data. TAXAVE is designed to indicate proportions by comparing various types of taxes against a firm's total tax bill. The tape contains a record for each industry-location combination requested from TAXES and also the highest and lowest values for the percent of total taxes, for each of seven taxes.

GRAFPAK

GRAFPAK is a computer graphics package developed by the institute for Social and Environmental Studies at the University of Kansas. GRAFPAK is intended to provide graphs, frequency distributions, two-dimensional maps, and three-dimensional surface views of the pen plotter. CUA is experimenting with its use.

*See Major Projects, "Tax Model".

EDC-CUA AGREEMENT

The Economic Development Council (EDC) of the Omaha Chamber of Commerce and the Center for Urban Affairs have signed a new working agreement for the period from April 1, 1972 to December 1, 1972. The agreement is a result of the recognition by EDC and UNO of the need for maintaining, in one location, a file of basic, current, accurate, and reliable information concerning the Omaha-Council Bluffs metropolitan area. In addition, the agreement allows the University to increase and improve its service to the community.

McDUC

In December of 1970, the Metropolitan Census Data Use Consortium (McDUC) was organized for the purpose of developing cooperation among Omaha agencies in the use of computerized census data. The Center has played an active role in McDUC. Center activities relating to McDUC over the 1971-72 fiscal year include the following:

1. Production of First Count (Enumeration District) display program
2. Production of Third Count (Block) microfiche display
3. Production of Second Count display program
4. Preliminary Fourth Count programming
5. Population Estimates and Projections Project

RESEARCH AND DEVELOPMENT

The Center for Urban Affairs has been designated the Research and Development component of the Omaha Mayor's Office. The purpose of the designation is:

1. to make available to local government university resources for understanding and solving particular urban and metropolitan problems.
2. to advance a coordinated program of continuing urban research, grounded in practical experience and application, relevant to urban management, human resources, and urban environmental and developmental problems.
3. to advance university capabilities in relating research and training activities more effectively to urban concerns and the conditions of urban living.

URBAN AFFAIRS LIBRARY

Center staff members have worked with staff members of other academic departments and the library staff in developing a good Urban Studies collection in the Eppley Library. A core catalog of some 1500 author cards has been assembled in the Center, with a view toward creating a full card catalog using detailed subject headings. Through computer analysis of this "core" collection, hopefully a comprehensive catalog of urban-related holdings can be built.

CONTINUING RELATIONSHIPS

The Center for Urban Affairs provides limited information and data services for many public agencies on a continuing basis. Included in these agencies are: Omaha City Planning, Greater Omaha Community Action, Omaha-Douglas County Health, Nebraska Department of Economic Development, Nebraska Department of Health, local colleges and school districts, Omaha Urban League, and Community Coordinated Child Care.

Publications and Papers

URBAN AFFAIRS KALEIDOSCOPE

The first issue of this quarterly publication was released in April 1972 by the School of Public Affairs and Community Service. The Kaleidoscope includes a variety of articles on urban-related topics.

CUA NEWSLETTER

This bulletin is published regularly by the Center in an attempt to inform its readers of current opportunities and activities in urban-related research, teaching and community service.

CAROL LUNBECK

Child Care in Omaha: Part I Facilities (December 1971)
CUA Census Report #3: Indian Population in Douglas County (January 1972)
Neighborhood Study: Kennedy Freeway Report (preliminary, March 1972)
Neighborhood Analysis: A Survey Approach to South Omaha (paper presented at the Rocky Mountain Social Science Convention April 1972)

KEITH MAW

State of the Data Bank, II (August 1972)
Data Users' Survey (in progress)
Socio-Economic Indicators: A Preview (in progress)

ROBERT McCUNE

"Medical and Other Health Professions in the Omaha SMSA" (April 1972 Kaleidoscope)
"Education Profile: Omaha and the State" (April 1972 Kaleidoscope)

RALPH TODD

General Revenue and Expenditure Trends, Revenue Effort, and Fiscal Imbalance of State and Local Governments in Nebraska (paper presented to the Nebraska Clergy Economic Association)

"Employment Trends in the Omaha SMSA" (April 1972 Kaleidoscope)
"Evidence of Immediate Tax Shifting in U.S. Manufacturing, 1948-1967" (to be published in the Nebraska Journal of Economics and Business, Winter 1972)
"Intercity Comparison of Taxes on Industry" (April 1972 Kaleidoscope)
"Revenue Receipts of School Districts in Douglas and Sarpy Counties, 1970-1971: A Comparative Analysis" (to be published in Kaleidoscope)

JOHN ZIPAY

1970 First Count Census Data: Population and Housing Characteristics for Douglas County, Nebraska (February 18, 1971)
"The DIME File and ADMATCH: Geographic Keys to an Urban Information System" (to be published in Kaleidoscope)