SOCIOECONOMIC DATA BOOK An Index of Data on Michigan's Grand Traverse Bay Area

Working Paper No. 41

Compiled by

Patricia L. Braden, Research Associate Bureau of Business Research, University of Michigan

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PREFACE

The Socioeconomic Data Book has been prepared under the sponsorship of the University of Michigan Sea Grant Program. The work was completed at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan, as a part of its general program in regional economic development. The Data Book has been compiled to serve as a reference for other members of the Sea Grant Program at the University of Michigan and to help avoid inefficiencies resulting from duplicated searches for secondary data. It is our hope that it will also become a useful means of coordinating information searches within the Sea Grant Program.

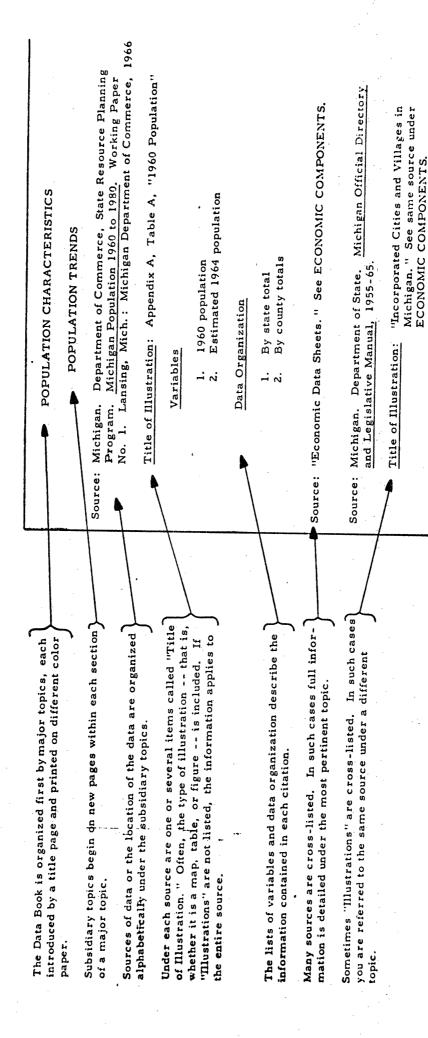
One of the primary objectives of the Sea Grant Program is to promote interdisciplinary cooperation in the study of the water resource requirements of the Upper Great Lakes region. This Data Book is a simple effort to make the basic tools of economic research available to all participating staff members and to researchers in other disciplines who recognize a need to incorporate the effects of economic decision making into their empirical analyses. The Data Book is expected to be used as an index to popular sources of secondary data in identified areas of interest. It has been organized by major areas of societal concern, which

reflect both the concentrated areas of decision-making activity and available secondary data. Within each area of concern, data-sharing topics of interest have been gathered together to speed access to the information. References have been made as complete as possible so that users may locate the source in a library or contact the publisher directly.

The author would like to thank both Suzanne Purnell and William Cook, Research Assistants, for their help in compiling the materials that have been indexed here. Special note should be made of the fine editorial help of Mrs. Kathleen Schoonmaker, without whose help the Socioeconomic Data Book would never have achieved this form.

Patricia L. Braden

Ann Arbor, Michigan May 1971



ORGANIZATION OF THE DATA BOOK

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POPULATION CHARACTERISTICS

POPULATION TRENDS

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN MICHIGAN

Source:

Haber, William; Spivey, W. Allen; and Warshaw, Martin R., eds. Michigan in the 1970's: An Economic Forecast.

Michigan Business Studies Vol. XVI, No. 4. Ann Arbor,

Mich.: Bureau of Business Research, Graduate School of

Business Administration, University of Michigan, 1965.

Variables

- 1. Projected percentage change in population, 1960-70
- 2. Projected percentage change in population, 1960-65
- 3. Projection of population -- 1970, 1975, 1980

Data Organization

- 1. By county
- 2. By year -- 1960, 1965, 1970, 1975, 1980

Source:

Michigan. Department of Commerce. State Resource Planning Program. Michigan Population 1960 to 1980. Working Paper No. 1. Lansing, Mich.: Michigan Department of Commerce, 1966.

Title of Illustration: Table 6, "Projections of the Population of Michigan Counties, 1960-1980"

Variable

 Population projections -- 1960, 1965, 1970, 1975, 1980

Data Organization

- 1. By county
- 2. By state total
- 3. By five-year intervals -- 1960, 1965, 1970, 1975, 1980

Title of Illustration: Appendix, Table A, "1960 Population"

Variables

- 1. 1960 population
- 2. Estimated 1964 population

Data Organization

- 1. By state total (Michigan)
- 2. By county totals

Title of Illustration: "Population by Years and Age Groups for (Name of County)"

Variable

Population by age groups -- 1960, 1965, 1970, 1975, 1980

Data Organization

- Ten tables, one for each of ten counties
- By population in five-year groups --0-4, 5-9, ..., 86 plus
- 3. By year -- 1960, 1965, 1970, 1975, 1980

Source:

Michigan. Department of Public Health. Michigan Population Handbook, 1965. Lansing, Mich.: Michigan Department of Public Health.

Title of Illustration: "Projected Population in Hundreds"

Variable

1. Annual population, 1961-80 (projections)

Data Organization

- By county
- 2. By year, 1961 through 1980

Title of Illustration:

Table 8, "Population: Age Groups and Nonwhite by County; Number and Percent"

Variables

- Total population
- Age groups -- under 5, 5-19, 20-44, 45-64, 65 plus
- 3. Nonwhite

Data Organization

- Michigan total 1.
- By county 2.
- 3. By year -- 1930, 1940, 1950, 1960

Title of Illustration: "Michigan Population Estimates: State, Counties, and Cities"

Variables

- Total population, July 1, 1963
 Total population, July 1, 1964

Data Organization

- By county
- 2. By major city

Title of Illustration: Table 10, "Mean Annual Rates of Population Change: 1960-1963, 1950-1960"

Variables

- Natural increase
- 2. Migration increase
- Total increase 3.

Data Organization

- 1. By county
- 2. By state

Title of Illustration:

"Michigan Counties: Population (and Proportion) Aged 65 Years and Over --1960, 1963, and 1970 (Census of Counties, Estimates, and Projections)"

Variables

- 1960 (census) population
- 1963 (estimates) population
- 3. 1970 (projection) population
- 4. Percentage 65 years and over --1963, 1970

Data Organization

- By county
- 2. State totals

Source:

CONTROL (1900) THE WEST SEAS A SEAS OF THE PARTY SHARES SHE SEAS OF THE RES

Michigan. Department of State. Michigan Official Directory and Legislative Manual, 1955-65.

Title of Illustration: "Incorporated Cities and Villages in Michigan. " See same source under ECONOMIC COMPONENTS -- GOVERN-MENT, MISCELLANEOUS.

Source:

Michigan. Executive Office of the Governor. Bureau of the Budget. Office of Planning Coordination. Memorandum on Michigan population projections to state and local officials, January 12, 1969. (Typewritten.)

"Michigan County Population Projections, Title of Illustration: 1960-1990"

Variable

Projected population totals for counties --1960, 1970, 1975, 1980, 1985, 1990

Data Organization

- 1. By county
- 2. Michigan total
- 3. Regional total

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1965, 1968. Lansing, Mich.: Michigan State University.

Title of Illustration: "Births and Deaths"

<u>Variables</u>

- 1. Number of live births and rate per 1,000 population -- 1962, 1964, 1966
- Number of deaths and rate per
 1,000 population -- 1962, 1964, 1966

Data Organization

- 1. By county
- 2. By year -- 1962, 1964, 1966

Title of Illustration: "Projected Population by Age Group for 1960, 1965"

Variable

1. Projected population for age groups -under 5, 5-14, 15-24, 25-39, 40-54,
55-64, 65-74, 75 and over

Data Organization

- 1. By county
- 2. By year -- 1960, 1965

Title of Illustration: "Nonwhites as a Percentage of the Total Population"

Variables

- 1. Nonwhites as percentage of total population as of April 1, 1960
- 2. Projected total population -- 1965, 1970, 1975, 1980

Data Organization

- 1. By county
- 2. By year -- 1960, 1965, 1970, 1975, 1980

Title of Illustration: "Educational Status of the Population"

Variable

 Persons aged 25 and over completing 1-8 years of school, 1-3 years of high school, 4 years of high school, 1-3 years of college, 4 years or more of college

Data Organization

1. By county

Title of Illustration:

"Projected Population Total and Number of Households for 1961, 1963, 1965, and 1967"

Variables

- 1. Projected total population for December 31, 1961, 1963, 1965, 1967
- Projected total number of households for December 31, 1961, 1963, 1965, 1967

Data Organization

- 1. By county
- 2. By year -- 1961, 1963, 1965, 1967

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Number of School Children and Teachers for Public Schools"

Variables

- 1. Number of school children aged 0-4, 5-19
- 2. Total number of school children
- 3. Fall public elementary school membership
- 4. Fall public secondary school membership (7th to 12th grade)
- 5. Number of teachers as verified in September

Data Organization

- 1. By county
- 2. By year -- 1963, 1965, 1967

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration: "Population in SMSAs and Non-SMSA Counties in Selected Years, 1929-1968"

Variable

1. Population in 1924, 1940, 1950, 1959, 1962, 1965, 1966, 1967, 1968

Data Organization

- 1. By county
- 2. By state total
- 3. By regional total

Source:

"Survey of Buying Power." Annual. Sales Management, XCVI (June 10, 1966).

Title of Illustration: Appendix B, Part I, "Income and Population -- Michigan Counties"

Variables

- 1. County
- 2. Disposable income -- net dollars
- 3. 1965 population
- 4. Projected 1980 population
- 5. Area / square mile
- 6. 1965 population / square mile
- 7. 1965 boats / 1,000 population

Data Organization

- By county
- 2. By year -- 1965-66

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

Source:

U. S. Department of Commerce. Bureau of the Census. 1970 Census of Population -- Michigan. Preliminary Reports, September, 1970.

Title of Illustration: "Michigan Population Change -- 1960-1970"

Variables

- 1. 1960 population
- 2. 1970 population

- Absolute change for 1960-70
- Percentage change for 1960-70

Data Organization

- 1. By county
- 2. By regional total
- By state total
- By years -- 1960, 1970

AGE AND AGE DISTRIBUTION

Source:

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Michigan. Department of Commerce. State Resource Planning Program. Michigan Population 1960 to 1980.

Title of Illustration:

"Population by Years and Age Groups for (Name of County). "

See same source under POPULATION CHARACTERISTICS -- POPULATION

TRENDS.

Source:

Michigan. Department of Public Health. Michigan Population Handbook, 1965.

Title of Illustration:

Table 8, "Population: Age Groups and Nonwhite by County; Number and Percent. " See same source under POPULATION CHARACTERISTICS -- POPULATION

TRENDS.

Title of Illustration:

"Michigan Counties: Population (and Proportion) Age 65 Years and Over --1960, 1963, and 1970 (Census of Counties, Estimates and Projections). " See same

source under POPULATION CHARACTERISTICS

POPULATION TRENDS.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968.

Title of Illustration:

"Births and Deaths." See same source under

POPULATION CHARACTERISTICS --

POPULATION TRENDS.

Title of Illustration:

"Projected Population by Age Group for 1960, 1965. " See same source under POPULATION CHARACTERISTICS --POPULATION TRENDS.

MIGRATION

Source:

Mighigan. Department of Public Health. Michigan

Population Handbook, 1965.

Title of Illustration:

Table 10, "Mean Annual Rates of

Population Change: 1960-1963, 1950-1960." See same source

under POPULATION CHARACTERISTICS --

POPULATION TRENDS.

Source:

U.S. Department of Commerce. County and City Data

Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS - -

INDUSTRIAL DATA.

MINORITY GROUPS

Source:

Michigan. Department of Public Health. Michigan

Population Handbook, 1965.

Title of Illustration:

Table 8
"Population: Age Groups and Non-

white by County; Number and Percent."
See same source under POPULATION
CHARACTERISTICS--POPULATION

TRENDS.

Source:

Michigan State University. Graduate School of Business

Administration. Division of Research. Michigan Statistical

Abstract, 1962, 1964, 1966, 1968.

Title of Illustration:

"Nonwhites as a Percentage of the

Total Population." See same source

under POPULATION CHARACTERISTICS--

POPULATION TRENDS.

Source:

U.S. Department of Commerce. County and City Data Book,

1956, 1962, 1967. See ECONOMIC COMPONENTS--

INDUSTRIAL DATA.

EDUCATIONAL LEVELS

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN

MICHIGAN.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968.

Title of Illustration:

"Educational Status of the Population."
See same source under POPULATION
CHARACTERISTICS -- POPULATION
TRENDS.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968.

Title of Illustration:

"Number of School Children and Teachers for Public Schools." See same source under POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Source:

U. S. Department of Commerce. County and City Data
Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS - INDUSTRIAL DATA.

POPULATION PROJECTIONS

Source:

Haber, William; Spivey, W. Allen; and Warshaw, Martin R., eds. Michigan in the 1970's: An Economic Forecast. See POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Source:

Michigan. Department of Commerce. State Resource Planning Program. Michigan Population 1960 to 1980.

Title of Illustration:

Table 6, "Projections of the Population of Michigan Counties, 1960-1980." See same source under POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Title of Illustration:

Appendix, Table A, "1960 Population."
See same source under POPULATION
CHARACTERISTICS -- POPULATION
TRENDS.

Source:

Michigan. Department of Public Health. Michigan Population Handbook, 1965.

Title of Illustration:

"Projected Population in Hundreds."
See same source under POPULATION
CHARACTERISTICS -- POPULATION
TRENDS.

Title of Illustration:

"Michigan Counties: Population (and Proportion) Aged 65 Years and Over -- 1960, 1963, and 1970 (Census of Counties, Estimates, and Projections.)" See same source under POPULATION CHARACTER-ISTICS--POPULATION TRENDS.

Source:

Michigan. Executive Office of the Governor. Bureau of the Budget. Office of Planning Coordination. Memorandum on Michigan population projections.

Title of Illustration:

"Michigan County Population Projections, 1960-1990." See same source under POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968.

POPULATION PROJECTIONS -- Continued

Title of Illustration:

"Projected Population by Age Group for 1960, 1965. " See same source under POPULATION CHARACTERISTICS --

POPULATION TRENDS.

Title of Illustration:

"Projected Population Total and Number of Households for 1961, 1963, 1965, and 1967. "See same source under POPULATION

CHARACTERISTICS -- POPULATION

TRENDS.

Title of Illustration:

"Nonwhites as a Percentage of the Total Population." See same source

under POPULATION CHARACTERISTICS --

POPULATION TRENDS.

PHYSICAL COMPONENTS

GEOGRAPHICAL LOCATION

Source:

Northwest Michigan Economic Development District Commission. Prologue for the Accelerated Growth of Economy. Traverse City, Mich.: Grand Traverse County Courthouse, October, 1968.

Title of Illustration:

p. 13, "Location Map," a map of Michigan

Variables

1. County boundary lines

 Distance in miles from Traverse City to major cities within 300 miles

Title of Illustration:

p. 14, "District Counties," a map of the ten-county Grand Traverse Bay area

Variables

1. County boundary lines

2. Location points of towns and cities

TRANSPORTATION

Source:

Michigan. Department of Commerce. State Resource
Planning Program. "Commercial Shipping." Part II
of Transportation Predictive Procedures: Recreational
Boating and Commercial Shipping. Technical Report No. 9C.
Lansing, Mich.: Michigan Department of Commerce.

Title of Illustration:

Table 1, "1964 Tonnages -- Michigan Ports"

Variables

- 1. Name of ports
- Tonnage

Data Organization

- 1. By port: Manistee, Charlevoix, Frankfort, Petoskey Penn-Dixie, Traverse City
- 2. By year -- 1964

Title of Illustration:

Table 2, "Michigan Ports Handling Less Than 1,000,000 but more than 100,000 Tons: 1964"

Variables

- 1. Name of port
- 2. Tons of coal
- 3. Tons of stone
- 4. Tons of petroleum products
- 5. Remainder tons

Data Organization

- By ports: Manistee, Petoskey Penn-Dixie, Traverse City
- 2. By years -- 1964

Title of Illustration:

"Michigan Ports Handling Less Than 100,000 Tons -- 1964"

Variables

- 1. Name of port
- 2. Tons of coal
- 3. Tons of petroleum products
- 4. Tons of stone
- 5. Remainder tons

Data Organization

- 1. By port: Charlevoix, Frankfort
- 2. By year -- 1964

Title of Illustration:

Table 16, "Relative Importance of Factors Which Would Influence Greater Use of Great Lakes Ports"

Variables

- Factors among exporters and percentage of respondents
- Factors among importers and percentage of respondents

Title of Illustration:

Table 17, "Change in Export Routing Given Improved Conditions at Michigan Ports"

Variable

 Percentage of dollar value and percentage of tonnage for present routing, routing under improved conditions, change, and total

Data Organization

 By ports: Detroit, other Michigan ports, other ports

Title of Illustration:

Table 18, "Change in Import Routing Given Improved Conditions at Michigan Ports"

Variable

1. Percentage of dollar value and percentage of tonnage for present routing, routing under improved conditions, change, and total

Data Organization

 By ports: Detroit, other Michigan ports, other ports

Title of Illustration:

Table 19, "Import and Export Forecast -- 1966 and 1970"

Variables

- 1. SIC numbers for exports and imports
- 2. Increase from 1965 to 1966
- 3. Increase from 1965 to 1970

Data Organization

- 1. By SIC code number
- 2. For years -- 1966 and 1970

TRANSPORTATION ** COntinued

Source:

Michigan. Department of Commerce. State Resource Planning Program. Michigan Port Hinterlands as Determined by Inland Carrier Class Rates. Technical Report No. 8 prepared by Dale Edwards and Richard Blasius. Lansing, Mich.: Michigan Department of Commerce, December, 1966.

Title of Illustration:

"Rail Mileages (Rate Bases) between Michigan Points and

Selected Ports"

Variables

- Cities 1.
- Rail mileages

Data Organization

- By cities in the Grand Traverse Bay area
- By cities which are destinations

Title of Illustration:

"Rail Mileage to Class 100 Conversion Table"

Variables

- 1. Mileages
- Class 100s

Data Organization

- By mileage -- 41 to 45, 46 to 50, 51 to 55, etc.
- By class 100

Title of Illustration:

"Special Conversion Table for Baltimore"

Variables

- Mileage 1.
- Basing point 2.
- Class 100 rate 3.

Data Organization

- By mileages
- By basing point -- Ann Arbor, Port Huron, Detroit, Jackson, etc.
- By class 100 rate 3.

Title of Illustration:

"Truck Mileages (Rate Bases) between Michigan Points and Selected Ports"

Variables

- Cities 1.
- Mileages

Data Organization

- 1. By cities in the Grand Traverse Bay area
- 2. By cities which are destinations

Title of Illustration:

"Truck Mileage to Class 100

Conversion Table"

Variables

- 1. Mileages
- 2. Class 100s

Data Organization

- 1. By mileage -- 11 to 15, 16 to 20, 21 to 25, etc.
- 2. By class 100

Title of Illustration:

"Conversion Table for Baltimore and Northport"

Variables

- 1. Mileages
- 2. Class 100s

Data Organization

- 1. By mileages -- 541 to 560, 561 to 580, 581 to 600, etc.
- 2. By class 100s

Title of Illustration: A list of tariffs

Variables

- Tariffs -- 30, 31, 220, 226, 490, 562,
 E-1,009, 227, National Rate Basis Tariff
- 2. Bureaus or companies of concern
- 3. ICC number

Data Organization

1. By specific tariffs

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Active U.S. General Aviation Civil Aircraft as of Jan. 1," 1961, 1963, 1964, 1966, 1967

Variables

- 1. Total aircraft
- 2. Air carrier aircraft (not for 1961)
- 3. Multi-engine aircraft
- 4. Four-place and over single-engine aircraft
- 5. Rotor craft
- 6. All others

Data Organization

- 1. By county
- 2. By year -- 1961, 1963, 1964, 1966, 1967

Source:

Michigan State University. Graduate School of Business
Administration. Division of Research. Michigan Statistical
Abstract, 1970. E. Lansing, Mich.: Michigan State
University.

Title of Illustration:

"Freight Traffic on Principal Michigan Waterways -- 1955-1967"

Variables

- 1. Port or waterway
- 2. Thousands of tons for years 1955-67

Data Organization

- 1. By port or waterway
- 2. By year -- 1957 through 1967

Source:

Northwest Michigan Economic Development District Commission. Prologue for the Accelerated Growth of Economy. Traverse City, Mich.: Grand Traverse County Courthouse, October, 1968.

Title of Illustration: Map 3, "District Highways"

Variables

- 1. Ten counties of the Grand Traverse Bay area
- 2. Major highways in the area

Title of Illustration: Map 4, "Motor Freight Lines"

Variables

- 1. Ten counties of the Grand Traverse Bay
- Motor freight routes of three freight lines --Parker Motor, Darling, Short Freight Lines

Title of Illustration: Map 6, "Railroad Lines and Carriers"

Variables

- 1. Ten counties of the Grand Traverse Bay area
- Major railroad routes -- Ann Arbor-Chesapeake, Chesapeake and Ohio, and Penn Central R, R.

Title of Illustration: Map 7, "Waterways and Ports"

Variables

- 1. Ten counties of Grand Traverse Bay area
- 2. Waterways, port cities, towns

Title of Illustration: Table 23, "Airline Passengers"

Variables

- 1. Names of commercial airports
- 2. Number of passengers -- 1963, 1967
- Percentage increase per airport between 1963 and 1967

Data Organization

- 1. By airport
- 2. For years -- 1963, 1967

Title of Illustration: Table 24, "Registered Aircraft"

Variables

- 1. Number of registered aircraft for 1963, 1967
- Total registered aircraft

Data Organization

- 1. By county
- 2. By year -- 1963, 1967

Source:

Upper Great Lakes Regional Commission. Highway Planning
Considerations for the Upper Great Lakes Economic
Development Region. Washington, D.C.: Upper Great
Lakes Regional Commission.

Variables

- 1. Regional economic characteristics
 - a. Population
 - b. Per capita income
 - . Property valuation
- 2. Regional physical characteristics
 - a. Predominant land characteristics
 - b. Recreation
 - c. Industry and higher education
 - d. Principal trade centers
- 3. Regional transportation
 - a. Present rail transportation

- b. Present air transportation
- c. Present water and pipeline transportation
- d. Present state truck highway transportation system
- 4. Highway useage and forecasts
- 5. Highway planning
- 6. Highway systems to serve the region

Title of Illustration: "Air T

"Air Traffic in UGLED Region"

Variables

- 1. Name of airport
- 2. Percentage scheduled aircraft departures
- 3. Estimated number of itinerant passengers arriving and departing
- 4. Estimated close population
- 5. Estimated airport reliability

Data Organization

1. By airport

PARKS AND CAMPGROUNDS

Source:

"Fact Sheet... Sleeping Bear Dunes National Lakeshore." On file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Variables

- 1. Proposed site -- geographic area
- 2. Number of areas for park
- 3. Attributes of the park
- 4. State officials supporting the proposal and their comments

COMMUNICATION FACILITIES AND COMMUNICATIONS

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1960, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

Table X-1, "Michigan Daily Newspapers," 1960, 1961, 1963, 1965, 1967, 1970

Variables

- 1. Name of county
- 2. Name of city
- 3. Name of daily newspaper
- 4. Daily circulation figure

Data Organization

- 1. By county, city, and name of paper
- 2. By year -- 1960, 1961, 1963, 1965, 1967, 1970

Title of Illustration:

"Michigan Weekly and Semi-Weekly Newspapers," 1960, 1961, 1963, 1965, 1967, 1970

Variables

- 1. Name of county
- 2. Name of city
- 3. Name of newspaper
- 4. Circulation figure

Data Organization

- 1. By county, city, and name of paper
- 2. By year -- 1960, 1961, 1963, 1965, 1967, 1970

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1966, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Michigan Commercial Radio Stations -- 1966, 1968"

Variables

- 1. Name of city or town of location
- 2. Call letters (AM or FM)

COMMUNICATION FACILITIES AND COMMUNICATIONS -- Continued

- 3. Origination date
- 4. Call numbers
- 5. Number of watts- day and night

Data Organization

- I. By city or town
- 2. By year -- 1966, 1968

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Michigan Commercial Television

Stations -- 1968"

Variables

- 1. Name of city or town of location
- 2. Channel number
- 3. Call letters and network representation
- 4. Number of watts -- audio and video
- 5. Origination date

HOUSING QUALITY AND HOUSING

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN

MICHIGAN.

Source:

U.S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

Source:

U.S. Department of Commerce. Bureau of the Census. 1970 Census of Population and Housing -- Michigan. Preliminary Reports. Information explaining the data parameters available is on file at the Bureau of Business Research, Graduate School of Business Administration,

University of Michigan.

ENERGY GENERATING FACILITIES (GAS AND OIL)

Source:

Michigan. Department of Conservation. Geology Survey Division. Summary of Operations -- Oil and Gas Fields. Annual Statistical Summaries. Lansing, Mich.: Michigan Department of Conservation and Natural Resources, 1960, 1962, 1965, 1967, 1968, 1969.

Title of Illustration:

"Oil and Gas Statistics -- Annual Statistical Summary"

Variables

- Classifications of new-hole completions (many variables)
- 2. Production totals (many variables)

Data Organization

1. By county

2. By year -- 1960, 1962, 1965, 1967, 1968, 1969

RECREATION

Source:

Allen, Gerald L. Colorado Ski and Winter Recreation Statistics, 1968. Boulder, Colo.: Business Research Division, Graduate School of Business Administration, University of Colorado, 1968.

Title of Illustration:

Table 13, "Number of Out-of-State Skiers and Estimated Expenditures in Colorado, 1955-1967"

Variables

- 1. Season
- 2. Number of skiers
- 3. Expenditures

Data Organization

1. By years -- 1955 to 1967

Title of Illustration:

Table 14, "Itemized Expenditures on Ski Trips in Colorado and 12 Western States, 1963-64"

Variables

- 1. Kind of expenditures
- 2. Amount spent

Data Organization

- 1. By kind of expenditure -- lodging and meals, lift tickets, rental or repair, ski schools, after-ski activities, equipment, transportation, package plan trips, other
- 2. By amount spent in Colorado
- 3. By amount spent in 12 western states

Source:

Michigan. Department of Commerce. State Resource Planning Program. "Recreational Boating." Part I of Transportation Predictive Procedures: Recreational Boating and Commercial Shipping. Technical Report No. 9C. Lansing, Mich.: Michigan Department of Commerce.

Title of Illustration: Table 4, "1980 Forecast of Fleet Size"

Variables

- 1. County
- Population factor x population density factor
 x income factor = forecast factor
- 3. Forecast--number of craft in 1980

Data Organization

- 1. By county
- 2. Forecast for 1980

Title of Illustration: "U

"Use of Launching Sites -- Boaters Who Transport Only"

Variables

- 1. Size of boat
- 2. Number of boaters
- 3. Use of launching sites
- 4. Average use per season

Data Organization

- 1. Boaters who transport only
- 2. Boaters who also have mooring

Title of Illustration:

"Size and Type of Registered Boats in Michigan Counties"

Variables

- 1. Name of county
- 2. Type of propulsion -- outboard, inboard, sailboat, total
- 3. Length of boat in feet and inches -- 12'0" and under, 12'1" to 20'0", 20'1" to 30'0", 30'1" to 40'0", 40'1" and over, and total

Data Organization

1. By county

Title of Illustration: Appendix D, "The Sampling Plan"

Variables

- 1. Name of county
- 2. Registered boats, 20' or less
- 3. Registered boats greater than 20'

Data Organization

1. By county

Source:

Pennington, Allan L.; Ross, Ivan; and Rudelius, William. Minnesota Tourism '68: A Market Analysis. St. Paul, Minn.: Minnesota State Planning Agency, January, 1969.

Title of Illustration:

Table 3, "Vacation Behavior of Families Living in the Midwest, July 1, 1967, to June 30, 1968.

RECREATION -- Continued

Variables

- 1. State of residence
- 2. Number of vacations
- 3. Total number of families
- 4. Percentage taking at least one vacation

Data Organization

- l By state
- 2. By year -- July 1, 1967, to June 30, 1968

Title of Illustration:

Table 5, "States of Residence and Destination of Vacationers Living in the Midwest, 1967-68"

Variables

- 1. State of residence
- 2. Destination for vacation

Data Organization

- 1. By state
- 2. By year -- 1967-68

Title of Illustration:

Table 18, "Vacationing Behavior of Persons Requesting Tourist Information"

Variables

- 1. Percentage of people vacationing in Minnesota
- 2. State of vacation
- 3. Reasons

Title of Illustration:

Table 29, "Tourist Advertising Expenditures in Measured Media in the U.S. -- 1966 and 1967, in Dollars"

Variables

- 1. State
- 2. Magazines
- 3. Newspapers
- 4. TV
- 5. Radio
- 6. Total
- 7. Rank among the 50 states

NATURAL RESOURCES

Source:

Lake Michigan Basin Study: Michigan Section. Prepared by the League of Women Voters of Michigan, January, 1968.

Variables

- State agencies having responsibility for water supplies
- 2. Watershed review of Aetna Township, Missaukee County
- 3. Power plants -- type of power and location
- 4. Frankfort Harbor
- 5. Harbors in Grand Traverse Bay area with boating facilities
- 6. County facilities -- state parks, state fish hatcheries, trout rearing stations, number of lakes and ponds with trout

Source:

Michigan. Northern Great Lakes Region. Soil Conservation Districts. <u>Framework Programs</u>. Typed abstracts of programs on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Title of Illustration:

"Soil, Water, and Related Conservation Framework Program for West Shore and West Central Highlands, North Central Highlands, Grand Traverse Bay, The Muskegon River; Broad Program Areas, Michigan"

Variables

- 1. Identification of the area
- 2. Resources of the area
- 3. Resource uses and development
 - a. Agricultural enterprises
 - b. Woodland enterprises
 - c. Recreational enterprises
 - d. Action that will influence development of enterprises
- 4. BPA subareas
- Summary of resource use and development enterprises (estimate planned developments and present situation)
- 6. Map of the area showing agricultural, forestry, and recreational land uses
- 7. Resource use and development enterprises
- 8. Land use practices needed to support the resource developments
- 9. Types and amounts of practices by soil conservation districts
- 10. Others

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1960, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Assessed and Equalized Valuations of Real and Personal Property"

Variables

- Assessed amount of real and personal property by county
- 2. State total
- 3. Regional total

Data Organization

- 1. By county
- 2. By year -- 1960, 1961, 1962 through 1969

Title of Illustration:

"Final State Equalized Value by State Board of Equalization in \$000's"

Variables

- 1. County equalized value
- 2. State total
- 3. Regional total

Data Organization

- 1. By county
- 2. By year -- 1960 through 1969

Title of Illustration:

"Final Equalized Value as % of State Valuation"

Variable

1. County equalized value as percentage of state valuation

Data Organization

- 1. By county
- 2. By year -- 1960 through 1969

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration: "Total Water Area in Acres"

Variable

1. Total water area in acres by county

Data Organization

- 1. By county
- 2. By year -- 1968

Source:

Vertrees, Robert C. "A Study of Nonresident Landowners of Ten or More Acres in Antrim and Kalkaska Counties, Michigan." Unpublished Ph. D. dissertation, Department of Resource Development, Michigan State University, 1967.

Variables

- 1. Various statistics on landowners
- 2. Agricultural and classification
- 3. Reasons for purchasing land originally
- 4. Present or future uses of land
- 5. Analysis of significant past and future uses
- 6. Types of assistance desired
- 7. Analysis of home address information

Data Organization

- 1. By county
- 2. By year -- 1967

DATA ON CITIES OF MICHIGAN

Source: Consumers Power Company. Data on Cities of Michigan. Jackson, Mich.: Consumers Power Co., 1967.

Variables

- 1. Name of city
- 2. Population of city and county
- Economic data (retail sales, value added, manufacturing, etc.)
- 4. Area cultural facilities
- 5. Public schools
- 6. Recreational facilities
- 7. Manufacturers, product, and employment
- 8. Various other economic data

Data Organization

- 1. By city
- 2. By year -- 1967

Source: Traverse City Chamber of Commerce. Facts about Traverse City, Michigan. Typewritten -- no title. On file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Variable

1. Various socioeconomic data

Data Organization

- 1. Various classes of socioeconomic data
- 2. By year -- 1962

Source: Upper Great Lakes Regional Commission. Growth Centers and their Potentials in the Upper Great Lakes Region. Washington, D.C.: Upper Great Lakes Regional Commission, May, 1969.

Variables

- 1. Name of growth center
- 2. Population
- 3. Status of a shopping center
- 4. Service center
- 5. Tourist recreation
- 6. Various other parameters in regard to growth

MISCELLANEOUS

Source: Michigan. Northern Great Lakes Region. Soil Conservation

Districts. Framework Programs.

Title of Illustration: "Soil, Water, and Related Conservation

Framework Program for: West Shore and West Central Highlands..." See

same source under PHYSICAL COMPONENTS -

NATURAL RESOURCES.

Source: Upper Great Lakes Regional Commission. Highway Planning

Considerations for the Upper Great Lakes Economic Develop-

ment Region. See PHYSICAL COMPONENTS -- TRANSPORTATION.

ECONOMIC COMPONENTS

NATURAL RESOURCES PRODUCTION

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration: "Value of Minerals Produced in Dollars"

Variable

1. Minerals produced in order of value

Data Organization

- 1. By county
- 2. By year -- 1959 through 1968

Source:

U. S. Department of Agriculture. Forest Service. Pulpwood Production in Lake States Counties, 1960. Station Paper No. 94 prepared by Arthur G. Horn. St. Paul, Minn.: Lake States Forest Experiment Station, January, 1962.

Title of Illustration:

"Michigan, North Half of Lower Peninsula--Pulpwood Production by County and Species, 1960-1968"

Variables

- 1. Number of thousand standard cords (roughwood basis) produced
- 2. All species
- 3. By specific species

Data Organization

- 1. By county
- 2. By year -- 1960 through 1968

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

EMPLOYMENT BY THREE-DIGIT SIC CODES

Source:

U.S. Department of Commerce. Bureau of the Census.

Census of Manufacturers, Area Statistics -- 'Michigan.'

Washington, D.C.: Government Printing Office, 1958,

1963.

Title of Illustration:

Table 7 (from both the 1958 and 1963 edition), "Distribution of Establishments by Employment Size Class and by Major Industry Group, for Counties"

Variables

- 1. Total establishments
- 2. State, county, and size class
- 3. SIC code
- 4. Number of establishments by major industry group

Data Organization

- 1. By state (Michigan)
- 2. By county
- 3. By city (Cadillac, Traverse City)
- 4. By SIC code
- 5. By year -- 1958, 1963

Source:

U. S. Department of Commerce. Bureau of the Census.

County Business Patterns. Washington, D. C.: Government

Printing Office. Pertinent data for the United States and

Michigan have been abstracted and are on file at the Bureau
of Business Research, Graduate School of Business Administration,
University of Michigan.

Title of Illustration:

A series of tables on employment, taxable payrolls, and total reporting units by county -- 1953, 1956, 1959, 1962, 1964, 1965, 1966, 1967, 1968

Variables

- 1. Number of employees, mid-March pay period
- 2. Taxable payrolls, January-March
- 3. Total reporting units
- 4. Number of reporting units, by employment size class -- 1 to 3, 4 to 7, 8 to 19, 20 to 49, 50 to 99, 100 to 249, 250 to 499, 500 or more

Data Organization

- 1. By county
- 2. By state (Michigan) -- 1956, 1968

EMPLOYMENT BY THREE-DIGIT SIC CODES -- Continued

- 3. By nation (U.S.) -- 1956, 1968
- 4. By employment size class
- 5. By SIC code (index provided)
- 6. By years -- 1953, 1956, 1959, 1962, 1964, 1965, 1966, 1967, 1968

Source:

U. S. Department of Commerce. Bureau of the Census.

County Business Patterns, ibid. And Battelle Memorial
Institute. "Industries Suited for the Upper Great Lakes
Region." A report by David C. Sweet, John M. Griffin,
and Hal S. Maggied. Columbus, Ohio, 1970, pp. 4-2 to 4-5.

Pertinent data have been abstracted and are on file at the
Bureau of Business Research, Graduate School of Business
Administration, University of Michigan.

Title of Illustration:

Series of tables on manufacturing employment by 3-digit SIC code and by county

Variables

- 1. SIC code
- 2. Industry title
- 3. 1959 employment
- 4. 1967 employment
- 5. Absolute number of employment changes between 1959 and 1967
- 6. Percentage of employment change between 1959 and 1967
- 7. Total figure for 2-digit SIC code classification

Data Organization

- 1. By county
- 2. By 2- and 3-digit SIC code
- 3. By year -- 1959, 1967

EMPLOYMENT BY MAJOR INDUSTRY CLASSES AND MISCELLANEOUS

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN

MICHIGAN.

Source:

Kievat, Irene M. Michigan's Manpower Resources. Technical Report No 10C. Lansing, Mich.: State Resource Planning Division, Office of Economic Expansion, Michigan Department of Commerce, March, 1967.

Title of Illustration:

Table 4, "Jobs Expected to be in Existence through 1975 but Have Keen Competition"

Variables

- 1. Jobs expected to feel impact of technology earliest
- 2. Jobs likely to feel the impact of technology through changes in the tasks performed by people filling those jobs
- 3. Occupation in which competition is expected to be greater through the 1970s

Title of Illustration:

Table 5, "Jobs Likely to Keep Pace with the Population Growth"

Variables

- 1. Jobs expected to register employment declines during next two decades
- 2. Jobs expected to grow with and maintain relative position with total employment
- 3. Jobs in which employment increases are expected to be greater than population increases during next two decades

Title of Illustration:

Table 6, "Jobs Expected to Grow Faster Than Population and More Rapidly Than Average Employment"

Variables

- 1. Slowest growing jobs in this category
- 2. Fastest growing jobs in the economy

Source:

Michigan. Department of Labor. Michigan Employment Security Commission. Copies of tables on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

EMPLOYMENT BY MAJOR INDUSTRY CLASSES AND MISCELLANEOUS -- Continued

Title of Illustration:

"Labor Force and Employment Estimates," a series of tables for seven broad areas:
Antrim County, Benzie County, Charlevoix County, Emmet County, Manistee County, Traverse City (Grand Traverse, Kalkaska, Leelanau), Cadillac (Missaukee, Osceola, Wexford)

Variables

- 1. Total labor force
- 2. Unemployment as a percentage of total labor force
- 3. Wage and salary workers in manufacturing industries (total figure), nonmanufacturing industries (total figure), and government (total figure)

Data Organization

- By seven broad areas (see <u>Title of Illustration</u>)
- 2. By yearly totals -- 1965, 1966, 1967, 1968, 1969 (1965 and 1966 missing for Cadillac)
- 3. By monthly totals -- 1970

Source:

Michigan. Department of Labor. Michigan Employment Security Commission. Annual Report for Fiscal Year..., 1960-69. Detroit, Mich.: Michigan Employment Security Commission.

Title of Illustration:

"Michigan Covered Employment by County, Monthly for Calendar Year "1959-68

Variables

- 1. Covered employment per month
- 2. Covered employment per county

Data Organization

- 1. By county
- 2. By month
- 3. By year -- calendar years 1959 through 1968

Source:

Michigan. Department of Labor. Michigan Employment Security Commission. Final Report on the Michigan Manpower Study:

An Analysis of the Characteristics of Michigan's Labor Force in the Next 15 Years. Detroit, Mich.: Michigan Employment Security Commission.

Variables

- 1. Various employment statistics
- An analysis of the characteristics of Michigan's labor force in the next 15 years

EMPLOYMENT BY MAJOR INDUSTRY CLASSES AND MISCELLANEOUS -- Continued

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1966, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Employment and Taxable Payrolls in Michigan Establishments Covered by Old-Age, Survivors, and Disability Insurance Program"

Variables

- 1. Number of employed (mid-March pay period)
- 2. Taxable payrolls in thousands of dollars (January March)

Data Organization

- 1. By county
- 2. By years -- 1962, 1964, 1966, 1967

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Number of Employed Persons by Major Industry Groups" (according to the 1960 census)

Variables

- 1. County
- 2. Number of employed persons for
 - a. Agriculture, forestry, and fisheries
 - b. Mining
 - c. Construction
 - d. Manufacturing
 - e. Utilities
 - f. Trade
 - g. Finance, insurance, and real estate
 - h. Business, repair, and personal services
 - i. Other services
 - j. Public administration
 - k. Industry not reported

Data Organization

- 1. By county
- 2. By industry group
- 3. By year -- 1960 census count

Source:

U. S. Department of Commerce. Bureau of the Census.

County and City Data Book, 1956, 1962, 1967. See ECONOMIC

COMPONENTS -- INDUSTRIAL DATA.

EMPLOYMENT BY MAJOR INDUSTRY CLASSES AND MISCELLANEOUS -- Continued

Source:

U. S. Department of Commerce. Bureau of the Census. Regional Economics Division. Set of tables which are part of an untitled work. Copies of tables on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Title of Illustration:

"Employment and Mean Wages in the SMSA in 1965," a set of tables

Variables

- 1. Employment status in 1960 -- sex, race
- Migration and work force status -- sex, race, industry
- 3. Selected notes on the area

Data Organization

- 1. By state
- 2. By county
- 3. By SMSA
- 4. By year
- 5. By age
- 6. By industry

LABOR FORCE PARTICIPATION

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS DATA FOR COUNTIES IN MICHIGAN.

Source:

Northwest Michigan Economic Development District Commission.

Prologue for the Accelerated Growth of Economy. Traverse

City, Mich.: Grand Traverse County Courthouse, October, 1968.

Title of Illustration:

Table 6, "Civilian Labor Force Participation Rate, 1960"

Variables

- 1. Population 14 years and over -- total, male, female
- 2. Labor force -- total, male, female
- 3. Participation rate, percentage -- total, male, female

Data Organization

- 1. By county
- 2. By district
- 3. By state (Michigan)
- 4. By United States
- 5. By year -- 1960 as based on 1960 census

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

INCOME

Source:

"Économic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN MICHIGAN.

Source:

Michigan. Department of Commerce. Office of Economic Expansion. Research Division. January, 1969. Set of tables and maps which are part of an untitled work. On file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Title of Illustration:

"Total Personal Income by Counties: Change from 1950 to 1960 in Millions of Dollars" (a map); "Per Capita Personal Income by Counties, 1966" (a map); "Total Personal Income by County: Percentage Change from 1950 to 1966" (a map); "Total and Per Capita Personal Income for Selected Years, 1940-1966"

Variables

- 1. Total income -- 1940, 1950, 1959, 1962, 1965, 1966
- Per capita dollars -- 1940, 1950, 1959, 1962, 1965, 1966
- 3. 1966 change from 1950, 1959, 1962, 1965 in terms of total and per capita amount and total and per capita percentage

Data Organization

1. By county (Wexford missing)

Source:

Michigan. Department of Commerce. Office of Economic Expansion. Research Division. February, 1970. Set of tables which are part of an untitled work. A copy on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Title of Illustration: "Personal Income by Major Source, 1967"

Variables

- 1. Wages and salaries and other labor income
- 2. Proprietors' income
- 3. Total earnings
- 4. Property income
- 5. Transfer payments less social insurance
- 6. Total personal income

Data Organization

- 1. By county
- 2. By source of income

Title of Illustration:

- "Total Earnings (Wages and Salaries and Other Labor Income and Proprietors' Income)"
- 2. "Total Farm Earnings"
- 3. "Total Nonfarm Earnings"
- 4. "Total Government Earnings"
 - a. "Total Federal Government Earnings"
 - b. "Total State and Local Government Earnings"
- 5. "Total Private Nonfarm Earnings"
- 6. "Total Income from Manufacturing"
- 7. "Total Income from Mining"
- 8. "Total Income from Contract Construction"
- 9. "Total Income from Transportation, Communication, and Public Utilities"
- 10. "Total Income from Wholesale and Retail Trade"
- 11. "Total Income from Finance, Insurance, and Real Estate"
- 12. "Total Income from Services"
- 13. "Total Income from Other Sources"

Variables

- Total earnings figure for year -- 1950, 1959, 1967
- 2. Total change in earnings by amount and percentage for 1950-59 and 1959-67

Data Organization

- 1. By county
- 2. By SMSA

Source:

Michigan. Department of Commerce. Office of Economic Expansion. Research Division. July, 1970. Typed table available from Leonard D. Bronder, Office of Economic Expansion, Department of Commerce, Lansing, Michigan.

Title of Illustration:

"Total Personal and Per Capita Income, 1959 and 1968"

Variables

- 1. Total income for 1959, 1968, and change in millions of dollars and percentage from 1959 to 1968
- 2. Per capita income for 1959, 1968, and change in millions of dollars and percentage from 1959 to 1968

Data Organization

- 1. By county
- 2. By year -- 1959, 1968

Source:

Michigan. Department of Labor. Michigan Employment Security Commission. Annual Report for Fiscal Year..., 1960-69. Detroit, Mich.: Michigan Employment Security Commission.

Title of Illustration:

"Quarterly and Annual Payrolls in Covered Employment and Average Quarterly Earnings of Covered Workers for Calendar Year ," 1959-68

Variables

- 1. Annual payroll figure
- 2. Quarterly payroll figure
- 3. Average quarterly earnings

Data Organization

- 1. By county
- 2. By year -- 1959 through 1968
- 3. By quarter -- 1959 through 1968

Source:

Michigan. Department of Labor. Michigan Employment Security Commission. Final Report on the Michigan Manpower Study:

An Analysis of the Characteristics of Michigan's Labor Force in the Next 15 Years. See ECONOMIC COMPONENTS -EMPLOYMENT BY MAJOR INDUSTRY CLASS AND MISCELLANEOUS.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968. E. Lansing, Mich.: Michigan State University.

Title of Illustration: "Estimates of Michigan Buying Power by County -- 1961, 1963, 1965, 1967"

Variables

- 1. Estimates of Michigan buying power per capita
- 2. Estimates of Michigan buying power per household

Data Organization

- 1. By county
- 2. By year -- 1961, 1963, 1965, 1967

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Average Annual Salary Paid Classroom Teachers"

Variable

1. Average annual salary

Data Organization

- 1. By county
- 2. By state
- 3. By region
- 4. By year -- 1963 through 1970

Source:

"Survey of Buying Power." Annual. Sales Management, XCVII (June 10, 1966).

Title of Illustration:

Appendix B, Part I, "Income and Population -- Michigan Counties."
See same source under POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

Source:

U.S. Department of Commerce. Bureau of the Census. Regional Economics Division. Set of tables which are part of an untitled work.

Title of Illustration:

"Employment and Mean Wages in the SMSA in 1965," a set of tables. See same source under ECONOMIC COMPONENTS -- EMPLOYMENT BY MAJOR INDUSTRY CLASSES AND MISCELLANEOUS.

Source:

U.S. Department of Commerce. Office of Business Economics. Total and Per Capita Personal Income in Selected Years, 1929-68 by SMSA's and Counties, November, 1970. Data sheets available from the Michigan Department of Commerce, Office of Economic Expansion, Research Division, Seven Story Building, Lansing, Michigan.

Title of Illustration:

"Per Capita Personal Income in SMSA and Non-SMSA Counties in Selected Years, 1929-68"

Variable

1. Per capita personal income figure

Data Organization

- 1. By state (Michigan)
- 2. By region

- 3. By county
- 4. By year -- 1929, 1940, 1950, 1959, 1962, 1965, 1966, 1967, 1968

Title of Illustration:

"Per Capita Income Relatives by SMSA and Non-SMSA Counties in Selected Years, 1929-1968"

Variable

1. Per capita income relatives (percentage of national average)

Data Organization

- 1. By state (Michigan)
- 2. By region
- 3. By county
- 4. By year -- 1929, 1940, 1950, 1959, 1962, 1965, 1966, 1967, 1968

Title of Illustration:

"Total Personal Income in SMSA and Non-SMSA Counties in Selected Years 1929-1968"

Variable

1. Total personal income figure

Data Organization

- 1. By state (Michigan)
- 2. By region
- 3. By county
- 4 By year -- 1929, 1940, 1950, 1959, 1962, 1965, 1966, 1967, 1968

Title of Illustration:

"Total Personal Income Relatives in SMSA and Non-SMSA Counties in Selected Years, 1929-1968"

Variable

1. Total personal income relatives (percentage of national total)

Data Organization

- 1. By state (Michigan)
- 2. By region
- 3. By county
- 4. By year -- 1929, 1940, 1950, 1959, 1965, 1966, 1967, 1968

Source:

U.S. Department of Commerce. Office of Business Economics. Regional Economics Information System. February 14, 1969. A set of tables which are part of an untitled work. Copy on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

INCOME -- Continued

Title of Illustration:

Table 5.02, "Personal Income by Major Sources and Earnings by Broad Industrial Sector (Percent Change)"

Variables

- 1. Percentage change in total personal income by major sources
- 2. Percentage change in total earnings by broad industrial sector

Data Organization

- 1. By county
- 2. By year -- 40/29, 50/40, 59/50, 62/59, 65/62, 66/65, 66/29, 66/50, 66/59

Source:

U. S. Department of Commerce. Office of Business Economics. Regional Economics Information System. June 10, 1970. A set of tables which are part of an untitled work. Copy on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Title of Illustration:

"Personal Income by Major Sources and Earnings by Broad Industrial Sector, June 10, 1970"

Table 5.00 -- Thousands of Dollars

Table 5.01 -- Percentage of U.S.

Table 5.02 -- Percentage change

Table 5.03 -- Percentage of Total Personal Income

Table 5.04 -- Percentage of Total Earnings

Table 5.05 -- Percentage of Nonfarm Earnings

Table 5.06 -- Location Quotient for Total
Earnings

Table 5.07 -- Location Quotient for Nonfarm Earnings

Variables

- Total personal income
 - a. Total wage and salary disbursements
 - b. Other labor, income
 - c. Proprietors' income
 - d. Property income
 - e. Transfer payments
 - f. Personal contributions for social insurance
- 2. Total earnings
 - a. Farm earnings
 - b. Total nonfarm earnings
 - Government earnings (total federal, federal civilian, military, state and local)
 - c. Private nonfarm earnings
 - 1. Manufacturing
 - 2. Mining
 - 3. Contract construction

INCOME -- Continued

- 4. Transportation, communication, and public utilities
- 5. Wholesale and retail trade
- 6. Finance, insurance, and real estate
- 7. Services
- 8. Other

Data Organization

- 1. For Grand Traverse, Michigan
- 2. By county
- 3. By year -- 1929, 1940, 1950, 1959, 1962, 1965, 1966, 1967, 1968, 1969

INDUSTRIAL DATA

Source: The Directory of Michigan Manufacturers, 1969.

Variables

- 1. Manufacturing cities by county
- 2. Name of city
- 3. Name of county and population
- 4. Manufacturer
 - a. Name
 - b. Type of product produced
 - c. Number of employees
 - d. Date of establishment

Data Organization

- 1. By county
- 2. By city
- 3. By manufacturer
- 4. By year -- 1969

Source:

"Economic Data Sheets." See ECONOMIC COMPONENTS -- MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN MICHIGAN.

Source:

Michigan Employment Security Commission. Research and Statistics Division. Socioeconomic Survey of Cadillac, Manistee, Petoskey, and Traverse City, 1970. Detroit, Mich.: Michigan Employment Security Commission, 1970.

Variable

1. Numerous statistics concerning industry in the four city areas

Data Organization

- By city (Cadillac, Manistee, Petoskey, Traverse City)
- 2. By year -- 1970

Source:

"Survey of Buying Power." Annual. Sales Management, LXXXVIII, XCII, XCVI, and C (June 10, 1962, 1964, 1966, 1968 respectively).

Title of Illustration:

"Estimated Retail Sales for 1961, 1963, 1965, 1967"

1963, 1965, 1967

Variables

1. Estimated retail sales of:

INDUSTRIAL DATA -- Continued

- a. Food
- b. General merchandise
- c. Furniture, household appliances
- d. Automotive products
- e. Drugs
- f. Total (including jewelry stores; feed stores, etc.)

Data Organization

- 1. By county
- 2. By year -- 1961, 1963, 1965, 1967

Source:

U. S. Department of Commerce. Bureau of the Census. Census of Business, Retail Trade, Area Statistics -- "Michigan." Washington, D. C.: Government Printing Office, 1954, 1958, 1963.

Title of Illustration:

Table 102 and 3, "Retail Trade: Counties, Cities of 2,500 Inhabitants or More," 1958, 1963

Variables

- 1. Establishments -- total number and number with payroll
- 2. Sales -- total (all establishments), establishments with payroll
- Payroll -- entire year; workweek ended
 November 15; paid employees, workweek ended
 November 15
- 4. Number of active proprietors of unincorporated businesses
- 5. Kind of business group (food stores, automotive dealers, etc.) -- number of establishments, sales

Data Organization

- 1. By state (Michigan)
- 2. By county
- 3. By city (Boyne, Charlevoix, Petoskey, Traverse City, Manistee, Cadillac)
- 4. By year -- 1958, 1963

Title of Illustration:

Tables 9 and 102A, "Retail Trade: Counties; Cities of 2,500 Inhabitants or More," 1954, 1958, 1963

Variables

- 1. Establishments -- total number and number with payroll
- 2. Sales -- total and with payroll
- 3. Payroll (entire year)

Data Organization

- 1. By county
- 2. By state (Michigan)

INDUSTRIAL DATA -- Continued

- 3. By city (Boyne, Charlevoix, Petoskey, Traverse City, Manistee, Cadillac)
- 4. By year -- 1954, 1958, 1963

Source:

U. S. Department of Commerce. Bureau of the Census. Census of Business, Selected Services, Area Statistics -- "Michigan." Washington, D. C.: Government Printing Office, 1958, 1963.

Title of Illustration:

Tables 102, 102A, 104, "Selected Services: Counties, Cities with 2,500 Inhabitants or More," 1958, 1963

Variables and Data Organization

1. The variables are the same as those shown for the source above.

Source:

U. S. Department of Commerce. Bureau of the Census. Census of Business, Wholesale Trade, Area Statistics -- "Michigan." Washington, D. C.: Government Printing Office, 1958, 1963.

Title of Illustration:

Tables 102, 4, and 7, "Wholesale Trade: Counties; Cities of 2, 500 Inhabitants or More," 1958, 1963

Variables

- 1. Number of establishments
- 2. Total sales
- 3. Total payroll
 - a. Entire year
 - b. Workweek ended November 15
 - c. Paid employees, workweek ended November 15
- 4. Number of active proprietors of unincorporated business
- 5. Merchant wholesalers
 - a. Number of establishments
 - b. Sales
- 6. Other operating types
 - a. Number of establishments
 - b. Sales

Data Organization

- 1. By state (Michigan)
- 2. By county
- By city (Boyne, Charlevoix, Petoskey, Traverse City, Manistee, Cadillac)
- 4. By year -- 1958, 1963

INDUSTRIAL DATA -- Continued

Source:

U. S. Department of Commerce. Bureau of the Census. Census of Manufacturers, Area Statistics -- "Michigan." Washington, D. C.: Government Printing Office, 1954, 1963, 1968.

Title of Illustration:

Table 3, "General Statistics for SMSA's, Counties, and Selected Cities," 1954, 1958, 1963

Variables

- 1. Establishments -- total, number with 20 or more employees
- 2. Employees -- number, payroll
- 3. Production workers -- number, man-hours, wages
- 4. Value added by manufacturer
- 5. New capital expenditures

Data Organization

- 1. By county
- 2. By state (Michigan)
- 3. By city (Cadillac, Traverse City)
- 4. By year -- 1954, 1958, 1963

Title of Illustration:

Table 7, "Distribution of Establishments by Employment Size Class and by Major Industry Group, for Counties." See same source under ECONOMIC COMPONENTS -- EMPLOYMENT BY THREE-DIGIT SIC CODE.

Source:

U.S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. Washington, D.C.:
Government Printing Office.

Variables

- 1. Various and numerous statistics for:
 - a. Manufactures
 - b. Retail trade
 - c. Wholesale trade
 - d. Selected services
 - e. Minerals industries
 - f. Agriculture
 - g. Banking

Data Organization

- 1. By county
- 2. By year -- 1956, 1962, 1967

MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN MICHIGAN

Source:

"Economic Data Sheets." Compiled by the Research Division of the Michigan Economic Development Department, in cooperation with Detroit Field Office, U.S. Department of Commerce, March, 1957.

Variables

- 1. Land area and population density
- 2. Population -- county
- 3. Population -- villages
- 4. Effective buying income, 1955
- 5. Retail sales, 1955-56
- 6. Bank deposits, 1955
- 7. Health facilities
- 8. Housing
- 9. Civilian labor force, 1950
- 10. Retail trade, 1954
- 11. Selected services, 1954
- 12. Wholesale trade, 1954
- 13. Business establishments, 1953 and 1951 by industry division
- 14. Agriculture, 1954
- 15. Mineral resources produced, 1954
- 16. Climate
- 17. Electric and gas utilities serving area
- 18. Public water supplies
- 19. Transportation facilities

Data Organization

- 1. By counties in the Grand Traverse Bay area
- 2. By year -- 1950s

Source:

"Economic Data Sheets." Set of data sheets which are untitled. Copies on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

Variables

- 1. Section I
 - a. Population characteristics
 - b Education
 - c. Housing
- 2. Section II
 - a. Income
 - b. Employment
 - c. Unemployment
- 3. Section III
 - a. Age in labor force
 - b. Labor force
- 4. Section IV
 - a. Occupations in labor force, percentage distribution by sex and color

MISCELLANEOUS ECONOMIC DATA FOR COUNTIES IN MICHIGAN -- Continued

- b. Occupational experience of unemployed, percentage distribution
- 5. Section V
 - a. Agriculture
 - b. Manufacturing
 - c. Retail trade
 - d. Wholesale trade
 - e. Services

Data Organization

- 1. By county
- 2. By state (Michigan)
- 3. By U.S.
- 4. By year -- 1960 (mostly)

Source:

U. S. Department of Commerce. Bureau of the Census.

County and City Data Book, 1956, 1962, 1967. See ECONOMIC

COMPONENTS -- INDUSTRIAL DATA.

GOVERNMENT, MISCELLANEOUS

Source:

Michigan. Department of State. Michigan Official Directory and Legislative Manual, 1965-66. Lansing, Mich.: Michigan Department of State.

Title of Illustration:

"Incorporated Cities and Villages

in Michigan"

Variable

 Incorporated city and village data -- name of city or village, county and township (for villages), date incorporated, 1960 population

Data Organization

- 1. By city and county (or village)
- 2. By year -- 1962

Source:

U. S. Department of Commerce. Bureau of the Census.

Census of Governments: 1962. Vol. III, No. 22, Government
in Michigan. Washington, D.C.: Government Printing

Office, 1964 as cited in Michigan Statistical Abstract, 1968.

Title of Illustration:

"Local Government Revenue in \$000

for 1962"

Variables

- 1. Local government revenue in 1962
 - a. Intergovernmental revenues
 - b. Local charges and miscellaneous
- 2. Local government expenditures for 1962
 - a. Capital outlay
 - b. Total direct expenditures
 - All other expenditures, except education, highways, public welfare, health, and hospitals

Data Organization

- 1. By county
- 2. By year -- 1962

Title of Illustration:

"Local Government Information"

Variables

- 1. Number of local governments, including county governments
- 2. Total local government employees
- 3. Full-time local government employees

- 4. Total payroll in thousands of dollars, October 1962
- 5. Education payroll in thousands of dollars, October 1962
- 6. Payroll for other functions in thousands of dollars, October 1962

Data Organization

- 1. By county
- 2. By year -- 1962

Title of Illustration:

"Government in Michigan, Statistics of Local Governments"

Variables

- 1. Number of total county governments
- 2. Number of total county governments with proper tax power
- 3. Number of townships, number of school districts, number of special districts
- 4. Population (1960) per local government

Title of Illustration:

"Local Government Employment and Payrolls in Individual County Areas"

Variables

- 1. Total full-time employees
- 2. October payrolls (education, teachers, other than education)
- 3. Average earnings by classes as in #2 above
- 4. Functions other than education
- 5. Employees per 10,000 inhabitants by education, teachers, functions other than education (such as highways, fire protection, etc.)

Data Organization

- 1. By county
- 2. By year -- 1960

Title of Illustration:

"Selected Items of Local Government Finances for Individual County Areas: 1962"

Variables

- 1. General revenue (excluding interlocal)
 - a. Intergovernmental revenues from state
 - b. Revenues from local sources (property taxes, other taxes, charges, and miscellaneous)
- 2. Total direct general expenditure for:
 - a. Capital outlay
 - b. Education
 - c. Other than education (broken into 17 areas)
 - d. Water supply revenue and expenditure
- Debt -- Total general debt outstanding for local schools and other
- 4. Per capita amounts for the above categories

GOVERNMENT, MISCELLANEOUS -- Continued

Data Organization

- 1. By county
- 2. Per capita
- 3. By year -- 1962

Title of Illustration:

"Financial Statistics for Individual County Governments: 1962"

Variables

- 1. General revenues (taxes, intergovernmental, etc.)
- 2. General expenditures (education, police protection, etc.)

Data Organization

- 1. By county
- 2. By year -- 1961 fiscal year

Title of Illustration:

"Financial Statistics for Individual Municipalities having a 1960 Population of 10,000 or more: 1962"

Variables

- General revenues (taxes, intergovernmental, utility, etc.)
- 2. General expenditures (sewerage, housing, etc.)

Data Organization

- By municipalities with population of 10,000 or over
- 2. By year -- 1962

Title of Illustration:

"Employment Statistics for Individual County Governments: Oct. 1962"

Variables

- 1. Number of employees (full-time segregated)
- 2. October payroll in thousands of dollars
- 3. Number of full-time employees in other than educational functions (by selected functions -- public welfare, highways, etc.)

Data Organization

- 1. By county
- 2. By year -- 1962

Title of Illustration:

"Employment Statistics for Individual School Districts Enrolling 3,000 or More Pupils, by County: Oct. 1962" (includes Grand Traverse -- Grand Traverse City only)

GOVERNMENT, MISCELLANEOUS -- Continued

Variables

- 1. School enrollment
- 2. Number of total employees (full-time and part-time)
- 3. Number of teachers
- 4. Payroll (for different classes)

Title of Illustration:

"Employment Statistics for Individual Municipalities having a 1960 Population of 10,000 or More: Oct. 1962"

Variables

- 1. Number of employees (full-time segregated)
- 2. October payroll in thousands of dollars
- 3. Number of full-time employees in other than educational functions (by selected functions (11))

Data Organization

- 1. Cadillac and Traverse
- 2. By year -- 1962

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

GOVERNMENT, TAX COLLECTIONS AND TAXES

Source:

Michigan. Department of Revenue. Annual Report for 1949 through 1969. Lansing, Mich.: Speaker-Hines and Thomas, Inc.

Title of Illustration:

"Tax Collections"

Variables

- 1. Percentage of increase or decrease in sales tax collections compared with prior years
- 2. Sales tax collection in dollars per capita (includes state average)
- 3. Sales tax collections, percentage of total and percentage of increase
- 4. Sales, intangibles, and inheritance tax
- 5. Sales tax collection by county and types of business groups, 5 areas (1951 on)
- 6. Business activities tax by type of business (1955 on)
- 7. Bank despositories, various information (1966 on)
- 8. (1968-69) Michigan tax rate
 - a. Name of tax
 - b. Year adopted
 - c. Current rate

Data Organization

- 1. By county
- 2. By year -- 1949 through 1969

Source:

Michigan. Department of Revenue. Annual Report, as cited in Michigan Statistical Abstract, 1962, 1964, 1966, 1968, 1970.

Title of Illustration:

"Tax Collections"

Variables

- 1. Number of sales tax returns
- 2. Sales tax in collections
- 3. Number of business activities taxpayers
- 4. Business activities tax collections
- 5. Number of intangible taxpayers
- 6. Intangible tax collections
- 7. Inheritance tax collections (but not including tax waiver fees)
- 8. Use tax collections (1969 only)

Data Organization

1. By county

2. By year -- 1961, 1963, 1965, 1967, 1969

Source:

Michigan. Department of Revenue. Annual Report, as cited in Michigan Statistical Abstract, 1964, 1966, 1968.

Title of Illustration:

"Retail Sales Tax Collections for Fiscal Years 1953 and 1963; 1955 and 1965; 1957 and 1967"

Variables

- 1. Total retail sales collections for years shown above
- 2. Percentage change from each ten-year comparison

Data Organization

- 1. By county
- 2. By year -- 1953 and 1963, 1955 and 1965, 1957 and 1967

Source:

Michigan. Department of the Treasury. Monthly Research and Statistical Bulletin. Lansing, Mich.: Michigan Department of the Treasury.

Title of Illustration:

Monthly "Sales Tax Collections by Counties, Cities of 10,000 or over, and 8 Major Business Categories," from Jan. 1968 through Sept. 1970.

Variables

- 1. Total monthly sales tax collections
- 2. Number of returns
- 3. Monthly sales tax by eight classes of business (building material, general merchandise, food, automotive, apparel, furniture, miscellaneous retail, nonretail)
- 4. Total use tax collected

Data Organization

- 1. By months (January 1968 through September 1970)
- 2. By county
- 3. By cities with a population of 10,000 or more
- By eight major business categories (shown in # 3 above)

Source

Michigan. State Tax Commission and State Board of Assessors. Thirty-first through Thirty-third Report, Special Release, as cited in Michigan Statistical Abstract, 1962, 1964, 1966, 1968, 1970.

GOVERNMENT, TAX COLLECTION AND TAXES -- Continued

Title of Illustration:

"Total Property Tax as Levied in Michigan by Local Governments and Average Tax Rate"

Variables

- 1. Total general property tax
- 2. County property tax
- 3. School property tax
- 4. Township property tax
- 5. City property tax
- 6. Village property tax
- 7. Average tax rate per \$1000 of state equalized valuation

Data Organization

- 1. By county and region
- 2. By year -- 1960, 1962, 1964, 1967, 1969

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"State Equalized Valuations and Property Tax Levies in Michigan Municipalities Having 5,000 Inhabitants or More in 1960, 1962"

Variables

- 1. State equalized valuations
- 2. County taxes
- 3. City taxes
- 4. School taxes
- 5. Average tax rate per \$1000 of state equalized valuation

Data Organization

- 1. By year -- 1962, 1964, 1967, 1969
- By city -- Cadillac, Manistee, Petoskey, and Traverse City

Source:

U.S. Department of Commerce. Bureau of the Census. Census of Governments, 1962.

Title of Illustration:

"Local Government Revenue in \$000 for 1962." See same source under ECONOMIC COMPONENTS -- GOVERNMENT, MISCELLANEOUS.

Source:

U.S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

SOCIAL AND INSTITUTIONAL COMPONENTS

COMMUTING PATTERNS

Source:

Northwest Michigan Economic Development District Commission. Prologue for the Accelerated Growth of Economy. Traverse City, Mich.: Grand Traverse County Courthouse, October, 1968.

Title of Illustration: Map 9, "Commuting Patterns"

Variables

- 1. Net in-commutes
- 2. Net out-commutes

Data Organization

1. By county, Grand Traverse Bay area

Title of Illustration: Map 10, "Commuting Field of Central Cities"

Variables

- 1. Percentage of tract residents commuting to central city
- 2. Centers -- principal metropolitan, within metropolitan, independent

Data Organization

- 1. By county, Grand Traverse Bay area
- 2. By percentage -- 50 or more, 5 or more, some

<u>Title of Illustration:</u> Appendix S, "Intra District Commuting Patterns"

Variables

- 1. Number of intradistrict commutes
- 2. Net number of district commutes

Data Organization

- 1. By county, Grand Traverse Bay area
- By comparisons between counties in a matrix form

Title of Illustration:

Appendix S, "Commuting Patterns
Between District Counties and
Adjacent Counties"

Variables

- 1. Number of commutes between counties
- 2. Net number of out-district commutes

COMMUTING PATTERNS -- Continued

Data Organization

1. By county (in matrix form)

Source:

Upper Great Lakes Regional Commission. Growth Centers and their Potentials in the Upper Great Lakes Region.

Report of the Commission. Washington, D. C.: Upper Great Lakes Regional Commission, May, 1969.

Title of Illustration:

Figure 14,"Labor Markets of Non-Metropolitan Centers, " a map

Variable

1. Commuting patterns by percentage of age of population commuting

Data Organization

1. By county

MEDICAL FACILITIES

Source:

Michigan. Department of Public Health. Michigan State Plan -- 1966-1967 (for Hospital and Medical Facilities Construction). Lansing, Mich.: Department of Public Health.

Title of Illustration:

"Hospitals of the District -- 1966"

Variables

- 1. Number of beds
- 2. Percentage of beds occupied
- 3. Patients admitted

Data Organization

- 1. By hospital names within counties
- 2. By county

Source:

Michigan. Department of Public Health. Michigan Department of Licensing and Regulation. Special Releases, as cited in the 1968 Michigan Statistical Abstract.

Data Organization

- 1. By county, regional total
- 2. By year -- 1968

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1960, 1962, 1964, 1966, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Medical Facilities"

Variables

- 1. Number of hospital beds
- 2. Number of doctors of medicine
- 3. Number of dentists

Data Organization

- 1. By county, regional total
- 2. By year -- 1960, 1962, 1964, 1966, 1970.

MEDICAL FACILITIES -- Continued

Source:

Northwest Michigan Economic Development District
Commission. Prologue for the Accelerated Growth
of Economy. Traverse City, Mich.: Grand Traverse
County Courthouse, October, 1968.

Title of Illustration:

Appendix N, "Nursing Care and

Housing for the Elderly"

Variables

1. Name and location of institutions

2. Number of beds

Data Organization

1. By city within each county

2. By county

EDUCATIONAL INSTITUTIONS, HIGHER EDUCATION

Source:

Cass, James, and Birnbaum, Max. Comparative Guide to American Colleges. New York: Harper & Row, 1969.

Title of Illustration:

"Four Year Colleges and Universities in the Upper Great Lakes Region"

Variables

- 1. Name of college
- 2. Location
- Enrollment figure

Data Organization

By college

Source:

Michigan. Department of State. Michigan Official Directory and Legislative Manual, 1965-66. Lansing, Mich.: Michigan Department of State.

Title of Illustration:

"Community Colleges"

Variable.

Names of community colleges in Petoskey and Traverse City

Source:

Graduate School of Michigan State University. Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968.

Title of Illustration:

"Educational Status of the Population. " See same source

under POPULATION CHARACTERISTICS --

POPULATION TRENDS.

Source:

Upper Great Lakes Regional Commission. Prospectus for Regional Development -- First Year Investments. Washington, D.C.: Upper Great Lakes Regional Commission, June, 1969.

Title of Illustration:

"Vocational-Technical Education Facilities in Upper Great Lakes Economic Development Region,

1968!' a map

Variables

- 1. Four-year colleges with vocationaltechnical programs
- 2. Two-year colleges with vocational-technical programs
- 3. Area vocational-technical schools
- 4. Area vocational-technical high schools
- 5. Thirty-mile commuting service radius

EDUCATIONAL INSTITUTIONS, PUBLIC SCHOOLS

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1962, 1964, 1966, 1968.

Title of Illustration:

"Educational Status of the Population."
See same source under POPULATION
CHARACTERISTICS -- POPULATION
TRENDS.

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968.

Title of Illustration:

"Number of School Children and Teachers for Public Schools." See same source under POPULATION CHARACTERISTICS -- POPULATION TRENDS.

Title of Illustration:

"Average Annual Salary Paid Classroom Teachers." See same source under ECONOMIC COMPONENTS --INCOME.

Source:

U. S. Department of Commerce. Bureau of the Census.

Census of Governments: 1962. Vol. VII, No. 22,

Government in Michigan. Washington, D. C.: Government

Printing Office, 1964.

Title of Illustration:

"Financial Statistics for Individual School Districts Enrolling 3,000 or More Pupils, by County: 1962" (Only Grand Traverse -- Traverse City)

Variable

1. Financial statistics (operating budget figure)

Data Organization

- 1. Traverse City
- 2. By year -- 1962

Title of Illustration:

"Employment Statistics for Individual School Districts Enrolling 3, 000 or More Pupils, by County: Oct. 1962." See same source under ECONOMIC COMPONENTS -- GOVERNMENT, MISCELLANEOUS.

EDUCATIONAL INSTITUTIONS, PUBLIS SCHOOLS -- Continued

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

FAMILY

Source:

Michigan. Department of Public Health. Michigan

Center for Health Statistics. Michigan Health

Statistics, 1961-67.

Title of Illustration:

"Annual Statistical Report,"

1961-67. See same source under SOCIAL AND INSTITUTIONAL COMPONENTS -- HEALTH.

Source:

U.S. Department of Commerce. Bureau of the Census.

County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

SOCIAL SERVICES RECIPIENTS, WELFARE

Source:

Michigan State University. Graduate School of Business
Administration. Division of Research. Michigan Statistical
Abstract, 1960, 1962, 1964, 1966, 1968, 1970. E. Lansing,
Mich.: Michigan State University.

Title of Illustration:

"Michigan Public Assistance Payments and Number of Recipients under Major Programs by County (amount of Payments and Number of Recipients)"

Variables

- 1. Amount of payments
- 2. Number of recipients -- old age, relief, blind, disabled, dependent children

Data Organization

- 1. By county
- 2. By the five categories shown in #2 above
- 3. By fiscal year -- 1957 through 1969

Source:

Northwest Michigan Economic Development District Commission.

Prologue for the Accelerated Growth of Economy. Traverse City,

Mich.: Grand Traverse County Courthouse, October, 1968.

Title of Illustration:

Table 15, "Social Services Recipients," 1967-68

Variables

- 1. Number of recipients -- old age, relief, blind, disabled, dependent children
- 2. Absolute difference
- 3. Percentage change between 1967 and 1968

Data Organization

- 1. By county
- 2. By the five categories shown in #1 above
- 3. For years -- 1967 and 1968

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

HEALTH

Source:

Michigan. Department of Public Health. Michigan Center for Health Statistics. Michigan Health Statistics. Lansing, Mich.: Department of Public Health, 1961-67.

Title of Illustration: "Annual Statistical Report," 1961-67

Variables

- 1. Number of suicides
- 2. Disease profile
 - a. Communicable diseases
 - b. Accidental deaths by cause
 - c. Malignant neoplasms
 - d. Mental illness
 - e. Heart disease
 - f. Deaths by cause
 - g. Births and deaths
 - h. Others

Data Organization

- 1. By county
- 2. By year -- 1961 through 1967

VOTING PATTERNS

Source:

Michigan State University. Graduate School of Business
Administration. Division of Research. Michigan Statistical
Abstract, 1964, 1966, 1968. E. Lansing, Mich.: Michigan
State University.

Variables

- 1. Votes cast for governor, November 6, 1962, November 3, 1964, and November 5, 1966
- 2. Votes cast for secretary of state (same dates)

Data Organization

1. By county

2. By political party within each county (Democrat, Republican, and Socialist Labor)

Source:

U. S. Department of Commerce. Bureau of the Census. County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

FINANCIAL INSTITUTIONS

Source:

Michigan. Department of Treasury. Annual Report, 1966-69.

Title of Illustration:

"Bank Depositories"

Variables

- 1. Name of city, county, and bank
- 2. Dollar figure, common stock and surplus
- 3. Dollar figure, U.S. or Michigan securities pledged
- 4. State of Michigan depositories (commercial accounts and time deposits)

Data Organization

1. By city, county, and bank

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1960, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Ranking of Michigan's Largest Banks (Assets over \$5, 6 and 7 million)"

Variables

- Banks are ranked in terms of size of assets
- 2. Total resources figures
- 3. Name of bank

Data Organization

- 1. Bank and city location
- 2. By years -- 1959, 1961, 1963, 1965, 1967, and 1969

Title of Illustration:

"Bank Deposits as of June, " 1958, 1960, 1962, 1964, 1966, 1968

Variables

- Total deposits including interbank and government deposits
- Demand deposits of individuals, partnerships, and corporations
- 3. Time deposits of individuals, partnerships, and corporations

IONS -- Continued

Data Organizations

- 1. By county
- By year -- 1958, 1960, 1962, 1964, 1966, 1968

U.S. Department of Commerce. Bureau of the Census. Source: County and City Data Book, 1956, 1962, 1967. See ECONOMIC COMPONENTS -- INDUSTRIAL DATA.

JUVENILE DELINQUENCY

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Official Caseloads of Juvenile Division of Probate Court, by County"

Variable

 Number of cases -- delinquency, neglect, made permanent wards, adoptions confirmed

Data Organization

1. By county -- yearly figure

2. By year -- 1963, 1965, 1967, 1969

MISCELLANEOUS

Source:

Michigan State University. Graduate School of Business Administration. Division of Research. Michigan Statistical Abstract, 1960, 1962, 1964, 1966, 1968, 1970. E. Lansing, Mich.: Michigan State University.

Title of Illustration:

"Michigan Motor Vehicle Registration by County"

Variable

 Number of motor vehicles registered -passenger, total

Data Organization

1. By county

2. By year -- 1958 through 1969

BIBLIOGRAPHY

- Allen, Gerald L. Colorado Ski and Winter Recreation Statistics, 1968.

 Boulder, Colo.: Business Research Division, Graduate School of Business Administration, University of Colorado, 1968.
- Battelle Memorial Institute. "Industries Suited for the Upper Great Lakes Region." A report by David C. Sweet, John M. Griffin, and Hal S. Maggied. Columbus, Ohio: Battelle Memorial Institute, 1970.
- Cass, James, and Birnbaum, Max. Comparative Guide to American Colleges. New York: Harper & Row, 1969.
- Consumers Power Company. <u>Data on Cities of Michigan.</u> Jackson, Mich.: Consumers Power Co., 1967.
- The Directory of Michigan Manufacturers, 1969.
- "Economic Data Sheets." Compiled by the Research Division of the Michigan Economic Development Department, in cooperation with the Detroit Field Office, U.S. Department of Commerce, March, 1957.
- "Economic Data Sheets." Set of data sheets which are untitled.

 Copies on file at the Bureau of Business Research, Graduate
 School of Business Administration, University of Michigan.
- "Fact Sheet... Sleeping Bear Dunes National Lakeshore." On file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.
- Haber, William; Spivey, W. Allen; and Warshaw, Martin R., eds.

 Michigan in the 1970's: An Economic Forecast. Michigan Business

 Studies Vol.XVI, No. 4. Ann Arbor, Mich.: Bureau of
 Business Research, Graduate School of Business Administration,
 University of Michigan, 1965.

- Kievat, Irene M. Michigan's Manpower Resources. Technical Report
 No. 10C. Lansing, Mich.: State Resource Planning Division,
 Office of Economic Expansion, Michigan Department of Commerce,
 March, 1967.
- Lake Michigan Basin Study: Michigan Section. Prepared by the League of Women Voters of Michigan, January, 1968.
- Michigan. Department of Commerce. Office of Economic Expansion, Research Division. Tables and maps. Jaunary 1969, February 1970, July 1970.
- . State Resource Planning Program. Michigan Population 1960 to 1980. Working Paper No. 1. Lansing, Mich.: Michigan Department of Commerce, 1966.
- ______. State Resource Planning Program. Michigan Port Hinterlands as Determined by Inland Carrier Class Rates. Technical Report No. 8 prepared by Dale Edwards and Richard Blasius. Lansing, Mich.: Michigan Department of Commerce, December, 1966.
- . State Resource Planning Program. Transportation Predictive Procedures: Recreational Boating and Commercial Shipping. Technical Report No. 9C. Lansing, Mich.:

 Michigan Department of Commerce.
- Michigan. Department of Conservation. Geology Survey Division.

 Summary of Operations--Oil and Gas Fields. Annual Statistical
 Summaries. Lansing, Mich.: Michigan Departments of
 Conservation and Natural Resources, various years.
- Michigan. Department of Labor Michigan Employment Security Commission. Annual Report. Detroit, Mich.: Michigan Employment Security Commission, various years.
- . Michigan Employment Security Commission. Final Report on the Michigan Manpower Study: An Analysis of the Characteristics of Michigan's Labor Force in the Next 15 Years. Detroit, Mich.: Michigan Employment Security Commission.
- . Michigan Employment Security Commission. Copies of tables on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.

- Michigan Department of Public Health. Michigan Population

 Handbook, 1965. Lansing, Mich.: Michigan Department of Public Health.
- . Michigan State Plan--1966-1967 (for Hospital and Medical Facilities Construction). Lansing, Mich.: Department of Public Health.
- . Michigan Center for Health Statistics. Michigan

 Health Statistics. Lansing, Mich.: Michigan Department
 of Public Health, 1961-67.
- Special Releases. Lansing, Mich.: Michigan Department of Public Health.
- Michigan. Department of Revenue. Annual Report. Lansing,
 Mich.: Speaker-Hines and Thomas, Inc., various years.
- Michigan. Department of State. Michigan Official Directory and Legislative Manual. Lansing, Mich.: Michigan Department of State, 1955-65.
- Michigan. Department of the Treasury. Annual Report. Lansing, Mich.: Michigan Department of the Treasury, various years.
- . Monthly Research and Statistical Bulletin. Lansing,
 Mich.: Michigan Department of the Treasury.
- Michigan. Executive Office of the Governor. Bureau of the Budget. Office of Planning Coordination. Memorandum on Michigan population projections to state and local officials, January 12, 1969. (Typewritten.)
- Michigan. Northern Great Lakes Region. Soil Conservation Districts.

 Framework Programs. Typed abstracts of programs on file at the Bureau of Business Research, Graduate School of Business Administration, University of Michigan.
- Michigan. State Tax Commission and State Board of Assessors.

 Thirty-first through Thirty-third Report, Special Releases.

 Lansing, Mich.: State Tax Commission and State Board of Assessors.
- Michigan Employment Security Commission. Research and Statistics

 Division. Socio-Economic Survey for Cadillac, Manistee,

 Petoskey, and Traverse City. Detroit, Mich.: Michigan

 Employment Security Commission, 1970.

- Michigan State University. Graduate School of Business Administration.

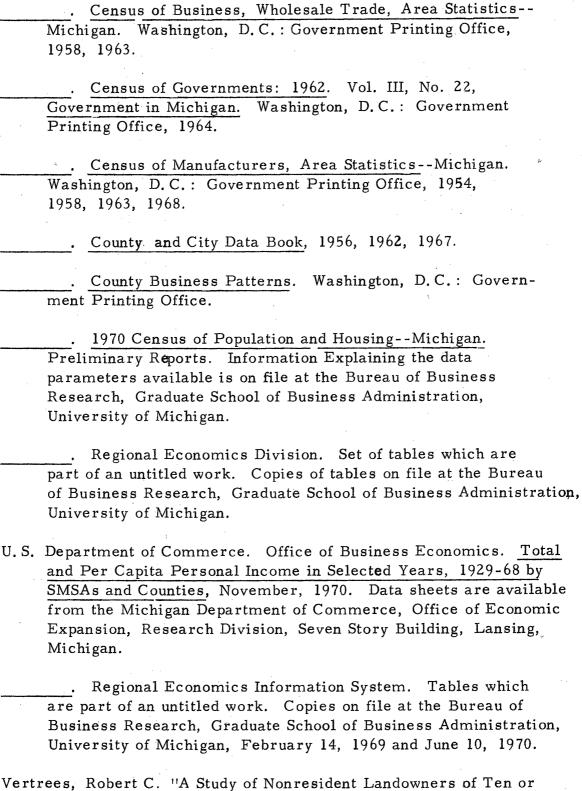
 Division of Research. Michigan Statistical Abstract. E. Lansing,

 Mich.: Michigan State University, various years.
- Northwest Michigan Economic Development District Commission.

 Prologue for the Accelerated Growth of Economy. Traverse City, Mich.: Grand Traverse County Courthouse, October, 1968.
- Pennington, Allan L.; Ross, Ivan; and Rudelius, William. Minnesota

 Tourism '68: A Market Analysis. St. Paul, Minn.: Minnesota

 State Planning Agency, January, 1969.
- "Survey of Buying Power." (Annual.) Sales Management, various years.
- Traverse City Chamber of Commerce. Facts about Traverse City,
 Michigan. Typewritten--no title. On file at the Bureau of
 Business Research, Graduate School of Business Administration,
 University of Michigan.
- Upper Great Lakes Regional Commission. Growth Centers and Their
 Potentials in the Upper Great Lakes Region. Washington, D.C.:
 Upper Great Lakes Regional Commission, May, 1969.
- Economic Development Region. Washington, D.C.: Upper Great Lakes Great Lakes Regional Commission.
- . Prospectus for Regional Development--First Year Investments. Washington, D.C.: Upper Great Lakes Regional Commission, June, 1969.
- U. S. Department of Agriculture. Forest Service. Pulpwood Production
 in Lake States Counties, 1960. Station Paper No. 94 prepared by
 Arthur G. Horn. St. Paul, Minn.: Lake States Forest Experiment
 Station, January, 1962.
- U.S. Department of Commerce. Bureau of the Census. Census of Business, Retail Trade, Area Statistics--Michigan. Washington, D.C.: Government Printing Office, 1954, 1958, 1963.
- . Census of Business, Selected Services, Area Statistics--Michigan. Washington, D.C.: Government Printing Office, 1958, 1963.



Vertrees, Robert C. "A Study of Nonresident Landowners of Ten or More Acres in Antrim and Kalkaska Counties, Michigan." Unpublished Ph. D. dissertation, Department of Resource Development, Michigan State University, 1967.

SOURCE GUIDES

- Ellis, J. B. Outdoor Recreation Planning in Michigan by a Systems

 Analysis Approach. Part 1: A Manual for "Program RECSYS."

 Technical Report No. 1. Prepared for the Recreation Resource

 Planning Division, Michigan Department of Conservation, Lansing,
 Michigan, May, 1966.
- Lake Michigan Basin Study, Bibliography. Prepared by the Michigan League of Women Voters, 1967.
- Michigan. Department of Commerce. State Resource Planning Program.

 <u>List of Available Publications</u>. Lansing, Mich.: Michigan

 <u>Department of Commerce</u>.
- Environmental Problems in Michigan. Working Paper No.

 7. Lansing, Mich.: Michigan Department of Commerce.
- Michigan. Department of Labor. Bureau of Labor Statistics.

 Monthly Labor Review. Lansing, Mich.: Michigan
 Department of Labor.
- Michigan State University. Graduate School of Business Administration.

 Division of Research. Bibliography of Business and Economic
 Research Pertaining to Michigan and Its Development. E. Lansing,
 Mich.: Michigan State University.
- _____. <u>Michigan Statistical Abstract</u>. E. Lansing, Mich.: Michigan State University.
- Ohio. Department of Development. Socio-Economic History of Ohio,
 Socio-Economic Profile. Technical Report No. 1. Columbus,
 Ohio: Ohio Department of Development.
- U. S. Department of Commerce. Industrial Location as a Factor in Regional Development, Bibliography. Washington, D.C.:
 Government Printing Office.

- U. S. Department of Commerce. Bureau of the Census. Bureau of the Census Catalogue. Part I, "Publications." Part II, "Data Files and Special Tabulations." Washington, D. C.: Government Printing Office.
- . Directory of Federal Statistics for Local Areas: A
 Guide to Sources, 1966. Washington, D.C.: Government
 Printing Office.
- . Directory of Non-Federal Statistics for States and Local

 Areas: A Guide to Sources, 1969. Washington, D.C.:

 Government Printing Office.
- . 1970 Census Users' Guide, October, 1970. Part III,

 "Electronic Data Processing Series, Technical Documentation
 Series." Washington, D.C.: Government Printing Office.
- U. S. Department of Commerce. Clearinghouse for Federal Scientific and Technical Information. Clearinghouse Announcements in Science and Technology. No. 14, "Food and Agriculture."

 June 25, 1970. Washington, D. C.: Government Printing Office.

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