

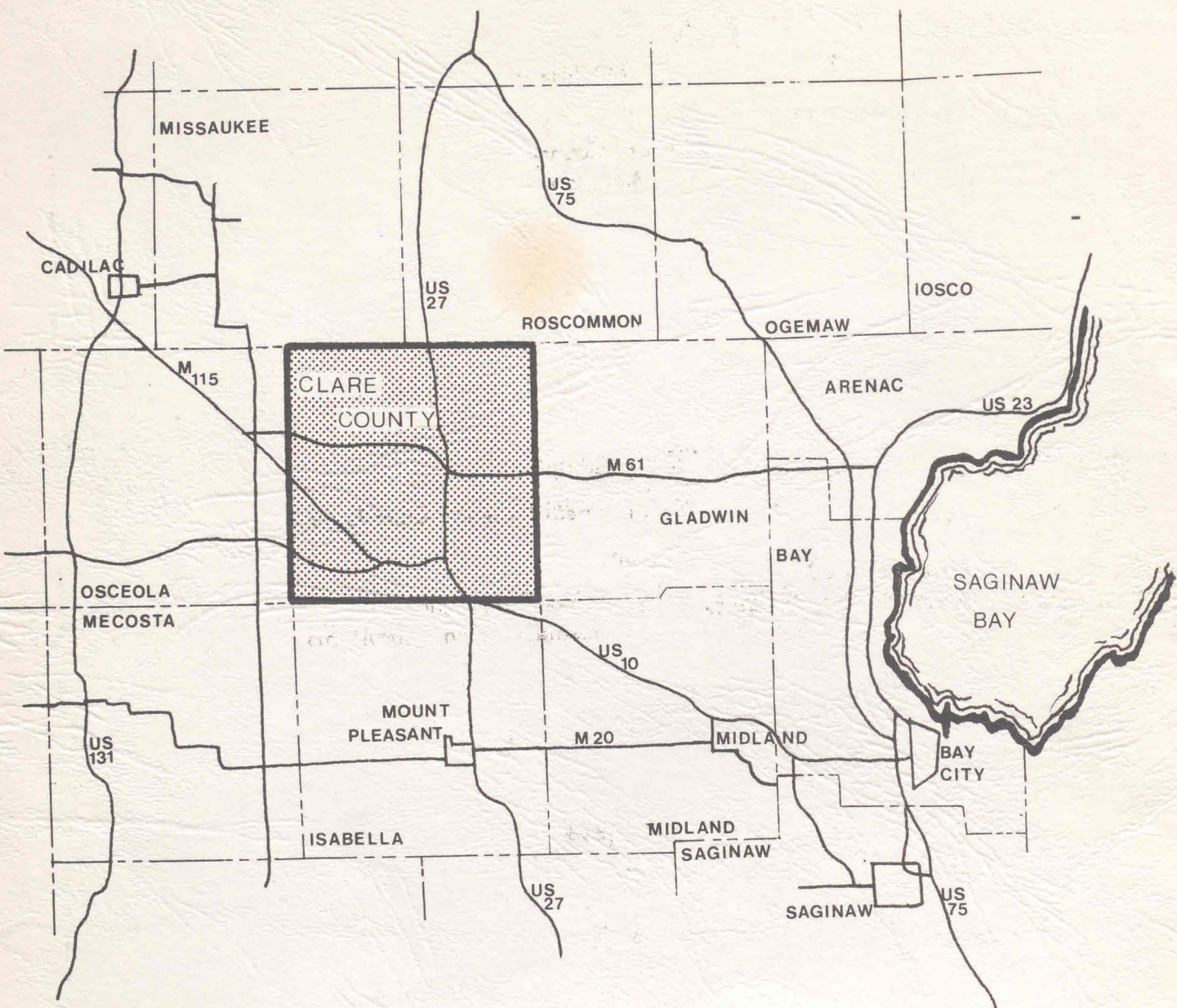
# REGIONAL COMPREHENSIVE PLAN



ASSOCIATION OF CLARE COUNTY LOCAL PLANNING COMMISSIONS



# CLARE COUNTY LOCATION



JUNE, 1978

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN



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## REGIONAL COMPREHENSIVE PLAN

Clare County  
Michigan

Prepared by  
Association of Clare County Local Planning Commissions  
and  
Parkins, Rogers & Associates, Inc.  
Planning, Research & Environmental Design Consultants

June 1978

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| 16. Abstracts<br>This Plan contains surveys, analyses and evaluation on the natural resources and environment, population, economy, housing characteristics, land use, organizational structure, transportation facilities and utilities relating to Clare County. Recommendations are made on future desirable land use needs to serve the County's future population in the year 2000. Implementation measures are presented -- including a recommended five-year Continuing Planning Program. |  |                                  |                                                          |                              |
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# TABLE OF CONTENTS

|                                                            | Page |
|------------------------------------------------------------|------|
| Abstract . . . . .                                         | iii  |
| Table of Contents . . . . .                                | v    |
| List of Tables . . . . .                                   | ix   |
| List of Charts . . . . .                                   | xii  |
| List of Maps . . . . .                                     | xii  |
| General Summary . . . . .                                  | xiv  |
| <br>History                                                |      |
| Historical Perspective . . . . .                           | 1    |
| Historic Preservation . . . . .                            | 2    |
| <br>Environmental Characteristics                          |      |
| Climate . . . . .                                          | 3    |
| Drainage . . . . .                                         | 3    |
| Major Lakes, Ponds, and Streams . . . . .                  | 3    |
| Soils and Surface Geology . . . . .                        | 3    |
| Bedrock Geology . . . . .                                  | 5    |
| Surface Geology . . . . .                                  | 5    |
| Soil Associations . . . . .                                | 5    |
| Topography . . . . .                                       | 11   |
| Water . . . . .                                            | 12   |
| Soil Hydrology . . . . .                                   | 12   |
| Agricultural Interpretation of Soil Associations . . . . . | 12   |
| Forest Cover . . . . .                                     | 13   |
| Fragile Environmental Areas . . . . .                      | 13   |
| Conclusion . . . . .                                       | 14   |
| <br>Population Characteristics and Forecast                |      |
| Past Population Growth Trends . . . . .                    | 15   |
| Population Composition . . . . .                           | 15   |
| Population Distribution, Density and Migration . . . . .   | 20   |
| Population Forecast . . . . .                              | 23   |
| <br>Economy                                                |      |
| Introduction . . . . .                                     | 28   |
| Employment and Income Distribution . . . . .               | 28   |
| Business Activity . . . . .                                | 31   |
| Agriculture . . . . .                                      | 34   |
| Anticipated Urbanization and Future Space Needs . . . . .  | 37   |
| <br>Housing Study                                          |      |
| Introduction . . . . .                                     | 40   |
| Existing Housing Characteristics . . . . .                 | 40   |



# TABLE OF CONTENTS (Continued)

|                                                         | <u>Page</u> |
|---------------------------------------------------------|-------------|
| Housing Study (cont.)                                   |             |
| Housing Supply Needs . . . . .                          | 47          |
| Housing Needs Analysis . . . . .                        | 51          |
| Housing Environment . . . . .                           | 53          |
| Statement of Goals . . . . .                            | 57          |
| Housing Assistance Programs . . . . .                   | 58          |
| Existing Circulation and Transportation Characteristics |             |
| Introduction . . . . .                                  | 59          |
| Regional Setting . . . . .                              | 59          |
| Road Inventory . . . . .                                | 60          |
| Characteristics of the Road System . . . . .            | 63          |
| Airport Facilities . . . . .                            | 64          |
| Rail Facilities . . . . .                               | 66          |
| Trucking Facilities . . . . .                           | 66          |
| Public Transportation . . . . .                         | 66          |
| Conclusion . . . . .                                    | 66          |
| Public Utilities, Facilities and Services               |             |
| Introduction . . . . .                                  | 68          |
| Recreational Facilities . . . . .                       | 68          |
| Libraries . . . . .                                     | 69          |
| Police Protection . . . . .                             | 72          |
| Fire Protection . . . . .                               | 73          |
| Ambulance Services . . . . .                            | 75          |
| Hospital Services . . . . .                             | 75          |
| Mental Health . . . . .                                 | 75          |
| Dental Care . . . . .                                   | 76          |
| Schools . . . . .                                       | 76          |
| Electricity . . . . .                                   | 76          |
| Goals and Policies                                      |             |
| Policies and Procedures for Decision-Making . . . . .   | 79          |
| Citizen Awareness and Participation . . . . .           | 79          |
| Controlled Development . . . . .                        | 80          |
| Agriculture and Land Use . . . . .                      | 81          |
| Business . . . . .                                      | 81          |
| Industry . . . . .                                      | 82          |
| Transportation . . . . .                                | 83          |
| Environmental . . . . .                                 | 84          |
| Utilities . . . . .                                     | 85          |
| Organizational Cooperation . . . . .                    | 85          |
| Land Use Plan                                           |             |
| Introduction . . . . .                                  | 87          |
| Existing Land Use . . . . .                             | 87          |



# TABLE OF CONTENTS (Continued)

|                                                                                                                          | <u>Page</u> |
|--------------------------------------------------------------------------------------------------------------------------|-------------|
| Land Use Plan (cont.)                                                                                                    |             |
| Clare County Land Use Patterns . . . . .                                                                                 | 90          |
| Urban-Rural Land Use Conflicts . . . . .                                                                                 | 94          |
| Future Land Use Plan . . . . .                                                                                           | 95          |
| Concepts of the Plan . . . . .                                                                                           | 95          |
| Existing Factors Influencing the Plan . . . . .                                                                          | 99          |
| Planning by Development Sectors . . . . .                                                                                | 100         |
| Land Use Control . . . . .                                                                                               | 105         |
| Conclusion . . . . .                                                                                                     | 105         |
| Organizational Analysis                                                                                                  |             |
| Introduction . . . . .                                                                                                   | 107         |
| Structure of Counties . . . . .                                                                                          | 107         |
| County Functions . . . . .                                                                                               | 108         |
| County Administrator . . . . .                                                                                           | 111         |
| County Board of Commissioners . . . . .                                                                                  | 112         |
| Implementation - Continuing Planning Program                                                                             |             |
| Introduction . . . . .                                                                                                   | 117         |
| Organization . . . . .                                                                                                   | 118         |
| The Continuing Planning Process . . . . .                                                                                | 120         |
| Components of a Continuing Planning Program . . . . .                                                                    | 121         |
| Maintenance and Updating of Planning Data . . . . .                                                                      | 121         |
| APPENDIX                                                                                                                 |             |
| Environmental Assessment                                                                                                 |             |
| Introduction . . . . .                                                                                                   | 130         |
| Environmental Impact . . . . .                                                                                           | 130         |
| Unavoidable Adverse Environmental Effects . . . . .                                                                      | 132         |
| Alternative to the Plan . . . . .                                                                                        | 132         |
| Irreversible and Irretrievable Commitment of Resources . . . . .                                                         | 133         |
| Applicable Environmental Controls . . . . .                                                                              | 133         |
| Table A - 1, Value of Housing, Clare County, 1970 . . . . .                                                              | 134         |
| Table A - 2, Housing Characteristics, Clare County, 1970 . . . . .                                                       | 135         |
| Table A - 3, Type of Structure, Clare County, 1970 . . . . .                                                             | 136         |
| Table A - 4, Count of Housing Units with Complete Bathroom<br>Facilities, Clare County, 1970 . . . . .                   | 137         |
| Table A - 5, Source of Water, Clare County, 1970 . . . . .                                                               | 138         |
| Table A - 6, Heating Equipment, Clare County, 1970 . . . . .                                                             | 139         |
| Table A - 7, Year Structure Built, Clare County, 1949 to 1970 . . . . .                                                  | 140         |
| Table A - 8, County and State Median Values, Clare County, 1970 . . . . .                                                | 141         |
| Table A - 9, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Clare County . . . . . | 142         |



# TABLE OF CONTENTS (Continued)

|                                                                                                                                   | <u>Page</u> |
|-----------------------------------------------------------------------------------------------------------------------------------|-------------|
| Table A - 10, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, City of Clare . . . . .        | 143         |
| Table A - 11, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, City of Harrison . . . . .     | 144         |
| Table A - 12, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Arthur Township . . . . .      | 145         |
| Table A - 13, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Franklin Township . . . . .    | 146         |
| Table A - 14, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Freeman Township . . . . .     | 147         |
| Table A - 15, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Frost Township . . . . .       | 148         |
| Table A - 16, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Garfield Township . . . . .    | 149         |
| Table A - 17, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Grant Township . . . . .       | 150         |
| Table A - 18, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Greenwood Township . . . . .   | 151         |
| Table A - 19, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Hamilton Township . . . . .    | 152         |
| Table A - 20, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Hatton Township . . . . .      | 153         |
| Table A - 21, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Hayes Township . . . . .       | 154         |
| Table A - 22, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Lincoln Township . . . . .     | 155         |
| Table A - 23, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Redding Township . . . . .     | 156         |
| Table A - 24, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Sheridan Township . . . . .    | 157         |
| Table A - 25, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Summerfield Township . . . . . | 158         |
| Table A - 26, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Surrey Township . . . . .      | 159         |
| Table A - 27, True Cash Value of Real and Personal Property as<br>Determined from Assessment Roll, Winterfield Township . . . . . | 160         |
| Table A - 28, Township School Millage, Clare County, 1977 . . . . .                                                               | 161         |
| Clare County Drains, Clare County, Michigan, 1978 . . . . .                                                                       | 162         |
| Application for Plan Examination and Building Permit<br>Construction Code Authority, Clare County . . . . .                       | 164         |



# LIST OF TABLES

| Table<br>No. |                                                                                                                          | Page |
|--------------|--------------------------------------------------------------------------------------------------------------------------|------|
| 1            | Inventory of Lakes, Ponds, and Streams . . . . .                                                                         | 4    |
| 2            | General Soils Map Legend, Clare County . . . . .                                                                         | 6    |
| 3            | Comparative Population Growth, Clare and Surround-<br>ing Counties, 1940-1976 . . . . .                                  | 16   |
| 4            | Age Composition, Clare County, 1930-1970 . . . . .                                                                       | 17   |
| 5            | Median Age, Clare County and Other Regions,<br>1950, 1960 and 1970 . . . . .                                             | 19   |
| 6            | Population Per Household, Clare County and Other<br>Regions . . . . .                                                    | 20   |
| 7            | Population Trends by Local Municipality, 1950, 1960,<br>and 1970 . . . . .                                               | 21   |
| 8            | Natural Increase and Net Migration, Clare and Surround-<br>ing Counties, 1960 to 1970 and 1970 to 1 July, 1976 . . . . . | 24   |
| 9            | Population Projections, Clare County, 1990 and 2000 . . . . .                                                            | 25   |
| 10           | Employment, Clare Area and State of Michigan, 1977<br>and 1985 . . . . .                                                 | 29   |
| 11           | Employment Projections, Clare County, 1974, 1980 and<br>1990 . . . . .                                                   | 30   |
| 12           | Effective Buying Income and Distribution, Clare County,<br>1974-1976 . . . . .                                           | 32   |
| 13           | Retail Sales Data, Clare County, 1974, 1975 and 1976 . . . . .                                                           | 33   |
| 14           | Wholesale Trade Area, Clare County, 1967 and 1972 . . . . .                                                              | 33   |
| 15           | Selected Service Data, Clare County, 1967 and 1972 . . . . .                                                             | 34   |
| 16           | General Agricultural Statistics, Clare County, 1964,<br>1969 and 1974 . . . . .                                          | 35   |
| 17           | Types of Farms, Clare County, 1954, 1964 and 1974 . . . . .                                                              | 36   |



# LIST OF TABLES (Continued)

| <u>Table<br/>No.</u> |                                                                                           | <u>Page</u> |
|----------------------|-------------------------------------------------------------------------------------------|-------------|
| 18                   | Livestock Production and Sales, Clare County, 1954,<br>1964 and 1974 . . . . .            | 36          |
| 19                   | Shopping Area Standards Related to Population and Time-<br>Distance . . . . .             | 38          |
| 20                   | Owner Occupied Housing Value, Clare County, 1970 . . . . .                                | 41          |
| 21                   | Housing Characteristics, Clare County, 1970 . . . . .                                     | 42          |
| 22                   | Housing Units by Type (Occupied and Vacant all Year),<br>Clare County, 1970 . . . . .     | 42          |
| 23                   | Bathroom Facilities, Clare County, 1970 . . . . .                                         | 43          |
| 24                   | Sewage Disposal, Clare County, 1970 . . . . .                                             | 44          |
| 25                   | Source of Water, Clare County, 1970 . . . . .                                             | 45          |
| 26                   | Heating Equipment, Clare County, 1970 . . . . .                                           | 45          |
| 27                   | Building Permit Statistics, Clare County, 1977 . . . . .                                  | 49          |
| 28                   | Projected Housing Supply Permanent and Second Homes,<br>Clare County, 1970-1980 . . . . . | 50          |
| 29                   | Household Income Levels, Clare County, 1976 . . . . .                                     | 52          |
| 30                   | Elderly and Non-Elderly Low Income Households,<br>Clare County, 1976 . . . . .            | 52          |
| 31                   | Street Mileage Within Incorporated Communities, Clare<br>County . . . . .                 | 60          |
| 32                   | Inventory of Roads and Surface Types, Clare County, 1976 . . . . .                        | 62          |
| 33                   | Commercial Aircraft Serving Tri-City Airport, May, 1976 . . . . .                         | 65          |
| 34                   | Single-Plane Airline Service From Tri-City Airport, May<br>1976 . . . . .                 | 65          |



# LIST OF TABLES (Continued)

| Table<br>No. |                                                                         | Page |
|--------------|-------------------------------------------------------------------------|------|
| 35           | Standards for Specific Recreation Activities,<br>Clare County . . . . . | 70   |
| 36           | Inventory of Natural, Scenic, and Historic Sites . . . . .              | 71   |
| 37           | Desirable Library Standards, Clare County . . . . .                     | 72   |
| 38           | School Districts, Clare County, 1977 . . . . .                          | 77   |
| 39           | Existing Land Use, Clare County, 1978 . . . . .                         | 91   |
| 40           | Updating Procedures . . . . .                                           | 125  |



## LIST OF CHARTS

| <u>Chart<br/>No.</u> |                                                            | <u>Page</u> |
|----------------------|------------------------------------------------------------|-------------|
| 1                    | Lot and Plat Approval, 1870 - 1978, Clare County . . . . . | 97          |
| 2                    | Suggested Organizational Structure . . . . .               | 119         |

## LIST OF MAPS

| <u>Map<br/>No.</u> |                                                   | <u>Follows<br/>Page</u> |
|--------------------|---------------------------------------------------|-------------------------|
|                    | <u>Existing Environment</u>                       |                         |
| 1                  | Water Resources . . . . .                         | 4                       |
| 2                  | Surface Geology . . . . .                         | 5                       |
| 3                  | General Soil Map . . . . .                        | 5                       |
| 4                  | Agricultural Land . . . . .                       | 13                      |
| 5                  | Major Forest Types . . . . .                      | 14                      |
| 6                  | Soil Conservation Areas . . . . .                 | 14                      |
|                    | <u>Population</u>                                 |                         |
| 7                  | Population Distribution . . . . .                 | 22                      |
| 8                  | Housing Study Area Location . . . . .             | 55                      |
| 9                  | Road Classifications . . . . .                    | 62                      |
| 10                 | Traffic Volumes . . . . .                         | 63                      |
|                    | <u>Facilities and Services</u>                    |                         |
| 11                 | Natural, Scenic and Historic Sites . . . . .      | 70                      |
| 12                 | Fire, School and Hospital Service Areas . . . . . | 73                      |
|                    | <u>Land Use</u>                                   |                         |
| 13                 | Existing Land Use . . . . .                       | 90                      |
| 14                 | Approved County Plats, 1870-1978 . . . . .        | 96                      |



# LIST OF MAPS (Continued)

| <u>Map<br/>No.</u> |                                         | <u>Follows<br/>Page</u> |
|--------------------|-----------------------------------------|-------------------------|
|                    | <u>Land Use (cont.)</u>                 |                         |
| 15                 | Soil Limitations . . . . .              | 100                     |
| 16                 | Cultural Limitations . . . . .          | 100                     |
| 17                 | Combined Physical Limitations . . . . . | 100                     |
| 18                 | Future Land Use . . . . .               | 101                     |



## GENERAL SUMMARY



## GENERAL SUMMARY

### REGIONAL SETTING

- \*Clare County is located in northcentral Michigan and is primarily a rural-farming and recreational area.
- \*Clare County's growth will come about not as a result of being near a regional urban growth radial nor because of absorption by an expanding large city, but rather as a rural resort area.
- \*U.S. 27, U.S. 10 and M-61 Freeways can be expected to play an important role in the County's residential and industrial development.
- \*Clare County in the future will be subjected to two major economic forces: development pressures and rural stability.

### ENVIRONMENT

- \*Glaciation has been the dominant force creating the surface formation in Clare County
- \*Clare County relief (elevation of land surfaces above sea level) varies from hilly land in the central townships to gently rolling land in the surrounding portions of the County.
- \*The soils of Clare County are varied and have a direct relationship to the development potentials and problems in the County.
- \*Clare County contains approximately 400 lakes and ponds, both natural and man-made. Of these 60 are between 20 and 388 acres.
- \*There are 29 miles of major streams and 302 miles of tributary streams flowing within Clare County.
- \*In terms of natural land capability, Clare County is abundantly endowed with diversified soils, crop land, topography, bodies of water and mineral and organic soil resources.

### POPULATION CHARACTERISTICS AND FORECAST

- \*Clare County experienced a relatively consistent but rather slow population growth between 1940 and 1960 (9,163 in 1940 to 11,647 in 1960).
- \*Population growth in the 1960's significantly increased with an average yearly increase of approximately 600 persons. The 1970 population was 16,695 people.
- \*Between 1940 and 1970, the age distribution of the County dramatically changed. Following national trends the most obvious change in the age distribution within Clare County has been the large growth in the proportion of young people up to 1960. By 1970 dramatic increases of older citizens (55 + years) were noted. In the future, a large proportion of the new families will be in the 55 years or older age group. School age children continued to increase in the 1970's, but should increase more slowly during the 1980's.
- \*The population distribution of Clare County is generally concentrated in the Cities of Clare and Harrison and the Village of Farwell and around several major lakes. The greatest population density occurs



POPULATION  
CHARACTERISTICS  
AND FORECAST  
(Continued)

in the City of Clare (1,224 people per square mile) and the lowest in Summerfield and Freeman Townships (each having 5.9 people per square mile). Reviewing the center of population within the County from 1940 to 1960 a shift toward the City of Clare indicates that population had been growing more rapidly in the southern and western portions of the County. This trend reversed in the 1960's and early 1970's and will gradually locate in the central area portion of the County in the Hayes Township area.

\*In review of the growth in the 1960's and the known placement of growth generators in the County (e.g., freeways, utility systems, proposed developments), the 1990 population projection is for a population of between 34,000 and 37,000 people. By the Year 2000, the County's population is expected to be approximately 45,000 to 50,000.

ECONOMY

\*The purpose of the economic base study is to analyze the industrial, commercial and agricultural sectors of Clare County, the three generators of economic growth within the County. In 1977, over 8,700 people were employed out of a total work force of 9,675. Employment within the non-manufacturing industries is expected to increase the most rapidly through 1990.

\*It is projected that by the Year 2000 over 4,000 additional people will be employed in Clare County.

\*The Retail and Wholesale Trade and Service Industries in Clare County are not as specialized as these industries are in more urbanized areas. The sales volume and number of employees per establishment are both considerably less than the State average.

\*The total number of farms in the County has decreased steadily during the 1954-1974 period as has the total land area in farms. However, the value of farm products and the total production of livestock and livestock products has increased during these 20 years due to more intensive methods of farming.

HOUSING STUDY

\*The purpose of the housing study is to identify housing related problems in Clare County which may impair the type, quality and quantity of the future County housing stock.

\*As of 1970, the last Federal Decennial Census, there were 11,061 dwelling units in the County. In 1970 more than half of all the homes were built for either seasonal use or were vacant and used occasionally.

\*In 1970, nearly 44 percent of the houses were constructed since 1961 while an additional nine percent were constructed in the 1950 decade and another four percent were constructed between 1940 and 1949, the remaining 22 percent being constructed before 1940. As of 1970, only 56 percent of the total dwelling units were less than 10 years old.



## HOUSING STUDY (Continued)

- \*There is a shortage of rental housing in the County.
- \*In Clare County there are large clusters of homes in need of improvement. Zoning and land use plans and building and construction codes should be reviewed periodically to determine if they are realistic. However, once they are updated, they should be closely followed and enforced.

## TRANSPORTATION

- \*Five interchange areas off U.S. 27 are integral to Clare County's Development
- \*In order to provide a continuous road system through Clare County, new road connections must be provided. Because of the soil conditions and topographic variations in some areas of the County, feasibility studies by the County Road Commission are required.
- \*A program of taking periodic traffic counts along the County Primary Roads should be initiated by the County Road Commission. This will provide necessary information to develop a road improvement program in the County.

## PUBLIC UTILITIES, FACILITIES AND SERVICES

- \*Clare County has sufficient regional recreation areas located in the County to satisfy future needs based on recreation standards. However, resort-recreation areas in Clare County receive intense use by people living outside of Clare County and crowded conditions exist.
- \*Clare County's natural physiography and its location in north-central Michigan provide the potential for greater recreational development in the County.
- \*Clare County has a great potential for tourism with likely success in vacation cabins, cottages, camping grounds, picnicking, fishing, golfing, hunting, and hunting preserves.
- \*Clare County should encourage the tourist industry in the County to expand rather than develop new County recreation areas.
- \*An organization of recreation related businesses should be organized to explore common concerns of the tourist industry in Clare County.
- \*The County should consider preparing a tourist development plan which would identify areas for tourism in the County and which could provide information to be used by potential investors.
- \*A promotional map showing the present recreation resources and facilities available to visitors in Clare County should be prepared.
- \*The existing library system consists of three separate libraries all funded to some extent by the County.
- \*Improvement and expansion of the existing library system should soon be implemented to meet the growing County population.
- \*Two ambulance services operate within Clare County.



PUBLIC UTILITIES,  
FACILITIES AND  
SERVICES  
(Continued)

\*Clare Osteopathic Hospital is the only hospital located within Clare County. Eleven doctors are on staff. Seven dentists work in Clare County.

\*Clare County includes eight school districts the largest of which is the Harrison School District.

GOALS AND  
OBJECTIVES

\*Urban development in Clare County should be concentrated in distinct urban areas. The scattering of population throughout the County means that services are provided at a high cost to the taxpayer or not provided at all.

\*Agricultural uses cannot compete with urban land uses and therefore must be protected. The concentration of population in the County is one important way to protect agricultural land.

\*Primary urban areas in Clare County should be encouraged so that it can achieve a size which can support a wider variety of services and cultural activities.

\*Clare County is bountiful in natural assets which should be preserved for recreation use of residents in the County of Michigan.

\*The objective of the County should be to encourage all local municipalities to adhere to the goals of the County in reference to various land uses.

LAND USE

\*The existing residential land in the County amounts to about 29,680 acres. About 1.7 percent is single-family in character and 81 percent is in rural lots. Concentrations of residential development occur in the City of Clare and Harrison and the Village of Farwell and surrounding many lakes in the County. The remainder of the housing is randomly scattered along Section and Quarter Section Line roads.

\*Approximately 600 acres are used for commercial purposes within the County. About 20 percent of the commercial acreage is located in the City of Clare and Harrison and the Village of Farwell with the remaining 80 percent scattered in the townships.

\*The location of manufacturing land uses is not evenly distributed throughout the County. Concentrations of manufacturing land uses are found in and around the City of Clare and the Village of Farwell. Of the approximately 4,070 acres of industrial land usage, only 0.1 percent is in manufacturing, warehousing and storage. The remainder is in extractive industries such as gas and gravel extraction.

\*Forested land is the predominant land use in Clare County with approximately 195,000 acres in large forested lots.

\*Other land uses in Clare County include Transportation and Utilities (12,000 acres), Public, State-Owned Land (43,650 acres), and Water (3,200 acres) and Agriculture (75,720 acres).



## LAND USE (Continued)

- \*The scattering of urban development throughout a rural area generally results in the gradual discontinuance of farming. There is evidence that the scattering of urban uses in rural areas of southern Clare County is occurring.
- \*The Future Land Use Plan is based upon the sector theory of development. Broad areas of the County are identified as having distinct characteristics which indicates a dominant type of land use within a sector. The County is divided into five sectors: high intensity development, low intensity development, conservation, agricultural, and rural development sectors.
- \*Examining physiographic features (soil percolation, slope and cultural limitations) in Clare County reveals that there are extensive areas in the County which should avoid urbanization. Large portions of the County are unsuitable for urban development.
- \*High intensity land uses, medium density residential, industry, commerce are recommended near major thoroughfares and urban settlements.
- \*Moderate and low density residential development are proposed in and around the Cities of Clare and Harrison and other existing urban communities.
- \*The agricultural sector is extensive and stretches from the north to the south primarily along the eastern areas of the County.
- \*The conservation sector (e.g., State-Owned land, private parks and recreation areas) are indicated in two broad areas in the County. The first area is in the north and northwest where the state-owned and forested areas are best suited to recreation use. The second area extends north of the City of Harrison in an area including large portions of Frost and Franklin Townships.

## ORGANIZATIONAL ANALYSIS

- \*The fact that County officials have managed to perform their duties so well is a tribute to their capabilities and not a result of the present organizational structure as defined in the Michigan Constitution and State laws.
- \*There are seven members of the Board of Commissioners in Clare County.
- \*In 1974 Clare County voters set a fixed millage limit of 15 mills.
- \*Clare County has more than a two million dollar budget.
- \*The County Home Rule Act, Act 293, does not have the potential to substantially improve County governmental operations.
- \*A County administrator could help make the County's operations more efficient.
- \*The Association of Clare County Local Planning Commissions is unique to Clare County and can continue to serve the region.



## IMPLEMENTATION

- \*Due to the nature of Clare County's rapid growth, comprehensive planning is becoming increasingly necessary.
- \*A County Planning Department should be formed in Clare County and work in conjunction with the County Building and Health Departments.
- \*The Regional Comprehensive Plan should be periodically revised and updated to keep pace with Clare County's growth and changing nature.
- \*All local governmental units within the County should work together toward achieving well planned and coordinated growth.



## HISTORY



## HISTORY

### Historical Perspective

Clare County is one of the few areas in Michigan which remained relatively untouched and unused in its early years. The first people to make use of the area were the Indians who played a significant role in Michigan's history, but their activity was very limited. The Indians did not have any permanent settlements in the Clare County area. A few scattered families did live in the area but it was only used to traverse the State in an east and west direction. Because of this minimum use of the area by the Indians the County remained in a relatively natural state up until the time of the first white settlers.

In 1840 Clare County was approved as a county by the Lansing Legislature and was at that time named Kaykakee, meaning "Pigeon Hawk" in Chippewa Indian Language. In 1843, the name Kaykakee was changed to Clare by an Irish surveyor, Henry Nicholson, who was devoted to his County Clare in Ireland.

The documented history of Clare County begins in 1866 with the settlement of the Wilkins family in what later became Surrey Township. At the same time, the Crawford family settled near what is now Dover in the northeast corner of Grant Township. The entrance of these families was nearly concurrent; however, the Crawford settlement (Dover) is credited as being the first settlement in Clare County.<sup>1</sup>

The first settlement of an industrial nature in the County was Hinkleville, a community which was established for the purpose of lumbering in 1868. Hinkleville was located near the intersection of U. S. 10 and the Tobacco River, a mile and a half east of what is now the Village of Farwell. It was here that the County's first impromptu County Seat was located. Today, Hinkleville is overgrown with grass, weeds and trees.

Slowly, between the years of 1870-1980 settlers formed the existing township government units which are still in operation today. The prime reason for migration to the Clare County area was the forest cover resources base which existed in the County. Because of the great resource in trees, it was quite natural that the various related lumber industries developed, and even complete lumbering towns in strategic areas of the County. Many of these towns and industries have long since disappeared. The railroads, which were a necessity to the lumber industry, followed the lumber camps and consequently opened the way for additional settlers with interests other than lumber. The railroad lines were instrumental in determining the prosperity of such towns as Farwell, Clare and Harrison. In 1879, Harrison was platted by the Flint and Pere Marquette Railroad, resulting in the County Seat being moved to Harrison from its original location in Farwell.<sup>2</sup>

During the time new development was occurring, significant changes in the physical environment were made. Many acres of land were completely stripped of tree cover. Mass removal of trees and ground cover led to increased sedimentation which altered drainage patterns, thus beginning the cycle of environmental change due to human use. Also, access to forest areas by means of the lumbering trails, promoted additional settlement to those areas.

<sup>1</sup> Forrest Meek, Michigan's Timber Battleground, (published in conjunction with the Clare County Bicentennial Historical Committee), 1976.

<sup>2</sup> Clare County Environmental Study, Student Water Publications, Michigan State University, 1971.



In more recent years, the County's economic emphasis has changed and lumbering does not hold the dominant position that it once held. Agricultural activity, and more recently, recreational activities, have replaced it as significant factors in the County economy. The development of roads and, more recently, the high speed freeways have all had a large role in shaping the development of Clare County. Population has been increasing and with this increase more environmental concerns have arisen.

#### Clare County Today

History has had a vast impact on Clare County and the role that it plays in the State. The fact that Clare County is the "Gateway to the North" still remains as a concept that will have a significant influence on the path that Clare County follows in the future. The County has ties with the northern portions of the State as well as with the southern sectors. County residents must choose which role they are going to follow in the future and the particular life-style that they desire. Growth brings benefits but it also brings significant problems, unless the growth is well planned for by the residents for it is their home and their responsibility. Hopefully, what is included in this document will aid in providing incentive to Clare County officials and residents to work for a better environment.

#### Historic Preservation

There are no historic sites in Clare County which are on the National Register of Historic Places. However, in December 1977, the Lincoln Township Hall was approved by the Michigan History Department as a historic site. The development plans of this Regional Comprehensive Plan will not adversely affect any historic sites.



## ENVIRONMENT



## ENVIRONMENTAL CHARACTERISTICS

The various land capabilities in Clare County exert limiting or accelerating effects upon prospects for future growth of the County. Man's natural environment influences urban and rural growth. This development should never be the result of poor planning decisions. A knowledge of these natural features of the land is, therefore, necessary in formulating sound planning principles for the County. The features characteristic of Clare County which are considered include climate, drainage, water resources, soil characteristics, topography and mineral and organic deposits.

### Climate

A humid continental climate is characteristic of Clare County. The annual mean temperature is 43° F., and the average annual precipitation is 32.64 inches. The growing season averages 143 days per year. The mean July temperature is 69° to 70° F., and the mean January temperature is 19° to 20° F. Early and late frosts have at times caused some damage to crops.

### Drainage

The Muskegon Watershed and its tributary streams drain about half of Clare County, while the Cedar and Tobacco Rivers join the Tittabawassee River, a major stream flowing eastward into the Saginaw River. The Muskegon River drains westward into the Saginaw River. The Muskegon River drains westward into Lake Michigan. Clare County is consequently subject to a major drainage divide with waters flowing both westward and eastward into Lake Michigan and Lake Huron.

### Major Lakes, Ponds, and Streams

There are 29 miles of major streams and 302 miles of tributary streams flowing within Clare County. The County also has approximately 400 lakes and ponds, both natural and man-made. Of these, 60 are between 20 to 388 acres in area, and 191 are between 2 to 40 acres in size. There are 11 public fishing sites. The State of Michigan has two 40 acre public easement sites for fishing along the stream banks within the easements. (Refer to Table 1, Inventory of Lakes, Ponds, and Streams.) The major rivers, creeks, and lakes are shown on Map 1, "Water Resources."

### Soils and Surface Geology

Past development of Clare County has for the most part been controlled by its soils. Given today's limited utility facilities throughout the County, the soils are still controlling its development. Controls, however, are being based upon a greater base of knowledge and the restrictions established by law and enforced by the Clare County Health Department. These factors have combined to create a settlement pattern running across the middle of the County from the northeast corner to the southwest corner. This prime development area covers about one half of the County and the only limitations to its complete development are those areas of excessive topography.

The area in the northwest corner of the County is primarily well drained, droughty sand to poorly drained sands and muck. The droughty sands present development problems in terms of on site disposal systems due to the extremely high permeability which does not adequately provide for



TABLE 1  
INVENTORY OF LAKES, PONDS, AND STREAMS

| Name of Water   | Location                     | Size     | Description of Water | Present Use    | Name of Water | Location                          | Size    | Description of Water | Present Use    |
|-----------------|------------------------------|----------|----------------------|----------------|---------------|-----------------------------------|---------|----------------------|----------------|
| Round           | 17N 3W 2                     | 25.0     | Natural Lake         |                | Windover      | 18N 6W 11,<br>14                  | 50.0    | Natural Lake         | Panfish, pike  |
| Balley          | 17N 3W 3                     | 40.0     | Natural Lake         | Panfish, pike  | Doc and Tom   | 18N 6W 23,<br>24, 25, 26          | 187.0   | Natural Lake         |                |
| Loon (Big)      | 17N 4W 5                     | 75.0     | Natural Lake         |                | Lost          | 18N 6W 20,<br>33                  | 34.0    | Natural Lake         |                |
| Gut             | 17N 4W 8                     | 41.3     | Natural Lake         | Panfish        | Dodge         | 19N 3W 19                         | 25.0    | Natural Lake         | Panfish        |
| Arnold          | 17N 4W 8,<br>9, 16           | 141.6(1) | Natural Lake         | Panfish        | No Name       | 19N 3W 19,<br>30                  | 20.0    | Natural Lake         |                |
| Otter           | 17N 4W 18                    | 22.0     | Natural Lake         |                | Swallow Dev.  | 19N 3W 10                         | 26.0    | Artificial Lake      |                |
| Shamrock        | 17N 4W 26                    | 120.0    | Natural Lake         |                | Townline      | 19N 3W 19                         | 28.0    | Natural Lake         | Panfish, trout |
| Clear           | 17N 5W 5                     | 50.0     | Natural Lake         | Panfish        | Springwood #2 | 19N 3W 28,<br>29                  | 70.0    | Natural Lake         |                |
| Bear            | 17N 5W 5, 6                  | 76.0     | Natural Lake         | Panfish        | Springwood #1 | 19N 3W 20                         | 32.0    | Natural Lake         |                |
| Half Moon       | 17N 5W 5, 6<br>18N 5W 31, 32 | 62.5     | Natural Lake         | Panfish        | Howland       | 19N 3W 34,<br>35                  | 34.0    | Natural Lake         |                |
| No Name         | 17N 5W 6                     | 32.0     | Natural Lake         |                | Cranberry     | 19N 4W 1,<br>12                   | 106.0   | Natural Lake         | Panfish, pike  |
| Thirteen        | 17N 5W 13                    | 88.0     | Natural Lake         |                | Arnold        | 19N 4W 2                          | 118.0   | Natural Lake         | Pike, trout    |
| Mill Pond       | 17N 5W 26                    | 32.0     | Natural Lake         |                | Budd          | 20N 4W 35<br>10N 4W 16,<br>21, 28 | 175.4   | Natural Lake         | Panfish, trout |
| Surrey          | 17N 5W 21,<br>22             | 44.8     | Artificial Lake      |                | Sutherland    | 10N 4W 22,<br>23                  | 42.0    | Natural Lake         | Panfish        |
| Three Lakes     | 17N 6W 2, 11                 | 57.0     | Natural Lake         |                | Long (Little) | 10N 4W 21,<br>22                  | 43.0    | Natural Lake         | Panfish, trout |
| Cranberry (Big) | 17N 6W 4,<br>9, 16           | 203.0    | Natural Lake         |                | Deer          | 19N 4W 23                         | 22.0    | Natural Lake         |                |
| Mud (Big)       | 17N 6W 6                     | 210.0    | Natural Lake         | Panfish, pike  | Elbow         | 20N 3W 10,<br>15                  | 40.0    | Natural Lake         |                |
| Mystic          | 17N 6W 16                    | 44.0     | Natural Lake         |                | Trout         | 20N 3W 11,<br>14                  | 30.0    | Natural Lake         |                |
| Bass            | 17N 6W 17,<br>18             | 58.0     | Natural Lake         |                | Half Moon     | 20N 4W 22,<br>23                  | 24.0    | Natural Lake         | Panfish        |
| Eight Point     | 17N 6W 19,<br>20, 29, 30     | 387.5    | Natural Lake         | Panfish, pike  | Long (Big)    | 20N 4W 22,<br>26, 27, 35          | 210.0   | Natural Lake         | Panfish, pike  |
| Crooked         | 17N 6W 21,<br>22, 23, 27     | 264.0    | Natural Lake         | Panfish, trout | Rice Pond     | 20N 5W 12                         | 72.0    | Natural Lake         |                |
| Perch           | 17N 6W 23                    | 50.0     | Natural Lake         |                | Haskell       | 20N 5W 13,<br>24                  | 32.0    | Natural Lake         |                |
| Bluff           | 17N 6W 25                    | 43.5     | Natural Lake         | Panfish        | Fur Farm      | 20N 5W 21,<br>28                  | 263.0   | Natural Lake         |                |
| Grey            | 17N 6W 27,<br>34             | 46.0     | Natural Lake         | Panfish        | Cranberry     | 20N 6W 1<br>21N 6W 36             | 62.0(3) | Natural Lake         |                |
| Wolf            | 18N 3W 25<br>18N 2W 30       | 20.0(2)  | Natural Lake         |                |               |                                   |         |                      |                |
| Beebe           | 18N 4W 14,<br>23             | 51.0     | Natural Lake         | Panfish, pike  |               |                                   |         |                      |                |
| Lily            | 18N 5W 3                     | 209.0    | Natural Lake         |                |               |                                   |         |                      |                |
| Shingle         | 18N 5W 7, 8                  | 31.0     | Natural Lake         | Panfish, pike  |               |                                   |         |                      |                |
| George          | 18N 5W 8,<br>16, 17, 21      | 134.0    | Natural Lake         | Panfish, pike  |               |                                   |         |                      |                |
| Bungo           | 18N, 5W 21,<br>22            | 45.0     | Natural Lake         |                |               |                                   |         |                      |                |
| Bertha          | 18N 5W 22                    | 43.0     | Natural Lake         |                |               |                                   |         |                      |                |
| Perch           | 18N 5W 28, 29                | 25.0     | Natural Lake         |                |               |                                   |         |                      |                |
| Hemlock         | 18N 5W 29                    | 20.0     | Natural Lake         |                |               |                                   |         |                      |                |
| Silver          | 18N 5W 30                    | 54.5     | Natural Lake         | Panfish, pike  |               |                                   |         |                      |                |
| Norway (Big)    | 18N 6W 2, 3                  | 52.0     | Natural Lake         |                |               |                                   |         |                      |                |
| Spring          | 18N 6W 10,<br>11             | 35.0     | Natural Lake         | Panfish        |               |                                   |         |                      |                |

SOURCE: An Appraisal of Potential Outdoor Recreational Development  
in Clare County, Nov. 1968. (1970 Reprint)



purification of effluent. The remainder of the soils have a high water table or will not support foundations.

In the southeast part of the County the soils tend to be well to poorly drained, moderately fine textured soils with moderately low to very slow permeability. The result is the development of on site disposal facilities are very costly because of the extensive tile field and the amount of aggregate necessary to have such a system function. This area of the County, however, is best suited to developments of an agricultural nature.

### Bedrock Geology

The geology of the County is divided into two basic segments. These segments are: (1) bedrock, and (2) surface geology. This report, however, will not deal with bedrock geology because there is up to 800 feet of overburden consisting of surface geology. This means the bedrock geology of the area has little influence in terms of development except for gas, oil and high delivery water wells from the Saginaw Formation. Presently, natural gas resources are being developed in Lincoln and Winterfield Townships.

### Surface Geology

The surface geology of Clare County was laid down during the glacial period of this region. As a result, three basic types of formations exist. These are: (1) Moraine, (2) Outwash, and (3) Till Plain. The Moraine is composed of undifferentiated Punctino sand, clay-gravel and silt, Outwash being comprised of sand and gravel, and Till Plain-clay and silt. Map 2 shows the various types of surface geology in Clare County.

The Moraine area of the County underlies prime development soils of the County. While there is slightly less area of Moraine than prime soil, the basic cause can be attributed to the erosion which has taken place since the recession of the glacier.

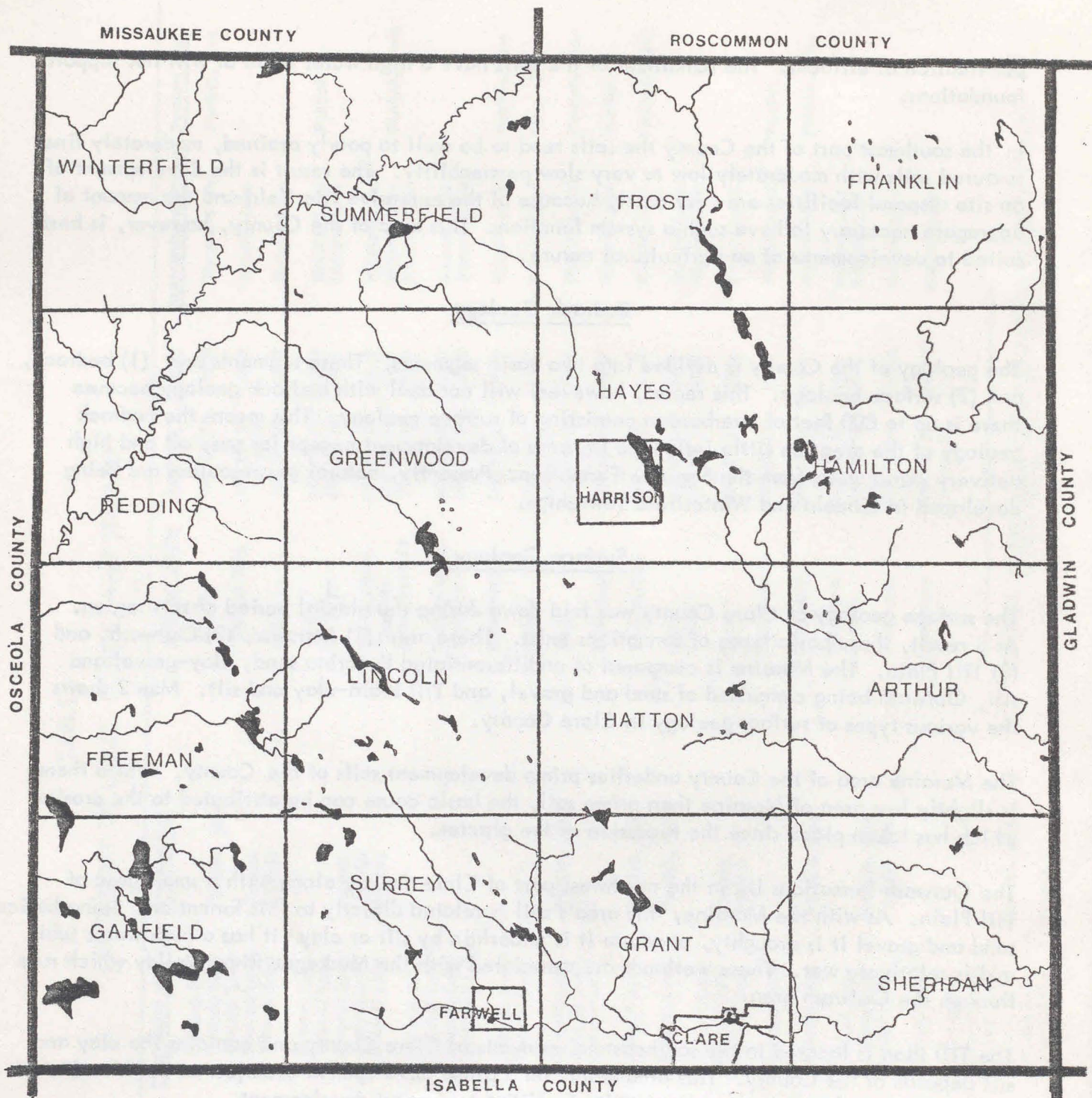
The Outwash formations lie in the northwest part of Clare County along with a small area of Till Plain. As with the Moraine, this area's soil is related directly to this formation. Being basically sand and gravel it is droughty, or where it is underlain by silt or clay, it has a high water table and is relatively wet. These wetlands are associated with the Muskegon River Valley which runs through the Outwash area.

The Till Plan is located in the southeastern segments of Clare County and contains the clay and silt deposits of the County. This area would be a prime development area just as the Moraine area is, except that it needs urban utility facilities to support development.

### Soil Associations

A complete soil map for Clare County was completed in 1976 by the Clare County Soil Conservation Service. Map 3 graphically shows the nine soil associations as they are found in the County. (See Table 2 for legend.) This general map is useful in understanding the soil groups on a generalized County scale. Soils in different parts of the County can be compared and areas found suitable for certain types of land use can be delineated. The map is not in sufficient detail, however, to permit detailed land use planning involving soils on individual sites. However, the U. S. Soil Conservation Service, which maintains an office in the City of Harrison, has a complete collection of detailed soil maps drawn on aerial photographs to aid in detailed soil work.





# WATER RESOURCES



JUNE, 1978

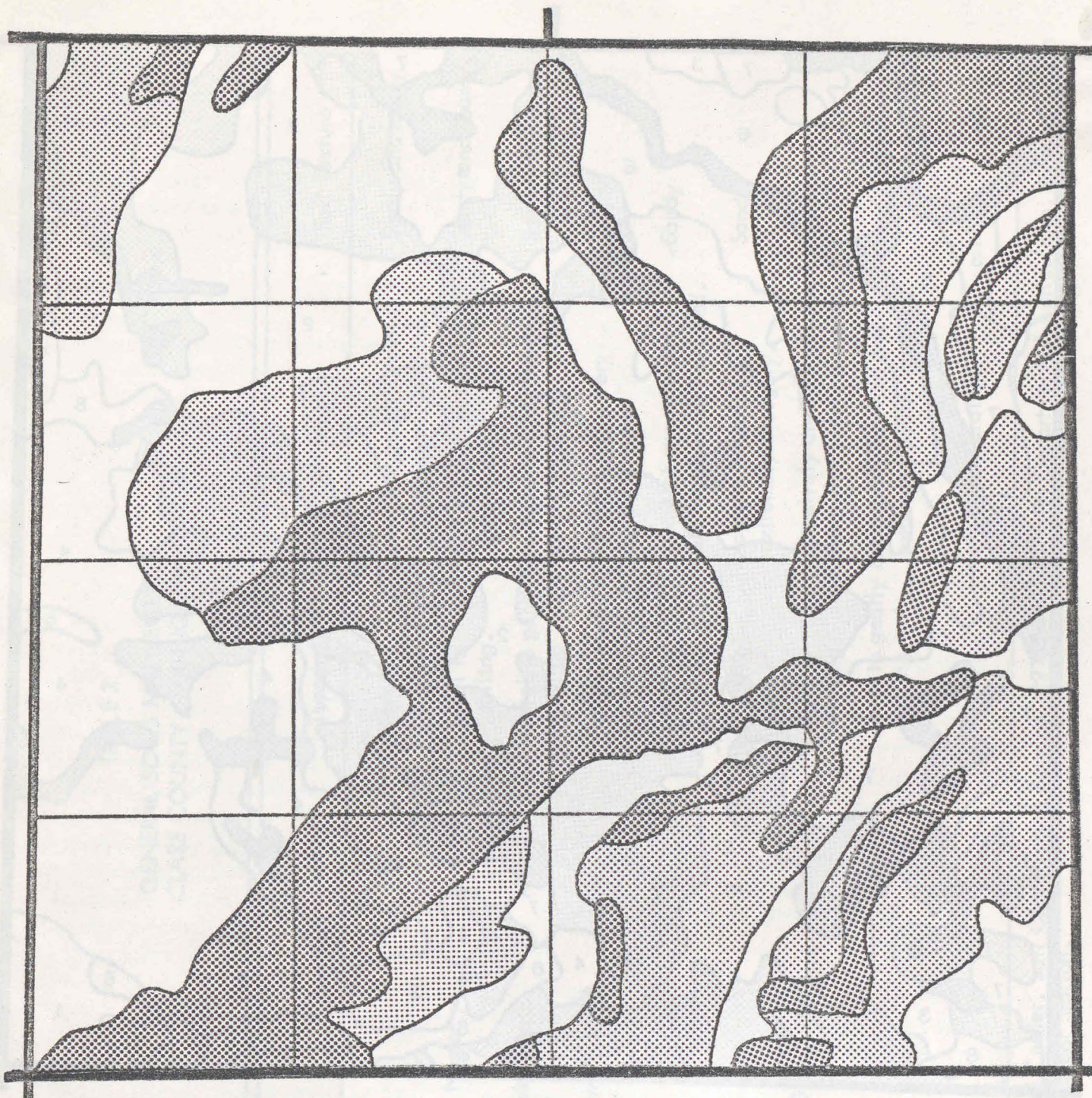
1

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

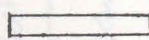
CLARE COUNTY, MICHIGAN





# SURFACE GEOLOGY

 moraine—undifferentiated sand, clay, gravel and silt

 outwash—sand and gravel

 till plain—clay and silt



JUNE, 1978

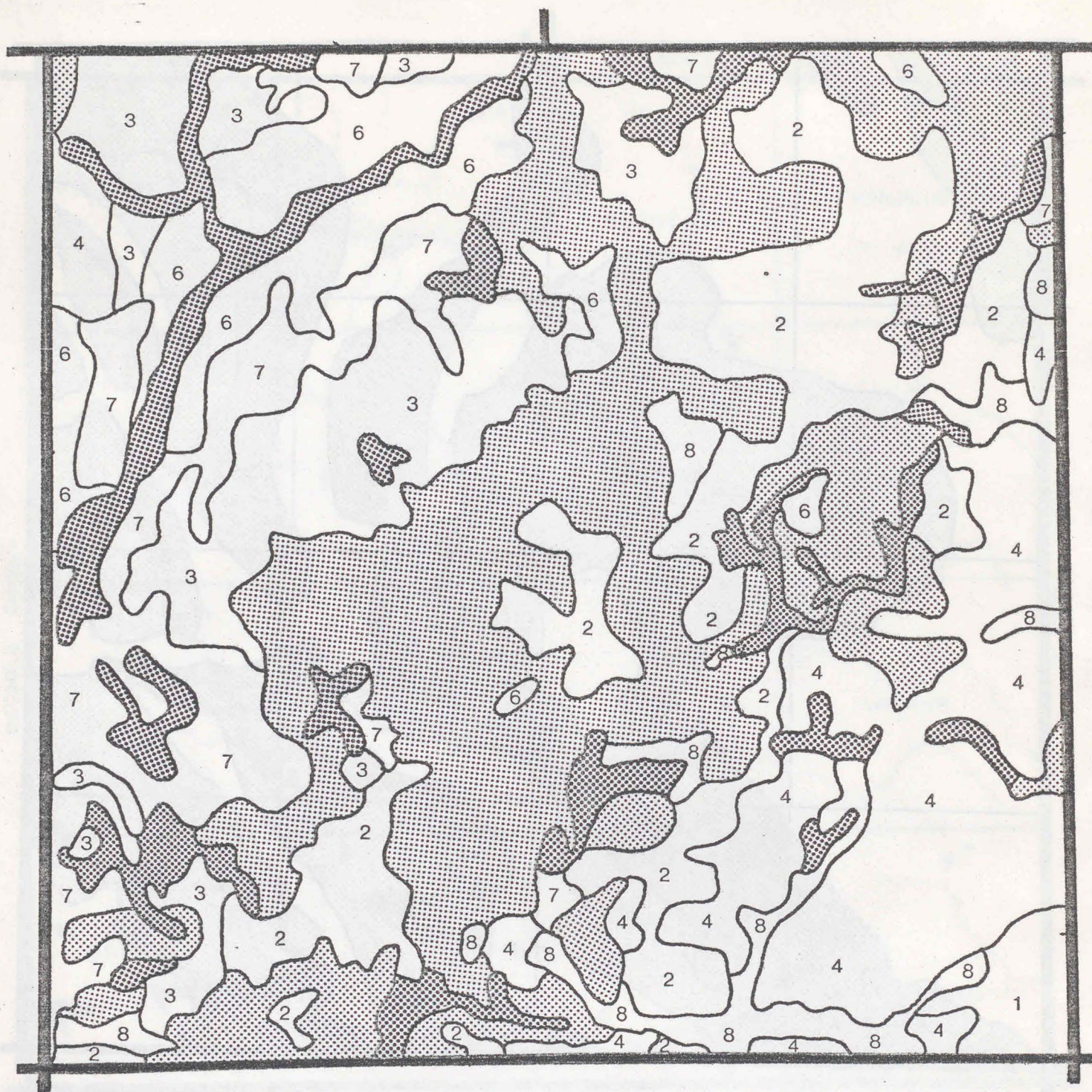
2

THE ASSOCIATION OF CLARE  
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CLARE COUNTY, MICHIGAN





# GENERAL SOILS MAP

MAP NUMBERS AND PATTERNS CORRESPOND  
WITH TABLE 2



JUNE, 1978

3

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

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CLARE COUNTY, MICHIGAN



TABLE 2  
GENERAL SOILS MAP LEGEND  
CLARE COUNTY, MICHIGAN\*

| Area | Soil Association            | Percent<br>of County | Topography                 | Drainage                                            | Soil Texture    |
|------|-----------------------------|----------------------|----------------------------|-----------------------------------------------------|-----------------|
| 1    | Gladwin, Wheatley           | 1%                   | level                      | Somewhat poorly drained<br>to very poorly drained.  | Sandy and loamy |
| 2    | Montcalm, Menominee, Nester | 15                   | level to<br>rolling.       | Well drained to moderately<br>well drained.         | Sandy and loamy |
| 3    | Menominee, Iosco, Kawkawlin | 11                   | level to gently<br>rolling | Well drained to somewhat<br>poorly drained.         | Sandy and loamy |
| 4    | Nester, Kawkawlin, Sims     | 14                   | level to<br>rolling        | Well drained to very<br>poorly drained              | Loamy           |
| 5    | Graycalm, Montcalm          | 29                   | level to<br>steep          | Somewhat excessively<br>drained and well drained.   | Sandy           |
| 6    | Grayling                    | 8                    | level to<br>steep          | Excessively drained,<br>extremely droughty.         | Sandy           |
| 7    | Rubicon, Croswell, Au Gres  | 9                    | level to<br>rolling        | Excessively drained to<br>somewhat poorly drained.  | Sandy           |
| 8    | Mancelona, Gladwin          | 4                    | level to gently<br>rolling | Excessively drained and<br>somewhat poorly drained. | Sandy and loamy |
| 9    | Lupton, Markey              | 9                    | level                      | Very poorly drained                                 | Muck            |

\*Soil Survey of Clare County, Paul Corder, Soil Conservation Service, 1976, United States Department of Agriculture, in cooperation with Michigan Agricultural Experiment Station.



For example, because of percolation problems found throughout the County, all development requiring the installation of septic tanks should be checked against the data available at State and local agencies. On the other hand, the general soil map is useful for County-wide planning programs. Agricultural programs, urban development, highway planning and recreational developments can be better evaluated using this map. In addition to the outline in Table 2, (the nine soil associations in Clare County), the physical qualities of soils comprising each association are described below.

Association 1: Gladwin-Wheatley. This Association consists of nearly level, somewhat poorly drained to very poor drained sandy and loamy soils, that have sandy and gravelly substratums. These nearly level soils occur on old glacial lake beds and outwash plains. Differences in elevation between the soils ranges from one to five feet.

Association 1 occupies about one percent of the County. About 40 percent of this map unit is Gladwin soil, 35 percent is Wheatly soil, and the remaining 25 percent are soils of minor extent.

The Gladwin soil is slightly higher in the landscape than the Wheatley soil. It lies on the slightly higher broad flat areas and drainageways. The Wheatley soil lies on the wet drainageways and broad wet flat areas. The Gladwin soil is somewhat poorly drained, and the Wheatley soil is poorly and very poorly drained. Both these soils have a seasonal high water table, and low available water capacity.

The minor soils in this map unit include the somewhat excessively drained Mancelona soil, the somewhat poorly drained Au Gres, Colonville, Iosco, and Kawkawlin soils, and the poorly and very poorly drained Brevort and Roscommon soils. These types are used mainly for woodland, pasture, or idle grassland. For most uses, the excess wetness of these soils is the major limitation.

This map unit does have good to fair potential for pasture. The excess wetness is so difficult to overcome that the potential is fair to poor for cultivated crops, woodland, wildlife, and recreational uses, and poor for most engineering uses. However, there is a good to fair resource of sand and gravel.

Association 2: Montcalm-Menominee-Nester. This Association is composed of nearly level to rolling, well drained and moderately well drained sandy and loamy soils, that have sandy and loamy substratums. Most areas of this Association are hilly, but a few areas are fairly flat. This area has few streams, rivers or lakes. Association 2 occupies about 15 percent of the County. About 40 percent consists of Montcalm soil, 10 percent each of Menominee and Nester soils, and the remaining 40 percent are soils of minor extent.

The Montcalm soil in most places is slightly higher in elevation than the Menominee and Nester soils. All these soils lie on hills to fairly flat areas with slight rises. The Montcalm soil is well drained, and the Menominee and Nester soils are well and moderately well drained. The minor soils in this map unit include the somewhat excessively drained Graycalm soil, the moderately well drained McBride soil, and the somewhat poorly drained Iosco and Kawkawlin soils.

This map unit is used mainly for pasture, woodland and cultivated crops. For most uses, the susceptibility to erosion and the variable texture of these soils are the major limitations.



Association 2 does have good potential for pasture and woodland. It has fair to good potential for cultivated crops and upland wildlife and variable potential for recreational uses and engineering uses, depending upon the soil and the use. Community development on the flatter areas of Montcalm soil have good potential, while the other areas within this map unit have fair to poor potential. Recreation uses on the flatter areas of the Nester soil have good to fair potential, while the Montcalm and Menominee soils have fair potential.

Association 3: Menominee-Iosco-Kawkawlin. This Association is nearly level to gently rolling, well drained to somewhat poorly drained sandy and loamy soils, that have loamy substratums. These nearly level to gently rolling soils occur predominantly on till plains and moraines, but some areas are outwash plains. Most areas of this map unit are nearly flat with some slight rises. This map unit has few lakes, streams or rivers. It is higher than the Grayling map unit in elevation and lower than the Graycalm-Montcalm map unit in elevation.

Association 3 occupies about 11 percent of Clare County. About 30 percent of this map unit consists of Menominee soils, 25 percent Iosco and Kawkawlin soils, and the remaining 45 percent are soils of minor extent. The Menominee soil in most places is higher in elevation than the Iosco and Kawkawlin soils. It lies on the higher areas that consist of slight rises and hills. The Iosco soil lies on the very gentle knolls and the Kawkawlin soil lies on the nearly flat area. The Menominee soil is well and moderately well drained. The Iosco and Kawkawlin soils are somewhat poorly drained, and they have a seasonal high water table. The minor soils in this map unit include the somewhat excessively drained Graycalm and Melita soils, the well drained Montcalm soil, the well and moderately well drained Ubyly soil, and the poorly and very poorly drained Brevort soil.

This map unit is used mainly for pasture or woodland, but some areas are cultivated. For most uses, the excess wetness, the susceptibility to soil blowing and the high clay content of these soils are the major limitations. The high clay content of these soils substratums cause moderate shrink-swell potential, and moderately slow permeability. This Association does have good potential for pasture, and good to fair potential for woodland and upland wildlife. It has fair potential for cultivated crops, if the Iosco and Kawkawlin soils can be drained. It has fair to poor potential for recreational uses and engineering uses.

Association 4: Nester-Kawkawlin-Sims. This Association is nearly level to rolling, well drained to very poorly drained loamy soils, that have loamy substratums. These nearly level to rolling soils occur on till plains and moraines. Most areas of this map unit are fairly flat with some slight rises, but some areas have several hills. This map unit is lower in elevation than the Graycalm-Montcalm map unit. It is above the Lupton-Markey map unit and the Gladwin-Wheatley map unit in elevation.

This map unit occupies about 14 percent of the County. About 55 percent of the Association consists of Nester soil, 20 percent Kawkawlin soil, 10 percent Sims soil and the remaining 15 percent are soils of minor extent.

The Nester soil in most places is higher in elevation than the Kawkawlin and Sims soils. The Kawkawlin soil lies on the flat areas with slight rises. The Sims soil lies on the low-lying wet areas and depressions. The Nester soil is well and moderately well drained. The Kawkawlin soil is somewhat poorly drained, the Sims soil being poorly and very poorly drained. The Kawkawlin and Sims soils have a seasonal high water table. Flooding is frequent on the Sims soils. The permeability is moderately slow in the Nester and Kawkawlin soils, and slow in the Sims



soil. All these soils have a high available water capacity. The minor soils in this map unit include the well and moderately well drained Menominee soil, the somewhat poorly drained losco soil, and the very poorly drained Markey soil.

Association 4 is used mainly for cropland and pasture. Cash crops, dairy herds and beef herds are the main farming enterprises. For most uses, the excess wetness, erosion susceptibility and high clay content of these soils are the major limitations. This map unit has good potential for woodland, and certain types of wildlife. It has fair to poor potential for most recreational uses and for most engineering uses. It has good to fair potential for cultivated crops and pasture in general. The undrained areas of the Sims soil has poor potential for cultivated crops.

Association 5: Graycalm-Montcalm. This Association is nearly level to steep, somewhat excessively drained and well drained sandy soils, that have thin sandy and loamy bands. These nearly level to steep soils occur on till plains, moraines and outwash plains. Areas of this map unit range from fairly flat areas to very steep hilly areas. This map unit has few streams and rivers, but it does have several lakes. This map unit occupies about the highest elevation in Clare County.

Association 5 occupies about 29 percent of the County. About 45 percent of this map unit is Graycalm soil, 25 percent Montcalm soil, and the remaining 30 percent are soils of minor extent.

The Graycalm and Montcalm soils are about the same in elevation, but the Graycalm soil is usually slightly higher in most places. Both these soils lie on broad flat plains with slight rises to hilly and steep uplands. The Graycalm soil is somewhat excessively drained, and the Montcalm soil is well drained. They both have rapid permeability and low available water capacity. The minor soils in this map unit include the excessively drained Grayling soil, the well and moderately well drained Menominee soil, the moderately well drained McBride soil, and the very poorly drained Markey soil.

This map unit is used mainly for woodland, but few areas are cultivated, or are used for pasture. For most uses, the susceptibility to soil blowing and erosion and the droughtiness of these soils are the major limitations. The rapid permeability of these soils may cause pollution of the ground water from septic tank absorption fields. These soils also have corrosivity to concrete, and cut-banks that cave in excavations. Association 5 does have good potential for woodland. The Graycalm soil is a fair source of sand. This map unit has fair to poor potential for cultivated crops, wildlife, and recreational uses due to the major limitations listed above. The potential for pasture and engineering uses gets increasingly poorer as the slopes increase in length and height. Pastures and community development on the flatter areas of these soils has good potential, the hilly to steep areas have fair to poor potential.

Association 6: Grayling. This Association is nearly level to steep, excessively drained, extremely droughty sandy soil, that has a sandy substratum.

This nearly level to steep soil occurs on outwash plains. Most areas of this map unit are fairly flat, but some areas have steep hills to low hills. This map unit is usually higher in elevation than the Rubicon-Croswell-Au Gres map unit and the Lupton-Markey map unit.



This map unit occupies about eight percent of the County. About 80 percent of Association 6 consists of Grayling soil, and the remaining 20 percent are soils of minor extent.

The Grayling soil lies on broad plains with slight rises to steep hills. It is extremely droughty due to its very rapid permeability and very low available water capacity. The minor soil in this map unit include the moderately well drained Croswell soil, the somewhat excessively drained Graycalm soil, and the well drained Montcalm soil. This soil has poor potential for cultivated crops, pastures, woodland, wildlife and recreational uses due to the extreme droughtiness of the soil. Using the soil for woodland is usually the best choice due to the deep rooting capacity of the trees. Community development on the flatter areas has good potential, while the hilly to steep areas have fair to poor potential due to the slopes. This map unit is a good source of sand.

Association 7: Rubicon-Croswell-Au Gres. This Association is nearly level to rolling, excessively drained to somewhat poorly drained sandy soils, that have sandy substratums. These nearly level to rolling soils occur on outwash plains and till plains. Difference in elevation between the soils ranges from about 1 to 10 feet.

Association 7 occupies about nine percent of the County. About 30 percent of the map unit is Rubicon soil, 20 percent Croswell soil, 20 percent Au Gres soil, and the remaining 30 percent are soils of minor extent.

The Rubicon soil in most places is higher in elevation than the Croswell and Au Gres soils. It lies on the hills and higher broad plains with slight rises. The Croswell soil lies on the lower flat areas with slight rises. The Au Gres soil lies on the lowest flat areas. The Rubicon soil is excessively drained. The Croswell soil is moderately well drained, and Au Gres soil is somewhat poorly drained. All of these soils have rapid permeability and low available water capacity. The Au Gres and Croswell soils have a seasonal high water table. The minor soils in this map unit include the excessively drained Grayling soil, the somewhat excessively drained Graycalm and Melita soils, the somewhat poorly drained Iosco and Kawkawlin soils, the very poorly drained Markey soils and the poorly drained Roscommon soil.

This Association has good to fair potential for woodland. Cultivated crops and recreational uses have fair to poor potential due to the wetness and droughtiness of the soils. Engineering uses and pastures have a variable potential, depending upon the soil and the use. The Rubicon soil has good potential for community development on the flatter areas and fair potential on the hilly areas. The Croswell and Au Gres soils have fair to poor potential for community development due to their wetness. All the soils have poor potential for wildlife. These soils are a good source of sand.

Association 8: Mancelona-Gladwin. This Association is nearly level to gently rolling, somewhat poorly drained, sandy and loamy soils, that have sandy and gravelly substratums. These nearly level to gently rolling soils occur on outwash plains. Most areas of this map unit are fairly flat, but some areas have slight rises to low hills. These soils usually lie fairly close to streams, rivers and lakes. They are at the same elevation or are slightly lower in elevation than the adjacent till plain and moraines.

This map unit occupies about four percent of the County. About 50 percent of Association 8 consists of Mancelona soil, 15 percent Gladwin soil, and the remaining 35 percent are soils of minor extent.



The Mancelona soil in most places is slightly higher in the landscape than the Gladwin soil. It lies on the flat areas with some slight rises, to low hills. The Gladwin soil lies on the slightly lower flat areas and drainageways. The Mancelona soil is somewhat excessively drained, and the Gladwin soil is somewhat poorly drained. The Gladwin soil has a seasonal high water table. Both these soils have low available water capacity, and moderately rapid permeability. The minor soils in this map unit include the excessively drained Grayling soil, the somewhat excessively drained Graycalm soil, the somewhat poorly drained Colonville soil, the very poorly drained Markey soil, and the very poorly and poorly drained Wheatley soil.

This Association has good potential for pasture, and it is a good to fair source of sand and gravel. It has fair potential for cultivated crops and upland wildlife, and good to fair potential for woodland. It has fair to poor potential for most recreational uses, and a variable potential for engineering uses depending upon the soil and the use. The Mancelona soil has good potential for community development on the flatter areas and fair potential for the hilly areas. The Gladwin soil has fair to poor potential for community development due to the seasonal high water table.

Association 9: Lupton-Markey. This Association is nearly level, very poorly drained mucky soils, that have sandy and mucky substratums. These nearly level soils occur on bogs within till plains, outwash plains and moraines. Differences in elevation between the soils ranges from 0 to 3 feet. These soils usually lie next to streams, rivers and lakes. They are below all the other map units that surround them in elevation.

This Association occupies about nine percent of the County. About 35 percent of the map unit is Lupton soil, 35 percent Markey soil, and the remaining 30 percent are soils of minor extent.

The Lupton and Markey soils are about the same in elevation. They both lie on wet mucky areas. Both these soils have a high water table that frequently floods the soil surface. They also have moderately slow permeability and a high available water capacity.

The minor soils in this map unit include the moderately well drained Croswell soil, the somewhat poorly drained Winterfield soil, the poorly and very poorly drained Evart soil, and the very poorly drained Loxley and Greenwood soils.

This map unit is used mainly for woodland, but some areas are in marsh grass or bush covered. For most uses, the excess wetness and the instability of these soils are the major limitations. Association 9 does have good potential for wetland wildlife. The excess wetness and the instability of the soils are severe limitations, and they are so difficult to overcome that the potential is poor for cultivated crops, pasture, woodland, recreational uses and engineering uses.

### Topography

The topography of Clare County for the most part is gently rolling. However, there are areas of extreme topography in the County. Generally, these topographical extremes lie in the morainal areas and should be an asset to this area. Since this topographical relief lies in the area with the greatest potential for growth, these slopes will serve to insure separations between development areas.



The recreational development potential of Clare County is enhanced by its topography. The basic reason is related to the minimal relief in the majority of the urban areas of the State. For the most part, however, the topography of the County offers very few constraints to its development and in fact heightens its potential.

### Water

Ground water supplies in Clare County seem to be adequate to serve the needs of the County. There have been no reported water problems to this point in time on deep wells, in terms of insufficient supplies or extreme mineral content. Driven wells around the lake areas where the heaviest concentrations of recreational residences occur have been causing the Clare County Health Department concern.

### Soil Hydrology

The hydrologic characteristics of Clare County's soil can be expressed in terms of water-retaining capacity and soil infiltration rates. Soils with high moisture-retaining capacity and low infiltration rates, for example, the Nester, Kawkawlin and Sims soils, are more likely to require artificial drainage. In contrast, crops grown on soils with very low moisture-retaining capacity and high infiltration rates such as the Grayling soil would be more likely to respond to irrigation and would seldom require artificial drainage. These same soil moisture characteristics also have important considerations with respect to the operation of septic tanks. Soils with high moisture-retaining capacity and low infiltration rates are often unsuitable for such uses.

Presently, most of Clare County relies upon ground absorption of effluent (liquid sewage) as the main means of sanitary sewage disposal. If the soil in a given area will not readily absorb or transmit such liquids, and if other feasible means of waste disposal are unavailable, it will have a restricting effect on the County expansion.

The Architectural Standards Division of the Federal Housing Administration lists sandy and gravelly soils with no sand-clay mixtures among those most suitable for domestic septic tank installations. Generally speaking, a soil is considered unsuitable for sewage disposal purposes if it contains clay intermixed with fine-grained compacted sand or silt.

Even where soils do not readily permit internal drainage, a septic tank field may be installed, if the length of drain tile is adequate to insure absorption of the effluent waste at a rate compatible with existing sanitation codes. Usually, this is unsound economically since excessive amounts of land must be devoted exclusively to waste disposal. The final determination of the suitability for septic tank disposal is best provided by a percolation test which measures the ability of a soil in a given area to absorb liquids at a rate commensurate with applicable health standards. Generally, the soils in the southeastern corner and northwestern edge of Clare County are among the least desirable for septic tank installations.

### Agricultural Interpretation of Soil Associations

Following extensive cutting of timbered areas, much of the land in Clare County was turned over to agricultural usage. The lighter sandy soils covering about two-thirds of the County could not support intensive agricultural activity; and, consequently, much farming was discontinued. The remaining one-third of the County is characterized by the Nester-Kawkawlin Soil



Association and is capable of supporting agricultural uses under proper management practices.

It is intended by Clare County that part of its best agricultural land be protected to ensure its availability in future years. It is also intended that, where possible, this land be used as additional open space between municipalities and resort-oriented urban concentrations. The better agricultural areas in Clare County are delineated on Map 4, "Prime Agricultural Lands."

In 1964, farms covered about 110,370 acres or approximately 30.1 percent of Clare County land. By 1974, only 20.7 percent or 75,730 acres of the County's land was in agricultural use.

The contribution of crop agriculture to the County economy has declined substantially. Increasing individual productivity, especially through the use of modern technology, has made it possible for fewer farmers to produce more from fewer acres. This situation has resulted in fewer operators and a need for less farm acreage. The number of farms in Clare County has decreased from 573 in 1959, (467 in 1964), to 374 in 1974. The average size of farms has increased from 206.4 in 1959 to 236.3 acres in 1964, and then decreased to 202.5 acres in 1974. Increasing property taxes could play an integral role on the future of Clare County's agricultural production.

#### Forest Cover

Clare County has approximately 53 percent of its land area dominated by forest cover. Two basic forest associations exist in Clare County. These are: (1) Northern Associations, and (2) Southern Associations. The breakpoint for these associations is about midway through the County. Along this breakpoint and for a limited distance on either side there is a mixture of the two associations.

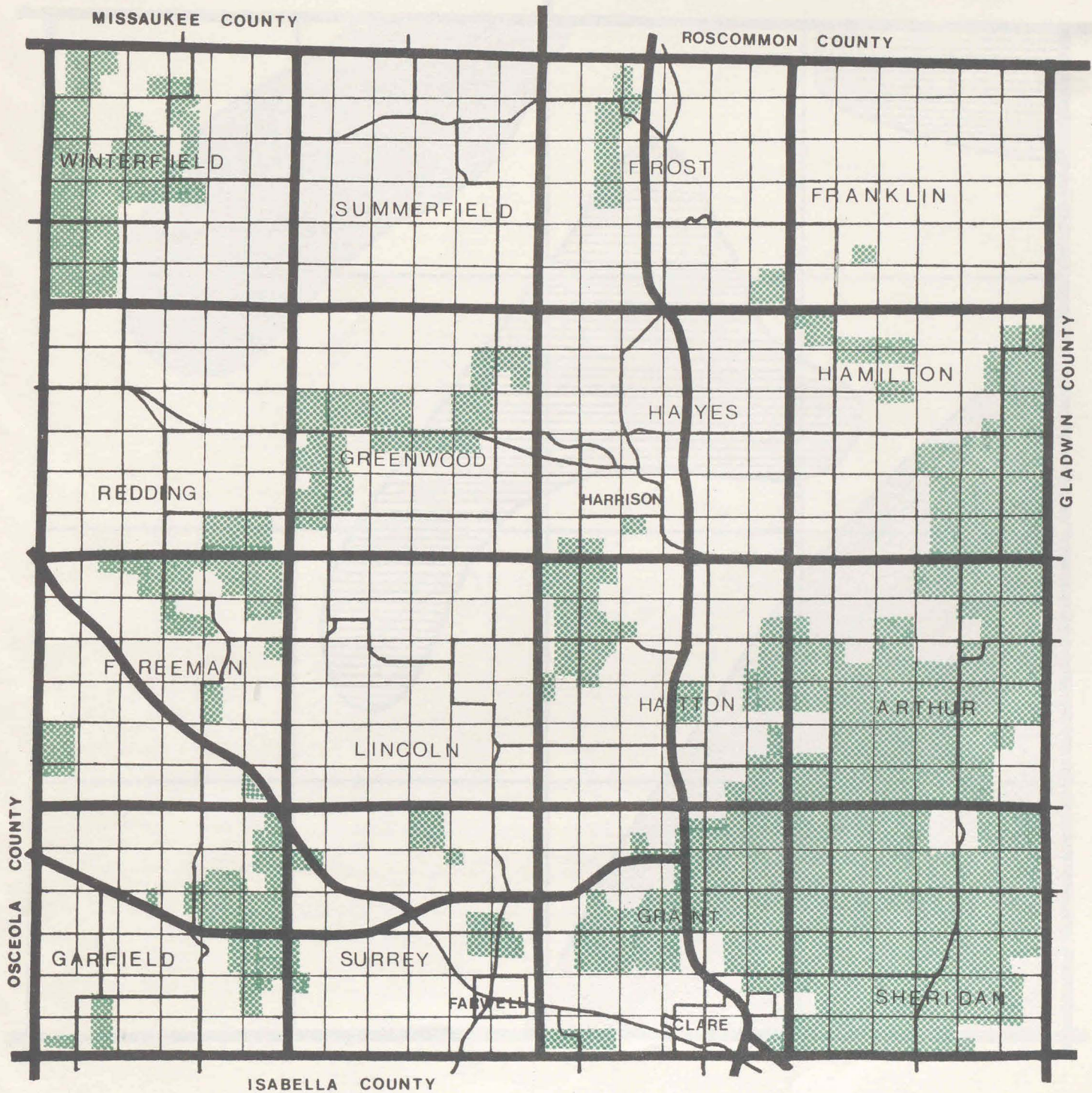
The forest cover throughout the County is second growth developed since the eastern white pine harvest of the late 1800's and early 1900's. As a result, much of these timber resources have not reached maturity. The next decade or two will see a considerable amount of this forest cover reaching maturity. Selective cutting will increase the growth rates in these areas and this type of operation is now in progress. The abandoned and ungrazed agricultural lands will and are now becoming reforested. Aerial reseedling would speed this process but such a program is highly unlikely. Map 5, compiled by the United States Forest Service, indicates the major forest types in Clare County and their approximate locations.

#### Fragile Environmental Areas

Numerous lakes dot the face of Clare County in a band running from the northeast part to the southwest part of the County on both sides of the watershed divide. In the past many more lakes existed in the County but intensive forest cutting and subsequent burning caused heavy siltation of these lakes which are now bogs. Most of the lakes in the County were affected in the same way just after the lumbering area, but due to their depth and the surrounding topography, they were not as severely affected.

In the "White Birch Lakes of Clare" development in Lincoln Township, several of these filled in lakes were dredged to create new lakes. If the existing development of the County continues, a considerable amount of lake reclamation work could take place. In existing lakes this activity could have some adverse effects upon the productive capacity of the lake. This would be caused by the removal of the breeding and food producing areas of the lake which lie in the narrow band adjacent to the shore. This type of reclamation program could make the lakes more vulnerable to excessive recreational development.





AGRICULTURAL LAND

Soils Best Suited for, or in Agricultural Production



JUNE, 1978

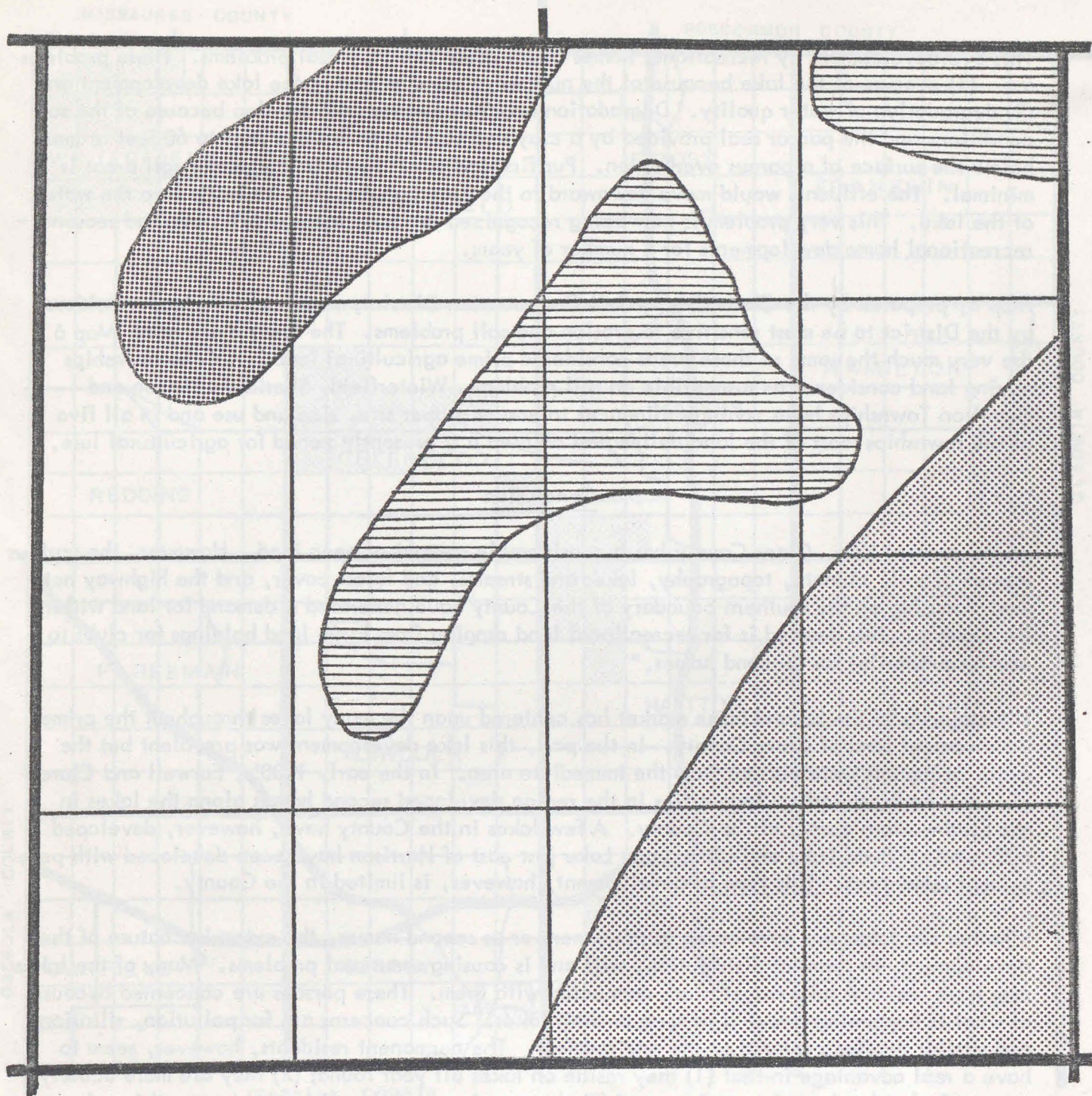
4

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN





### MAJOR FOREST TYPES

white, red, jack pine

oak, hickory

maple, beech, birch

aspen, birch



JUNE, 1978

5

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CLARE COUNTY, MICHIGAN



This overdevelopment by recreational homes could cause two very real problems. These problems are: (1) overuse of the lake because of the number of users housed in the lake development and (2) degradation of water quality. Degradation of water quality will develop because of the soil conditions and the pan or seal provided by a clay bed varying from three feet to 60 feet or more below the surface of a porous overburden. Purification of effluents in the porous soil areas is minimal. The effluents would move downward to the clay pan and then laterally into the water of the lake. This very problem is now being recognized on those lakes which have had seasonal recreational home developments for a number of years.

Map 6, prepared by the Clare County Soil Conservation District, represents the land considered by the District to be most sensitive to erosion and soil problems. The areas denoted on Map 6 are very much the same as those areas considered prime agricultural lands. Of the townships having land considered as susceptible to soil problems, Winterfield, Sheridan, Hatton and Hamilton Townships have zoning ordinances to ensure proper site, size and use and in all five of the townships most of the land delineated on Map 6 is presently zoned for agricultural use.

### Conclusion

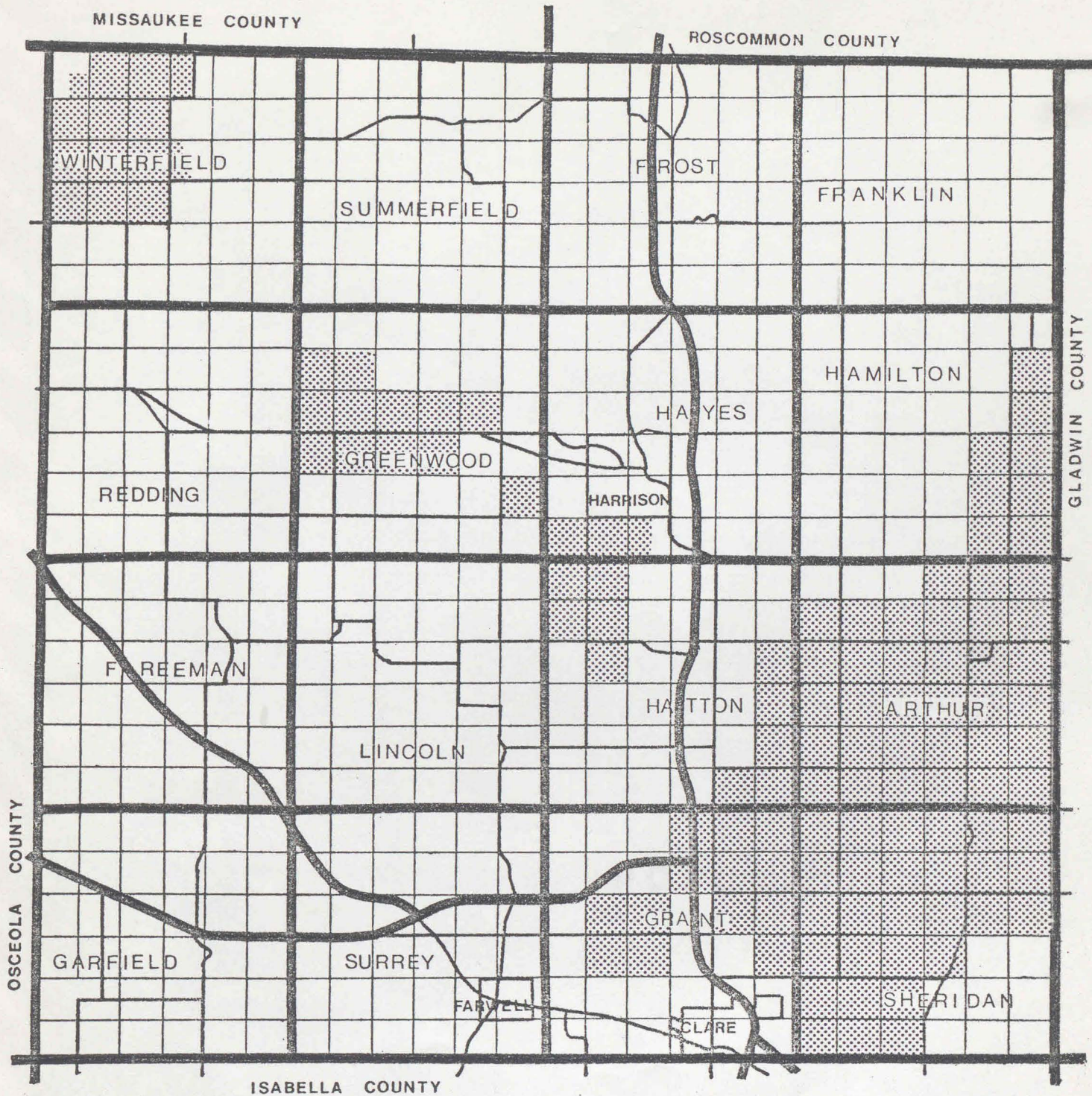
At the present time, Clare County has a considerable amount of open land. However, the various factors of soil, climate, topography, lakes and streams, and forest cover, and the highway network focusing on the southern boundary of the County have generated a demand for land within the County. This demand is for recreational land ranging from large land holdings for clubs to smaller properties for "second homes."

The majority of the second home market has centered upon the many lakes throughout the prime development land of Clare County. In the past, this lake development was prevalent but the major occupants were persons from the immediate area. In the early 1900's, Farwell and Clare residents and some others from cities in the region developed second homes along the lakes in the southwestern corner of the County. A few lakes in the County have, however, developed differently. Budd Lake and Little Long Lake just east of Harrison have been developed with permanent residences. This type of development, however, is limited in the County.

Whether the lakes are developing as permanent or as second homes, the extensive nature of the development, in terms of distribution, will and is causing some real problems. Many of the lakes now have resident lake associations connected with them. These persons are concerned because of what is happening or could happen to their lakes. Such concerns are for pollution, siltation and similar problems related to the environment. The permanent residents, however, seem to have a real advantage in that (1) they reside on lakes all year round; (2) they are more acutely aware of what has been happening, and (3) they are in a better position to do something about it.

While protective measures are being sought in those areas now built-up, the areas now undergoing development will be generating new and possible problems. The cause is related to the private nature of the development. These recreational developments were largely developed in a basically free market place without the guidance of land use planning and zoning which is now in existence in a majority of Clare County's townships. As this type of development continues in the townships without development guidelines, future problems can be compounded. This intensity will increase because of sheer numbers, whether they are people, cottages, homes, miles of streets or any other method by which one measures growth which leads to overuse and degradation.





# SOIL CONSERVATION AREAS

priority areas



JUNE, 1978

6

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

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CLARE COUNTY, MICHIGAN



## POPULATION



## POPULATION CHARACTERISTICS AND FORECAST

Urban planners in a rural area are principally concerned with the physical development of the community. Although physical development is the primary consideration, it is the people who must live in the environment suggested by the planners. Therefore, it is for the people that urban planning is undertaken.

People are the most important resource in any community. The population serves as a market and labor force. The size of the population will affect the amount of homes and commercial services that are needed. The size, type and number of community facilities relate to the number of people who use them. Certain segments of the population have different needs. The young require schools; the labor force needs shopping facilities and employment opportunities; and the elderly may need moderate or low income housing.

A study of the population reveals the growth potential of an area. This study contains the size, composition, distribution and density of Clare County's population. The County's population is a variable element, changing from decade to decade. With each changing decade, the County's population has, concurrent with the national, State and regional trends, altered in its characteristics. From these variations, County population trends can be evaluated. As an aid in developing long-range plans for the County, 1990 and 2000 population forecasts are made. Past population trends and expected future growth generators provide the basis for these population projections. These forecasts permit quantifying future land use and needs.

### Past Population Growth Trends

Clare County experienced a rather steady but consistent growth during the years 1940-1960. Its population increased from 9,163 to 11,647 in these two decades, at an average of approximately 1,240 people per decade. Its rate of growth during these 20 years exceeded that of only four counties in the surrounding 8 county region (Gladwin, Mecosta, Osceola and Roscommon). However, Clare County's rate of growth was less than all the other counties and the State and nation. (See Table 3.) It must be concluded that resort-recreational pressures spilling over from the Cities of Detroit, Lansing, and the Tri-Cities had not yet reached Clare County in 1960. In addition, many people were migrating from rural areas such as in Clare County during these years and this trend accentuated the growth in urban areas.

During the 1960 decade, however, Clare County experienced the most rapid growth rate of all governmental units (see Table 3), due primarily to a net migration of resort residents. This is evidenced by the high rate of growth of 43.3 percent in the County during the years 1960-1970. This rate of growth, was considerably greater than the figure of 13.4 percent in the State of Michigan and 15.7 percent throughout the nation during these same years. It must be concluded that during the 1960-1970 decade a shift from urban to rural areas began to affect the population growth trends in Clare County and will continue to lead to a net migration into the County during the 1970 decade, as is evidenced by the 1976 population estimate of a 34.2 percent increase in population in only six years. This rate of growth is exceeded by only that of Roscommon County which is still in an emerging state of development.

### Population Composition

Age group distribution of a population is important to community facility planning. Planning for such facilities as schools, parks and public services is contingent upon this population break-



TABLE 3  
COMPARATIVE POPULATION GROWTH  
CLARE AND SURROUNDING COUNTIES, 1940-1976\*

| County               | 1940        | 1950        | 1940-1950<br>Percent<br>Change | 1960        | 1950-1960<br>Percent<br>Change | 1970        | 1960-1970<br>Percent<br>Change | 1 July <sup>a</sup><br>1976 | 1970-1976<br>Percent<br>Change |
|----------------------|-------------|-------------|--------------------------------|-------------|--------------------------------|-------------|--------------------------------|-----------------------------|--------------------------------|
| Clare                | 9,163       | 10,253      | 11.9                           | 11,647      | 13.6                           | 16,695      | 43.3                           | 22,400                      | 34.2                           |
| Gladwin              | 9,385       | 9,451       | .7                             | 10,769      | 13.9                           | 13,471      | 25.1                           | 17,000                      | 26.2                           |
| Isabella             | 25,982      | 28,964      | 11.5                           | 35,348      | 22.0                           | 44,594      | 26.2                           | 51,400                      | 15.3                           |
| Mecosta              | 16,902      | 18,968      | 12.2                           | 21,051      | 11.0                           | 27,992      | 33.0                           | 34,400                      | 22.9                           |
| Midland              | 27,094      | 35,662      | 31.6                           | 51,450      | 44.3                           | 63,769      | 23.9                           | 67,500                      | 5.9                            |
| Missaukee            | 8,034       | 7,458       | -7.2                           | 6,784       | -9.0                           | 7,126       | 5.0                            | 9,200                       | 29.1                           |
| Osceola              | 13,309      | 13,797      | 3.7                            | 13,595      | -1.5                           | 14,838      | 9.1                            | 17,800                      | 20.0                           |
| Roscommon            | 3,668       | 5,916       | 61.3                           | 7,200       | 21.7                           | 9,892       | 37.4                           | 15,100                      | 52.6                           |
| State of<br>Michigan | 5,256,106   | 6,371,766   | 21.2                           | 7,823,194   | 22.8                           | 8,879,862   | 13.5                           | 9,104,100                   | 2.5                            |
| United<br>States     | 131,669,275 | 150,697,361 | 14.5                           | 178,464,236 | 18.4                           | 203,183,103 | 15.7                           | N/A                         | N/A                            |

\* U.S. Bureau of the Census, U.S. Census of Population, Michigan (Washington: U.S. Government Printing Office, 1950, 1960 and 1970 issues).

<sup>a</sup>Provisional estimates to the nearest hundred as presented in Michigan Statistical Review, 1977 edition.

N/A Not available.



down. The many decades of change through which the population of Clare County has evolved are most evident in the population characteristics. These are changes which can be witnessed each year -- the growing number of school age children, the in-migration of young families into the County and the increasing number of elderly residents. With the construction of two or three new subdivisions, the population composition of any municipality or township could greatly be altered by the addition of large numbers of young families with children or concentrations of elderly residents requiring special services.

#### Age Distribution

The age of Clare County's population dramatically changed over the 30 year period between 1930 and 1960, and again during the years 1960-1970. This shift in the age distribution of the County is presented in Table 4.

TABLE 4  
AGE COMPOSITION  
CLARE COUNTY, MICHIGAN, 1930-1970\*

| Age     | Percent of Total Population |      |      |      |      |
|---------|-----------------------------|------|------|------|------|
|         | 1930                        | 1940 | 1950 | 1960 | 1970 |
| 0 - 4   | 10.1                        | 10.2 | 11.3 | 12.6 | 8.0  |
| 5 - 14  | 21.7                        | 20.1 | 20.4 | 20.6 | 21.5 |
| 15 - 19 | 9.3                         | 9.7  | 8.3  | 8.2  | 9.3  |
| 20 - 29 | 12.3                        | 15.0 | 11.7 | 10.3 | 10.3 |
| 30 - 44 | 17.0                        | 17.0 | 19.3 | 16.9 | 14.9 |
| 45 - 54 | 9.9                         | 10.9 | 10.4 | 10.9 | 10.8 |
| 55 - 64 | 9.6                         | 8.1  | 9.1  | 8.8  | 12.0 |
| 65+     | 10.1                        | 9.0  | 9.5  | 11.7 | 13.2 |

\*U. S. Bureau of the Census, U. S. Census of Population, 1930, 1940, 1950, 1960, 1970.

The most obvious change in the age distribution within Clare County has been the tremendous growth in the proportion of older people. The "Baby Boom" of the late 1940's and 1950's did not drastically affect Clare County.

To better understand the age distribution of the County's population, age groups that demonstrate the same facilities and housing needs, and that have other similar characteristics are grouped together. Four major age categories and a subcategory are thus formed:

Pre-School (0-4). -- This age group provides a short-range indicator of future school enrollment. Children have been placing an increasing strain on school facilities as the size of the pre-school age group has been increasing both numerically and as a proportion of the total population.

School Age (5-19). -- This group places the greatest burden on community services. Education and active recreation facilities are just two of the many services that this age group requires. The ability of a community to keep its young people after they finish their education is most important to the stability and well-being of the community. The community must provide a



reason, such as employment opportunities and a desirable living environment, for young people to stay in a community.

Labor Force (20-64). -- This age group is the foundation of the community. They are, for the most part, the property owners and taxpayers and they make the major contribution to the financing and management of local government.

Family Formation (20-44). -- This is a subgroup of the labor force category. Persons in this subgroup are valuable contributors to economic activity in the community in that they constitute a large body of consumers of goods and services. There is a direct relationship between the size of the family formation group and the size of the pre-school and school age groups. This subgroup also requires good housing, fire and police protection, recreational facilities and other municipal services.

Senior Citizens (65 and over). -- This age group places special demands on the community for passive recreation uses, transportation facilities, specialized hospital facilities, housing and other such services.

The Pre-School age group (0-4) increased from 10.1 percent of the total population in 1930 to 12.6 percent in 1960 and then dropped to 8.0 percent in 1970. The increase from 1930 to 1960 was the result of the large number of babies born after World War II. The national birth rate then decreased during the 1960 decade. However, there are more women of child-bearing age than ever before. In the future, the proportion of pre-school children to the total population may not increase, but the numerical number of pre-school children will. However, due to the increasing median age of the County a large influx of pre-school children is not expected. Pre-school demands in the County should remain relatively constant or slightly increased over the next several decades.

The proportion of School Age children (5-19) slightly decreased between 1930 and 1960 but increased to its highest level in three decades in 1970. This recent increase resulted from the children born after World War II. As they enter the school system, this age group will constitute a greater percentage of the total population. In fact, the 1970 decade should witness greater demands on junior and senior high school facilities than ever before. Numerically, school age children should continue to place even greater burdens on the school system over the next two decades.

The Labor Force group (ages 20-64 years) and the Family Formation subgroup (ages 20-44 years) decreased slightly as a proportion of the total population during the years 1930 to 1960 as the pre-school age group increased. By 1970, the proportion increased by about two percent in the Labor Force group and decreased nearly two percent to the Family Formation subgroup.

The elderly increasingly represented a greater proportion of the County's total population during the 30 years following 1930. In 1970 as this age category was at its highest proportion to the total population in over four decades. The numerical population in the 65 and over age group in the County increased even faster than the percentage indicates due to the dramatic overall County population increase. The national trend of people living longer and the natural preference of many elderly people to retire in their "old" resort homes accounts for this large absolute increase. The elderly group is anticipated to continue to increase numerically within the County. As this age group becomes larger, so do the responsibilities of government in meeting their specific needs.



None of the age groups have an imbalance of males or females. The sex composition of Clare County will have little effect on the development plans of the County.

### Median Age

Over the past two decades, a national trend in the median age of the population has been evolving, revealing a constantly younger population. The major reason for the decreasing median age exhibited on Table 5 is the post World War II "Baby Boom" which boosted the national birth rate up to about 124 per 1,000 women in the 15-44 age group. The nation's birth rate has witnessed a sharp decline in recent years which may reverse this trend.

Between 1950 and 1970, the national median age fell from 30.2 to 28.3 years of age. During this same time span, Michigan witnessed an even greater decrease in the median age, falling from 29.8 years in 1950 to 26.3 years in 1970. However, a decrease of only 0.5 years was witnessed in the micro-region median ages. The micro-region's median age was 28.9 years in 1950 as opposed to 28.4 years in 1970. Clare County witnessed much the same trend from 1950 to 1960 and had a less dramatic median age decrease compared to the national, State and micro-region median ages. However, the median age of its residents took a sharp turnaround during the 1960 decade and increased 2.4 years to 30.9 years in 1970.

TABLE 5.  
MEDIAN AGE  
CLARE COUNTY AND OTHER REGIONS,  
1950, 1960, AND 1970\*

| Year | U. S. | Michigan | Micro-Region<br>Average | Clare<br>County |
|------|-------|----------|-------------------------|-----------------|
| 1950 | 30.2  | 29.8     | 28.9                    | 35.5            |
| 1960 | 29.5  | 28.3     | 27.3                    | 28.5            |
| 1970 | 28.3  | 26.3     | 28.4                    | 30.9            |

\* U. S. Bureau of the Census, U. S. Census of Population, Michigan, 1950, 1960, and 1970.

### Household Size

The national trend towards the reduction of persons per household which has been evident in the last few decades, reveals smaller family sizes resulting from the decrease in the birth rate and a probable increase in the proportional number of households of elderly citizens. Between 1950 and 1960, as revealed in Table 6, the ratio of persons to households in the United States declined 0.09, from 3.38 to 3.29 while a decrease of 0.21 to 3.17 occurred during the 1960 decade. During the same time period, Michigan's proportion of persons per household, which was higher than the national figure, fell from 3.48 to 3.42 to 3.27.

The micro-region's average household size also decreased between 1950 and 1970, from 3.50 to 3.17. Clare County followed the micro-region's pattern of decreased household size between 1950 and 1970. The County's ratio of persons per household decreased .36 from 3.46 to 3.10 for this time period. This phenomenon can be attributed to the growing percentage of one and two member elderly households.



TABLE 6  
POPULATION PER HOUSEHOLD  
CLARE COUNTY AND OTHER REGIONS,  
1950, 1960, AND 1970\*

| Year | U. S. | Michigan | Micro-Region<br>Average | Clare<br>County |
|------|-------|----------|-------------------------|-----------------|
| 1950 | 3.38  | 3.48     | 3.50                    | 3.46            |
| 1960 | 3.29  | 3.42     | 3.42                    | 3.33            |
| 1970 | 3.17  | 3.27     | 3.17                    | 3.10            |

\*U. S. Bureau of the Census, U. S. Census of Population, 1950, 1960, and 1970.

#### Population Distribution, Density and Migration

In addition to developing a knowledge of the number and composition of inhabitants living in the County, analysis of the distribution of the population, population densities and population migration is also important. This will assist in developing recommendations where community facilities, such as schools, parks, libraries, and hospitals are needed.

#### Population Distribution

Population trends in the various localities of Clare County offer an indication of the distribution of people. Table 7 illustrates the population of the last three Federal censuses for the incorporated municipalities and townships. The principal communities in 1970 were the City of Clare, Hayes Township, Grant Township, Surrey Township, and the City of Harrison.

The population distribution of Clare County is generally concentrated in the southern and central portions of the County, and around several major lakes. The remainder of the population is generally along the Section or Quarter Section Line roads of the individual townships. However, a more meaningful presentation of the population distribution on the County level can be exhibited by the center of population technique.

The center of population is that point which may be considered as the center of population gravity in Clare County. It is that point upon which Clare County would balance if it were rigid plane with each person in the County being assumed to have equal weight and to exert an influence on a central point proportional to his distance from that point. Map 7 shows the center of population for the County by decade from 1940 to 1970.

Assuming that the County's population were evenly distributed, the center of population would be identical to the geographical center of the County (the point where Greenwood, Hayes, Lincoln and Hatton Townships meet). The actual center of the population lies to the southeast of this geographic center. The center of population for Clare County in 1970 was located in Section 16 of Hatton Township. This implies that the County's population is greater in the southeast area of the County. This would reflect the existence of the City of Clare and the population growth of Grant Township. The southern variance between the geographic center of the County and the center of population indicates that the present population of the County is more heavily concentrated in the southern townships.



TABLE 7  
POPULATION TRENDS BY LOCAL MUNICIPALITY  
1950, 1960 AND 1970\*

| Community                  | 1950   | 1960               | 1950-1960<br>Percent<br>Change | 1970   | 1960-1970<br>Percent<br>Change |
|----------------------------|--------|--------------------|--------------------------------|--------|--------------------------------|
| <u>Cities and Villages</u> |        |                    |                                |        |                                |
| Clare                      | 2,440  | 2,442              | .08%                           | 2,639  | 8.1%                           |
| Harrison                   | 884    | 1,072              | 21.3                           | 1,460  | 36.2                           |
| Farwell                    | 694    | 737                | 6.2                            | 777    | 5.4                            |
| <u>Townships</u>           |        |                    |                                |        |                                |
| Arthur                     | 433    | 420                | -3.0                           | 475    | 13.1                           |
| Franklin                   | 243    | 251                | 3.3                            | 374    | 49.0                           |
| Freeman                    | 165    | 127                | -23.0                          | 212    | 67.0                           |
| Frost                      | 404    | 338                | -16.0                          | 607    | 79.6                           |
| Garfield                   | 511    | 686                | 34.2                           | 938    | 36.7                           |
| Grant                      | 937    | 1,328 <sup>a</sup> | 41.7                           | 1,754  | 32.1                           |
| Greenwood                  | 327    | 255                | -22.0                          | 362    | 42.0                           |
| Hamilton                   | 445    | 513                | 15.3                           | 796    | 55.2                           |
| Hatton                     | 268    | 295                | 10.0                           | 460    | 56.0                           |
| Hayes                      | 437    | 606                | 38.7                           | 1,842  | 220.5                          |
| Lincoln                    | 225    | 345                | 53.3                           | 645    | 87.5                           |
| Redding                    | 293    | 200                | -31.7                          | 281    | 40.5                           |
| Sheridan                   | 696    | 712                | 2.3                            | 863    | 21.2                           |
| Summerfield                | 110    | 119                | 8.2                            | 214    | 79.8                           |
| Surrey                     | 1,138  | 1,653              | 45.3                           | 2,338  | 44.1                           |
| Winterfield                | 297    | 285                | -4.0                           | 335    | 17.5                           |
| Clare County               | 10,253 | 11,647             | 13.6                           | 16,695 | 43.3                           |

\*U.S. Decennial Censuses, 1950, 1960 and 1970.

<sup>a</sup>Part of Grant Township annexed to Clare City.



In reviewing the center of population movement over recent decades, several facts are revealed. First, the center of population shift has been relatively slight from 1940 to 1960, indicating a stable rural population. No significant concentrations of population in any one area of the County have had an overwhelming pull on the center of the County's population. Second, the center of population had been moving in a general southwest direction until 1960. Population increases, therefore, have been slightly greater in the southern and western portions of the County until 1970 and then the Hayes Township area began to attract a larger proportion of the County's growth.

The shifts in the center of population by decade have been in a linear southern pattern. From 1940 to 1960, the pull was from the south. From 1960 to 1970, the population center indicates a large pull toward the northern and central townships. In general, however, the center of population indicates that the population in the County is remaining relatively close to U. S. 27 probably because of its direct link with the metropolitan areas in downstate Michigan.

The most important shift in the County's center of population would be that which resulted from 1960 to 1970. Increased housing development and greater population increases indicate that urbanization is increasing at an even greater rate. The growth center of population technique assumes no population to be residing in the County at the base date of 1960. Therefore, only the distribution of new population growth between 1960 and 1970 is considered. The growth center of population over the last decade is located in Section 34 of Hayes Township. The 1960-1970 growth center when compared to the geographic center of the County indicates that the growth is increasingly locating in the central portions of the County. The City of Harrison and Hayes Township are gaining most of the new growth in the County.

### Population Density

The population density of the County is another means of describing population settlement. Map 7 shows population densities by municipality for Clare County as computed in 1970.

The greatest densities occur in the Cities of Harrison and Clare and the Village of Farwell. The City of Clare has the greatest density with approximately 1,224 people per square mile. The Village of Farwell is next with approximately 621 people per square mile and the City of Harrison with 365 people per square mile.

The townships display lesser densities than the two Cities and the Village of Farwell; Hayes Township has the greatest township density, with about 54 people per square mile. This higher density in Hayes Township reflects the high concentration of resort housing surrounding the many lakes in the Township. Grant and Surrey Townships also rank high with 48.7 and 43.4 people per square mile, respectively. The lowest densities are recorded in Summerfield Township and Freeman Township, each having 5.9 people per square mile.

### Population Migration

Natural increase and net migration rates of population for Clare County constitute an important segment of the population. The number of births minus the number of deaths (for a specific time period) is called natural increase. If all other factors remain constant, the natural increase would represent the net increase in this specific time period. However, the population of any area is not stable, so, in order to determine the number of people coming into or going out of an area, the term "net migration" is used. Net migration is simply the total change in popula-







tion minus the natural population increase. The resulting figure is the number of people that migrated into or out of that area during the specific period of time. Table 8 shows the natural increase and net migration for 1960, 1970 and the estimated net migration for July 1, 1976 within Clare and surrounding counties.

Net migration (total population minus natural increase) provides a measure of population movement. Clare County's net in-migration from 1960 to 1970 was 4,073 people, and from 1970 to July 1, 1976 estimate was 5,400 people. When compared to the surrounding counties Clare County's net in-migration ranks high. During the 1960 to 1970 time period, only Mecosta and Isabella Counties had a greater net in-migration. During the 1970 to July 1, 1976 time period Clare and Roscommon Townships had the highest net in-migration of 5,400 people each. This was a figure almost twice as great as Clare County's east and west neighbors Osceola and Gladwin Counties. Again, this net influx of population is a result of the high resort nature of Clare County and its attractiveness to retired and elderly persons.

#### Population Forecast

An estimate of the future population of Clare County is one of the most important and basic steps in the overall planning process. The need for future land uses and community facilities cannot be assessed if the number of future residents is not projected. There are no truly accurate methods of predicting future growth since growth is based on different variables. However, historic growth provides one basis for projecting future growth. Historic growth projections, however, must be modified to reflect future growth generators that will affect future population growth. The continuing planning process should provide a periodic review and restudy of long-range plans. Therefore, these predictions can be adjusted to reflect changing conditions within the County.

Five different population projections are considered for Clare County's estimated population in 1990 and 2000. These projections are shown in Table 9.

#### Michigan Department of Management and Budget

One source for projections for future population of Clare County is the comprehensive studies undertaken by the Michigan Department of Management and Budget in October 1974. These projections were made using data for birth rates, number of women in child-bearing years, death rates, and recent migration trends. Through this method Clare County's population projection for 1990 is 36,817 people and for the Year 2000 at 49,159 people.

#### Region VII "208" Planning Projection

The East Central Michigan Planning and Development Region's 208 Area-Wide Waste Treatment Management Program population projections included Clare County. The report, published in March 1977, estimated that the 1990 population of Clare County would reach 41,950 and the Year 2000 population would reach 59,550. These projections are quite liberal since the estimated July 1976 population was only 22,400 and in the "208" report Clare County's population is estimated to attain approximately 28,000 people by 1980.

#### Arithmetic Projection

The arithmetic method of projection is based entirely upon the assumption that the exact numerical growth in the past decade will continue on into the next decade. From 1960 to 1970 Clare County



TABLE 8  
NATURAL INCREASE AND NET MIGRATION  
CLARE AND SURROUNDING COUNTIES, 1960 to 1970 and 1970 to 1 July 1976\*

| County    | 1960 to 1970      |                  |               | 1970 to 1 July 1976 <sup>a</sup> |                  |               |
|-----------|-------------------|------------------|---------------|----------------------------------|------------------|---------------|
|           | Population Change | Natural Increase | Net Migration | Population Change                | Natural Increase | Net Migration |
| Clare     | 5,048             | 975              | 4,073         | 5,700                            | 300              | +5,400        |
| Gladwin   | 2,702             | 873              | 1,829         | 3,500                            | 400              | +3,100        |
| Isabella  | 9,246             | 5,076            | 4,170         | 6,800                            | 2,600            | +4,200        |
| Mecosta   | 6,941             | 2,406            | 4,535         | 6,500                            | 1,300            | +5,200        |
| Midland   | 12,319            | 9,937            | 2,382         | 2,700                            | 4,600            | -900          |
| Missaukee |                   |                  |               |                                  |                  |               |
| Osceola   | 1,243             | 1,090            | 153           | 3,000                            | 700              | +2,300        |
| Roscommon | 2,692             | 38               | 2,654         | 5,200                            | -200             | +5,400        |

\*Source: Bureau of the Census, Current Population Reports (Washington, D.C.: 1976), Series P-25, No. 461, and Series P-26, No. 23-76 and No. 23-75.

<sup>a</sup>Provisional estimate rounded to the nearest hundred as presented in Michigan Statistical Review, 1977 edition.



TABLE 9  
POPULATION PROJECTIONS  
CLARE COUNTY, 1990 AND 2000\*

|                                                 | Projected 1990<br>Population | Projected 2000<br>Population |
|-------------------------------------------------|------------------------------|------------------------------|
| Michigan Department of Management<br>and Budget | 36,817                       | 49,159                       |
| Region VII "208" Planning Projection            | 41,950                       | 59,550                       |
| Arithmetic Projection                           | 26,791                       | 31,839                       |
| Straight Line Projection (1960-1970)            | 34,283                       | 49,127                       |
| Planning Advisor's Projection                   | 34,000-37,000                | 45,000-50,000                |

\*Compiled by Herman Raad, Association of Clare County Local Planning Commissions' Planning Advisor, March 1978.

increased its population by 5,048 people. Simply adding 5,048 three times gives the Year 2000 projection of 31,839. This projection is considered to be very conservative.

#### Straight Line Projection

The straight line projection (1960-1970) simply extends the County's population into the future by the same increase as was experienced during the last decade (approximately 43.3 percent). The 1990 Clare County population would then be about 34,287 people, with the Year 2000 projection at 49,127, very close to the projections established by the Department of Management and Budget.

#### Projection by Township Planning Advisor

Growth projections based upon historical growth patterns fail to consider new developments which will affect growth in the future. At best, historical growth projections provide the lower limits for expected future population size. Growth generators such as freeways, utility systems and new employment centers stimulate growth in an area. The extent of new growth that these generators stimulate depends upon many variables. One of the more important variables is the location, extent and direction of regional growth trends.

Clare County is located within a morning's driving range from most of the population in Michigan. Both U. S. 27 and U. S. 10 (linkages to heavily populated areas) ensures that if people are going "up north" there will be a good chance of driving to Clare County. The rural attractiveness and ease of access to populated areas ensures a rapid and steady growth rate for Clare County.

Population Projection for 1990. -- Several significant growth factors will mature by 1990. These include:

1. The vast amount of recreational and vacant units in the County, if filled, would have more than double the 1970 population of 16,695 to 39,686.



2. Expansion of industrial parks.
3. Expansion of sewerage facilities adjacent to developed lake areas and incorporated communities.
4. Urban renewal rejuvenation in the Cities of Clare and Harrison and the Village of Farnwell.
5. A number of Federally assisted elderly housing apartment complexes.

The exact impact that these new growth factors will have on Clare County is difficult to numerically project. It is certainly anticipated that the growth rate in the 1960's will continue into the 1970's and probably equal the 1960-1970 growth rate. It is estimated that the growth rate will be between 42 and 54 percent from 1980 to 1990, for a 1990 population of between 34,000 and 37,000 people.

Population Projection for the Year 2000. -- The growth generators for the Year 2000 are anticipated to further mature and develop. In addition new factors could arise such as:

1. Early retirement and additional recreational needs for the middle class worker.
2. High transportation costs which could force people to spend limited time driving to reach a vacation or cabin site. Clare County is aptly called "The Gateway to the North."
3. Development of additional services and light industrial concerns drawn by the already stable population and generally lower pay scale than in the metropolitan areas.

It is therefore anticipated that between 45,000 and 50,000 people are expected to live in Clare County by the Year 2000.

It is not essential that a population projection be absolutely accurate. A population projection provides the planning program with a general basis for determining the extent of future land areas and community facilities. The Clare County Planning Commission and the Association of Clare County Local Planning Commissions should periodically evaluate the actual growth of the County in relation to the projected County growth. In this manner, the implementation of the Regional Comprehensive Plan can be accelerated or decelerated to meet actual County growth. For the purpose of future planning, a Year 2000 population of 45,000 to 50,000 will be utilized.

The ultimate population growth over the next two decades will be greatly influenced by County and local municipal officials. The various ways officials have to influence growth include:

1. Physical change in Clare County, as well as economic change, will be influenced by highway development by the Michigan Department of State Highways and Transportation and the Clare County Road Commission.
2. The quality and quantity of services, particularly sewerage and water supply facilities and street development, will significantly affect County population changes.
3. The cost of homes and living conditions also affect decisions of families as to their location. A wide price and rental range of housing generally attracts people with a range of interests and ability to pay for or rent homes and other living accommodations; a restriction of cost range will likewise restrict the number of available



buyers. Land use controls such as building codes, zoning ordinances and subdivision regulations influence the rate and type of population change.

4. Solutions to the problems of solid waste disposal, storm drainage and other development problems surrounding lake areas are essential to additional housing construction.
5. A pleasant environment supplying adequate recreation facilities, preserving open land areas and redeveloping older urban areas can attract people to an area.

These are some of the important factors which will directly influence population growth in the County. How and when County decision makers provide workable answers to these factors will greatly determine the population growth of Clare County.



**ECONOMY**



## ECONOMY

### Introduction

The purpose of an economic base study is to analyze the various generators of economic activity within a community. An understanding of the resultant employment structure which stems from these particular generators forms a basis upon which sound planning programs may be developed. Clare County is presently changing from a farming-oriented community to one whose future will be determined, to a large extent, by resort pressures emanating from the Cities of Detroit, Lansing and the Tri-Cities. Therefore, the first section of this study consists of this study and projected future industry mix and employment structure within the County. The agricultural sector of the economy is discussed in the second section, while an analysis of the effect that urbanization will have upon the local governmental units within the County is included in the final section.

### Employment and Income Distribution

#### State and Regional Employment Projections

Over an extended period of time, the economy of Clare County will be affected not only by internal changes but also by forces originating at the regional and State level. Therefore, a general description of the employment structure within the State of Michigan and the Clare County Region,<sup>3</sup> and projections for the year 1985 are presented in Table 10.<sup>4</sup> This projection was completed by the Michigan Department of Commerce in 1976.

During the 1977-1985 period, the largest increases in employment throughout the State are projected to occur in the Durable Goods Industry, Government and Retail Trade and are also projected to develop the most rapidly in the Clare County area.

#### Employment Projections for Clare County

In Table 11, employment by industry within Clare County during the 1974 period is presented along with estimates for the years 1980 and 1990.<sup>5</sup> Employment within the non-manufacturing industries is expected to increase the most rapidly through 1990. Retail Trade employment is expected to increase from 925 in 1974 to 2,048 by 1990. Employment in construction (an indicator of County development) is expected to take a healthy increase during the 1980's and 1990's.

Employment within the manufacturing industries are expected to increase approximately 33 to 39 percent by 1990.

Employment growth in Clare County is not projected to be as fast as population growth. By the Year 2000 there is projected to be between 45,000 and 50,000 residents in Clare County or approximately 7,290 more households. Between 1974 and 1990, there is projected to be a total increase

<sup>3</sup> Consists of Clare, Arenac, Gladwin, Gratiot, Iosco, Isabella, Midland, Ogemaw, and Roscommon Counties.

<sup>4</sup> 1970 Census 4th County Population Display Program.

<sup>5</sup> The 1980 and 1990 projections were derived by assuming that the present growth trends in employment would continue through 1990.



TABLE 10  
EMPLOYMENT  
CLARE AREA AND STATE  
OF MICHIGAN, 1977 and 1985\*

| Employment             | Clare Area <sup>a</sup> |                                  |                     |         | State of Michigan             |                                     |                     |         |
|------------------------|-------------------------|----------------------------------|---------------------|---------|-------------------------------|-------------------------------------|---------------------|---------|
|                        | 1977<br>Employment      | 1985<br>Employment<br>Projection | 1977-1985<br>Change |         | 1977<br>Employment<br>(1,000) | Employment<br>(1,000)<br>Projection | 1977-1985<br>Change |         |
|                        |                         |                                  | Number              | Percent |                               |                                     | Number<br>(1,000)   | Percent |
| Civilian Labor Force   | 111,536                 | 147,473                          | 35,937              | 32.2    | 4,145.140                     | 4,935.590                           | 794.45              | 19.2    |
| Employment             | 99,918                  | 126,764                          | 26,864              | 26.9    | 3,807.500                     | 4,637.160                           | 829.66              | 21.3    |
| Unemployment           | 11,608                  | 20,704                           | 9,096               | 78.3    | 338.360                       | 298.640                             | -39.72              | -11.7   |
| Rate                   | 10.4                    | 14.1                             | 3.7                 |         | 8.2                           | 6.1                                 | -2.1                |         |
| Wage and Salary        | 75,203                  | 90,513                           | 15,310              | 20.4    | 3,457.600                     | 4,361.630                           | 904.03              | 26.1    |
| Manufacturing Ind.     | 22,990                  | 21,985                           | -1,005              | -4.4    | 1,130.220                     | 1,323.910                           | 193.68              | 17.1    |
| Durable goods Ind.     | 7,801                   | 8,834                            | 1,033               | 13.2    | 908.040                       | 1,106.760                           | 198.72              | 21.9    |
| Non-durable goods Ind. | 15,189                  | 13,151                           | -2,130              | -13.4   | 222.180                       | 217.140                             | -5.04               | -2.3    |
| Non-Manufacturing Ind. | 34,343                  | 46,146                           | 11,803              | 34.3    | 1,706.070                     | 2,235.770                           | 529.70              | 31.1    |
| Construction           | 4,195                   | 6,325                            | 2,130               | 50.8    | 126.400                       | 180.960                             | 54.56               | 43.2    |
| Retail Trade           | 12,496                  | 17,329                           | 4,833               | 38.7    | 546.590                       | 669.320                             | 122.73              | 22.5    |
| Government             | 17,871                  | 22,383                           | 4,512               | 25.3    | 621.470                       | 801.990                             | 180.52              | 29.1    |

\*Source: Civilian Labor Force, Employment and Unemployment Forecasts Multi-County Balance of State Areas, Malcolm S. Cohen, Harold T. Shapiro, Arthur R. Schwartz, Alan Kett and Philip Mirowski, May, 1977.

<sup>a</sup>Consists of Clare, Arenac, Gladwin, Gratiot, Iosco, Isabella, Midland, Ogemaw, and Roscommon Counties.



TABLE 11  
EMPLOYMENT PROJECTIONS  
CLARE COUNTY 1974, 1980 and 1990\*

| Employment Projections               | 1974  | 1980  | 1974-1980<br>Percent<br>Change | 1990  | 1980-1990<br>Percent<br>Change |
|--------------------------------------|-------|-------|--------------------------------|-------|--------------------------------|
| <u>Manufacturing Industries</u>      | 67    | 84    |                                | 113   |                                |
| Lumber and Wood Products             | 67    | 84    | 25.4                           | 113   | 34.5                           |
| Fabricated Metal Products            | 40    | 50    | 25.0                           | 67    | 34.0                           |
| Machinery, except Electrical         | 73    | 92    | 26.0                           | 124   | 34.8                           |
| Electrical Equipment and<br>Supplies | 134   | 169   | 26.1                           | 227   | 34.3                           |
| Transportation Equipment             | 227   | 286   | 26.0                           | 384   | 34.3                           |
| Other Durable Manufacturers          | 19    | 24    | 26.3                           | 32    | 33.3                           |
| Food and Kindred Products            | 121   | 153   | 26.7                           | 205   | 34.0                           |
| Print and Publishing                 | 11    | 13    | 18.1                           | 18    | 38.5                           |
| Other Non-Durable Manufac-<br>turers | 16    | 20    | 25.0                           | 27    | 35.0                           |
| <u>Non-Manufacturing Industries</u>  |       |       |                                |       |                                |
| Construction                         | 120   | 201   | 67.5                           | 336   | 67.2                           |
| Wholesale Trade                      | 58    | 108   | 86.2                           | 192   | 77.7                           |
| Retail Trade                         | 825   | 1,346 | 45.5                           | 2,048 | 52.2                           |
| Other                                | 1,007 | 1,883 | 87.0                           | 3,344 | 77.6                           |

\*Source: Research and Statistics Division, Michigan Employment Security Commission; Civilian Labor Force and Employment Estimates, 1970-1973.

This chart originally appeared in the "Clare County Solid Waste Management Plan", prepared by the E.C.M.P.D.R. for the Clare County Board of Commissioners, May, 1975, pg. 28.



in employment of 4,299 jobs in the County. New employment opportunities within Clare County do not entirely account for the population growth in the County. A majority of those migrating to Clare County do so for retirement and not to find employment.

### Income Distribution

The level of effective buying income and the distribution of families within the various income categories is a direct result of the industry mix which generates the economic wealth of a community. The level of household income is the single most important indicator of the economic well-being of the residents. Data documenting these figures for Clare County during the 1974-1976 period are presented in Table 12.

During these three years, the level of household income in Clare County has been steadily growing. Clare County has a growing proportion of family incomes in the \$15,000 or over category and a decline of households earning less than \$8,000. However, these statistics do not take into consideration income which is earned, but not recorded. In many agricultural and rural communities, commodities such as fruit, vegetables, meats and dairy products are produced by the individual family and their expenditures for these necessities are thus reduced considerably. Also, housing is often less expensive in rural communities. In actuality, the "standard of living" in Clare County may be as high or higher than the average throughout the State, but complete living standard statistics are not available.

### Business Activity

The characteristics of the business establishments of Clare County are similar to those of establishments which are located in a rural county (e.g., they are smaller in size and do a smaller dollar sales volume per establishment than similar establishments located in more industrially oriented and populous counties). The Cities of Harrison and Clare and the Village of Farwell provide shopping and convenience goods for the majority of County residents. However, to obtain specialized goods and services, County residents must travel to the Mount Pleasant area, and, in some instances, to the Tri-City (Midland/Bay City/Saginaw) area and the Lansing areas.

### Retail Trade

The amount of employment in Retail Trade is directly related to the population size within the area serviced by the retail establishments. Also, the general trend throughout the State and the nation has been for a decrease in the number of retail establishments, while both the number of employees and dollar sales per establishment have been increasing. These trends are most evident in areas where shopping centers with large stores are replacing the downtown business establishments. In Table 13, data on Retail Trade in Clare County is presented.

During the 1974-1976 period, retail sales have been steadily increasing for most retail services. Both furniture and automobile sales have increased the highest during this period. As could be expected in a rapidly growing retirement and recreation area, food sales and restaurants have nearly kept pace with the overall retail sales increase for the period 1975-1976. There is a great diversity of goods within Clare County attracting sales of its rapidly expanding population as is evidenced in a steady retail sales growth; 5.8 percent from 1974 to 1975 and 16.0 percent from 1975 to 1976.



TABLE 12  
EFFECTIVE BUYING INCOME AND DISTRIBUTION  
CLARE COUNTY, 1974-1976\*

| Total Effective<br>Buying Income<br>(Thousands) | Median<br>Household<br>Income | Family Income Distribution:<br>Percent of Families Within Each Income Category |               |               |               |                 |           |      |
|-------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------|---------------|---------------|---------------|-----------------|-----------|------|
|                                                 |                               | \$0-2,999                                                                      | \$3,000-4,999 | \$5,000-7,999 | \$8,000-9,999 | \$10,000-14,999 | \$15,000+ |      |
| 1974                                            | \$58,491                      | \$7,612                                                                        | 21.6          | 14.1          | 16.6          | 12.5            | 22.9      | 12.3 |
| 1975                                            | \$69,169                      | \$8,389                                                                        | N/A           | N/A           | N/A           | 10.9            | 24.1      | 17.1 |
| 1976                                            | \$79,739                      | \$9,292                                                                        | N/A           | N/A           | N/A           | 9.9             | 23.5      | 23.1 |

\*Sales and Management Magazine (1974, 1975, 1976 editions).

N/A - Not available.



TABLE 13  
RETAIL SALES DATA  
CLARE COUNTY, 1974, 1975 AND 1976\*

| (Thousands)                | 1974             | 1975     | Percent Increase | 1976     | Percent Increase |
|----------------------------|------------------|----------|------------------|----------|------------------|
| Food                       | \$13,133         | \$15,093 | 14.9             | \$17,161 | 13.7             |
| Eating and Drinking Places | N/A <sup>a</sup> | 7,196    | N/A              | 8,454    | 15.9             |
| General Merchandising      | 2,352            | 1,820    | 22.6             | 1,999    | 9.8              |
| Furniture and Appliances   | 2,779            | 2,990    | 7.6              | 3,523    | 17.8             |
| Automotive                 | 9,168            | 8,760    | -4.5             | 10,875   | 24.1             |
| Drug                       | 1,570            | 1,736    | 10.6             | 1,849    | 6.5              |
| Total Retail Sales         | \$55,467         | \$58,687 | 5.8              | \$68,050 | 16.0             |

\*Sales and Management Magazine (1974, 1975 and 1976 editions).

<sup>a</sup>N/A - Not Available.

#### Wholesale Trade

Employment in Wholesale Trade is not as closely related to changes in population as is Retail Trade. Wholesaling activities are often understated as certain manufacturers sell directly to the ultimate consumer and do not use brokers, or the wholesaling activities are consolidated with other functions. Data on Wholesale Trade within Clare County is documented in Table 14.

It is evident that wholesaling activities are rapidly expanding within Clare County as the dollar sales, the number of stores and the total payrolls have increase dramatically. Wholesalers usually are located where the products are produced, near the market or at the intersection of several main arteries of transportation. Clare County has the advantages of excellent transportation access to populated areas in "downstate" Michigan.

TABLE 14  
WHOLESALE TRADE AREA  
CLARE COUNTY, 1967 AND 1972\*

| (Thousands)      | 1967    | 1972     | Change    |         |
|------------------|---------|----------|-----------|---------|
|                  |         |          | Numerical | Percent |
| Sale             | \$8,447 | \$16,031 | 7,584     | 89.8    |
| Number of Stores | 13      | 29       | 16        | 123.1   |
| Total Payrolls   | 354     | 1,197    | 843       | 238.1   |

\*U. S. Census of Business, 1967 and 1972, Wholesale Trade, Michigan.



### Selective Services

As the expendable income of the population increases and people have more leisure time, the demand for services increases. Thus, over the past decade, the service industry has become the fastest growing industry throughout the nation. In Table 15, data is presented on these "selected services."

TABLE 15  
SELECTED SERVICE DATA  
CLARE COUNTY, 1967 AND 1972\*

| Kind of Business             | 1967 | 1972 | Number of Establishments |         |
|------------------------------|------|------|--------------------------|---------|
|                              |      |      | Numerical                | Percent |
| Hotels, Motels, Etc.         | 25   | 20   | -5                       | -20.0   |
| Personal Services            | 49   |      |                          |         |
| Business Services            | 13   |      |                          |         |
| Repair and Auto Services     | 19   | 34   | 15                       | 78.9    |
| Motion Pictures <sup>a</sup> | 3    |      |                          |         |
| Recreation <sup>a</sup>      | 9    | 16   | N/A                      | N/A     |
| Legal Services               | b    | 7    |                          |         |

\*U. S. Census of Business, 1967 and 1972, Selected Services, Michigan.

<sup>a</sup> Combined for the 1972 Census.

<sup>b</sup> Not reported in 1967.

N/A - Not Available.

The type and number of Selected Service establishments within Clare County is indicative of a northern resort community where a large percentage of commercial enterprise comes from service oriented business. As the County population keeps increasing, larger establishments will be more numerable and will provide more specialized services.

### Agriculture

#### General Agricultural Activity

The purpose of the analysis of the Agricultural sector of the economy is to present a general description of Clare County's agricultural productivity and then to determine the primary concentrations of this activity within the County. This analysis will guide future planning programs as it will serve as a basis upon which to make decisions which will arise when the forthcoming urban pressure dictates that some land must be taken out of agricultural production.

Data on the number of farms and acres in production throughout Clare County during the 1964-1974 period are presented in Table 16. The agricultural trends in Clare County followed the national and State trends as the total number of farms and the land area in farms decreased during this period. However, the value of all products sold and the value of the products sold



per farm both increased during this 10 year interval. These trends are a result of both inflation and a more intensive and efficient method of farming. The average number of acres per farm decreased from 236.3 to 219.0 acres during these 10 years as some farms were platted and sold off acreage.

TABLE 16  
GENERAL AGRICULTURAL STATISTICS  
CLARE COUNTY, 1964, 1969 AND 1974\*

|                               | 1964      | 1969      | 1974      |
|-------------------------------|-----------|-----------|-----------|
| Number of Farms               | 467       | 394       | 346       |
| Land Area in County (Acres)   | 366,080   | 366,080   | 366,080   |
| Land Area in Farms (Acres)    | 110,375   | 89,013    | 75,730    |
| Average Size of Farms (Acres) | 236.3     | 225.9     | 219.0     |
| Value of Land and Buildings   |           |           |           |
| Per Farm                      | 20,571    | 32,943    | 66,870    |
| Value of Land and Buildings   |           |           |           |
| Per Acre                      | 87.15     | 141.81    | 306       |
| Cropland Harvested (Acres)    | 28,979    | 23,048    | 25,778    |
| Value of All Agricultural     |           |           |           |
| Products Sold                 | 2,885,750 | 3,141,114 | 4,817,000 |
| Average Sold Per Farm         | 6,179     | 7,972     | 13,922    |
| Livestock and Livestock       |           |           |           |
| Products Sold                 | 2,476,204 | 2,719,318 | 3,751,000 |
| Crops Sold                    | 357,741   | 392,187   | 912,000   |
| Forest Products               |           |           |           |

\*U.S. Bureau of the Census, Census of Agriculture, Michigan (Washington: U. S. Government Printing Office, 1964, 1969 and 1974 issues).

The number of the different types of farms in the County as classified by the U. S. Census of Agriculture for the years 1954, 1964 and 1974 for which data is available, are documented in Table 17. Livestock showed the smallest percentage change during these 20 years. A large decrease occurred in the number of Dairy and General farms and in the number of Miscellaneous and Unclassified farms. Field Crops and Cas Grain farms show a slight increase from 1954 to 1974.

### Livestock

Available data illustrating the trends in livestock production in the County for the 1954-1974 period are presented in Table 18. The total number of cattle and calves decreased slightly during the 1954-1964 period while the total value of livestock and livestock products produced increased. From 1964 to 1974 the number of livestock farms and number of cattle per farm increased substantially as did the value of livestock products for the same period.



## Dairy

In 1954, 311 dairy farms existed in Clare County; by 1974 the number dropped to 65. Although the number of farms has drastically decreased, the value of dairy products sold from Clare County markedly increased. (See Table 18.) This reflects larger more efficient dairy farms in 1974 than those 20 years ago.

TABLE 17  
TYPES OF FARMS  
CLARE COUNTY, 1954, 1964 AND 1974\*

| Type of Farm                                 | 1954 | 1964 | 1974 |
|----------------------------------------------|------|------|------|
| Field Crops (other than fruit and vegetable) | 5    | 13   | 26   |
| Cash Grain                                   | 13   | 12   | 19   |
| Other Field Crops                            | --   | 1    | --   |
| Vegetable                                    | --   | --   | 2    |
| Fruit                                        | --   | --   | --   |
| Poultry                                      | 5    | 2    | 1    |
| Dairy                                        | 311  | 175  | 65   |
| Livestock                                    | 99   | 67   | 81   |
| General                                      | 55   | 35   | 6    |
| Miscellaneous and Unclassified               | 392  | 175  | 2    |

\*U. S. Bureau of the Census, Census of Agriculture, Michigan (Washington: U. S. Government Printing Office, 1954, 1964 and 1974 issues).

TABLE 18  
LIVESTOCK PRODUCTION AND SALES  
CLARE COUNTY, 1954, 1964 AND 1974\*

|                                   |            |             |             |
|-----------------------------------|------------|-------------|-------------|
| Cattle and Calves (number)        | 8,365      | 13,691      | 7,097       |
| Hogs and Pigs (number)            | 3,215      | 2,929       | 3,624       |
| Sale of Dairy Products            | \$647,637  | \$2,135,000 | \$1,349,570 |
| Milk Sold (pounds)                | 14,364,095 | N/A         | 32,361,867  |
| Poultry and Poultry Products Sold | \$91,525   | N/A         | \$100,291   |

\*U. S. Bureau of the Census, Census of Agriculture, Michigan (Washington: U. S. Government Printing Office, 1954, 1964 and 1974 issues).

N/A - Not Available.



## Anticipated Urbanization and Future Space Needs

### Urbanization

The preceding two sections have discussed past, present and expected future economic trends within the County. The conclusions arrived at in these sections are used to determine what effect the future expected changes will have upon the local governmental units within the County.

Change in population per square mile, a density factor, is a good criteria of how rapidly various communities are being urbanized. Two paths of increasing population densities are emerging in Surrey and Grant Townships. One is following the route of Old U. S. 10 Highway westward from the City of Clare through the Townships of Grant and Surrey and the Village of Farwell. Another path of increasing population density is along U. S. 27 through the Cities of Clare and Harrison and the Townships of Grant and Hatton, Hayes and Frost. Hamilton Township is also beginning to experience increased population pressures. The low densities in the western and northernmost townships in Clare County are mostly attributed to the relatively greater distance and driving time from populated areas, and the lack of a direct route from these townships to a larger city.

The largest area of conflict with urbanization in the County is expected to occur in the Townships of Arthur and Sheridan. Both have rich farmland and are agriculturally oriented and are desirous of maintaining their farmland. The conflict arises because both townships have ready access to the U. S. 27 Freeway and are within commuting distance from the Cities of Harrison and Clare and employment centers in the Tri-Cities area.

There is a large proportion of State land devoted to recreational purposes in Redding, Summerfield and Winterfield Townships. This trio of townships will remain primarily forested and will also continue to exhibit large landholdings. Due to their isolated locations, it is expected that, at least for the next 10 years, the Townships of Greenwood, Franklin and Freeman will only experience a slight comparative increase in urban concentration, notwithstanding the fact that Clare County is one of the most rapidly expanding counties in this part of Michigan.

### Future Potential Space Needs

Industrial and Commercial. -- The 1990 employment projections indicate that there will be an increase in the number of employers in Clare County. Clare County has two industrial corporations in Clare and Harrison and there is a possibility of the Village of Farwell developing an industrial committee. In 1977, the City of Harrison was awarded a Public Works Administration Grant for development of a 18 acre site with public water, sewage and gas facilities. The County is also fortunate to have Mid-Michigan Community College which offers a large choice of vocational training programs. Large gas storage areas have recently developed in the Townships of Lincoln and Winterfield. Depending greatly upon the future energy needs of Michigan and the United States, these Townships could be dramatically changed.

Land for industrial expansion is available in Clare County. However, in most areas of the County, water and sewer lines needed for industrial purposes are lacking. In summary, with all the vacant land in the County, there will be no problem in meeting the future additional space needed by new and expanding firms. As long as proper zoning codes are enforced throughout the County, industrial expansion can provide a greater tax base for the community with a minimum of destruction of open space. However, some utility expansion will be needed.



The largest concentration of commercial establishments is in the Cities of Clare and Harrison. Originally, Clare served as a "community" shopping center for the County but recently the City of Harrison has been expanding in terms of services. In Table 19, the recommended population needed for the different sizes of shopping centers is documented.

TABLE 19  
SHOPPING AREA STANDARDS  
RELATED TO POPULATION AND TIME-DISTANCE\*

| Shopping Area       | Composition                                                                                                              | Population Served                                   | Service Area                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------|
| Neighborhood Center | Supermarket or small variety store are major tenants with total floor space of at least 20,000 square feet for all uses. | 3,000 to 25,000 depending on density of population. | Neighborhood or population necessary to serve an elementary school. |
| Community Center    | Major tenant of junior department store. Total area for all facilities should be 10 to 40 acres.                         | 15,000 to 100,000 population.                       | One to three miles radius.                                          |
| Regional Center     | Two (2) major department stores. Site size 40 to 100 acres.                                                              | 100,000 to 400,000 population.                      | 30 minutes driving time.                                            |

\*Adapted from standards established by Urban Land Institute; Santa Clare County, Commercial Land Needs (November 1964); and International City Managers Association, Local Planning Administration (Chicago, Illinois, 1959).

By Year 2000, the County's population will be approximately 45,000 to 50,000 people which will require the present retail shopping base in the County to expand. Expansion will occur by existing retail stores becoming larger and new stores locating in the County.

Existing commercial development in the Cities of Harrison and Clare and the Village of Farwell throughout the County will generally meet the demand for neighborhood shopping centers and in certain instances for a part of the community center needs. With the trend today towards planned shopping centers, Clare County can anticipate receiving some small neighborhood shopping centers. These will occur where the population growth is the greatest.

Shopping centers have tremendous advantage in retailing goods. Parking is plentiful, convenient and free. Shoppers can do a wide range of shopping at one location by walking through a variety of stores. Central business districts in existing population settlements will have a diffi-



cult time to compete with new shopping centers particularly in the Harrison area where growth is expanding along Clare Avenue ("old" U. S. 27).

The three incorporated communities presently act as small community shopping centers. They will have to revitalize their central business districts if they hope to successfully compete with shopping centers and strip commercial growth in the future.

Regional facilities are presently located in the Mount Pleasant and the Tri-Cities areas. These communities will continue as the regional shopping facilities for Clare County in the near future.

Housing. -- As the population increases, so does the demand for housing. It was noted in the income analysis that the residents of Clare County are primarily in the "lower to low middle income" ranges. It has been traditional in American society, especially in generations which have recently migrated from a farm, for middle class families to own their own home. However, with the present money market and high interest rates, many people, especially young couples, cannot afford a single-family home and must rent a dwelling of some type or live in a mobile home.

If the approximately 27,300 additional people that will live in Clare County by the Year 2000 (22,700 in 1976 vs. 50,000 in 2000), all chose to live in single-family residences, at an average of 3.1 persons per household, approximately 8,806 additional dwellings would be needed and, at an average of 2.5 persons per household, 10,900 more dwellings would be needed in the next 22 years. It is impossible to accurately determine what proportion of the future population will desire multiple or single-family residences. With the large supply of part-time vacant housing in Clare County, any of which could possibly be converted to permanent homes, not all the additional homes need be constructed. Both the construction and construction supply industries should profit from the housing demand in Clare County. Realtors and other people depending on land development as a source of income should also prosper in the future.

Care must be taken to insure that the interest of a small industry does not cause any deterrent to the planning and coordination of future County growth.



## HOUSING



## HOUSING STUDY

### Introduction

The purpose of the Housing Study is to analyze the problems that confront the residents of Clare County in relation to the adequacy, supply and price of housing. Recommendations of objectives that will help alleviate existing housing problems and will prevent this recurrence in the future will be presented. Various elements of the overall housing environmental and special residential areas in Clare County will also be analyzed. This Study's purpose is not intended to solely project future housing needs but to analyze the characteristics of its existing housing stock affecting the supply and demand of housing within the County.

### Existing Housing Characteristics

#### Housing Stock

In 1970, there were 11,061 dwelling units in Clare County. This represented an increase of 3,028 units over the 1960 figure of 8,033.<sup>6</sup> Many of the structures within the County are relatively new. Approximately 44 percent of the 1970 County housing stock was constructed in the 1960 decade. Nearly 23 percent of the County's total 1970 housing units were constructed in the 1950 decade. The remaining structures were divided among 11 percent in the 1940 decade and 22 percent before 1939. Detailed local unit analysis is included in the Appendix of this document.

In general, the quality of the County housing stock appears to be in need of improvement in spite of its age. However, an in-depth structural quality study of the entire County's housing stock should be undertaken to determine what the present condition is of these dwellings since the Census data is based upon a sample of the total number of units and the surveys are often undertaken by inexperienced personnel. Only with a detailed survey could there be a determination of exact locations of structural deterioration and remedial action taken.

There is a high turnover rate of housing within certain areas of the County. This is indicated by the 1970 Census data. As of that year, 52 percent of the homes were either vacant for occasional use or strictly seasonal cottages. This proportion is more predominant in the recreation-oriented townships of the County as the lakefront developments characteristically have small lake lots and high density resort housing.

#### Housing Value

Although the definition used by the Census Bureau is clear, the validity of the reported dollar value as an estimate of property valuation is a subjective measurement and may be questioned. "Value" is the respondent's (owner's) estimate of "How much the property would sell for on today's market." Value data is limited to single-family housing (one unit structures), detached and attached, that are located on 10 acres or less, or on properties which also have a business establishment. Cooperatives, condominiums, and trailers are also excluded from the value tabulations.

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<sup>6</sup> Information provided by the East Central Michigan Planning and Development Region, Saginaw, Michigan.



TABLE 21  
HOUSING CHARACTERISTICS  
CLARE COUNTY, 1970\*

| Units                           | Number | Percent |
|---------------------------------|--------|---------|
| Built for Seasonal Use          | 1,741  | 13.6    |
| Occupied Year Round             | 5,345  | 41.8    |
| Vacant for Rent                 | 161    | 1.3     |
| Vacant for Sale                 | 179    | 1.4     |
| Vacant for Occasional Use       | 4,837  | 37.8    |
| Other Vacant                    | 499    | 3.9     |
| Rented or Sold but not Occupied | 32     | .2      |
| Total                           | 12,802 | 100.0   |

\*U. S. Census of Population and Housing; provided by the East Central Michigan Planning and Development Regional Planning Commission.

The large number of seasonal homes is indicative of Clare County's resort nature. The large percentage of resort housing is heavily influenced by large numbers of seasonal homes in Hamilton and Hayes Townships possessing 40.6 and 31.3 percent, respectively, of all the resort homes in Clare County.

#### Housing Type

The predominate type of housing unit in Clare County is single-family dwellings. In addition, in 1970 there were 491 year-round mobile homes in the County.

TABLE 22  
HOUSING UNITS BY TYPE  
(OCCUPIED AND VACANT ALL YEAR),  
CLARE COUNTY, 1970\*

| Type            | Number | Percent |
|-----------------|--------|---------|
| Single Family   | 10,199 | 92.2    |
| Duplex          | 247    | 2.2     |
| Multiple Family | 124    | 1.1     |
| Mobile Homes    | 491    | 4.5     |
| Total           | 11,061 | 100.0   |

\*1970 U. S. Census, Census of Housing, U. S. Bureau of the Census; 4th Count Summary Tapes.



In 1970, over 40 percent of all of Clare County's single-family homes were located in Hayes, Garfield and Lincoln Townships. These three townships are also the townships which possess large clusters of homes adjacent numerous lake developments. Surrey, Grant and Frost Townships cumulatively comprise 21.0 percent of Clare County's single-family housing stock. The Cities of Harrison and Clare, the only two cities in the County, house 15.4 percent of the County's homes; and the remaining 2,353 homes were almost equally distributed in the remaining nine townships.

Of the total 247 (1970) duplex units in the County, 124 were located in the City of Clare and 33 were located in the City of Harrison. Six townships in the County possessed the remaining 90 duplex units.

In 1970, the multiple family dwelling units were concentrated in the Cities of Clare and Harrison with a combined total of 76 multiple family dwelling units out of a total 124 such units.

Nearly a quarter of all the County's 1970 mobile homes were found in Hayes Township. The 1970 Census information indicated 104 mobile homes in Hayes Township, or 21.2 percent of the County's 491 mobile homes. The Township Planning Advisor estimates that in 1978 there are nearly 1,000 mobile homes in the County, 350 in Hayes Township alone.

#### Plumbing Facilities

Plumbing facilities include toilet and bathing equipment and water supply facilities. The characteristics of these fixtures are measurements of housing quality.

Housing units considered as having all plumbing facilities are those which have piped hot and cold running water inside the structure, a flush toilet, and a bathtub or shower inside the structure for use only by the occupants of the unit.

TABLE 23  
BATHROOM FACILITIES<sup>a</sup>  
CLARE COUNTY, 1970\*

| None or<br>Half Bath <sup>b</sup> | 1<br>Bath | 1-1/2<br>Baths | 2<br>Baths | 2-1/2<br>Baths | 3 or<br>More | Total<br>Units |
|-----------------------------------|-----------|----------------|------------|----------------|--------------|----------------|
| 3,682                             | 6,532     | 496            | 277        | 50             | 50           | 11,087         |

\* 1970 Census of Housing, U. S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup> Based on 15 percent sample calculations.

<sup>b</sup> Includes facilities also used by occupants of another unit.

The 1970 Census reported that 3,682 or 27.8 percent of Clare County's year-round housing did not have complete bathroom facilities. The problem of insufficient or total absence of plumbing facilities will become more serious if the present trend of seasonal home conversion to year-round units continues throughout the County.



Allied to plumbing facilities are those housing characteristics which describe the various methods of residential sewage disposal and the different sources of water supply. These characteristics are also elements of housing quality, for many persons place great value on publicly provided sewer and water services.

### Sewage Disposal

Residential sewage disposal is handled through three basic methods:

- (a) Public sewer.
- (b) Septic tank or cesspool.
- (c) Some other means, ordinarily a very primitive method such as a privy, chemical toilet, or running a sewer line from the housing unit directly into a creek, lake, swamp, etc.

TABLE 24  
SEWAGE DISPOSAL<sup>a</sup>  
CLARE COUNTY, 1970\*

| Unit         | Public<br>Sewer | Septic<br>Cesspool | Other <sup>b</sup> | Occupied and<br>Vacant Total |
|--------------|-----------------|--------------------|--------------------|------------------------------|
| County Total | 1,050           | 7,093              | 2,944              | 11,087                       |

\*1970 Census of Housing, U. S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup>Year-round units. Based on 15 percent Census sample.

<sup>b</sup>Other includes units on individual sewer lines running directly to creek, lake, or swamp.

According to the 1970 Census, only 9.5 percent of all Clare County's year-round units were tied into a public sewer system; 86.3 percent of these homes used a septic cesspool system, and the remaining 26.5 percent relied upon some other means of sewage disposal.

### Source of Water

In 1970, nearly 18 percent of Clare County's 11,087 homes relied on a public water or private water system; all but 8.8 percent were so provided in the Cities of Harrison and Clare and the Village of Farwell. Homes with water supplied by a individual well constituted 80.2 percent (8,897 homes) of all the homes in Clare County. Only 221 occupied and vacant year-round homes relied upon a creek, river or spring directly. Two townships, Frost and Lincoln, had 54 homes each relying upon a primitive method of water supply.



TABLE 25  
SOURCE OF WATER<sup>a</sup>  
CLARE COUNTY, 1970\*

| Unit         | Public System or<br>Private Company <sup>b</sup> | Individual<br>Well | Other <sup>c</sup> | Total<br>Units |
|--------------|--------------------------------------------------|--------------------|--------------------|----------------|
| Clare County | 1,969                                            | 8,897              | 221                | 11,087         |

\*1970 Census of Housing, U. S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup>Based on 15 percent calculated sample.

<sup>b</sup>Common source supplying water to more than five units.

<sup>c</sup>Water obtained directly from springs, creeks, rivers, etc.

#### Heating Equipment

Heating equipment, like plumbing facilities, is a measure of housing quality. The types of heating equipment discussed here represent the principal kind of equipment used in each housing unit.

The U. S. Census Bureau in its survey of heating equipment utilized eight separate classifications. For simplicity, these have been reduced to four major categories:

- (a) Central heating equipment, whether hot water, warm air, or electric;
- (b) Room heater without a flue;
- (c) Other types which include room heaters with a flue, pipeless furnaces, stoves, fireplaces, and portable heaters;
- (d) Not heated.

TABLE 26  
HEATING EQUIPMENT<sup>a</sup>  
CLARE COUNTY, 1970\*

| Unit         | Central<br>Heating | Heater Without<br>Flue | Other<br>Types | Not<br>Heated | Total  |
|--------------|--------------------|------------------------|----------------|---------------|--------|
| Clare County | 3,534              | 256                    | 7,142          | 129           | 11,061 |

\*1970 Census of Housing, U. S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup>Based on a 20 percent sample. Occupied and Vacant Year-Round Units.

In 1970, 32.0 percent of all the year-round units in Clare County were equipped with some form of central heating system (83.4 percent of these were warm air type). Only 256 of all the year-round units relied upon non-flued room heaters. Over 64 percent of the County's



year-round units relied on other types of heating facilities (about 57.1 percent of these were heated with flued heaters). All but 129 homes in Clare County were heated in 1970. Most of the homes built since 1970 rely on some form of central heating.

### Mobile Homes

The mobile home is one aspect of the housing supply which is often overlooked. In 1975 about 9.9 million people lived in more than four million mobile homes.<sup>7</sup> Now more than two percent of the United States population live in mobile homes. The mobile home industry has inherited the lower-priced market and this year will sell about 95 percent of new homes under \$25,000.<sup>8</sup>

Mobile homes are, therefore, beginning to have great impact upon the low-cost housing market. Mobile homes may range from 12 feet in width to 70 feet in length. Two 12 foot wide mobile homes can be placed together and may have well over 1,200 square feet of floor space. New mobile homes, fully equipped and completely furnished, range in price from \$7,500 to \$18,000. The double wide homes may range from \$9,000 to \$30,000. Prices may vary according to size, style, and quality of the unit.

The Veterans Administration makes loans for mobile homes with a maximum limit of \$12,500 financed over a 12 year period. An additional \$7,500 maximum loan may also be obtained to purchase a site for a mobile home. A total of \$20,000 may be borrowed for a 15 year period.

The Federal Housing Administration (FHA) insures loans on mobile homes up to \$12,500 with a maximum repayment period of 12 years and 32 days. The mobile home must meet construction standards as determined by the U. S. Department of Housing and Urban Development. FHA does not insure loans on seasonal mobile homes.

Today, there is little to distinguish the mobile home owner from those who own conventional homes. Many mobile home units may be used as second homes. Twenty percent of the total mobile home shipments are assumed to be in this category.<sup>9</sup>

Considering that the "typical income for the mobile home family in 1974 ranged between \$6,000 and \$9,000 (and) about 25 percent (of the owners) were over 65,"<sup>10</sup> Clare County appears ripe for mobile home development. The Township Planning Advisor estimates that there are approximately 1,000 year-round mobile homes in Clare County as of June, 1978.<sup>11</sup>

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<sup>7</sup> Sylvia Porter, "Mobile Homes Affordable," The State Journal, August 8, 1976.

<sup>8</sup> Carl Norcos, "Mobile Homes - The Most for Your Money," Detroit Free Press, Parade Magazine, September 12, 1976.

<sup>9</sup> U. S. Department of Agriculture, Agriculture Handbook N. 428, Projections of Demand for Housing by Type of Unit and Region, May 1972.

<sup>10</sup> Sylvia Porter, "More About Mobile Homes," The State Journal, June 10, 1976.

<sup>11</sup> This estimation is derived from assumptions made from building permit statistics for the year 1977 and from population estimates. In 1977 alone an additional 144 mobile homes were placed in Clare County (not all are assumed to be permanent Clare County residents).



### Seasonal Housing

The discussion of housing growth characteristics has heretofore grouped all housing units in Clare County with no distinction made between year-round and seasonal dwellings. Yet, there are ample reasons for examining the two types separately. First of all, seasonal homes are highly restrictive in their intended use, and often inadequately constructed, equipped, or maintained for year-round occupancy. As such, it is unrealistic to include these units with the County's year-round housing resources.

In 1970, the U. S. Census Bureau determined that there were 1,737 seasonal homes, however, there were also 5,716 homes classified as vacant. Many of the homes classified as vacant were also used as seasonal homes. This means that approximately 58 percent of Clare County's homes were classified as either seasonal or vacant in 1970.

The large number of seasonal units hinders the provision of public services throughout the County. Concentrations of dwelling units that would normally be capable of supporting public services are unable to do so in Clare County due to the large percentage of seasonal homes. The owners of seasonal homes, being temporary occupants, are often hesitant to pay for public services, thereby making any system too expensive for the year-round residents during the non-peak seasons. The result of this situation is a lack of public services in areas where environmental conditions often demand them.

### Housing Supply Needs

In the three decades previous to 1960, only a small portion of the population increase in Clare County was due to an in-migration of people. However, from 1960 to 1970 Clare County's population increased an estimated 10,748 persons. Of this total increase, 88 percent was due to a net inflow of people from other counties.<sup>12</sup> The pleasant living conditions, abundant recreational opportunities, and absence of urban problems have induced many people to reside in the County and commute to the City of Midland or as far away as the Tri-Cities or Lansing areas for employment. Clare County's history as a resort area has helped spur the in-migration of elderly persons, many of whom move into their "vacation home" permanently after retirement.

### Existing Supply

The County's 1970 population of 16,695 is projected to increase to approximately 26,000 by 1980 and to about 36,000 by 1990. If these additional people were to live in single-family homes at an average of 2.81 persons per household,<sup>13</sup> an additional 3,300 homes would have to be made available by 1980 and an additional 3,300 homes would be needed between 1980 and 1990.

According to the East Central Michigan Planning and Development Region in its 1975 Housing Inventory, Clare County in 1970 had a total of 12,802 housing units. Of this total, 13.6 percent, or 1,741 units, were classified as seasonal residences. From the remaining 11,061 year-round housing units, 348 were for sale or rent. The remaining 10,713 units were composed of 5,368 second homes and 5,345 occupied households. Removing the homes which were considered

<sup>12</sup> See Chapter, Population Characteristics and Forecast.

<sup>13</sup> Computed by East Central Michigan Planning and Development Region, originally presented in Technical Guide For Housing Plan, Preliminary Draft, 1978, p. 21.



substandard due to deficiencies in plumbing and deterioration, only 7,298 year-round homes in 1970 were considered available. The problem with this analysis is that consideration was not given to the actual amount of seasonal and second homes which will potentially be available by 1980. This large number of potentially available homes is an important factor in Clare County's future housing supply.

#### Supply Projection Methodology

In order to accurately project the 1980 supply, the number of housing units to be made available through construction or renovation must be tabulated. The first step in accomplishing this task is to determine the average rate of construction or renovation for the various types of building activities. Actual building permit statistics are needed to serve as a base. However, only in 1977 are complete records available. (See Table 27.) Building activity prior to 1977 will have to be estimated. (The Department of Commerce estimated that 1,302 housing units were constructed from 1970 to 1975, however, the source of their information indicated voluntary reporting of permit activity. No accurate records were kept during that period for any Clare County community.)

Estimations of potential 1980 housing supply were made from 1977 building permit statistics and through discussions with the Clare County Building and Health Departments.<sup>14</sup> Through discussions with the Clare County Building and Health Inspectors it was determined that 1977 was not a "typical" year for County development. It was ascertained that 1977 had a more rapid rate of mobile home development than the previous six years. Permits for housing construction and additions were also higher than they had been in prior years. Fewer cabins were constructed in 1977 as well as fewer improvements on existing second homes. Incorporating 1977 permit data and the observations of two well informed department heads, an average yearly rate of development for each type of building activity was determined. Each class of activity was then calculated as to the ratio of permanent to second homes. Table 28 summarizes 1980 supply projections.

#### Potential 1980 Standard Housing Supply

As indicated on Table 28, it is estimated that an additional 1,400 mobile homes will be moved into Clare County during the 1970 decade. It is approximated that 63 percent of the mobile homes moving into the County will be used as second homes, and a total of 518 additional permanent mobile homes will be added to the housing stock. It is also projected that approximately 70 cabins will be built per year or a total of 700 additional resort or second homes by 1980. Approximately 15 percent of these units, 105 units, are estimated to be used permanently. In 1977, 109 single family homes were constructed. This high figure is not indicative of the County's early development when seasonal home construction was still in its heyday. It is anticipated that an average of 125 permanent homes will be constructed yearly during the 1970's, or a total of 1,250 additional homes by 1980.

In 1977, more than one-half of all the building permits issued were for additions and improvements to existing structures. The Clare County Building Inspector estimates that 60 percent of all additions made in Clare County are intended to prepare a second home for permanent occupancy. The Building Inspector further estimates that 25 percent of all the improvements made in Clare County are intended to convert a second home for permanent use. It is estimated that

<sup>14</sup>Discussions held during Month of May, 1978.



TABLE 27  
BUILDING PERMIT STATISTICS<sup>a</sup>  
CLARE COUNTY 1977\*

| Unit              | Mobile<br>Homes | Addition | Cabin <sup>b</sup> | House | Improvement | Pole Barn<br>Garage | Total |
|-------------------|-----------------|----------|--------------------|-------|-------------|---------------------|-------|
| <u>Townships:</u> |                 |          |                    |       |             |                     |       |
| Arthur            | 2               | 1        | 1                  | 4     | 0           | 2                   | 20    |
| Franklin          | 6               | 9        | 6                  | 6     | 1           | 14                  | 42    |
| Freeman           | -               | -        | -                  | -     | -           | -                   | -     |
| Frost             | 15              | 17       | 5                  | 5     | 9           | 23                  | 74    |
| Garfield          | 19              | 20       | 3                  | 12    | 15          | 29                  | 98    |
| Grant             | -               | -        | -                  | -     | -           | -                   | -     |
| Greenwood         | 16              | 5        | 2                  | 6     | 3           | 14                  | 46    |
| Hamilton          | -               | -        | -                  | -     | -           | -                   | -     |
| Hatton            | 6               | 5        | 0                  | 5     | 5           | 12                  | 33    |
| Hayes             | 41              | 73       | 15                 | 22    | 35          | 60                  | 246   |
| Lincoln           | -               | -        | -                  | -     | -           | -                   | -     |
| Redding           | 9               | 11       | 2                  | 1     | 4           | 6                   | 33    |
| Sheridan          | 1               | 6        | 1                  | 10    | 4           | 10                  | 32    |
| Summerfield       | 6               | 8        | 4                  | 0     | 3           | 11                  | 32    |
| Surrey            | 11              | 29       | 4                  | 20    | 13          | 30                  | 107   |
| Winterfield       | 3               | 5        | 0                  | 4     | 0           | 4                   | 16    |
| <u>Cities:</u>    |                 |          |                    |       |             |                     |       |
| Clare             | -               | -        | -                  | -     | -           | -                   | -     |
| Harrison          | 0               | 27       | 0                  | 13    | 19          | 26                  | 85    |
| Farwell           | 1               | 2        | 0                  | 1     | 8           | 8                   | 20    |
| County Total      | 144             | 218      | 43                 | 109   | 114         | 249                 | 877   |

\*Clare County Building Department, March, 1978. Compiled by Township Planning Advisor.

<sup>a</sup>Freeman, Hamilton, Lincoln and Grant Townships and the City of Clare had their own building inspector during 1977.

<sup>b</sup>A cabin is considered to be a seasonal residence of approximately 720 or smaller.

<sup>c</sup>Improvements include porches, fireplaces, breezeways, roofs and similar alterations.



TABLE 28  
PROJECTED HOUSING SUPPLY  
PERMANENT AND SECOND HOMES  
CLARE COUNTY, MICHIGAN 1970-1980\*

| Type of Construction | Yearly Occurrence        |                             | Yearly Average | Seasonal or 2nd Homes |           | Permanent |        |
|----------------------|--------------------------|-----------------------------|----------------|-----------------------|-----------|-----------|--------|
|                      | Actual 1977 <sup>a</sup> | Estimated 1977 <sup>b</sup> |                | Percent               | Total No. | Percent   | Number |
| Mobile Homes         | 144                      | 184                         | 110            | 63%                   | 882       | 37%       | 518    |
| Cabins               | 43                       | 55                          | 70             | 85%                   | 595       | 15%       | 105    |
| Houses               | 109                      | 161                         | 125            | 6%                    | 6         | 100%      | 1250   |
| Additions            | 218                      | 316                         | 291            | N/A                   | N/A       | 60%       | 1746   |
| Improvements         | 114                      | 166                         | 169            | N/A                   | N/A       | 25%       | 422    |

\*Discussions with Clare County Building Department and Clare County Health Department, May 1978.

<sup>a</sup>Table 28

<sup>b</sup>Freeman, Hampton, Lincoln and Grant Townships and the City of Clare's building activity was estimated by the following methodology.

1. Freeman Township's building activity was assumed to be the average of the construction activity during 1977 in Summerfield, Winterfield and Redding Townships.
2. Hamilton and Lincoln Townships collectively compose 11 percent of the County's housing units. Thus, for all the types of building activity an additional 11 percent was added to account for Hamilton and Lincoln Township building activity.
3. The level of activity for the City of Clare was assumed to be the same as the level of activity for the City of Harrison.

<sup>c</sup>Due to the rising building costs occurring throughout the State and Nation none of the homes larger than 720 square feet are considered seasonal or second dwellings.

N/A - Not applicable. Additions or improvements to existing seasonal or second homes would not increase the number of available seasonal or second homes.



an additional 2,168 permanent standard quality homes will be made available through renovation of existing second or seasonal homes.

### Supply Summary

As indicated in Table 28, an estimated 4,041 housing units will be added to the County's housing stock by 1980. Including this figure with the 3,758 standard year-round units available in 1970,<sup>15</sup> the assumption can be made that 7,799 housing units will be available in 1980. If the projected population reaches 26,000, as is estimated, and if the projection of household size is correct (2.81 people per household), a total of 9,253 housing units will be needed. An additional 370 housing units, approximately four percent of the housing stock, should be added to the projected need to accommodate for mobility and vacancy. In comparing the supply and need calculations it is determined that Clare County will have a shortage of 1,824 standard housing units by 1980. Employing the 2.81 population per household estimate, 5,125, County residents, or nearly 21 percent of the County's 1980 population, will be housed in substandard housing. In the following section housing needs will be addressed to determine the special needs of elderly persons, low income persons and renters.

### Housing Needs Analysis

Different population groups have different needs. The needs of the elderly are not the same as the needs of low income families or renters, although they are sometimes very much related. An elderly retired couple does not require the same size house that a young family with children would require. Low income families may be composed of both renters and elderly people and are many times limited by their low income to have a wide range of housing choice.

### Elderly/Non-Elderly Household Needs

The Department of Health, Education and Welfare estimated the elderly population (60 years or older) for each county in the United States as of July 1, 1975.<sup>16</sup> This estimate indicated that 18.7 percent of Clare County's population was over 60 years old in 1975. Assuming that the ratio of elderly to non-elderly persons will remain the same, 4,762 people in Clare County will be over 60 years old in 1980. If all elderly households have two members, 2,382 homes will be needed for elderly residents. If the average household size is less than two, an even greater number of homes will be needed for elderly citizens.

### Low and Moderate Income Household Needs

The determination of what constitutes a low or moderate income household is estimated by the Community Development Act of 1974 to be 80 percent of the median household income for the moderate income household and 50 percent below the median income household for the low income household. In 1977, the "Survey of Buying Power"<sup>17</sup> was published in which the median household income for every county in the nation was tabulated. "Effective buying income" (EBI) excludes personal taxes and social security payments and, therefore, does not necessarily reflect

<sup>15</sup> East Central Michigan Planning and Development Region, Housing Inventory Analysis, 1975.

<sup>16</sup> Department of Health, Education and Welfare Publication (OHD) 77-20085, "Estimates of the 60+ and 65+ Population for Counties and PSA's: 1975, Michigan.

<sup>17</sup> "Survey of Buying Power," Sales and Marketing Management, July 25, 1977 pp. C-102-C-110.



"total" income. However, Clare County's EBI does reflect a general ability to purchase goods and is consequently used in this document as the base for calculating low and very low income levels for 1976 (Table 29).

TABLE 29  
HOUSEHOLD INCOME LEVELS  
CLARE COUNTY, MICHIGAN, 1976\*

| 1976 Median Effective Buying Income | Low Income Level | Very Low Income Level |
|-------------------------------------|------------------|-----------------------|
| \$9,292                             | \$7,434          | \$4,646               |

\*"Survey of Buying Power," Sales and Marketing Management, July 25, 1977 and East Central Michigan Planning and Development Region calculations.

TABLE 30  
ELDERLY AND NON-ELDERLY  
LOW INCOME HOUSEHOLDS  
CLARE COUNTY, MICHIGAN, 1976\*

| 1976 Clare County Households Below |             |                    |            |             |       |                 |             |       |
|------------------------------------|-------------|--------------------|------------|-------------|-------|-----------------|-------------|-------|
| Median Income                      |             |                    | Low Income |             |       | Very Low Income |             |       |
| Elderly                            | Non-Elderly | Total <sup>a</sup> | Elderly    | Non-Elderly | Total | Elderly         | Non-Elderly | Total |
| 4,181                              | 6,492       | 41%                | 3,881      | 4,041       | 30.5% | 3,114           | 2,171       | 20.3% |

\*"Survey of Buying Power," Median Household Income Data, 1976; Department of Housing and Urban Development, Percentage Distribution of Households, 1974; and Township Planning Advisor's calculations.

<sup>a</sup> As a percent of total County population.

In 1974, the Department of Housing and Urban Development produced statistics as to the percentage distributions of households at various income levels for elderly and non-elderly populations. This statistical breakdown for Clare County is shown in Table 30.

Nearly 88 percent of Clare County's elderly population earned less than the 1976 median effective buying income of \$9,292. A general rule of thumb is that a person can afford approximately twice their yearly income for housing. Table 30 indicates that the 1980 housing market in Clare County will most likely be for homes valued at less than \$20,000. Clare County's large group of very low income residents will probably require financial assistance to be able to enjoy a suitable living environment. Many of these low income people could also be forced to live in rental housing.

Considering the fact that housing costs are escalating out of the reach of many low or moderate income families, an increasing demand could occur for rental homes. In 1970, 12.9 percent of the standard available homes in Clare County were rented. If the same ratio holds true in 1980, 3,354 County residents will be potential renters. Assuming an average household size of 2.81



persons for rental homes, 1,194 rental units will be needed in Clare County in 1980.

### Housing Environment

Housing quality deteriorates for many reasons. Poor original construction and lack of proper maintenance are two major reasons. However, much more is involved than just poor maintenance and construction. Deteriorating housing is a much broader problem. The environment in which housing is located is vital to its existence. Several factors will be examined which affect the housing environment.

### Incompatible Land Uses

Incompatible land uses are uses of land which tend to adversely affect one another. Concentrations of deteriorating homes appear in those areas where the lack of, or the improper administration of zoning creates conflicting land usage. The National Commission of Urban Problems made the following statement concerning the link between poor housing and conflicting land usage: "A common characteristic of a deteriorating area is a mixture of land uses not conducive to a neighborhood of homes."<sup>18</sup> Land use in close proximity to residential areas has a major impact in determining the desirability of these areas for living.

A heavy industrial area generally presents a poor environment for housing. However, it is conceivable that a light industrial plant using few raw materials and generating limited traffic could exist quite well near a residential area. Most commercial uses generally tend to adversely affect the residential environment. Notable exceptions to this may be found. The only real answer is that each individual case must be carefully examined so as to determine its functional needs. The objective must be to obtain a mix of uses which exist compatibly with each other; not to be totally segregated uses. Such total segregation can only lead to a sterilized community with living, working and shopping areas linked only by automobile. The answer must be reached carefully with the specific goal of grouping uses according to their needs and functional characteristics with each case given individual consideration.

### Inadequate Neighborhoods

It is difficult to determine what makes a neighborhood inadequate. Certain answers to the problem may be due to the absence or presence of needed neighborhood facilities. The availability of schools, parks, etc., has much influence in determining the desirability of neighborhoods as living areas; however, the exact forces which determine a neighborhood's quality are not always related to the availability of facilities.

### Poor Subdivision Developments

"While poor construction is in large measure responsible for new slums, poor land use regulations, and particularly poor subdivision design standards and review have played a large part in speeding deterioration of new housing developments."<sup>19</sup> Many of the problems of poor subdivisions are at least bound to the fact that virtually no regulations or controls were in effect when the growth

<sup>18</sup> Report on the National Committee on Urban Problems to the Congress and the President, "Building the American City," Washington, D.C., 1968, page 6.

<sup>19</sup> The American Society of Planning Officials, "Problems of Zoning and Land Use Regulation," Washington, D.C., 1968, page 18.



occurred. Recently adopted zoning ordinances for many of the County's communities provides standards for orderly residential growth.<sup>20</sup> Also, the County Building Code adopted in 1975, as administered by Bill Randle, helps ensure quality construction of new units. (See Appendix for sample building permit.)

Subdivision regulations should be employed only to designate the broad framework development should follow, not to dictate specific details of design. Regulation must seek to provide minimum design criteria with enough flexibility to allow good developers to provide sufficient facilities to ensure the future stability of their developments.

#### Problems Associated With Land Speculations

"The transfer of land for profit has been necessary to the functioning of the American economic system, and is generally defended on the ground that it helps to ensure that land is being put to its most economically productive use."<sup>21</sup> Today, however, land speculation is generally considered a primary cause of many land use problems. In this regard, the National Commission on Urban Problems found: "The ever rising cost of land has unquestionably been a factor in increasing the cost of housing, and it, therefore, decreased the supply of low and moderate cost accommodations."<sup>22</sup>

Constant pressure is exerted by land speculators for measures to rapidly increase the value of their holdings. Measures which bring about this rapid increase are often in the hands of Township officials. Placement of schools, water and sewer lines, streets, highways, and public services of all kinds affect the value of land. Pressure is frequently exerted on Township officials by speculators to place public facilities at locations which will bring the most direct benefits to their holdings. The net effect of this process is an illogical and uncoordinated growth pattern.

#### Statement of Problems

Rising building cost is a prohibitive factor when planning new construction. Because of the high cost of labor and materials, builders make a low profit margin on low priced housing. Therefore, many builders prefer to limit their construction to houses that exceed \$20,000. As a result, high building costs are particularly responsible for creating a lack of low and moderate priced housing.

There are numerous families in Clare County that cannot afford to rent or buy suitable housing. The problem could be partially remedied if better job opportunities were made available at both the Township and County level.

There is an acute shortage of rental housing in Clare County. As a result of current high building cost and the demand for low priced housing (i.e., less than \$20,000) rental housing demand has taken a sharp increase during the recent years. Since there is a shortage in this

<sup>20</sup> Zoned communities in Clare County as of June 1978 are Surrey, Sheridan, Arthur, Hatton, Lincoln, Freeman, Hayes, Hamilton, and Frost Townships. The Townships of Winterfield, Summerfield and Franklin have ordinances very close to adoption. Both the Cities of Harrison and Clare have adopted zoning ordinances.

<sup>21</sup> American Society of Planning Officials, op.cit, page 66.

<sup>22</sup> American Society of Planning Officials, op.cit, page 68.



type of housing, any families attempt to remedy this problem by purchasing mobile homes. During the past decade, the number of mobile homes in Clare County increased from 122 in 1960 to 491 in 1970, and to an estimated 1,000 permanent year-round mobile homes in June 1978. The lack of suitable mobile home parks, creates a problem in itself. As a result, trailers are scattered throughout the County many being improperly installed and lacking adequate sanitation facilities.

The increasing trend to convert seasonal homes to permanent residences could create a detrimental effect on the living environment in Clare County. Many older residents who owned a resort home in Clare County are retiring permanently in their seasonal homes, many of which are located on very small lots. If this trend continues, sewage and other public service problems could drastically increase, especially surrounding the heavily developed lake areas.

Another problem created by seasonal home conversion to year-round residences is that many people find that the old cottage is just too small to adequately meet their permanent living needs. Because of this, many people are building their own additions, many times overlooking building code requirements. Part of the problem could be that Clare County adopted the State BOCA Building Code in the latter part of 1974. Up until that time, there were no building specifications for a homeowner to go by. It is assumed and hoped that as time goes by more people will be aware of, and adhere to, the County administered Building Code.

Limited financial resources of the County which results in the basic inability to afford adequate expertise in the areas of planning, revenue, code enforcement, etc., is a major and serious obstacle to the complete solution of the local housing problem. This situation necessitates coordinated efforts and requests for State, Federal and related aid. These financial inadequacies are particularly critical in the area of sewer construction and financing and providing adequate staff and administrative budgets for potential code enforcement programs.

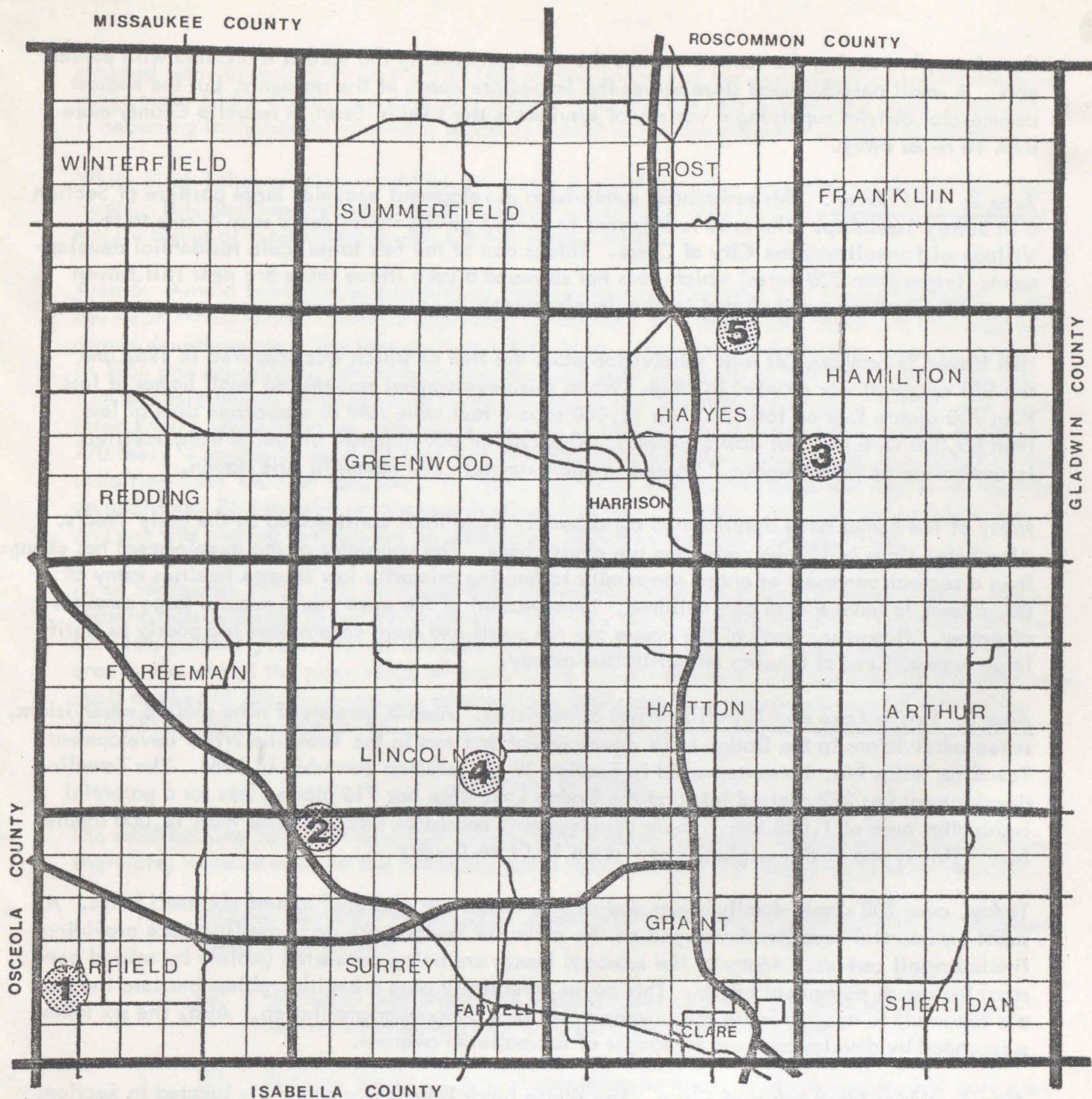
In general, there is a lack of understanding concerning the intent of such reasonable land use controls as zoning and subdivision regulations. This misunderstanding could create an opposition to regulatory control.

#### Windshield Survey Analysis

There are many residential subdivision developments in Clare County which exemplify the housing problems previously mentioned. Early in 1978, the Planning Advisor completed windshield surveys of five residential areas representing a variety of problems common to many Clare County neighborhoods. See Map 8.

Area 1: Eight Point Lake. This Garfield Township development surrounds the largest lake in Clare County. The Eight Point Lake area is one of the most expensive property areas in the County. All roads immediately servicing the lake are gravel. The majority of the homes are on the lake side of the road. Many of the established seasonal residents, or new permanent residents, are forced to build their garage or storage sheds across the street from their home due to the very small lake lots. The majority of the homes are in good condition; however, because of the high ratio of seasonal residents, many of the homes are in need of minor repair. Small lot sizes and an increasing tendency toward grass covered front lawns requiring fertilization has helped speed the growth of algae. Eight Point Lake has a Lake Association and every few years the Association hires a firm to cultivate the seaweed. A majority of the homes are vacated during





# HOUSING STUDY AREA LOCATIONS



housing study area



JUNE, 1978

8

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN



the winter; but during the summer months the road surrounding the lake is inundated with parked cars. A small neighborhood store serves the immediate needs of the residents, but the nearest commercial district supplying a variety of services is the City of Evart in Isabella County more than 10 miles away.

Area 2: Hill Haven. This residential subdivision development occupies large portions of Section 6 in Surrey Township. The area is adjacent to M-115 giving its residents easy access to the Village of Farwell and the City of Clare. This is one of the few large scale residential developments (larger than 320 acres) which does not surround a lake (three lakes are near Hill Haven Subdivision but are not included in the development).

Hill Haven is composed of nine subdivision plats the first of which was approved in 1962 and the last approval was granted in 1974. When this development was started small homes of less than 700 square feet on lots less than 12,000 square feet were sold at a package deal of less than \$5,000 with minimal downpayments. This type of development attracted many resorters to capitalize on the "bargain." There are approximately 260 homes in Hill Haven.

Many of the homes have deteriorated considerably since their construction in the early 1960's. "For Sale" signs and broken windows are everywhere. The character of the development has changed, from a recreation-resort oriented community to housing primarily low income families many of whom seem to have school age children. Improvement of the area would require large amounts of money. However, many of the homes are too small and were constructed too poorly to justify large expenditures of housing rehabilitation money.

Area 3: Dodge Lake and Townline Wilds Subdivision. Area 3 consists of nine platted subdivisions, seven subdivisions in the Dodge Lake development and two in the Townline Wilds development. Townline Wilds No. 1 was approved in Section 19 of Hamilton Township in 1954. The Townline development has 322 platted lots and the Dodge Lake area has 716 platted lots for a potential residential area of 1,038 lots. These developments consist of lots much less than 12,000 square feet. This is one of the original resort areas in Clare County.

Today, over 700 single-family homes and mobile homes are clustered around six small lakes. A small commercial area has developed on the corner of Dodge Lake and Townline Lake providing limited retail services. Many of the seasonal homes are being converted (mainly by retired persons) for use as permanent homes. This could potentially pose a health problem because the lots are too small to accommodate the sewage needs of a permanent population. Also, the six lakes surrounded by development are in danger of recreational overuse.

Area 4: White Birch Lakes of Clare. The White Birch Lakes development is located in Sections 26, 27, 35 and part of 34 in Lincoln Township. This is the most recent large-scale subdivision development in Clare County. This development consists of six subdivision plats, the first of which was approved in 1970 and the last being approved in 1972. The development provides a total of 1,356 one and two acre lots. The roads traversing this development have 66 foot easements, a community center and a posted security guard at the development's entrance.

White Birch Lakes of Clare appears to have been geared toward developing a more affluent residential area in the County. However, in 1974, the project experienced financial difficulties and went into receivership and at present its future is in question. Of the 1,356 lots only about 90 have been developed with residential structures. Of the homes that were con-



structed many appear to be in the \$30,000 or over range and are consequently beyond the price range many Clare County residents can afford. This and the fact that second home ownership is becoming increasingly expensive probably added to the development's financial problems.

White Birch Lakes of Clare could have become a model for other potential residential developments. This development has a set of stringent subdivision regulations to ensure that scattered mobile homes or substandard houses are not constructed.

Area 5: Arnold Lake (Hayes Township). Arnold Lake is in Section 2 of Hayes Township. This development represents a unique approach; on the west side of the lake there are four separately owned developments. The first of these subdivisions, Jay Woods Subdivision, was approved in 1956 and contains 42 lots with an average lake front lot depth of 240 feet. This large lot size was rare among resort areas in Clare County in the last 1950's and early 1960's. Six years later Koch's Subdivision was platted to include 21 lots with an average lakefront lot depth of 270 feet. Keeping in mind the fact that Hill Haven Subdivision (Area 2) was developed at the same time with 150 feet long lots. In 1967, Jay Mar Subdivision No. 2 was approved, platting an additional 26 lots with an average depth of 200 feet. Finally, in 1970 Hughes South Subdivision was platted to allow for an additional 13 lots in the area's development.

As of September 1977, only 34 homes were developed on the west side of Arnold Lake. There were no mobile homes in the development, and very few homes are for sale. The homes on the lake lots generally start around \$40,000 and up depending upon the lot and residence. This area is also out of the price range of many Clare County residents, but considering the relatively small number of lots involved, the area will probably not face the same financial difficulties White Birch Lakes experienced.

#### Statement of Goals

The main housing objective of Clare County is to provide adequate housing for all its citizenry. Therefore, consideration of the following goals must be met if the objective is to be realized.

1. Enforce and adopt reasonable controls that will serve to guide private development along orderly lines.
  - (a) Uniformly administer and enforce local zoning ordinances so that new residential construction will conform to adjacent land uses.
  - (b) Analyze the possibility of preparing subdivision regulations so that land subdivision will meet minimum health and safety lot standards to accommodate new home construction.
  - (c) Continued enforcement of building codes so that future construction will meet minimum safety standards.
2. Provide adequate information concerning the availability of housing to all income levels.
3. Work with local groups which are seeking information and assistance on housing programs.



4. Update existing local housing studies and information on housing conditions on a yearly basis.
5. Provide technical assistance to local builders and contractors on site identification and financing.
6. Encourage builders to construct more and better quality low and moderate income housing.
7. Participate in planning programs at the regional level which would help the County and its townships in qualifying for assistance programs.
8. Analyze the feasibility of preparing a Waste Water and Sewage Collection Facility Plan.
9. Employ local tax credits to achieve housing code compliance.
10. Utilize Federal and State housing subsidies.
11. Provide input and work with the Clare County Housing Commission.
12. The Regional Comprehensive Plan should be revised as necessary and implemented.

#### Housing Assistance Programs

There is presently existing in Clare County a housing assistance program sponsored by the Clare County Housing Commission. Through their program (approximately \$380,000 for fiscal year 1977-1978) existing housing, substantial rehabilitation and new construction may be partially or wholly financed. Elderly housing and direct loans for residential rehabilitation, and direct and insured loans for elderly and low to moderate income housing are presently available.

Mr. Ron Jessup, the Clare County Housing Director, should be contacted at his office in the Clare County Courthouse, phone number 539-2761 for specific program guidelines and policies.



## TRANSPORTATION

## TRANSPORTATION



## EXISTING CIRCULATION AND TRANSPORTATION CHARACTERISTICS

### Introduction

Transportation facilities play an important role in the growth of any area. Without proper access within the community and to surrounding areas, residential, commercial and industrial development may never occur. By the same token, improved transportation routes in adjacent areas could have a negative effect on a community's economic base if the community too did not evidence transportation improvements.

Competition is an economic fact of life in governments. Historically, competition has always occurred between nations, states, counties, and even local municipalities. Competition has also occurred between modes of transportation and those who are responsible for those modes.

From the very exploratory beginnings of this hemisphere in the 16th Century, settlements have competed with each other for the largest share of commerce. As the towns and villages grew along the water tributaries in this nation, as well as around the Great Lakes, they competed with each other. As the nation grew, a faster mode of transportation than water was needed to carry both passengers and goods. Thus, the railroad, with the aid of Federal subsidies, became the prime mode of transportation. Towns and villages sprouted and grew wherever train stations were located.

In the early 20th Century, the invention of the automobile again changed the transportation habits of the United States and indeed the entire world. With the advent of the automobile, new roads and highways had to be constructed to transport volumes of people to areas not settled before. These areas, located away from the water tributaries and the railroad lines, were then settled. The highways were used to transport goods to markets away from the water and rail hubs of commerce, thereby lessening their importance.

It was found by businessmen that it was cheaper and faster for a truck driver to deliver goods to the doorstep rather than wait for a train to unload and then find another mode of transportation to deliver goods the remainder of the distance to the place of business. In the future, air transportation is expected to become an important carrier of both freight and people. However, today it is the automobile and the truck which carry the bulk of people and goods to their destinations, and therefore the road system, on which these modes of transportation depend, is the foundation upon which economic growth is governed.

### Regional Setting

Clare County boundaries are located approximately 170 miles north of downtown Detroit, 15 miles north of Mount Pleasant and 30 miles northwest of the Tri-Cities (Midland, Bay City, Saginaw). One State Highway (M-61) and two U. S. Freeways (U. S. 27 and U. S. 10) directly link Clare County to Detroit, Flint, Lansing and other major urban areas in the State. These routes will remain an important part of the transportation system connecting Clare County with neighboring communities even though other thoroughfares and freeways may eventually be built through the County.



## Road Inventory

Not all roads provide the same function for carrying traffic. Motorists with their destination or origin outside of the County will generally travel on regional thoroughfares. These highways are generally indicated as State routes and are engineered for fast-moving traffic between major population centers. Roads which are designed to provide links between major land uses relating to employment, shopping and residential uses within the County are considered as County Primary roads. These roads which provide access to abutting property are considered local roads. An inventory of these three types of roads and their condition in Clare County is included in Tables 31 and 32.

### Regional Thoroughfares

Regional thoroughfares, as found in Clare County (see Map 9), are M-61, U. S. 10 and U. S. 27.

There were over 80 miles of State trunkline in Clare County. Table 31 shows the number of trunkline miles in each of the three incorporated communities and the total street mileage of the communities. It is interesting to note that the communities all possess urban trunkline mileage.

TABLE 31  
STREET MILEAGE WITHIN INCORPORATED COMMUNITIES  
CLARE COUNTY, MICHIGAN\*

| Incorporated Community | Urban Trunkline | Major | Local | Total |
|------------------------|-----------------|-------|-------|-------|
| Clare                  | 3.11            | 3.68  | 16.62 | 23.41 |
| Harrison               | 3.47            | 4.22  | 13.96 | 21.15 |
| Farwell                | 1.25            | 2.63  | 4.64  | 8.52  |
| Total (Miles)          | 7.83            | 10.53 | 35.22 | 53.58 |

\*State of Michigan, Department of State Highways and Transportation, Twenty-Fourth Annual Progress Report, Report No. P 62, (Lansing, Michigan, 1975), pp. 66-87.

Michigan Highway 61 (M-61) connects the Cities of Gladwin and Marion and traverses the entire width of Clare County, cutting directly through the center of the City of Harrison.

Michigan Highway 115 (M-115) begins on the west side of the City of Clare near the U. S. 27 Freeway. It travels north from this location through Farwell north through Cadillac and on to Frankfort, Michigan.

U. S. 10 links Clare County to Midland and I-75. I-75 goes through Detroit and all the way to the State of Florida. To the north, U. S. 10 links Clare County to Ludington. The Old U. S. 10 is now a County Primary road and links the Village of Farwell with the City of Clare.

U. S. 27 is a major limited access thoroughfare that traverses the center of Michigan from Mackinaw City through Lansing to Indiana.



Since the function of the regional thoroughfare is to provide a means of moving goods and people in a relatively quick fashion and at the same time being accessible to most of the residents in the County, it is apparent that these regional thoroughfares are spaced in a manner that does in fact make them readily accessible to people in Clare County and linking the County with urban concentrations in lower Michigan.

#### County Primary Roads

The designation of a Primary road is made by using two criteria. The first is location (e.g., they serve as connecting links between major thoroughfares as well as other communities). A second criteria relates to the amount of traffic volume carried by the road. The transportation network of any county would be adversely affected were it without an adequate Primary road system. Map 9 indicates the location of County Primary roads in Clare County.

The County Primary road system is established by the Clare County Road Commission after approval by the Michigan Department of State Highways and Transportation. By designating a road as part of the County Primary road system, the County can obtain Federal and State highway funds to help maintain said road.

Taking an overall view of the County Primary road system in Clare County, the major problem is the lack of adequate improved Primary roads within the County and also a lack of continuity in the road network itself. The location and condition of the Primary road system in Clare County overall is better in the southern and central sections of the County.

North of the M-61 Highway, the County Primary road system is more random in spacing. There are numerous jogs, even in major roads, as well as combinations of different road surfaces, including gravel. The road system appears to have developed without any real thought or design. In other words, the road system simply happened. For example, Old State Road is a County Primary road which may be utilized as a north-south access to M-61 Highway. Most of Old State road north of M-61 is gravel and is in poor condition during the Spring wet season.

#### County Local Roads

Under the Michigan Highway Law (Act 51 of 1951, as amended) all roads under County jurisdiction other than Primary roads are considered County Local roads. The County Local roads are perhaps a more vital link in the transportation network than might be imagined. Obviously, if the local roads of a county are in such poor condition as to impede good accessibility to the Primary roads, then the Primary roads, and indeed the regional thoroughfares themselves, are rendered of reduced value to the person wishing to gain access to them.

Local roads comprise the largest portion of the total road mileage in the County. There are over 760 miles of Local roads in Clare County. Just over 27 miles of the Local roads are paved while about 647 miles are gravel and nearly 92 miles are sand trails. (See Table 32.) For the most part, the Local roads form a grid system with Section Line and Quarter Section Line roads comprising the bulk of the local road system.



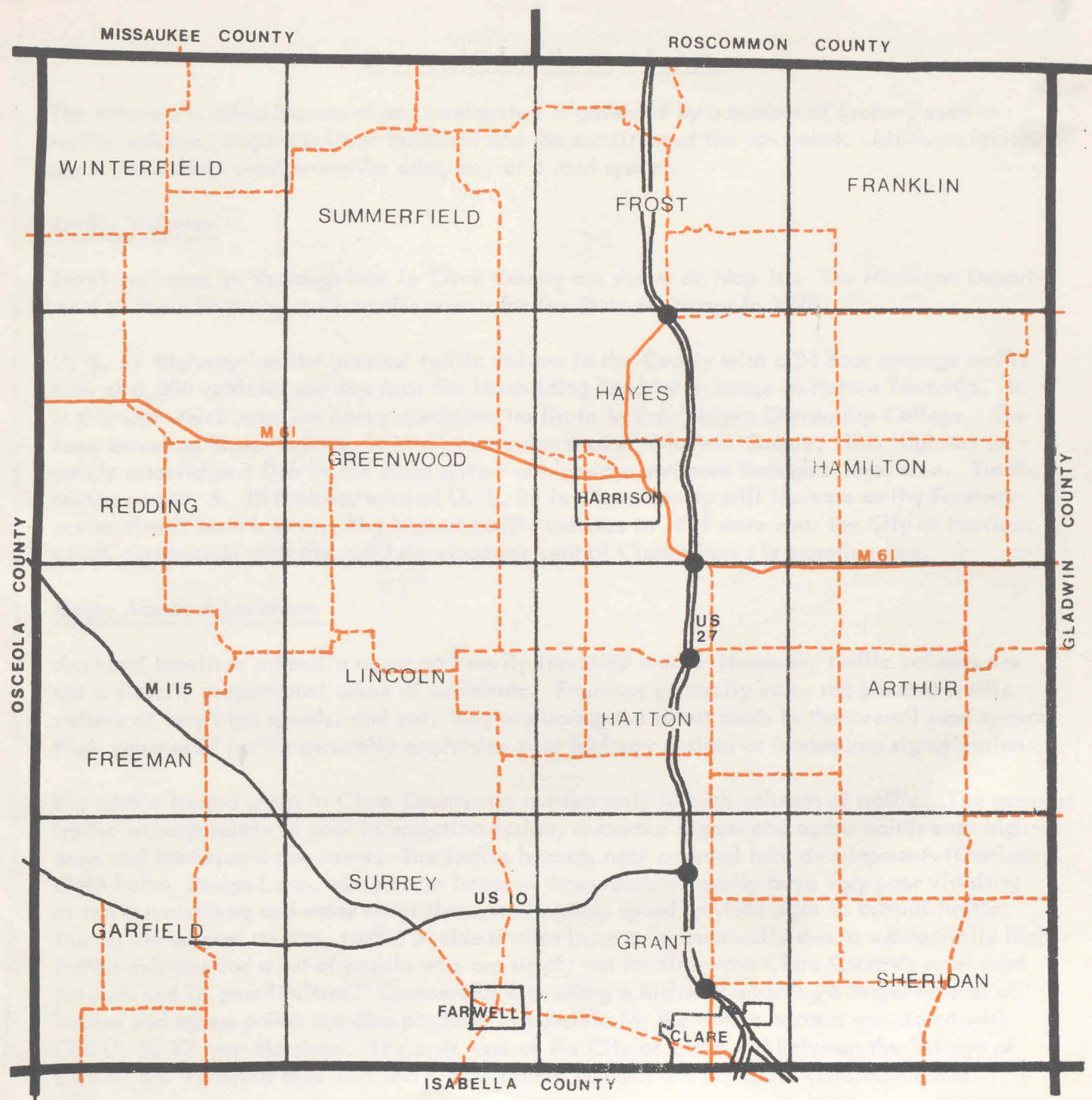
TABLE 32  
INVENTORY OF ROADS AND SURFACE TYPES  
CLARE COUNTY 1976\*

| Category               | Paved  |                  | Gravel |                  | Sand Trails |                  | Total   |                  |
|------------------------|--------|------------------|--------|------------------|-------------|------------------|---------|------------------|
|                        | Miles  | Percent of Total | Miles  | Percent of Total | Miles       | Percent of Total | Miles   | Percent of Total |
| Trunkline <sup>a</sup> | 81.96  | 100.0            | 0.00   | 0.00             | 0.00        | 0.00             | 81.96   | 7.6              |
| County Primary Roads   | 140.61 | 59.4             | 96.16  | 40.60            | 0.00        | 0.00             | 236.77  | 21.8             |
| County Local Roads     | 27.13  | 3.5              | 647.16 | 84.5             | 91.96       | 12.00            | 766.25  | 70.6             |
| Total                  | 249.70 | 23.0             | 743.32 | 68.5             | 91.96       | 8.5              | 1084.98 | 100.0            |

\*Clare County Road Commission, Road Systems Tabulation, April 16, 1976.

<sup>a</sup>Michigan Department of State Highways and Transportation, Twenty-Fourth Annual Report, Report No. 162 (Lansing, Michigan, 1975), pp. 36-37.





#### ROAD CLASSIFICATIONS

- Principal Arterials
- - - Rural Collectors
- Rural Arterials
- Interchange Areas



JUNE, 1978

9

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN



## Characteristics of the Road System

The nature and effectiveness of any road system is governed by a number of factors, such as traffic volumes, major accident locations and the condition of the pavement. All these factors are related when considering the adequacy of a road system.

### Traffic Volumes

Traffic volumes for thoroughfares in Clare County are shown on Map 10. The Michigan Department of State Highways took traffic counts for the State Highways in 1974.

U. S. 27 Highway has the greatest traffic volume in the County with a 24 hour average traffic flow of 8,300 vehicles per day near the Mannsiding Road interchange in Hatton Township. It is this exit which receives heavy commuter traffic to Mid-Michigan Community College. The least travelled State Highway is M-61 four miles west of Gladwin County. This Highway primarily establishes a link in the State system of highways and goes through a rural area. Traffic on the new U. S. 10 Freeway west of U. S. 24 in Clare County will increase as the Freeway connection is more known. The highest traffic volumes in 1974 were near the City of Harrison which corresponds with the rapid development central Clare County is experiencing.

### Major Accident Locations

Accident locations primarily occur on heavily travelled roads. However, traffic volumes are not a directly proportional cause of accidents. Freeways generally carry the greatest traffic volume at very high speeds, and yet, they are among the safest roads in the overall road system. High volumes of traffic generally emphasize poor highway designs or inadequate signalization.

The traffic hazard areas in Clare County are not due only to high volumes of traffic. The greatest traffic hazards relate to poor intersection design, numerous ingress and egress points onto highways and inadequate pavement. The traffic hazards near crowded lake developments (Cranberry, Eight Point, Dodge Lake, etc.) occur because these roads generally have very poor visibility at the intersections and many times there are no stop, speed or yield signs to control traffic. During the summer months, traffic accident rates increase dramatically due to substantially higher traffic volumes and a lot of people who are simply not familiar with Clare County's rural road network and its peculiarities. Commercial uses along a highway allowing a larger number of ingress and egress points are also partially responsible for the traffic hazards associated with Old U. S. 27 near Harrison. The area west of the City of Clare and between the Village of Farwell has numerous curb cuts and higher traffic volumes and numerous commercial uses.

As traffic volumes increase on County roads, the inadequacies of the road system will become more evident. Some of the common problems associated with the highway system in Clare County are:







facilities, or services available.

In terms of passenger jet travel, a resident of Clare County would optimumly use the Tri-City Airport located approximately 10 miles from Saginaw. The next nearest air carrier facilities are located in Alpena to the north, Traverse City to the northwest, Grand Rapids to the southwest, Lansing, and Detroit to the south.

Tri-City is served by two certificated airlines -- North Central and United -- and by one commuter carrier -- Air Metro. Table 33 provides a list of aircraft which are utilized and their passenger capacities. Table 34 lists all destinations by single-plane service from Tri-City.

TABLE 33  
COMMERCIAL AIRCRAFT SERVING  
TRI-CITY AIRPORT, MAY 1976\*

| Airline       | Equipment       | Typical Passenger Capacity |
|---------------|-----------------|----------------------------|
| North Central | Douglas DC-9-30 | 100                        |
| North Central | Convair 580     | 50                         |
| United        | Boeing 727-100  | 96                         |
| United        | Boeing 727-200  | 124                        |
| United        | Boeing 737-200  | 91                         |
| Air Metro     | Beech 99        | 18                         |

\*U. S. Civil Aeronautics Board.

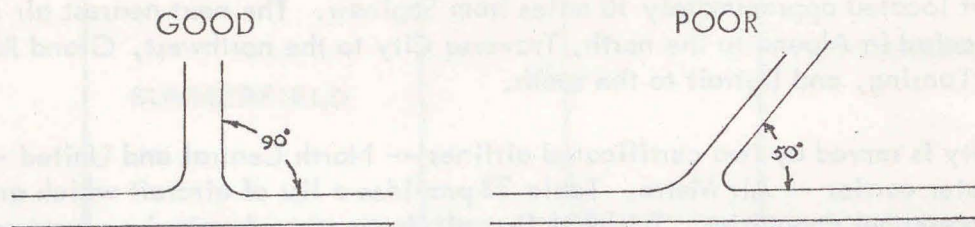
TABLE 34  
SINGLE-PLANE AIRLINE SERVICE  
FROM TRI-CITY AIRPORT, MAY 1976\*

| <u>Non-Stop</u> | <u>One-Stop</u> | <u>Two-Stop</u> | <u>Three-Stop</u> |
|-----------------|-----------------|-----------------|-------------------|
| Alpena          | Denver          | Kalamazoo       | South Bend        |
| Chicago         | Marquette       | New Orleans     |                   |
| Cleveland       | Minneapolis     | Reno            |                   |
| Detroit City    | Pittsburgh      |                 |                   |
| Detroit Metro   | Tampa           |                 |                   |
| Flint           | Toronto         |                 |                   |
| Grand Rapids    |                 |                 |                   |
| New York City   |                 |                 |                   |
| Traverse City   |                 |                 |                   |

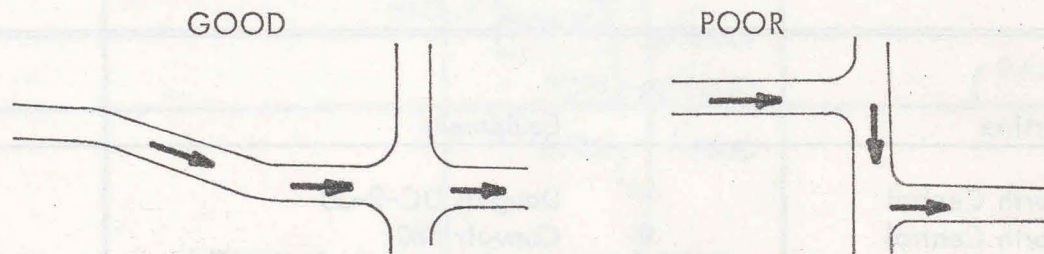
\*Air Metro Airlines, North Central Airlines, United Airlines.



1. Roads which intersect at less than a 60 degree angle can be considered as possible hazard areas. Turning movements at such an intersection are very difficult to judge and poor judgement by motorists will create a traffic hazard.



2. Interruptions in traffic flow due to staggered intersections of major roads will create problems when traffic volumes increase along these roads. Off-set roads of less than 150 feet are a problem to traffic flow. Traffic must make several turning movements which conflict with traffic moving on the through road. This may delay motorists from making turns, thus stacking up traffic and creating congestion.



3. Traffic signalization at highway intersections and intersections with railroads should be constantly checked to ensure its adequacy in handling increased traffic volumes.
4. Stripp commercial, industrial and residential development along major roads should be carefully controlled to ensure proper ingress and egress onto major roads.

### Airport Facilities

#### Clare Municipal

There are three airport facilities in Clare County. All three are under private ownership. The Clare Municipal airport is located one mile northeast of the City of Clare. It has one lighted bituminous runway and two unlighted turf runways which are mowed. Snow is removed from the paved runway during the winter. The airport is attended during the day and has a beacon but no radio facilities. Services include gasoline, major airframe and power plant repairs, rental car agency, and taxi service.

#### Harrison

This airport is located 2.3 miles NNW of Harrison and is closed from November 1 to April 1. It has three turf runways maintained by mowing. The airport is attended during the day but has no beacon, lights, or radio facilities. Services include gasoline and taxi service.

#### Scott Airstrip

This airport is located one mile west of Lake Station and has one turf runway which is unlighted and maintained by mowing. The airport is attended intermittently and has no beacon, radio



### Rail Facilities

There are two rail facilities now serving Clare County, the Ann Arbor Railroad, and the Chesapeake and Ohio Railroad (Chessie System).

The Ann Arbor Railroad extends from Toledo, Ohio to Frankfort, Michigan passing through Clare County. The Ann Arbor Railroad experienced financial problems resulting in their bankruptcy and in 1977 was subsidized by the State of Michigan to become a part of the Michigan Interstate Railroad Company. The end point, a car ferry in Frankfort, has been experiencing more business in recent years than past trends would have indicated. This could be a good sign for the "old" Ann Arbor Railroad and Clare County.

The Chessie System operates one of the most extensive railroad systems in Michigan. The line that cuts through the City of Clare also goes through the Cities of Midland and Saginaw and stops at Ludington. The Chessie System has recently petitioned the Interstate Commerce Commission to stop service at the car ferry in Ludington. The effect on Clare County of such approval is not as yet known.

### Trucking Facilities

The trucking industry is an important sector of transportation and greatly affects the economic status of Clare County. A general complaint in the County is that the truck lines do not adequately serve the County. A detailed investigation should be undertaken to arrest this situation.

### Public Transportation

Public transportation in Clare County is limited to bus and taxi services. There is no railway passenger service. Public transportation in the County is limited to those types which can utilize streets and highways. These carriers can be divided into two types: intercity buslines and taxi and limosine services.

Both the North Star and Greyhound lines serve Clare County both using the major thoroughfares as their routes, thereby, providing access to the more densely populated areas of the State.

Clare County does not have a fixed route or demand response transportation system other than one privately owned cab system. County officials should recognize the importance of public transportation especially considering the rapid population growth of elderly and retired citizens within the County. Roscommon and Gladwin Counties already have demand responsive public transportation.

### Conclusion

A good transportation system is essential to the economic growth and well-being of any region. An effective system includes varieties of transportation including highways, railroads and airports. A balanced network of transportation enables people and goods to move within and through a region quickly and efficiently. In today's world, the mobility that transportation permits is vital to the shopper, worker, industrialist, store owner, farmer and visitor.



The present transportation system in the County was developed over many years. For the most part, this transportation system primarily served rural areas, where demands were small. Summarizing Clare County's existing circulation and transportation system, several conclusions can be reached:

1. Clare County has an existing system of County Primary roads that, by and large, do not reflect an ease of travel for the motorist. It is characterized by continual stops and turns, with intermittent stretches of pavement.
2. With the advent of large-scale development, the existing road network will not adequately carry the volume of traffic that will be required of it.
3. Traffic hazard areas exist at locations where heavily populated lake areas have been allowed to develop with little or no consideration as to how to handle the traffic they will generate.
4. There are two rail facilities in Clare County providing inadequate service.
5. Clare County has three private airport facilities. Public air transit is found outside the County.

Recognizing that the present system of transportation within the County must be improved to adequately meet future needs, how is a future transportation system to be developed? It is obvious from existing development patterns that major transportation facilities providing the greatest mobility to markets attract urban uses. Thus, at the intersections of U. S. 27 Highway with M-61 and U. S. 10 Highways, the two largest urban centers in Clare County are located. Along these three highways, especially at intersections, strip urban development is concentrating. Improvements to the transportation system in the future are likely to affect development in a similar manner.

Because transportation is so important to the growth pattern of development, a piecemeal approach is undesirable. As Clare County faces the 1980's and 1990's, major development decisions must be made. Where should development occur? How much development is desirable? How soon should it occur? The Land Use Plan addresses itself to these very decisions. Through the Land Use Plan, decisions of where development should occur and the intensity and type of development are presented. This provides an overall scheme of development for Clare County.



## **PUBLIC UTILITIES, FACILITIES & SERVICES**



## PUBLIC UTILITIES, FACILITIES AND SERVICES

### Introduction

Clare County is undergoing an accelerating population growth. As more people move into the County, more services will have to be extended. Community facilities are directly related to the increase in population. This makes it essential that the Clare County officials thoroughly study the existing community facilities of the County and have an understanding of future needs. In this way, rational decisions can be made on the location and size of such facilities. Budgeting needs can be anticipated and the level of services in Clare County can be maintained. Without such a study, it is all too easy to underestimate needed facilities and be unprepared when it becomes necessary to provide them.

### Recreational Facilities

More and more people are seeking recreational opportunities. All levels of government have some responsibility for providing recreation areas for people. The local communities concentrate on smaller parks and recreation facilities for the enjoyment of their constituents. Activities are related to active play areas or passive recreation pursuits such as picnicking. Counties generally provide large regional recreation areas where multiple recreation pursuits for the entire family can be provided. Usually, special facilities for hiking, swimming, snowmobiling, horseback riding or similar activities are provided. Thus, the County augments local recreation programs by providing large areas for specialized facilities.

Basically, regional kinds of facilities serve larger geographic regions such as county or multi-county areas. The uses associated with them span the full range of recreational facilities, including all the facilities mentioned in the formerly noted areas plus hunting, fishing, and conservation of natural resources. Regional parks are intended to serve as a vehicle for bringing about a more desirable configuration of the urban environment. Regional facilities and parks may be State, Federal, regional authority, county or multi-county development.

### Recreation Standards

How much land is needed for recreational use? It should be obvious that any attempt to resolve the problem posed must go beyond the concept of mere physical space available. Recreation in its most comprehensive sense includes visual and physical settings; it includes land, buildings and various types of recreational apparatus, equipment and facilities. Recreation, moreover, is aesthetic as well as physical. It can be man-made or it can be natural. It can be used by man or left as nature's storehouse to achieve a balanced eco-system.

A basic minimum area for regional parks or reservations is 15 acres per 1,000 population. Such a standard should provide a minimum recreation opportunity to Clare County residents. The size of the site may vary depending upon its function. This standard does not take into consideration specialized features of a region such as commercial recreation potential or special land forms or physical features. Both these considerations must be kept in mind when discussing Clare County. These two features may make it desirable to go beyond the 15 acres per 1,000 population guide.



To further delineate regional recreation standards, specific activity standards are provided in Table 35. These standards are general and may not specifically apply to Clare County today. But as the County continues to gain in population, the more important it becomes to apply these standards to Clare County.

A program of mutual cooperation between the public and private sectors would be beneficial to the development of the County. These would serve to decrease the costs of recreational development by the public sector of the economy. In addition, such private developments would serve to spread the recreational usage of lands and stabilize the natural environment. Map 11 shows the location and types of existing recreational developments, and Table 36 inventories Clare County's natural, scenic, and historic sites.

### Recreation Needs

Even though Clare County has a large number of acres devoted to public recreation, there appears to be potential for greater recreation development in the County. Such development could either be public or private recreation. The public sector is heavily dependent upon state owned land. At this time there are no proposals known for future expansion. However, there would still be considerable potential for commercial recreation development. Instead of developing new County recreation areas, the tourist industry in Clare County should be encouraged to expand. Clare County should assist in developing tourism in the County.

Clare County does not presently have a large commercial recreation industry. Various camps by church groups and the Boy Scout and Girl Scouts of America have the greatest development in the County. Approximately 4,000 acres of land in Clare County are developed for private and semi-private camps.

Clare County has a greater commercial potential than just as a campground area. A number of potential recreation activities in Clare County have a high potential. Recreation activities having a high potential for success in Clare County are vacation cabins, cottages and homesites, camping grounds, picnicking, fishing, golf, hunting and hunting preserves, and natural and scenic views.

County government can help provide the initiative in getting the private sector interested in developing tourism. An organization of recreation-related businesses should be organized similar to a Chamber of Commerce. Possible existing Chambers of Commerce could organize the founding of a special tourist committee. This committee could explore the common concerns of the tourist industry in Clare County and provide a great deal of information and guidance.

### Libraries

Libraries provide a number of services to the community including education, entertainment and information. Every level of government is involved in library service. Many areas have local library services as well as county and state service. Many local communities are too small to acquire, house, bind and circulate books or run special library programs without County-wide financial assistance as is the case in Clare County. The system of promoting libraries in the County is unique in that two city libraries and a township library receive a certain amount of County Revenue Sharing money (the amount is not set and varies annually). A county supported library system can be extremely important to developing a comprehensive library service in Clare County.



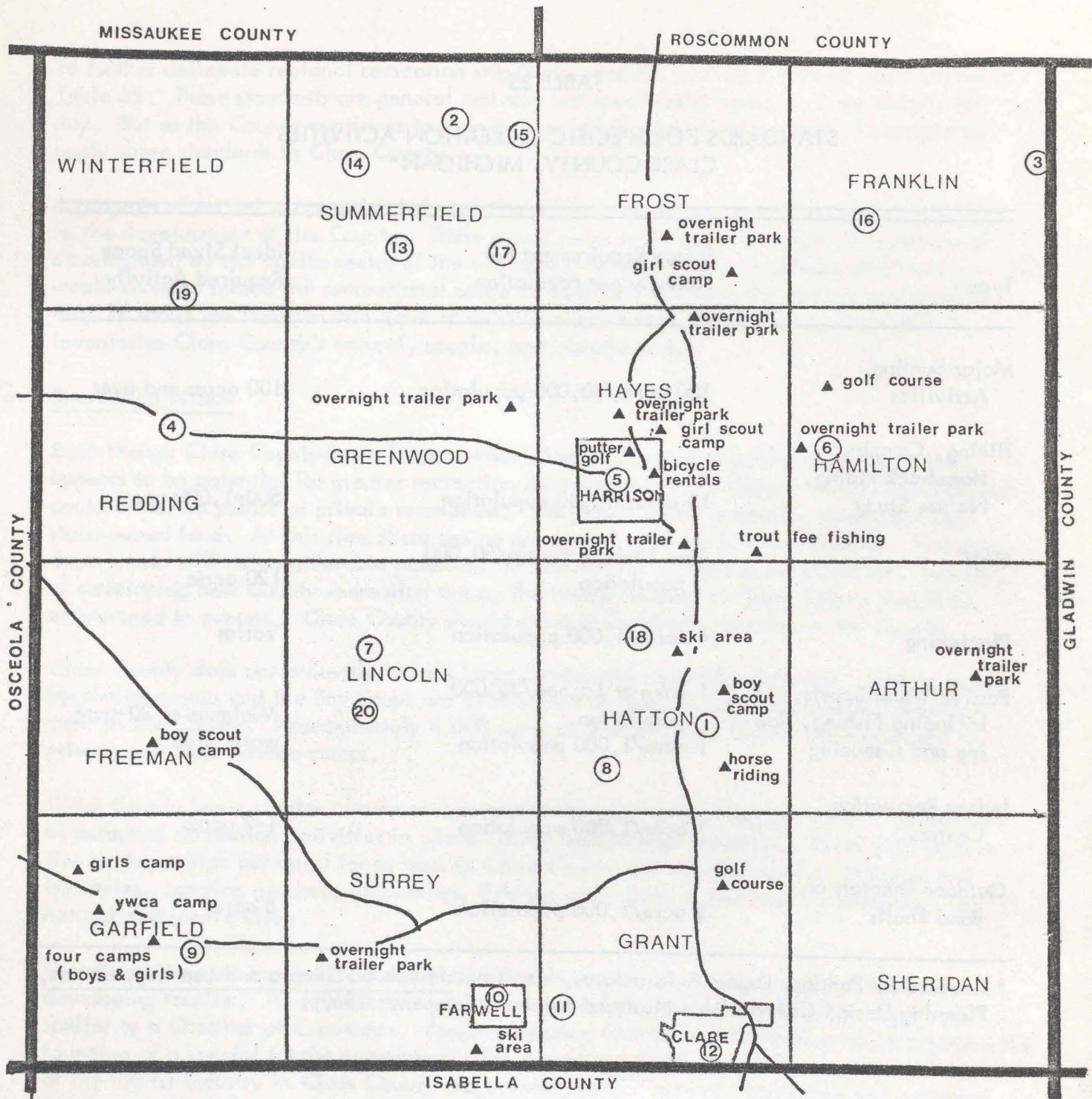
TABLE 35

STANDARDS FOR SPECIFIC RECREATION ACTIVITIES  
CLARE COUNTY, MICHIGAN\*

| Type                                                                 | Space Requirement For Activity per Population                 | Ideal Sized Space Required Activity |
|----------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|
| Major Boating Activities                                             | 100 acres/50,000 population                                   | 100 acres and over                  |
| Hiking, Camping<br>Horseback Riding,<br>Nature Study                 | 10 acres/1,000 population                                     | 500-1,000 acres                     |
| Golf                                                                 | One 18-hole course/50,000 population                          | 120 acres                           |
| Picnicking                                                           | 4 acres/1,000 population                                      | Varies                              |
| Passive Water Sports,<br>including Fishing, Row-<br>ing and Canoeing | 1 Lake or Lagoon/25,000 population<br>1 acre/1,000 population | Minimum of 20-acre water area       |
| Indoor Recreation Centers                                            | 1 acre/1,000 population                                       | 1-2 acres                           |
| Outdoor Theaters on Band Shells                                      | 1 acre/1,000 population                                       | 5 acres                             |

\* Adapted by Parkins, Rogers & Associates, Inc. from Joseph DeChicara and Lee Koppelman, Planning Design Criteria (Van Nostrand Reinhold Company, 1969).





### NATURAL, SCENIC AND HISTORIC SITES

② natural, scenic and historic sites

NUMBERS REFER TO TABLE IN TEXT

▲ private recreational developments



JUNE, 1978

11

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN



TABLE 36

## INVENTORY OF NATURAL, SCENIC, AND HISTORIC SITES

| NAME OF AREA                       | TYPE OF AREA    | LOCATION                |                                    | SIZE OF AREA | DESCRIPTION OF AREA                                                      | PRESENT-USE OF AREA |
|------------------------------------|-----------------|-------------------------|------------------------------------|--------------|--------------------------------------------------------------------------|---------------------|
|                                    |                 | TOWNSHIP                | HIGHWAY                            |              |                                                                          |                     |
| 1 County Park with Historic Marker | Scenic-Historic | Hatton                  | Old 27                             | 2 acres      | Developed picnic area along creek. Has flowing well and Historic Marker. | County Park         |
| <u>Lumbering Period Towns:</u>     |                 |                         |                                    |              |                                                                          |                     |
| 2 Leota                            | Historic        | Summerfield Sec. 10, 11 | Corner of 1232 & 1233              | 300 acres    | Small community that was once noted lumbering town.                      | Village             |
| 3 Meridith                         | Historic        | Franklin Sec. 13        | 18 & Meridith Grade                | 40 acres     | Small community that was once noted lumbering town.                      | Village             |
| 4 Temple                           | Historic        | Redding Sec. 21, 22     | 61-11 miles W. of Harrison         | 80 acres     | Small community that was once noted lumbering town.                      | Village             |
| 5 Harrison                         | Historic        | Hayes Sec. 20, 21, 22   | 61-old 27                          | 2000 acres   | County seat that was noted lumbering town.                               | Town                |
| 6 Dodge                            | Historic        | Hamilton Sec. 19        | Townline Rd. & Co. 458             | 500 acres    | Lake development for seasonal dwellings.                                 | Community           |
| 7 Lake George                      | Historic        | Lincoln Sec. 7, 8, 17   | Bringold Ave. 5 mi. south of 61    | 500 acres    | Lake development for seasonal dwellings.                                 | Village             |
| 8 Hatton                           | Historic        | Hatton Sec. 29          | Hatton Rd. & Harrison Grade        | 5 acres      | Foundations of lumbering community along route of old RR grade.          | Wildlife            |
| 9 Lake                             | Historic        | Garfield Sec. 23        | Co. 436 S. of 10 Crooked Lake      | 80 acres     | Lumbering period town.                                                   | Village             |
| 10 Farwell                         | Historic        | Surrey Sec. 25, 26      | 10 - 4 mi. west of Clare           | 1000 acres   | Town that was once noted lumber town.                                    | Town                |
| 11 Hinkleville                     | Historic        | Grant Sec. 30           | 10 - 1-1/2 mi. E. of Farwell       |              | Old lumbering village site along RR grade.                               | Wildland            |
| 12 Clare                           | Historic        | Grant Sec. 34, 35       | 10 and old 27                      | 1000 acres   | Town that was once noted lumber town.                                    | Town                |
| 13 Old Fur Farm Flooding           | Natural-Scenic  | Summerfield Sec. 28     | 4 mi. W., 1 mi. S. of Haskell Lake | 200 acres    | Mich. Dept. of Nat. Res. flooding project.                               | Wildland            |
| 14 Muskegon River High Banks       | Natural-Scenic  | Summerfield Sec. 17     | 3 mi. W. of Haskell Lake           | 5 acres      | High south banks along the Muskegon River                                | Wildland            |
| 15 Rice Pond Lookout               | Natural-Scenic  | Summerfield Sec. 12     | 2 mi. E. of Leota                  | 200 acres    | High gravel hill overlooking Rice Pond and Muskegon                      | Wildland            |
| 16 Meridith Grade                  | Historic-Scenic | Hayes & Franklin        |                                    |              | Old lumber RR grade.                                                     | Co. Roadway, Trail  |
| 17 Leota Grade                     | Historic-Scenic | Hayes & Summerfield     |                                    |              | Old lumber RR grade.                                                     | Co. Roadway, Trail  |
| 18 Harrison Grade                  | Historic-Scenic | Grant, Hatton & Hayes   |                                    |              | Old lumber RR grade.                                                     | Co. Roadway, Trail  |
| 19 Michigan Gas Storage            | Scenic          | Winterfield Sec. 34     | 1-1/2 mi. E. of 61                 |              | Natural Gas Pumping and Treatment operation.                             |                     |
| 20 Great Lakes Gas Transmission    | Scenic          | Lincoln Sec. 20         | 2 mi. S. of Lake George            |              | Natural Gas Pumping and Treatment operation.                             |                     |

SOURCE: An Appraisal of Potential Outdoor Recreational Development in Clare County, Nov. 1968. (1970 Reprint)



### Library Standards

There are a number of nationally recommended standards for libraries. Table 37 indicates these guidelines for communities of between 35,000 and 100,000 population. This fits Clare County's projected population of about 45,000-50,000 people by the Year 2000. However, when applying the standards to Clare County, a major factor must be kept in mind. Clare County does not have all its people concentrated in one area. Therefore, the County will have to disperse its facilities throughout the County as is presently in effect. When applying the standards to Clare County, the population which the standards are being applied to must be carefully analyzed to determine their urban and rural nature. In other words, these standards cannot be applied to the total County population without modification.

TABLE 37

#### DESIRABLE LIBRARY STANDARDS CLARE COUNTY, MICHIGAN\*

| Population Size  | Book Stock - Volumes<br>Per Capita | Number of Seats<br>Per 1,000<br>Population | Total Sq. Ft.<br>of a Main<br>Library |
|------------------|------------------------------------|--------------------------------------------|---------------------------------------|
| 35,000 - 100,000 | 2.5 - 2.75                         | 3                                          | .5 - .6                               |

\* Joseph L. Wheeler and Herbert Goldbar, Practical Administration of Public Libraries (New York: Harper and Row, 1962), p. 554.

### Police Protection

The State of Michigan is divided into 83 counties. Each of these counties has a sheriff who is responsible for policing the unincorporated areas of their county. In addition, Michigan sheriffs maintain custody of county jails.

### Standards

There are no adequate standards regarding manpower needs. The extent of manpower requirements must be based on a number of factors such as density of population, crime statistics (e.g., type and frequency of crime), roads to be patrolled and other controlling factors. Thus, this study makes no attempt to establish a desirable level of manpower.

The standard for jail capacities has been established by the Michigan State Department of Correction. They recommend one prisoner space per 1,000 population.

### Existing Conditions

The Clare County Sheriff's Department consists of 11 full time officers plus three part time marine patrol officers. The Department generally operates two patrol cars during the day only one patrol



car between 12 a.m. and 8 a.m. Augmenting the Sheriff's Department are the State Police Posts located in Mt. Pleasant and Houghton Lake, which both have jurisdiction in Clare County. The service area of these State Police Posts are divided by M-61. The Post in Mt. Pleasant has 33 men on full time duty and generally has a car on patrol everyday south of M-61 in Clare County. The Mt. Pleasant Post also aids the City of Clare by taking all police calls into the City between 4 p.m. and 8 a.m. and dispatches the local police cars. The Houghton Lake Post has 13 men on full time duty and has primary responsibility for the area north of M-61.

The summer months are the most demanding for police protection. A marine patrol is dispersed to all recreational lake areas. In addition, the thousands of visitors to the County in the summer months add to the amount of road patrolling and other police activity. Summer months are also the time when the Sheriff's Department is the most understaffed.

The Clare County jail is located adjacent to the Clare County Courthouse along M-61 Highway on the west side of the City of Harrison. The jail has capacity for 24 prisoners. There are two dormitory cell areas which house eight prisoners. In addition, there are four maximum security cells and a bullpen. The jail has no separate facilities for women. Thus, women prisoners are kept in other county jails near Clare County which have facilities for women and charge the County \$20 per night for their accommodations. There are no records on the number of women arrested in Clare County in 1977, but it is estimated that there were not enough to warrant a need for women jail facilities.

In 1977, the daily number of prisoners ranged from 12 to 15. In 1977 a total of 942 prisoners were housed at the jail. Even though the jail seems to be large enough to handle Clare County's needs, some changes might have to be made. The State Department of Correction says that a jail should have an exercise yard, a cafeteria and a law library. Clare County's jail does not have any of these facilities, nor is their room on the present site to accommodate these changes.

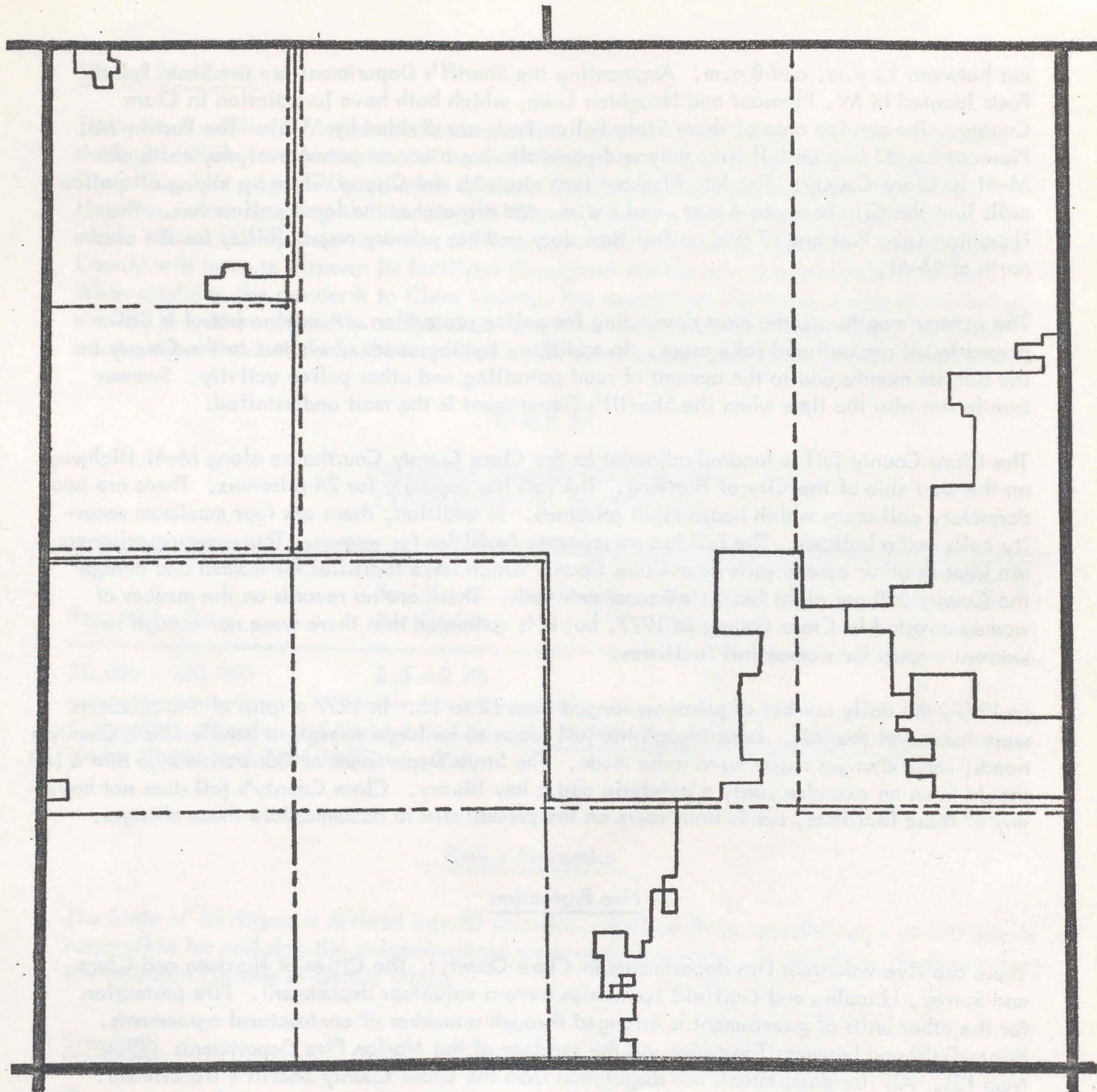
#### Fire Protection

There are five volunteer fire departments in Clare County. The Cities of Harrison and Clare and Surrey, Lincoln, and Garfield Townships have a volunteer department. Fire protection for the other units of government is arranged through a number of contractual agreements. Winterfield and Freeman Townships use the services of the Marion Fire Departments. (See Map 12). All fire departments are dispatched from the Clare County Sheriff's Department.

#### Sheriff

The County Sheriff, who is an elected constitutional officer, is the chief law enforcement officer in Clare County. In addition, he administers the County Jail. He also coordinates the functions of the County law enforcement agency with that of the State Police and the local municipalities within the County. Many law enforcement studies prepared for other counties have recommended a county-wide agency which would consolidate all such departments within the County. One fact always brought up by the local municipalities in such discussions is that the County Sheriff is an elected and not an appointive office and many local municipalities were reluctant to place power in an official over whom they have little control and who will not necessarily be re-elected even if he is very competent. However, it is worth noting that if conditions permit, a County-wide law enforcement agency consolidating all such agencies in the County would be the best to implement efficient law enforcement measures.





# FIRE, SCHOOL AND HOSPITAL SERVICE AREAS

- fire service area boundry
- school district boundry
- . - hospital service area boundry



THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE  
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
ADMINISTERED BY THE STATE OF MICHIGAN

CLARE COUNTY, MICHIGAN

JUNE, 1978

12



At the present time, the Clare County Sheriff's Department furnishes police service on a contractual basis to Lincoln Township. The Sheriff's Department provides two full-time men and Lincoln Township pays salaries and bought a car for their use in the Township. This is one method of implementing a County-wide law enforcement agency. This has proved beneficial to the area serviced and the County itself. It is recommended that such a policy be encouraged whenever possible throughout the County.

#### Dog Warden

The Dog Warden in Clare County is a department that is operated through the Sheriff's Office. Phone calls from the public for this department are placed directly to the Sheriff's office, who then relays them to the Dog Warden. The operations of the animal control department appear to be very efficient in Clare County. In 1977, one full-time employee and truck were dispatched to 1,432 animal complaints.

#### Clare County Public Health Department

Clare County instituted a Public Health Department in 1969 in conjunction with Arenac, Gladwin, Isabella, Osceola and Roscommon Counties and formed the Central Michigan District Health Department. Each County has a branch of this agency in its respective county seat. The Clare County branch is housed in the Clare County Courthouse in the City of Harrison. This Public Health Department has responsibility for several functions, including environmental health and the control of communicable disease.

The Central Michigan District Health Department has a full-time staff of over 60 personnel representing a variety of disciplines. In Clare County there is a full-time staff of five and one part-time public health nurse. Basically, Clare County's health department serves two functions: environmental health and an individual health program.

The environmental health aspects of the Health Department are handled by two full-time sanitarians. At an interview conducted in March, 1978, it was mentioned by the sanitarians that over 20 various duties are performed in relation to environmental health. These duties range from ensuring properly installed septic systems to inspecting foster care centers. Before a building may be constructed anywhere in Clare County, a health permit must first be obtained before a building permit may be issued. This type of check and balance system helps insure that Clare County can be safe in the knowledge that the environment of the County is carefully watched.

The public health of Clare County is in the hands of two full-time and one part time public health nurses. It is their responsibility to conduct health clinics, and provide preventive treatment to various Clare County residents. The nurses also visit certain County resident's homes. In addition to these services, the Health District has a group of technicians to visit all six counties and perform glaucoma and hearing tests.

The money for both of these services comes from a variety of sources. The Clare County Board of Commissioners annually approve funds which are then pooled to the district office in Mt. Pleasant. The District Office then uses the money from the six counties, and other federal and state funds, to operate its district office. Through pooling of resources Clare County is better able to provide health care and preventive health care to its residents than if the services were to be paid solely from limited County funds.



### Ambulance Services

There are two ambulance services in Clare County. One is located in the City of Clare and is privately owned, subsidized by the County and dispatched out of the Clare Nursing Home. The second service, United Rescue Service, is a volunteer operation maintaining its base of operation in the City of Harrison. As Clare County's population expands, a corresponding improvement of the ambulance services should be made. The need of elderly persons is different than those of the median age county resident. Considering Clare County's potential as a retirement community, careful watch should be maintained to insure an increasing improvement of ambulance services.

### Hospital Services<sup>23</sup>

According to the Michigan Department of Public Health, Clare County is included in three health facilities services areas, shown on Map 12. These areas are fluid, but major changes are unlikely. Most of Clare County is served by Clare Osteopathic and Central Michigan Community Hospitals. Clare Osteopathic has 64 licensed beds and Central Michigan Hospital has 115 currently licensed beds with 30 licensed beds soon to be available.

Franklin, Hamilton and Arthur Townships are classified as being in the Gladwin Area and Midland Hospital Center Service Areas. Gladwin Area Hospital has 42 licensed beds and Midland Hospital Center has 239 licensed beds.

Winterfield and Redding Townships are included within the Cadillac facility service area.

The Clare Osteopathic Hospital is the only hospital located within Clare County's boundaries. There are 11 doctors on staff of whom nine are Doctors of Osteopathic medicine, one is a medical doctor and one is a pediatricist. The Hospital has five emergency treatment rooms. (two were recently added in a new hospital addition).

In 1975 the Michigan Cooperative Health Information system reported 66 licensed practical nurses (49 percent working full time, 17 percent working part time, and 34 percent inactive); 75 registered nurses (32 percent full time, 31 percent part time and 37 percent inactive) in Clare County.

### Mental Health

Clare County is a member of the Central Michigan Mental Health District (Clinic). The Clinic is a non-profit, publicly funded agency offering mental health services to the residents of Clare, Isabella, Mecosta and Osceola Counties, and is administered by a Board appointed by the County Commissioners of each respective county. The Board operates under authority from the State Department of Mental Health (Act 258, P.A. 1974.) The Board is funded jointly by the four counties and the State of Michigan. Some Program components are currently being

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<sup>23</sup> Annual Survey of Hospitals, Michigan Department of Public Health, Division of Health Facility Planning and Construction, 1975, provided by East Central Michigan Health systems Agency, Inc., May, 1978.



supported by federal grants.

The Clare County Clinic consists of two clinical psychologists, one aftercare treatment counselor, one clinical case worker and one social worker. In addition, the Clinic utilizes the services of a psychiatric consultant. The cost of service is determined by an individual's ability to pay, no person being refused service because of an inability to pay. The Clare Clinic is located in the basement of the Clare County Courthouse.

#### Dental Care

According to the Michigan Department of Liensure and Regulation (as of March, 1978) there are seven dentists in Clare County. The City of Clare has four, the City of Harrison two, and the Village of Farwell has one dentist.

#### Schools

Clare County includes eight school districts (Map 12), the largest of which is the Harrison School District. In 1977 the Harrison District composed 37.88 percent of the total Clare County equalized valuation (Table 38). In 1977 this amounted to nearly \$72 ,000,000. Of the 10 governmental units within the Harrison District, Hayes Township had nearly 32 percent of the entire Districts evaluation, and including the City of Harrison, nearly 46 percent of the School District is supported.

The second largest school district is the Farwell District. This District has over 36 percent of the entire County's equalized valuation. Within the Farwell District five County governmental units are included. Lincoln Township composes over 35 percent of the District's valuation.

The Clare School District's taxable base is 17.16 percent of the entire County's equalized valuation. Within the District more than 53 percent is supported by the City of Clare.

The remaining five school districts support schools located outside of Clare County and compose comparatively small percentages of the County's valuation.

#### Electricity

Consumers Power Company supplies most of Clare County's electricity.<sup>24</sup> In speaking with representatives of the Company, it was learned that no major problems exist and improvements in the system are made continually in accord with development trends and projections. Three-phase service is provided along major highways (all-weather roads) and throughout the urban areas. Single phase services is provided along most county roads. Consumers Power representatives adds that the general backbone of electrical power in the County is the Consumers Power Company which can supply electrical service sufficient to handly any major development providing

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<sup>24</sup> Both O & A Electric Cooperative and Tri County Electric Cooperative supply electricity to a small number of Clare County residents.



TABLE 38  
SCHOOL DISTRICTS  
CLARE COUNTY, MICHIGAN, 1977\*

| School District | Governmental Units | Equalized Valuation | Percent of Clare County<br>Supported School District |
|-----------------|--------------------|---------------------|------------------------------------------------------|
| Farwell         | Freeman            | \$ 8,353,212        | 12.14                                                |
|                 | Garfield           | 12,757,750          | 18.55                                                |
|                 | Grant              | 6,277,242           | 9.13                                                 |
|                 | Lincoln            | 24,462,491          | 35.55                                                |
|                 | Surrey             | 16,948,097          | 24.64                                                |
|                 | TOTAL              | \$68,798,792        | 100.00%                                              |
| Harrison        | Arthur             | 357,168             | 0.50                                                 |
|                 | Franklin           | 5,348,150           | 7.45                                                 |
|                 | Frost              | 8,002,670           | 11.14                                                |
|                 | Greenwood          | 6,536,032           | 9.10                                                 |
|                 | Hamilton           | 10,691,048          | 14.89                                                |
|                 | Hatton             | 3,397,148           | 4.73                                                 |
|                 | Summerfield        | 4,647,229           | 6.47                                                 |
|                 | Winterfield        | 27,200              | 0.04                                                 |
|                 | Harrison City      | 10,015,300          | 13.95                                                |
|                 | Hayes              | 22,791,267          | 31.73                                                |
|                 | TOTAL              | \$71,813,212        | 100.00%                                              |
| Beaverton       | Arthur             | 959,986             | 100.00                                               |
| Gladwin         | Arthur             | 1,634,959           | 55.55                                                |
|                 | Hamilton           | 1,308,110           | 44.45                                                |
|                 | TOTAL              | \$ 2,943,069        | 100.00%                                              |
| Evart           | Freeman            | TOTAL \$ 16,000     | 100.00%                                              |
| Marion          | Redding            | 3,248,059           | 26.08                                                |
|                 | Winterfield        | 9,208,154           | 73.92                                                |
|                 | TOTAL              | \$12,456,213        | 100.00%                                              |
| McBain          | Winterfield        | TOTAL \$ 54,700     | 100.00%                                              |
| Clare           | Arthur             | 1,005,832           | 3.09                                                 |
|                 | Hatton             | 1,023,500           | 3.14                                                 |
|                 | Grant              | 7,779,855           | 23.92                                                |
|                 | Sheridan           | 5,193,620           | 15.97                                                |
|                 | Clare City         | 17,526,219          | 53.88                                                |
|                 | TOTAL              | \$32,529,056        | 100.00%                                              |

\*Clare County Equalization Department, 1978. -77-



proper notice and financial arrangements are made.



## GOALS & OBJECTIVES



## GOALS AND POLICIES

### Policies and Procedures for Decision-Making

The Association of Clare County Local Planning Commissions (ACCLPC) realizes that planning is a continual process, and that planning decisions must be made intelligently when the need arises. It is imperative for Clare County to have a well-planned guide of policy statements at the time of development so that sound planning decisions will be made and executed.

It is the ACCLPC's intention to place its major emphasis on careful review of the quality, design, and effective functioning of proposed developments. The County intends that its planning program shall deal effectively with evolving reality, not prematurely with only a projected possibility. In order to accomplish this, Clare County shall place special emphasis on the process leading to decisions, and shall seek consistency of action through mature decisions instead of through premature, baseless decisions.

Planning decisions mean environmental change. The process for decision-making, a procedure for change, shall be consistent and unchanging, even though the process may be different every time. In brief, that process shall always follow this basic two-part sequence:

1. Statement of public intent (Comprehensive Plan, Goals and Policies).
2. Legal procedures to see that the intent will be realized (Zoning Ordinances, Subdivision Regulations, Building Codes, etc.).

The planning process in Clare County, however, shall be continuous and timely. The ACCLPC recommends certain design and use standards, as well as any other basic criteria, for arriving at future decisions, and they may adopt detailed plans for limited areas within the County. These may be adopted periodically as part of the evolving comprehensive plan, or whenever it becomes necessary to make clear the public intent and the basis for a future decision.

### Goals and Policies

The comprehensive planning elements will be guided by statements of long-range Goals and Policies set forth during the progression of the Comprehensive Planning Program. They are to be adopted as an expression of the public intent of the ACCLPC. These statements will serve as the basis for the resultant Comprehensive Plan.

### Citizen Awareness and Participation

**Goal:** Instill within the citizens of Clare County, the desire to be actively interested in community functions and the future of the County.

**Policies:** To maintain and encourage the free flow of communication among governmental agencies and the citizens of Clare County.



- To continually inform the citizens through news media of various County events and problems.
- To encourage the formation of civic improvement organizations, technical committees and citizen advisory groups to actively strive for county betterment.
- To actively engage various county lake and neighborhood associations to overcome local problems and collectively engage in solving county-wide problems.
- To strive for better attendance at local meetings when significant issues are discussed and decisions are made.

#### Controlled Development

Goal: Control Clare County population density and amount of land coverage in accord with predetermined capacities of County utilities and service facilities.

- Policies: To encourage major areas of residential development to occur in close proximity to established communities so that utilities and services may be economically provided. Where development continuous to existing sewer and water systems is impractical, steps should be taken to encourage large lot development so that individual septic and well systems can be utilized effectively.
- To support a County-wide ordinance that demands high standards and quality on mobile home installation.
  - To strive to eliminate marginal or temporary housing units in deteriorating conditions.
  - To provide for development of mobile home parks (year-round occupancy) where access is direct and the road surfaces dustless. Parks should be easily accessible to fire protection vehicles.
  - To ensure future construction of standard subdivisions on land having soil characteristics suitable for that use.
  - To prevent or discourage scattered development of non-farm permanent residences along outlying roads of rural agricultural sections of the County,
  - To insist upon good design of residential areas allowing for freedom from the noise and danger of high speed or heavy traffic, for safe pedestrian circulation, safe play areas for children, and for the logical grouping of homes to form neighborhoods of sufficient size to permit efficient installation of utilities and community services such as schools, shops, and churches in nearby locations.



- To encourage the construction of residential structures in accord with high standards, as can be set forth in local building and health codes.
- To inform local realtors that low cost "budget construction" will produce County liabilities over a period of time.

#### Agriculture and Land Use

Goal: Maintain and preserve the most productive agricultural soils of Clare County, and regulate future land uses to provide maximum benefits to citizens of the County.

Policies: To protect the prime agricultural lands of the County by preventing scattered rural housing. Such housing tends to increase the assessed value of adjacent land and results in higher taxes for the farmer. The withdrawal of farm land from cultivation because of increased value for urban use eliminates its agricultural productivity as effectively as if its topsoil were carried away by erosion.

- To help identify opportunities for private landowners and commercial enterprises to make profitable investments in various facilities and areas of the County.
- To encourage conversion of open land to intensive uses when all necessary urban services may be provided, and when sufficiently large tracts are planned, to insure future utility of the entire tract and all adjacent land, as well as all highways serving both.
- To discourage intensive development on steep, rugged areas as well as very poor drained bottom lands having poor permeability or soil stability.
- To carefully control and regulate new growth adjacent to lake areas to help enhance and enrich the lives of County residents, as well as improve the image and attractiveness of the County as a whole.

#### Business

Goal: Encourage the growth of business and commercial activities in incorporated as well as unincorporated areas, in harmony with anticipated population growth in or near existing communities.

Policies: To strengthen existing business areas where future potential can be justifiably maintained or expanded.

- To recognize the need for broadening the activity and the growth of retail business within existing commercial centers of incorporated communities.
- To strive to maintain, and upgrade where necessary, the quality of merchandise and services of all business in Clare County.



- To prevent the diversity and haphazard arrangement of business as "strip development sectors" along highways and County Primary Roads.
- To encourage new business developments to locate in Clare County in unincorporated areas adjacent to or within easy access of principal and minor arterials when such development would not conflict with objectives and policies of neighboring communities or urbanized concentrations.
- To encourage combined investment of public and private capital in the future development or rehabilitation of central business district areas within the various existing communities as needed.
- To create an awareness of the importance of central business districts, their impact upon the local economy, and the need for planning their future development.
- To promote performance standards for business areas, as well as all other uses, to prevent undue amounts of noise, smoke, or glare.
- To encourage business enterprises to locate with direct or limited access to existing or planned major collector or arterial streets.
- To promote standards for adequate off-street parking for commercial developments.
- To locate and design commercial areas to avoid:
  1. Commercial traffic on residential streets.
  2. Commercial activity noise.
  3. Unsightliness created by signs, backs of buildings, trash, etc.
  4. Fumes and odors.
  5. Glare from exterior lighting.
  6. Uncontrolled runoff of surface waters.

#### Industry

Goal: Encourage growth of industrial uses within the County in order to diversify and strengthen the tax base and to provide employment for the permanent Clare County population.

Policies: To promote a diversity in the size of industrial concerns, both large and small.

- To require adequate regulation and control of industrial pollutants through the adoption of local zoning ordinances.



- To promote new industrial developments through a close liaison among municipal, County and industrial promotion representatives.
- To ensure and protect industrial development from the encroachment of incompatible land uses.
- To serve industrial areas with adequate utilities.
- To provide adequate parking and loading space in industrial areas.
- To encourage industrial park development with areas set aside for expansion when necessary.
- To encourage vocational training in the educational system.
- To foster and encourage the development of small "homegrown" industry having the long-range potential of becoming principal employers in the Clare County area.

#### Transportation

**Goal:** Maintain and further develop effective and efficient transportation facilities to meet the needs of an increasing population.

**Policies:** To disapprove individual lot access from intensive development to any arterial or collector highways where the loss of highway efficiency is likely to occur. Sufficient open land be planned adjacent to existing roadways to enable further acquisition and widening.

- To require all intensive development to have interior systems of local circulation.
- To encourage the design of internal local streets that will effectively prevent their use by through traffic.
- To support all County group efforts toward realizing new or improved air travel facilities to handle the needs of the entire County area and vicinity.
- To protect the areas immediately surrounding existing or proposed airport from the noise and hazards of low-flying planes during landing and take-off. This shall be done by promoting land use in the immediate vicinity area for nonresidential uses.
- To promote electrical signals and/or crossing gates at intersections of highway-railroad grade crossings considered potentially dangerous because of heavy traffic or congestion.
- To promote rail sidings in the County with loading ramps that meet industrial requirements.



## Environmental

Goal: Protect the environment of Clare County from sporadic and haphazard use.

Policies: To encourage programs of soil conservation by lending full support to all agencies involved in this endeavor.

- To encourage efforts to improve the physical appearance of vacated mines so that reclamation for possible recreational or residential purposes may be undertaken.
- To encourage complete cooperation in watershed improvement programs in order to improve their recreational potential.
- To preserve wildlife areas wherever feasible. These areas should include public hunting and fishing areas for County residents as well as visitors.
- To preserve significant scenic, geologic, and historic features for the enjoyment of present and future generations.
- To integrate both public and private recreation development in a complementary relationship of activities and land use to enable the County to realize its full recreation potential.
- To use public access easements to allow public access to land or water for hunting, hiking, and other recreational purposes.
- To provide scenic views and roadside picnic grounds throughout various parts of the County for use by local residents as well as travelers or vacationers passing through or going to Clare County.
- To enforce flood plain or watershed district regulations to preserve attractive stretches of rivers and streams in their natural state and to control flood damage costs by restricting development in areas subject to flooding.
- To develop pleasant, clean and uncrowded places along Clare County lakes where families can picnic and enjoy their leisure hours.
- To preserve portions of lake and water areas where stands of trees, stretches of beach, or natural swamp habitats exist.
- To require highways near shorelines be planned and platted so as not to impair recreation, scenic or fish and wildlife assets.
- To use conservation or scenic easements to keep land in its natural state, to provide open space or buffer zones around parks, and to preserve natural countryside along highways.



- To seek a balance among various kinds of resources and areas within Clare County.
- To help preserve areas of natural drainage courses through a coordinated open space program in order to protect such areas.

#### Utilities and Services

Goal: Develop public facilities and services to adequately service the anticipated growth of Clare County.

Policies: To provide personnel to handle a continuing planning program as well as provide services for help in enforcement of local zoning ordinances, and other similar regulations.

- To maintain an awareness of the increasing problem of adequate and diverse water supplies, storm drainage and flood control in Clare County.
- To develop an action-oriented comprehensive program on County water and sewage facilities to meet present and future needs.
- To determine the growth potential of Clare County and program improvements to adequately meet ensuing demands.
- To enlarge police and fire facilities, personnel, services, and equipment to keep pace with population growth.
- To encourage new development in areas having access to public centralized treatment facilities.
- To effectuate or implement a Continuing Planning Program to keep data current and make continuous evaluations of any deviation from the projected course of growth established in the Regional Comprehensive Plan.

#### Organizational Cooperation

Goal: Cooperation with internal community groups, technical committees, advisory bodies, adjacent municipalities and counties, state authorities, and all independent commissions, boards and governing bodies, and assist in the creation of a well-planned and organized future for the whole of Clare County.

Policies: To maintain an awareness of events and actions in surrounding areas that may affect Clare County.

- To maintain an awareness of all private and governmental financial assistance potentially available for Clare County.
- To recognize the fact that what occurs in Clare County affects surrounding areas.



- To request public agencies, community and lake associations, service clubs, conservation organizations, farm bureaus, etc., to encourage all individuals of the County to protect and enhance the scenic qualities of any of their holdings. There must be participation and cooperation among these groups and the County residents to produce positive results.
- To develop working relationships between the Clare County Planning Commission, adjoining County Planning Commissions, and the Association of Clare County local Planning Commissions.



The County is currently in the process of reviewing a number of proposals for development in the County. The County is currently in the process of reviewing a number of proposals for development in the County. The County is currently in the process of reviewing a number of proposals for development in the County.

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## LAND USE

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## LAND USE PLAN

### Introduction

Clare County is located in the north-central part of Michigan's southern peninsula. An imaginary line running east to west through northern Clare County is generally cited by those traveling north as a transitional zone between southern agricultural lands and the northern evergreen forests.<sup>25</sup> The County is within short driving distance from Lansing and the Detroit metropolitan area. Both U.S. 10 and U.S. 27 pass through Clare County, offering excellent driving conditions for metropolitan residents attracted to the County's recreational opportunities.

Live in the country-work in the city. This way of life is becoming more attractive to many families. But, as so often happens the more families who seek the country, the less country there is to find. Unfortunately, man destroys the very essence of what he seeks. More people result in more roads, more homes, more business, more factories and more pollution. It does not take a conscious effort to pervert nature, but only the thoughtless attempts to achieve a better life. It does not take hundreds of thousands of people to ruin a glen or brook or lair of some wildlife, but only the abuse of a handful of well-meaning families.

Clare County is delicately balanced between remaining a beautiful, unspoiled area or becoming an urbanized community whose cancerous development despoils the landscape. How can Clare County maintain its balance? Is there no way to prevent growth? Roads and buildings will be built. If the development is certain, must the beauty of Clare County be lost? If the answer is yes, Clare County will be ravished. Development will occur in a helter-skelter pattern across the face of the County. Pollution will become worse; forests will be cleared; farm land will be subdivided. The County will in truth be ravished. Not all at once--not all 366,000 acres. The development will be scattered; nowhere in the County will it be possible to escape the presence of development. And yet, so little development will actually occur.

How can Clare County maintain a balance between a beautiful countryside and an urbanized area? The answer presently being sought is through planning. If the influx of people is a certainty, then minimize its negative effects. If the scattering of development creates problems, then concentrate the development. If the land area in Clare County is truly worth saving, then regulate development to protect the land. All these are easier said than done, but what is the alternative? The uncontrolled scattered developments of the past may become the development patterns of the future unless conscious efforts through planning bring about a rational pattern.

### Existing Land Use

The existing patterns of land use provide the base from which the Future Land Use Plan is prepared. Both land use survey and analysis are essential for describing the intensity of land utilization, the patterns of development, growth pressures, and the

<sup>25</sup> From a student report on the Land Use of Clare County, Michigan State University Resource Development 816, Spring, 1967.



emerging direction of future physical growth. The composition and analysis of this information constitutes a most elemental and necessary description of the County's environment.

Land is a precious resource. The present usage of land in the County represents investments by several generations. In order to protect these investments, especially in view of accelerating land use development, sound and effective planning must be accomplished. Accordingly, this analysis stresses the relationship between urban and rural development. It was quickly realized from the beginning of the land use survey that differences between urban areas (e.g., incorporated communities) and farm areas are not as clear as they once were.

Nature itself provides a balance between land, water, forest, and wildlife. All too often the spread of urban development into rural areas has destroyed this balance, resulting in floods, storm damage, water shortages or water pollution. Many of these negative occurrences to which "built-up" areas have subjected themselves are directly attributable to the failure to properly relate urban development to the natural environment. Through effective planning, it is hoped to make the natural forces work for developing areas and not against them. Only in this way can nature's balance be protected.

The existing land use survey has recorded how man uses the land within Clare County. By studying what has been done to or placed upon the land, officials can make decisions on how to provide a healthful, efficient, and attractive environment. What County, Township and City decision makers do today limits and shapes the possible alternatives of tomorrow.

#### Inventory of Clare County Land Use

Population characteristics, when correlated with the land use data, reveal useful information. Also, by using the existing land use information as a base, updated comparisons indicate trends that are shaping the County's rural-urban complex. Ultimately, data collection and technical reports are aids to the understanding of the forces exerting strong influences on the growth of communities; and to help formulate decisions encouraging a better living environment.

A classification of land uses is necessary to provide a common understanding of the material presented. Land uses can generally be grouped into major categories such as residential, commercial, industrial and agricultural. These categories are not conclusive enough for the purposes of this study, and a further breakdown is necessary. The following is a description of the various land use classifications used in this study.

#### Residential

This category includes areas in which dwellings with their accessory buildings occupy the major portion of the land and consist of the following sub-categories:



Single-Family Residential.-- These areas in which single-family dwelling units and their accessory buildings are located. This category also includes mobile homes located on individual lots or in mobile home parks. Single-family residential units, 20,000 square feet or less, seasonal homes, including mobile homes located especially around lakes, are included in this category.

Rural Residential.--This is an area that is used primarily for residential purposes. For purposes of this study, a rural residential lot is deemed to occupy up to ten acres.

### Commercial

Land areas where goods are distributed or personal business services are provided are considered commercial uses. This category includes the retail sale of goods (e.g., grocery stores, gas stations and drug stores, businesses providing services such as restaurants, banks and real estate offices, and commercial transit lodging places (e.g., hotels, and motels).

Industrial.--Industrial uses are land areas with or without buildings where one of the following operations is conducted:

Manufacturing, Warehousing and Storage.--Manufacturing includes land areas with or without buildings where raw or semi-finished materials are processed, fabricated and/or manufactured. Warehousing and storage of materials includes uses enclosed in a building or not. Open storage, such as concrete block, farm equipment, junk cars and waste material and municipal dumps are considered industrial uses because of the possible nuisance factors associated with them. Utility industrial uses such as gas storage stations are included in this category.

Extractive.--Areas in which sand, gravel, clay, peat, or rock are excavated have been placed in the Extractive category. Included are the gravel pits used by the Clare County Road Commission and private excavations.

### Transportation and Utilities

Transportation uses encompass all dedicated surface right-of-way, including highways, freeways, railroads and airports, which are used for the movement of people and goods. Utilities include both public and private facilities providing general services, such as electric power stations, gas regulator stations, sewage treatment plants, radio stations and other facilities of this nature.

### Forestry, Public, Quasi-Public and Recreation

Land areas and facilities, such as schools and government buildings, which are available to, or used by, all the people within a particular service area, are considered public uses. Also included in this classification are areas and buildings that are used by a limited number of persons with particular interests and who do not have profit as their main motive (Quasi-Public and Recreation). This category includes churches, the County



Fair Grounds, sportsmen's clubs, Boy and Girl Scout camps, parochial school camps and other similar uses. Recreation uses such as bowling alleys and movie theaters, because of their smaller size and functions, are placed within the commercial category. Permanent or seasonal residents on non-agricultural land larger than ten acres are considered forestry land uses. Areas covered by water and forested areas are also considered in the broad category of forestry.

#### State-Owned Land

Land areas owned by the State, with or without structures, that serve the recreation needs of the public or provide open land areas under conservation management, are included in this category.

#### Agriculture

This classification is applied principally to areas for crop land, permanent pasture land, and land lying fallow but which indicate cultivation at an earlier date. Due to the variations in the agricultural practices of farmers, in terms of land cultivation, this classification is flexible for specific parcels.

### Clare County Land Use Patterns

Traveling through Clare County, the visitor receives the impression of vast areas of farm land, woodland, open land areas, richly scenic areas and isolated grouping of homes located near primary road intersections. Along highways are scattered residential, commercial or industrial land uses which become more frequent as the visitor approaches the City of Clare, the City of Harrison and the Village of Farwell.

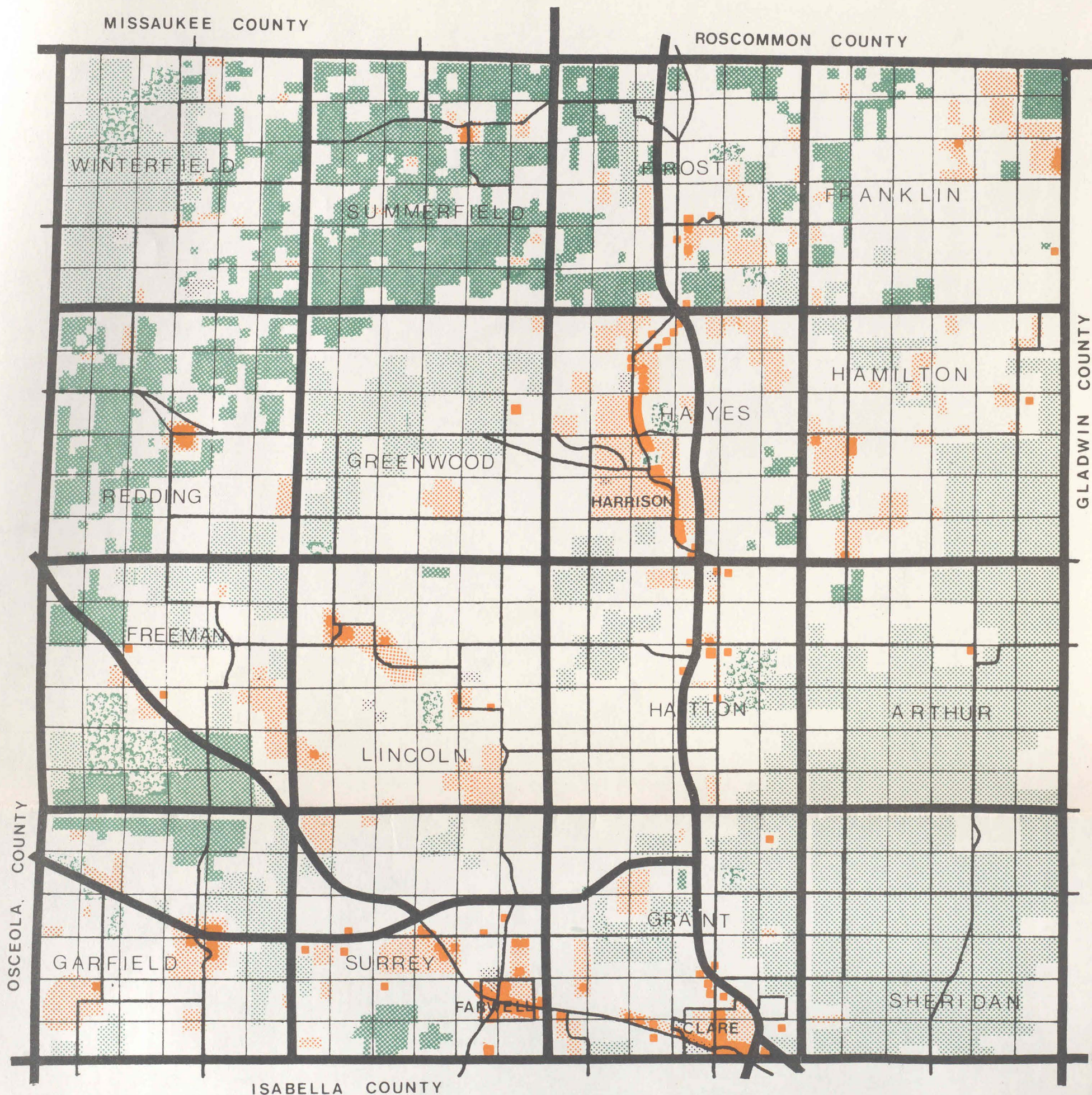
The effect upon the traveller of an open, rural county can be seen on Map 13, Existing Land Use, Clare County. Land uses, especially residential development, are widely dispersed throughout the County. Table 39 indicates the amount of area that these uses occupy within the County.

#### Residential Land Use

The existing residential land in Clare County amounts to about 29,860 acres, or approximately 8.2 percent of the total County area. Of the residential land about 20.3 percent is single-family in character and a 79.7 percent is comprised of larger rural lots. Apartment and townhouse development is so infrequent that it is not considered by this report as a major County land use.

The residential development found surrounding many lakes in the County is characterized by very small lot sizes. The majority of this type of concentrated development occur in the Townships of Hayes, Hamilton, Lincoln Garfield, Surrey and Grant. While the original purpose of the majority of these cottages was for seasonal use, there has been a trend in recent years to convert these units into year-round homes. This trend has created





# EXISTING LAND USE

- AGRICULTURE
- STATE OWNED LAND
- RESIDENTIAL (SINGLE FAMILY & RURAL)
- COMMERCIAL
- RECREATION
- INDUSTRIAL (WAREHOUSING, MANUFACTURING, EXTRACTIVE AND STORAGE)
- FORESTRY & PUBLIC LAND



JUNE, 1978

13

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CLARE COUNTY, MICHIGAN



a pollution problem around some of the lakes in Clare County. Mobile homes are also found scattered within many lake developments. The use of very small lake frontage lots without adequate utilities has increased health and sanitation problems. Overcrowding of the lakes should be avoided, or optimum use of lakes for recreational purposes may be jeopardized.

Lot sizes in the incorporated communities are understandably smaller because of the presence of municipal facilities. However, elsewhere in the County where sewers have not as yet been installed, there is a potential hazard of water pollution due to the increasing trend of seasonal home conversion to year round residences. Many of the lake front lots are less than 8,000 square feet in size which did not pose a problem when only one of four lots were regularly used. During the peak summer Clare County's population more than triples. Most of the seasonal residents own homes near the County's lake and stream areas.

TABLE 39  
EXISTING LAND USE  
CLARE COUNTY, MICHIGAN, 1978\*

| Land Use                                         | Acres         | Percent of Total |
|--------------------------------------------------|---------------|------------------|
| Residential                                      | 29,860        | 8.2%             |
| Single-Family                                    | 6,060         | 1.7              |
| Rural Residential                                | 23,800        | 6.5              |
| Commercial                                       | 600           | .2               |
| Industrial                                       | 4,070         | 1.1              |
| Manufacturing, Warehousing<br>and Storage        | 230           | .1               |
| Extractive                                       | 3,840         | 1.0              |
| Transportation and Utilities                     | 12,000        | 3.2              |
| Forestry, Public, Quasi-Public and<br>Recreation | 195,180       | 53.3             |
| State-Owned Land                                 | 48,650        | 13.3             |
| Agriculture                                      | 75,720        | 20.7             |
| TOTAL                                            | 366,080 acres | 100.0%           |

Pollution problems are forcing some communities within Clare County to consider sewage systems. In this regard both Lincoln and Hayes Townships prepared Facility Plans in 1976 to consider alternative courses of action. In both units the cost was a prohibitive factor and no action was taken. However, Grant Township is now considering possible coordination with the City of Clare to extend sewer lines to the Five Lakes Area.

As a result of the early settlement patterns of large parcel ownership, lots are fairly evenly distributed throughout the County along Section Line and Quarter Section Line



Roads. Lot size is not as significant with rural lots because the land surrounding the residences usually belongs to the owner of the house. When problems of water supply or sewage disposal arise, the large lot owner is not faced with as great a dilemma since he is in a position to re-drill a new well or construct a new tile field on his surrounding land.

As implied in the above statements regarding residential lot sizes where no public water or sewage disposal facilities exist, the minimum desirable lot size requirement is dictated to some degree by the soil conditions present. Because of the potential water pollution problem created by septic tanks on small lots, the Clare County Health Department must be contacted before any construction may begin.

### Commercial Land Use

Approximately 600 acres, or about 0.2 percent of the County's total area, are used for commercial purposes. About 20 percent of the commercial activity is located in the Cities of Clare and Harrison and the Village of Farwell, with the remaining 80 percent scattered in the townships. The City of Clare has the largest number of acres in commercial use for an incorporated area. The Townships of Grant and Hayes have the greatest commercial acreage among the townships in Clare County.

The concentrations of commercial land uses as represented on the Map 13 evidence the early settlement pattern within the County. Forestry and Agricultural interests were dominant within the County and small towns established primarily as service centers for the surrounding farm and forestry areas. Commercial areas were established within these towns. Today, many problems, such as deterioration of old buildings and lack of parking areas, threaten to relegate these commercial areas in competition with commercial land uses locating along major highways outside of the urban areas. This second type of commercial development pattern is beginning to occur within the County primarily along the two-lane state highways.

### Transportation and Utility Land Uses

About 12,000 acres or 3.2 percent of Clare County, are occupied by transportation and utility land uses. Of the acreage, about 94 percent is included in road and railroad rights-of-way, with the remaining six percent in utilities. This small acreage of land in utilities is generally scattered throughout the County.

Road and railroad rights-of-way comprise about 11,280 acres in Clare County. Within incorporated areas, the Cities of Harrison and Clare have the most acreage devoted to this type of use as may be expected. The amount of transportation land uses is normally directly proportional to city or village size. Road and railroads rights-of-way within individual townships vary little in the amount of land used. Most of township roads in the County basically consist of Section and Quarter Section Line Roads. There is little variance from township to township in the amount of land used for roads, reflecting the basic rural nature of the County.

Townships which are crossed by railroad lines or include sections of State highways are slightly above the township average for land in rights-of-way. Grant, Hatton, Hayes



and Frost Townships acreage in rights-of-way are high because of the U.S. 27 and U.S. 10 Freeways. Grant Township because of the U.S. 10 right of way and two major ramps, has the highest proportion of rights-of-way land exit than any other Township in the County.

Other transportation uses in the County include three airstrips. One airport, Clare Municipal, having three runways, is located northeast of the City of Clare. A smaller facility, Harrison Airport, also having three runways, is located northwest of the City of Harrison. There is also a small airstrip near Lake Station. As industrial uses increase in the County, better air facilities will be needed.

#### Forestry, Public, Quasi-Public and Recreation Land Use

Approximately 195,180 acres of land within Clare County are devoted to forestry, public, quasi-public and recreation land use, constituting 53.3 percent of the total County land. Map 13 shows areas devoted to this category. Within this classification, forest covered land accounts for approximately 95 percent and public, quasi-public and recreation land uses compose the remaining five percent.

Generally, most of the public and quasi-public uses are situated near the Cities of Clare and Harrison. These uses include small community parks, governmental structures, churches, post offices and schools. The townships contain the majority of the cemeteries and township meeting halls. Schools now used by Clare County children are generally located in the Cities of Clare and Harrison or in the Village of Farwell.

Recreation land uses are dispersed throughout the County. These consist of rural camps, Boy and Girl Scout camps, golf courses, public access to lakes, roadside parks and sportsmen's clubs.

Forest land is generally found in greater concentrations in the western and northern areas of the County. Forestry areas are also intermingled with residential and agricultural uses creating an effective buffer strip between potential conflicting land uses. Forestry land serves in the County's recreation needs for hunting and snowmobiling areas.

#### State-Owned Land

In addition to the recreation facilities mentioned in the previous section, State land within the County also provides recreational opportunities for County residents and those of surrounding counties alike. State land in Clare County covers approximately 18,650 acres, or about 13.3 percent of the County's total area.

#### Industrial Land Use

There are approximately 4,070 acres in Clare County devoted to industrial land use, which is about 1.1 percent of the total County land area. Of the total industrial land uses, extractive industries account for about 94 percent, with the remaining six percent in manufacturing, warehousing and storage.



The distribution of manufacturing land is not evenly spread throughout the County, but rather it is concentrated primarily in and around the City of Clare; however, both Harrison and the Village of Farwell also have manufacturing areas. These concentrations become more evident when viewing the generalized patterns of industrial development portrayed on the Map I3 for the County. Isolated parcels of manufacturing land within the townships are usually open storage areas for farm equipment or junk. Several industrial uses within the County occupy large acreages of land due to open storage. These include the Michigan Consolidated Gas Company properties in Winterfield and Lincoln Townships, and adjacent the C & O Railroad Tracks in Grant Township.

Extractive industries use the greatest amount of land in the industrial category. The majority of this land consists of gas and oil extraction. Extraction of gas and oil is the most predominate in Lincoln and Winterfield Townships, however, numerous small one acre extration sites are located throughout the entire County.

### Agricultural Land

Agricultural land is the second most predominant land use in Clare County following forestry land. Of the County's total land area, approximately 75,720 acres, or 20.7 percent, are found in farming use. Most of the farm land is found in the Townships of Sheridan, Arthur and Winterfield. The amount of land in farm production is decreasing each year. Consumption of agricultural land is expected to increase at an increasing rate as residents and business interests relocate in the County. However, the expanding population of Clare County requires increasing amounts of fresh fruit, vegetables, and milk (preferably locally produced to help maintain a stable economic base in the County).

### Urban-Rural Land Use Conflicts

Throughout this report, reference has been made to urban and rural land uses. Urban land uses represent man-made improvements characteristic of development within cities or villages. Such development, for the purposes of this study, include Single-Family, Commercial, Manufacturing, Warehousing and Storage, and Transportation and Utility land use. Rural land uses are associated with agricultural and forestry practices and open land areas that are not occupied by permanent structures. For the purpose of this study, such uses include the land use categories of Agriculture, Rural Residential, Extractive Industry, State-Owned Land and Forestry and Recreation Land.

If all the urban land uses were massed together in one area, less than the area of one township (36 square miles) within Clare County could accommodate all of the urban growth presently located within the County. Agricultural land uses (those areas actively being formed) if placed all together would be equivalent to over three townships within the County. Agricultural land uses (those areas actively being formed) if placed all together would be equivalent to over three townships within the County. In addition, Rural Residential lots would be about equal to a township and the remainder of the County area would be in forest and state-owned land use. The rural character of Clare County is predominate.



The influence within an area of urban and rural development is not proportional to their size. It is the experience of most developing areas in the State that urbanization is accomplished through a cessation and replacement of farming activities. However, the cessation of farming is not always followed by immediate use for urban development. Increased land values and land speculation can make it unprofitable to continue farming land which was once farmed and therefore becomes idle. Yet, such land may not all be marketable for urban use. The scattering of urban development throughout a rural area generally results in the gradual discontinuance of farming.

Reviewing Map 13, there is evidence that the scattering of urban uses in rural areas is occurring. This is particularly true of the non-farm, single-family land use. It has become common to locate single-family homes in rural areas. Commercial and industrial uses are locating along major highways adjacent the incorporated communities and throughout the rural areas.

#### Future Land Use Plan

The saving of the landscape is only one reason a rational plan should be developed for Clare County. Another reason is economies of scale. Water pollution is less expensive to control if people settle in areas with greater population densities. More services, such as fire and police protection, can be provided with less expense. These and other savings and benefits are available to any community which is willing to regulate itself. This self-regulation, as propagated through the planning process, is the challenge that Clare County residents must accept very soon.

The County is composed of numerous political sub-units, such as townships. The Land Use Plan cannot, and must not replace the local municipality's responsibility in developing its own planning programs. The County has numerous powers but ultimately development is best controlled by local units of government through zoning, subdivision regulations and local planning. The Future Land Use Plan does not specifically indicate individual land uses, but provides an overall framework within which local municipalities must provide the necessary detail. For example, large residential areas are identified within the Plan, but no consideration is given to ancillary residential uses, such as schools, neighborhood recreation areas, churches, neighborhood shopping areas and other related land uses. Those specific uses and their locations are the proper responsibility of local municipalities.

The Future Land Use Plan is an attempt to locate land uses of regional consequence for the forthcoming two decades. Its prophetic success will only be as great as the attempt of County and local officials to use the Plan, along with any subsequent justified amendments, as a working blueprint of future coordinated development within the County.

#### Concepts of the Plan

There are 22,400 people on 366,080 acres in Clare County--one person for every sixteen acres. In 22 years, the ratio is likely to be one person for every seven acres. It will not be an overcrowded county, but the expected 45,000 to 50,000 people could possibly spoil much of the 366,080 acres. The overall concept of the Future Land Use Plan is to concentrate growth in urban centers presently in existence. At the same time, the concen-



centration of people will allow the farm areas and scenic areas to remain unblemished in the County.

The City of Clare is the most important and largest urban community in Clare County. Major transportation facilities, community facilities and utilities presently exist in the City. The City of Harrison is the second largest urban center existing in the County and it too has transportation, utilities and community facilities. Located at the center of the County, it is planned that the City of Harrison will become a secondary urban center, subordinate in size and function to the City of Clare. Surrounding these two urban centers, the greatest part of the increase in population is expected to live. The two communities are far enough apart that the eventual merging of these two urban communities can be avoided.

There are numerous small settlements located throughout the County. Their growth should be limited. Their primary function is to provide services to small geographic areas within the County. Limited growth in these small villages and settlements will occur, but large population growth should be watched with caution.

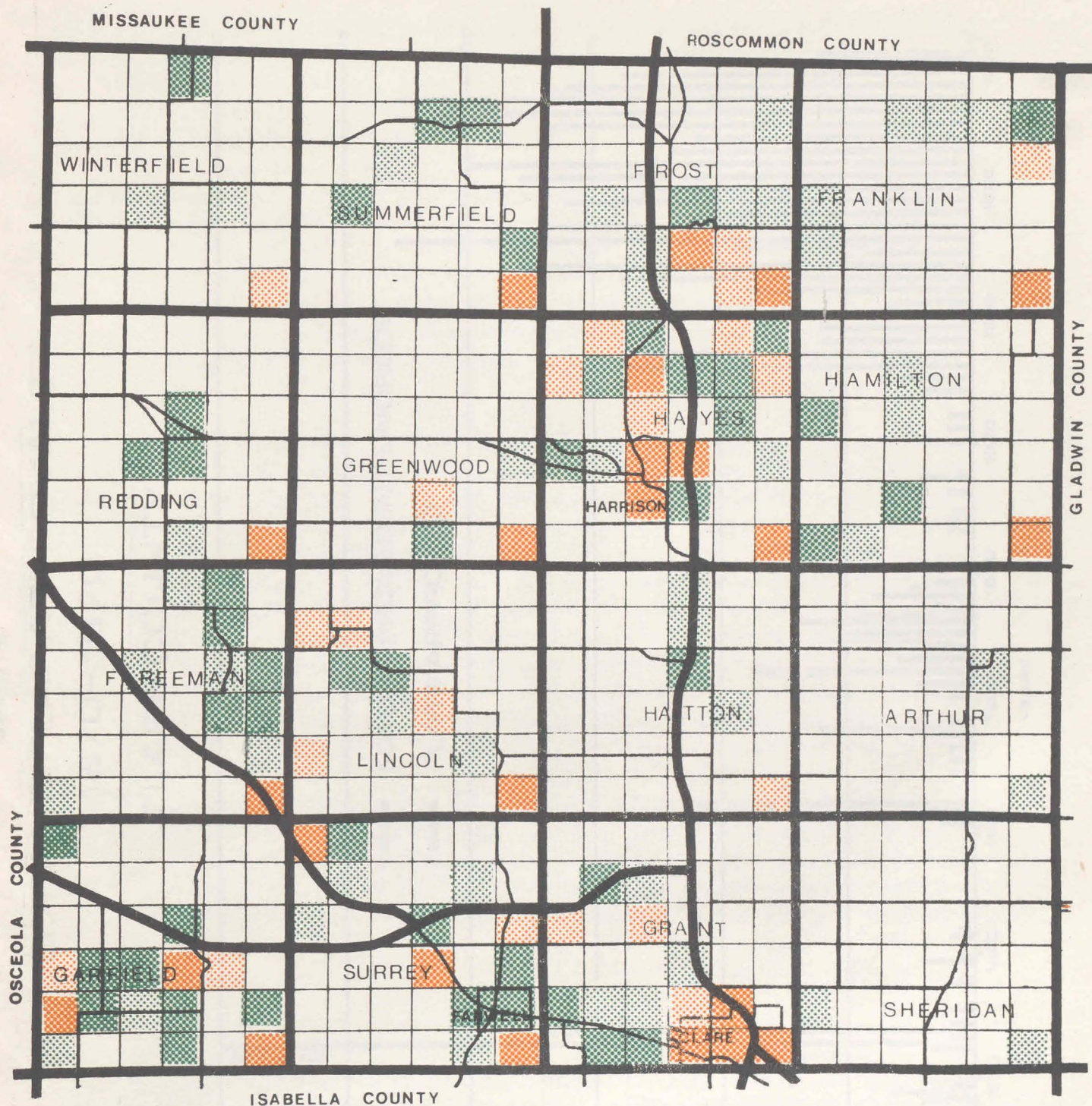
Clare County is a vast area. If urban development is to be concentrated, what will the remainder of the County be like 20 years from now? The Existing Land Use Study indicated that prominent land usage in Clare County included agricultural uses, recreation uses and estate or forestry development. Clare County is urbanizing, but urbanization only has to locate in a small percentage of the land area.

At the present time Clare County has a considerable amount of open land. However, the various factors of soil, climate, topography, lakes and streams, and forest cover the County's natural beauty and the highway network have generated a demand for land within the County. This demand is for recreational land ranging from large land holdings for clubs to smaller properties surrounding lake areas for second homes.

Plat records since 1950 show the increasing demand for second home properties based upon the numbers of lots platted. Chart I and Map I4, shows the plat and lots recorded by year since 1870. This serves to trace the development of the County and its urban centers. The majority of the second home market has centered upon the many lakes throughout the prime development land of the County. In the past this lake development was prevalent but the major occupants were persons from the immediate area. In the early 1900's, Farwell and Clare residents and some others from cities in the region developed second homes along the lakes in the southwestern corner of the County. A few lakes in the County have, however, developed differently. Budd Lake and Little Long Lake just east of Harrison have been developed as permanent residences. This type of development, however, is limited in the County.

Whether the lakes are developing as permanent or as second homes the extensive nature of the development, in terms of distribution, will and is causing some real problems. Many of the lakes now have lake associations. These persons are concerned because of what is happening or could happen to their lakes. Such concerns are for pollution, siltation and similar problems related to the environment.





# APPROVED PLATS

## NUMBER OF APPROVED PLATS PER SECTION

|                                                                                     |             |                                                                                     |                 |
|-------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|-----------------|
|  | 1 Plat      |  | 4, 5 & 6 Plats  |
|  | 2 & 3 Plats |  | 7 or more Plats |



JUNE, 1978

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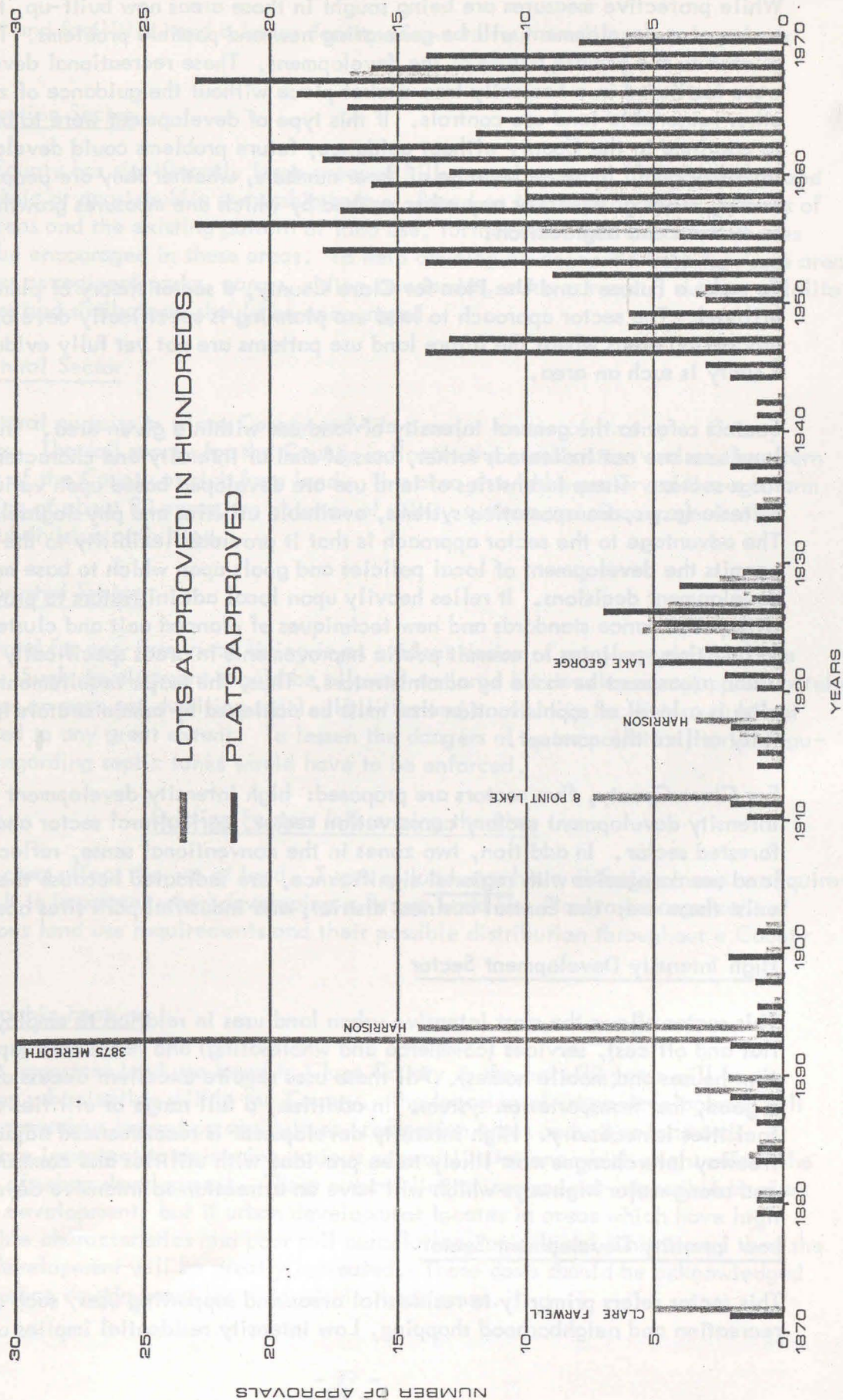


CHART 1

# LOT AND PLAT APPROVALS

1870-1970

CLARE COUNTY





While protective measures are being sought in those areas now built-up, the areas now undergoing development will be generating new and possible problems. The cause is related to the private nature of the development. These recreational developments were instituted in a basically free market place without the guidance of zoning and other reasonable land use controls. If this type of development were to be allowed to continue in the County without guidance, future problems could develop. The intensity could increase because of sheer numbers, whether they are people, cottages, homes, miles of streets or any other method by which one measures growth which leads to overuse and degradation.

To make a Future Land Use Plan for Clare County, a sector theory of planning was utilized. The sector approach to land use planning is specifically developed for urbanizing areas where the future land use patterns are not yet fully evident. Clare County is such an area.

Sectors refer to the general intensity of land use within a given area. The specific land uses are not indicated; rather, uses of similar intensity and character are suggested for a sector. These intensities of land use are developed based upon various locational criteria (e.g., transportation systems, available utilities and physiographic features). The advantage to the sector approach is that it provides flexibility to the Plan and permits the development of local policies and goals upon which to base more definitive development decisions. It relies heavily upon local administrators to provide zoning with performance standards and new techniques of planned unit and cluster developments. In addition, policies to commit public improvements in areas specifically designed as urban areas must be made by administrators. Thus, the major requirement for the sector plan is a level of sophistication that must be achieved by administrators in order to fully utilize the concept.

For Clare County, five sectors are proposed: high intensity development sector, low intensity development sector, conservation sector, agricultural sector and the rural forested sector. In addition, two zones in the conventional sense, reflecting major land use categories with regional significance, are indicated because they presently exist these are; the central business district, and industrial park sites open space.

#### High Intensity Development Sector

This sector allows the most intensive urban land uses in relation to employment (industrial and offices), services (commerce and wholesaling) and residences (apartments, townhouses and mobile homes). All these uses require excellent access as provided by a good, fast transportation system. In addition, a full range of utilities and community facilities is necessary. High intensity development is recommended adjacent to those freeway interchanges most likely to be provided with utilities and community facilities and along major highways which will have an attraction to intensive development.

#### Low Intensity Development Sector

This sector refers primarily to residential areas and supporting uses, such as churches, recreation and neighborhood shopping, Low intensity residential implies only partial



utilities and facilities, and a lower density of two to four dwelling units per gross acre.

#### Conservation Sector

Clare County has significantly large areas of hilly, wooded land. Much of this land is in public or quasi-public ownership today. Based on the physiographic features of these areas and the existing pattern of land use, further open space recreation uses should be encouraged in these areas. To help develop an economic base for these areas such uses as regional parks, camps, riding academies, summer resorts, skiing, wildlife preserves and similar uses should be encouraged.

#### Agricultural Sector

Agricultural pursuits in Clare County provide a major source of income to County residents. The soil survey for the County indicates the northeastern and southwestern portions of the County as rich farm land. This area should be preserved through farm lot zoning of about 20 acres, an absence of utility systems and discouragement of future subdivision activities.

#### Rural Forested Sector

The demand for non-farm rural living is an evident desire of many people in Clare County. Such development should be allowed on large lot development (approximately five acres or more per dwelling unit). Utilities and community facilities would not be needed to any great extent. To lessen the dangers of water pollution, strict regulations regarding septic tanks would have to be enforced.

#### Existing Factors Influencing the Plan

Many factors affect the use of land. Types of land uses have differing location requirements. It is important when developing a Future Land Use Plan to be cognizant of the various land use requirements and their possible distribution throughout a County area.

#### Physiographic Features

The most important land use trend in Clare County in the next 20 years will be the increasing urbanization within the County. The location of urban development will have a tremendous impact on agriculture, recreation areas and other land uses. It is therefore important to determine various natural limitations which might affect the location of urban development. These natural limitations are not impossible barriers to urban development, but if urban development locates in areas which have high water table characteristics and poor soil percolation, or cultural limitations, then the cost of development will be greatly increased. These costs should be acknowledged prior to urban development locating within these areas.



Water Table Characteristics and Soil Percolation.--These factors are perhaps of greatest significance to urban development. Sewage waste may be handled in two common ways--individual septic tanks or municipal treatment. The former method involves a direct expense to individual property owners, while the latter is a long-term community expense for a system which is costly to build and operate. Whenever soils have good percolation, septic tanks are generally an acceptable means of treating waste products, provided that population density is not excessive. Poor percolating soils create pollution problems if urban development is permitted to locate on them.

Map 15 indicates areas in Clare County which have the most serious percolation problems owing to water table characteristics and soil conditions. Certain of these areas are severe enough to warrant urban development to be discouraged from locating there. An example of the problems which may arise if urban development locates in poor percolation areas is the subdivision activity adjacent waterbeds and on heavy clay soils used presently for farming.

It must be realized that pollution problems can occur if not carefully watched, elsewhere in the County, depending upon the density permitted in an area. The more people concentrated in an area, the more necessary it becomes to have a sewage system. Thus, Map 15 only indicates the most serious conditions related to the water table and soil percolation within the County. On the other hand, certain wetlands which might be otherwise drained for urban purposes and provided utilities might better be left in a natural state through use of township zoning regulations.

Cultural Limitations.--There are some large open areas where existing uses are unlikely to change. These uses are generally based upon public or semi-public ownership and may be considered cultural limitations. Map 16 indicates cultural limitations in Clare County. For the most part, these areas consist of State-owned land. It would appear unlikely that this land would ever be used for urban development. Its value is in serving urban residents. Other areas in Clare County which will probably not be used for urban development include Boy Scout, Girl Scout and conservation club properties.

Combined Physical Limitations.--Combining the factors which limit urban development in Clare County, large areas of the County are actually unsuitable for urban growth. Map 17 illustrates this point. Urban development in the past has generally located where urban limitations were not greatly in evidence, as indicated by the fact that most cities and villages are located outside the areas demarcated as having urban limitations. It would seem logical to locate future growth in a similar manner.

#### Planning by Development Sectors

The sector concept represented in the Plan does not mean that other land uses should not develop in a sector. Rather, the sectors imply that an area is best suited for a particular type of development and that local plans should reflect this consideration. In addition, specific land use zones are represented on the Plan around the Cities of Harrison and Clare. These specific land use areas recognize existing local plans for those two municipalities. Similarly, other local plans developed by municipalities





### SOIL LIMITATIONS

 soils adversely affecting future development



JUNE, 1978

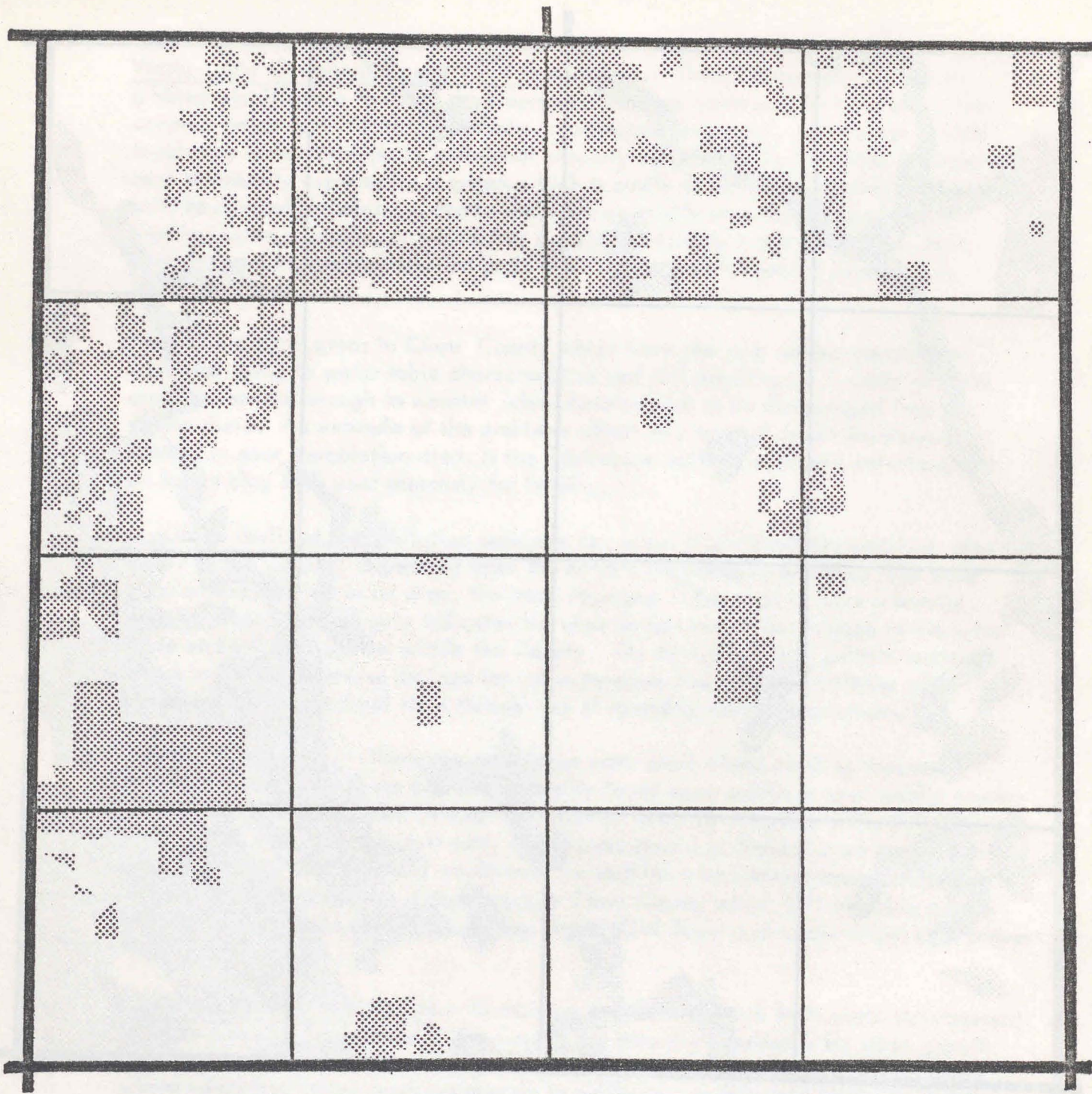
15

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### CULTURAL LIMITATIONS

major public and semi-public ownership



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# COMBINED PHYSICAL LIMITATIONS

 combined cultural and soil limitations



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CLARE COUNTY, MICHIGAN



have been used to formulate the regional concept of land uses as presented in this Plan.

#### High Intensity Development Sectors

High Intensity Sectors represent the most probable areas of intensity land use development. A good transportation system is the primary location factor affecting high density development. Those areas in Clare County which have the best transportation access are the Cities of Harrison and Clare and the Village of Farwell. In order to allow a larger density, municipal sewer and water is necessary.

Interchange Sector.--There are five interchanges along the U.S. 27 Freeway. Because they provide access to the freeway, they promote urban development. However, not all interchanges can be expected to attract growth. It is anticipated that the interchange near the City of Clare and the two interchanges south and north of the City of Harrison (See Map 18) will attract considerable urban development.

Corridor Sector.--High intensive land use development also locates along major highways. These highways provide a good road system which is desirable for intensive land uses. The corridors' depth may vary by the type of land use. For example, commercial development may require 300 feet of depth, while high density residential may require 600 feet or more to permit good residential design.

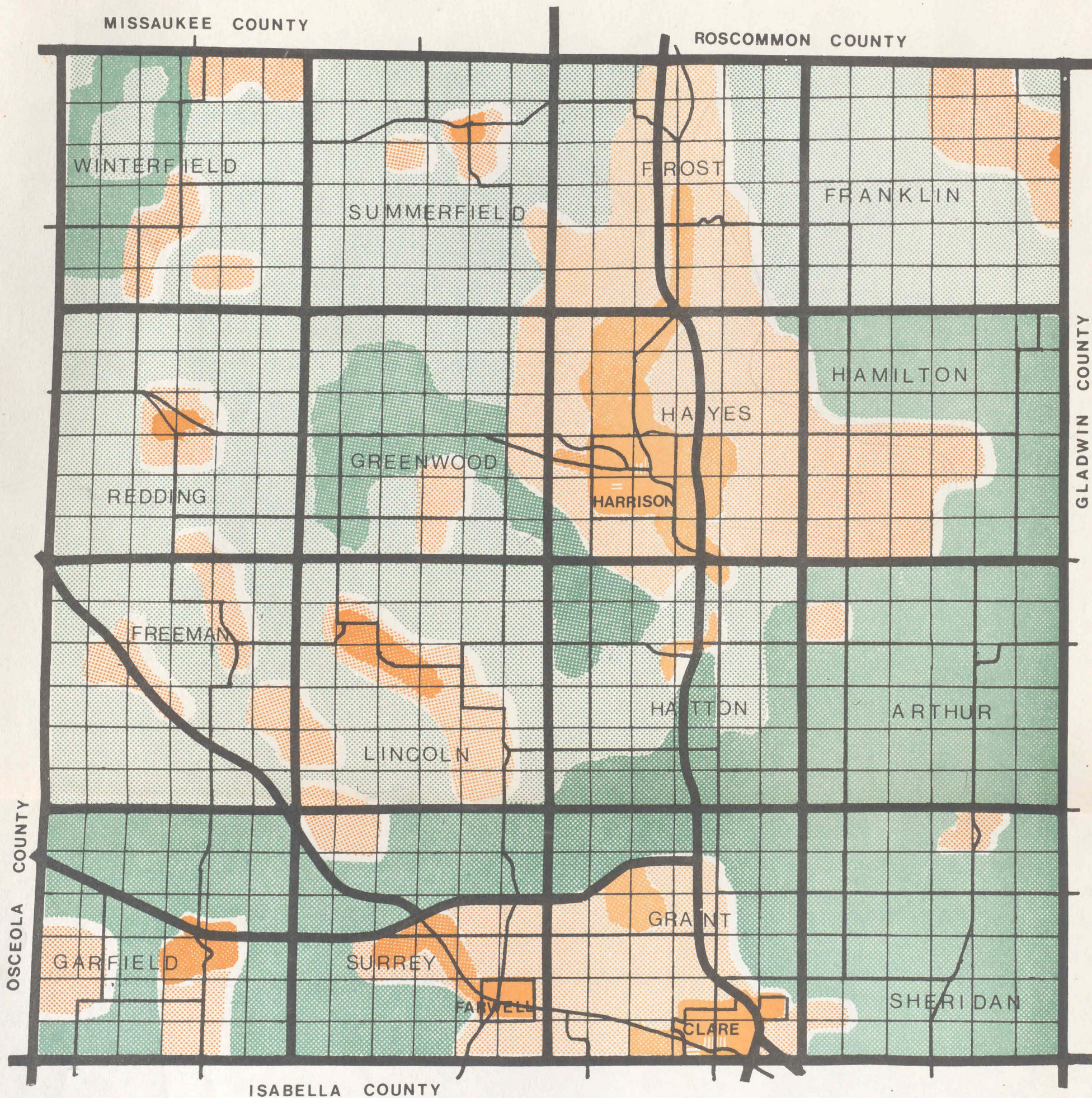
The important factor is that local municipalities recognize those highways while will develop as high intensive uses so that proper zoning controls with prudent site plan review can be effectuated. Certainly along such major highways direct access to the highway must be carefully controlled since numerous access points reduce the efficiency of a highway as well as create a traffic hazard from turning vehicles which conflict with through traffic.

Future Land Use, Map 18, indicates several major highways in the County for high intensive uses. North of the City of Harrison Business Route 27 is shown as a high intensive land use corridor. Business Route 27 is presently two-lane facility within the City of Harrison.

Other High Intensive Areas.--The Future Land Use Plan also indicates other areas as high intensive land uses (e.g., central business districts and industrial areas). Although these areas are high intensive land uses, the Zoning Ordinances for the Cities of Clare and Harrison and Hayes Township specified the use. Therefore, the Regional Land Use Plan indicates the use and not the concept.

The Central Business District in the City of Clare is the primary commercial area within Clare County. Certainly the Year 2000 County projected population of 45,000 to 50,000 persons is not sufficiently large to warrant a competing regional shopping center in Clare County. Thus, the City of Clare business center should be strengthened as the regional shopping area in Clare County. In this manner, more shopping opportunities will be provided Clare County residents than if a competing center were promoted.





# FUTURE LAND USE - 2000

## SECTORS

- HIGH INTENSITY DEVELOPMENT
- LOW INTENSITY DEVELOPMENT
- CONSERVATION
- AGRICULTURAL
- RURAL FORESTED

## ZONES

- CENTRAL BUSINESS DISTRICT
- INDUSTRIAL



JUNE, 1978

18

THE ASSOCIATION OF CLARE  
COUNTY LOCAL PLANNING  
COMMISSIONS

THE PREPARATION OF THIS MAP WAS FINANCED IN PART  
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CLARE COUNTY, MICHIGAN



It should be the policy of the City of Clare and Clare County to promote the CBD area of the City. Redevelopment of the business center through rehabilitation and renewal could provide sufficient off-street parking, a stronger commercial district, office uses and high density residential development.

Another intensive land use in the City of Clare area is the industrial development proposed south of the City. The 40 acre, 16 site industrial park will be complete in the latter part of 1978.

The central business district in the City of Harrison is another intensive land use development. It is a substantial business center which serves the central and northern portions of Clare County. This business center will serve a secondary function to the City of Clare's business core. North of the City of Harrison, in Hayes Township, is located an 18 site industrial park. The park is served by paved roadways and other utilities. The area has some industrial development, is flat and is between the two U.S. 27 interchanges serving the City of Harrison. A second industrial park is presently being developed in the City of Harrison and should be complete with all facilities by August, 1978.

A third intensive use is proposed in the Village of Farwell. Presently the Village is in a period of improvement. The voters of Farwell approved in March of 1977 to accept a \$400,000 sewer and water grant to improve their present system. Also, there is a good possibility that Farwell will be developing an industrial park. However, the Village of Farwell lacks a zoning ordinance to control potential growth. The Village of Farwell should investigate preparation of a zoning ordinance and other reasonable controls to combat haphazard, untimely development.

Low Intensity Development Sectors. --Low Intensity Sectors represent areas with varying degrees of development. For the most part, these sectors range from small lake front lot developments to very large rural lot developments. Both types of Low Intensity Development has its own character.

Moderate Density Residential. --This sector provides for a moderate density of between three and six families per gross acre. These densities are possible in Clare County only because most of the areas in moderate density are seasonal residence areas. If more permanent residents move into these areas municipal utilities might be needed.

Moderate density development refers to single-family development on small lots in forested and lake areas and also townhouse development. A mixture of housing types and lot sizes will provide a heterogeneous community, allowing a mixture of age groups and income ranges. Planning for related land uses, (e.g., schools, neighborhood shopping centers and recreation areas) and their location is the responsibility of local planning. It is important for local municipalities to recognize the relationship of their local plans to the Regional Plan. County roads and facilities should be provided in a regional concept. It should be the policy of local municipalities to require a full range of improvements (e.g., underground utilities, sidewalks, and paved roads) within the moderate density subdivision areas. These areas are urban in



nature and require such improvements. The Clare County Road Commission now requires that all new residential subdivisions have paved roads.

The unincorporated communities in Clare County are also proposed for moderate density development. Lake George and Meredith have already taken steps to insure coordinated growth through use of land use planning and zoning. A water and sewer plan was prepared for Lake George due to an increasing number of permanent residents. The plan was turned down by the Lincoln Township Board as being too expensive. To minimize potential health problems Lincoln Township should consider alternative water supply and sewage disposal systems. Lake Station (Garfield Township) however, has not taken any major steps to plan for its future other than that of a land use plan prepared for the Township in 1976. A zoning program should be undertaken in Garfield Township to ensure that Lake Station's a viable living and service oriented area. Large amounts of growth within or adjacent to these concentrations of development should not be encouraged. These areas primarily serve immediate service needs. Their character should not be encouraged to change since it is more economical and beneficial to the County as a whole to promote growth in the Clare and Harrison City areas.

Low Density Residential.--It must be recognized that large lot subdivisions are in demand. The number of families per acre may range up to three. These suburban densities do not always require a full range of urban improvements and municipal utilities. Where all utilities are provided, it may be feasible in certain areas to exceed this density range subject to detailed local site planning and based upon specific land characteristics and potentials.

The low density areas in Clare County are included within the Low Density Development Sector.

#### Rural Forested-Non-Farm

In Clare County, there is considerable evidence of residential development locating in rural areas. Completely preventing this type of development is unrealistic. It, however, should be carefully watched. Urban improvements (e.g., paved roads, municipal utility systems, fire and police protection and schools) cannot economically be provided as they could be in the urban areas of the County.

In these rural areas, lot sizes should be in the range of one and two acres, but no larger than 10 acres. Lot splitting and subdividing should be controlled through zoning and subdivision ordinances. In many cases the rural areas are on the fringe of urban development. Land speculation and promotion can become detrimental to the future development of these areas if and when demand permits such development. It should be the policy of local municipalities to discourage subdivision activity in these areas by requiring large lots through zoning and to discourage long, narrow lot splits (by requiring a minimum width to depth ratio for residential lots).

#### Conservation Sector

Two large areas in Clare County are suggested as Conservation Sectors (See Map 18). Four outstanding features of these areas are the topography, woodland, wetland and



generally large acreage of State owned land, and lakes. In these areas, some land has over 12 percent slope and are not conducive to urban development.

Winterfield, Summerfield, Redding, Freeman, Lincoln and Greenwood Townships comprise much of the Conservation area in the northern and western portion of the County. Heavily wooded areas and significant topographic variations characterize this area. Estate development (ten acres or more) and recreation areas (State parks, scout camps and private camps) typify the existing development. Such development preserves the natural beauty of the area and should be preserved and expanded in the future. The Conservation Sector expands into Hatton Township and includes the Mid-Michigan Community College due to its large wooded site and Camp Rotary a major Scout Camp.

Parts of Frost and Franklin Townships comprise another Conservation area north of the City of Harrison. This area has a rolling terrain and is heavily wooded.

Clare County has the topography and natural assets to develop as a regional recreation area. Seven million people are within three hour's drive of the County and access by these people to the County is greatly enhanced by the existing freeway system. Recreation and tourism has become one of Michigan's largest industries. It is possible for Clare County to take greater advantage of this industry and provide a new economic stimulus within the County. It should be a policy of the County to establish a committee to further investigate the recreation potential of Clare County. The Clare and Harrison City Chambers of Commerce and other organizations in the County could work with a County recreation committee to promote the idea of a recreation industry in the County. State and Federal agencies could also be contacted to lend assistance in this area.

It should be the policy of Clare County and local municipalities to preserve and enhance the natural amenities of the Conservation Sector. Zoning Ordinances should be adopted in Redding and Greenwood Townships; the other townships in the Conservation Sector should strictly implement their existing ordinances.

#### Agricultural Sector

The primary agricultural land in Clare County is in the southern and eastern portions of the County. These areas have gently rolling terrain with fertile soils which are presently being farmed in many locations. The biggest problem in the Agricultural Sector relates to scattered residential developments. To help control this situation and protect the agricultural nature of the area, small lot residential development should be discouraged on active agricultural land.

Two areas in the Agricultural Sector will have urban pressures. One such area is in Grant, Garfield and Surrey Townships. The concept of the Land Use Plan is to provide a broad open space area between the two urban areas in the County. Strong zoning ordinances will be necessary to discourage subdivision activity in this area. Certain areas around Lake Station and the U.S. 115 and U.S. 10 intersection may experience growth, but this growth should be concentrated and limited.



A second area which will have urban-agricultural conflicts is in the east Grant and west Sheridan Township areas. The soils to the east of the City of Clare are generally not conducive to urban development and a strong zoning ordinance can protect this area.

#### Land Use Control

Most townships in Clare County have zoning ordinances in effect. Those townships without zoning as of June 1978 are Garfield, Grant, Greenwood and Redding Townships. Within these townships, there are no regulations regarding the location of land uses. At present only Redding Township has not developed a Township Land Use Plan.

The remainder of the townships do have (or will have before 1979) zoning ordinances in effect. Ten of the 12 zoned township's did so through the assistance of the Association of Clare County Local Planning Commissions. In forming the Association the township's were able to prepare their zoning ordinances in a basically uniformed manner. Thus, the district sizes and allowable development for the agricultural, forestry, recreation, commercial and residential areas do not conflict. It is now the responsibility of these townships to equitably enforce and when the need arises to properly update their Land Use Plans and Zoning Ordinances. Each township presently has its own part time Zoning Administrator. Consideration should be given to the cooperative effort of hiring a full time professional Zoning Administrator and enforce all the zoned Townships in the County.

The Townships of Arthur and Frost prepared their own Zoning Ordinances without the help of professional planning personnel. These Townships should consider revising the ordinances to take into account the standards their surrounding Clare County Townships have adopted.

The Village of Farwell is the only incorporated community that does not have a zoning ordinance. In 1976 the Village Council approved a Future Land Use Plan but did not take action to prepare a zoning ordinance. Farwell should adopt a zoning ordinance immediately, especially considering its high intensity development potential.

#### Conclusion

The Sector Theory proposed by the Regional Comprehensive Plan requires a high degree of responsibility on the part of local municipalities to place controls on the development of Clare County. It will take a large effort on the part of the Association of Clare County Local Planning Commissions and the Clare County Planning Commission to encourage local leaders to adopt the concept of the Plan and to implement the Plan through proper land use controls. In some instances, the County will have to supply the needed expertise and leadership for local municipalities. This may be done by developing model ordinances for local adoption, preparing a series of education meetings on the Association's Planning Program and developing methods for the County to share in the enforcement of local ordinances. As noted earlier, the fact that a particular existing industry, business or subdivision is omitted from the Future Land Use Plan does not mean new or changed land uses in the future cannot be recognized on more detailed,



local municipal plans and zoning ordinances prepared under the guidance of the more general Regional Comprehensive Plan. The Future Land Use Plan primarily deals with "sectors" of land use intensity rather than individual land uses.

Some communities may object to the fact that their area is not considered for urban growth. The Association of Clare County Local Planning Commissions and the Clare County Planning Commission must convince such leaders that growth and bigness do not necessarily equate to quality of living environment or even progress. Urban growth is a burden. Utility systems, road systems and community facilities must be developed where growth occurs. Problems of pollution, land use controls, increased assessments and taxation and numerous other problems will plague growth communities. Certainly more expertise in government is required. Most communities in Clare County need not be faced with such burdens; other communities cannot escape these problems and must face up to them. This Land Use Plan can only be achieved if County and local community leaders accept its challenge and work towards its accomplishment.



## ORGANIZATIONAL ANALYSIS



## ORGANIZATIONAL ANALYSIS

### Introduction

The Organizational Analysis is part of the implementation phase of the planning program in which definite proposals are made relating to the structure and organization of the present government in Clare County. It is not within the scope of this study to undertake a detailed time-study analysis of the several County departments but rather to make recommendations relating to the overall structure of the present government organization. Recommendations contained within this study are not meant to reflect the qualifications or capacities of the individuals filling these affected positions.

### Structure of Counties

Counties in Michigan, as in many other states, operate on a series of laws passed over an extended period (150 years in Michigan) even though revisions were made in the 1963 State Constitution. The present structure of County government in Michigan places both elected and appointed officials in office. The State Constitution spells out the functions and powers of these officeholders in Michigan. There is little centralized authority as different government officials are not responsible to a single authority. The fact that County officials have managed to perform their duties so well is a tribute to their capabilities and not a result of the present organizational structure as defined in the Michigan Constitution and State laws. However, counties only have those powers delegated to them by the State. Their administrative structures and financial and service powers are explicitly spelled out in the State Constitution. Few court decisions have been made regarding the implied powers of the County so it is impossible to determine if they may be expanded beyond their present limit.

### Administrative Offices

The State Constitution presently requires that the following offices be filled through a direct, partisan, county-wide election -- Clerk, Prosecuting Attorney, Treasurer, Sheriff, Drain Commissioner and Register of Deeds.<sup>26</sup> The Judges of the Probate, Circuit and District Courts are also elected. The people filling the above offices, with the exception of the judges, constitute the "executive" branch of the government in Clare County.

It is quite evident that the lines of responsibility of these offices are set up to make the holders of the above offices directly responsible to the electorate instead of being appointed as the County residents directly determined who are the officeholders.

### Legislative Branch

The County Board of Commissioners constitutes the legislative body of county government but also holds some administrative powers as delegated to it by the State laws relating to county government. The number of Commissioners within a county is governed by State law, depending upon the resident population as indicated following:

<sup>26</sup> The Register of Deeds and the County Clerk offices may be combined.



| <u>County Population</u> | <u>Maximum Number of Commissioners</u> |
|--------------------------|----------------------------------------|
| 0 - 5,000                | 7                                      |
| 5,001 - 10,000           | 10                                     |
| 10,001 - 50,000          | 15                                     |
| 50,001 - 600,000         | 21                                     |
| over 600,000             | 25-35                                  |

At present, there are seven members of the Board of Commissioners in Clare County. Each member of the Board represents one geographic district of the County with approximately an equal number of County residents living in each district so that the one-man, one-vote principle is in effect. A committee composed of the County Clerk, County Treasurer, and County Prosecuting Attorney decided in 1971 that there will continue to be seven districts during the 1970 decade but the boundaries of the existing districts will change due to the new 1970 Federal Census.<sup>27</sup>

The County Board of Commissioners has the power to set the budgets of most of the departments (a notable exception is the County Road Commission which receives its funds directly from the State collections of gas and weight taxes) and thus exercises financial control over most of them. However, as indicated, the holders of most County offices are elected and in this respect are not directly responsible to the County Board of Commissioners. Many advisory committees and boards are also appointed by the Commissioners and report directly to this body. In effect, these committee members do most of the work for the Board and make recommendations directly to it.

### County Functions

#### Service Functions of Counties

Previously, it was felt by many political observers that with improved transportation and communication and more urban centers that service functions of the County would gradually disappear and give way to the more densely populated municipalities. However, just the opposite trend has developed. Many students of government now feel that the County is the best level of government to provide services. This increase in responsibility to County government has occurred as many services can be performed more efficiently and economically on a county-wide basis where economies of scale and possibilities of specialization develop (e.g., water and sewer systems and libraries). Also, in rural, unincorporated areas, the County is the logical body to provide these services as many townships do not have the financial resources to cope with the problems. The Federal and State governments have also realized the value of performing certain services on an area-wide basis and have encouraged the County role by providing grants and aid to counties. In the future, the service function of the counties in Michigan will undoubtedly increase, especially in areas which are becoming urbanized, as urban problems spill over municipal boundaries into the outlying areas.

The services provided by the counties which are mandatory and required by the State consist of holding elections, maintenance of law and order, care of prisoners, providing courts, supervising public welfare, keeping vital records, maintenance of county roads, care of dependent and neglected children and the relief of indigents.

<sup>27</sup> Clare County Clerk, April, 1978.



Permissive functions or those which the county is allowed but not required to perform include the construction and operation of parks, libraries, airports, hospitals, the provision of other health services, water and sewer systems and port facilities. However, counties cannot perform services for incorporated areas within boundaries unless these areas specifically give the county permission to do so.

### Financial Powers

There are three basic sources of revenue for counties--property taxes, State allocations and Federal aid, and fees, fines and charges.

The combined County property tax assessed by the townships, school districts, and the County is limited to 15 mills or \$15.00 per \$1,000 of State Equalized Valuation. With a referendum vote, the limit may be raised up to 18 mills. In 1974 Clare County voters set a fixed millage limit of 15 mills to be distributed in the following manner:

|                                   |           |
|-----------------------------------|-----------|
| County                            | 5.5 mills |
| Townships                         | 1.0 mills |
| Clare County Intermediate         | .5 mills  |
| School District                   |           |
| School Operating <sup>a</sup>     | 8.0 mills |
| Mid-Michigan College <sup>b</sup> | 1.5 mills |

<sup>a</sup>The rate will vary depending upon the respective school district.

<sup>b</sup>Indicates an extra-voted millage.

At present, there is no proposal to increase the millage over the present 15.00 mill limit.

The counties have no control over the amount of State aid refunded to them as the established formula upon which these disbursements are based is applied to the total dollars collected at the State level. Federal aid to counties depends upon the need of the county and the county's awareness of the Federally funded programs and its financial ability to raise its share when required to do so. The counties thus have no control over the amount of State or Federal aid available to them, but can further their own causes by pursuing certain programs (e.g., State recreation and Federal water-sewer grants). In relation to charges, fees and fines, little control is established in the county except for the amount of various user charges which it sets. In relation to the total revenue picture, the amount of the property tax is the only area in which the county can influence its revenue intake to any large extent and an upper limit is set on this amount by the voters. At present, counties cannot establish and use non-property taxes such as an income, sales or value-added to obtain revenues. Thus, no additional sources of tax revenue are available for use at the county level.

The amount of debt which a county may pledge its full faith and credit is limited by the State Constitution to ten percent of the State Equalized Valuation of real and personal property, or about \$19,000,000 in Clare County as of 1978.



## Charter Counties

The next question which needs to be answered is what alternatives and modifications to the present structure of government in Clare County are available? Act 293 of 1966 sets up the guidelines for Charter or Home Rule counties in the State as allowed by the 1963 State Constitution. At present, only two counties have sought to exercise the authority of the Act. Wayne County voters have twice rejected propositions to authorize a charter commission while Delta County voters, after having elected a charter commission, rejected, by a wide margin, the proposed charter. Since this alternate form of government exists in Michigan, the provisions of Act 293 are briefly discussed in this study.

### Administration

The County Home Rule Act of 1966, or Charter County Act, requires, as in the statutes relating to general county government, that five offices--Clerk, Sheriff, Treasurer, Register of Deeds and Prosecuting Attorney--be filled by direct partisan elections. It appears that the Drain Commissioner and Road Commission could be appointed or elected under a non-partisan system. No meaningful changes are made in administration by enactment of Act 293.

### Service Functions

There is no fundamental difference in the service functions of the county under the general county or charter county act. The county is still required under the home rule act to provide the same mandatory services as under the existing structure. Also, any countywide services cannot be carried out in villages or cities without the permission of such incorporated areas under either county structure.

### Taxing Powers

The cost of county services under County Home Rule would approximate those under the present governmental organization. Salaries and supplies are increasing and will continue to do so under either form of government. Also, the public will continue to demand more and better services regardless of the type of government which provides them.

On the revenue side of the ledger, Act 293 offers the possibility of increased revenue from the same sources. The County could set up a ten mill tax limit in its charter. This is 4.5 mills more than the present 5.50 limit voted in Clare County in 1974. No new county taxing powers are granted under the County Home Rule Act.

### Conclusion

The County Home Rule Act, Act 293, does not have the potential substantially to improve operations in Clare County. This is the case not so much because of the Act's wording but because of the existence and nature of Michigan townships. Since World War II Michigan townships have advanced in legal status to the point that they approach the legal standing of Michigan cities. As a result, Michigan counties have no geographical



territory or population over which they have exclusive control (except with respect to certain functions).

The Michigan situation, then, provides a special dilemma for county home rule advocates. There are several alternatives. One, which is to confront the issue of township or city legal standings, would require a substantial political fight. A second alternative is to limit county powers to so-called "new" functions as they become apparent. Another is to assign certain aspects of individual services and regulatory functions to the county—an approach which could give counties a role as a "producer" or "wholesaler" of services while other units focus on the "delivery" or "retailing" aspect of the service or function.

#### County Administrator

One additional topic related to the structure of county government is the issue of whether to have a full-time Administrator, or Controller, depending upon the title used. At present, all County Administrators in Michigan are appointed. They obtain their legal power of office from the County Board of Commissioners.

#### Clare County

In Clare County, the growth of County services and expenditures has been steadily increasing. The 1978 budget allows for over \$2,280,000 in expenditures of County funds, excluding the budget of the road commission which is a separate entity. Thus, County government in Clare is at the present time a million dollar plus operation.

At present, the administrative function of the government is directed by those members of the County Board of Commissioners on a part-time basis. The fact that the County has maintained a high level of services at a reasonable expense is a tribute to the efforts of the members of this Board. In approximately 22 counties, a full-time administrative position has been created by the Board. His functions are to review the budget, handle personnel problems, be the purchasing agent and advise the Board on other County affairs. There have been no studies conducted to determine the effect of such an administrator upon efficiency, costs and the level of government services. Much of the effectiveness of such an executive is an individual matter which varies from county to county and is dependent upon two basic criteria: the ability of the person filling the office and the power granted to this individual by the County Board. Unfortunately, no quantitative measure of these actual benefits exists as efficiency or output per dollar may increase but only with the spending of more money. It is recommended that the County Board of Commissioners consider creating an office for a full-time appointed administrator when the County population and work load demands it. Such an administrator would be directly responsible to the controller or administrator. Also, Gogebic County, whose 1970 population was approximately 20,676 has a controller. Prior to 1969, any counties with a population greater than 75,000 could implement the controller act. However, this restriction was removed in that year, and since that time, the concept has been implemented and investigated by some counties with a population less than the 75,000 figure.



It is felt that such an administrator could significantly reduce the work load of the Board of Commissioners and act in an advisory capacity to the members of the Board. The powers of this administrator should be as broad as possible and explicitly defined. Since this office is created at the will of the Board, it can be dissolved if found to be unsatisfactory.

No increase in efficiency can be expected if such a position is created but no power is granted to the officeholder. The duties of such an administrator would be to implement the policy decisions of the County Board of Commissioners. He would be responsible for preparing the budget, handling labor negotiations, centralizing purchasing and organizing and staffing those departments over which he would have control. In many instances, an insight into the daily activities of the various departments is required to determine their actual needs and to see what improvements can be undertaken (e.g., shifting of personnel and work loads between various departments and the consolidation or improvement of specific services provided by the County). A county administrator could fulfill such a void that presently exists and would most likely more than pay his salary by increased efficiency and output. In effect, such an administrator would implement the policy of the County Board of Commissioners. He would perform the administrative functions of the Board and free them to make policy decisions.

#### Board of Auditors

The County can establish a Board of Auditors consisting of a one-, two- or three-man Board whose members are appointed by the County Board of Commissioners. The Board of Auditors has assumed the role of the full-time administrative agency in counties having such a body. Its functions are to advise the County Board of Commissioners on policies relating to budgets, established a centralized purchasing department, audit all claims against the County and be responsible for other functions not specifically assigned to any other County departments (if desired by the Board). The role of the Board of Auditors would be one that overlapped considerably with a full-time executive. Therefore, it is proposed that no Board of Auditors be created for Clare County since the functions of such a body would be similar to that of a full-time administrator.

#### County Board of Commissioners

##### Number of Members

The present governing body in all counties is the County Board of Commissioners. This agency replaced the County Board of Supervisors in 1968 as the administrative board within all counties in Michigan. In Clare County, there were 27 members on the County Board of Supervisors. Included were the Township Supervisors and one or more city supervisors from each municipality, depending upon the population of the incorporated area. The number of commissioners will remain at seven during the 1970 but a change in boundaries will occur so that the one-man/one vote principle will remain in effect.

It is felt that seven is a workable number for the County Board of Commissioners. It is also recommended that in Clare County, the number range between seven and 13 members, and always consist of an uneven number of members. Thus, the Board would not be too



small to complete its work nor be too large and cumbersome. It is imperative that an uneven number of commissioners be apportioned so that inequities will not exist on issues coming before the County Board of Commissioners. It is understood that the number of commissioners only changes at the time of each Federal decennial census and that reapportionment is governed by a committee consisting of the County Treasurer, County Clerk and County Prosecuting Attorney. However, many proposals as to the number of districts are usually received. This recommendation, if followed, would place some limits on the number of commissioners and would establish certain guidelines.

#### Drain Commission

This department is to a large extent financially autonomous as most of the Drain Commission projects are financed via special assessment levies even though County drains at large are paid from the County General Fund. Due to the very nature of its functions, it has many contracts with the Road Commission. Also, it has close contact with the Register of Deeds office.

#### Planning Commission

The Clare County Planning Commission is charged with the responsibility of making studies, investigations and surveys relative to the economic, social and physical development of the County, formulating plans and making recommendations for the most economic, social and physical development of the County; cooperating with all departments, State and Federal governments, and other public agencies concerned with programs directed toward the economic, social and physical development of the County; and consulting with representatives of adjacent counties with respect to their planning so that conflicting, overall plans may be avoided.

A necessary part of any planning program is implementation. This is the stage through which many of the recommendations and policies contained in the Plan are put into effect. It is, therefore, recommended that the County Planning Commission establish workable channels through which planning recommendations can be implemented once the Comprehensive Development Plan is completed.

These channels could take a variety of forms. A full-time planning staff could be hired and a planning department created. Planning services could also be made available through professional planning consultants. A monthly retainer could be used to provide planning expertise to local government for a specified number of days per month. The County Planning Commission could also appoint new committees among itself to study in depth specific problems. Whatever channels are established, the County Planning Commission must remain sensitive to the needs of the local units of government.

It is recommended that the Clare County Planning By-Laws be reviewed. Periodic review of such By-Laws can promote revisions which are relevant to the composition and policies of the Commission. Items which should be reviewed carefully are membership, duties of the Chairman, attendance and duties of committees.



It is also recommended that members of the County Planning Commission be given nominal per diem compensation for attendance at meetings. This compensation should be commensurate with that amount received by other similar committees. This will not only serve to reinforce the value and necessity of planning in relation to other County departments but may also increase attendance at meetings. Regular monthly meetings should be held to keep the County Planning Commission actively involved with the Association of Clare County Local Planning Commissions and all township planning and zoning changes.

#### Association of Clare County Local Planning Commissions

The "Association" is a group of communities in the County which formed for the purpose of having land use plans, zoning ordinances and housing studies prepared. Act 245 of the Public Acts of 1945, as amended, enabled the Association to apply for 701 planning funds, thereby, helping the members afford professional planning expertise. Three annual 701 grants were awarded by the State to the Association in the years 1975-1978. During this period nine land use plans, five housing studies, 11 zoning ordinances and a Regional Comprehensive Plan were prepared (all were adopted except for Grant Township Zoning Ordinance). In most cases very little planning activity would have been completed by the local governmental units had there not been an in-house planning advisor available to answer daily questions. The members of the Association may also avail themselves to the services of a professional planning consultant who is contracted yearly to perform specific duties. Both the planning advisor and consultant are paid through the 701 Planning Assistance Grant.

The Planning Grant helps keep the Association in a sound financial footing. Every dollar collected in Clare County is matched by two federal dollars. This matching money allows many communities who could not otherwise afford to prepare professional quality plans to do so.

#### Building Department

As of November 6, 1974 the State of Michigan's statute mandated that a building permit be required for all structural work. In Clare County the Building Department is located in the County Courthouse in the City of Harrison and is manned by two full-time inspectors (one building and one electrical) and a full-time girl Friday. It is the responsibility of the Building Department to ensure that all structural work meets the State building code. This means that all new construction (including mobile home installation), changing of supporting or bearing sections, additions, demolitions and the moving of structures cannot be done unless a permit is first obtained. Also, a building permit cannot be issued until the following conditions are met: 1) a zoning permit has been issued by the respective community (if applicable), 2) a sanitation permit has been obtained from the Health Department, 3) a floor plan and the other applicable details have been presented to the Building Official, and 4) a complete application and energy code worksheet had been completed.

Thus, the Building Department makes sure that all new development complies with the applicable local and County regulations. For added insurance a minimum of three on-site



inspections are performed after the permit has been issued to insure that the construction will comply with the State building code. If someone fails to obtain a permit before starting construction a fee double the original building permit is charged.

If any plumbing changes are needed a plumbing permit is required, the forms are available from the Building Department, but a State inspector is called out to perform this duty. If any electrical work is needed, an electrical permit is also required. The Clare County Board of Commissioners hired an inspector early in 1978 just to handle electrical inspections (he shares an office and secretary with the Building Inspector.)

As the Building Department is presently set up it is an efficient organization. An improvement could be made, however, if a zoning administrator was also housed with the Building Inspector. Presently, each community that has zoning has its own zoning administrator. A more efficient system would be to have one professional full time administrator shared by all communities, rather than having 15 or 16 part time, well intentional but inexperienced laymen.

#### Treasurer

The County Treasurer is an elected County official with a myriad of duties. The Treasurer's office is the one County agency which experiences a peak work load in the spring and a lower volume in the last two months of the year. At the present time, an additional part-time person is employed during the first few months following February 28, to handle this seasonal increase of work. One function of a County Administrator would be to transfer people from one department to another during this peak and slack work months. This could be done in the Treasurer's office but not without the advice of someone who has a day-to-day working knowledge of the various County departments which would be affected.

Presently, as required by a Michigan State Statute, the delinquent tax rolls are turned over to the County Treasurer each spring. When the taxes are collected by the County, they are distributed to the local municipalities and school districts. A State statute allows the County to pay the municipalities the money due them, and collect it themselves with all interest accruing to the County. This action saves bookkeeping for the County Treasurer as the rolls do not have to be reviewed to determine where the money is to be distributed when collected. From this activity the County receives a four percent collection fee and three-quarters of one cent interest for each month of delinquency.

#### Courts

Counties in Michigan have little control over the number of judges of the Probate, District or Circuit Courts which are assigned to them. The State pays a large proportion of their respective salaries and determines their respective jurisdictions. Thus, little administrative control is administered over them by the respective counties.

#### Cooperative Extension Service

The Clare County Office of the Michigan Cooperative Extension Service is located in



the County Building in Harrison. Clare County, like other counties throughout the United States, has this educational arm extended from the Land Grant College or University in their State.

The funding of the Extension Service in Clare County is a joint effort by the Federal, State and County Governments. The Federal and State portions of the budget are funded through Michigan State University providing professional staff positions, bulletins, and other educational materials. Clare County supplies the office space, office supplies, clerical staff, agent travel expenses and other office operational needs.

The Clare Extension Office is staffed by a County Extension Director who has responsibility for total program direction and also works with Agriculture and Resource Development, a 4-H Youth agent and 4-H program assistant who work with boys and girls involved in the 4-H program. The extension office also has a Family Living Agent and Nutritional Assistant to work with families on family living programs and consumer marketing.

The Cooperative Extension's programs are available to all Clare County residents. Complete support of all the resources at Michigan State University are available to provide these educational programs.

The Clare County Extension Staff is directly responsible to Michigan State University but is conscious of Clare County's needs and welcomes input from Clare County residents on programs, program direction, evaluation, etc. The staff also works closely with other branches of County government, Township government, Churches, local organizations, etc.



## IMPLEMENTATION



## IMPLEMENTATION

### CONTINUING PLANNING PROGRAM

#### Introduction

Due to the nature of urban growth today, increasing population makes continuing comprehensive planning necessary to guide orderly development, and to assure wise investment in future development. Planning must encompass economic and sociological considerations, land use inventories, and forecasts, community facilities plans, transportation plans, and capital improvements programming. Before improvements are made, it is vital to understand and thoroughly consider the interaction of each phase and the complete interdependence expressed by the word "comprehensive."

It is primarily due to this fact that Clare County has begun a comprehensive planning process, supported by County, State and local financing. As a result, many planning programs and inventories have been initiated. However, planning is a continuing and evolving process. After the inventories, various analyses and forecasts are made and final plans are prepared to guide future urban development. Reason will dictate that a continuing planning program is needed to keep data current and make continuous evaluations of any deviation from the projected course of growth established in the initial Comprehensive Plan and township plans would seriously affect future Goals and Policies as originally conceived. Therefore, the following Continuing Planning Program will guideline a framework for:

- Watching and charting the growth process in Clare County.
- Noting and evaluating deviations from the projected and recommended Comprehensive Plan and Township detailed plans.
- Quickly and accurately evaluating alternative suggestions on land use development.

If Clare County's Continuing Planning Program is to evolve, requirements for this program should follow an established guideline. The suggested program consists of the following:

1. Surveillance-Keeping data inventories current while maintaining a continual watch over regional development and spotting and evaluating, as quickly as possible, the implications of any deviation from the projected course of development.
2. Continuing Reappraisal-Checking for significant land use changes, and updating any corresponding elements.
3. Service Function-Provision of data from the planning program for day-to-day decisions.
4. Research-The development of improved procedures and forecasting abilities with the possible simplification of data requirements.
5. Annual Report-This phase is elaborated upon later in this report.



Throughout this guide of a Continuing Planning Program, time scheduled for the updating of various projects are given a bi-annually, annually, or over a period of several years. Because these time schedules are demanding and untried in Clare County, it may be desirable to alter them to develop a more realistic schedule and still conform with the intent of the total planning program. The alteration of these schedules will probably depend upon the rate at which urban development occurs in the County.

Now that the County and its townships realize the planning process is a reality and understand it to be a necessity, the true success of the program will be the implementation of the recommended plans. If the plan in the Continuing Planning Program is to deal with reality, a procedure for obtaining official endorsements by all involved agencies should be integrated into the program, so that ultimate adoption is emphasized to complement plan preparation. Such endorsement may be generally assured by the following actions:

1. Complete involvement in the plan development by all Clare County, township and municipal agencies. Through such involvement, policy-makers will sense the true basis and value of comprehensive planning.
2. Through the thorough understanding of the Goals and Policies of the program, the presence of bias, prejudice, political motive, or mere intuition will be removed as bases for policy decisions.
3. Encourage use of inventory and planned data.

With the information gathered, private citizens and businesses can benefit directly in day-to-day decisions through their reliance upon available data.

### Organization

One of the most crucial factors in the Continuing Planning Program is the establishment of an organization. In this manner, it can be assured that consideration will be given to all elements, and implementation of the proposed plan will actually occur. Understanding and cooperation between the local municipalities, townships, and the County must exist if they are to provide for the establishment of committees to effectively carry out a Continuing Planning Program.

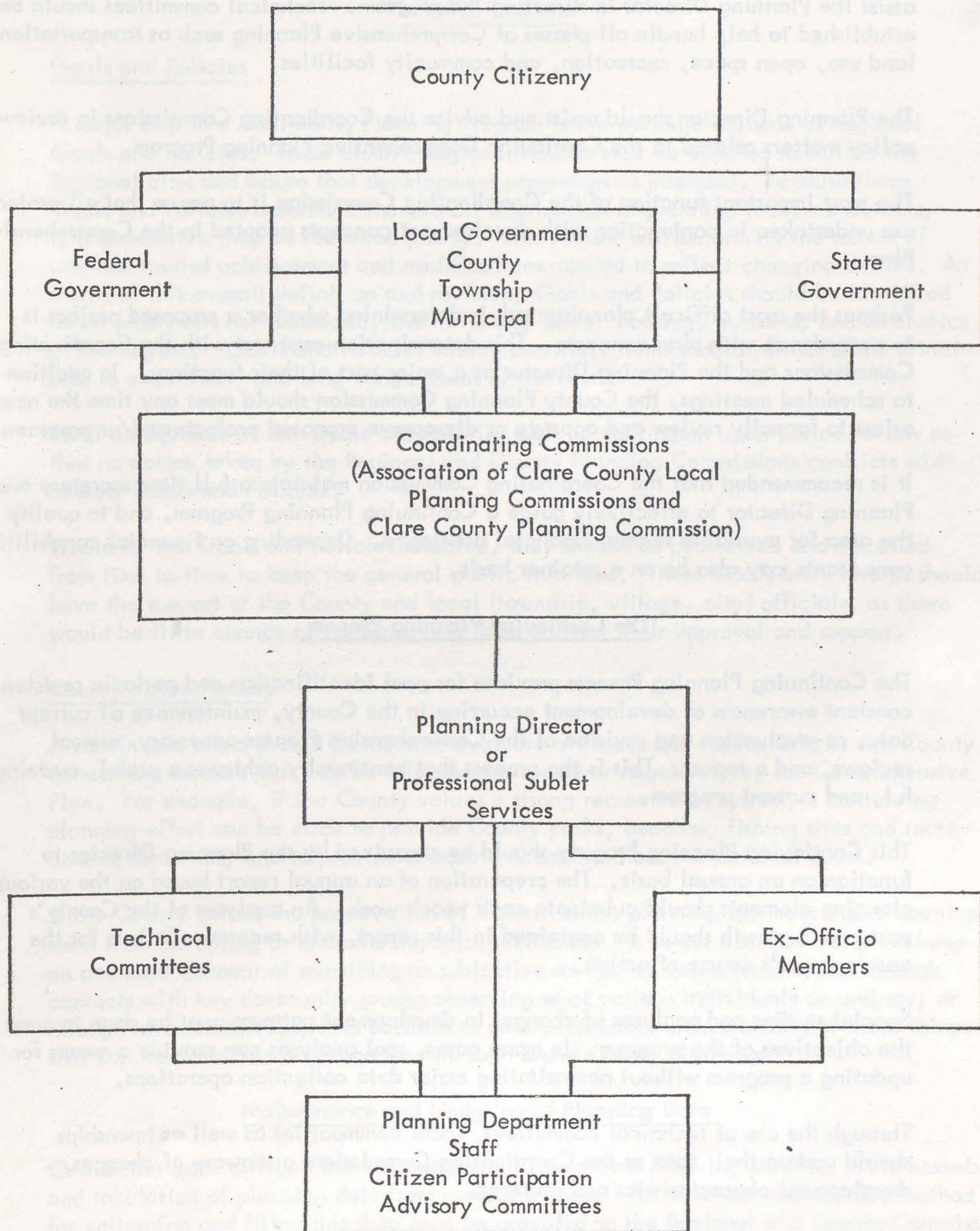
The participating agencies, committees, and commissions must determine the organization and structure of the agency best suited to local conditions. The Organization Chart, Chart 2, indicates the typical coordination of work of each participating agency and charts a flow of responsibility.

Since the Association of Clare County Local Planning Commissions and the Clare County Planning Commission represents the interests of the aggregate population of the County, they can serve as the Coordinating Commissions or nucleus of the Comprehensive Planning Program.



## CHART 2

### SUGGESTED ORGANIZATIONAL STRUCTURE





Policy formulation and overall direction of a Continuing Planning Program is carried out by the Association of Clare County Local Planning Commissions and the County Planning Commission. Technical committees, which should be composed of professional representatives of various participating agencies, will provide technical guidance and assist the Planning Director in directing the program. Technical committees should be established to help handle all phases of Comprehensive Planning such as transportation, land use, open space, recreation, and community facilities.

The Planning Director should assist and advise the Coordinating Commissions in reviewing policy matters related to the Continuing Comprehensive Planning Program.

The most important function of the Coordinating Commission is to assure that all projects are undertaken in conjunction with development concepts adopted in the Comprehensive Plan.

Perhaps the most difficult planning task is determining whether a proposed project is in accordance with plan concepts. This determination must rest with the Coordinating Commissions and the Planning Director as a major part of their functions. In addition to scheduled meetings, the County Planning Commission should meet any time the need arises to formally review and approve or disapprove proposed projects and/or programs.

It is recommended that the Coordinating Commission maintain a full time secretary and Planning Director to effectively guide a Continuing Planning Program, and to qualify the area for available federal financial assistance. Depending on financial capabilities, consultants may also be on a retainer basis.

#### The Continuing Planning Process

The Continuing Planning Process provides for goal identification and periodic revision, constant awareness of development occurring in the County, maintenance of current data, re-evaluation and revision of the Comprehensive Plan as necessary, annual reviews, and a report. This is the process that continually achieves a useful, meaningful, and current program.

This Continuing Planning Program should be organized by the Planning Director to function on an annual basis. The preparation of an annual report based on the various planning elements should culminate each year's work. An analyses of the County's past year's growth should be contained in this report, with recommendations for the ensuing year's course of action.

Special studies and analyses of changes in development patterns must be done to meet the objectives of the program. In many cases, spot analyses can provide a means for updating a program without necessitating major data collection operations.

Through the use of technical committees, local communities as well as townships should update their data so the Coordinating Commissions are aware of changes, development characteristics and patterns.



As the Continuing Planning Program progresses, Clare County will undoubtedly develop new and better techniques to perform the essential analyses and updating.

### Components of a Continuing Planning Program

#### Goals and Policies

A major step in a Continuing Planning Program is the periodic revision of Regional Goals and Policies. These elusive Regional desires must be updated to reflect the Regional aims and assure that development progresses as intended. Because these Goals and Policies determine the overall application of planning recommendations, it is imperative they be reviewed yearly. This review will determine the extent of progress toward achievement and modifications needed to reflect changing desires. As a part of this overall definition and revision, Goals and Policies should be identified for at least, but not limited to, the following items: housing, business, and aesthetics of the Region. Goals and Policies based upon these items should reflect sound principles to meet short- and long-range needs of the area.

Total acceptance of the Goals and Policies must be contingent upon period review so that no action taken by the Regional and County Planning Commissions conflicts with overall Goals and Policies.

Whatever the Goals and Policies selected, they should be publicized and discussed from time to time to keep the general public informed. These Goals and Policies should have the support of the County and local (township, village, city) officials, as there would be little chance of implementing them without their approval and support.

#### County Value Factors

A continuous effort should be made to evaluate attitudes and values held by the County concerning matters that may be affected positively or negatively by the Comprehensive Plan. For example, if the County values a strong recreational system, a continuing planning effort can be made to provide County parks, beaches, fishing sites and recreational facilities, and to provide adequate access to these recreational areas.

If the County values the preservation of historic sites, planning can help insure development from disrupting or encroaching upon such areas. It is not a simple matter to keep an accurate account of something as subjective as County value factors, but through contacts with key community groups observing what various individuals do and say, or through attitude surveys, it is possible to gain a workable understanding of those things that can be protected and enhanced through sound County planning.

#### Maintenance and Updating of Planning Data

One of the more difficult but necessary work items for a Planning Director is the assembly and tabulation of planning data from various sources. An efficient and reliable method for collecting and filing this data must be provided so the Regional and County Commissions are informed of all new developments and their utilization. It is important that this system



be designed by the Commissions and their Director to incorporate and produce information useful for the Continuing Planning Program and be readily retrievable.

#### Population-Economic Data

It is vital to the Continuing Planning Program that population and economic data be maintained and kept current. Population-economic data form the major yardstick for determining whether the County is developing in accordance with projected patterns. Therefore, one of the key elements of the maintenance program is to record and compare actual growth with the forecasts contained within this Comprehensive Plan. Further, it is desirable to determine any major changes which, in the long run, would affect the overall development of the projected land use pattern.

Data should be summarized in tabular form with the incorporated municipalities responsible for their jurisdictions, and the County and Townships responsible for the unincorporated areas. Such as the Michigan tax statistics, employment data, sales tax data, Motor Vehicle Registration data, building permits, and State and County population estimates would be helpful in maintaining this phase. The annual updating of the County O.E.D.P. would be useful.

It is important to emphasize that gathering data and making inventories is costly. Only those items required for proper planning considerations should be inventoried and duplications of studies should be avoided.

#### Land Use

Land use should be planned on a parcel-by-parcel basis and continually coded in the same manner used in the initial township plans. All agencies utilizing land use data should agree upon a standard land use code (Michigan Land Cover/Use Classification System) and be requested to use this standard system for identifying and coding land use activities within the County. This procedure would also help simplify later groupings of data.

#### Mapping Inventory

The current mapping program should be continued, providing for the annual updating of base maps used in the Comprehensive Planning Program. It is suggested that information be kept current through the establishment of a "chain of communication". This communication would involve cooperation between the local township and municipal governments and the County government for reporting changes in inventory information. Keeping base map information current can be costly but, in the long run, it will be beneficial to the County. Without current County, township and municipal base maps, a Continuing Planning Program will have less long-range value.

#### Transportation Facilities

All modes of transportation directly or indirectly affect one another, and current knowledge of the status of each mode is necessary for proper operation and forecast of a balanced transportation system. Therefore, a continuing inventory of transportation facilities should include streets and highways, airlines, railroads, and any other mode of transportation in use.



Because of their predominant role in the transportation system thoroughfares must be fully inventoried. The inventory should cover all physical and operational characteristics and contain functional classifications in accordance with the Comprehensive Plan. Information pertaining to existing capabilities, average speeds, and past accident records should also be gathered and analyzed. Such information is vital in recommending and evaluating improvements to the system.

#### Community Facilities

New schools, parks, recreational areas, and public buildings should be added periodically to the original Comprehensive Plan. In order to keep a Continuing Planning Program abreast of current data related to parks and recreational facilities, it is recommended that quarterly meetings be held by a technical committee consisting of a member of each Municipal Park Board (if established), a member of the County Park Board (if established) and a member of the state Department of Natural Resources. This technical committee should submit quarterly reports to the Planning Commission for recording current data affecting its Comprehensive Planning Program.

Likewise, a representative from each school district in Clare County should become a member of a technical committee that would also submit quarterly reports to the County Planning Commission and the Association of Clare County Local Planning Commissions.

#### Financial Resources

The status of financial resources is important. In the majority of cases, there are always more improvements needed than funds available. Financial resources and expenditures should be under constant review to determine if the best possible use is being made of existing revenues. County Capital Improvements Program should be made by a technical committee consisting of the Planning Director, a member of the County Board of Commissioners, a member of the County Planning Commission, and a member of the Association of Clare County Local Planning Commissions.

If existing revenues are inadequate to meet costs of improvements recommended, other methods and sources of acquiring additional funds should be investigated.

#### Law and Ordinances

As public officials can act only where statutes permit, laws and ordinances are the basic means of protecting and enhancing the overall welfare of Clare County's citizens. This protection is afforded by police regulations, building codes, zoning ordinances, subdivision regulations, health standards and other resolutions and laws. Without properly planned control through the use of laws and ordinances, the probability of proper development is remote. Therefore, all laws and ordinances should be reviewed annually with recommendations to proper officials for revisions, amendments and/or additions needed to promote development in the best interest.



### Annual Review and Report for a Continuing Planning Program

The following are several reasons for recommending an annual report of the Continuing Planning Program:

- It would form a permanent reference document for development of the County in terms of population growth and characteristics.
- It would form an important source of trend information for all data collected during the Continuing Planning Program.
- The annual report would keep all involved agencies informed and, at the same time, ensure the on-schedule undertaking and completion of the many functions of the program.

Work completed during any given year by the staff, technical committees, the Regional and County Planning Commissions, as well as by a Planning Director should be condensed into an annual report. After approval by the Regional and County Planning Commissions, this synthesized report may be reproduced in hand-out copies for public consumption. The report would also directly benefit the Board of County Commissioners and other legislative authorities in future decisions affecting Clare County. The following items are suggested for inclusion in this annual report:

- Tabulation of the annual change in population and employment by type of activity. These changes could be compared to the conditions forecast during the original studies. Deviations should be analyzed and followed by recommendations for new courses of action. Continual updating of the original Comprehensive Plan and local plans and ordinances is imperative.
- Major new developments should be described in both tabular and graphic form to indicate the direction of shifts in population and employment.
- An analysis of public expenditures should include a listing of major projects undertaken in the previous year, and their effect on the economy and growth of the County.
- Finally, on the basis of all data collected during the previous year, recommendations should be made for the major emphasis or thrusts in the program during the ensuing year.
- These recommendations might include requesting concentrated efforts for delving more deeply into specific areas, or an immediate updating of plans in light of substantial deviations from the original projected trends.

### Financial Responsibilities of the Continuing Planning Program

Maintaining current data in respect to the majority of elements of a Comprehensive Plan has been indicated throughout this report. Maintenance of data can range from full-time, day-to-day operations for the County to part-time or intermittent operations for the local communities, townships, or County. This maintenance and evaluation is a requisite for proper planning.



Responsibility for coordination of a Continuing Planning Program should be assigned to local governments and to the County Planning Commissions.

In order to supplement the Planning Department's budget the County, incorporated cities, communities and townships requiring services within the County should appropriate monies. This cooperation between the County and local governments would undoubtedly make possible the hiring of a qualified, competent planner or firm. It would also achieve coordination of all community, township, and County planning elements.

Federal funds may be available for financing portions of a Continuing Planning Program on a matching basis. An investigation should be launched to determine the availability of such funds from the U.S. Department of Housing and Urban Development (HUD) or other government departments.

Proper planning does not come cheaply, but the end result of a sound planning program over a period of years will repay the County tenfold.

The following table, "Updating Procedures," lists in outline form the procedure, frequency, and responsibility of a Continuing Planning Program for the points previously discussed in Maintenance and Updating of Planning Data.

Table 40 - UPDATING PROCEDURES

Population Factors

| <u>Procedures</u>                                                                                        | <u>Frequency</u> | <u>Responsibility</u>       |
|----------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Update current population historical trends, including in- and out-migration estimates by age groups. | Annually         | Local, County & Association |
| 2. Update in- and out-migration pattern data.                                                            | 5 Years          | Local, County & Association |
| 3. Maintain current population and number of households.                                                 | Continually      | Local, County & Association |
| 4. Forecast future (5- and 20-years population by urbanized area, political unit or census zones.        | 5 Years          | Local, County & Association |

Economic Factors (Could be accomplished as part of the Annual O.E.D.P. Updating Process)

| <u>Procedure</u>                                                                                                                                           | <u>Frequency</u> | <u>Responsibility</u>       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Maintain current data on labor force for the study area; i.e., employment and unemployment as inventoried by place of residence by the Bureau of Census | Continually      | Local, County & Association |



| <u>Procedure</u>                                                                                                                                                                                                                                                                           | <u>Frequency</u> | <u>Responsibility</u>       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 2. Maintain current data on employment for the study area by category by place of work. These control totals should then be distributed by zone. (Suggested categories are manufacturing, services, trade, transportation-communication-utilities, and agricultural-resources extraction.) | Currently        | Local, County & Association |
| 3. Maintain current per capita income data (in constant dollars).                                                                                                                                                                                                                          | 5 Years          | County & Association        |
| 4. Maintain current average family income by zone (in constant dollars).                                                                                                                                                                                                                   | 5 Years          | County & Association        |
| 5. Maintain current truck ownership and car ownership through use of Bureau of Motor Vehicle Registration.                                                                                                                                                                                 | Annually         | County                      |
| 6. Maintain current state sales tax receipts and bank deposits by city.                                                                                                                                                                                                                    | Continually      | Association                 |
| 7. Maintain current retail sales.                                                                                                                                                                                                                                                          | Bi-annually      | County & Association        |
| 8. Maintain current data on land values or tax duplicate of land and structures.                                                                                                                                                                                                           | Continually      | Local, County & Association |
| 9. Maintain income consumption patterns.                                                                                                                                                                                                                                                   | As Needed        | County & Association        |
| 10. Review area economic growth and development potential.                                                                                                                                                                                                                                 | 5 Years          | County & Association        |
| 11. Forecast future (5- and 20-year) employment by category by zone of work.                                                                                                                                                                                                               | 5 Years          | County & Association        |
| 12. Forecast future (5- and 20-year) total personal income in constant dollars and calculate per capita income.                                                                                                                                                                            | 5 Years          | County & Association        |
| 13. Forecast future (5- and 20-year) average family income in constant dollars by zone.                                                                                                                                                                                                    | 5 Years          | County & Association        |

#### Land Use

| <u>Procedure</u>                                                                                                            | <u>Frequency</u> | <u>Responsibility</u>       |
|-----------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Maintain current land usage parcel by parcel.                                                                            | Continually      | Local, County & Association |
| 2. Prepare current pattern and update coded maps of land use for comparison with previous maps and public presentation use. | 3 Years          | Association                 |
| 3. Maintain current land utilization by category.                                                                           | Annually         | Association                 |
| 4. Prepare pattern or coded future land use maps.                                                                           | 5 Years          | Association                 |



| <u>Procedure</u>                          | <u>Frequency</u> | <u>Responsibility</u> |
|-------------------------------------------|------------------|-----------------------|
| 5. Document land use forecast procedures. | 5 Years          | County & Association  |

#### Map Inventory

| <u>Procedure</u>                                                                                                     | <u>Frequency</u> | <u>Responsibility</u>       |
|----------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Provide new aerial photographs at five-year intervals (stereoscopic).                                             | 10 Years         | County                      |
| 2. Provide sectional enlargements of aerial photos, 1" = 400' in intensively developing areas.                       | 10 Years         | County                      |
| 3. Prepare aerial mosaic.                                                                                            | 10 Years         | County                      |
| 4. Maintain current County base maps.                                                                                | Annually         | Association                 |
| 5. Maintain current base maps of townships.                                                                          | Annually         | Association                 |
| 6. Prepare large scale maps of other large areas of interest and study industrial park development and display maps. | As Needed        | Local, County & Association |

Note: Aerial photographs may be used to review and check land use maps.

#### Transportation Facilities

| <u>Procedure</u>                                                                             | <u>Frequency</u> | <u>Responsibility</u>       |
|----------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Number new freeways, expressways, major and collector intersections.                      | As Needed        | County & Association        |
| 2. Maintain current map of inter-section numbers.                                            | Continually      | Local, County & Association |
| 3. Maintain current functional classifications of all roads and streets.                     | Continually      | Local, County & Association |
| 4. Maintain current physical characteristics of network by link on all except local streets. | Annually         | County                      |
| 5. Review capacities of all inventoried streets and intersections.                           | 5 Years          | County                      |
| 6. Maintain a current listing of deficient intersections for improvement scheduling.         | Annually         | Local & County              |
| 7. Prepare map showing present usage-capacity relationship of all streets and intersections. | As Needed        | Local & County              |
| 8. Maintain current ADT maps of area showing volumes of all streets over 1000 ADT.           | As Needed        | County & Association        |



| <u>Procedure</u>                                                                                                                   | <u>Frequency</u> | <u>Responsibility</u>       |
|------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 9. Determine dangerous locations from accident spot maps.                                                                          | Annually         | Local, County & Association |
| 10. Maintain current data on airlines, railroads, inter-city bus and truck lines as required to balance area transportation system | Annually         | Local, County & Association |
| 11. Make field reconnaissance of each segment of the proposed network to determine feasibility.                                    | 5 Years          | Local, County & Association |
| 12. Provide current design standards for future network.                                                                           | 7 Years          | Local & County              |

#### Community Facilities

| <u>Procedure</u>                                                       | <u>Frequency</u> | <u>Responsibility</u>       |
|------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Maintain current maps locating the following community facilities:* | Annually         | Local, County & Association |
| Present and proposed churches                                          |                  |                             |
| Present and Proposed schools and school districts                      |                  |                             |
| Present and proposed parks, open space and recreational facilities     |                  |                             |
| Historical sites and buildings                                         |                  |                             |
| Fire districts                                                         |                  |                             |
| Other community facilities                                             |                  |                             |

#### Financial Resources

| <u>Procedures</u>                                                          | <u>Frequency</u> | <u>Responsibility</u> |
|----------------------------------------------------------------------------|------------------|-----------------------|
| 1. Maintain current the following financial data:                          | Annually         | Local & County        |
| Real and personal property tax                                             |                  |                       |
| Bonded indebtedness                                                        |                  |                       |
| Present and committed tax obligations.                                     |                  |                       |
| Maximum tax rates and bonded indebtedness.                                 |                  |                       |
| Other data as necessary                                                    |                  |                       |
| 2. Prepare cost estimates of future (5 and 20 years) capital improvements. | 5 Years          | Local & County        |

\*Many of these maps are maintained and periodically updated by existing local agencies. This information should be utilized as much as possible.



| <u>Procedure</u>                                                                | <u>Frequency</u> | <u>Responsibility</u>       |
|---------------------------------------------------------------------------------|------------------|-----------------------------|
| 3. Recommend a 5 year and 20 year fiscal program and implementation procedures. | 5 Years          | Local, County & Association |

Laws and Ordinances

| <u>Procedure</u>                                                                                                            | <u>Frequency</u> | <u>Responsibility</u>       |
|-----------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------------|
| 1. Maintain current inventory of changes to zoning resolutions, setback requirements, building codes, and licensing powers. | Continually      | Local, County & Association |
| 2. Re-evaluate all development codes and resolutions as they relate to future development plans to determine deficiencies.  | Annually         | Local, County & Association |



## APPENDIX



## ENVIRONMENTAL ASSESSMENT

### Introduction

The Regional Comprehensive Plan for Clare County is an overall guide for the rational future planning of development in Clare County over the next 20 to 25 years. The Existing Environment Analysis, analyzes the current conditions of the natural environment in the County, including an identification of existing environmental problems and potentials. The Land Use Plan element provides for desirable location of land uses to minimize land use conflicts, maximize economic and natural resources and provide for the County residents' housing, shopping and recreation needs. The Transportation Plan element analyzes the transportation system in the County and recommends future improvements, where necessary, to accommodate anticipated future transportation usage and to increase the safety and efficiency of the system. The Community Facilities Plan element analyzes and identifies deficiencies in the areas of recreation, schools, County administrative offices and police and fire protection.

### Environmental Impact

Clare County is essentially sparsely developed at present with only a few scattered small vacant lots and an increasing trend toward large rural lot development, thus there is virtually no environmental impact related to large scale development of vacant natural areas. However, the Plan does propose certain developmental policies in the Future Land Use Plan which calls for land use changes that would result in development of existing rural areas.

### High Intensity Development

The proposed expansion of high intensity development north of the City of Harrison will eventually result in the development of many existing vacant areas. However, these high development uses will be subject to the Hayes Township Zoning Ordinance which requires proper setback and drainage. Also, the land which is presently proposed as Commercial on BR 27 north of the City of Harrison is a deteriorating large lot residential strip of development with interdispersed commercial and retail uses.

In fact, high intensity development could improve the natural features through landscaping and planting of additional trees, shrubbery and grass.

### Low Intensity Development

The Future Land Use Plan also calls for some low intensity development in surrounding communities of Lake Station, Temple, Lake George and Meredith which at present have a number of deficient and substandard homes with small commercial cores providing some basic living services. Development in these areas could cause removal of several homes and the combining of some inadequate lots that in the end will benefit the environment by removing deficient structures, improving deficient lots, and providing population concentrations to support existing commercial areas. Additional development along U.S. 10, north of Farwell, Old U.S. 27 north and south of Harrison, approximately



500 acres directly west of the City of Clare, and the Five Lakes area in Grant Township are all expected to be future low intensity development sites.

These areas are also presently in the stage of scattered commercial and more intensive residential use. The corridor on U.S. 10 northwest of the Village of Farwell is currently commercially zoned. High density residential areas abut this commercial corridor. A mobile home community is also included, as are many commercial uses and single-family residential lots.

The area directly west of Clare has scattered commercial lots with little natural ground cover. The area surrounding the Five Lakes development in Grant Township is also expected to flourish and develop to a more intensive area within the next twenty years. Two, five mile long corridors are expected to develop along Old U.S. 27 both north and south of the City of Harrison. Much of this land is already in small lot development with residential and commercial uses intermingled. Development of these corridors will be controlled by zoning ordinances in both Hayes and Hatton Townships.

Low Intensity Development is not planned to occur on large vacant properties and as such does not mar large acreages of vacant and previously untouched land. These areas are already located on the primary transportation system in their area of the County and no new roads would need to be constructed. In its developing stages the Low Intensity Sector will not need municipal services, however, when fully developed, in approximately the next twenty years, water and sewer services will probably have to be developed along the corridors and in the clusters of low intensity development in the various townships. Exceptions to this proposed need might be the localities of Temple, Leota and Meredith which might not develop large concentrations of potential water and sewer users.

#### Rural Residential Development

Development in the Rural Residential Sector will be primarily large lot developments of one to ten acre lots and occasional estate-sized lots. Sewer and water needs will not present themselves due to the large lot sizes and the sandy conditions of much of the sectors soil. This Sector's development merely assumes that the existing pattern of subdividing and developing in these areas will continue and in fact that they should continue to allow ample land to be left for conservation and forestry uses.

Most of the areas delineated as being in the Rural Residential Sector are already generally on smaller lots or larger tracts surrounded by ten acre or less size lots. The Future Land Use Section envisions that these existing residential areas be more fully utilized in the future.

The environmental impact of this development will destroy very little natural beauty of the large lots, which will accommodate an increasingly larger percentage of Clare County residents. If residential land is clustered in this fashion other more environmentally sensitive lands will not need to be developed.



### Agricultural Development

Agricultural Development is expected to occur primarily in the south and south-west areas of Clare County. Much of this land is presently in agricultural use of some kind. The economic feasibility of a forested section of land being cleared for potential farm land is slight. With this fact in mind the Future Land Use Plan is expected to only minimally affect the environment in the Agricultural Development Sector.

### Conservation/Recreation Development

The proposed acreage allocations in the Conservation/Recreation district should be no less than ten acres in size. With lots this large environmental degradation should not occur. With densities this low, public facilities or utilities will not be needed. Wildlife habitats are generally found adjacent river basins and the only such area in Clare County is along the Muskegon River. In the Future Land Use Plan it is proposed that the Muskegon River area be untouched to allow the river basin to remain in its natural state.

Concentrating urbanization on land in areas presently in various stages of development will have the effect of keeping the two major Conservation/Recreation areas in the most natural state possible.

### Unavoidable Adverse Environmental Effects

The Plan will have minimal negative environmental effects because most of the Plan elements are aimed at improving the existing urban development. Relatively few changes in land use and densities are planned. The extent of the natural loss is confined to the removal of a small number of trees, shrubbery and grass normally associated with building a single-family home. There are no critical natural areas that will be disrupted. The effects on the man-made environment will potentially involve the widening of streets and the increasing of parking spaces in the incorporated communities.

### Alternative to the Plan

The principal alternative to the planning program would be to take no action in the future, thereby allowing development to continue without the benefit of an overall guide or blue print. This is what happened in the past in Clare County. Numerous lake associations have formed to arrange for neighborhood and lake clean-up programs. Both Bud Lake in Hayes Township and Eight Point Lake in Garfield Township have hired a seaweed harvesting firm to improve their lakes. This occurrence is the result of waste seeping into the lake in the form of phosphorous and nitrogen. Both these elements feed the algae and seaweed growth in the lakes. The existing high density of single-family homes is too great for the lake environment to effectively handle with the implementation of various township zoning ordinances, lake areas and other environmentally sensitive areas will be protected from over development.

The fact must be realized that Clare County will experience development in the future whether it is planned for or not.



### Relationship Between Short-Term Environmental Use and Long-Term Productivity

All of the planning elements in this Plan are intended to provide recommendations and to project needs through the Year 2000. All recommendations are expected to be gradually implemented over the next 25 years. The recommendations made in the Plan are aimed at maintaining and enhancing the environment and long-term productivity of the County. Any short-term losses, deficiencies or inconveniences caused by the implementation of these recommendations, such as the removal of a few shrubs or bushes caused by maintenance and construction work, would be temporary and necessary to realize long-term benefits.

### Irreversible and Irretrievable Commitment of Resources

Numerous committee meetings and numerous hours of meetings will be the major resource commitment. The total cost of the Regional Comprehensive Plan's recommendations has not been calculated, as all of it awaits specific project planning; and much of the land acquisition will take place well in the future when additional people realize the beauty of living in northern Michigan. Surrounding the incorporated communities some natural resources (trees, grass and open space) will be lost, although most will be replaced through new planting and landscaping.

### Applicable Environmental Controls

Numerous controls are available to minimize any negative environmental effects that might be caused by these planning recommendations. Environmental Assessments with Federal and State review are required for any Federal Aid projects that might be implemented and, as part of these assessments, the Department of Public Works includes planned techniques designed to reduce negative environmental effects of a specific project. Numerous Federal and State agencies (including the Federal Highway Administration, Michigan Department of Natural Resources, Michigan Department of State Highways and Transportation, U.S. Army Corps of Engineers, Environmental Protection Agency, and U.S. Department of the Interior, among others) require environmental review. Two specific County agencies, the Clare County Road Commission and the Clare County Drain Commission, may sometimes be included in review procedures. Finally there is local review through the Clare County Building Department which will not approve a building permit unless a health permit has first been obtained through the Clare County Health Department and unless the local zoning administrator has assured the County Building Department that the development does obey all rules of the township or community. Included within all township zoning ordinances prepared by the Association of Clare County Local Planning Commissions is a section requiring that the local community prepare a wetlands map denoting environmentally sensitive lands and prohibiting development on such lots less than ten acres and only then if the use does not involve any major construction. If major construction is involved a professional engineer will have to have to prove that the environmental effects are minimal.



TABLE A-1

VALUE OF HOUSING<sup>a</sup>  
CLARE COUNTY 1970\*

| Unit                      | \$5,000<br>Less | \$5,000<br>9,999 | \$10,000<br>14,999 | \$15,000<br>17,499 | \$17,500<br>19,999 | \$20,000<br>24,999 | \$25,000<br>34,999 | \$35,000<br>49,999 | \$50,000<br>more | Total<br>Occupied |
|---------------------------|-----------------|------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|------------------|-------------------|
| <hr/>                     |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| <u>Townships:</u>         | (b)             |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| Arthur                    | -               | -                | -                  | -                  | -                  | -                  | -                  | -                  | -                | -                 |
| Franklin                  | 16              | 7                | 23                 | 7                  | 0                  | 7                  | 0                  | 0                  | 0                | 60                |
| Freeman                   | -               | -                | -                  | -                  | -                  | -                  | -                  | -                  | -                | -                 |
| Frost                     | 6               | 16               | 14                 | 0                  | 0                  | 0                  | 4                  | 7                  | 0                | 47                |
| Garfield                  | 48              | 103              | 59                 | 19                 | 6                  | 14                 | 8                  | 12                 | 0                | 269               |
| Grant                     | 27              | 116              | 65                 | 26                 | 37                 | 24                 | 17                 | 5                  | 0                | 317               |
| Greenwood                 | -               | -                | -                  | -                  | -                  | -                  | -                  | -                  | -                | -                 |
| Hamilton                  | 27              | 115              | 19                 | 6                  | 0                  | 12                 | 8                  | 0                  | 0                | 187               |
| Hatton                    | 18              | 34               | 18                 | 0                  | 0                  | 0                  | 6                  | 0                  | 0                | 76                |
| Hayes                     | 59              | 169              | 97                 | 0                  | 21                 | 15                 | 6                  | 20                 | 0                | 387               |
| Lincoln                   | 39              | 72               | 19                 | 6                  | 0                  | 0                  | 6                  | 0                  | 0                | 142               |
| Redding                   | 38              | 12               | 6                  | 0                  | 0                  | 0                  | 0                  | 0                  | 0                | 56                |
| Sheridan                  | 0               | 16               | 20                 | 10                 | 6                  | 0                  | 19                 | 0                  | 0                | 71                |
| Summerfield               | 38              | 29               | 0                  | 0                  | 0                  | 0                  | 0                  | 0                  | 0                | 67                |
| Surrey                    | 14              | 225              | 98                 | 26                 | 31                 | 28                 | 22                 | 6                  | 0                | 450               |
| Winterfield               | 15              | 13               | 0                  | 6                  | 0                  | 0                  | 0                  | 0                  | 0                | 34                |
| <hr/>                     |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| <u>Cities:</u>            |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| Clare                     | 19              | 137              | 115                | 105                | 41                 | 68                 | 74                 | 21                 | 0                | 580               |
| Harrison                  | 32              | 82               | 62                 | 32                 | 39                 | 53                 | 21                 | 0                  | 0                | 321               |
| <hr/>                     |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| County Total <sup>c</sup> | 415             | 1155             | 615                | 424                |                    | 221                | 191                | 71                 |                  | 3091              |
| <hr/>                     |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |
| County Median = \$9,900   |                 |                  |                    |                    |                    |                    |                    |                    |                  |                   |

\* 1970 Census of Housing, U.S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup> Owner Occupied. Data limited to one family homes, detached or attached, vacant or for sale, on less than 10 acres and no business property. Cooperatives, Condominiums, mobile homes, trailers excluded. Based on 10% sample.

<sup>b</sup> Indicates data suppressed for confidentiality purposes.

<sup>c</sup> Includes suppressed data therefore County totals are accurate.



TABLE A-2

HOUSING CHARACTERISTICS  
CLARE COUNTY 1970\*

| Built for Seasonal |                        |                    |                     | Year Round Construction            |                                 |                 |       |
|--------------------|------------------------|--------------------|---------------------|------------------------------------|---------------------------------|-----------------|-------|
| Unit               | Occupied<br>Year Round | Vacant<br>Seasonal | Vacant<br>Migratory | Occupied &<br>Vacant<br>Year Round | Vacant For<br>Occasional<br>Use | Other<br>Vacant | Total |
| <u>Townships:</u>  |                        |                    |                     |                                    |                                 |                 |       |
| Arthur             | 148                    | -                  | -                   | 203                                | 37                              | 9               | 203   |
| Franklin           | 150                    | 267                | -                   | 155                                | -                               | 5               | 422   |
| Freeman            | 31                     | -                  | -                   | 262                                | 218                             | 5               | 262   |
| Frost              | 114                    | 33                 | -                   | 552                                | 420                             | 9               | 585   |
| Garfield           | 382                    | 5                  | -                   | 1090                               | 645                             | 21              | 1095  |
| Grant              | 530                    | -                  | 4                   | 689                                | 145                             | 14              | 693   |
| Greenwood          | 135                    | -                  | -                   | 269                                | 114                             | 20              | 269   |
| Hamilton           | 299                    | 706                | -                   | 358                                | 30                              | 19              | 1064  |
| Hatton             | 171                    | -                  | -                   | 264                                | 67                              | 22              | 264   |
| Hayes              | 604                    | 543                | -                   | 2180                               | 1270                            | 227             | 2723  |
| Lincoln            | 204                    | -                  | -                   | 1077                               | 828                             | 24              | 1077  |
| Redding            | 77                     | -                  | -                   | 203                                | 101                             | 10              | 203   |
| Sheridan           | 218                    | -                  | -                   | 265                                | 32                              | 8               | 265   |
| Summerfield        | 100                    | -                  | -                   | 344                                | 244                             | -               | 344   |
| Surrey             | 679                    | 159                | -                   | 1070                               | 300                             | 50              | 1229  |
| Winterfield        | 120                    | -                  | -                   | 184                                | 60                              | 4               | 184   |
| <u>Cities:</u>     |                        |                    |                     |                                    |                                 |                 |       |
| Clare              | 905                    | -                  | -                   | 985                                | 4                               | 24              | 985   |
| Harrison           | 478                    | 24                 | -                   | 911                                | 322                             | 28              | 935   |
| County Total       | 5345                   | 1737               | 4                   | 11061                              | 4837                            | 499             | 12802 |

\* 1970 Census of Housing, Bureau of the Census, 4th Count Summary Tapes.  
ECMPDR Staff Calculations.



TABLE A-3

TYPE OF STRUCTURE<sup>a</sup>  
CLARE COUNTY 1970\*

| Unit              | 1 Unit<br>Detached | 1 Unit<br>Attached | 2 Units | 3-4 Units | 5-19 Units | 20-More | Mobile<br>Home | Total |
|-------------------|--------------------|--------------------|---------|-----------|------------|---------|----------------|-------|
| <u>Townships:</u> |                    |                    |         |           |            |         |                |       |
| Arthur            | 170                | 0                  | 5       | 0         | 0          | 0       | 28             | 203   |
| Franklin          | 137                | 0                  | 0       | 0         | 0          | 0       | 18             | 155   |
| Freeman           | 250                | 0                  | 12      | 0         | 0          | 0       | 0              | 262   |
| Frost             | 528                | 0                  | 0       | 0         | 0          | 0       | 24             | 552   |
| Garfield          | 1046               | 4                  | 13      | 0         | 0          | 0       | 27             | 1090  |
| Grant             | 631                | 0                  | 19      | 0         | 0          | 0       | 39             | 689   |
| Greenwood         | 246                | 0                  | 0       | 0         | 0          | 0       | 23             | 269   |
| Hamilton          | 352                | 0                  | 0       | 0         | 0          | 0       | 6              | 358   |
| Hatton            | 229                | 0                  | 0       | 0         | 8          | 0       | 27             | 264   |
| Hayes             | 2039               | 0                  | 7       | 0         | 30         | 0       | 104            | 2180  |
| Lincoln           | 1031               | 11                 | 13      | 0         | 0          | 0       | 22             | 1077  |
| Redding           | 203                | 0                  | 0       | 0         | 0          | 0       | 0              | 203   |
| Sheridan          | 260                | 0                  | 0       | 0         | 0          | 0       | 5              | 265   |
| Summerfield       | 336                | 0                  | 0       | 0         | 0          | 0       | 8              | 344   |
| Surrey            | 977                | 7                  | 21      | 0         | 10         | 0       | 55             | 1070  |
| Winterfield       | 170                | 0                  | 0       | 0         | 0          | 0       | 14             | 184   |
| <u>Cities:</u>    |                    |                    |         |           |            |         |                |       |
| Clare             | 750                | 6                  | 124     | 34        | 23         | 0       | 48             | 985   |
| Harrison          | 809                | 7                  | 33      | 4         | 15         | 0       | 43             | 911   |
| County Total      | 10164              | 35                 | 247     | 38        | 86         | 0       | 491            | 11061 |

\*Census of Housing, U.S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup>Occupied and Vacant Year Round.



TABLE A-4

COUNT OF HOUSING UNITS WITH  
COMPLETE BATHROOM FACILITIES<sup>a</sup>  
CLARE COUNTY 1970\*

| Unit              | None <sup>b</sup><br>or<br>Half Bath | 1<br>Bath | 1 1/2<br>Baths | 2<br>Baths | 2 1/2<br>Baths | 3 or<br>More<br>Baths | Total<br>Units |
|-------------------|--------------------------------------|-----------|----------------|------------|----------------|-----------------------|----------------|
| <u>Townships:</u> |                                      |           |                |            |                |                       |                |
| Arthur            | 57                                   | 141       | 7              | 0          | 0              | 0                     | 205            |
| Franklin          | 48                                   | 89        | 10             | 0          | 0              | 0                     | 147            |
| Freeman           | 72                                   | 175       | 0              | 14         | 0              | 0                     | 261            |
| Frost             | 155                                  | 358       | 24             | 0          | 0              | 0                     | 537            |
| Garfield          | 373                                  | 668       | 44             | 6          | 0              | 0                     | 1091           |
| Grant             | 34                                   | 579       | 36             | 18         | 7              | 7                     | 691            |
| Greenwood         | 112                                  | 155       | 0              | 0          | 0              | 0                     | 267            |
| Hamilton          | 70                                   | 277       | 31             | 0          | 0              | 0                     | 378            |
| Hatton            | 61                                   | 201       | 0              | 0          | 0              | 0                     | 262            |
| Hayes             | 1358                                 | 775       | 23             | 32         | 0              | 8                     | 2196           |
| Lincoln           | 489                                  | 532       | 6              | 43         | 0              | 6                     | 1076           |
| Redding           | 159                                  | 37        | 0              | 0          | 0              | 0                     | 196            |
| Sheridan          | 58                                   | 197       | 14             | 5          | 0              | 0                     | 274            |
| Summerfield       | 253                                  | 71        | 9              | 0          | 0              | 0                     | 333            |
| Surrey            | 174                                  | 770       | 97             | 13         | 8              | 8                     | 1070           |
| Winterfield       | 47                                   | 110       | 15             | 7          | 6              | 0                     | 185            |
| <u>Cities:</u>    |                                      |           |                |            |                |                       |                |
| Clare             | 13                                   | 689       | 128            | 96         | 29             | 21                    | 976            |
| Harrison          | 149                                  | 708       | 52             | 33         | 0              | 0                     | 942            |
| County Total      | 3682                                 | 6532      | 496            | 277        | 50             | 50                    | 11087          |

\* 1970 Census of Housing, U.S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup> Occupied and Vacant Year Round. Based on 15% Sample Calculations.

<sup>b</sup> Includes bathroom facilities also used by occupants of another unit.



TABLE A-5

SOURCE OF WATER<sup>a</sup>  
CLARE COUNTY 1970\*

| Unit              | Public System <sup>b</sup><br>or<br>Private Company | Individual<br>Well | Other <sup>c</sup> | Total<br>Units |
|-------------------|-----------------------------------------------------|--------------------|--------------------|----------------|
| <u>Townships:</u> |                                                     |                    |                    |                |
| Arthur            | 0                                                   | 193                | 12                 | 205            |
| Franklin          | 0                                                   | 147                | 0                  | 147            |
| Freeman           | 0                                                   | 261                | 0                  | 261            |
| Frost             | 15                                                  | 468                | 54                 | 537            |
| Garfield          | 12                                                  | 1055               | 24                 | 1091           |
| Grant             | 15                                                  | 670                | 6                  | 691            |
| Greenwood         | 0                                                   | 261                | 6                  | 267            |
| Hamilton          | 7                                                   | 371                | 0                  | 378            |
| Hatton            | 10                                                  | 244                | 8                  | 262            |
| Hayes             | 72                                                  | 2103               | 21                 | 2196           |
| Lincoln           | 24                                                  | 998                | 54                 | 1076           |
| Redding           | 0                                                   | 196                | 0                  | 196            |
| Sheridan          | 0                                                   | 269                | 5                  | 274            |
| Summerfield       | 0                                                   | 333                | 0                  | 333            |
| Surrey            | 324                                                 | 722                | 24                 | 1070           |
| Winterfield       | 18                                                  | 167                | 0                  | 185            |
| <u>Cities:</u>    |                                                     |                    |                    |                |
| Clare             | 886                                                 | 90                 | 0                  | 976            |
| Harrison          | 586                                                 | 349                | 7                  | 942            |
| County Total      | 1969                                                | 8897               | 221                | 11087          |

\* 1970 Census of Housing, U.S. Bureau of the Census, 4th Count Summary Tapes.

<sup>a</sup> Occupied and Vacant Year Round. Based on 15% Calculated Sample.

<sup>b</sup> Common source supplying water to more than 5 units.

<sup>c</sup> Water directly from springs, creeks, rivers, etc.



TABLE A-6

HEATING EQUIPMENT  
CLARE COUNTY 1970\*

| Unit              | Steam or<br>Hot Water | Central<br>Warm-Air<br>Furnace | Built-in<br>Electric<br>Units | Floor-Wall<br>Pipeless<br>Furnace | Room<br>Heater<br>with<br>Flue | Room<br>Heater<br>without<br>Flue | Fireplace-<br>Stoves-<br>Portable<br>Heaters | Not<br>Heated | Total |
|-------------------|-----------------------|--------------------------------|-------------------------------|-----------------------------------|--------------------------------|-----------------------------------|----------------------------------------------|---------------|-------|
| <u>Townships:</u> |                       |                                |                               |                                   |                                |                                   |                                              |               |       |
| Arthur            | 5                     | 68                             | 0                             | 17                                | 79                             | 0                                 | 29                                           | 5             | 203   |
| Franklin          | 7                     | 92                             | 0                             | 6                                 | 37                             | 0                                 | 13                                           | 0             | 155   |
| Freeman           | 0                     | 0                              | 14                            | 88                                | 136                            | 0                                 | 15                                           | 9             | 262   |
| Frost             | 0                     | 116                            | 0                             | 33                                | 114                            | 14                                | 275                                          | 0             | 552   |
| Garfield          | 29                    | 218                            | 6                             | 50                                | 651                            | 35                                | 68                                           | 33            | 1090  |
| Grant             | 19                    | 406                            | 21                            | 46                                | 119                            | 52                                | 21                                           | 5             | 689   |
| Greenwood         | 0                     | 83                             | 0                             | 6                                 | 160                            | 0                                 | 10                                           | 10            | 269   |
| Hamilton          | 14                    | 88                             | 8                             | 30                                | 117                            | 86                                | 15                                           | 0             | 358   |
| Hatton            | 16                    | 72                             | 13                            | 32                                | 117                            | 0                                 | 0                                            | 14            | 264   |
| Hayes             | 58                    | 386                            | 22                            | 35                                | 511                            | 28                                | 1131                                         | 9             | 2180  |
| Lincoln           | 0                     | 96                             | 0                             | 71                                | 828                            | 18                                | 46                                           | 18            | 1077  |
| Redding           | 0                     | 0                              | 0                             | 37                                | 95                             | 4                                 | 62                                           | 5             | 203   |
| Sheridan          | 25                    | 90                             | 28                            | 4                                 | 87                             | 0                                 | 28                                           | 3             | 265   |
| Summerfield       | 0                     | 0                              | 4                             | 24                                | 66                             | 0                                 | 250                                          | 0             | 344   |
| Surrey            | 38                    | 312                            | 40                            | 161                               | 449                            | 5                                 | 47                                           | 18            | 1070  |
| Winterfield       | 4                     | 13                             | 0                             | 76                                | 72                             | 0                                 | 19                                           | 0             | 184   |
| <u>Cities:</u>    |                       |                                |                               |                                   |                                |                                   |                                              |               |       |
| Clare             | 130                   | 475                            | 5                             | 238                               | 123                            | 14                                | 0                                            | 0             | 985   |
| Harrison          | 51                    | 433                            | 29                            | 70                                | 319                            | 0                                 | 9                                            | 0             | 911   |
| County Total      | 396                   | 2948                           | 190                           | 1024                              | 1080                           | 256                               | 2038                                         | 129           | 11061 |

\* 1970 Census of Housing, U.S. Bureau of the Census, 4th Count Summary Tapes.



TABLE A-7

YEAR STRUCTURE BUILT  
CLARE COUNTY 1949 to 1970\*

| Unit              | 69-70 | 65-68 | 60-64 | 50-59 | 40-49 | 1939 or<br>earlier | Total  |
|-------------------|-------|-------|-------|-------|-------|--------------------|--------|
| <u>Townships:</u> |       |       |       |       |       |                    |        |
| Arthur            | 5     | 27    | 11    | 56    | 6     | 98                 | 203    |
| Franklin          | 7     | 6     | 41    | 12    | 35    | 54                 | 155    |
| Freeman           | 36    | 71    | 80    | 43    | 10    | 22                 | 262    |
| Frost             | 7     | 79    | 79    | 235   | 113   | 39                 | 552    |
| Garfield          | 33    | 183   | 245   | 245   | 90    | 294                | 1,090  |
| Grant             | 58    | 159   | 60    | 114   | 67    | 231                | 689    |
| Greenwood         | 35    | 86    | 32    | 38    | 18    | 60                 | 269    |
| Hamilton          | 6     | 31    | 134   | 68    | 27    | 92                 | 358    |
| Hatton            | 12    | 45    | 33    | 105   | 5     | 64                 | 264    |
| Hayes             | 50    | 309   | 1,191 | 318   | 239   | 73                 | 2,180  |
| Lincoln           | 24    | 177   | 293   | 382   | 105   | 96                 | 1,077  |
| Redding           | 0     | 15    | 51    | 51    | 39    | 47                 | 203    |
| Sheridan          | 24    | 26    | 21    | 27    | 23    | 144                | 265    |
| Summerfield       | 16    | 46    | 63    | 127   | 68    | 24                 | 344    |
| Surrey            | 35    | 184   | 186   | 311   | 90    | 264                | 1,070  |
| Winterfield       | 0     | 35    | 31    | 33    | 12    | 73                 | 184    |
| <u>Cities:</u>    |       |       |       |       |       |                    |        |
| Clare             | 30    | 67    | 112   | 150   | 109   | 517                | 985    |
| Harrison          | 43    | 97    | 105   | 211   | 142   | 313                | 911    |
| County Total      | 421   | 1,643 | 2,768 | 2,526 | 1,198 | 2,505              | 11,061 |

Source: 1970 Census of Housing U.S. Bureau of the Census 4th Count Summary Tapes.

\* Bases on 20% Sample.



TABLE A-8

COUNTY AND STATE MEDIAN VALUES<sup>a</sup>  
CLARE COUNTY 1970\*

| Unit              | County<br>Median Value \$9,900 |                             |            | State<br>Median Value \$17,600 |                             |            |                             |
|-------------------|--------------------------------|-----------------------------|------------|--------------------------------|-----------------------------|------------|-----------------------------|
|                   | Total No.<br>Owner<br>Occupied | Number<br>Below<br>\$10,000 | %<br>Total | Number<br>Above<br>\$10,000    | Number<br>Below<br>\$17,500 | %<br>Total | Number<br>Above<br>\$17,500 |
| <u>Townships:</u> |                                |                             |            |                                |                             |            |                             |
| Arthur            | -                              | -                           | -          | -                              | -                           | -          | -                           |
| Franklin          | 60                             | 23                          | 38         | 37                             | 53                          | 83         | 7                           |
| Freeman           | -                              | -                           | -          | -                              | -                           | -          | -                           |
| Frost             | 47                             | 22                          | 47         | 25                             | 36                          | 77         | 11                          |
| Garfield          | 269                            | 151                         | 56         | 118                            | 229                         | 85         | 40                          |
| Grant             | 317                            | 143                         | 45         | 174                            | 234                         | 74         | 83                          |
| Greenwood         | -                              | -                           | -          | -                              | -                           | -          | -                           |
| Hamilton          | 187                            | 142                         | 76         | 45                             | 167                         | 89         | 20                          |
| Hatton            | 76                             | 52                          | 68         | 24                             | 70                          | 92         | 6                           |
| Hayes             | 387                            | 228                         | 59         | 159                            | 325                         | 84         | 62                          |
| Lincoln           | 142                            | 111                         | 78         | 31                             | 136                         | 96         | 6                           |
| Redding           | 56                             | 50                          | 89         | 6                              | 56                          | 100        | 0                           |
| Sheridan          | 71                             | 16                          | 23         | 55                             | 46                          | 65         | 25                          |
| Summerfield       | 67                             | 67                          | 100        | 0                              | 67                          | 100        | 0                           |
| Surrey            | 450                            | 239                         | 53         | 211                            | 363                         | 81         | 87                          |
| Winterfield       | N/A                            | N/A                         | N/A        | N/A                            | N/A                         | N/A        | N/A                         |
| <u>Cities:</u>    |                                |                             |            |                                |                             |            |                             |
| Clare             | 580                            | 156                         | 27         | 424                            | 376                         | 65         | 204                         |
| Harrison          | 321                            | 114                         | 36         | 207                            | 208                         | 65         | 113                         |
| County Total      | 3064                           | 1542                        | 50         | 1522                           | 2400                        | 78         | 664                         |

\* 1970 Census of Housing, U.S. Bureau of the Census, 4th Count Summary.

<sup>a</sup>Owner Occupied. ECMPDR Calculations.



Clare County  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-9

|                          | 1972          | 1973        | 1974        | 1975        | 1976        | 1977        |
|--------------------------|---------------|-------------|-------------|-------------|-------------|-------------|
| <u>Real Property</u>     |               |             |             |             |             |             |
| Agricultural             | \$13,881,664  | 16,101,439  | 22,213,003  | 30,127,364  | 28,773,814  | 30,619,426  |
| % of yearly change       |               | 16.1%       | 38.1%       | 37.7%       | -5.9%       | 6.4%        |
| % of change '72-'77..... |               | 120.57%     |             |             |             |             |
| Commercial               | \$12,726,713  | 14,359,166  | 18,485,867  | 21,275,229  | 22,063,838  | 23,592,944  |
| % of yearly change       |               | 12.8%       | 28.7%       | 17.5%       | 1.6%        | 6.9%        |
| % of change '72-'77..... |               | 85.4%       |             |             |             |             |
| Industrial               | \$4,644,875   | 4,574,855   | 4,809,958   | 4,527,416   | 4,878,828   | 6,380,930   |
| % of yearly change       |               | -1.5%       | 5.1%        | -5.9%       | 7.7%        | 30.8%       |
| % of change '72-'77..... |               | 37.4%       |             |             |             |             |
| Residential              | \$122,109,168 | 143,063,975 | 183,616,930 | 215,356,661 | 217,080,532 | 228,608,321 |
| % of yearly change       |               | 17.2%       | 28.3%       | 17.6%       | .5%         | 5.3%        |
| % of change '72-'77..... |               | 114.7%      |             |             |             |             |
| Timber Cut Over          | 11,061,932    | 17,146,752  | 20,961,186  | 23,630,885  | 23,290,046  | 21,777,715  |
| % of yearly change       |               | 55.0%       | 22.2%       | 13.9%       | -2.4%       | -6.5%       |
| % of change '72-'77..... |               | 96.9%       |             |             |             |             |
| Total Real               | \$162,456,191 | 197,587,350 | 247,167,932 | 297,503,836 | 295,886,102 | 311,643,411 |
| % of yearly change       |               | 21.6%       | 25.1%       | 20.3%       | .54%        | 5.3%        |
| % of change '72-'77..... |               | 91.8%       |             |             |             |             |



City of Clare  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABIF A-10

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Commercial               | \$7,638,942  | 7,757,654  | 8,346,874  | 9,088,599  | 9,080,335  | 9,554,459  |
| # of parcels             | 198          | 197        | 194        | 189        | 191        | 189        |
| % of yearly change       |              | 1.6%       | 7.6%       | 8.9%       | -.1%       | 5.2%       |
| % of change '72-'77..... | 25.1%        |            |            |            |            |            |
| Industrial               | \$2,464,606  | 2,268,822  | 2,707,480  | 2,818,179  | 2,933,924  | 2,384,015  |
| # of parcels             | 11           | 14         | 16         | 15         | 15         | 14         |
| % of yearly change       |              | -7.9%      | 19.3%      | 4.1%       | 4.1%       | -18.4%     |
| % of change '72-'77..... | -3.3%        |            |            |            |            |            |
| Residential              | \$13,203,421 | 13,426,746 | 15,197,428 | 15,424,358 | 17,354,601 | 18,263,339 |
| # of parcels             | 1119         | 1129       | 1138       | 1128       | 1134       | 1135       |
| % of yearly change       |              | 1.7%       | 13.2%      | 1.5%       | 12.5%      | 5.2%       |
| % of change '72-'77..... | 38.3%        |            |            |            |            |            |
| Total Real               | \$23,306,969 | 23,453,222 | 26,251,781 | 27,331,136 | 29,368,860 | 30,204,813 |
| % of yearly change       |              | .63%       | 11.9%      | 4.1%       | 7.5%       | 29.4%      |
| % of change '72-'77..... | 29.6%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$3,080,882  | 2,970,775  | 3,366,300  | 3,969,200  | 1,580,144  | 1,657,434  |
| # of parcels             | 202          | 206        | 412        | 424        | 343        | 168        |
| % of change '72-'77..... | -46.2%       |            |            |            |            |            |
| Industrial               | \$3,271,000  | 2,695,400  | 3,809,600  | 4,682,400  | 1,841,216  | 1,708,240  |
| # of parcels             | 6            | 8          | 23         | 23         | 18         | 10         |
| % of change '72-'77..... | -47.8%       |            |            |            |            |            |
| Utilities                | \$1,333,580  | 1,338,163  | 1,472,399  | 1,495,399  | 1,528,465  | 1,579,839  |
| # of parcels             | 2            | 1          | 2          | 2          | 2          | 2          |
| % of change '72-'77..... | 18.5%        |            |            |            |            |            |



City of Harrison  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-11

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Commercial               | \$2,188,400  | 2,408,199  | 2,874,779  | 3,814,097  | 4,040,363  | 4,338,274  |
| # of parcels             | 110          | 117        | 127        | 127        | 121        | 122        |
| % of yearly change       |              | 10.0%      | 19.4%      | 32.7%      | 5.9%       | 7.4%       |
| % of change '72-'77..... | 98.2%        |            |            |            |            |            |
| Industrial               | \$4,463      | 4,433      | 4,433      |            |            |            |
| # of parcels             | 1            | 1          | 1          |            |            |            |
| % of yearly change       |              | -.71%      | 0.0%       |            |            |            |
| Residential              | \$9,353,767  | 10,083,199 | 12,013,674 | 14,048,083 | 13,661,489 | 14,120,434 |
| # of parcels             | 1151         | 1157       | 1155       | 1145       | 1147       | 1146       |
| % of yearly change       |              | 7.8%       | 19.1%      | 17.8%      | -3.5%      | 3.4%       |
| % of change '72-'77..... | 51.1%        |            |            |            |            |            |
| Total Real               | \$11,546,630 | 12,495,831 | 14,892,886 | 17,862,180 | 17,701,852 | 18,458,708 |
| % of yearly change       |              | 8.2%       | 19.2%      | 19.9%      | -.1%       | 4.3%       |
| % of change '72-'77..... | 59.9%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$1,092,349  | 1,280,274  | 1,535,372  | 1,587,551  | 632,146    | 734,105    |
| # of parcels             | 76           | 78         | 76         | 74         | 71         | 78         |
| % of change '72-'77..... | -32.8%       |            |            |            |            |            |
| Utilities                | \$567,244    | 635,705    | 738,302    | 772,633    | 788,222    | 806,785    |
| # of parcels             | 2            | 2          | 2          | 2          | 2          | 2          |
| % of change.....         | 42.2%        |            |            |            |            |            |



Arthur Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-12

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$2,124,092 | 2,339,000 | 3,443,123 | 4,327,437 | 4,448,100 | 4,725,286 |
| # of parcels             | 205         | 230       | 244       | 239       | 245       | 247       |
| % of yearly change       |             | 10.1%     | 47.2%     | 25.7%     | 2.8%      | 6.2%      |
| % of change '72-'77..... | 122.5%      |           |           |           |           |           |
| Residential              | \$685,707   | 688,807   | 929,533   | 1,687,761 | 1,646,300 | 1,865,284 |
| # of parcels             | 86          | 90        | 96        | 114       | 115       | 119       |
| % of yearly change       |             | .45%      | 34.9%     | 81.6%     | -2.5%     | 13.3%     |
| % of change '72-'77..... | 172.0%      |           |           |           |           |           |
| Timber Cut Over          | \$881,167   | 714,267   | 849,022   | 1,004,745 | 991,600   | 1,008,600 |
| # of parcels             | 117         | 106       | 106       | 92        | 90        | 91        |
| % of yearly change       |             | 18.9%     | 18.8%     | 18.3%     | -1.3%     | 1.7%      |
| % of change '72-'77..... | 14.5%       |           |           |           |           |           |
| Commercial               |             | 45,000    | 63,042    | 55,823    | 47,600    | 47,600    |
| # of parcels             |             | 1         | 1         | 1         | 1         | 1         |
| % of yearly change       |             |           | 40.0%     | -11.5%    | -14.7%    | 0.0%      |
| % of change '72-'77..... |             | 5.8%      |           |           |           |           |
| Total Real               | \$3,690,966 | 3,787,074 | 5,284,720 | 7,075,766 | 7,133,600 | 7,646,770 |
| % of yearly change       |             | 2.6%      | 39.5%     | 33.9%     | .8%       | 7.1%      |
| % of change '72-'77..... | 107.2%      |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Commercial               | \$11,604    |           |           |           |           |           |
| # of parcels             | 1           |           |           |           |           |           |
| Utilities                | \$224,894   | 236,149   | 248,657   | 259,133   | 266,427   | 269,847   |
| # of parcels             | 9           | 9         | 8         | 8         | 8         | 8         |
| % of change '72-'77..... | 17.4%       |           |           |           |           |           |



Franklin Township  
True Cash Value of Real Personal Property  
as determined from Assessment Roll

TABLE A-13

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$151,074   | 155,365   | 487,000   | 138,230   | 139,651   | 396,201   |
| # of parcels             | 12          | 12        | 22        | 8         | 6         | 9         |
| % of yearly change       |             | 2.8%      | 213.4%    | -71.6%    | 1.0%      | 183.7%    |
| % of change '72-'77..... | 162.3%      |           |           |           |           |           |
| Residential              | \$3,477,628 | 4,086,022 | 4,160,149 | 6,417,120 | 6,964,670 | 7,445,429 |
| # of parcels             | 782         | 925       | 961       | 1093      | 1143      | 1174      |
| % of yearly change       |             | 17.4%     | 1.8%      | 54.3%     | 8.5%      | 6.9%      |
| % of change '72-'77..... | 114.1%      |           |           |           |           |           |
| Commercial               | \$172,760   | 197,200   | 267,812   | 241,082   | 210,958   | 225,400   |
| # of parcels             | 10          | 10        | 12        | 11        | 11        | 11        |
| % of yearly change       |             | 14.1%     | 35.8%     | 10.0%     | -12.5%    | 6.8%      |
| % of change '72-'77..... | 30.5%       |           |           |           |           |           |
| Timber Cut Over          | 1,448,607   | 1,630,425 | 2,325,026 | 2,340,373 | 2,294,945 | 2,050,600 |
| # of parcels             | 156         | 155       | 155       | 129       | 126       | 117       |
| % of yearly change       |             | 12.5%     | 42.6%     | .7%       | -1.9%     | 10.6%     |
| % of change '72-'77..... | 41.6%       |           |           |           |           |           |
| Total Real               | \$5,250,069 | 7,699,437 | 7,239,987 | 9,136,805 | 9,400,224 | 9,721,628 |
| % yearly change          |             | 46.6%     | -5.9%     | 26.2%     | 2.9%      | 3.4%      |
| % of change '72-'77..... | 85.2%       |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Commercial               | \$37,289    | 32,512    | 49,963    | 64,979    | 16,093    | 23,221    |
| # of parcels             | 9           | 9         | 18        | 24        | 19        | 10        |
| % change '72-'77.....    | -37.7%      |           |           |           |           |           |
| Utilities                | \$677,616   | 767,188   | 821,943   | 808,054   | 608,464   | 609,014   |
| # of parcels             | 8           | 8         | 8         | 8         | 8         | 6         |
| % change '72-'77.....    | -10.1%      |           |           |           |           |           |



Freeman Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-14

|                          | 1972        | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|-------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |             |            |            |            |            |            |
| Agricultural             | \$517,400   | 665,200    | 750,200    | 1,195,813  | 1,219,223  | 1,218,804  |
| # of parcels             | 24          | 24         | 24         | 34         | 34         | 34         |
| % of yearly change       |             | 28.5%      | 12.7%      |            | 59.4%      | - .93%     |
| % of change '72-'77..... |             | 135.6%     |            |            |            |            |
| Timber Cut Over          | 1,432,001   | 2,759,826  | 2,771,262  | 2,616,522  | 2,860,555  | 2,871,710  |
| # of parcels             | 238         | 231        | 234        | 219        | 223        | 227        |
| % of yearly change       |             | 92.7%      | .41%       | 6.9%       | 9.3%       | .38%       |
| % of change '72-'77..... |             | 100.5%     |            |            |            |            |
| Residential              | \$8,102,590 | 8,479,082  | 8,600,064  | 7,460,605  | 7,906,274  | 8,943,667  |
| # of parcels             | 1999        | 2010       | 2012       | 2020       | 2022       | 2028       |
| % of yearly change       |             | 4.6%       | 1.4%       | -13.2%     | 6.0%       | 13.1%      |
| % of change '72-'77..... |             | 10.4%      |            |            |            |            |
| Commercial               | \$64,404    | 72,000     | 74,000     | 74,430     | 64,865     | 74,200     |
| # of parcels             | 4           | 4          | 4          | 4          | 4          | 4          |
| % of yearly change       |             | 11.7%      | 2.7%       | .6%        | -12.9%     | 14.3%      |
| % of change '72-'77..... |             | 15.2%      |            |            |            |            |
| Total Real               | \$9,650,735 | 11,599,616 | 12,074,544 | 11,347,370 | 12,050,917 | 13,108,381 |
| % of yearly change       |             | 20.1%      | 4.0%       | -6.0%      | 6.2%       | 8.7%       |
| % of change '72-'77..... |             | 35.8%      |            |            |            |            |
| <u>Personal Property</u> |             |            |            |            |            |            |
| Commercial               | \$11,200    | 11,200     | 4,876      | 14,276     | 12,788     | 46,188     |
| # of parcels             | 2           | 2          | 4          | 4          | 4          | 4          |
| % of change '72-'77..... |             | 312.4%     |            |            |            |            |
| Utilities                | \$1,980,853 | 2,915,495  | 5,305,571  | 5,562,412  | 3,045,580  | 3,629,532  |
| # of parcels             | 9           | 10         | 15         | 15         | 13         | 10         |
| % of change '72-'77..... |             | 83.2%      |            |            |            |            |
| Residential              | \$5,000     | 5,000      | 5,000      | 5,000      | 5,000      | 5,000      |
| # of parcels             | 1           | 1          | 1          | 1          | 1          | 1          |
| % of change '72-'77..... |             | 0%         |            |            |            |            |



Frost Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-15

|                          | 1972        | 1973      | 1974       | 1975       | 1976       | 1977       |
|--------------------------|-------------|-----------|------------|------------|------------|------------|
| <u>Real Property</u>     |             |           |            |            |            |            |
| Agricultural             | \$ 326,223  | 367,140   | 422,759    | 828,808    | 731,100    | 737,371    |
| # of parcels             | 34          | 37        | 39         | 39         | 40         | 38         |
| % of yearly change       |             | 12.5%     | 15.1%      | 96.0%      | -11.8%     | .85%       |
| % of change '72-'77..... | 126%        |           |            |            |            |            |
| Timber Cut Over          | \$795,570   | 727,280   | 957,261    | 1,043,585  | 917,761    | 1,005,055  |
| # of parcels             | 83          | 81        | 83         | 80         | 75         | 73         |
| % of yearly change       |             | -8.5%     | 31.6%      | 9.0%       | -12.1%     | 9.5%       |
| % of change '72-'77..... | 26.3%       |           |            |            |            |            |
| Residential              | \$6,991,911 | 7,736,763 | 8,769,030  | 12,079,743 | 11,420,686 | 12,183,375 |
| # of parcels             | 1239        | 1312      | 1411       | 1427       | 1452       | 1472       |
| % of yearly change       |             | 10.6%     | 13.3%      | 37.8%      | -5.5%      | 6.7%       |
| % of change '72-'77..... | 74.2%       |           |            |            |            |            |
| Commercial               | \$225,550   | 217,300   | 245,188    | 387,891    | 344,191    | 386,858    |
| # of parcels             | 16          | 16        | 19         | 20         | 22         | 22         |
| % of yearly change       |             | -36.6%    | 12.8%      | 58.2%      | -11.3%     | 12.4%      |
| % of change '72-'77..... | 71.5%       |           |            |            |            |            |
| Industrial               | \$21,634    | 26,001    | 30,047     | 43,494     | 38,211     | 41,438     |
| # of parcels             | 2           | 2         | 2          | 3          | 3          | 3          |
| % of yearly change       |             | 20.2%     | 15.6%      | 44.8%      | -12.1%     | 8.4%       |
| % of change '72-'77..... | 91.5%       |           |            |            |            |            |
| Total Real               | \$8,360,888 | 9,074,484 | 10,424,285 | 14,383,521 | 13,451,949 | 14,354,095 |
| % of yearly change       |             | 8.5%      | 14.9%      | 38.0%      | -6.5%      | 6.7%       |
| % of change '72-'77..... | 71.7%       |           |            |            |            |            |
| <u>Personal Property</u> |             |           |            |            |            |            |
| Commercial               | \$59,280    | 76,774    | 91,539     | 100,519    | 31,887     | 105,080    |
| # of parcels             | 13          | 16        | 32         | 36         | 26         | 16         |
| % of change '72-'77..... | 77.3%       |           |            |            |            |            |
| Industrial               | \$37,944    | 44,909    | 82,678     | 82,678     |            |            |
| # of parcels             | 1           | 1         | 2          | 2          |            |            |
| % of change '72-'77..... |             |           |            |            |            |            |
| Utilities                | \$1,381,006 | 1,819,392 | 1,847,572  | 1,847,572  | 1,333,936  | 1,546,166  |
| # of parcels             | 4           | 4         | 4          | 4          | 4          | 4          |
| % of change '72-'77..... | 12.0%       |           |            |            |            |            |



Garfield Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-16

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$491,994    | 974,194    | 1,220,799  | 2,116,938  | 1,580,401  | 1,583,504  |
| # of parcels             | 37           | 68         | 76         | 73         | 95         | 95         |
| % of yearly change       |              | 98.0%      | 25.3%      | 73.4%      | 23.3%      | .19%       |
| % of change '72-'77..... | 221.9%       |            |            |            |            |            |
| Commercial               | \$239,995    | 265,465    | 379,400    | 521,015    | 427,418    | 540,700    |
| # of parcels             | 26           | 27         | 30         | 34         | 34         | 35         |
| % of yearly change       |              | 10.6%      | 42.9%      | 37.3%      | -18.0%     | 26.5%      |
| % of change '72-'77..... | 125.3%       |            |            |            |            |            |
| Industrial               | \$105,670    | 112,977    | 141,026    | 137,172    | 141,766    |            |
| # of parcels             | 3            | 3          | 3          | 3          | 2          |            |
| % of yearly change       |              | 6.9%       | 24.8%      | -2.7%      | 3.3%       |            |
| % of change '72-'77..... | 34.2%        |            |            |            |            |            |
| Residential              | \$13,574,522 | 13,959,903 | 17,184,265 | 21,255,486 | 19,981,846 | 20,564,300 |
| # of parcels             | 2089         | 2250       | 2342       | 2345       | 2384       | 2389       |
| % of yearly change       |              | 2.8%       | 23.1%      | 23.7%      | -6.0%      | -3.3%      |
| % of change '72-'77..... | 51.5%        |            |            |            |            |            |
| Timber Cut Over          | \$660,957    | 1,084,860  | 1,301,400  | 1,759,618  | 1,555,934  | 1,527,801  |
| # of parcels             | 116          | 91         | 95         | 96         | 96         | 97         |
| % of yearly change       |              | 64.1%      | 20.0%      | 35.2%      | -11.6%     | -1.8%      |
| % of change '72-'77..... | 131.1%       |            |            |            |            |            |
| Total Real               | \$15,073,138 | 16,397,399 | 20,226,890 | 25,790,229 | 23,687,365 | 24,216,305 |
| % of yearly change       |              | 8.8%       | 23.4%      | 27.5%      | -8.2%      | 2.2%       |
| % of change '72-'77..... | 60.7%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$118,987    | 138,199    | 143,599    | 174,299    | 109,499    | 98,299     |
| # of parcels             | 29           | 30         | 59         | 64         | 52         | 26         |
| % of change '72-'77..... | -17.4%       |            |            |            |            |            |
| Utilities                | \$1,605,403  | 1,862,801  | 1,992,201  | 2,086,701  | 1,602,601  | 1,201,301  |
| # of parcels             | 5            | 5          | 5          | 5          | 5          | 5          |
| % of change '72-'77..... | -25.2%       |            |            |            |            |            |



Grant Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-17

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$2,112,454  | 2,444,600  | 2,703,400  | 4,256,585  | 3,968,576  | 4,326,201  |
| # of parcels             | 173          | 146        | 157        | 151        | 159        | 144        |
| % of yearly change       |              | 15.7%      | 10.6%      | 57.5%      | -6.8%      | 9.0%       |
| % of change '72-'77..... |              | 104.8%     |            |            |            |            |
| Commercial               | \$917,691    | 972,974    | 1,295,000  | 1,416,039  | 1,849,899  | 2,118,400  |
| # of parcels             | 49           | 49         | 50         | 51         | 54         | 59         |
| % of yearly change       |              | 6.0%       | 86.7%      | 9.3%       | 30.6%      | 14.5%      |
| % of change '72-'77..... |              | 130.8%     |            |            |            |            |
| Industrial               | \$9,244      | 9,244      | 9,759      | 11,640     | 13,158     | 13,160     |
| # of parcels             | 7            | 7          | 7          | 7          | 7          | 7          |
| % of yearly change       |              | 0.0%       | 5.6%       | 19.3%      | 13.0%      | .02%       |
| % of change '72-'77..... |              | 42.4%      |            |            |            |            |
| Residential              | \$9,374,698  | 12,850,932 | 14,103,029 | 15,743,560 | 17,773,840 | 19,298,114 |
| # of parcels             | 1510         | 1586       | 1685       | 1682       | 1686       | 1713       |
| % of yearly change       |              | 37.1%      | 9.7%       | 11.6%      | 12.9%      | 8.6%       |
| % of change '72-'77..... |              | 105.9%     |            |            |            |            |
| Timber Cut Over          | \$178,651    | 305,545    | 311,751    | 279,279    | 325,569    | 357,200    |
| # of parcels             | 25           | 17         | 21         | 17         | 17         | 17         |
| % of yearly change       |              | 71.0%      | 2.0%       | -10.4%     | 16.6%      | 9.7%       |
| % of change '72-'77..... |              | 99.9%      |            |            |            |            |
| Total Real               | \$12,592,738 | 14,637,347 | 16,422,939 | 21,707,053 | 23,931,042 | 26,113,119 |
| % yearly change          |              | 16.2%      | 12.2%      | 32.2%      | 10.2%      | 9.1%       |
| % of change '72-'77..... |              | 107.4%     |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$299,049    | 265,677    | 996,225    | 618,356    | 200,982    | 226,123    |
| # of parcels             | 34           | 31         | 75         | 78         | 54         | 35         |
| % of change '72-'77..... |              | -24.4%     |            |            |            |            |
| Industrial               | \$15,504     | 34,622     | 48,844     | 49,836     | 450,306    | 915,856    |
| # of parcels             | 2            | 3          | 6          | 6          | 7          | 5          |
| % of change '72-'77..... |              | 5807.2%    |            |            |            |            |
| Utilities                | \$718,625    | 780,248    | 848,862    | 890,619    | 926,342    | 982,822    |
| # of parcels             | 7            | 7          | 7          | 7          | 7          | 7          |
| % of change '72-'77..... |              | 36.8%      |            |            |            |            |



Greenwood Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-18

|                          | 1972         | 1973      | 1974      | 1975      | 1976       | 1977       |
|--------------------------|--------------|-----------|-----------|-----------|------------|------------|
| <u>Real Property</u>     |              |           |           |           |            |            |
| Agricultural             | \$583,140    | 629,400   | 1,492,717 | 2,073,020 | 2,135,931  | 2,233,000  |
| # of parcels             | 55           | 57        | 67        | 67        | 68         | 69         |
| % of yearly change       |              | 7.9%      | 137.2%    | 38.9%     | 3.0%       | 4.5%       |
| % of change '72-'77..... | 282.9%       |           |           |           |            |            |
| Commercial               | \$18,800     | 21,400    | 48,000    | 73,237    | 87,000     | 109,200    |
| # of parcels             | 1            | 1         | 2         | 1         | 1          | 1          |
| % of yearly change       |              | 13.8%     | 124.3%    | 52.6%     | 18.7%      | 25.6%      |
| % of change '72-'77..... | 480.9%       |           |           |           |            |            |
| Industrial               | \$2,600      | 2,600     | 10,457    | 12,473    | 10,150     | 10,150     |
| # of parcels             | 1            | 1         | 4         | 4         | 4          | 4          |
| % of yearly change       |              | 0.0%      | 302.1%    | 19.3%     | -18.6%     | 0.0%       |
| % of change '72-'77..... | 290.4%       |           |           |           |            |            |
| Residential              | \$ 2,503,973 | 3,341,889 | 4,591,505 | 6,384,636 | 6,920,047  | 7,344,721  |
| # of parcels             | 505          | 616       | 632       | 703       | 730        | 755        |
| % of yearly change       |              | 33.5%     | 37.4%     | 39.1%     | 8.4%       | 6.1%       |
| % of change '72-'77..... | 193.3%       |           |           |           |            |            |
| Timber Cut Over          | \$581,809    | 574,544   | 1,203,807 | 1,358,726 | 1,272,580  | 1,273,600  |
| # of parcels             | 124          | 124       | 127       | 110       | 96         | 93         |
| % of yearly change       |              | -1.2%     | 109.6%    | 12.9%     | -6.3%      | .08%       |
| % of change '72-'77..... | 118.9%       |           |           |           |            |            |
| Total Real               | \$3,690,322  | 4,569,833 | 7,303,286 | 9,902,092 | 10,425,708 | 10,970,671 |
| % of yearly change       |              | 23.8%     | 59.8%     | 19.3%     | 5.3%       | 5.2%       |
| % of change '72-'77..... | 197.3%       |           |           |           |            |            |
| <u>Personal Property</u> |              |           |           |           |            |            |
| Commercial               | \$7,000      | 15,600    | 9,986     | 27,840    | 20,376     | 19,046     |
| # of parcels             | 1            | 2         | 5         | 7         | 6          | 5          |
| % of change '72-'77..... | 172.1%       |           |           |           |            |            |
| Industrial               | \$12,000     | 19,600    | 19,000    | 19,000    | 19,000     | 19,000     |
| # of parcels             | 1            | 3         | 6         | 6         | 2          | 2          |
| % of change '72-'77..... | 58.3%        |           |           |           |            |            |
| Utilities                | \$1,792,090  | 1,804,736 | 1,885,840 | 2,064,883 | 2,119,336  | 2,120,394  |
| # of parcels             | 5            | 5         | 6         | 6         | 6          | 6          |
| % of change '72-'77..... | 18.3%        |           |           |           |            |            |



Hamilton Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-19

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$1,371,800  | 1,367,200  | 1,704,759  | 3,435,493  | 3,074,891  | 3,082,670  |
| # of parcels             | 132          | 131        | 144        | 139        | 136        | 138        |
| % of yearly change       |              | .34%       | 24.7%      | 101.5%     | -10.5%     | .03%       |
| % of change '72-'77..... | 124.7%       |            |            |            |            |            |
| Commercial               | \$345,200    | 417,000    | 508,352    | 680,005    | 605,823    | 609,836    |
| # of parcels             | 22           | 23         | 22         | 22         | 22         | 22         |
| % of yearly change       |              | 20.8%      | 21.9%      | 33.8%      | -10.9%     | .66%       |
| % of change '72-'77..... | 76.7%        |            |            |            |            |            |
| Industrial               | \$140,800    | 140,800    | 169,271    | 167,946    | 171,675    | 245,395    |
| # of parcels             | 2            | 2          | 2          | 2          | 2          | 2          |
| % of yearly change       |              | 0.0%       | 20.2%      | -.8%       | 2.2%       | 42.9%      |
| % of change '72-'77..... | 74.3%        |            |            |            |            |            |
| Residential              | \$8,541,399  | 9,073,999  | 11,171,047 | 14,809,545 | 14,972,005 | 15,411,545 |
| # of parcels             | 1606         | 1725       | 1750       | 1807       | 1820       | 1841       |
| % of yearly change       |              | 6.2%       | 23.1%      | 32.6%      | 1.1%       | 2.9%       |
| % of change '72-'77..... | 80.4%        |            |            |            |            |            |
| Timber Cut Over          | 481,000      | 695,999    | 719,645    | 582,577    | 571,597    | 514,192    |
| # of parcels             | 42           | 42         | 38         | 32         | 32         | 27         |
| % of yearly change       |              | 44.7%      | 3.4%       | -19.0%     | -1.9%      | -10.0%     |
| % of change '72-'77..... | 6.9%         |            |            |            |            |            |
| Total Real               | \$10,880,199 | 12,962,198 | 14,273,074 | 19,675,566 | 19,403,770 | 19,863,638 |
| % of yearly change       |              | 19.1%      | 10.1%      | 37.9%      | -1.4%      | 2.5%       |
| % of change '72-'77..... | 82.6%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$211,861    | 238,833    | 244,179    | 282,555    | 271,011    | 212,219    |
| # of parcels             | 13           | 15         | 30         | 30         | 21         | 15         |
| % of change '72-'77..... | .17%         |            |            |            |            |            |
| Utilities                | \$3,024,022  | 3,374,657  | 3,546,323  | 3,652,631  | 3,325,953  | 3,933,205  |
| # of parcels             | 10           | 9          | 9          | 9          | 9          | 7          |
| % of change '72-'77..... | 30.1%        |            |            |            |            |            |



Hatton Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-20

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$759,984   | 1,039,780 | 1,297,644 | 2,164,592 | 1,804,935 | 1,770,509 |
| # of parcels             | 48          | 57        | 59        | 59        | 54        | 53        |
| % of yearly change       |             | 36.8%     | 24.8%     | 66.0%     | -16.6%    | -1.9%     |
| % of change '72-'77..... | 133.0%      |           |           |           |           |           |
| Commercial               | \$344,800   | 470,560   | 594,211   | 535,498   | 529,905   | 536,318   |
| # of parcels             | 12          | 14        | 17        | 14        | 15        | 15        |
| % of yearly change       |             | 36.5%     | 26.3%     | -9.9%     | -25.7%    | 1.2%      |
| % of change '72-'77..... | 55.5%       |           |           |           |           |           |
| Industrial               | \$31,200    | 32,000    | 37,488    | 2,805     | 3,243     | 3,244     |
| # of parcels             | 3           | 4         | 4         | 3         | 3         | 3         |
| % of yearly change       |             | 2.6%      | 17.2%     | -92.5%    | 15.6%     | .03%      |
| % of change '72-'77..... | -89.6%      |           |           |           |           |           |
| Residential              | \$2,845,990 | 2,863,018 | 3,425,581 | 4,794,439 | 4,294,570 | 4,636,729 |
| # of parcels             | 344         | 348       | 352       | 355       | 415       | 427       |
| % of yearly change       |             | .60%      | 19.6%     | 40.0%     | -10.4%    | 8.1%      |
| % of change '72-'77..... | 62.9%       |           |           |           |           |           |
| Timber Cut Over          | \$567,864   | 1,055,847 | 1,141,283 | 2,065,578 | 1,417,842 | 1,419,201 |
| # of parcels             | 79          | 83        | 85        | 87        | 92        | 93        |
| % of yearly change       |             | 85.9%     | 8.1%      | 81.0%     | -31.4%    | .09%      |
| % of change '72-'77..... | 149.9%      |           |           |           |           |           |
| Total Real               | \$4,549,838 | 5,461,205 | 6,496,207 | 9,562,912 | 8,050,495 | 8,366,001 |
| % of yearly change       |             | 20.0%     | 19.1%     | 47.2%     | -15.8%    | 39.2%     |
| % of change '72-'77..... | 83.9%       |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Commercial               | \$204,834   | 255,442   | 228,304   | 293,782   | 134,334   | 98,384    |
| # of parcels             | 16          | 17        | 35        | 37        | 15        | 12        |
| % of change '72-'77..... | -52.0%      |           |           |           |           |           |
| Utilities                | \$340,465   | 366,255   | 374,386   | 461,126   | 395,659   | 417,821   |
| # of parcels             | 6           | 6         | 6         | 6         | 6         | 6         |
| % of change '72-'77..... | 22.7%       |           |           |           |           |           |



Hayes Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-21

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$146,597    | 150,599    | 525,700    | 544,683    | 533,297    | 540,009    |
| # of parcels             | 12           | 12         | 12         | 16         | 16         | 16         |
| % of yearly change       |              | 2.7%       | 249.1%     | 3.6%       | -2.1%      | 1.3%       |
| % of change '72-'77..... | 268.4%       |            |            |            |            |            |
| Commercial               | \$1,315,962  | 1,235,534  | 2,158,800  | 2,203,373  | 2,290,098  | 2,332,811  |
| # of parcels             | 72           | 62         | 72         | 70         | 70         | 72         |
| % of yearly change       |              | -6.1%      | 74.7%      | 2.1%       | 3.9%       | 1.9%       |
| % of change '72-'77..... | 77.3%        |            |            |            |            |            |
| Industrial               | \$9,517      | 9,517      | 6,600      | 6,534      | 6,600      | 6,600      |
| # of parcels             | 1            | 1          | 1          | 1          | 1          | 1          |
| % of yearly change       |              | 0.0%       | -30.7%     | -1.0%      | 1.0%       | 0.0%       |
| % of change '72-'77..... | -30.7%       |            |            |            |            |            |
| Residential              | \$20,607,536 | 21,549,690 | 32,970,880 | 35,240,386 | 37,528,279 | 38,057,655 |
| # of parcels             | 4495         | 4719       | 4974       | 5018       | 5034       | 5073       |
| % of yearly change       |              | 4.6%       | 53.1%      | 6.9%       | 6.5%       | 1.4%       |
| % of change '72-'77..... | 84.7%        |            |            |            |            |            |
| Timber Cut Over          | \$433,968    | 1,151,193  | 1,983,500  | 1,780,431  | 1,877,377  | 1,843,576  |
| # of parcels             | 110          | 113        | 116        | 124        | 127        | 127        |
| % of yearly change       |              | 165.3%     | 72.3%      | -10.2%     | 5.4%       | -1.8%      |
| % of change '72-'77..... | 324.8%       |            |            |            |            |            |
| Total Real               | \$22,513,580 | 24,096,533 | 37,645,480 | 39,775,407 | 42,235,651 | 42,780,651 |
| % of yearly change       |              | 7.0%       | 56.2%      | 5.7%       | 6.2%       | 1.3%       |
| % of change '72-'77..... | 90.0%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$366,047    | 410,175    | 458,429    | 409,188    | 290,429    | 724,602    |
| # of parcels             | 44           | 42         | 42         | 94         | 77         | 54         |
| % of change '72-'77..... | 97.8%        |            |            |            |            |            |
| Industrial               | \$117,000    | 117,000    | —          | 70,000     | 70,000     | 70,000     |
| # of parcels             | 2            | 2          |            | 4          | 1          | 1          |
| % of change '72-'77..... | -40.2%       |            |            |            |            |            |
| Utilities                | \$1,870,252  | 2,315,472  | 2,339,806  | 2,437,237  | 2,157,729  | 2,370,931  |
| # of parcels             | 6            | 6          | 6          | 6          | 6          | 3          |
| % of change '72-'77..... | 26.8%        |            |            |            |            |            |



Lincoln Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-22

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$16,260     | 49,981     | 97,600     | 124,051    | 122,400    | 121,300    |
| # of parcels             | 1            | 2          | 2          | 3          | 3          | 3          |
| % of yearly change       |              | 207.4%     | 95.3%      | 27.1%      | -1.3%      | -.90%      |
| % of change '72-'77..... | 646.0%       |            |            |            |            |            |
| Commercial               | \$189,691    | 169,480    | 235,200    | 383,925    | 396,472    | 385,900    |
| # of parcels             | 19           | 14         | 18         | 19         | 22         | 22         |
| % of yearly change       |              | -10.7%     | 38.8%      | 63.2%      | 3.4%       | 2.7%       |
| % of change '72-'77..... | 103.4%       |            |            |            |            |            |
| Industrial               | \$735,179    | 563,561    | 206,100    | 247,625    | 208,800    | 2,288,428  |
| # of parcels             | 10           | 2          | 2          | 2          | 2          | 3          |
| % of yearly change       |              | -23.3%     | -63.4%     | 20.1%      | -15.7%     | 996.1%     |
| % of change '72-'77..... | 211.3%       |            |            |            |            |            |
| Residential              | \$12,404,444 | 15,151,500 | 22,416,376 | 24,479,750 | 20,938,480 | 21,850,119 |
| # of parcels             | 3088         | 2960       | 3451       | 3446       | 3456       | 3498       |
| % of yearly change       |              | 22.1%      | -8.4%      | 9.2%       | -14.5%     | 4.4%       |
| % of change '72-'77..... | 76.1%        |            |            |            |            |            |
| Timber Cut Over          | \$800,800    | 1,650,329  | 2,231,000  | 2,799,570  | 3,115,859  | 2,977,635  |
| # of parcels             | 46           | 98         | 121        | 123        | 118        | 118        |
| % of yearly change       |              | 106.1%     | 35.2%      | 25.5%      | 11.3%      | 4.4%       |
| % of change '72-'77..... | 271.8%       |            |            |            |            |            |
| Total Real               | \$14,146,374 | 17,584,851 | 25,186,276 | 28,034,921 | 24,782,011 | 27,625,382 |
| % of yearly change       |              | 24.3%      | 43.2%      | 11.3%      | -11.6%     | 11.5%      |
| % of change '72-'77..... | 95.3%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$45,290     | 79,860     | 80,086     | 76,609     | 42,102     | 58,570     |
| # of parcels             | 24           | 20         | 40         | 45         | 30         | 18         |
| % of change '72-'77..... | 29.3%        |            |            |            |            |            |
| Industrial               | \$6,419      | 12,600     | 16,000     | 20,000     | 20,000     | 13,600     |
| # of parcels             | 1            | 1          | 2          | 2          | 2          | 1          |
| % of change '72-'77..... | 112.0%       |            |            |            |            |            |
| Residential              | \$2,600      |            |            |            |            |            |
| # of parcels             | 4            |            |            |            |            |            |
| Utilities                | \$16,723,400 | 17,890,454 | 17,499,538 | 21,053,920 | 22,228,124 | 21,297,664 |
| # of parcels             | 8            | 8          | 9          | 9          | 8          | 7          |
| % of change '72-'77..... | 27.4%        |            |            |            |            |            |



Redding Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-23

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$143,000   | 354,200   | 429,891   | 539,849   | 536,883   | 564,600   |
| # of parcels             | 29          | 29        | 30        | 29        | 30        | 29        |
| % of yearly change       |             | 147.7%    | 21.4%     | 25.6%     | -.5%      | 5.2%      |
| % of change '72-'77..... | 294.8%      |           |           |           |           |           |
| Commercial               | \$14,000    | 17,000    | 21,269    | 28,627    | 28,914    | 32,427    |
| # of parcels             | 2           | 2         | 2         | 2         | 2         | 2         |
| % of yearly change       |             | 21.4%     | 25.1%     | 34.6%     | -1.0%     | 12.1%     |
| % of change '72-'77..... | 131.6%      |           |           |           |           |           |
| Residential              | \$830,520   | 1,711,400 | 2,462,746 | 3,303,823 | 3,290,433 | 3,855,460 |
| # of parcels             | 417         | 394       | 428       | 473       | 517       | 542       |
| % of yearly change       |             | 106.1%    | 43.9%     | 34.2%     | -.4%      | 17.2%     |
| % of change '72-'77..... | 364.2%      |           |           |           |           |           |
| Timber Cut Over          | \$813,586   | 1,118,000 | 1,104,594 | 1,317,434 | 1,185,773 | 1,284,040 |
| # of parcels             | 150         | 154       | 154       | 148       | 142       | 134       |
| % of yearly change       |             | 37.4%     | -1.2%     | 19.3%     | -10.0%    | 8.3%      |
| % of change '72-'77..... | 57.8%       |           |           |           |           |           |
| Total Real               | \$1,801,106 | 3,200,600 | 4,018,500 | 5,189,733 | 5,042,003 | 5,636,527 |
| % of yearly change       |             | 77.7%     | 25.6%     | 29.1%     | -2.8%     | 11.8%     |
| % of change '72-'77..... | 212.9%      |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Commercial               | \$24,245    | 25,400    | 28,160    | 26,044    | 49,638    | 75,168    |
| # of parcels             | 5           | 5         | 15        | 17        | 12        | 12        |
| % of change '72-'77..... | 210.0%      |           |           |           |           |           |
| Utilities                | \$1,226,782 | 1,091,801 | 1,306,202 | 1,423,385 | 702,440   | 688,951   |
| # of parcels             | 7           | 7         | 8         | 8         | 8         | 5         |
| % of change '72-'77..... | 43.8%       |           |           |           |           |           |



Sheridan Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-24

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$4,093,406 | 4,065,381 | 5,885,714 | 5,187,695 | 5,750,772 | 6,442,931 |
| # of parcels             | 228         | 225       | 235       | 227       | 237       | 242       |
| % of yearly change       |             | -.68%     | 44.8%     | -11.9%    | 10.9%     | 12.0%     |
| % of change '72-'77..... | 57.4%       |           |           |           |           |           |
| Commercial               |             | \$22,400  | 32,000    |           |           |           |
| # of parcels             |             | 1         | 1         |           |           |           |
| % of yearly change       |             |           | 42.9%     |           |           |           |
| Industrial               | \$2,462     | 2,600     | 5,142     | 11,185    | 9,431     | 11,200    |
| # of parcels             | 2           | 2         | 2         | 2         | 2         | 2         |
| % of yearly change       |             | 5.6%      | 97.8%     | 117.5%    | -15.7%    | 18.8%     |
| % of change '72-'77..... | 354.9%      |           |           |           |           |           |
| Residential              | \$1,221,130 | 1,321,000 | 2,217,857 | 2,129,252 | 2,349,307 | 2,690,199 |
| # of parcels             | 134         | 135       | 157       | 186       | 202       | 216       |
| % of yearly change       |             | 8.2%      | 67.9%     | -4.0%     | 10.3%     | 14.5%     |
| % of change '72-'77..... | 120.3%      |           |           |           |           |           |
| Timber Cut Over          | \$311,752   | 725,255   | 842,286   | 676,849   | 844,271   | 741,993   |
| # of parcels             | 48          | 59        | 64        | 49        | 43        | 41        |
| % of yearly change       |             | 132.6%    | 16.1%     | 19.6%     | 24.7%     | -12.1%    |
| % of change '72-'77..... | 138.0%      |           |           |           |           |           |
| Total Real               | \$4,529,750 | 6,136,636 | 8,982,999 | 8,004,982 | 8,953,781 | 9,886,323 |
| % of yearly change       |             | 35.5%     | 46.4%     | -10.9%    | 11.9%     | 10.4%     |
| % of change '72-'77..... | 118.3%      |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Residential              | \$111,446   | 118,507   | 176,377   | 125,123   | 131,937   | 135,788   |
| # of parcels             | 24          | 26        | 25        | 25        | 25        | 24        |
| % of change '72-'77..... | 21.8%       |           |           |           |           |           |
| Utilities                | \$293,783   | 336,063   | 367,795   | 365,095   | 372,595   | 387,595   |
| # of parcels             | 3           | 3         | 3         | 3         | 3         | 3         |
| % of change '72-'77..... | 31.9%       |           |           |           |           |           |
| Commercial               |             | 66,400    | 69,800    | 98,100    | 94,300    | 94,300    |
| # of parcels             |             | 2         | 4         | 4         | 2         | 2         |
| % of change '72-'77..... | 42.0%       |           |           |           |           |           |



Summerfield Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-25

|                          | 1972        | 1973      | 1974      | 1975      | 1976      | 1977      |
|--------------------------|-------------|-----------|-----------|-----------|-----------|-----------|
| <u>Real Property</u>     |             |           |           |           |           |           |
| Agricultural             | \$33,300    | 79,600    | 105,650   | 126,436   | 83,704    | 85,800    |
| # of parcels             | 10          | 11        | 14        | 12        | 7         | 7         |
| % of yearly change       |             | 139.0%    | 32.7%     | 19.7%     | -33.8%    | 2.5%      |
| % of change '72-'77..... | 157.7%      |           |           |           |           |           |
| Commercial               | \$31,000    | 53,000    | 42,000    | 52,923    | 52,000    | 52,000    |
| # of parcels             | 2           | 2         | 3         | 3         | 3         | 3         |
| % of yearly change       |             | 71.0%     | -20.8%    | 26.0%     | -1.7%     | 0.0%      |
| % of change '72-'77..... | 67.7%       |           |           |           |           |           |
| Residential              | \$2,503,734 | 2,910,999 | 3,822,509 | 4,694,053 | 5,510,750 | 5,649,502 |
| # of parcels             | 579         | 577       | 590       | 645       | 651       | 659       |
| % of yearly changes      |             | 16.3%     | 31.3%     | 22.8%     | 17.4%     | 25.2%     |
| % of change '72-'77..... | 125.6%      |           |           |           |           |           |
| Timber Cut Over          | \$322,600   | 564,002   | 581,040   | 710,194   | 879,500   | 881,700   |
| # of parcels             | 64          | 64        | 68        | 63        | 61        | 62        |
| % of yearly change       |             | 74.8%     | 1.5%      | 22.2%     | 23.8%     | .25%      |
| % of change '72-'77..... | 173.3%      |           |           |           |           |           |
| Total Real               | \$2,890,634 | 3,607,601 | 4,551,199 | 5,583,606 | 6,525,950 | 6,669,002 |
| % of yearly change       |             | 24.9%     | 26.2%     | 22.7%     | 16.9%     | 2.2%      |
| % of change '72-'77..... | 130.7%      |           |           |           |           |           |
| <u>Personal Property</u> |             |           |           |           |           |           |
| Commercial               | \$16,951    | 20,058    | 29,932    | 35,253    | 15,920    | 14,300    |
| # of parcels             | 7           | 7         | 12        | 12        | 6         | 3         |
| % of change '72-'77..... | -15.6%      |           |           |           |           |           |
| Utilities                | \$3,752,259 | 3,605,501 | 4,520,390 | 5,085,742 | 2,559,178 | 2,619,014 |
| # of parcels             | 7           | 7         | 7         | 8         | 8         | 10        |
| % of change '72-'77..... | -30.2%      |           |           |           |           |           |



Surrey Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-26

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$271,342    | 493,600    | 633,266    | 1,269,704  | 882,794    | 995,480    |
| # of parcels             | 20           | 42         | 41         | 38         | 38         | 38         |
| % of yearly change       |              | 81.9%      | 28.3%      | 105.0%     | -30.5%     | 12.8%      |
| % of change '72-'77..... | 266.9%       |            |            |            |            |            |
| Commercial               | \$1,025,538  | 1,129,000  | 1,299,940  | 2,218,665  | 2,008,262  | 2,248,560  |
| # of parcels             | 66           | 73         | 83         | 80         | 81         | 81         |
| % of yearly change       |              | 10.1%      | 15.1%      | 70.7%      | -9.5%      | 12.1%      |
| % of change '72-'77..... | 119.3%       |            |            |            |            |            |
| Industrial               | \$292,000    | 575,000    | 606,891    | 872,060    | 671,370    | 705,800    |
| # of parcels             | 3            | 5          | 6          | 6          | 6          | 7          |
| % of yearly change       |              | 96.9%      | 5.5%       | 43.7%      | -23.0%     | 5.1%       |
| % of change '72-'77..... | 141.7%       |            |            |            |            |            |
| Residential              | \$12,670,704 | 13,206,205 | 17,398,540 | 22,739,454 | 21,801,955 | 23,563,464 |
| # of parcels             | 1961         | 2068       | 2119       | 2164       | 2152       | 2175       |
| % of yearly changes      |              | 4.2%       | 31.7%      | 30.7%      | -4.1%      | 8.1%       |
| % of change '72-'77..... | 86.0%        |            |            |            |            |            |
| Timber Cut Over          | \$596,900    | 1,102,681  | 1,224,660  | 1,510,559  | 1,863,333  | 1,863,662  |
| # of parcels             | 116          | 116        | 119        | 124        | 147        | 145        |
| % of yearly change       |              | 84.7%      | 11.1%      | 23.3%      | 23.4%      | .02%       |
| % of change '72-'77..... | 212.2%       |            |            |            |            |            |
| Total Real               | \$14,856,484 | 16,506,486 | 21,163,297 | 28,610,442 | 27,227,714 | 29,376,966 |
| % of yearly change       |              | 11.1%      | 28.2%      | 35.2%      | -4.8%      | 7.9%       |
| % of change '72-'77..... | 97.7%        |            |            |            |            |            |
| <u>Personal Property</u> |              |            |            |            |            |            |
| Commercial               | \$517,778    | 561,108    | 650,175    | 734,971    | 592,331    | 773,894    |
| # of parcels             | 62           | 64         | 146        | 137        | 109        | 71         |
| % of change '72-'77..... | -49.8%       |            |            |            |            |            |
| Industrial               | \$542,899    | 686,007    | 1,910,801  | 1,261,927  | 360,283    | 340,571    |
| # of parcels             | 3            | 4          | 14         | 14         | 10         | 5          |
| % of change '72-'77..... | -37.3%       |            |            |            |            |            |
| Residential              | \$6,000      | 1,000      | 1,000      | 1,000      | 2,560      | 2,000      |
| # of parcels             | 1            | 1          | 1          | 1          | 1          | 1          |
| % of change '72-'77..... | -66.7%       |            |            |            |            |            |
| Utilities                | \$2,134,840  | 2,193,878  | 2,407,776  | 3,188,667  | 3,013,190  | 3,402,759  |
| # of parcels             | 9            | 10         | 11         | 11         | 11         | 12         |
| % of change '72-'77..... | 59.4%        |            |            |            |            |            |



Winterfield Township  
True Cash Value of Real and Personal Property  
as determined from Assessment Roll

TABLE A-27

|                          | 1972         | 1973       | 1974       | 1975       | 1976       | 1977       |
|--------------------------|--------------|------------|------------|------------|------------|------------|
| <u>Real Property</u>     |              |            |            |            |            |            |
| Agricultural             | \$739,598    | 926,199    | 1,012,781  | 1,798,030  | 1,761,160  | 1,795,760  |
| # of parcels             | 95           | 99         | 102        | 105        | 114        | 114        |
| % of yearly change       |              | 25.2%      | 9.3%       | 77.5%      | -2.0%      | 2.1%       |
| % of change '72-'77..... | 142.8%       |            |            |            |            |            |
| Industrial               | \$825,500    | 827,300    | 875,264    | 1,096,303  | 670,500    | 671,500    |
| # of parcels             | 16           | 16         | 16         | 16         | 17         | 18         |
| % of yearly change       |              | .22%       | 5.8%       | 25.3%      | -38.8%     | .15%       |
| % of change '72-'77..... | -18.7%       |            |            |            |            |            |
| Residential              | \$1,197,973  | 1,276,799  | 1,421,576  | 2,664,607  | 2,765,000  | 2,865,021  |
| # of parcels             | 262          | 275        | 295        | 299        | 349        | 357        |
| % of yearly change       |              | 6.6%       | 11.3%      | 87.4%      | 3.6%       | 3.6%       |
| % of change '72-'77..... | 139.2%       |            |            |            |            |            |
| Timber Cut Over          | \$754,700    | 1,286,699  | 1,419,960  | 1,880,935  | 1,315,550  | 1,314,150  |
| # of parcels             | 162          | 162        | 187        | 176        | 124        | 124        |
| % of yearly change       |              | 70.5%      | 10.4%      | 32.5%      | -30.1%     | -.11%      |
| % of change '72-'77..... | 74.1%        |            |            |            |            |            |
| Total Real               | \$3,517,771  | 4,316,997  | 4,729,581  | 7,439,875  | 6,512,210  | 6,646,431  |
| % of yearly change       |              | 22.7%      | 9.6%       | 57.3%      | -12.5%     | 2.1%       |
| % of change '72-'77..... | 88.9%        |            |            |            |            |            |
| Utilities                | \$15,539,178 | 14,159,656 | 18,652,262 | 20,149,868 | 11,665,146 | 11,942,566 |
| # of parcels             | 10           | 10         | 11         | 11         | 11         | 11         |
| % of change '72-'77..... | -23.1%       |            |            |            |            |            |



TABLE A-28

TOWNSHIP SCHOOL MILLAGE  
CLARE COUNTY, MICHIGAN 1977\*

| SCHOOL<br>DISTRICT | BEAVERTON | CLARE  | EVART | FARWELL | GLADWIN | HARRISON | MARION | MCBAIN |
|--------------------|-----------|--------|-------|---------|---------|----------|--------|--------|
| TOWNSHIP           |           |        |       |         |         |          |        |        |
| ARTHUR             | 37.106    | 42.116 |       |         | 37.706  | 36.596   |        |        |
| FARNKLIN           |           |        |       |         |         | 36.596   |        |        |
| FREEMAN            |           |        | 33.45 | 35.716  |         |          |        |        |
| FROST              |           |        |       |         |         | 36.596   |        |        |
| GARFIELD           |           |        |       | 36.416  |         |          |        |        |
| GARNT              |           | 42.116 |       | 35.416  |         |          |        |        |
| GREENWOOD          |           |        |       |         |         | 36.596   |        |        |
| HAMILTON           |           |        |       |         | 38.706  | 37.596   |        |        |
| HATTON             |           | 42.116 |       |         |         | 37.596   |        |        |
| HAYES              |           |        |       |         |         | 36.596   |        |        |
| LINCOLN            |           |        |       | 37.916  |         |          |        |        |
| REDDING            |           |        |       |         |         |          | 32.22  |        |
| SHERIDAN           |           | 42.116 |       |         |         |          |        |        |
| SUMMERFIELD        |           |        |       |         |         | 36.596   |        |        |
| SURREY             |           |        |       | 36.416  |         |          |        |        |
| WINTERFIELD        |           |        |       |         |         | 36.596   | 32.22  | 33.2   |
| CLARE              |           | 41.116 |       |         |         |          |        |        |
| HARRISON           |           |        |       |         |         | 35.596   |        |        |

\* Clare County Equalization Department.



Clare County  
Drains  
Clare County, Michigan 1978\*

| <u>NAME</u>     | <u>TOWNSHIP</u>            | <u>SECTIONS</u>     | <u>LENGTH</u>        |
|-----------------|----------------------------|---------------------|----------------------|
| ANKNEY          | ARTHUR                     | 36-35-34            | 9200 ft              |
| ALLEN           | GRANT                      | 31-32               | 3700 ft, Br 1 3300,  |
| BAILEY          | SHERIDAN                   | 15-22-21-16         | 650 rds              |
| CORNWELL        | ARHTUR                     | 7-18                | 120 rds              |
| CROSTON         | FREEMAN                    | 30                  | 6900 ft              |
| COURTWRIGHT     | FREEMAN                    | 30                  | 35 ft                |
| COOK            | ARTHUR 36                  | 1                   | 11,220 ft            |
| COATS           | ARTHUR                     | 26-27               | 4700 ft              |
| FLYNN           | WINTERFIELD                | REDDING             | 20,845 ft            |
| FARWELL         | SURREY                     | FARWELL CITY - TILE | 2840 ft              |
| GILMORE JT      | GRANT                      | 36                  | CITY OF CLARE        |
| GIBSON          | WINTERFIELD                | 10-9-3-4            | 19,066 ft            |
| HICKOK          | FREEMAN                    | 30-31               | 558 rds              |
| HOWE            | SHERIDAN                   |                     |                      |
| HARVEY          | SHERIDAN                   | 11-14               |                      |
| HERRING         | GRANT                      | 36                  | 180 rds in Clare Co. |
| HUTCHINSON      | SHERIDAN                   | 5-6                 | 3216 ft              |
| JORDAN          | SHERIDAN 30                | GRANT               | 25                   |
| LOWER           | HATTON                     | 36                  | 155 rds              |
| LARSON & ELLIOT | SHERIDAN                   | 33                  | 50 rds               |
| LOOMIS JT       | ISABELLA CO.               |                     |                      |
| LITTLE TOBACCO  | CITY OF CLARE              |                     | 5300 ft              |
| LAMONT          | CITY OF CLARE & VERNON TWP |                     |                      |
| LEITNER         | ARHTUR                     | 22-15-15-21         | 4630 ft              |
| LAPD            | GARFIELD                   | 25                  | 2520 ft tile         |
| LLOYD           | GRANT                      | 24-23               | 5400 ft              |
| MARK BRAND      | ARTHUR                     | 28                  | 130 rds              |
| MARION          | WINTERFIELD                | 17-18               | 2376 ft              |
| MURPHY JT ****  | SHERIDAN                   | 36                  | 871 tile             |
| McGRAY          | LINCOLN                    | 19-18-7             | 7348 ft Br 700 East  |
| McGIVERN        | SHERIDAN                   | 14-11               | ?                    |



# Clare County Drains (con't)

|                 |                       |             |         |
|-----------------|-----------------------|-------------|---------|
| NASS            | GRANT                 | 10-11-15    | 290 rds |
| NASH            | FRANKLIN              | 24          | 240 rds |
| RANDALL         | WINTERFIELD           | 7           | 3500 ft |
| RILETT          | SHERIDAN              | 12-13       | ?       |
| SHERIDAN-CARROW | SHERIDAN              | 14-15-22-23 | 293 rds |
| STATE TRUNKLINE |                       |             |         |
| TONKIN JT       | ARTHUR                | 29-20-21-17 |         |
| TONKIN BRANCH   | ARTHUR                | 18          | 3292 ft |
| WHISKEY CREEK   | REDDING & WINTERFIELD | 16-17-8-5   |         |
| WARNER          | SHERIDAN              | 10-11-2     | 5108 ft |

\* Clare County Drain Commissioner, April, 1978.



# CLARE COUNTY, MICHIGAN

## CONSTRUCTION CODE AUTHORITY

### APPLICATION FOR PLAN EXAMINATION AND BUILDING PERMIT

|                                 |                                        |
|---------------------------------|----------------------------------------|
| LOCATION _____                  | PROPERTY<br>NUMBER _____               |
| CITY _____                      | TOWNSHIP _____                         |
| BETWEEN _____<br>(cross street) | AND _____<br>(cross street)            |
| SUBDIVISION _____               | LOT _____<br>BLOCK _____<br>SIZE _____ |
| DIRECTIONS<br>TO SITE _____     |                                        |

| TYPE OF IMPROVEMENT                 |                                      | COST                                        |
|-------------------------------------|--------------------------------------|---------------------------------------------|
| <input type="checkbox"/> HOUSE      | <input type="checkbox"/> MOBILE HOME | COST OF IMPROVEMENT (INCLUDING LABOR) _____ |
| <input type="checkbox"/> CABIN      | <input type="checkbox"/> GARAGE      | TOTAL VALUE OF IMPROVEMENT..... _____       |
| <input type="checkbox"/> ADDITION   | <input type="checkbox"/> CARPORT     | PERMIT FEE..... _____                       |
| <input type="checkbox"/> ALTERATION | <input type="checkbox"/> POLE BARN   |                                             |
| <input type="checkbox"/> REPAIR     | <input type="checkbox"/> WRECKING    |                                             |
| <input type="checkbox"/> FIREPLACE  | <input type="checkbox"/> MOVING      |                                             |
| <input type="checkbox"/> PORCH      | <input type="checkbox"/> OTHER       |                                             |

#### DIMENSIONS

WIDTH..... \_\_\_\_\_  
LENGTH..... \_\_\_\_\_  
TOTAL SQUARE FEET FLOOR AREA..... \_\_\_\_\_  
TOTAL LAND AREA, SQUARE FEET..... \_\_\_\_\_  
NUMBER OF STORIES..... \_\_\_\_\_

#### RESIDENTIAL BUILDINGS ONLY

NUMBER OF BEDROOMS... \_\_\_\_\_  
NUMBER OF BATHROOMS: \_\_\_\_\_  
FULL..... \_\_\_\_\_  
PARTIAL..... \_\_\_\_\_

#### TYPE OF FOUNDATION

☐ BASEMENT  
☐ SLAB  
☐ CRAWLSPACE  
☐ POLES  
☐ PIERS

FOOTING DEPTH \_\_\_\_\_

#### MOBILE HOMES

SIZE..... \_\_\_\_\_  
YEAR..... \_\_\_\_\_  
TYPE OF SET UP: \_\_\_\_\_  
PIERS..... \_\_\_\_\_  
SLAB..... \_\_\_\_\_  
RIBBONS..... \_\_\_\_\_  
TYPE OF TIE DOWNS..... \_\_\_\_\_  
NUMBER PERSONS OCCUPYING.... \_\_\_\_\_

#### PRINCIPLE TYPE OF FRAME

☐ MASONRY (WALL BEARING)  
☐ WOOD FRAME  
☐ STRUCTURAL STEEL  
☐ REINFORCED CONCRETE  
☐ OTHER

#### TYPE OF SEWAGE DISPOSAL

☐ PUBLIC OR PRIVATE COMPANY  
☐ PRIVATE (SEPTIC TANK, ETC.)



|                                 |  |
|---------------------------------|--|
| ENVIRONMENTAL CONTROL APPROVALS |  |
|---------------------------------|--|

|                       | REQUIRED | NOT REQUIRED | APPROVED | DATE OBTAINED | NUMBER | BY |
|-----------------------|----------|--------------|----------|---------------|--------|----|
| 1 — ZONING            |          |              |          |               |        |    |
| 2 — FIRE DISTRICT     |          |              |          |               |        |    |
| 3 — POLLUTION CONTROL |          |              |          |               |        |    |
| 4 — NOISE CONTROL     |          |              |          |               |        |    |
| 5 — SOIL EROSION      |          |              |          |               |        |    |
| 6 — FLOOD ZONE        |          |              |          |               |        |    |
| 7 — WATER SUPPLY      |          |              |          |               |        |    |
| 8 — SEPTIC SYSTEM     |          |              |          |               |        |    |
| 9 — VARIANCE GRANTED  |          |              |          |               |        |    |
| 10 — OTHER            |          |              |          |               |        |    |

NOTES and Data — (For department use)

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.



|                             |           |
|-----------------------------|-----------|
| ZONING PLAN EXAMINERS NOTES |           |
| DISTRICT                    |           |
| USE                         |           |
| FRONT YARD                  |           |
| SIDE YARD                   | SIDE YARD |
| REAR YARD                   |           |
| NOTES                       |           |
|                             |           |
|                             |           |

IX. SITE OR PLOT PLAN - For Applicant Use

A large rectangular area filled with a fine grid of lines, intended for drawing a site or plot plan. On the right side of the grid, there is a small circle with the letter 'N' next to it, indicating North.



| IDENTIFICATION - To be completed by all applicants |      |                                                   |                          |          |
|----------------------------------------------------|------|---------------------------------------------------|--------------------------|----------|
|                                                    | Name | Mailing address - Number, street, city, and State | ZIP code                 | Tel. No. |
| 1.<br>Owner or<br>Lessee                           |      |                                                   |                          |          |
| 2.<br>Contractor                                   |      |                                                   | Builder's<br>License No. |          |
| 3.<br>Architect or<br>Engineer                     |      |                                                   |                          |          |

I hereby certify that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and we agree to conform to all applicable laws of this jurisdiction.

|                        |         |                  |
|------------------------|---------|------------------|
| Signature of applicant | Address | Application date |
|                        |         |                  |

#### OTHER REQUIREMENTS

IF NO SEPTIC IS IN, A SANITATION PERMIT IS REQUIRED BY THE HEALTH DEPARTMENT BEFORE WE MAY ISSUE A BUILDING PERMIT.

HAVE A SEPARATE DRAWING OF THE STRUCTURE SHOWING FLOOR PLAN, AND DIMENSIONS OF STRUCTURAL MATERIALS.

SET BACKS AND LOT RESTRICTIONS MUST MEET THOSE OF LOCAL ZONING ORDINANCES.

ALL APPLICATIONS FOR PERMIT IN LINCOLN TOWNSHIP ARE REQUIRED TO BE SIGNED BY THE LINCOLN TOWNSHIP CLERK.



## Michigan Land Cover / Use Classification System\*

Existing land use classifications, as presented in the Clare County Regional Comprehensive Plan, correspond with the Michigan Land Cover / Use Classification System.

The Classification System presented below is intended to help provide standardized terminology, by means of a numbering system, for describing land use classes and types of ground cover. Through use of this System all levels of government can be aided by means of standardized and organized land use information.

Clare County's existing land uses, as illustrated on Map 13, are compared below to the Michigan Land Cover / Use Classification System.

### Clare County, Existing Land Use Nomenclature

### Corresponding Michigan Land Cover / Use Classification Number

|             |                  |
|-------------|------------------|
| Agriculture | 291              |
| Residential | 113              |
| Commerical  | 124              |
| Recreation  | 193              |
| Industrial  | 146 <sup>a</sup> |
| Foresty     | 431              |

<sup>a</sup>Limited amounts of Use Classification Number 139 are also included.

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\* "Michigan Land Cover / Use Classification System" as developed by the Michigan Land Use Classification and Referencing Committee, reprinted May, 1977.