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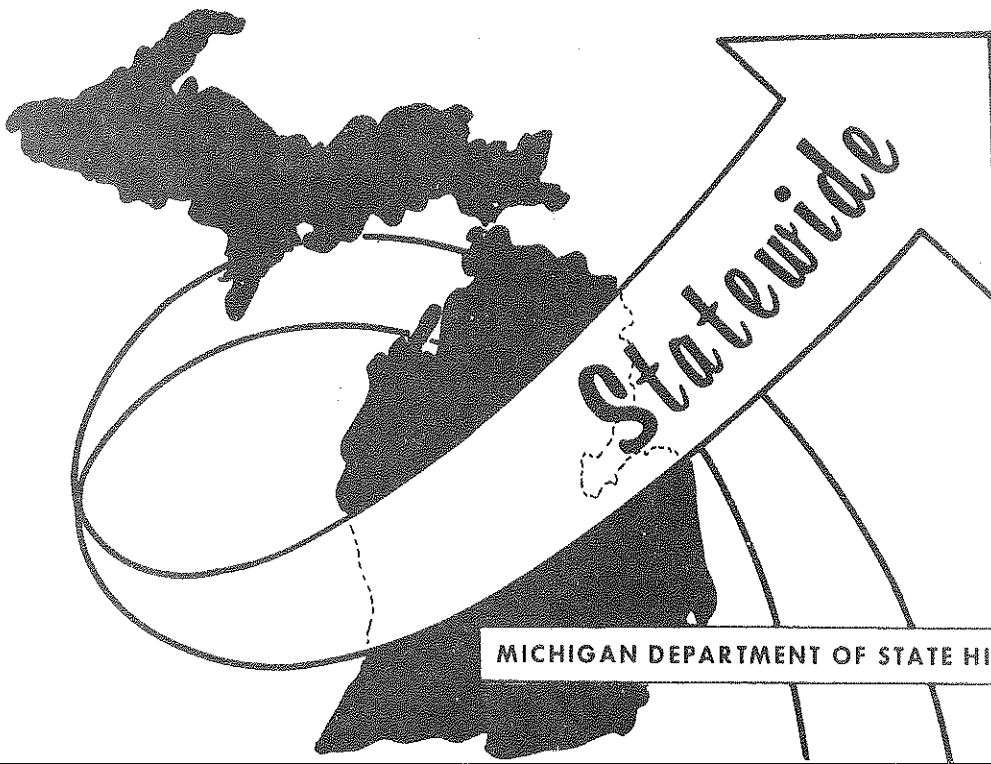
Statewide Transportation Analysis & Research

MICHIGAN'S
STATEWIDE TRAFFIC
FORECASTING MODEL

VOLUME IX

STATEWIDE SOCIO-ECONOMIC
DATA FILE

MARCH 1973
STATEWIDE STUDIES UNIT



MICHIGAN DEPARTMENT OF STATE HIGHWAYS AND TRANSPORTATION

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MARCH 1973
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REVISED JUNE 1974

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JOHN P. WOODFORD, STATE HIGHWAY DIRECTOR

May 9, 1973

Mr. Sam F. Cryderman
Engineer of Transportation Planning
Transportation Planning Division

Dear Mr. Cryderman:

The following is an outgrowth of work being carried on to update the trip generation-distribution equations for the Statewide Traffic Forecasting Model. This update process requires statewide socio-economic data; and therefore, the 1970 census data was a logical choice. This report deals with the development and use of a system to obtain census information at the statewide model's 547 zone level. Zonal summaries of census information may be obtained with a minimum of manpower and cost and can be output in simple list form or a variable-shaded state map (SYMAP).

Other information such as water area, lake frontage, assessed valuation, truck terminals and hospitals will be added to the file in the future.

This report was prepared by Alan R. Friend under the supervision of Richard E. Esch of the Statewide Studies Unit.

Sincerely,

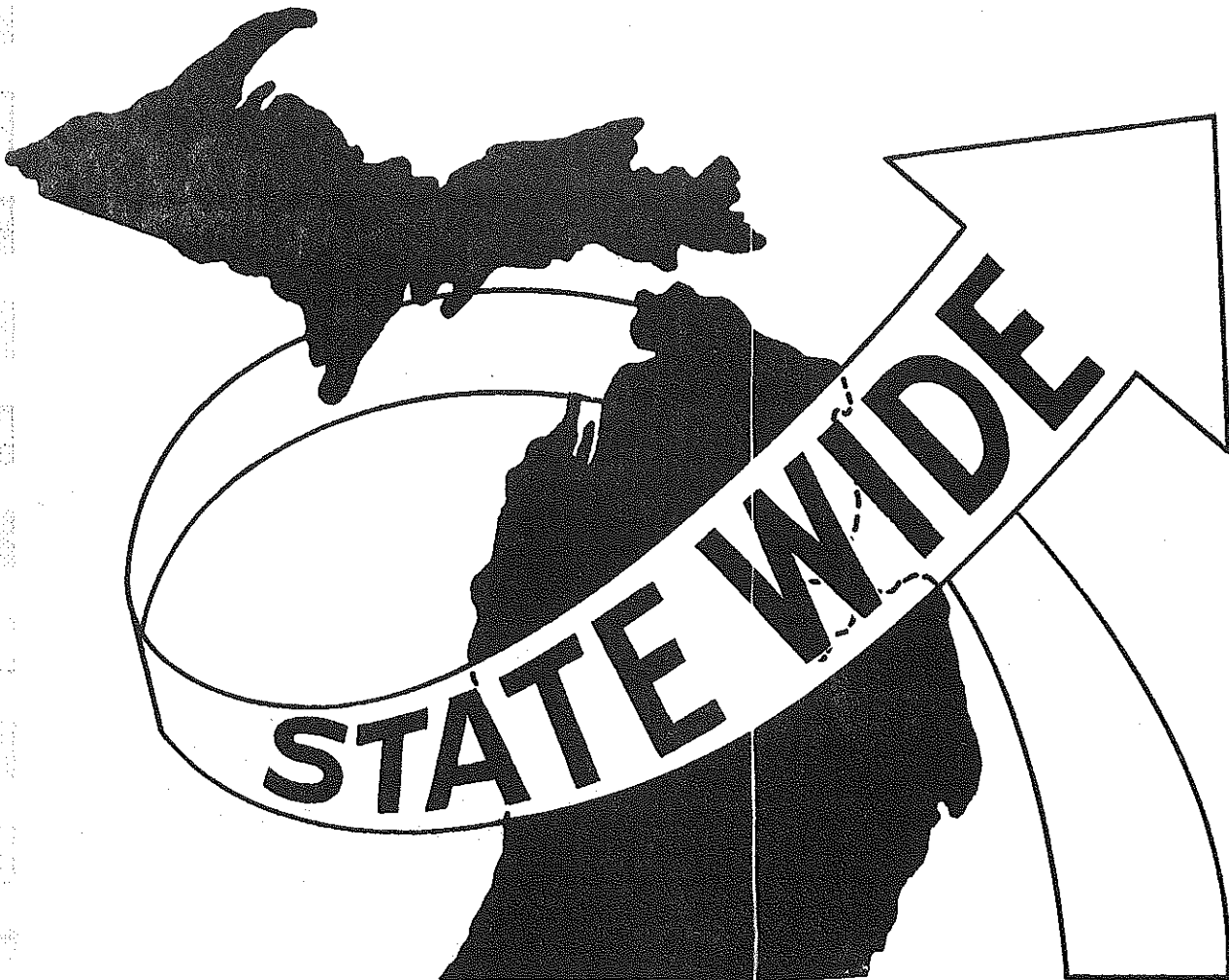
A handwritten signature in cursive script that reads "Keith E. Bushnell".

Keith E. Bushnell, Engineer
Transportation Survey & Analysis



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PREFACE



PREFACE

The following report is an outgrowth of the continuing development and applications being discovered for Michigan's Statewide Traffic Forecasting Model. This forecasting model, which is used as an aid in highway planning, uses a gravity model technique for predicting future traffic. The model uses primarily population and driving times to predict trip interchanges. In an effort to refine the present model it appeared that other socio-economic data would be required. Data from many sources has been compiled for this purpose. A complete description of the types of data and their sources may be found in Statewide Studies publication entitled "Development of the Statewide Socio-Economic Data Bank For Trip Generation-Distribution", December 1972.

One source of data mentioned in this report is the U. S. government census information. In the preliminary phases of adapting the census data for use with the statewide traffic forecasting model, it became apparent that this information and the tools developed by Statewide Studies for retrieving this information might be made available to others even though they had no direct need of the forecasting model itself. The next section will discuss this multiple-use aspect.

INTRODUCTION



INTRODUCTION

State highway departments and other state agencies are being asked today to provide more information concerning the people (and their surroundings) who are affected by new highways and new facilities such as hospitals, universities, and airports. This information may help in identifying needs. For instance, are old age facilities located near the elderly? Are universities located near age groups which might attend colleges? Where are concentrations of these college age groups? Are there airports near concentrations of higher income families (studies show certain high income families are heavy airport users). On the other hand, these types of information can be used as variables in predicting future socio-economic activity. Future traffic volumes are often projected using population and employment data. Economic growth studies, employment studies, and land use models often make use of such items as number of persons in each household, population, income, and type of employment.

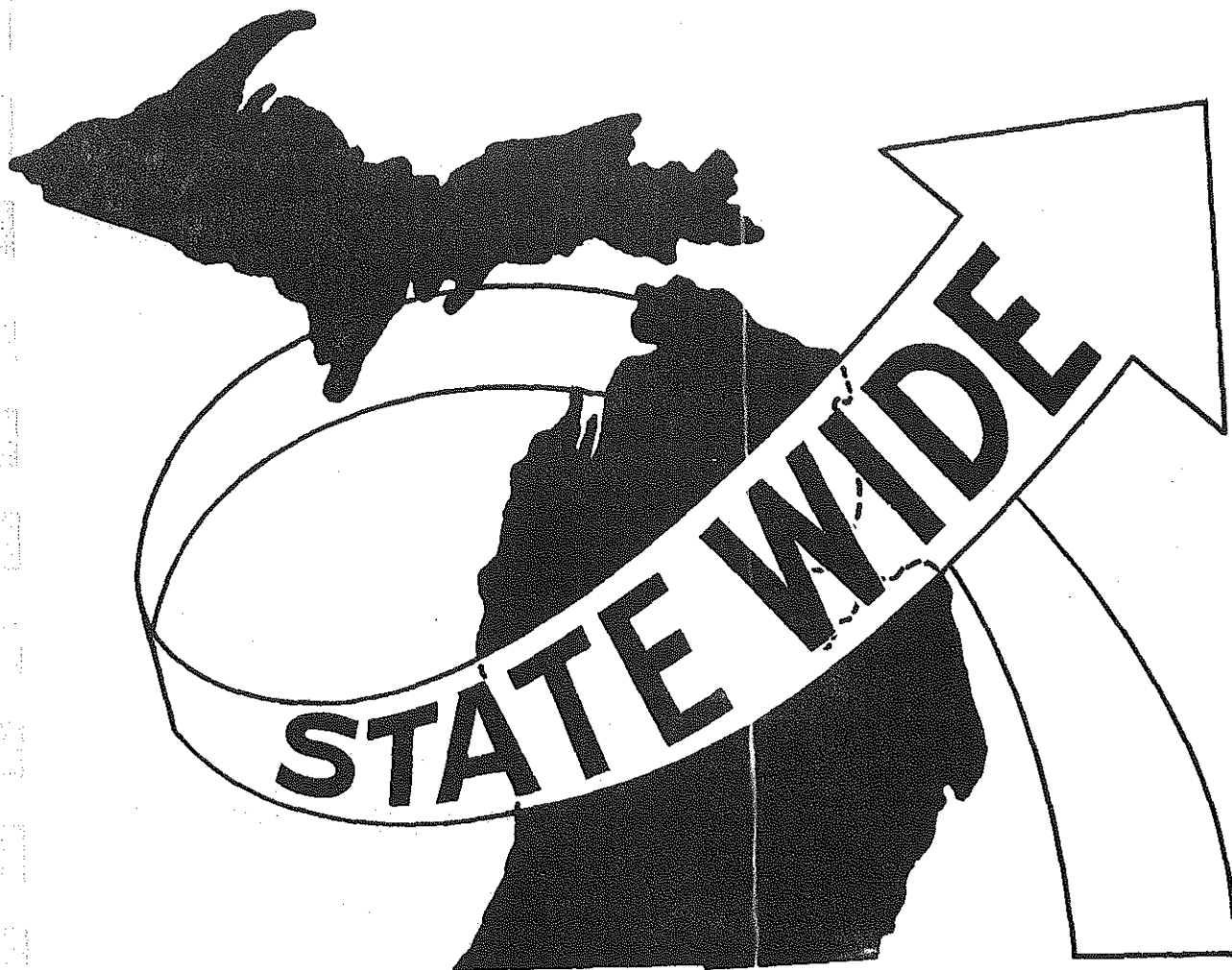
Because of the increasing importance of the planning of highways and other state facilities and because of the integral relationship between highways and the planning of facilities, it was decided to expand the use of the census data from the original intent of improving trip-generation to that of creating a generalized socio-economic file which others in the department or other state agencies might also use.

Although other information can easily be added as the need arises, most of the socio-economic data file presently consists of 1970 census information. The file was originally created using the fourth-count population data. Selected items from the fourth-count housing data have recently been added. Other non-census information will be appended in the near future.

The next section deals with the specific kinds of information in the file and the conversion of the census data from its original format into a format useable with the Statewide Traffic Forecasting Modeling process.

ORIGIN, CONTENTS, AND

CONVERSION OF THE BASIC FILE



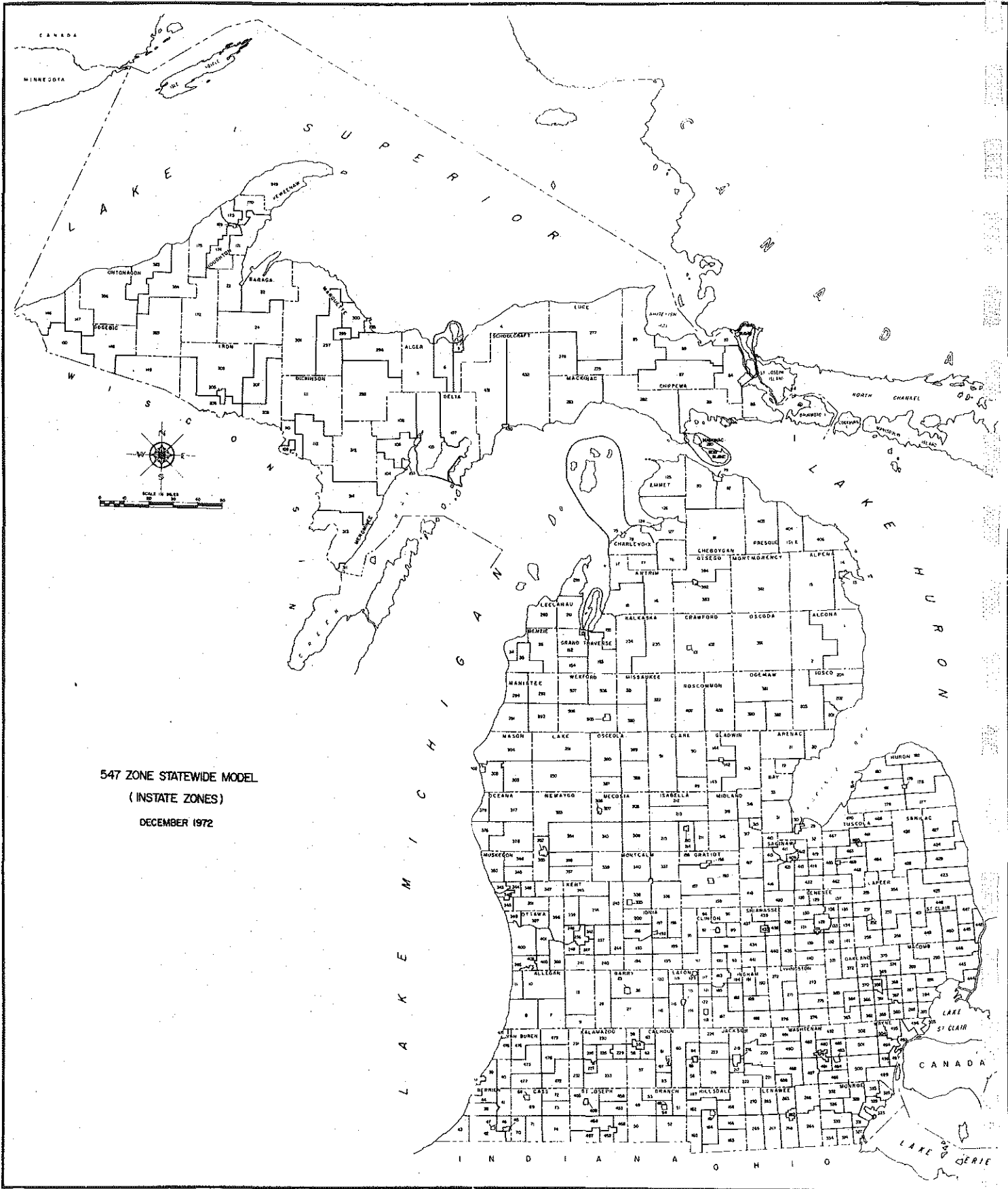
ORIGIN, CONTENTS AND CONVERSION
OF THE BASIC FILE

The main source of information for the Statewide Socio-Economic Data File was the 1970 Census Fourth Count Population and Housing Tallies by Minor Civil Division (MCD) for Michigan. The basic population information was stored on 4 reels of 7-track magnetic tape. The basic housing information was stored on 7 reels of tape. All tapes were obtained from Michigan State University.

To create a more manageable file, selected census information was used as the base for the socio-economic file. An attempt was made to select those items thought to be used more frequently. For example, a more specific item such as "Males 30-49 Years Old by Work Status in 1965 and 1970" was not kept, but the more general "Population 16 Years & Older by Labor Force Status, Selected Characteristics, and Sex" was kept. For a complete list of items in the file refer to Appendix D.

In order to use the census information with the Statewide Traffic Forecasting Model, it was necessary to summarize the data into those "zones" used with the model. The traffic forecasting model divides Michigan into 508 regions or zones, as seen in figure 1. Cities such as Albion, Jackson, and Lansing are each defined as separate zones. Some smaller cities such as Bad Axe in the "thumb" area and Cheboygan in the north are also individual zones. In more rural areas, a township or groups of townships becomes a zone.

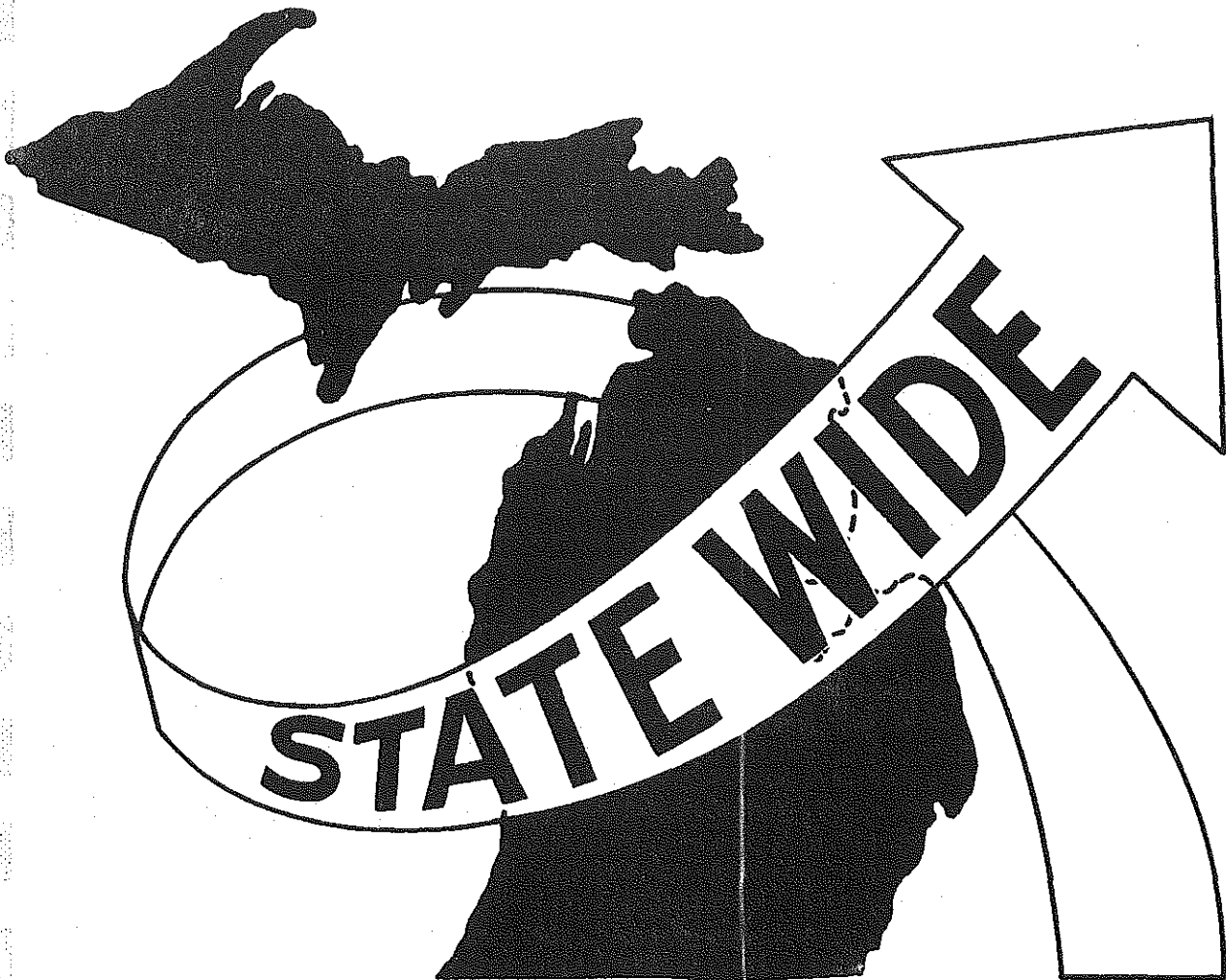
FIGURE 1



Thus, the Statewide Socio-Economic Data File consists of a single record for each statewide zone. Each one of these records contains the statewide zone number, 619 pieces of selected population information, 204 pieces of housing information, and projected population in five-year increments from 1975 to 2000. Space has been made available on the present file for about 200 more pieces of information for each zone. About 100 of these are reserved for specific items.

Those wishing a more detailed description of the file and how it was created are referred to Appendix A. The next section will discuss some selected uses of the socio-economic file.

FILE APPLICATIONS



FILE APPLICATIONS

Many will find the file useful in providing basic information needed for other studies, especially those studies included in planning future programs and facilities such as highway, health care, employment, and other files involving large numbers of people. These studies often require the location of special groups of people. For instance, using the socio-economic file one can geographically locate the following sub-sets of the general population:

1. The elderly
2. College age people
3. People employed by various types of industry
4. High income families
5. Low income families
6. Families with income below poverty level
7. Females of child-bearing age

Not all of the above are distinct categories on the file, but must be obtained by grouping other items. For example, the file contains the number of people by age and sex. It does not directly contain a category for the "elderly". The break down of age and sex which occurs on the file is shown in figure 2. Thus, if one defines elderly as 70 years and over, the desired total for elderly will be produced by summing the categories for:

- 1) Male 70-74
- 2) Male 75 and over
- 3) Female 70-74
- 4) Female 75 and over

FIGURE 2

1970 CENSUS

FOURTH COUNT POPULATION SUMMARY

AGE

MALE	FEMALE
Under 3	Under 3
3-4	3-4
5	5
6	6
7-9	7-9
10-13	10-13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22-24	22-24
25-29	25-29
30-34	30-34
35-39	35-39
40-44	40-44
45-49	45-49
50-55	50-55
55-59	55-59
60-61	60-61
62-64	62-64
65-69	65-69
70-74	70-74
75 and over	75 and over

The method for retrieving the information contains options for performing arithmetic operations with the data, therefore, this totaling can be accomplished automatically without the user performing these operations by hand.

The retrieved information is saved on a standard disk file and may be accessed thru the use of a remote terminal. This information may simply be listed, in which case 508 lines are printed corresponding to the 508 instate zones of the statewide forecasting model as mentioned earlier (figure 1).

This information may also be manipulated with the Burroughs Advances Statistical Inquiry System (BASIS). This system allows statistical analysis to be performed on the data. Basic information such as the range, sum, mean, and standard deviation of any variable may be obtained. Also, histograms may be plotted showing the observed frequency against the value of any variable. Figure 3 shows a histogram of the percent of the zone population living in families below poverty level. Other statistical sub-routines are available such as multiple regression and correlation analysis. A complete list of operational routines are shown in figure 4.

Information retrieved from the socio-economic file may be graphically displayed on an outline of the State of Michigan through the use of a line-printer mapping program developed by the Laboratory for Computer Graphics and Spatial Analysis, Harvard Center for Environmental Design Studies, Harvard University. The program is referred to as "SYMAP". A map

JOB DEF= *****
PROC DEF= PPOVF
DATA DEF= PPOVT

FREQUENCY OF PERCENT OF POP IN POVERTY FAMILIES
PERSONS IN FAMILIES BELOW POVERTY LEVEL

HISTOGRAM OF VARIABLE PPOVER

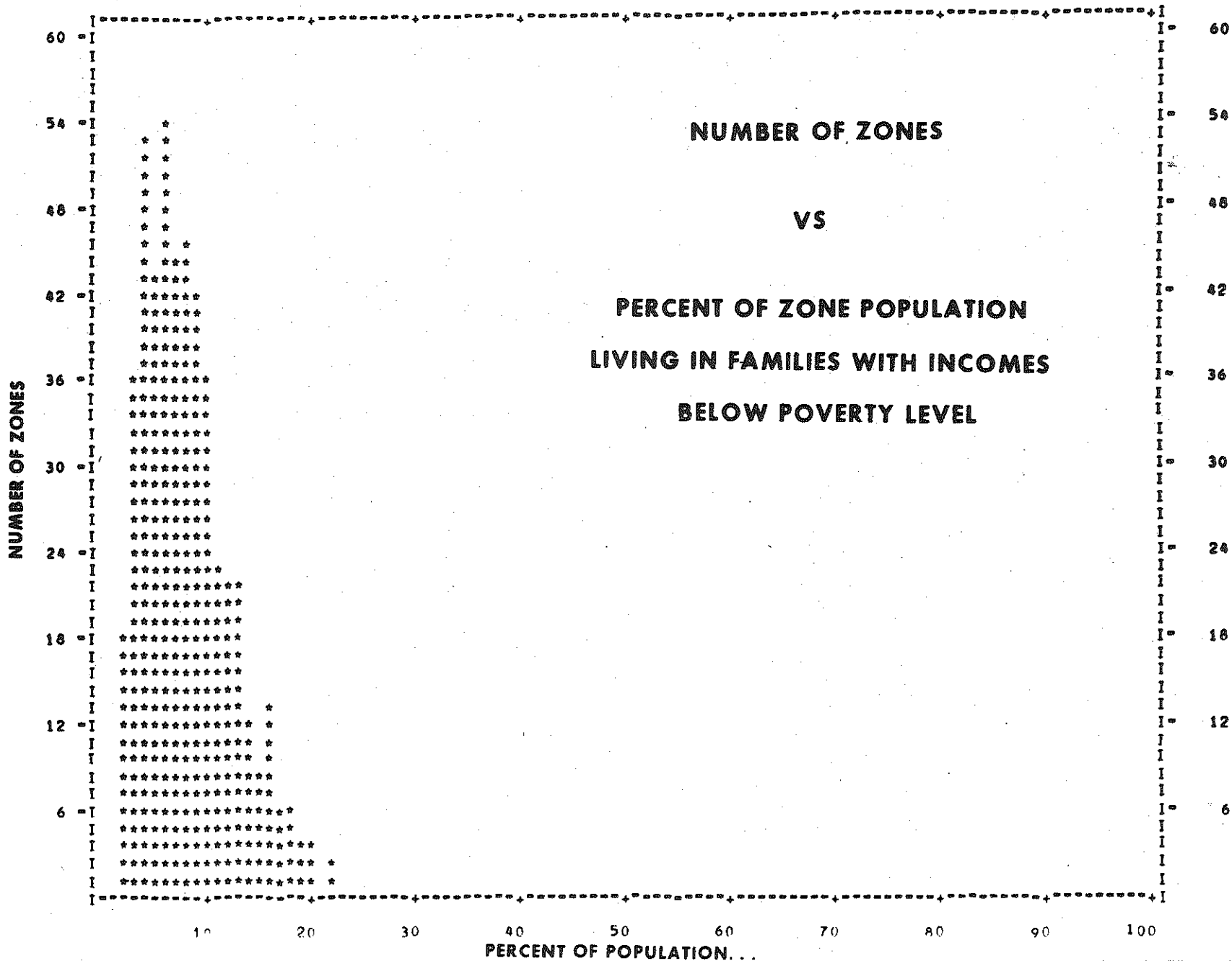


FIGURE 3

FIGURE 4

BASIS Statistical Programs

AID	- Automatic Interaction Detection
ANOVA1	- One-Way Analysis of Variance
ANOVA2	- Two-Way Analysis of Variance
BIPLOT	- Two Variable Plotting
BIVAR	- Bivariate Table Generation
BUILD	- Build a Transformed Data File
CORREL	- Linear Correlation Analysis
DISC	- Two Group Discriminant Analysis
FACTOR	- Principle Components with Varimax Rotation
LOOK	- Data Inspection
MDISC	- Multiple Discriminant Analysis
MISDAT	- Missing Data Analysis
MOMENT	- Raw Moments, Kurtosis, Skewness
MULTR	- Multiple Regression
PLOT	- Data Plotting
QTEST	- Cochrans Q-Test
REGRES	- Linear Regression
SPRANK	- Spearman Rank Correlation
STAT	- Basic Statistics
STEPR	- Stepwise Multiple Regression
TSA	- Time Series Analysis
TTEST	- Difference of Means and Variance
UNIVAR	- Univariate Analysis
WILCOX	- Wilcoxon Paired Comparison Test

recently produced by the Statewide Studies Unit is shown in figure 5. This example was taken from a preliminary study now being conducted at the Highway Department relating to the planning of statewide bicycle paths as required by recent legislation. This information was derived from the basic age data contained in the socio-economic file and from bicycle participation rates obtained from a U.S. Department of the Interior Survey on outdoor recreational activities.

To produce the map the following steps were taken:

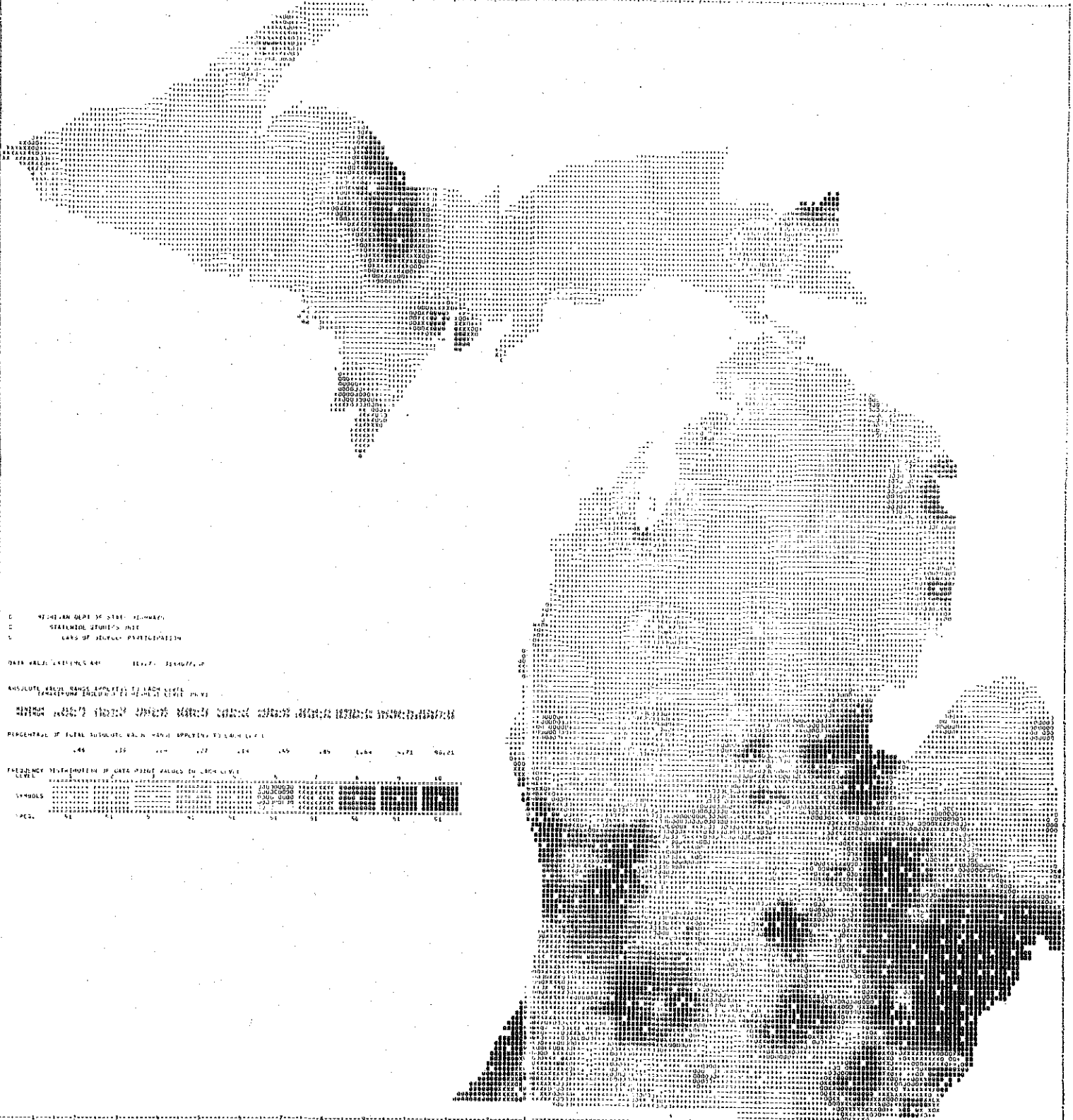
1. The total number of people in each age group for each zone was retrieved from the Statewide Socio-Economic Data File.
2. The participation rates from each age group were applied to get total number of bicycle participants in each zone.
3. The days of participation per person were applied to the number of participants to give the total number of person-days of bicycling per year for each zone.

The resulting map in figure 5 shows the relative number of person-days of bicycling per year on a statewide basis.

This type of map provides at low cost a quick, overall view of bicycling demand on a statewide basis.

In order to gain even further insight into data retrieved, we turn to an additional analysis tool. As mentioned earlier, one use of the socio-economic file might be to locate special

FIGURE 5



D. MEAN DEPT OF STR. BEMWAG
 E. STALLING STRENGTH INSE
 F. GATS OF SEVCA PARTICIPATION

DATA VALUE RANGES ARE: 100000 1000000

ABSOLUTE VALUE RANGE EXPANDED TO EACH LEVEL
 100000 1000000 10000000 100000000 1000000000 10000000000 100000000000 1000000000000

PERCENTAGE OF TOTAL ABSOLUTE VALUE EXPANDED TO EACH LEVEL

100	10	1	0.1	0.01	0.001	0.0001	0.00001	0.000001	0.0000001
-----	----	---	-----	------	-------	--------	---------	----------	-----------

FREQUENCY DISTRIBUTION OF DATA POINT VALUES IN EACH LEVEL

LEVEL	1	2	3	4	5	6	7	8	9	10
SYMBOLS	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PERCENT	100	10	1	0.1	0.01	0.001	0.0001	0.00001	0.000001	0.0000001

groups of people, but even more important is the relationship of these people to existing facilities or facilities being planned for these special groups.

For example, consider the problem of planning the location and operation of obstetric units in hospitals. Obviously, one question of interest will be "where are females of child-bearing age located?" While this information is surely important, more important questions to be answered might be "how many females of child-bearing age are located within, say, 30 minutes driving time of each existing OB unit?" and "how does the capacity of these units compare with this number?"

These questions can be answered at this date with a tool recently developed by the Statewide Studies Unit. This process is referred to as "Proximity Analysis". For the details of this process, the reader is referred to the report "Proximity Analysis: Social Impacts of Alternate Highway Plans on Public Facilities".

In general, the process includes a zone to zone driving-time matrix(used in the Statewide Traffic Forecasting Model) to accumulate socio-economic information within specified driving-time bands of user-supplied facilities. The present list of available facilities is shown in figure 6.

For a more detailed description of the facilities and their creation, the reader is directed to another Statewide Studies publication, "Statewide Public and Private Facility File".

FIGURE 6

STATEWIDE FACILITY FILE

AIRPORTS
AMBULANCE SERVICE
BUS TERMINALS
CAMP GROUNDS, PUBLIC AND PRIVATE
CERTIFIED INDUSTRIAL PARKS
CITIES OVER 30,000 POPULATION
CITIES OVER 5,000 POPULATION
CIVIL DEFENSE TERMINALS
COLLEGES, NON-PUBLIC
COLLEGES, PUBLIC COMMUNITY
COLLEGES AND UNIVERSITIES, PUBLIC 4 YEAR
CONVENTION CENTERS
GAME AREAS
GOLF COURSES
HIGH SCHOOLS
HISTORIC SITES
HOMES FOR THE AGED
HOSPITALS
MAJOR COMMERCIAL CENTERS
MANUFACTURERS
MENTAL HEALTH CENTERS
NEWSPAPERS, DAILY
NEWSPAPERS, WEEKLY AND BIWEEKLY
NURSING HOMES
PORTS
RAIL TERMINALS
SECRETARY OF THE STATE OFFICES
SEWAGE TREATMENT FACILITIES
SKI RESORTS
SNOWMOBILE TRAILS
STATE PARKS
STATE POLICE POSTS
TOURIST ATTRACTIONS
TREASURY OFFICES
TRUCK TERMINALS
UNEMPLOYMENT OFFICES
WEATHER SERVICE STATIONS-NATIONAL
WHOLESALE TRADE CENTERS

In addition proximity analysis will determine a capacity to number-of-servers ratio (i.e. number of beds in OB unit to the total number of females of child-bearing age). Some preliminary work has been done in cooperation with other state agencies who have inquired about applications relevant to their specific needs. The reader is referred to the following publications for more information on these actual applications:

1. "RIFLE-RANGE PROXIMITY ANALYSIS"
2. "STATEWIDE PROJECT REPORT: REGIONAL PARK PROXIMITY ANALYSIS"
3. "PROXIMITY OF POPULATION TO GENERAL-PURPOSE HOSPITALS"
4. "PROXIMITY OF AIRPORTS WITH SCHEDULED SERVICE TO POPULATION"
5. "IMPACT OF TRANSPORTATION SYSTEMS ON THE PROXIMITY OF AIRPORTS AND LABOR FORCE TO INDUSTRIAL PARKS"

As documentation for our own use, a small "users" manual has been prepared for running the program which retrieves the socio-economic data from the master file. For those interested, a copy of this manual is found in Appendix B.

The next section will be directed toward present plans for the continuing development of the socio-economic data file.

FUTURE MODIFICATIONS



FUTURE MODIFICATIONS

The Statewide Traffic Forecasting Model is presently being expanded from 547 to 2300 zones. (See figure 7).

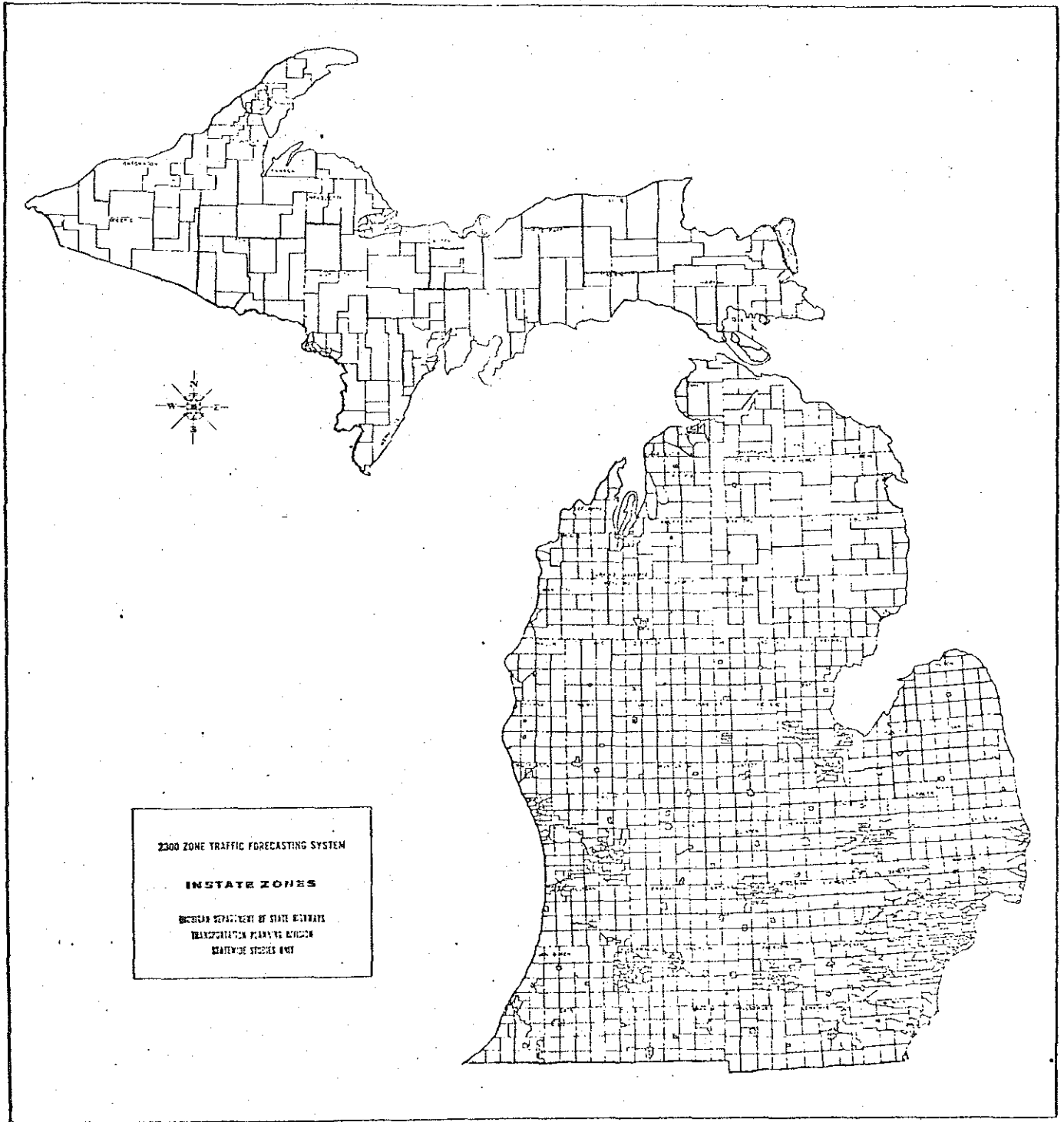
In the future a 2300 zone socio-economic data file will also be created. This more detailed file will help in overcoming some of the present limitations due to the larger zone size.

Plans are underway to include more information in the present file. Interested users may wish to offer data to be included. A cooperative maintenance effort could be undertaken among those parties wishing to contribute pertinent information to the file. Each party could maintain those items of their speciality and in return would have access to the entire file.

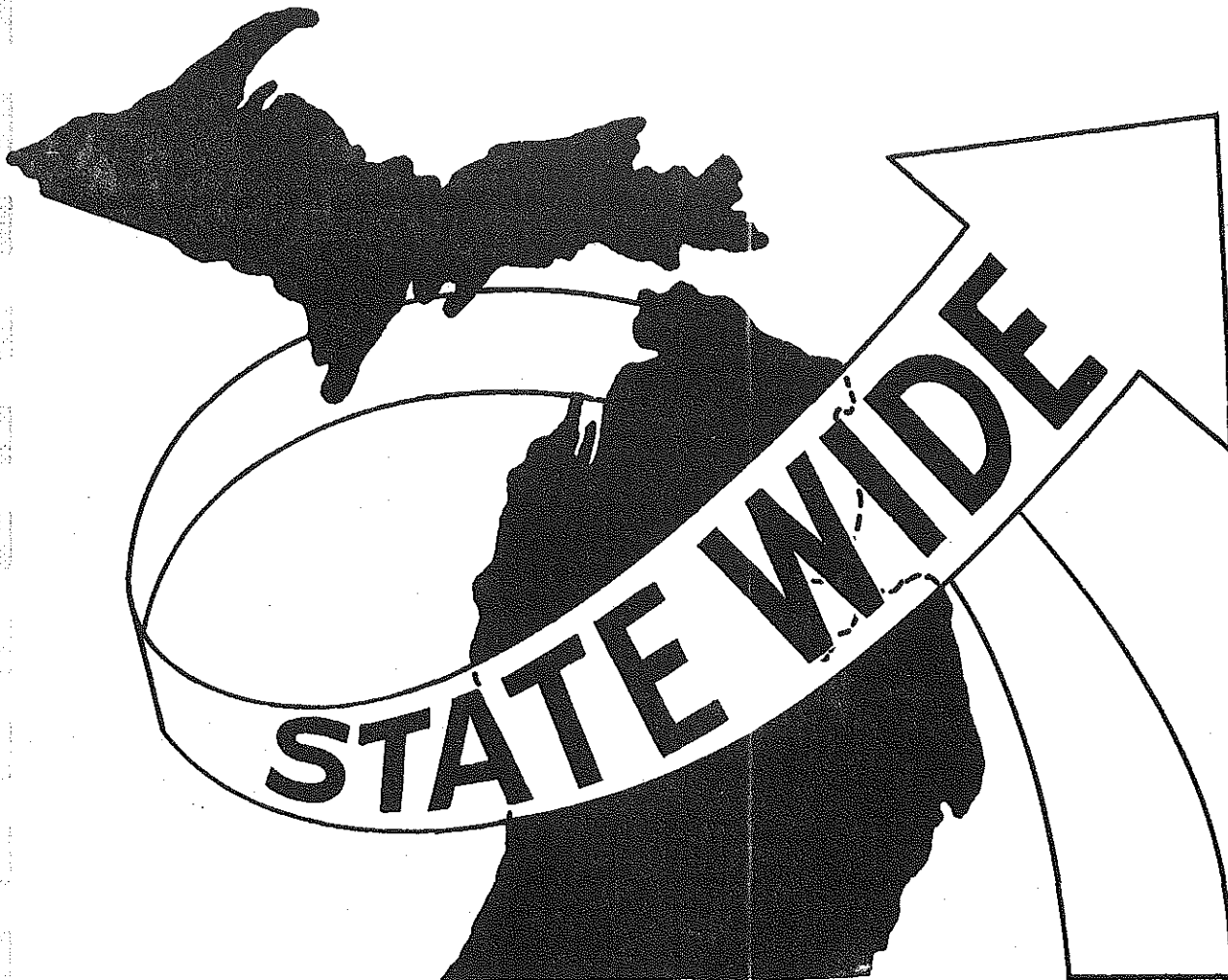
Efforts are now being made to more closely integrate the socio-economic file, the facility file, and the statewide highway network file into a "mini" information system. Present socio-economic data could be adjusted on the basis of future population changes so that present or future socio-economic data could be used in evaluating the mutual impact of existing or future facility and highway plans on each other. Other modes of transportation might also be considered.

Any suggestions regarding future modifications or improvements would be welcomed.

FIGURE 7



CONCLUSIONS



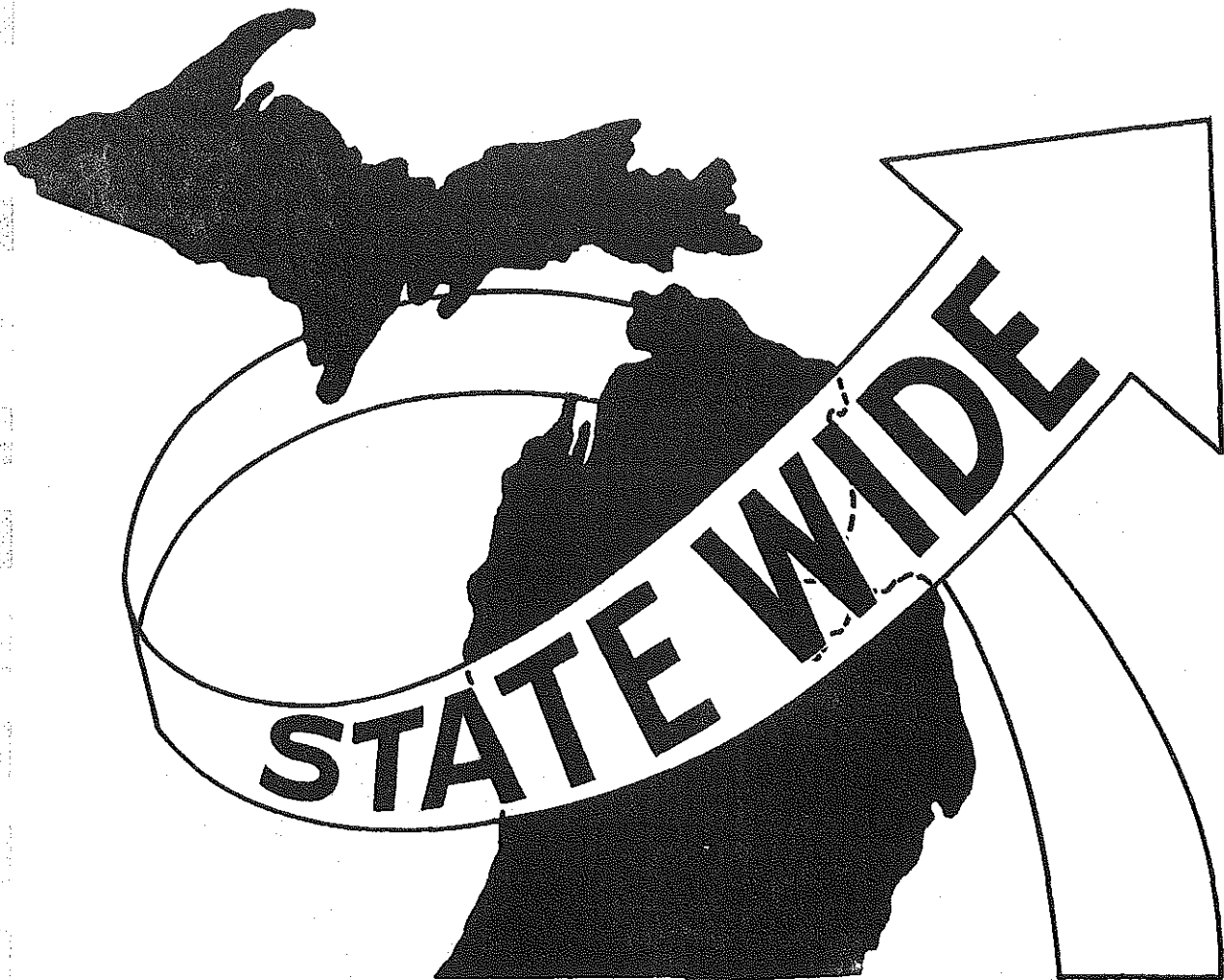
CONCLUSIONS

In the continuing development of Michigan's Statewide Traffic Forecasting Model, it became apparent that a Statewide socio-economic data file might also be of use to many other people -- particularly those involved in the planning of state facilities where it is often important to know the relationship of facilities to socio-economic data and the highway system. Through the use of a tool already developed, "proximity analysis", this integral relationship between people and places can now be studied.

It is hoped that through the cooperative effort of many departments, all may benefit far more than would have been possible through individual efforts.

Any who feel the Statewide Socio-economic Data File and its accompanying analysis might be useful in satisfying some of their particular needs are invited to contact the Michigan Department of State Highways to discuss applications and possible uses.

APPENDIX A



APPENDIX A

DETAILED ACCOUNT OF 1970 CENSUS CONVERSION

The basic census data was obtained from the Computer Center at Michigan State University with the assistance of Andy Johanson of Applications Programming. These files consisted of:

1. Master Enumeration District (MED) List
2. 1970 Fourth-Count Population Tallies for Minor Civil Divisions (MCD)
3. 1970 Fourth-Count Housing Tallies for Minor Civil Divisions

A description of these files follows, after which an outline will be presented showing how these files were used to create the final socio-economic file.

The Master Enumeration District list contains an entry for each tract-block, minor civil division, or county civil division. Listed for each entry is the name, the various codes identifying the location of the area, the housing count, and the population. For a more detailed description of these fields, refer to Appendix E. The technical details of the tape follows:

1. Reel Size: 10½ inch diameter, 2400 feet.
2. Recording Density = 800 BPI, 7 channel
3. Record Size:

Physical record = 1950 characters

Logical record = 108

Blocking = 18

Note: record length is a multiple of 6 and not a multiple of 8.

4. Parity: Even
5. Label: Unlabeled
6. File Size: 727 records on 1 reel
7. File Description - See Appendix E

The population tallies are contained on four reels of magnetic tape. The technical details of this file follows:

1. Reel Size: 10½ inch diameter, 2400 feet
2. Recording Density: 800 BPI, 7 channel
3. Record Size:
 - Physical record = 2040 characters
 - Logical record = 5 physical records for record types 01 thru 04 and 2 physical records for record type 13.
4. Parity: Even
5. Label: Unlabeled
6. File Size: Approximately - 24000 records on 4 reels
7. File Description - The file is composed of summaries for minor civil divisions (MCD) with 5 records required for each MCD. The file is sorted by 1970 county of tabulation code (CNTY), MCD, and record type. For records types 01 and 04, each MCD is composed of 120 characters of geographic identification followed by 60 sixteen-character aggregate tally fields and 118 eight-character fields.

Record type 13 is the allocation record consisting of 120 characters of identification followed by 252 eight-character tallies, 10 sixteen character tallies, and 4 eight character tallies.

- Record type 1 = Total population
- Record type 2 = White
- Record type 3 = Negro

Record type 4 = Spanish American

Record type 13 = Allocations

These are special records indicating adjustments made to original data due to no response and other errors.

See Appendix C for a complete list of titles for all tallies.

The original housing tallies are contained on seven reels of magnetic tape. The technical details of this file follows:

1. Reel Size: 10½ inch diameter, 2400 feet.

2. Recording Density: 800 BPI, 7 channel

3. Record Size:

Physical record = 1680 characters

Logical record = 7 physical records for record type 1
6 physical records for record type 2
7 physical records for record type 7
5 physical records for record type 8
5 physical records for record type 9
7 physical records for record type 10

4. Parity: Even

5. Label: Unlabeled

6. File Size: 49,794 physical records

7. File Description: There are up to 37 physical records for each minor civil division (MCD). Most categories contain tabulations by tenure and race of head, however, most of these fields have been suppressed except for the total-occupied categories.

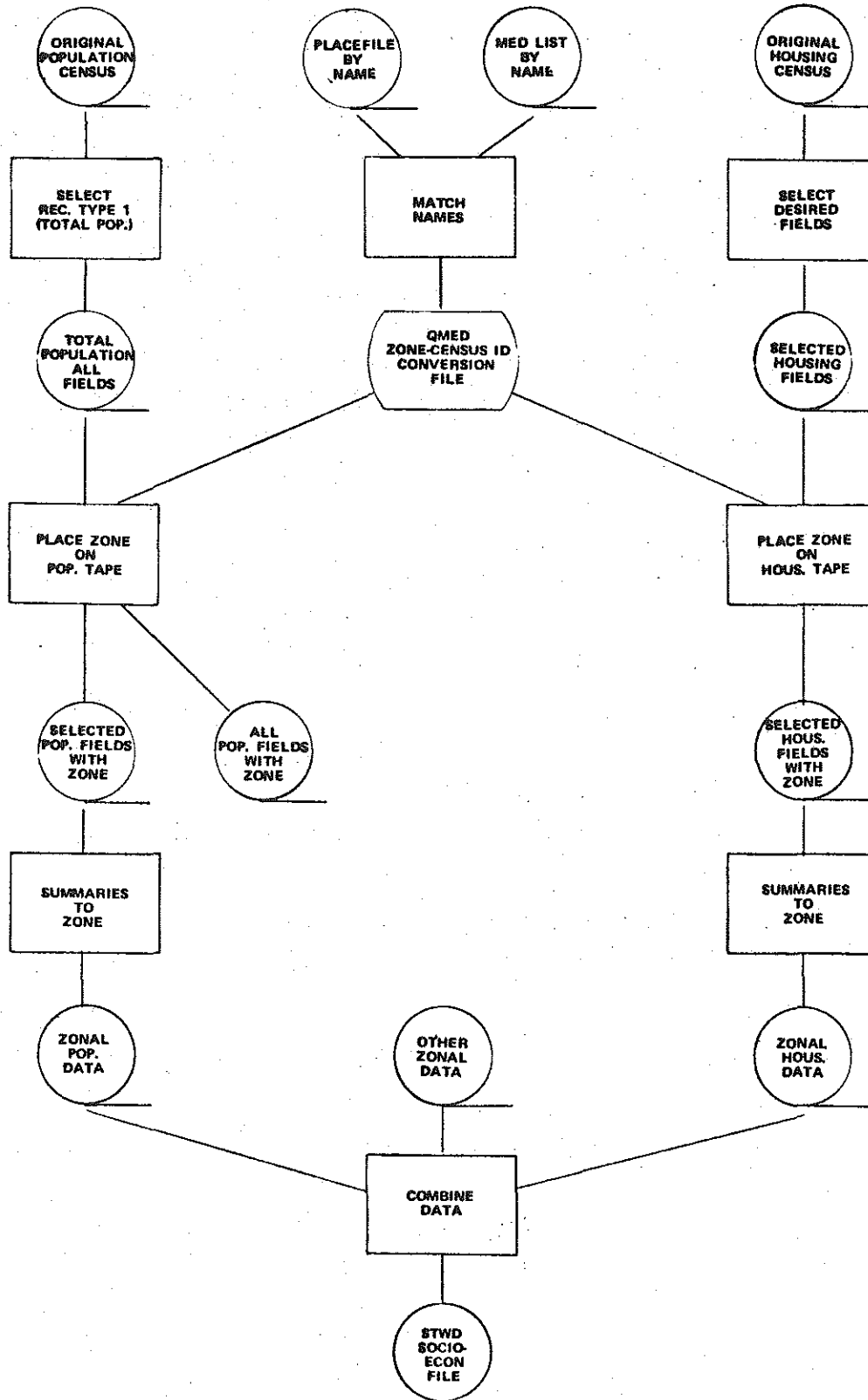
A more complete description of these files may be found in the "1970 Census User's Guide, Part II".

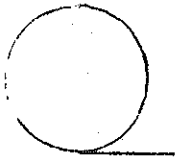
The main conversion task concerned the creation of a zonal summary of the census information based on the statewide traffic forecasting model instate zones as previously seen in figure 1. The basic steps involved are whosn in figure A1. The following

pages will outline the detailed steps of the process. Each page will contain a flow diagram on one side of the page and a brief explanation on the other side.

FIGURE A1

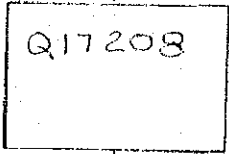
CONVERSION OF 1970 CENSUS DATA



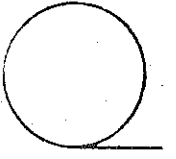


ID: NSUL
 REEL # H7045
 REC: 1950
 BLK: 18
 SORT: CNTY, MCD
 NREC: 727

Original Master Enumeration District (MED) List
 Note: Non-standard tape, physical records = 1950 char., logical record = 108 char. Six char. filler at end of physical record.

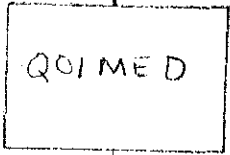


Tape copy to standard Burroughs tape

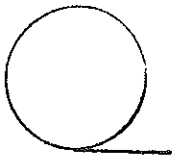


ID: QTOIMED
 REEL # 537
 REC: 1944
 BLK: 4
 SORT: CNTY, MCD
 NREC: 727

Med List - logical record for each census division (MCD, CCD, or tract - block) = 108 char.



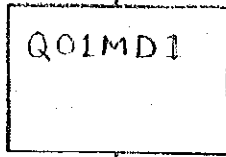
Converts each 108 char above to one 120 char record.



ID: QTOIMED
 REEL # 1946
 REC: 120
 BLK: 10
 SORT: CNTY, MCD
 NREC: Approx. 12,000

Med List



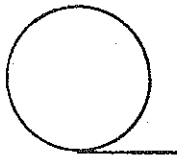


Pull only MCD's (cities, twps)
 Write CNTY, MCD, NAME
 Reserve space for Stw. Zone and place code
 Sort on name.



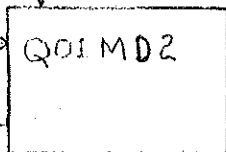
ID: QMED
 REEL #
 REC: 80
 BLK: 30
 SORT: NAME
 NREC: 1511

MCD MED List by name.

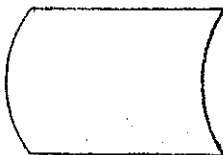


ID: WORKTAP
 REEL #4814
 REC: 80
 BLK: 80
 SORT: PLACENAME
 NREC: Approx. 5,000

Place file by name



Match names, put Stw. Zone and place-code on MED List

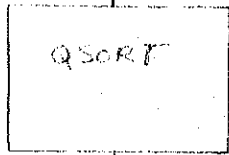


ID: QMED
 REEL #
 REC: 80
 BLK: 30
 SORT: Name
 NREC: 1511

MCD List with Stw. Zone and place name - correct
 mis-match on terminal



B



ID: QMED
REEL: #
REC: 80
BLK: 30
SORT: CNTY, MCD
NREC: 1511

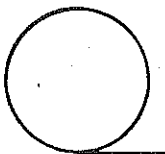


C

Sort QMED by CNTY, MCD

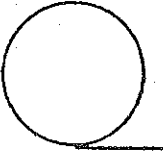
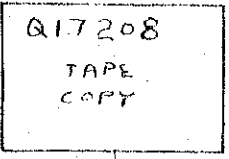
QMED by CNTY, MCD
(Census ID - Stw. Zone)
Conversion List

Puts Statewide Zone on Census file



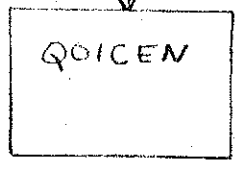
ID: NSUL
 REEL # (*)
 REC: 2040
 BLK: 1
 SORT: CNTY, MCD
 NREC: REC-TYPE
 24095

Original Census Tapes.
 2040 char records, 5 records
 needed for complete population info.
 on any one MCD plus
 2 records for complete
 allocation. Info.
 Note: 4 Reels, 4 Separate files
 must be used in order given
 * H7046, H7047, H7048, H7049

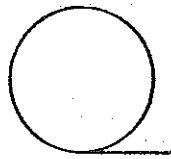


ID: QTOICEN
 REEL # (**)
 REC: 2040
 BLK: 1
 SORT: CNTY, MCD,
 NREC: REC-TYPE
 24095

Now 4 reels but 1 file
 ** 4934, 4937 4938, 4939,



Select rec type 1 only
 (Total pop. info.)

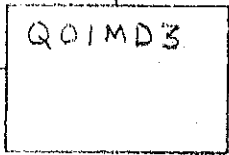


ID: QTOICEN
 REEL # 4940
 REC: 2040
 BLK: 1
 SORT: CNTY, MCD
 NREC: 7545

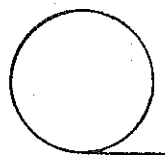
Total pop. figures.
 5 records need for complete
 information on each MCD



C

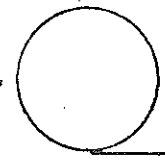


QMED and Census matched on CNTY, MCD. Stw. Zone and place code put on census record. Two census files written, one complete and one shortened version.



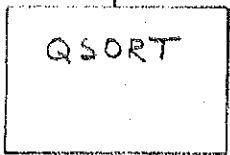
ID: QTO1CEN
 REEL #4065
 REC: 2040
 BLK: 1
 SORT: CNTY,MCD
 NREC: 7545

Complete Census info. (with zone)
 5 records still needed for complete MCD.

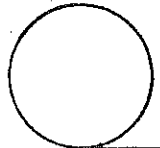


ID: QTCENSU
 REEL # 2163
 REC: 5832
 BLK: 1
 SORT: CNTY,MCD
 NREC: 1509

Compressed Census info. (with zone)
 One record for each MCD. 120 character ID field and 714 eight character census fields.

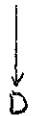


Sort by zone

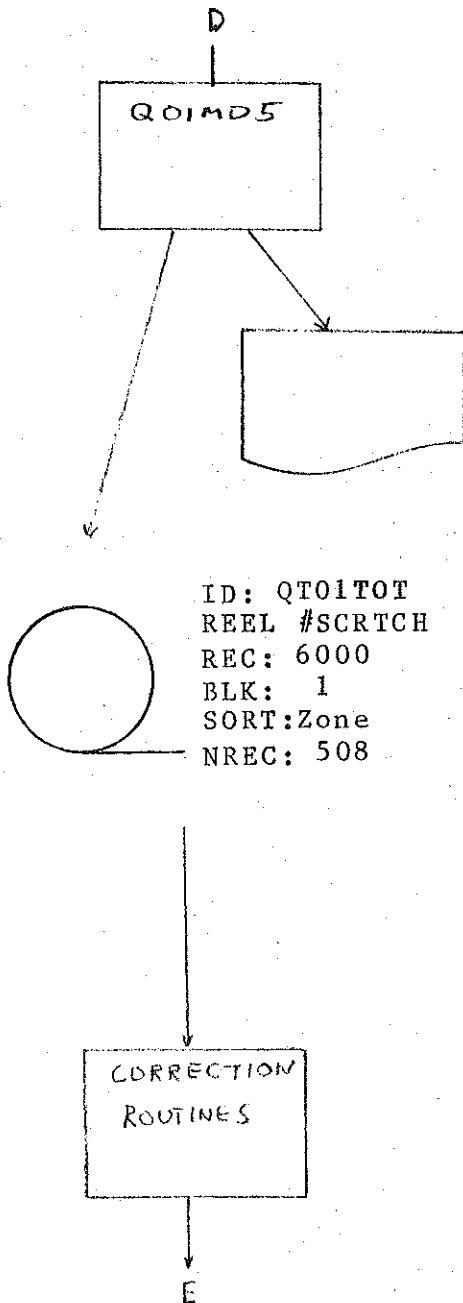


ID: QTCENSU
 REEL # 2649
 REC: 5832
 BLK: 1
 SORT: zone
 NREC: 1509

Compressed Census MCD's by zone.



D



Check for Suppression codes.
 Sum MCD's with same zone
 and write record for each zone.
 Extra space for expansion included.

List of zones and categories suppressed.
 (See Figure A2)

Statewide Socio-Economic Data File.
 One record per zone containing zone
 totals of the 714 census categories.

Corrections were made for the following
 which were summarized to the wrong zone:

Wilson Twp.	Blue Lake Twp.
Bloomfield Twp.	Elba Twp.
Wheatfield Twp.	Sturgis (City)

Detroit is the only city in the Statewide Model's 547 zone system which is split into more than one zone. Because Detroit is split into 3 zones the census totals for Detroit were divided into 3 parts according to the zone populations.

The city of Caro is a zone separate from surrounding Indianfield twp. A separate census record was not available for Caro, therefore, the twp, information was divided according to population to obtain separate totals for Caro. Similarly Houghton was not a separate census record and was extracted from the surrounding Portage twp. according to population.

E

ID: QT01TOT
REEL #SCRTCH
REC: 6000
BLK: 1
SORT:Zone
NREC: 508

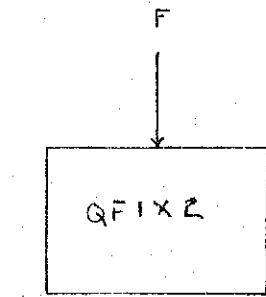
Corrected Socio-Economic Data File

QADDP

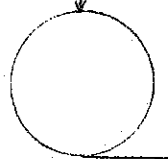
Append 1970, 75, 80, 85, 90, 95
and 2000 population to each record.

ID: QT01SIS
REEL # 6421
REC: 6000
BLK: 1
SORT:Zone
NREC: 508

Final Statewide Socio-Economic Data
File containing statewide zone
number, 714 fields of census data
1970 population and six projected
populations.

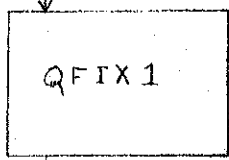


Corrections made for some errors found in zone 235 and 346.

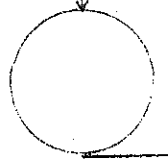


ID: QT01SIS
 REEL: # 5304
 REC: 6000
 BLK: 1
 SORT: ZONE
 NREC: 508

Socio-Economic Data File
 (722 Total fields)



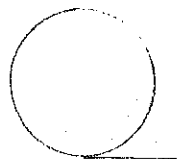
Several little used fields are dropped from population data.



ID: QT01SIS
 REEL: # 3669
 REC: 6000
 BLK: 1
 SORT: ZONE
 NREC: 508

Socio-Economic Data File
 (619 Total fields)

J

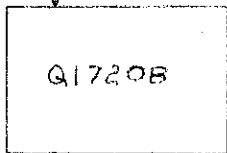


ID: NSUL
 REEL: #(*)
 REC: 1680
 BLK: 1
 SORT: CNTY, MCD
 NREC: 49794

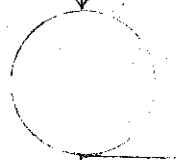
Original housing tapes. Up to 37 records for each MCD.

NOTE: Seven reels are separate files and must be used in order.

*H7410, H7411, H7412, H7413, H7414, H7415, H7416

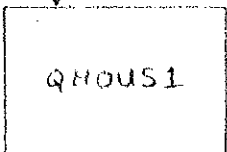


Copy to one file.

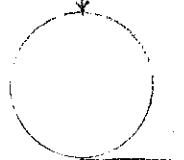


ID: QTH0US1
 REEL: #(**)
 REC: 1680
 BLK: 1
 SORT: CNTY, MCD
 NREC: 49794

As above but five reels = 1 file
 ** 6987, 6481, 3553, 3909, 6558

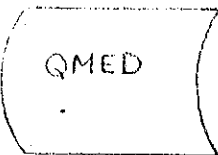


Program selects 208 eight-character fields plus 120 character ID.



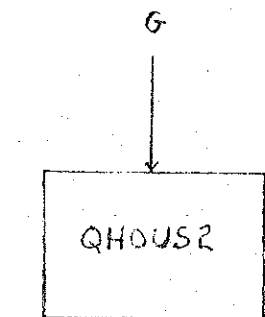
ID: QT01HS1
 REEL: # 7654
 REC: 1784
 BLK: 1
 SORT: CNTY, MCD
 NREC: 1510

Selected housing data
 1 record = 1 MCD

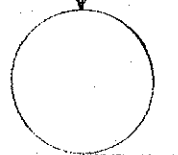


MCD to zone conversion file

G

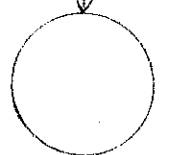
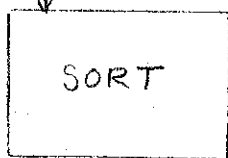


Zone number and place code inserted in each record



ID: QT01HS2
 REEL: # 50
 REC: 1784
 BLK: 1
 SORT: CNTY, MCD
 NREC: 1510

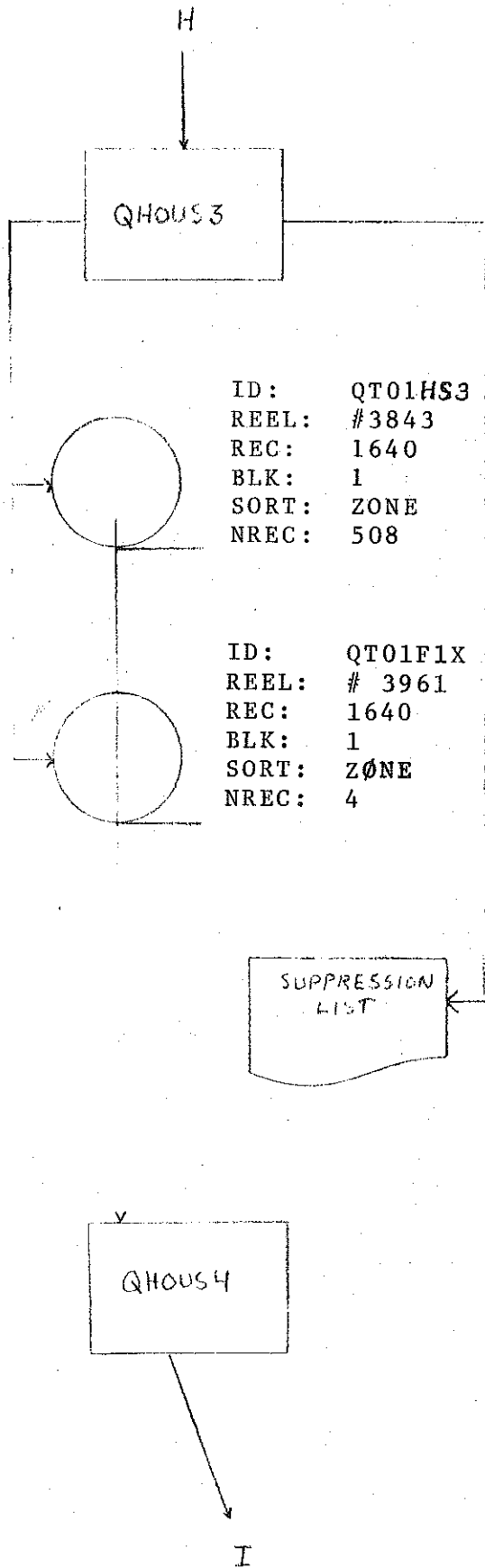
Selected housing data with 120 character ID (with zone number and place code) plus 208 housing fields.



ID: QT01HS2
 REEL # 2382
 REC. 1784
 BLK: 1
 SORT: ZONE
 NREC: 1510

As above but sorted by zone number.





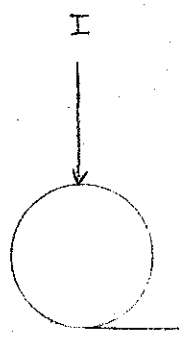
Housing data summarized to zone. Four housing fields are dropped due to excessive suppression.

Zonal housing data. One record/zone. As with population data, Caro, Houghton-Hancock, and Detroit zones are not yet complete.

Amounts to be added to zones 169, 460, 495, 496

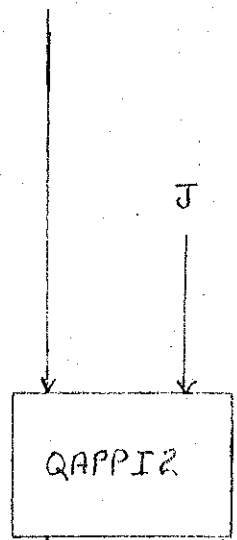
List of categories by MCD which have data suppressed.

Corrections completed for zones 169, 460, 495, 496

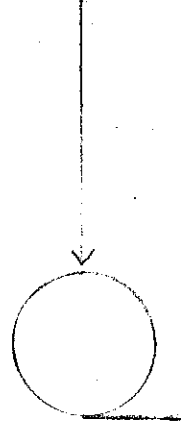


ID: QT01HS4
REEL: # 3961
REC: 1640
BLK: 1
SORT: ZONE
NREC: 508

Final zonal housing summaries
(One record/zone)



Housing data is appended to
previously created population file



ID: QT01SIS
REEL: # 8293
REC: 8160
BLK: 1
SORT: ZONE
NREC: 508

Socio-Economic Data File
Fields used = 823

FIGURE A2

1970 CENSUS SUPPRESSION LIST

<u>ZONE</u>	<u>CITY OR TWP</u>	<u>CATEGORY SUPPRESSED</u>
2	MITCHELL TWP	13, 15
6	GRAND ISLAND TWP	13, 15
22	ARVON TWP	13, 15
24	SPURR TWP	13, 15
36	PLATTE TWP	13, 15
76	CHANDLER TWP	13, 15
		5, 6, 7
83	SUGAR ISLAND TWP	13, 15
85	HULBERT	13, 15
91	FREEMAN TWP	13, 15
102	LOVELLS TWP	13, 15
105	BAY DE NOC TWP	13, 15
111	WEST BRANCH TWP	13, 15
125	CROSS VILLAGE TWP	13, 15
143	GRIM TWP	13, 15
143	BOURRET TWP	13, 15
153	UNION TWP	2 Thru 34
173	HANCOCK TWP	13, 15
182	GORE TWP	13, 15
235	BEAR LAKE TWP	13, 15
249	GRANT TWP	13, 15
251	DOVER TWP	13, 15
280	BOIS BLANC TWP	13, 15
282	HUDSON TWP	13, 15
282	HENDRICKS TWP	13, 15
285	GROSSE POINTE SHORES	13, 15
293	SPRINGDALE TWP	13, 15
298	WELLS TWP	13, 15
298	TURIN TWP	13, 15
303	LOGAN TWP	13, 15
314	FAITHORN TWP	13, 15
314	CEDARVILLE TWP	13, 15
321	BLOOMFIELD TWP	5, 6, 7
		8, 9, 13, 15
346	BLUE LAKE TWP	13, 15
353	MONROE TWP	13, 15
385	HAIGHT TWP	13, 15
394	DOVER TWP	13, 15
405	BEARINGER TWP	13, 15
408	NESTER TWP	13, 15
408	AU SABLE TWP	13, 15
408	BACKUS TWP	13, 15

FIGURE A2

CONTINUED

1970 CENSUS SUPPRESSION LIST

<u>ZONE</u>	<u>CITY OR TWP</u>	<u>HOUSING CATEGORY SUPPRESSED</u>
1	ALCONA TWP	49-61
2	MITCHELL TWP	49-61, 70
2	MILLEN TWP	49-61, 70
4	BURT TWP	49-61
5	ONOTA TWP	40, 42-46
5	LIMESTONE TWP	70
6	GRAND ISLAND TWP	38-46, 49-61, 63-67, 69-71
15	WELLINGTON TWP	49-61, 70
16	WARNER TWP	49-61, 70
16	STAR TWP	49-61
16	JORDAN TWP	49-61, 70
21	OMER	49-61
22	ARVON TWP	49-61
24	SPURR TWP	49-61
34	LAKE TWP	49-61
36	PLATTE TWP	49-61, 70
36	INLAND TWP	49-61, 70
36	COLFAX TWP	70
76	HUDSON TWP	38-46, 49-61, 63-67, 69-71
76	CHANDLER TWP	38-46, 49-71
78	ST. JAMES TWP	38-46, 49-61, 63-67, 69-71
78	PEAINE TWP	40-46, 49-61, 70
78	NORWOOD TWP	49-61
80	MACKINAW TWP	49-61
80	HEBRON TWP	49-61, 70
80	BURT TWP	49-61
81	WALKER TWP	49-61, 70
81	MENTOR TWP	70
81	KOEHLER TWP	49-61
81	ELLIS TWP	49-61, 70
83	SUGAR ISLAND TWP	49-61, 70
85	HULBERT TWP	49-61, 70
88	BAY MILLS TWP	49-61
90	ARTUR TWP	70
91	GREENWOOD TWP	49-61, 70
91	FREEMAN TWP	49-61, 70
102	MAPLE FOREST TWP	70
102	LOVELLS TWP	49-61, 70
105	ENSIGN TWP	49-61
105	BAY DE NOC TWP	49-61, 70
107	NAHMA TWP	49-61
107	FAIRBANKS TWP	49-61
111	WEST BRANCH TWP	40-46, 49-61, 70
111	BREEN TWP	49-61
125	READMOND TWP	49-61, 70
125	CENTER TWP	70
125	CROSS VILLAGE TWP	49-61, 70
125	BLISS TWP	49-61, 70

FIGURE A2

CONTINUED

<u>ZONE</u>	<u>CITY OR TWP</u>	<u>HOUSING CATEGORY SUPPRESSED</u>
126	PLEASANT VIEW TWP	40-46, 49-61, 70
126	FRIENDSHIP TWP	49-61, 70
143	GRIM TWP	38-46, 49-71
143	BOURRET TWP	49-61
147	WAKEFIELD TWP	49-61
153	UNION TWP	38-46, 49-71
157	HAMILTON TWP	70
173	QUINCY TWP	49-61, 70
173	HANCOCK TWP	49-61, 70
175	ELM RIVER TWP	49-61, 70
179	SHERIDAN TWP	70
180	CHANDLER TWP	70
182	POINTE AUX BARQUES	38-46, 49-71
182	HURON TWP	70
182	GORE TWP	38-46, 49-61, 63-67, 69-71
202	WILBER TWP	49-61
203	BURLEIGH TWP	70
208	MANSFIELD TWP	49-61, 70
212	COLDWATER TWP	70
234	ORANGE TWP	49-61
234	BOARDMAN TWP	49-61
235	OLIVER TWP	49-61, 70
235	COLD SPRINGS TWP	49-61
235	EXCELSIOR TWP	49-61, 70
235	BLUE LAKE TWP	49-61
235	BEAR LAKE TWP	49-61, 70
249	SHERMAN TWP	40, 42-46, 49-61, 70
249	GRANT TWP	49-61, 70
249	HOUGHTON TWP	49-61
249	EAGLE HARBOR TWP	38-46, 49-61, 63-67, 69-71
250	SWEETWATER TWP	49-61, 70
250	PINORA TWP	49-61, 70
250	LAKE TWP	49-61
250	CHERRY VALLEY TWP	49-61, 70
251	SAUBLE TWP	49-61
251	PEACOCK TWP	49-61
251	NEWKIRK TWP	49-61
251	ELLSWORTH TWP	49-61
251	DOVER TWP	49-61, 70
251	EDEN TWP	49-61
260	GLEN ARBOR TWP	49-61
260	CLEVELAND TWP	49-61
280	BOIS BLANC TWP	38-46, 49-61, 63-67, 69-71
282	HUDSON TWP	40, 42-46, 49-61, 70
282	HENDRICKS TWP	49-61, 70
285	LAKE TWP	49-61
291	BROWN TWP	70

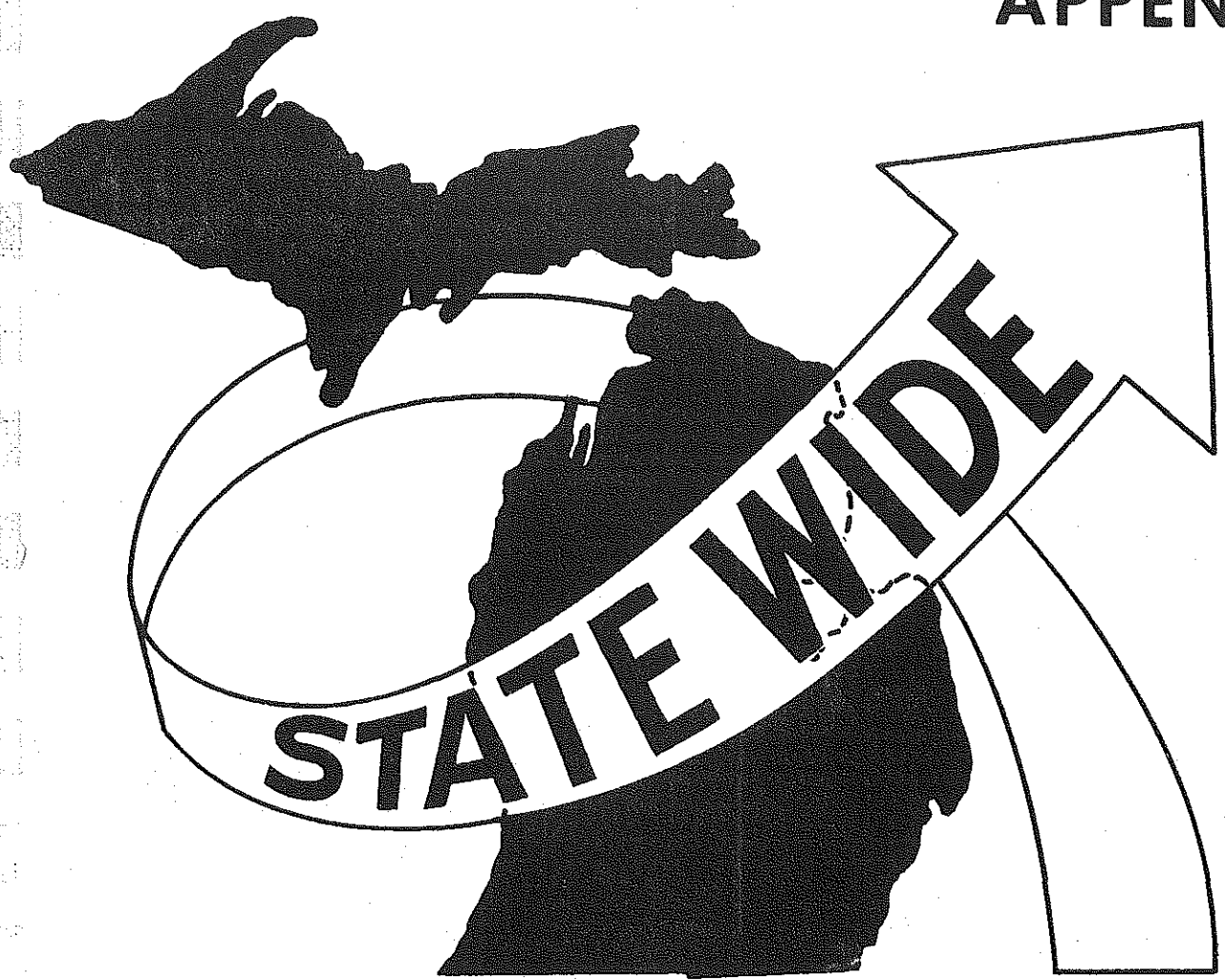
FIGURE A2 CONTINUED

<u>ZONE</u>	<u>CITY OR TWP</u>	<u>HOUSING CATEGORY SUPPRESSED</u>
293	SPRINGDALE TWP	49-61, 70
293	MARILLA TWP	20, 42-46, 49-61, 70
298	WELLS TWP	49-61, 70
298	TURIN TWP	49-61, 70
298	EWING TWP	49-61
301	MICHIGAMME	49-61
303	LOGAN TWP	40, 42-46, 49-61, 70
303	EDEN TWP	49-61, 70
304	MEADE TWP	40, 42-46, 49-61, 70
310	AUSTIN TWP	70
314	HOLMES TWP	49-61
314	FAITHORN TWP	49-61, 70
314	GOURLEY TWP	49-61
314	CEDARVILLE TWP	49-61, 70
315	MIDLAND	70
320	REEDER TWP	70
321	PIONEER TWP	49-61, 70
321	FOREST TWP	49-61
321	BLOOMFIELD TWP	38-46, 49-61, 63-67, 69-71
322	WEST BRANCH TWP	49-61, 70
322	NORWICH TWP	49-61, 70
322	HOLLAND TWP	49-61, 70
322	ENTERPRISE TWP	40, 42-46, 49-61, 70
322	AETNA TWP	49-61, 70
322	BUTTERFIELD TWP	49-61
341	VIENNA TWP	49-61, 70
341	LOUD TWP	49-61, 70
341	AVERY TWP	49-61, 70
353	TROY TWP	38-46, 49-61, 63-67, 69-71
353	NORWICH TWP	49-61
353	MONROE TWP	38-46, 49-61, 63-67, 69-71
353	MERRILL TWP	49-61
353	HOME TWP	49-61, 70
353	BEAVER TWP	70
353	BARTON TWP	70
354	LINCOLN TWP	49-61
363	NOVI TWP	49-61
378	OTTO TWP	49-61, 70
381	GOODAR TWP	49-61
381	FOSTER TWP	49-61
384	ROCKLAND TWP	49-61
384	BOHEMIA TWP	40, 42-46, 49-61, 70
385	HAIGHT TWP	49-61, 70
386	MATCHWOOD TWP	40, 42-46, 49-61, 70

FIGURE A2 CONTINUED

<u>ZONE</u>	<u>CITY OR TWP</u>	<u>HOUSING CATEGORY SUPPRESSED</u>
388	ORIENT TWP	49-61
388	EVART TWP	49-61
389	HARTWICK TWP	49-61
390	ROSE LAKE TWP	49-61
390	CEDAR TWP	49-61, 70
391	ELMER TWP	49-61
393	HAYES TWP	49-61
393	CHESTER TWP	49-61
394	DOVER TWP	49-61
404	MOLTKE TWP	49-61, 70
404	BISMARCH TWP	49-61, 70
405	OCQUEOC TWP	70
405	BEARINGER TWP	49-61
406	PULAWSKI TWP	49-61
408	NESTER TWP	49-61, 70
408	AU SABLE TWP	49-61, 70
408	BACKUS TWP	38-46, 49-61, 63-67, 69-71
412	ZILWAUKEE TWP	49-61
425	MAPLE VALLEY TWP	70
427	WHEATLAND TWP	70
431	THOMPSON TWP	49-61
432	SENEY TWP	49-61
432	MUELLER TWP	49-61
432	GERMFASK TWP	49-61
451	LYNN TWP	70
506	SOUTH BRANCH TWP	49-61, 70
506	SLAGLE TWP	49-61, 70
506	HENDERSON TWP	40, 42-46, 49-61, 70
506	BOON TWP	49-61
507	WEXFORD TWP	70
507	HANOVER TWP	49-61
507	ANTIOCH TWP	49-61, 70
508	LIBERTY TWP	49-61
508	COLFAX TWP	70
508	GREENWOOD TWP	49-61, 70

APPENDIX B



APPENDIX B

In order to access the socio-economic file it is first important to know the structure of the file.

The present statewide Socio-Economic Data File resides on magnetic tape. The technical details of this file follows:

1. Reel Size: 10½ inch, 24 feet
2. Recording Density: 800 BPI, 7 channel
3. Record Size: Physical record = 8160 characters
Logical record = 1 physical record
4. Parity: ODD
5. Label: QT01SIS
6. File Size: 508 records
7. File Description:

Each record represents a particular zone and contains 1020 eight-character fields. The first field is the statewide model zone number. The next 611 fields contain census population data. The seven fields giving the 1970 and future projected populations are next. The next 204 fields contain census housing data. The remaining fields are blank and reserved for future use. A detailed description of each field is available in Appendix D.

Access to information is made by running a short computer program either from remote terminal or on site. Input to the Statewide Information Retrieval Program (QSIRP) will include:

1. A title card for identification purposes
2. Field definition cards to identify:

individual fields in the socio-economic file or to define temporary variables created by arithmetic manipulation of these individual fields or other temporary variables.

3. Save card to indicate which temporary variables are to be saved for output.

Access to the data was to have been through the use of the general inquiry system already available in BASIS (Burroughs Advanced Statistical Inquiry System); however, BASIS could not accommodate the large record size without extensive modification. The retrieval program develop was designed to obtain and transform data in a manner similar to BASIS.

Information to be saved may be written to either disk or tape and consists of 508 records (corresponding to the 508 instate zones) plus one record containing totals of the previous 508 records. The output may simply be listed or it may be used in other analysis routines. Figure B1 indicates the general process.

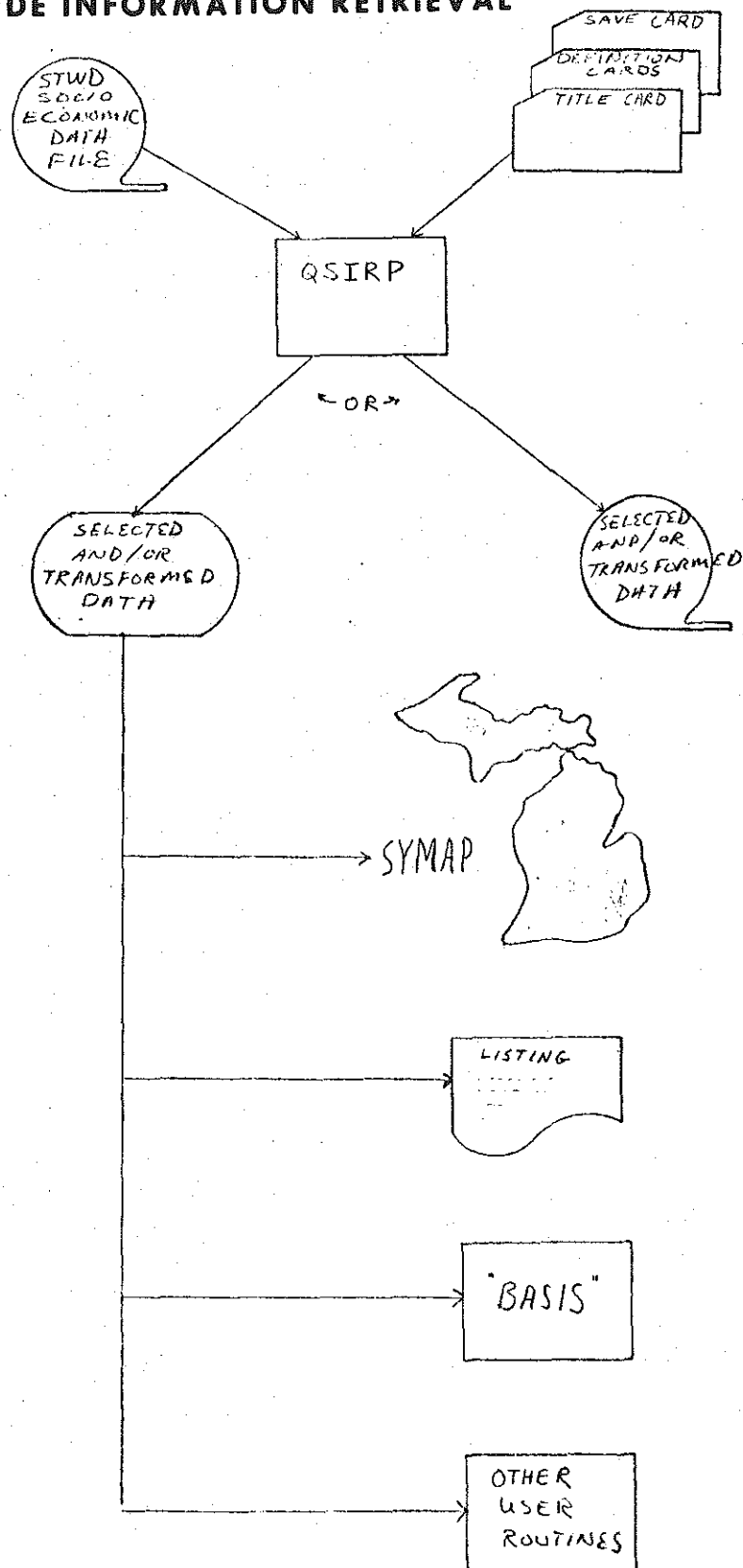
To illustrate the input formats and use of input cards an example using the age and sex category will be considered. The task will be to obtain the number of children under 5 years of age in each zone.

Referring to Appendix D it can be seen that the first variable (V1) or field in the file is the statewide zone number; the second variable (V2) is the number of male children under 3 years of age; and the third variable (V3) is the number of male children 3 and 4 years of age. Similarly the corresponding fields for females are V29 and V30. Thus to obtain the number of children under 5 years of age we need to sum variables 2, 3, 29, and 30.

To create a file containing this total for each zone along with the corresponding zone number the Statewide Information

FIGURE B1

STATEWIDE INFORMATION RETRIEVAL



Retrieval Program would be run with the following 4 cards or entries on the remote terminal:

```
D NUMBER OF CHILDREN UNDER 5
T0001=V0001
T0002=V0002+V0003+V0029+V0030
SAVED=T0001,T0002
```

The first card is a title card, of which the first column should be a "D" or "T" to indicate whether the output is to be written to disk or tape. The next two cards define the zone number and the required sum. The "V" in these cards refers to the variables found in the socio-economic data file and their corresponding position in the file as defined in Appendix D. The "T" indicates a temporary variable. The left hand side of a definition card must always be a "T" variable.

The right hand side of the definition card may be "T" or "V" variables. The variable number must always be a four-digit number. The last card indicates which temporary variables are to be saved and written to the output file. Figure B2 shows the setup and a partial print of the resulting output. The list shows, for example, that zone 183 (Lansing) has 17489 children under the age of 5.

The specific formats and run instructions are contained in figures B3 and B4. Before using the file each user should be aware of those items or zones where data has been suppressed for confidential reasons. This is discussed in Appendix A along with special notes regarding data for Houghton, Caro, and Detroit.

New information will periodically be added to the socio-economic

FIGURE B 2

STATEWIDE INFORMATION RETRIEVAL

EXAMPLE SETUP

NOTE: Underlined portions indicate user-entered data.

R QSIRP
RUNNING

?D NUMBER OF CHILDREN UNDER 5
?T0001=V0001
?T0002=V0002+V0003+V0029+V0030
?SAVED=T0001+T0002

D NUMBER OF CHILDREN UNDER 5

READ = 00000508

WRITTEN = 00000509

END QSIRP 13.2 SEC.

CHANGE QDSIR TYPE TO DATA

#

PRINT QDSIR 183-185

0000183.0 0017489.0

0000184.0 0001689.0

0000185.0 0001503.0

file. Those interested in the reel number of the most recent Statewide Socio-Economic Data File whould contact the Statewide Studies Research and Development Section.

FIGURE B3

STATEWIDE INFORMATION RETRIEVAL PROGRAM

INSTRUCTIONS

Remote Terminal Program = QSIRP/QSTWD

Input Tape = QT01SIS Reel number available from
Statewide Studies

Three types of cards are required and must be in the following
order:

- 1) Title card
- 2) Definition cards (in order by temporary variable #)
- 3) Save Card

Card Formats

1. Title Card

Col 1.	=	"T"	If output to be card-image tape "QT01SIR"
	=	"D"	If output to be TSS disk file "QDSIR"
Col 2-79	=		Any title desired

2. Definition cards

Col 1.	=	"T"	Indicates temporary variable
Col 2-5	=	"9999"	Where 9999 = temporary variable number. Must be sequential beginning with 0001. (Maximum of 99)
Col 6.	=	"="	
Col 7.	=	"T"	If first Operand is a previous temporary variable
	=	"V"	If first Operand is a variable from the Socio-Economic Data File

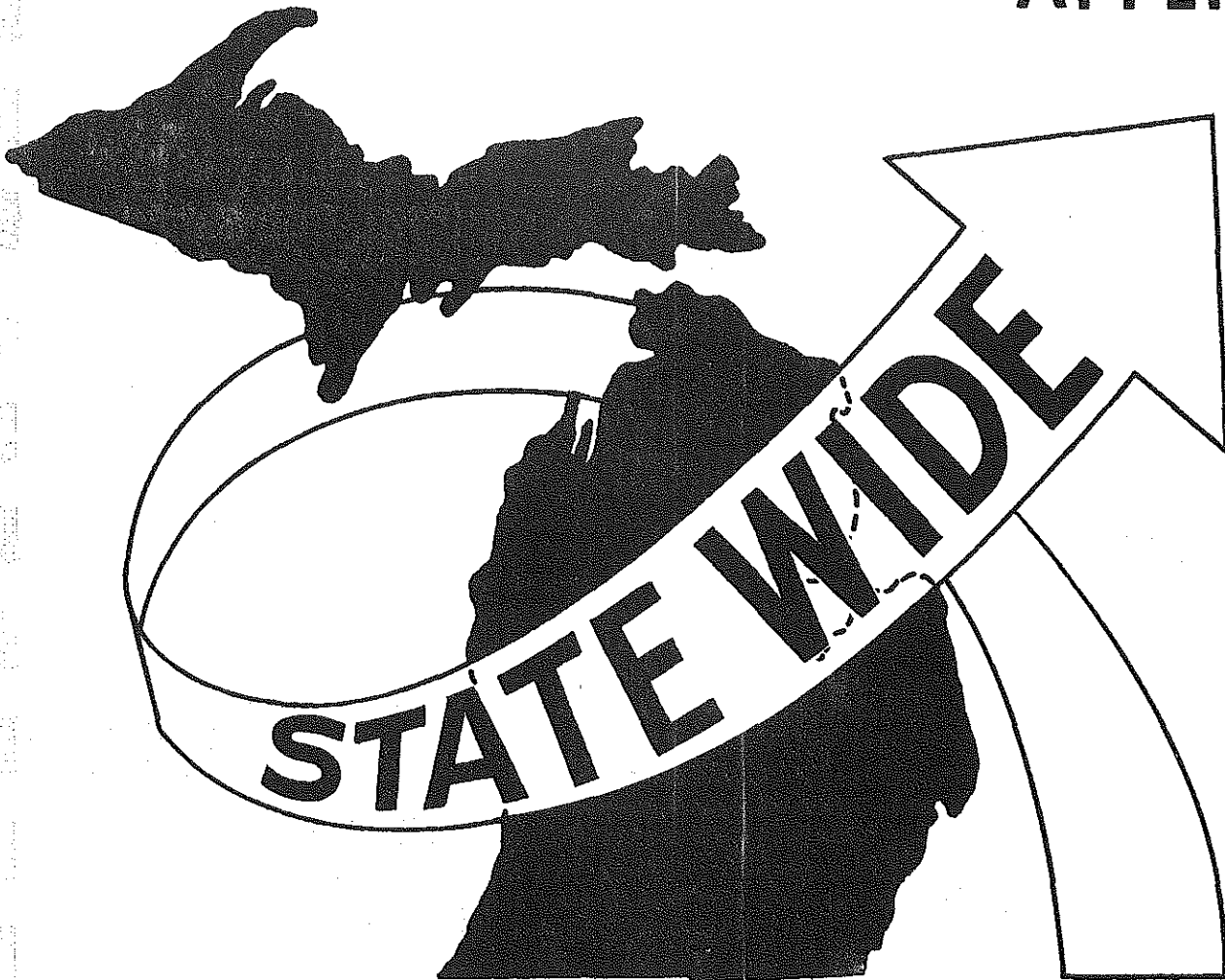
FIGURE B4

Col 8-11	=	"9999"	Where 9999 = variable number
Col 12	=	"+"	Operation to be performed
		"_"	
		"*"	
		"/"	
		" "	Blank if no operation
Col 13-17			Code as Col 7-11 for second Operand.*
Col 18-78			Thirteen additional add fields (not used for operations other than addition). Code as Col 7-11.
3. Save Card			
Col 1-5	=	"SAVED"	
Col 6	=	"="	
Col 7	=	"T"	
Col 8-11	=	"9999"	Where 9999 = temporary variable to be saved and written on putput file.
Col 12	=	","	
Col 13-16			Six additional save fields code as Col 7-12 to have other variables written on the output file (output format = 8F10.1).

Each record of the resulting output file will contain the totals described by the definition and save cards. The file will contain 509 records. The first 508 correspond to the 508 instate zones in the Statewide Forecasting Mode. The last record contains totals of the previous 508 records.

* Second operand may be a constant by coding "C" in Col. 13 and the integer constant in Col. 14-16.

APPENDIX C



APPENDIX C

1970 Census Fourth Count
Population Summary Categories

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Tabulation
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6	AGGREGATE \$ EARNINGS OF MALES 16 YEARS OLD AND OVER IN THE EXPERIENCED CIVILIAN LABOR FORCE BY SELECTED OCCUPATIONS
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12	AGGREGATE # INCOME OF SPECIFIED TYPES RECEIVED BY FAMILIES BELOW POVERTY LEVEL
13	AGGREGATE \$ INCOME OF SPECIFIED TYPES RECEIVED BY UNRELATED INDIVIDUALS BELOW POVERTY LEVEL
14	AGGREGATE \$ VALUE OF OWNER-OCCUPIED UNITS BY POVERTY STATUS OF FAMILY OR PRIMARY INDIVIDUAL
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22	COUNTRY OF ORIGIN AND NATIVITY (15%)
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25	CITIZENSHIP AND AGE (5%)

26 YEAR OF IMMIGRATION FOR THE FOREIGN-BORN POPULATION (5%)

27 STATE OF BIRTH FOR THE NATIVE POPULATION

28* POPULATION 5 YEARS OLD AND OVER BY RESIDENCE IN 1965 (15%)

29 POPULATION 5 YEARS OLD AND OVER LIVING IN SMSA'S OR
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30 POPULATION LIVING IN A DIFFERENT COUNTY BY RESIDENCE
AND ACTIVITY STATUS IN 1962 (15%)

31 POPULATION IN ARMED FORCES IN 1970 AND LIVING IN A
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32 INMATES OF INSTITUTIONS IN 1970 AND LIVING IN A DIFFERENT
COUNTY BY RESIDENCE IN 1965 (15%)

33 POPULATION ATTENDING COLLEGE IN 1970 AND LIVING IN A
DIFFERENT COUNTY RESIDENCE IN 1965 AND RESIDENCE WITH
PARENTS IN 1970 (15%)

34 YEAR MOVED INTO UNIT (15%)

35* POPULATION AT WORK DURING THE CENSUS WEEK BY PLACE OF
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38* POPULATION 3 YEARS OLD AND OVER ENROLLED IN SCHOOL BY
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40* POPULATION 18-24 YEARS OLD BY COMPLETION OF HIGH SCHOOL
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42* POPULATION 25 YEARS OLD AND OVER BY YEARS OF SCHOOL
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51* POPULATION IN GROUP QUARTERS BY TYPE OF GROUP QUARTERS

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SCHOOL BY DISABILITY, EMPLOYMENT STATUS, AND SEX (5%)

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60 EMPLOYED MALES 14-15 YEARS OLD BY OCCUPATION

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80 TYPE OF INCOME AND FAMILY STATUS

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82* RATIO OF FAMILY INCOME TO POVERTY LEVEL

83* AGGREGATE NUMBER OF PERSONS IN FAMILIES BELOW POVERTY LEVEL

84 FAMILIES BY PRESENCE OF RELATED CHILDREN UNDER 18, TYPE OF FAMILY, AND POVERTY STATUS

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- 93* POPULATION RECEIVING SOCIAL SECURITY OR RAILROAD RETIREMENT BY AGE AND POVERTY STATUS
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- 95 NUMBER OF UNRELATED INDIVIDUALS BELOW POVERTY LEVEL RECEIVING INCOME OF SELECTED TYPES
- 96* FAMILIES AND PRIMARY INDIVIDUALS IN HOUSING UNITS BY TENURE AND POVERTY STATUS
- 97 FAMILIES AND PRIMARY INDIVIDUALS IN HOUSING UNITS LACKING ONE OR MORE PLUMBING FACILITIES BY POVERTY STATUS
- 98 SPECIFIED POVERTY LEVEL, TYPE OF FAMILY, AND SELECTED FAMILY STATUS
- 99 SPECIFIED POVERTY LEVEL AND AGE

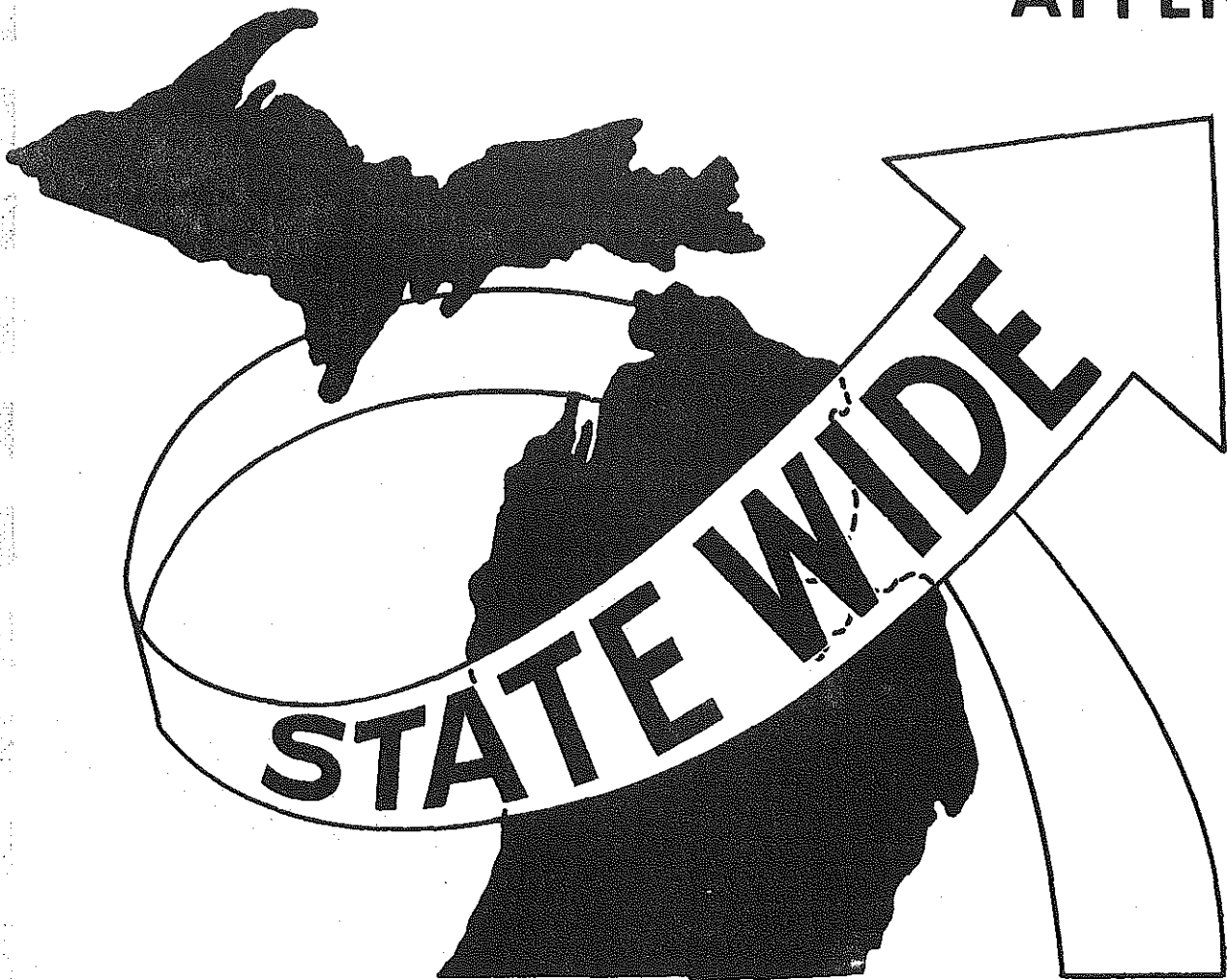
ALLOCATIONS

- 100 COUNT OF PERSONS SUBSTITUTED PLUS PERSONS WITH LESS THAN TWO SAMPLE CHARACTERISTICS REPORTED
- 101 POPULATION ALLOCATIONS AND SUBSTITUTIONS
- 102 COUNT OF HOUSEHOLDS SUBSTITUTED
- 103 FARM RESIDENCE
- 104 SEX
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- 107 NATIVITY
- 108 NATIVITY OF PARENTS (15%)
- 109 YEAR MOVED INTO UNIT (15%)
- 110 RELATIONSHIP
- 111 POPULATION 14 YEARS OLD AND OVER BY MARITAL STATUS
- 112 POPULATION 3-34 YEARS OLD BY ENROLLMENT STATUS AND AGE (15%)
- 113 POPULATION 3-34 YEARS OLD ENROLLED IN SCHOOL BY LEVEL OF SCHOOL (15%)
- 114 POPULATION 25 YEARS OLD AND OVER BY YEARS OF SCHOOL COMPLETED
- 115 POPULATION 16 YEARS OLD AND OVER BY EMPLOYMENT STATUS
- 116 EMPLOYED POPULATION 16 YEARS OLD AND OVER BY OCCUPATION
- 117 EMPLOYED POPULATION 16 YEARS OLD AND OVER BY INDUSTRY
- 118 POPULATION 16 YEARS OLD AND OVER BY WEEKS WORKED IN 1969
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- 122 POPULATION 14 YEARS OLD AND OVER BY INCOME STATUS, TYPE OF INCOME, AND SEX
- 123 POPULATION 14 YEARS OLD AND OVER BY AGGREGATE INCOME AND SEX
- 124 UNWEIGHTED SAMPLE POPULATION COUNT
- 125 UNWEIGHTED SAMPLE HOUSING COUNT
- 126 100% POPULATION COUNT
- 127 100% HOUSING COUNT

*Indicated those items retained for the Statewide Socio-Economic Data File.

All tabulations not otherwise indicated represent 20% sample. Those indicated as 20% tabulations for Spanish Americans are tabulated on a 15% basis.

APPENDIX D



STATEWIDE ZONE NUMBER

CATEGORY

1. ZONE

STATEWIDE TRAFFIC FORECASTING MODEL 547 ZONE SYSTEM

ZONE NUMBER V1

CENSUS POPULATION DATA

2. AGE AND SEX

COUNT OF PERSONS

<u>AGE</u>	<u>SEX</u>	
	MALE	FEMALE
UNDER 3	V2	V29
3-4	V3	V30
5	V4	V31
6	V5	V32
7-9	V6	V33
10-13	V7	V34
14	V8	V35
15	V9	V36
16	V10	V37
17	V11	V38
18	V12	V39
19	V13	V40
20	V14	V41
21	V15	V42
23-24	V16	V43
25-29	V17	V44
30-34	V18	V45
35-39	V19	V46
40-44	V20	V47
45-49	V21	V48
50-54	V22	V49
55-59	V23	V50
60-61	V24	V51
62-64	V25	V52
65-69	V26	V53
70-74	V27	V54
75 AND OVER	V28	V55

CATEGORY

3. FAMILIES BY TYPE, PRESENCE AND AGE OF OWN CHILDREN

COUNT OF FAMILIES

<u>PRESENCE AND AGE OF CHILDREN</u>	<u>HUSBAND-WIFE FAMILY</u>	<u>OTHER FAMILY WITH MALE HEAD</u>	<u>FAMILY WITH FEMALE HEAD</u>
OWN CHILDREN UNDER 18 YRS NOT PRESENT.....	V56	V59	V62
OWN CHILDREN UNDER 18 YRS PRESENT			
UNDER 6.....	V57	V60	V63
OVER 5.....	V58	V61	V64

4. POPULATION 14 YEARS OLD AND OVER BY MARITAL STATUS AND SEX

COUNT OF PERSONS 14 YEARS OLD AND OVER

<u>MARITAL STATUS</u>	<u>SEX</u>	
	<u>MALE</u>	<u>FEMALE</u>
NEVER MARRIED.....	V65	V71
MARRIED, SPOUSE PRESENT.....	V66	V72
MARRIED, SPOUSE ABSENT.....	V67	V73
SEPARATED.....	V68	V74
WIDOWED.....	V69	V75
DIVORCED.....	V70	V76

5. POPULATION 5 YEARS OLD AND OVER BY RESIDENCE IN 1965

COUNT OF PERSONS 5 YEARS OLD AND OVER

RESIDENCE IN 1965

SAME HOUSE.....	V77
DIFFERENT HOUSE	
SAME COUNTY.....	V78
DIFFERENT COUNTY	
SAME STATE.....	V79
DIFFERENT STATE	
NORTHEAST.....	V80
NORTH CENTRAL.....	V81
SOUTH.....	V82
WEST.....	V83
ABROAD, IN ARMED FORCES IN 1965.....	V84
ABROAD, NOT IN ARMED FORCES IN 1965.....	V85
MOVED, RESIDENCE IN 1965 NOT REPORTED.....	V86

6. POPULATION AT WORK DURING THE CENSUS WEEK BY PLACE OF WORK

COUNT OF PERSONS AT WORK DURING THE CENSUS WEEK

EACH OF THE 26 DATA ITEMS IS A COUNT OF PERSONS RESIDENT IN THE SUMMARY AREA WHO WORK IN THE SPECIFIED AREA AS FOLLOWS:

THE FIRST 20 PLACES OF WORK ARE UNIQUELY DEFINED FOR EACH COUNTY. (A LIST OF THESE PLACES FOR EACH COUNTY WILL BE MADE AVAILABLE AT A LATER DATE.) THE PLACES OF WORK MAY BE COUNTIES (TOWNS IN NEW ENGLAND), CITIES OF 20,000 OR MORE POPULATION (1960) OR THE CENTRAL BUSINESS DISTRICTS V87 V106

V107, V108, V109 (NOT MEANINGFUL FOR SUMMARY AREAS OUTSIDE SMSA'S.)

PLACE OF WORK INSIDE THIS SMSA V107
PLACE OF WORK OUTSIDE THIS SMSA V108
NOT REPORTED V109

PLACE OF WORK INSIDE COUNTY OF RESIDENCE V110
PLACE OF WORK OUTSIDE COUNTY OF RESIDENCE V111
NOT REPORTED V112

7. POPULATION AT WORK DURING THE CENSUS WEEK BY MEANS OF TRANSPORTATION TO WORK.

COUNT OF PERSONS AT WORK DURING THE CENSUS WEEK

MEANS OF TRANSPORTATION TO WORK

PRIVATE AUTO, DRIVER V113
PRIVATE AUTO, PASSENGER V114
BUS OR STREETCAR V115
SUBWAY OR ELEVATED V116
RAILROAD V117
TAXICAB V118
WALKED ONLY V119
OTHER MEANS V120
WORKED AT HOME V121

8. POPULATION 3 YEARS OLD AND OVER ENROLLED IN SCHOOL BY LEVEL AND TYPE OF SCHOOL

COUNT OF PERSONS 3 YEARS OLD AND OVER ENROLLED IN SCHOOL

LEVEL AND TYPE OF SCHOOL

POPULATION 3-34 YEARS:

NURSERY SCHOOL:	
PUBLIC.....	V122
PAROCHIAL.....	V123
PRIVATE.....	V124
KINDERGARTEN:	
PUBLIC.....	V125
PAROCHIAL.....	V126
PRIVATE.....	V127
ELEMENTARY:	
PUBLIC.....	V128
PAROCHIAL.....	V129
PRIVATE.....	V130
HIGH SCHOOL:	
PUBLIC.....	V131
PAROCHIAL.....	V132
PRIVATE.....	V133
COLLEGE:	
PUBLIC.....	V134
PRIVATE.....	V135
POPULATION 35 YEARS AND OVER..	V136

9. POPULATION 3-34 YEARS OLD ENROLLED IN SCHOOL BY AGE

COUNT OF PERSONS 3-34 YEARS OLD ENROLLED IN SCHOOL

AGE

3-4.....	V137
5-6.....	V138
7-13.....	V139
14-15.....	V140
16-17.....	V141
18-19.....	V142
20-21.....	V143
22-24.....	V144
25-34.....	V145

10. POPULATION 18-24 YEARS OLD BY COMPLETION OF HIGH SCHOOL AND COLLEGE

COUNT OF SELECTED PERSONS 18-24 YEARS OLD

YEARS OF SCHOOL COMPLETED

COMPLETED 4 YEARS OF HIGH SCHOOL OR MORE.....	V146
COMPLETED 4 YEARS OF COLLEGE OR MORE.....	V147

11. POPULATION 16-21 YEARS OLD NOT ENROLLED IN SCHOOL BY YEARS OF SCHOOL COMPLETED, EMPLOYMENT STATUS, AND SEX

COUNT OF PERSONS 16-21 YEARS OLD NOT ENROLLED IN SCHOOL

<u>EMPLOYMENT STATUS AND YEARS OF SCHOOL COMPLETED</u>	<u>SEX</u>	
	MALE	FEMALE
EMPLOYED OR IN ARMED FORCES:		
NOT ENROLLED IN SCHOOL AND NOT HIGH SCHOOL GRADUATE.....	V148	V152
NOT ENROLLED IN SCHOOL AND HIGH SCHOOL GRADUATE.....	V149	V153
UNEMPLOYED OR NOT IN LABOR FORCE:		
NOT ENROLLED IN SCHOOL AND NOT HIGH SCHOOL GRADUATE.....	V150	V154
NOT ENROLLED IN SCHOOL AND HIGH SCHOOL GRADUATE.....	V151	V155

12. POPULATION 25 YEARS OLD AND OVER BY YEARS OF SCHOOL COMPLETED AND SEX

COUNT OF PERSONS 25 YEARS OLD AND OVER

<u>YEARS OF SCHOOL COMPLETED</u>	<u>SEX</u>	
	MALE	FEMALE
NO SCHOOL YEARS COMPLETED (INCLUDES NURSERY & KINDERGARTEN).....	V156	V166
ELEMENTARY		
1-4 YEARS.....	V157	V167
5-6 YEARS.....	V158	V168
7 YEARS.....	V159	V169
8 YEARS.....	V160	V170
HIGH SCHOOL		
1-3 YEARS.....	V161	V171
4 YEARS.....	V162	V172
COLLEGE		
1-3 YEARS.....	V163	V173
4 YEARS.....	V164	V174
5 YEARS OR MORE.....	V165	V175

13. POPULATION 16-64 YEARS OLD WITH LESS THAN 3 YEARS OF COLLEGE COMPLETED BY VOCATIONAL TRAINING AND SEX

COUNT OF PERSONS 16-64 YEARS OLD WITH LESS THAN 3 YEARS OF COLLEGE COMPLETED

<u>VOCATIONAL TRAINING</u>	<u>SEX</u>	
	MALE	FEMALE
WITH VOCATIONAL TRAINING.....	V176	V178
WITHOUT VOCATIONAL TRAINING.....	V177	V179

14. POPULATION IN GROUP QUARTERS BY TYPE OF GROUP QUARTERS

COUNT OF PERSONS IN GROUP QUARTERS

TYPE OF GROUP QUARTERS

INMATE OF MENTAL HOSPITAL.....	V180
INMATE OF HOME FOR THE AGED & DEPENDENT.....	V181
INMATE OF OTHER INSTITUTION.....	V182
IN ROOMING HOUSE.....	V183
IN MILITARY BARRACKS.....	V184
IN COLLEGE DORMITORY.....	V185
IN OTHER GROUP QUARTERS.....	V186

15. POPULATION 16-64 YEARS OLD NOT INMATES AND NOT ATTENDING SCHOOL BY DISABILITY, EMPLOYMENT STATUS AND SEX

COUNT OF PERSONS 16-64 YEARS OLD NOT INMATE AND NOT ATTENDING SCHOOL

DISABILITY AND EMPLOYMENT STATUS

SEX

MALE FEMALE

NOT DISABLED NOR HANDICAPPED:

IN LABOR FORCE.....	V187	V194
NOT IN LABOR FORCE.....	V188	V195

DISABLED OR HANDICAPPED:

EMPLOYED	V189	V196
UNEMPLOYED.....	V190	V197
NOT IN LABOR FORCE		
ABLE TO WORK	V191	V198
UNABLE TO WORK		
DISABLED LESS THAN 6 MONTHS.....	V192	V199
DISABLED 6 MONTHS OR MORE.....	V193	2000

16. POPULATION 16 YEARS OLD AND OVER BY LABOR FORCE STATUS, SELECTED CHARACTERISTICS, AND SEX

COUNT OF PERSONS 16 YEARS OLD AND OVER

LABOR FORCE STATUS AND SELECTED CHARACTERISTICS

SEX

MALE FEMALE

IN ARMED FORCES.....	V201	V210
IN LABOR FORCE:		
EMPLOYED	V202	V211
UNEMPLOYED.....	V203	V212
NOT IN LABOR FORCE:		
UNDER 65:		
INMATES	V204	V213
ENROLLED IN SCHOOL.....	V205	V214
OTHER.....	V206	V215
65 AND OVER:		
INMATE.....	V207	V216
ENROLLED IN SCHOOL.....	V208	V217
OTHER.....	V209	V218

17. POPULATION 16 YEARS OLD AND OVER IN THE LABOR FORCE BY AGE AND SEX
COUNT OF PERSONS 16 YEARS OLD AND OVER IN THE LABOR FORCE

<u>AGE</u>	<u>SEX</u>	
	MALE	FEMALE
16-17 YRS OLD.....	V219	V227
18-19 " "	V220	V228
20-21 " "	V221	V229
22-24 " "	V222	V230
25-34 " "	V223	V231
35-44 " "	V224	V232
45-64 " "	V225	V233
64 AND OVER.....	V226	V234

18. EMPLOYED POPULATION 16 YEARS OLD AND OVER BY INDUSTRY AND SEX

COUNT OF EMPLOYED PERSONS 16 YEARS OLD AND OVER

<u>INDUSTRY</u>	<u>SEX</u>	
	TOTAL	MALE
AGRICULTURE, FORESTRY, AND FISHERIES.....	V235	V276
MINING.....	V236	V277
CONSTRUCTION.....	V237	V278
FURNITURE AND LUMBER AND WOOD PRODUCTS.....	V238	V279
PRIMARY METAL INDUSTRIES.....	V239	V280
FABRICATED METAL INDUSTRIES (INCLUDING NOT SPECIFIED METALS).....	V240	V281
MACHINERY, EXCEPT ELECTRICAL.....	V241	V282
ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES.....	V242	V283
MOTOR VEHICLES AND OTHER TRANSPORTATION EQUIPMENT...	V243	V284
OTHER DURABLE GOODS.....	V244	V285
FOOD AND KINDRED PRODUCTS.....	V245	V286
TEXTILE MILL AND OTHER FABRICATED TEXTILE PRODUCTS..	V246	V287
PRINTING, PUBLISHING, AND ALLIED INDUSTRIES.....	V247	V288
CHEMICAL AND ALLIED PRODUCTS.....	V248	V289
OTHER NONDURABLE GOODS (INCLUDING NOT SPECIFIED MANUFACTURING INDUSTRIES).....	V249	V290
RAILROADS AND RAILWAY EXPRESS SERVICE.....	V250	V291
TRUCKING SERVICE AND WAREHOUSING.....	V251	V292
OTHER TRANSPORTATION.....	V252	V293
COMMUNICATIONS.....	V253	V294
UTILITIES AND SANITARY SERVICES.....	V254	V295
WHOLESALE TRADE.....	V255	V296
FOOD, BAKERY, AND DAIRY STORES.....	V256	V297
EATING AND DRINKING PLACES.....	V257	V298
GENERAL MERCHANDISE RETAILING.....	V258	V299
MOTOR VEHICLES RETAILING AND SERVICE STATIONS.....	V259	V300
OTHER RETAIL TRADE.....	V260	V301
BANKING AND CREDIT AGENCIES.....	V261	V302
INSURANCE, REAL ESTATE, AND OTHER FINANCE.....	V262	V303
BUSINESS SERVICES.....	V263	V304
REPAIR SERVICES.....	V264	V305
PRIVATE HOUSEHOLDS.....	V265	V306
OTHER PERSONAL SERVICES.....	V266	V307
ENTERTAINMENT AND RECREATION SERVICES.....	V267	V308
HOSPITALS.....	V268	V309
MEDICAL AND OTHER HEALTH SERVICES EXCEPT HOSPITALS..	V269	V310
ELEMENTARY AND SECONDARY SCHOOLS AND COLLEGES:		
GOVERNMENT.....	V270	V311
PRIVATE.....	V271	V312
OTHER EDUCATION AND KINDRED SERVICES.....	V272	V313
WELFARE, RELIGIOUS, AND NONPROFIT MEMBERSHIP ORG....	V273	V314
LEGAL, ENGINEERING, AND MISC. PROFESSIONAL SERV....	V274	V315
PUBLIC ADMINISTRATION.....	V275	V316

19. EMPLOYED POPULATION 16 YEARS OLD AND OVER BY INDUSTRY, CLASS OF WORKER, AND SEX

COUNT OF EMPLOYED PERSONS 16 YEARS OLD AND OVER

<u>INDUSTRY AND CLASS OF WORKER</u>	<u>SEX</u>	
	MALE	FEMALE
AGRICULTURE:		
EMPLOYEE OF PRIVATE COMPANY	V317	V331
EMPLOYEE OF OWN CORPORATION	V318	V332
FEDERAL GOVERNMENT WORKER	V319	V333
STATE GOVERNMENT WORKER	V320	V334
LOCAL GOVERNMENT WORKER	V321	V335
SELF-EMPLOYED WORKER	V322	V336
UNPAID FAMILY WORKER	V323	V337
OTHER INDUSTRIES:		
EMPLOYEE OF PRIVATE COMPANY	V324	V338
EMPLOYEE OF OWN CORPORATION	V325	V339
FEDERAL GOVERNMENT WORKER	V326	V340
STATE GOVERNMENT WORKER	V327	V341
LOCAL GOVERNMENT WORKER	V328	V342
SELF-EMPLOYED WORKER	V329	V343
UNPAID FAMILY WORKER	V330	V344

20. EMPLOYED POPULATION 14 YEARS OLD AND OVER BY OCCUPATION AND SEX

COUNT OF EMPLOYED PERSONS 14 YEARS OLD AND OVER

<u>OCCUPATION</u>	<u>SEX</u>	
	MALE	FEMALE
PROFESSIONAL, TECHNICAL, AND KINDRED WORKERS	V345	V358
MANAGERS AND ADMINISTRATORS, EXCEPT FARM	V346	V359
SALES WORKERS	V347	V360
CLERICAL AND KINDRED WORKERS	V348	V361
CRAFTSMEN, FOREMEN, AND KINDRED WORKERS	V349	V362
OPERATIVES, EXCEPT TRANSPORT	V350	V363
TRANSPORT EQUIPMENT OPERATIVES	V351	V364
LABORERS, EXCEPT FARM	V352	V365
FARMERS, AND FARM MANAGERS	V353	V366
FARM LABORERS AND FOREMEN	V354	V367
SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD	V355	V368
PRIVATE HOUSEHOLD WORKERS	V356	V369
OCCUPATION NOT REPORTED**	V357	V370

**REPRESENTS ALLOCATIONS TO MAJOR GROUP

21. EXPERIENCED UNEMPLOYED POPULATION 16 YEARS OLD AND OVER BY OCCUPATION AND SEX

COUNT OF EXPERIENCED UNEMPLOYED PERSONS 16 YEARS OLD AND OVER

<u>OCCUPATION</u>	<u>SEX</u>	
	TOTAL	MALE
PROFESSIONAL, TECHNICAL, AND MANAGERIAL WORKERS..	V371	V381
SALES WORKERS	V372	V382
CLERICAL AND KINDRED WORKERS	V373	V383
CRAFTSMEN, FOREMEN, AND KINDRED WORKERS	V374	V384
OPERATIVES, INCLUDING TRANSPORT	V375	V385
LABORERS, EXCEPT FARM	V376	V386
FARM WORKERS	V377	V387
SERVICE WORKERS, EXCEPT PRIVATE HOUSEHOLD	V378	V388
PRIVATE HOUSEHOLD WORKERS	V379	V389
LAST WORKED 1959 OR EARLIER	V380	V390

22. FAMILY INCOME

COUNT OF FAMILIES

FAMILY INCOME

UNDER \$1,000 (INCLUDES \$1-\$999, NONE, AND LOSS).....	V391
\$ 1,000 - \$ 1,999	V392
\$ 2,000 - \$ 2,999	V393
\$ 3,000 - \$ 3,999	V394
\$ 4,000 - \$ 4,999	V395
\$ 5,000 - \$ 5,999	V396
\$ 6 000 - \$ 6,999	V397
\$ 7,000 - \$ 7,999	V398
\$ 8,000 - \$ 8,999	V399
\$ 9,000 - \$ 9,999	V400
\$10,000 - \$11,999	V401
\$12,000 - \$14,999	V402
\$15,000 - \$24,999	V403
\$25,000 - \$49,999	V404
\$50,000 AND OVER	V405

23. POPULATION 14 YEARS OLD AND OVER BY INCOME AND SEX

COUNT OF PERSONS 14 YEARS OLD AND OVER

INCOME	SEX	
	MALE	FEMALE
WITHOUT INCOME	V406	V420
\$1 - \$999 OR LOSS.....	V407	V421
\$ 1,000 - 1,999.....	V408	V422
\$ 2,000 - \$ 2,999.....	V409	V423
\$ 3,000 - \$ 3,999.....	V410	V424
\$ 4,000 - \$ 4,999.....	V411	V425
\$ 5,000 - \$ 5,999.....	V412	V426
\$ 6,000 - \$ 6,999.....	V413	V427
\$ 7,000 - \$ 7,999.....	V414	V428
\$ 8,000 - \$ 8,999.....	V415	V429
\$ 9,000 - \$ 9,999.....	V416	V430
\$10,000 - \$14,999.....	V417	V431
\$15,000 - \$24,999.....	V418	V432
\$25,000 AND OVER.....	V419	V433

24. MALES 16 YEARS OLD AND OVER IN THE EXPERIENCED CIVILIAN LABOR FORCE BY EARNINGS AND OCCUPATION

COUNT OF MALES 16 YEARS OLD AND OVER IN THE EXPERIENCED CIVILIAN LABOR FORCE

EARNINGS

OCCUPATION

	EXPERIENCED CIVILIAN LABOR FORCE TOTAL	PROFESSIONAL MANAGERIAL AND KINDRED WORKERS	CRAFTSMEN FOREMEN & KINDRED WORKERS	OPERATIVES INCLUDING TRANSPORT
WITHOUT EARNINGS.....	V434	V448	V462	V476
\$1 - \$999 OR LOSS.....	V435	V449	V463	V477
\$ 1,000 - \$ 1,999.....	V436	V450	V464	V478
\$ 2,000 - \$ 2,999.....	V437	V451	V465	V479
\$ 3,000 - \$ 3,999.....	V438	V452	V466	V480
\$ 4,000 - \$ 4,999.....	V439	V453	V467	V481
\$ 5,000 - \$ 5,999.....	V440	V454	V468	V482
\$ 6,000 - \$ 6,999.....	V441	V455	V469	V483
\$ 7,000 - \$ 7,999.....	V442	V456	V470	V484
\$ 8,000 - \$ 8,999.....	V443	V457	V471	V485
\$ 9,000 - \$ 9,999.....	V444	V458	V472	V486
\$10,000 - \$14,999.....	V445	V459	V473	V487
\$15,000 - \$24,999.....	V446	V460	V474	V488
\$25,000 AND OVER.....	V447	V461	V475	V489
	LABORERS EXCEPT FARM	FARMERS AND FARM MANAGERS	FARM LABORERS, EXCEPT UNPAID AND FARM FOREMEN	
WITHOUT EARNINGS.....	V490	V504	V518	
\$1 - \$999 OR LOSS.....	V491	V505	V519	
\$ 1,000 - \$ 1,999.....	V492	V506	V520	
\$ 2,000 - \$ 2,999.....	V493	V507	V521	
\$ 3,000 - \$ 3,999.....	V494	V508	V522	
\$ 4,000 - \$ 4,999.....	V495	V509	V523	
\$ 5,000 - \$ 5,999.....	V496	V510	V524	
\$ 6,000 - \$ 6,999.....	V497	V511	V525	
\$ 7,000 - \$ 7,999.....	V498	V512	V526	
\$ 8,000 - \$ 8,999.....	V499	V513	V527	
\$ 9,000 - \$ 9,999.....	V500	V514	V528	
\$10,000 - \$14,999.....	V501	V515	V529	
\$15,000 - \$24,999.....	V502	V516	V530	
\$25,000 AND OVER.....	V503	V517	V531	

25. FEMALES 16 YEARS OLD AND OVER IN THE EXPERIENCED CIVILIAN LABOR FORCE BY EARNINGS AND OCCUPATION

COUNT OF FEMALES 16 YEARS OLD AND OVER IN THE EXPERIENCED CIVILIAN LABOR FORCE

<u>EARNINGS</u>	<u>OCCUPATION</u>		
	EXPERIENCED CIVILIAN LABOR FORCE TOTAL	CLERICAL AND KINDRED WORKERS	OPERATIVES INCLUDING TRANSPORT
WITHOUT EARNINGS.....	V532	V545	V558
\$1 - \$999 OR LOSS.....	V533	V546	V559
\$ 1,000 - \$ 1,999.....	V534	V547	V560
\$ 2,000 - \$ 2,999.....	V535	V548	V561
\$ 3,000 - \$ 3,999.....	V536	V549	V562
\$ 4,000 - \$ 4,999.....	V537	V550	V563
\$ 5,000 - \$ 5,999.....	V538	V551	V564
\$ 6,000 - \$ 6,999.....	V539	V552	V565
\$ 7,000 - \$ 7,999.....	V540	V553	V566
\$ 8,000 - \$ 8,999.....	V541	V554	V567
\$ 9,000 - \$ 9,999.....	V542	V555	V568
\$10,000 - \$14,999.....	V543	V556	V569
\$15,000 OR MORE.....	V544	V557	V570

26. TYPE OF INCOME AND SEX

COUNT OF PERSONS 14 YEARS OLD AND OVER WITH INCOME

<u>TYPE OF INCOME</u>	<u>SEX</u>	
	MALE	FEMALE
WAGE AND SALARY.....	V571	V577
NONFARM SELF-EMPLOYMENT.....	V572	V578
FARM SELF-EMPLOYMENT.....	V573	V579
SOCIAL SECURITY OR RAILROAD RETIREMENT.....	V574	V580
PUBLIC ASSISTANCE OR WELFARE PAYMENTS.....	V5 5	V581
ALL OTHER INCOME.....	V576	V582

27. RATIO OF FAMILY INCOME TO POVERTY LEVEL

COUNT OF FAMILIES

RATIO OF FAMILY INCOME TO POVERTY LEVEL

UNDER .50.....	V583
.50 - .74.....	V584
.75 - .99.....	V585
1.00 - 1.24.....	V586
1.25 - 1.49.....	V587
1.50 - 1.99.....	V588
2.00 - 2.99.....	V589
3.00 OR MORE.....	V590

28. AGGREGATE NUMBER OF PERSONS IN FAMILIES BELOW POVERTY LEVEL

29. CIVILIAN MALE FAMILY HEADS 14-64 YEARS OLD BY LABOR FORCE AND POVERTY STATUS

COUNT OF CIVILIAN MALE FAMILY HEADS 14-64 YEARS OLD

LABOR FORCE STATUS

POVERTY STATUS

ABOVE POVERTY LEVEL BELOW POVERTY LEVEL

EMPLOYED	V592	V595
UNEMPLOYED	V593	V596
NOT IN LABOR FORCE	V594	V597

30. FEMALE FAMILY HEADS IN THE LABOR FORCE WITH RELATED CHILDREN UNDER 6 YEARS OLD BY POVERTY STATUS

COUNT OF FEMALE FAMILY HEADS IN THE LABOR FORCE WITH RELATED CHILDREN UNDER 6 YEARS OLD

POVERTY STATUS

ABOVE POVERTY LEVEL.....	V598
BELOW POVERTY LEVEL.....	V599

31. POPULATION 65 YEARS OLD AND OVER BY POVERTY STATUS

COUNT OF PERSONS 65 YEARS OLD AND OVER

POVERTY STATUS

ABOVE POVERTY LEVEL.....	V600
BELOW POVERTY LEVEL.....	V601

32. POPULATION RECEIVING SOCIAL SECURITY OR RAILROAD RETIREMENT BY AGE AND POVERTY STATUS

COUNT OF PERSONS 14 YEARS AND OVER RECEIVING SOCIAL SECURITY OR RAILROAD RETIREMENT

AGE

POVERTY STATUS

ABOVE POVERTY LEVEL BELOW POVERTY LEVEL

UNDER 65 YEARS.....	V602	V604
65 YEARS OLD AND OVER.....	V603	V605

33. NUMBER OF FAMILIES BELOW POVERTY LEVEL RECEIVING INCOME OF
SELECTED TYPES

COUNT OF FAMILIES BELOW POVERTY LEVEL

SELECTED TYPES OF INCOME

EARNINGSV606
 SOCIAL SECURITY OR RAILROAD RETIREMENT.....V607
 PUBLIC ASSISTANCE OR WELFARE PAYMENTS.....V608

34. FAMILIES AND PRIMARY INDIVIDUALS IN HOUSING UNITS BY TENURE
AND POVERTY STATUS

COUNT OF FAMILIES AND PRIMARY INDIVIDUALS FOR WHICH VALUE AND
RENT ARE TABULATED

TENURE

POVERTY STATUS
 ABOVE BELOW
 POVERTY LEVEL POVERTY LEVEL

OWNER	V609	V611
RENTER	V610	V612

35. CENSUS YEAR POPULATION - 1970

V613

36. PROJECTED POPULATION

1975V614
 1980V615
 1985V616
 1990V617
 1995V618
 2000V619

CENSUS HOUSING DATA

37. TOTAL HOUSING UNITS

COUNT OF ALL HOUSING UNITS BY OCCUPANCY/VACANCY STATUS

OCCUPANCY/VACANCY STATUS

TOTAL (ALL UNITS).....V620
VACANT, SEASONAL.....V621
VACANT, MIGRATORYV622
OCCUPIED AND VACANT, YEAR-ROUNDV623

38. YEAR STRUCTURE BUILT

COUNT OF OCCUPIED HOUSING UNITS BY YEAR STRUCTURE BUILT

YEAR STRUCTURE BUILT

1969 - 1970V624
1965 - 1968V625
1960 - 1964V626
1950 - 1959V627
1940 - 1949V628
1939 OR EARLIERV629

39. UNITS IN STRUCTURE

COUNT OF OCCUPIED HOUSING UNITS BY UNITS IN STRUCTURE

UNITS IN STRUCTURE

1 UNIT, DETACHED.....V630
1 UNIT ATTACHED.....V631
2 UNITS.....V632
3-4 UNITS.....V633
5-9 UNITS.....V634
10-19 UNITS.....V635
20-49 UNITS.....V636
50 UNITS OR MORE.....V637
MOBILE HOME OR TRAILER.....V638

40. YEAR HEAD OF HOUSEHOLD MOVED INTO UNIT

COUNT OF OCCUPIED UNITS BY YEAR HEAD OF HOUSEHOLD MOVED INTO UNIT

YEAR HEAD OF HOUSEHOLD MOVED INTO UNIT

1969 - 1970V639
1968V640
1967V641
1965 - 1966V642
1960 - 1964V643
1950 - 1959V644
1949 OR EARLIER.....V645

41. HEATING EQUIPMENT

COUNT OF OCCUPIED HOUSING UNITS BY HEATING EQUIPMENT

HEATING EQUIPMENT

STEAM OR HOT WATER.....V646
CENTRAL WARM-AIR FURNACE.....V647
BUILT-IN ELECTRIC UNITS.....V648
FLOOR, WALL, OR PIPELESS FURNACE.....V649
ROOM HEATERS WITH FLUE.....V650
ROOM HEATERS WITHOUT FLUE.....V651
FIREPLACES, STOVES, OR PORTABLE ROOM HEATERS...V652
NOT HEATED.....V653

42. SOURCE OF WATER

COUNT OF OCCUPIED HOUSING UNITS BY SOURCE OF WATER

SOURCE OF WATER

PUBLIC SYSTEM OR PRIVATE COMPANY.....V654
INDIVIDUAL WELL.....V655
OTHER SOURCE (SPRING, CREEK, RIVER, CISTERN, ETC.)...V656

43. TYPE OF SEWAGE DISPOSAL

COUNT OF OCCUPIED HOUSING UNITS BY TYPE OF SEWAGE DISPOSAL

TYPE OF SEWAGE DISPOSAL

PUBLIC SEWER.....V657
SEPTIC TANK OR CESSPOOL.....V658
OTHER MEANS.....V659

44. NUMBER OF BATHROOMS

COUNT OF OCCUPIED HOUSING UNITS BY NUMBER OF BATHROOMS

NUMBER OF BATHROOMS

NONE, OR ONLY HALF BATHV660
1 COMPLETE BATHROOM.....V661
1 COMPLETE BATHROOM, PLUS HALF BATH(S)....V662
2 COMPLETE BATHROOMS.....V663
2 COMPLETE BATHROOMS, PLUS HALF BATH(S)...V664
3 OR MORE COMPLETE BATHROOMS.....V665

45. NUMBER OF AUTOMOBILES AVAILABLE

COUNT OF OCCUPIED UNITS BY NUMBER OF AUTOMOBILES AVAILABLE

AUTOMOBILES AVAILABLE

NONE.....V666
 1 AUTOMOBILE.....V667
 2 AUTOMOBILES.....V668
 3 AUTOMOBILES OR MORE.....V669

46. AIR CONDITIONING

COUNT OF OCCUPIED HOUSING UNITS BY AIR CONDITIONING

AIR CONDITIONING

1 INDIVIDUAL ROOM UNIT.....V670
 2 OR MORE INDIVIDUAL ROOM UNITS....V671
 CENTRAL AIR CONDITIONING SYSTEM....V672
 NO AIR CONDITIONING.....V673

47. GROSS RENT

COUNT OF RENTER-OCCUPIED UNITS FOR WHICH RENT IS TABULATED

MONTHLY GROSS RENT

\$ 30 - \$ 39.....V674
 \$ 40 - \$ 49.....V675
 \$ 50 - \$ 59.....V676
 \$ 60 - \$ 69.....V677
 \$ 70 - \$ 79.....V678
 \$ 80 - \$ 89.....V679
 \$ 90 - \$ 99.....V680
 \$100 - \$119.....V681
 \$120 - \$149.....V682
 \$150 - \$199.....V683
 \$200 - \$249.....V684
 \$250 - \$299.....V685
 \$300 OR MORE.....V686
 WITHOUT PAYMENT OF CASH RENT....V687

48. LOCATION OF STRUCTURE AND VACANCY STATUS

COUNT OF VACANT YEAR-ROUND UNITS BY VACANCY STATUS AND LOCATION OF STRUCTURE

VACANCY STATUS

LOCATION OF STRUCTURE

LESS THAN 10 ACRES 10 ACRES OR MORE

TOTAL VACANT YEAR-ROUND.....V688	V689
VACANT FOR RENT.....V690	V691
VACANT FOR SALE ONLY.....V692	V693

49. STORIES IN STRUCTURE

COUNT OF OCCUPIED HOUSING UNITS BY STORIES IN STRUCTURE

STORIES IN STRUCTURE

1-3 STORIES.....V694
4-6 STORIES.....V695
7-12 STORIES.....V696
13 STORIES OR MORE.....V697

50. UNITS IN STRUCTURE WITH 4 STORIES OR MORE BY PASSENGER ELEVATOR

COUNT OF OCCUPIED HOUSING UNITS IN STRUCTURES WITH 4 STORIES OR MORE BY PASSENGER ELEVATOR

YES, PASSENGER ELEVATOR.....V698
NO PASSENGER ELEVATOR.....V699

51. COOKING FUEL

COUNT OF OCCUPIED UNITS BY COOKING FUEL

COOKING FUEL

UTILITY GAS.....V700
BOTTLED, TANK, OR LP GAS.....V701
ELECTRICITY.....V702
FUEL OIL, KEROSENE, ETC.....V703
COAL OR COKE.....V704
WOOD.....V705
OTHER FUEL.....V706
NO FUEL USEDV707

52. HOUSE HEATING FUEL

COUNT OF OCCUPIED UNITS BY HOUSE HEATING FUEL

HOUSE HEATING FUEL

UTILITY GAS.....V708
BOTTLED, TANK, OR LP GAS...V709
ELECTRICITY.....V710
FUEL OIL, KEROSENE, ETC...V711
COAL OR COKE.....V712
WOOD.....V713
OTHER FUEL.....V714
NO FUEL USED.....V715

53. WATER HEATING FUEL

COUNT OF OCCUPIED UNITS BY WATER HEATING FUEL

WATER HEATING FUEL

UTILITY GAS.....V716
BOTTLED, TANK OR LP GAS....V717
ELECTRICITY.....V718
FUEL OIL, KEROSENE, ETC....V719
COAL OR COKE.....V720
WOOD.....V721
OTHER FUEL.....V722
NO FUEL USED.....V723

54. NUMBER OF BEDROOMS

COUNT OF OCCUPIED HOUSING UNITS BY NUMBER OF BEDROOMS

NUMBER OF BEDROOMS

NO BEDROOM.....V724
1 BEDROOM.....V725
2 BEDROOMS.....V726
3 BEDROOMS.....V727
4 BEDROOMS.....V728
5 BEDROOMS OR MORE.....V729

55. CLOTHES WASHING MACHINE

COUNT OF OCCUPIED UNITS BY CLOTHES WASHING MACHINE

CLOTHES WASHING MACHINE

AUTOMATIC OR SEMI-AUTOMATIC.....V730
WRINGER OR SEPARATE SPINNER.....V731
NONE.....V732

56. CLOTHES DRYER

COUNT OF OCCUPIED UNITS BY CLOTHES DRYER

CLOTHES DRYER

ELECTRICALLY HEATED....V733
GAS HEATED.....V734
NONE.....V735

57. DISHWASHER

COUNT OF OCCUPIED UNITS BY DISHWASHER

DISHWASHER

YES, DISHWASHER.....V736
NO DISHWASHER.....V737

58. HOME FOOD FREEZER

COUNT OF OCCUPIED UNITS BY HOME FOOD FREEZER

HOME FOOD FREEZER

YES, HOME FOOD FREEZER....V738
NO HOME FOOD FREEZER.....V739

59. NUMBER OF TELEVISION SETS

COUNT OF OCCUPIED UNITS BY NUMBER OF TELEVISION SETS

NUMBER OF TELEVISION SETS

YES, 1 SET.....V740
YES, 2 OR MORE SETS.....V741
NO SET PRESENT.....V742

WITH TELEVISION:

WITH UHF.....V743
NO UHF.....V744

60. BATTERY-OPERATED RADIO

COUNT OF OCCUPIED UNITS BY BATTERY-OPERATED RADIO

BATTERY-OPERATED RADIO

YES, BATTERY-OPERATED RADIO...V745
NO BATTERY-OPERATED RADIO.....V746

61. SECOND HOME

COUNT OF OCCUPIED UNITS BY SECOND HOME

SECOND HOME

YES, OWN SECOND HOME.....V747
NO, DO NOT OWN SECOND HOME.....V748

62. OCCUPANCY/VACANCY STATUS

COUNT OF OCCUPIED AND VACANT YEAR-ROUND HOUSING UNITS

OCCUPANCY/VACANCY STATUS

OCCUPIED.....V749
VACANT YEAR-ROUND:
FOR RENT.....V750
FOR SALE ONLY.....V751
RENTED OR SOLD, NOT OCCUPIED...V752
FOR OCCASIONAL USE.....V753
OTHER VACANT.....V754

63. TENURE

COUNT OF OCCUPIED UNITS BY TENURE

TENURE

OWNED OR BEING BOUGHT (EXCLUDES COOPERATIVE AND
CONDOMINIUM UNITS, EXCEPT WHEN THERE ARE LESS THAN
FIVE SUCH UNITS IN THE TABULATION AREA).....V755

COOPERATIVE OR CONDOMINIUM UNITS WHICH ARE OWNED
OR BEING BOUGHT*.....V756

RENTED FOR CASH RENT.....V757

RENTED UNITS OCCUPIED WITHOUT PAYMENT OF CASH RENT.....V758

*DURING PROCESSING, THIS WAS EDITED TO "OWNED OR
BEING BOUGHT" WHEN LESS THAN FIVE UNITS.

64. NUMBER OF PERSONS IN UNIT

COUNT OF OCCUPIED UNITS AND PERSONS

NUMBER OF PERSONS IN UNIT

1 PERSON IN UNIT.....V759
2 PERSONS IN UNIT.....V760
3 PERSONS IN UNIT.....V761
4 PERSONS IN UNIT.....V762
5 PERSONS IN UNIT.....V763
6 PERSONS IN UNIT.....V764
7 PERSONS IN UNIT.....V765
8 PERSONS IN UNIT.....V766
9 PERSONS OR MORE IN UNIT.....V767
AGGREGATE NUMBER OF PERSONS.....V768

65. HOUSEHOLDS BY TYPE AND AGE OF HEAD

COUNT OF OCCUPIED UNITS

HOUSEHOLD TYPE AND AGE OF HEAD

HUSBAND-WIFE FAMILY:

UNDER 25 YEARS OLD.....V769
25-29 YEARS OLD.....V770
30-34 YEARS OLD.....V771
35-44 YEARS OLD.....V772
45-64 YEARS OLD.....V773
65 YEARS OLD AND OVER.....V774

OTHER FAMILY WITH MALE HEAD:

UNDER 65 YEARS OLD.....V775
65 YEARS OLD AND OVER.....V776

FAMILY WITH FEMALE HEAD:

UNDER 65 YEARS OLD.....V777
65 YEARS OLD AND OVER.....V778

MALE PRIMARY INDIVIDUAL:

UNDER 65 YEARS OLD.....V779
65 YEARS OLD AND OVER.....V780

FEMALE PRIMARY INDIVIDUAL:

UNDER 65 YEARS OLD.....V781
65 YEARS OLD AND OVER.....V782

66. PERSONS PER ROOM

COUNT OF OCCUPIED UNITS

PERSONS PER ROOM

0.50 OR LESS PERSONS PER ROOM....V783
0.51-0.75 PERSONS PER ROOM.....V784
0.76-1.00 PERSONS PER ROOM.....V785
1.01-1.50 PERSONS PER ROOM.....V786
1.51-2.00 PERSONS PER ROOM.....V787
2.01 OR MORE PERSONS PER ROOM....V788

67. NUMBER OF ROOMS IN UNIT

COUNT OF OCCUPIED HOUSING UNITS AND ROOMS

NUMBER OF ROOMS IN UNIT

1 ROOM IN UNIT.....V789
2 ROOMS IN UNIT.....V790
3 ROOMS IN UNIT.....V791
4 ROOMS IN UNIT.....V792
5 ROOMS IN UNIT.....V793
6 ROOMS IN UNIT.....V794
7 ROOMS IN UNIT.....V795
8 ROOMS IN UNIT.....V796
9 ROOMS OR MORE IN UNIT.....V797
AGGREGATE NUMBER OF ROOMS.....V798

68. TYPE OF FOUNDATION AND TYPE OF STRUCTURE

COUNT OF OCCUPIED AND VACANT YEAR-ROUND HOUSING UNITS

TYPE OF STRUCTURE AND TYPE OF FOUNDATION (BASEMENT)

TOTAL OCCUPIED AND VACANT YEAR-ROUND:
WITH BASEMENT.....V799
BUILT ON A CONCRETE SLAB.....V800
BUILT IN ANOTHER WAY.....V801
ONE-FAMILY OCCUPIED AND VACANT YEAR-ROUND:
WITH BASEMENT.....V802
BUILT ON A CONCRETE SLAB.....V803
BUILT IN ANOTHER WAY.....V804

69. TELEPHONE AVAILABLE

COUNT OF OCCUPIED UNITS

TELEPHONE AVAILABLE

YES, TELEPHONE AVAILABLE.....V805
NO, TELEPHONE NOT AVAILABLE.....V806

70. VALUE

COUNT OF UNITS FOR WHICH VALUE IS TABULATED

VALUE

LESS THAN \$5,000.....V807
\$ 5,000 - \$ 7,499.....V808
\$ 7,500 - \$ 9,999.....V809
\$10,000 - \$12,499.....V810
\$12,500 - \$14,999.....V811
\$15,000 - \$17,499.....V812
\$17,500 - \$19,999.....V813
\$20,000 - \$24,999.....V814
\$25,000 - \$34,999.....V815
\$35,000 - \$49,999.....V816
\$50,000 OR MORE.....V817

71. PLUMBING FACILITIES

COUNT OF OCCUPIED HOUSING UNITS

PLUMBING FACILITIES

WITH ALL PLUMBING FACILITIES.....V818
LACKING ONE OR MORE PLUMBING FACILITIES:
LACKING PIPED HOT WATER ONLY.....V819
LACKING OTHER PLUMBING FACILITIES (CAN IN-
CLUDE LACKING PIPED HOT WATER).....V820

72. COUNT OF ALL PERSONS.....V821

73. COUNT OF NEGRO PERSONS.....V822

74. COUNT OF SPANISH AMERICAN PERSONS.....V823

FACILITY DATA

75. NUMBER OF FACILITIES

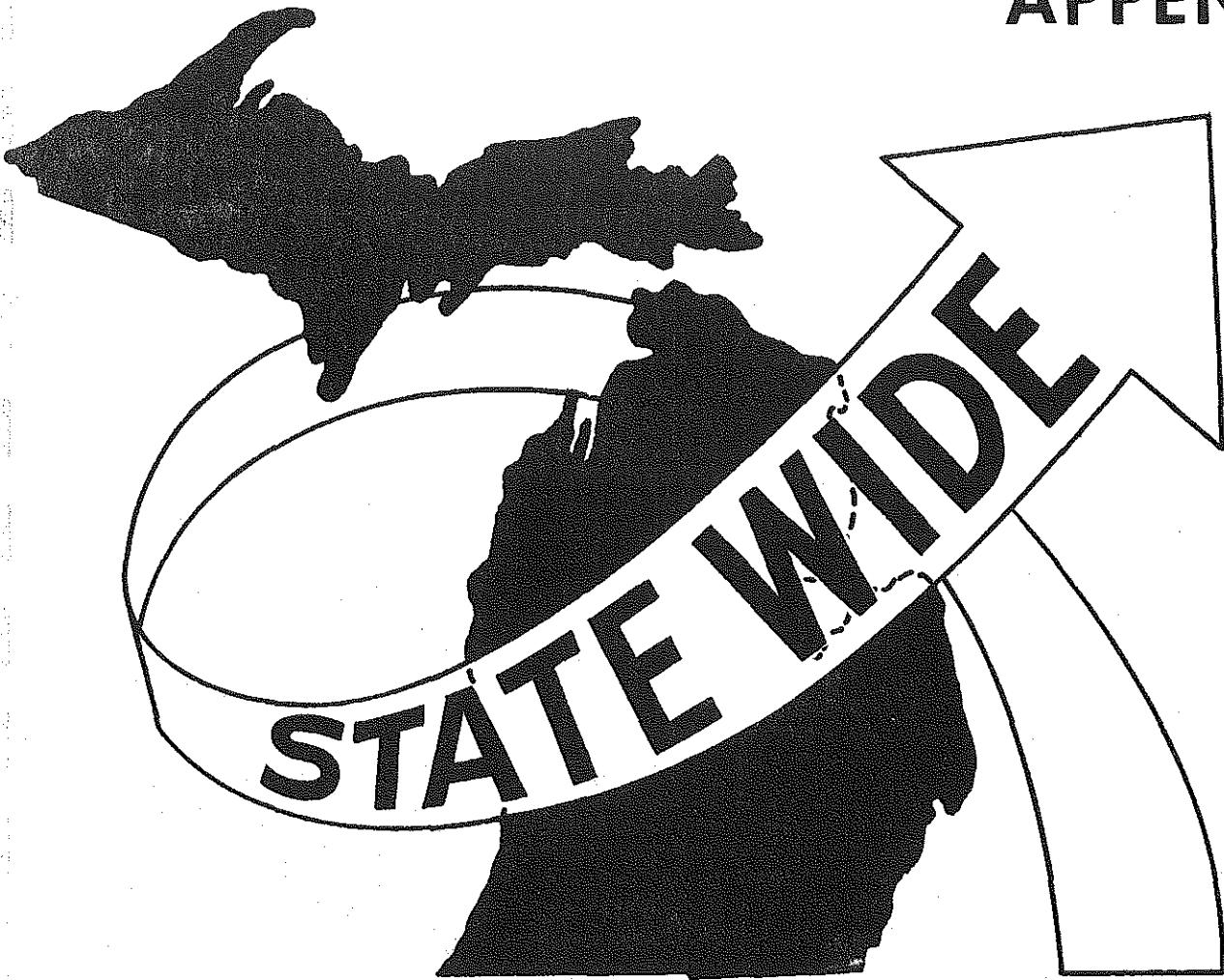
COUNT OF FACILITIES

AIRPORTS.....	V824
AMBULANCE SERVICE.....	V825
BUS TERMINALS.....	V826
CAMP GROUNDS, PUBLIC.....	V827
CAMP GROUNDS, PRIVATE.....	V828
CERTIFIED INDUSTRIAL PARKS.....	V829
CITIES OVER 30,000 POPULATION.....	V830
CITIES OVER 5,000 POPULATION.....	V831
CIVIL DEFENSE TERMINALS.....	V832
COLLEGES, NON-PUBLIC.....	V833
COLLEGES, PUBLIC COMMUNITY.....	V834
COLLEGES AND UNIVERSITIES, PUBLIC 4 YEAR.....	V835
CONVENTION CENTERS.....	V836
GAME AREAS.....	V837
GOLF COURSES.....	V838
HIGH SCHOOLS.....	V839
HISTORIC SITES.....	V840
HOMES FOR THE AGED.....	V841
HORSEBACK ENTERPRISES.....	V842
HOSPITALS.....	V843
MAJOR COMMERCIAL CENTERS.....	V844
MANUFACTURERS.....	V845
MENTAL HEALTH CENTERS.....	V846
NEWSPAPERS, DAILY.....	V847
NEWSPAPERS, WEEKLY AND BIWEEKLY.....	V848
NURSING HOMES.....	V849
PORTS.....	V850
RAIL TERMINALS.....	V851
SECRETARY OF THE STATE OFFICES.....	V852
SEWAGE TREATMENT FACILITIES.....	V853
SKI RESORTS.....	V854
SNOWMOBILE TRAILS.....	V855
STATE PARKS.....	V856
STATE POLICE POSTS.....	V857
TOURIST ATTRACTIONS.....	V858
TREASURY OFFICES.....	V859
TRUCK TERMINALS.....	V860
UNEMPLOYMENT OFFICES.....	V861
WEATHER SERVICE STATIONS-NATIONAL.....	V862
WHOLESALE TRADE CENTERS.....	V863

76. FACILITY CAPACITIES

AIRPORTS	
NUMBER OF PASSENGERS ENPLANED.....	V864
AMBULANCE SERVICE	
NUMBER OF VEHICLES.....	V865
CAMP GROUNDS, PUBLIC	
NUMBER OF CAMPSITES.....	V866
CAMP GROUNDS, PRIVATE	
NUMBER OF CAMPSITES.....	V867
CERTIFIED INDUSTRIAL PARKS	
NUMBER OF ACRES.....	V868
CITIES OVER 30,000 POPULATION	
1970 POPULATION.....	V869
CITIES OVER 5,000 POPULATION	
1970 POPULATION.....	V870
COLLEGES, NON-PUBLIC	
1970 ENROLLMENT.....	V871
COLLEGES, PUBLIC COMMUNITY	
1970 ENROLLMENT.....	V872
COLLEGES AND UNIVERSITIES, PUBLIC 4 YEAR	
1970 ENROLLMENT.....	V873
CONVENTION CENTERS	
CAPACITY.....	V874
GAME AREAS	
NUMBER OF ACRES.....	V875
HIGH SCHOOLS	
ENROLLMENT.....	V876
HOMES FOR THE AGED	
LICENSED CAPACITY.....	V877
HOSPITALS	
NUMBER OF BEDS.....	V878
MANUFACTURERS	
NUMBER OF EMPLOYEES.....	V879
MENTAL HEALTH CENTERS	
RESIDENT POPULATION.....	V880
NEWSPAPERS, DAILY	
CIRCULATION.....	V881
NEWSPAPERS, WEEKLY AND BIWEEKLY	
CIRCULATION.....	V882
NURSING HOMES	
NUMBER OF BEDS.....	V883
SEWAGE TREATMENT FACILITIES	
DESIGN FLOW (MILLIONS OF GALLONS PER DAY).....	V884
SKI RESORTS	
NUMBER OF RUNS.....	V885
SNOWMOBILE TRAILS	
NUMBER OF MILES.....	V886
STATE PARKS	
NUMBER OF CAMPSITES.....	V887
WHOLESALE TRADE CENTERS	
DOLLARS OF TRADE (THOUSANDS).....	V888

APPENDIX E



Explanation of MEDList Code
1970 Census of Population & Housing

1. State
 - A. 1970: two digit number assigned to states alphabetically. See page 75 of Census User Guide, Part 1.
 - B. 1960: two digit number assigned by geographical division. P. 75.
2. FED STD County - Federal Standard County: three digit numeric code assigned within State. Always end in an odd number. Multiply county number by 2 and subtract 1. P. 76.
3. County of TAB - County of Tabulation: three digit numeric code which in Michigan will always agree with the Standard County Code. P. 76.
4. CC - Central County code: one digit indicating those counties which have central cities of SMSA's. 0 - do contain central cities; 1 - do not. P. 78.
5. MCD/CCD - Minor Civil Divisions or Census County Divisions (The latter does not apply to Mich.): three digit numeric code arranged alphabetically within county; gaps of five were allowed for additions. P. 79.
6. Place
 - A. Code: Incorporated as cities, towns or villages, also larger unincorporated places. A four-digit code is assigned to each place alphabetically within State. Gaps of five are allowed for additions. P.80

6. B. DESC - Place Description Code: one digit numeric code identifying places by type. Code Numbers are 1, 2, 3, 4, 5 and 7. This code is found on P. 80.
 - C. Size: two digit code which identifies the size group based on 1970 population; there are 16 size groups. P. 80.
7. SCA - Standard Consolidated Area; only applies to New York and Chicago metropolitan Complexes. P. 85.
8. SMSA - Standard Metropolitan Statistical Areas: A generally well understood concept. Are identified by a four digit numeric code arranged alphabetically within the Nation. P. 83.
9. Urbanized Areas: Differ from SMSA's by excluding rural areas. Boundaries are not permanent. A four digit numeric code corresponding to SMSA code identifies urbanized areas. P. 82.
10. Tracted Area: A four digit numer uniquely identifying all records in each tracted area; includes SMSA's and adjacent territory; corresponds with SMSA code. P. 86.
11. Universal Area (UAC)
 - A. Prefix: a one digit numeric code identifying level of a UAC. There are four levels. P. 85.
 - B. Code: A five digit numeric code assigned to each area requiring separate identification in census tabulations of mobility and place of work. P. 85.

12. SEA - State Economic Areas - Are single counties or groups of counties within a State with relatively homogeneous economic and social characteristics. Are identified by either (1) a two digit numeric code for counties outside SMSA's or (2) a one digit alphabetic code for counties within SMSA's. P. 76.
13. ESR - Economic Sub-Regions: Are combinations of SEA's, and bring together those SEA's most closely related; state lines are frequently crossed. A three digit numeric code is assigned within Nation. P. 76.
14. CBD - Central Business District: A self-explanatory concept: a one digit numeric code denotes what areas are to be tabulated as part of a CBD; 0 = yes; 1 = no. P. 86.
15. Area Name: Self-explanatory
16. Tract - Census Tract
 - A. Basic-the first four digits of the six digit tract number. Basic tract codes range from 0 - 9999.
 - B. Suffix-the last two digits of a six digit tract number. Is only used when necessary to identify two or more tracts formed from a single tract.

For a full discussion of census tracts, see page 86.
17. BLK/GRP - Block Group: Is used only in census-by-mail areas where Address Coding Guides were prepared. Each block group is identified by the first digit of the three digit block number. Are equivalent to ED's in mail-out, mail-back areas where ACG's were prepared. Flags (*) indicate split block groups. P. 87.

18. ED - Enumeration Districts

A. Code - A four digit numeric code is assigned sequentially to each ED within a county.

B. Suffix - A one digit alphabetic code indicates splits of original ED's.

For full discussion of ED's, see page 87-88.

19. U/R - Urban - Rural areas: A one digit numeric code classifying ED's as urban or rural; 0 = urban, 1 = rural. P. 82.

20. Ward - Political subdivisions of cities used for voting and representation purposes. A two digit number for each ward within a place of 3,000 or more pop. containing wards. P. 79.

21. CD - Congressional District: two digit numeric codes corresponding to the number assigned in state legislation. P. 78.

22. 1970 Counts

A. Housing - Self-explanatory

B. Population - Self-explanatory