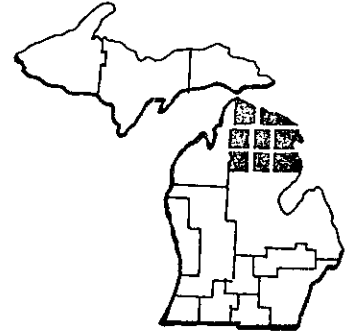


AN ATLAS OF
THE NORTHEAST MICHIGAN REGION



Northeast Michigan Council
of Governments

P. O. Box 457
Gaylord, Michigan 49735
Phone: (517) 732-3551

June 30, 1976

To: Commission Members

Gentlemen:

It is a pleasure to submit to you the following document entitled "An Atlas of the Northeast Michigan Region." This study graphically portrays the multiple facets that make up the character of the northeast sector of the lower peninsula of the State of Michigan.

The preparation of this study was part of the region's comprehensive planning program, financed in part through financial assistance from the Department of Housing and Urban Development and administered by the State of Michigan.

The primary purpose of this study is to advance a better understanding of the Region's unique character. This study also reflects the inter relationships of various characteristics on the intra-regional governmental units that comprise the region.

Sincerely,

A handwritten signature in cursive script that reads "Howard L. Anderson".

Howard L. Anderson
Chief Planner

hla/ncd

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PREFACE

This atlas was prepared to be used by all who are interested in Northeast Michigan (State Planning District #9). The area is composed of the counties of Alcona, Alpena, Cheboygan, Crawford, Montmorency, Oscoda, Otsego and Presque Isle. It is offered as a reference tool for better understanding the areal distribution of the many characteristics which go to make up this sector of the State of Michigan.

All characteristics portrayed represent the most recent data that is available. In many cases, data had to be generalized to fit the scale of the standardized maps that were used for the atlas. Source materials used and mapping in greater detail are available at the offices of the Northeast Michigan Council of Governments*.

The format of this atlas is fashioned similar to the "Atlas of Michigan", prepared by Earl J. Senninger Jr. (1970). The materials portrayed are arranged along the lines of the P.A.S.E. system of classification (People-Activities-Services-Environment) used in the Region's report entitled "A Regional Planning Handbook" (1974).

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(517) 732-3551

PEOPLE

The Planning Approach...

In order to efficiently study any subject one must first have a clear and concise picture of what exactly is being considered. For the purposes of approaching the regional community we have separated the study into four basic elements: People, Activities, Services and Environment. All the various elements which should be studied to adequately understand our region can be classified under one of these four major elements. A complete breakdown as to the areas studied and how they are categorized is as follows:

| <u>PEOPLE</u> | <u>ACTIVITIES</u> |
|------------------|-------------------|
| History | Residential |
| Population | Agriculture |
| Education | Commercial |
| Health & Welfare | Industrial |
| Economy | Recreation |
| Government | Public |

| <u>SERVICES</u> | <u>ENVIRONMENT</u> |
|-----------------|--------------------|
| Communications | Land |
| Energy Supply | Water |
| Waste Disposal | Air |
| Transportation | Resources |

To simply express how these various elements interact is to suggest that People have Activities and Services which influence the Environment. To clearly express what the four major elements are, a discussion of each follows.

PEOPLE:

One of the most difficult duties we have as a

regional planning agency is to discover the needs and wants of the 94,000 plus people in our region which are spread over a 5,000 square mile area. Although some characteristics and needs are common to all people, others differ because of the differences of age, sex, race, religion, income, education, skills, etc. What we must achieve is to provide the needed opportunities within the desired environment.

The 'People' element has been seen as consisting of History, Population, Education, Health & Welfare, Economy and Government. History to provide us with examples from the past; Population information to provide data about our people; Education Surveys to let us know the region's people general character and abilities; Health & Welfare to give us insight into human physical needs; Economic information to provide advice on how the region's people make their living; and Governmental information and structure to illustrate how people rule themselves and provide for their collective needs.

Once all this data relevant to man and society is collected, a clear picture of the region's people and their institutions begins to form. With this information we can begin to prepare for the social needs of the region and develop the human resource.

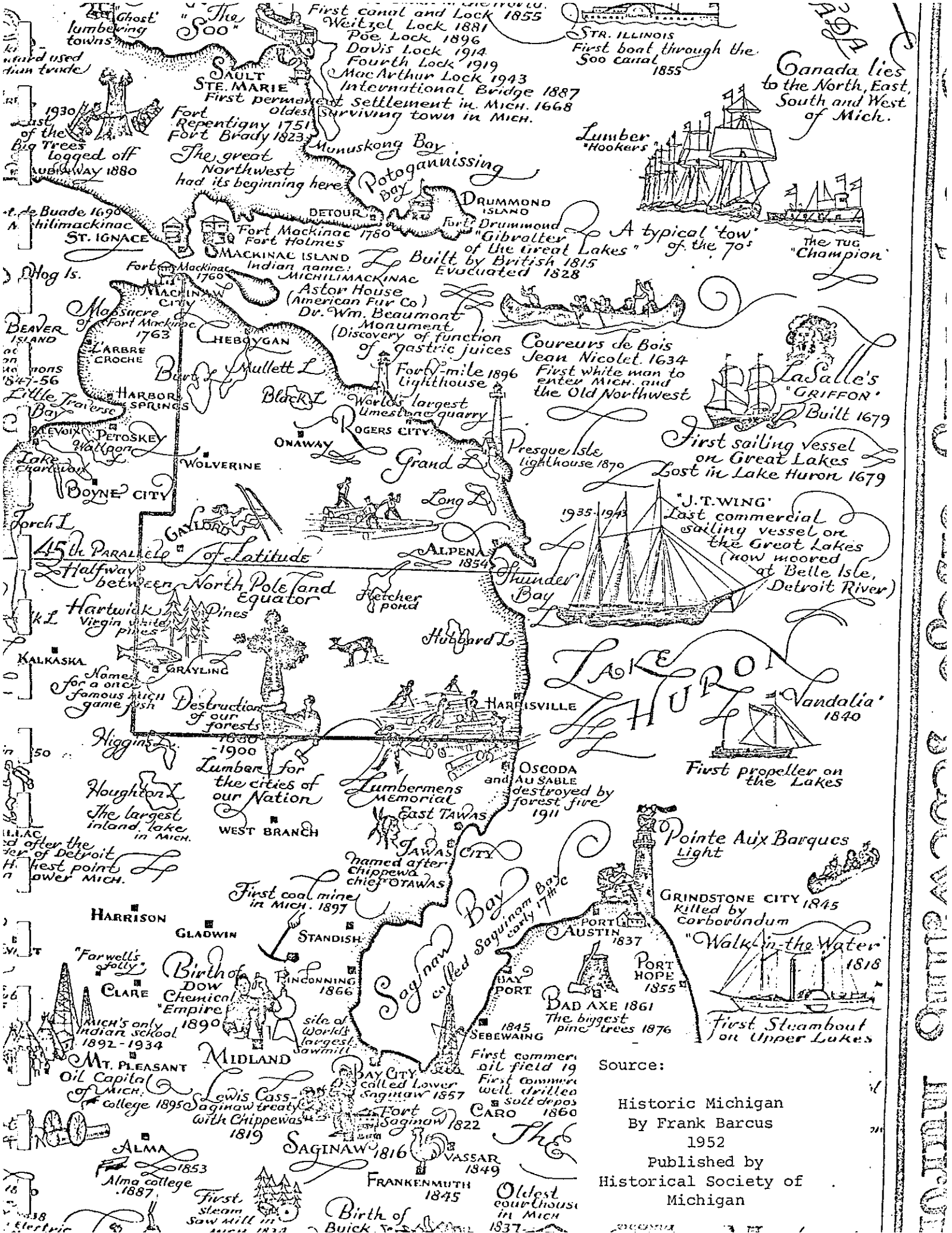
ACTIVITIES:

People in the course of their everyday lives create activities; activities which must be regulated to insure that each person does not infringe upon the rights of others. These activities can be separated into six basic and distinct activities: Residential, Agricultural, Commercial, Industrial, Recreational and Public.

The PASE System

There are many ways in which you can approach a community or region to study its contents. One of the prime factors in approaching any subject in a systematic way is to simplify it so we can easily understand what is happening. That is why the P.A.S.E. System was developed by the Regional Commission. If a subject as complicated as human society and settlements can be logically broken into only four physical elements, then a tool is available to study and improve man and his community.

Sometimes items will be discussed or situations arise in which it may seem appropriate to utilize more than one of the four elements in this system. When this occurs our procedure is to place the item in its most logical PASE element and attempt to be consistent throughout the process of study and review. Hopefully, a simple approach to man's community will provide the means whereby we easily gain knowledge to develop and implement practical, working solutions to regional problems.



Ghost lumbering towns
 natural used
 diuin trade
 1930
 last of the
 big trees
 logged off
 SUBWAY 1880

The "Soo"
 First canal and Lock 1855
 Weitzel Lock 1881
 Poe Lock 1896
 Davis Lock 1914
 Fourth Lock 1919
 MacArthur Lock 1943
 International Bridge 1887
 First permanent settlement in Mich. 1668
 oldest surviving town in Mich.
 Fort Repentigny 1751
 Fort Brady 1823
 The great Northwest had its beginning here
 Munuskong Bay
 Potogannissing Bay

STR. ILLINOIS
 First boat through the
 Soo canal
 1855
 Canada lies to the North, East, South and West of Mich.
 Lumber "Hookers"
 A typical "tow" of the 70s
 The tug "Champion"

DETOUR
 DRUMMOND ISLAND
 Fort Mackinac 1760
 Fort Holmes
 MACKINAC ISLAND
 Indian name: MICHILIMACKINAC
 Astor House (American Fur Co)
 Dr. Wm. Beaumont Monument
 (Discovery of function of gastric juices)
 Fort Drummond
 "Gibraltar of the Great Lakes"
 Built by British 1815
 Evacuated 1828
 Fort Mackinac 1760
 MACKINAC CITY
 MACHINAW CITY
 Fort Mackinac 1763
 HEBOYGAN
 Mullett L.
 Black L.
 Rogers City
 World's largest limestone quarry
 Forty-mile 1896
 Lighthouse
 Coureurs de Bois
 Jean Nicolet 1634
 First white man to enter Mich. and the Old Northwest
 Lasalle's "GRIFFON"
 Built 1679
 First sailing vessel on Great Lakes
 Lost in Lake Huron 1679

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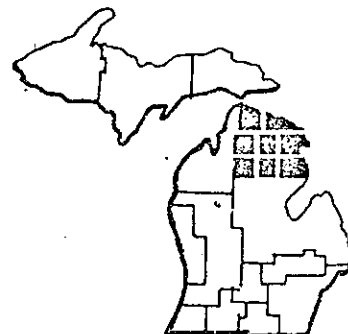
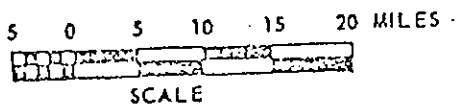
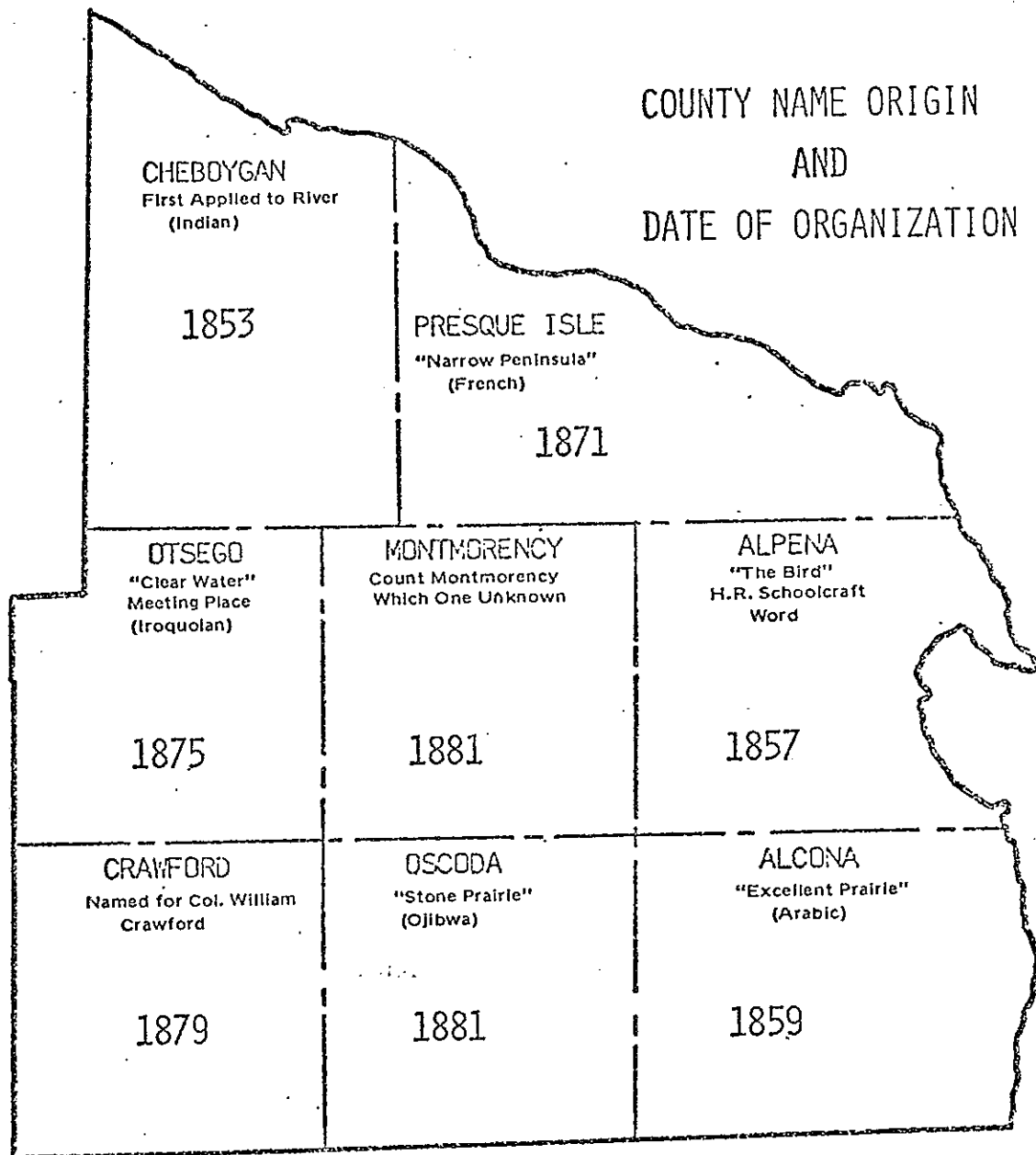
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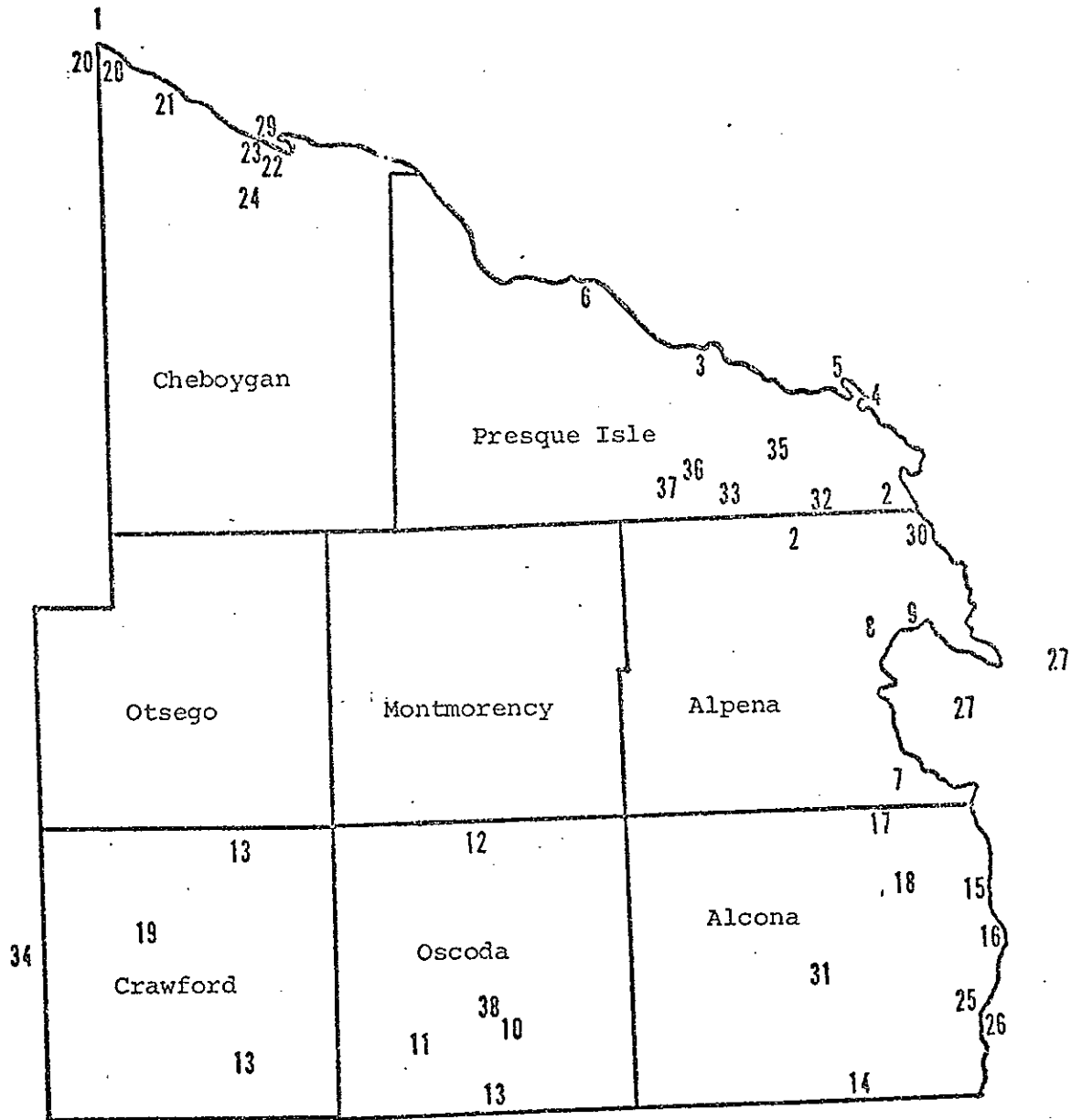
Source:
 Historic Michigan
 By Frank Barcus
 1952
 Published by
 Historical Society of
 Michigan

COUNTY NAME ORIGIN
AND
DATE OF ORGANIZATION



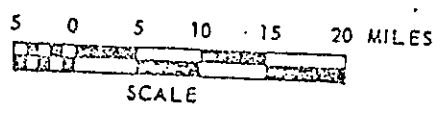
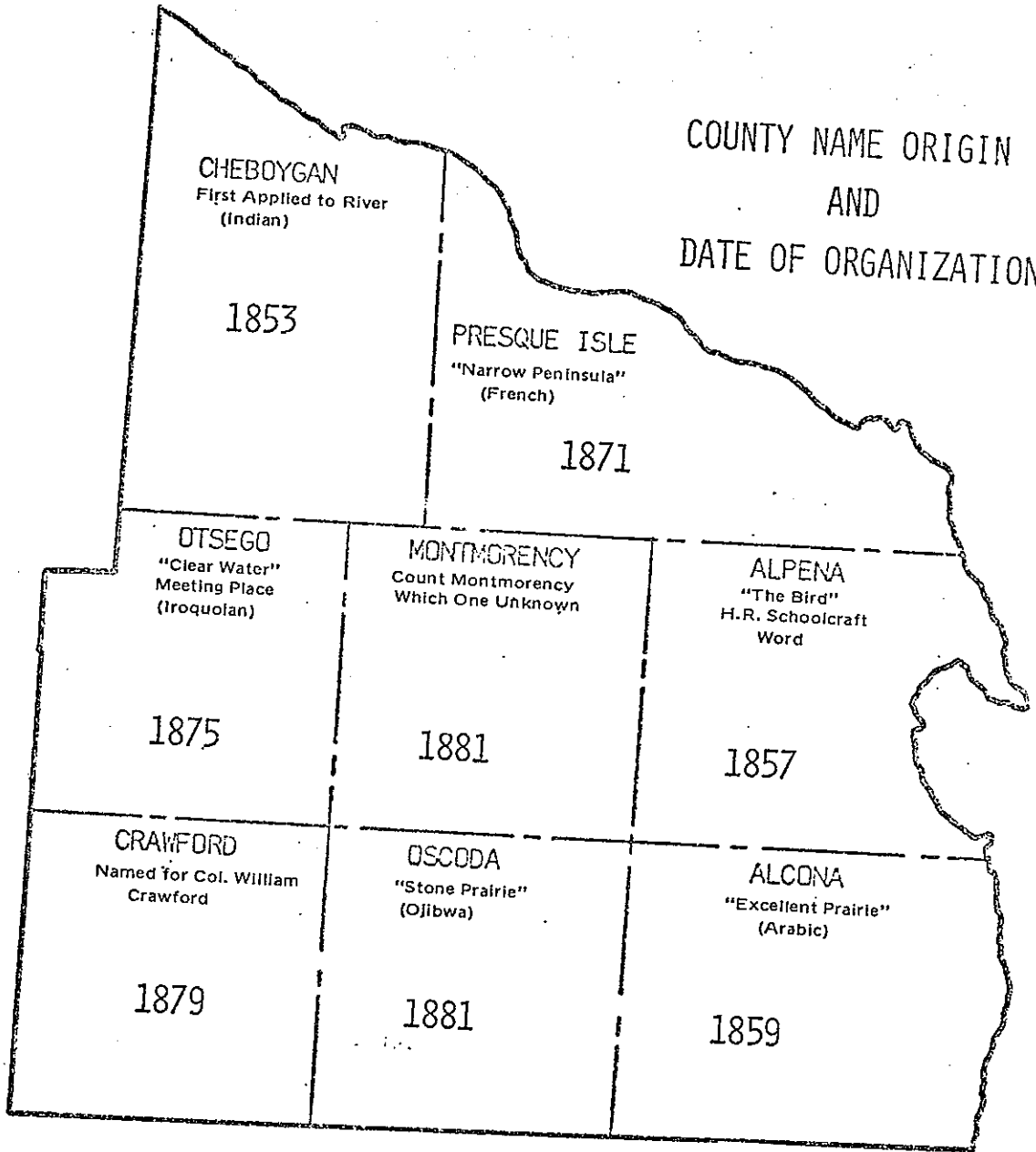
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LOCATION OF HISTORIC AND ARCHEOLOGIC SITES

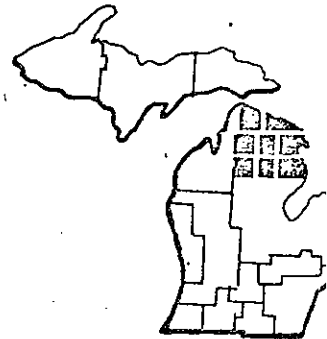
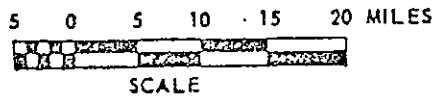
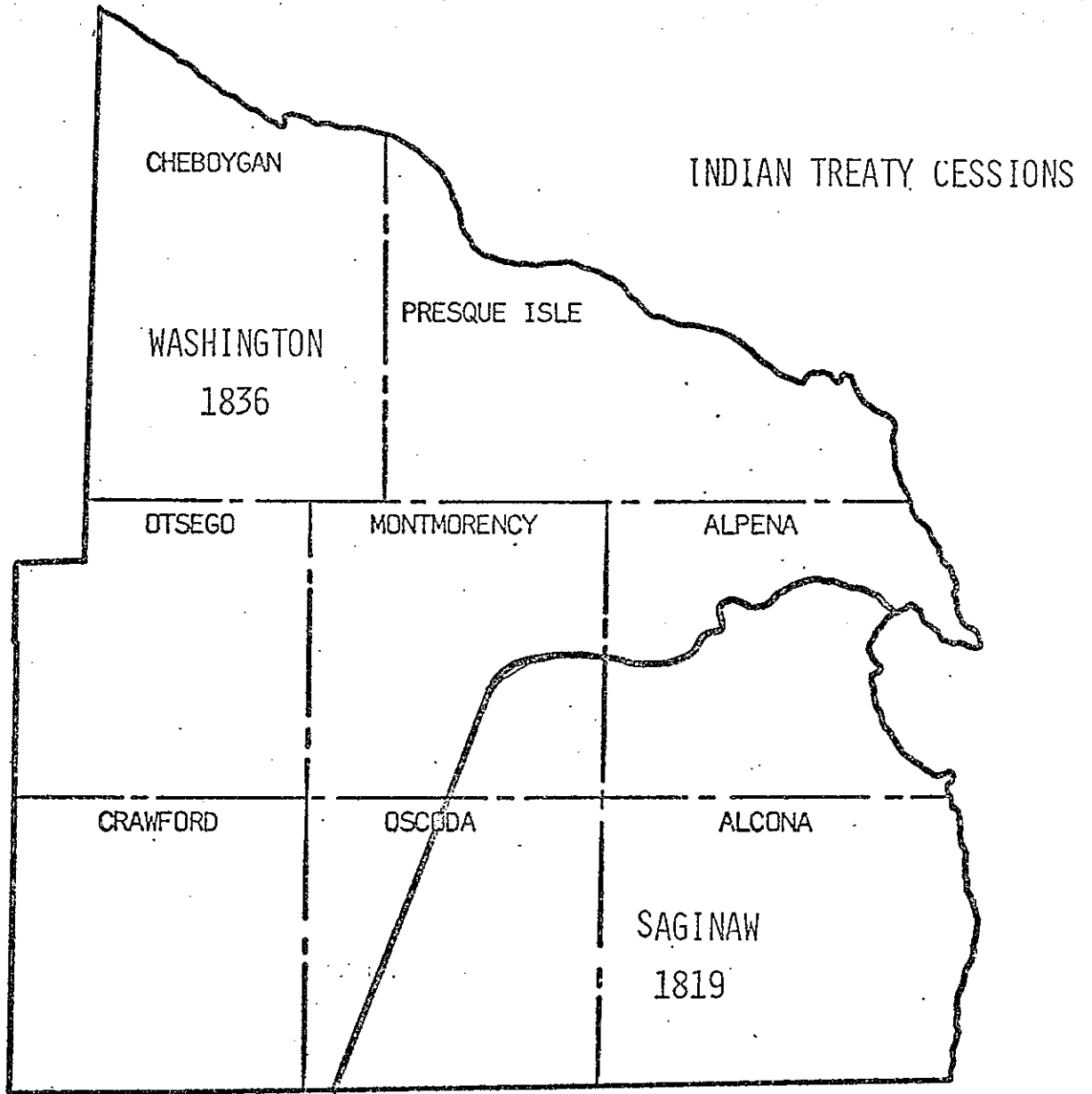


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| <ol style="list-style-type: none"> 1. Mackinaw Bridge 2. Sink Holes 3. U.S. Steel Limestone Quarry (World's Largest) 4. Old Presque Isle Lighthouse 5. Presque Isle Lighthouse 6. Sacred Rock 7. Domke's Prehistorical Zoo Gardens 8. Besser Museum 9. Huron-Portland Cement Plant (World's Largest) 10. Kirtland's Warbler Monument 11. Luzerne Fire Site 12. Steiner Museum 13. Kirtland's Warbler Nesting Area 14. Chippewa Indian Settlement | <ol style="list-style-type: none"> 15. Alcona Ghost Town 16. Sturgeon Point Lighthouse 17. Paul Bunyan and Babe, His Blue Ox 18. Hall of Ancient Man 19. Hartwick Pines Area (Virgin White Pines) 20. Fort Michilimackinac 21. Campbell Farm Site 22. Cheboygan Opera House 23. Old Cheboygan County Courthouse 24. Inland Waterway 25. Springport Inn 26. Great Black Rock 27. Thunder Bay Shipwrecks 28. Mackinaw Point Lighthouse | <ol style="list-style-type: none"> 29. Old Duncan City (Cheboygan Marsh) 30. Port of Rockport (Abandoned) 31. Briggs Centennial Farm 32. Elowski Centennial Farm 33. Metz Fire 34. Michigan Grayling 35. Noffze Centennial Farm 36. Selke Centennial Farm 37. Smolinski Centennial Farm 38. Oscoda County Courthouse |
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COUNTY NAME ORIGIN
AND
DATE OF ORGANIZATION

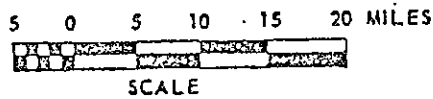
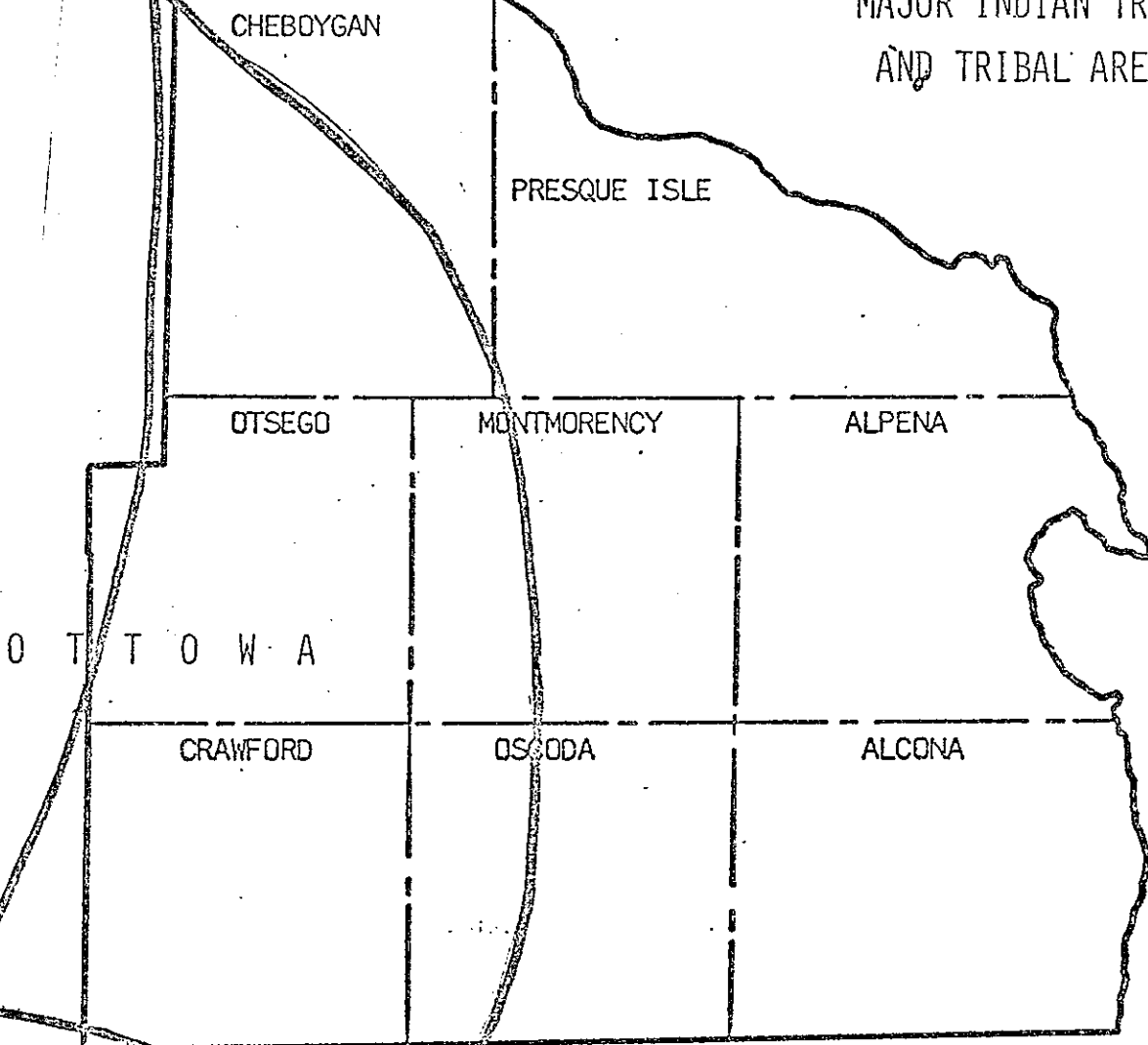


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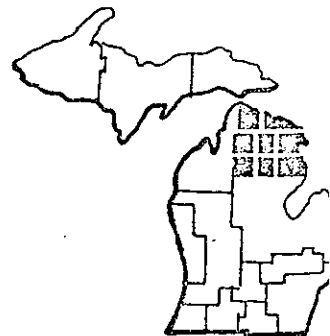


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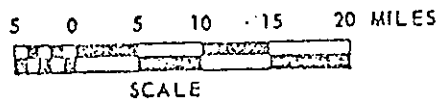
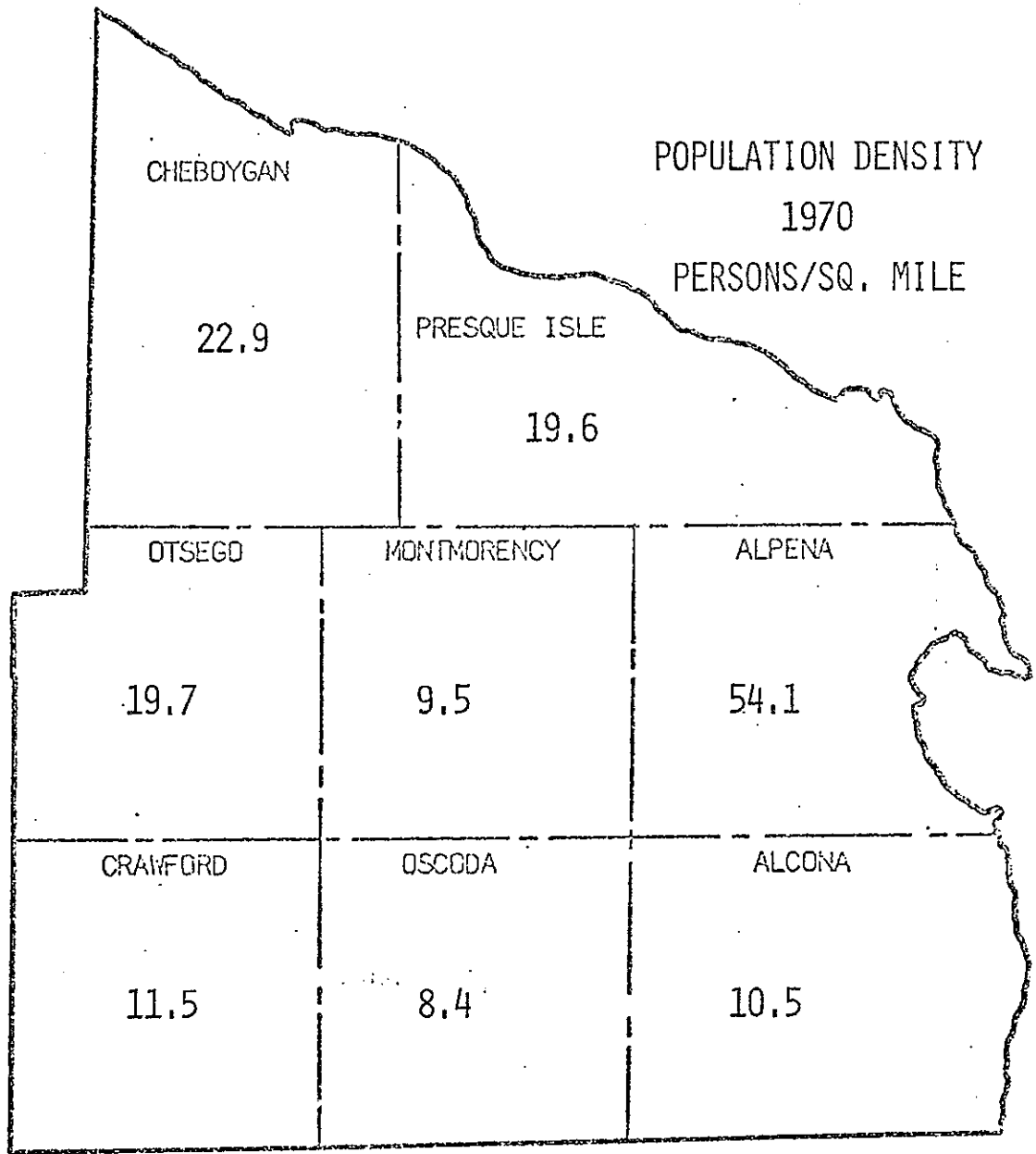
MAJOR INDIAN TRAILS AND TRIBAL AREAS



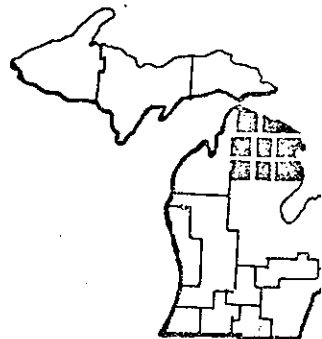
SAGINAW AND MACKINAC TRAIL



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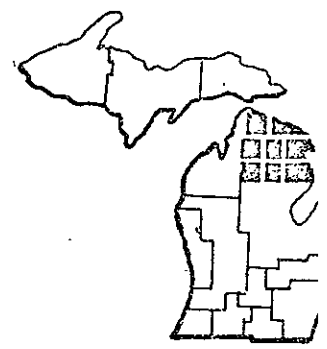
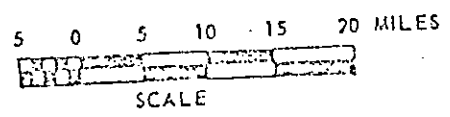
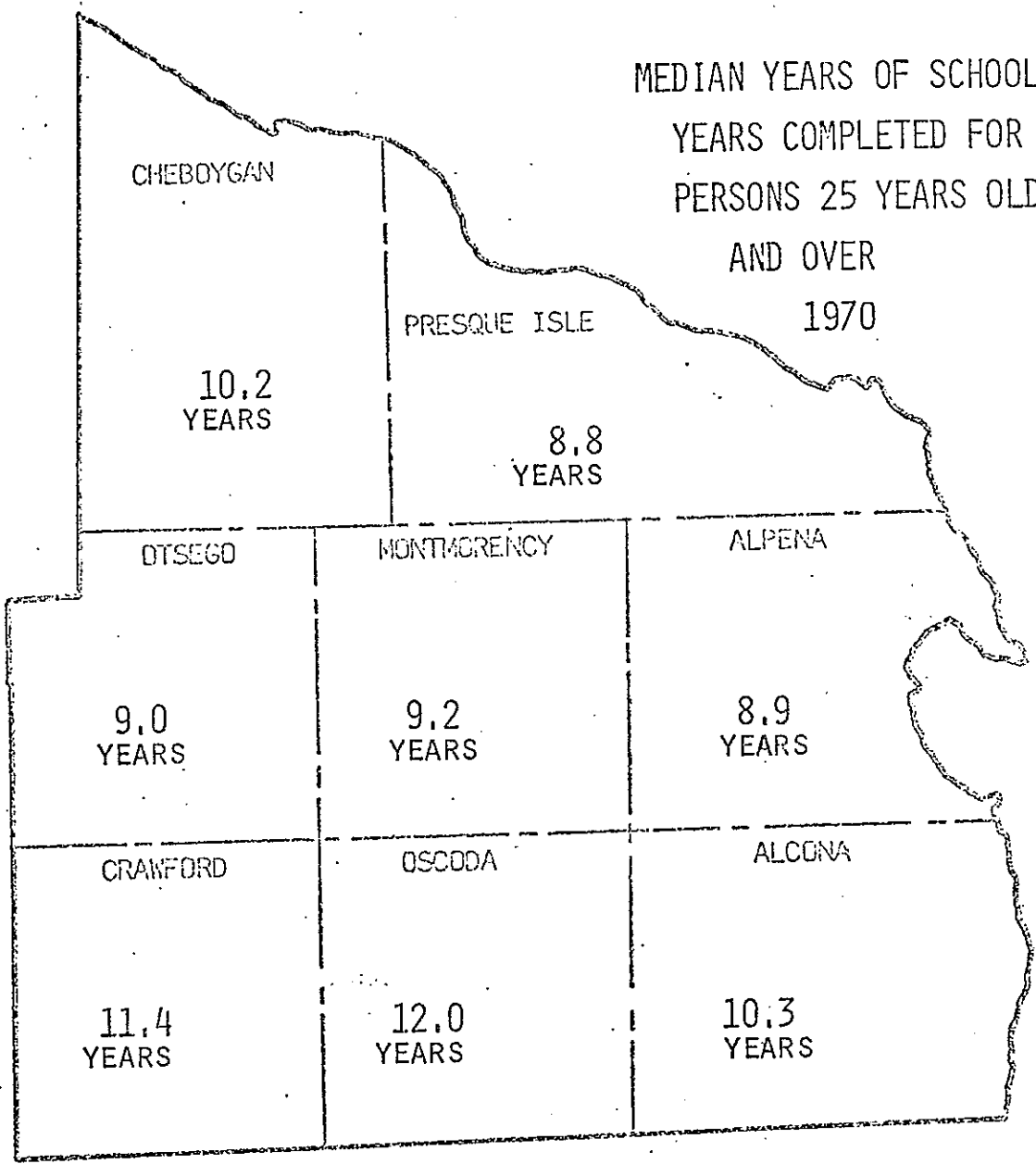


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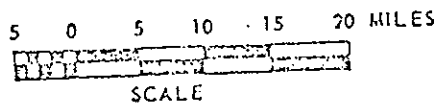
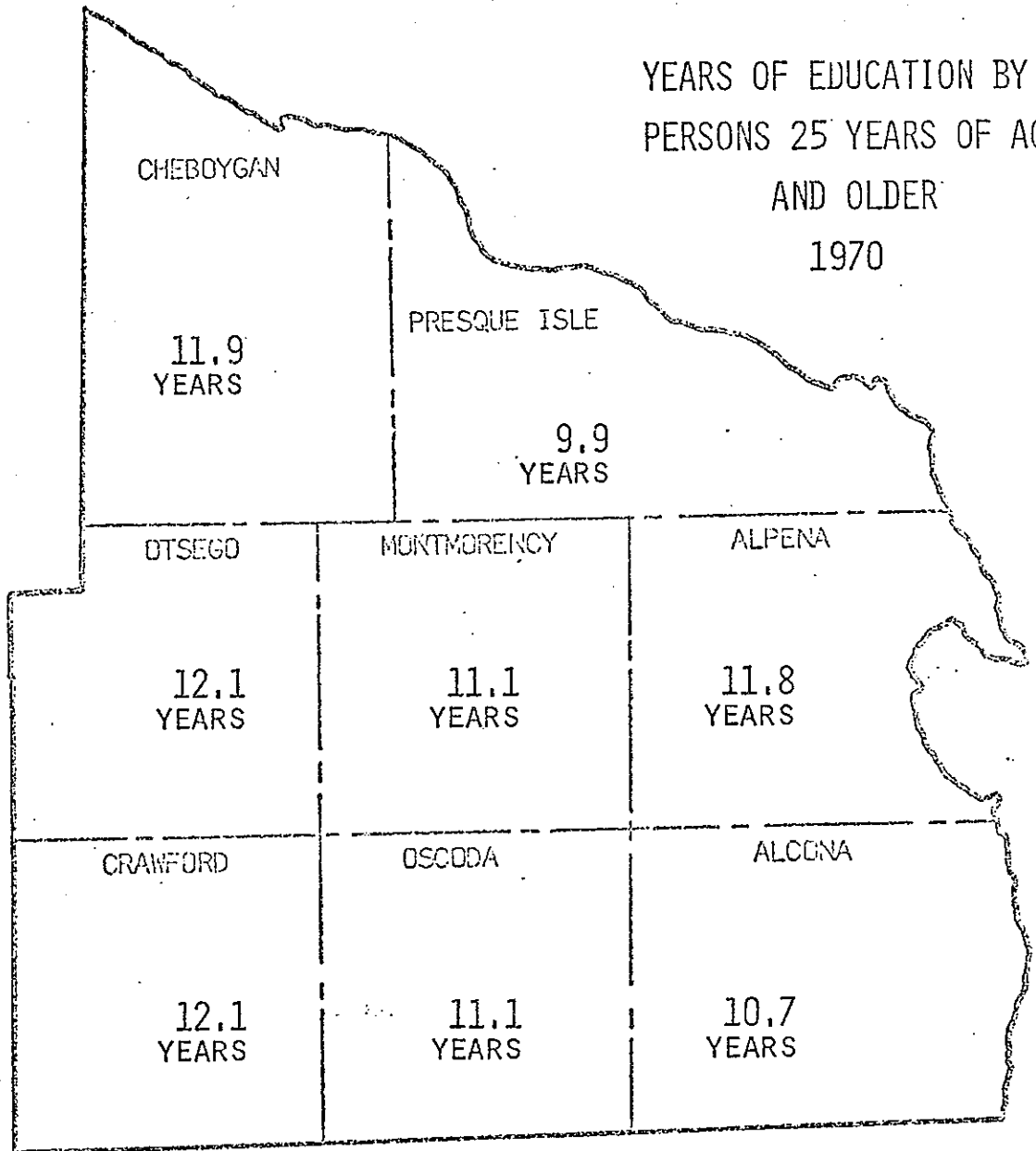
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MEDIAN YEARS OF SCHOOL
 YEARS COMPLETED FOR
 PERSONS 25 YEARS OLD
 AND OVER
 1970



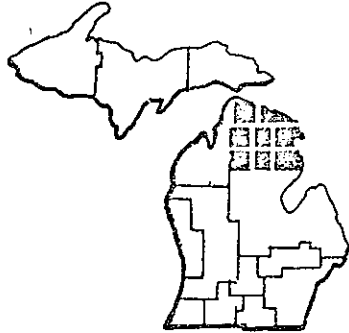
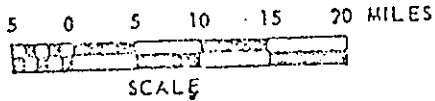
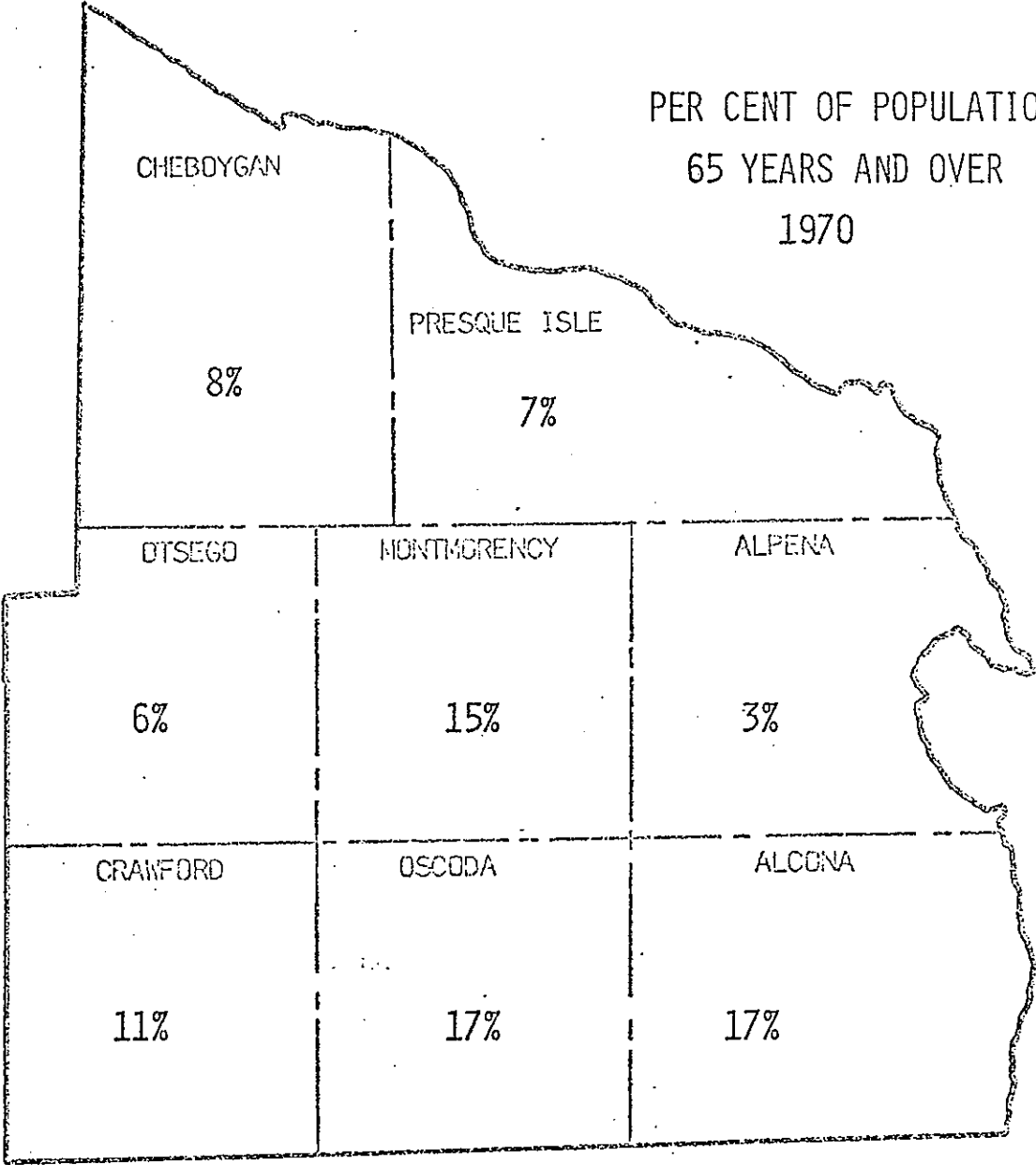
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YEARS OF EDUCATION BY
PERSONS 25 YEARS OF AGE
AND OLDER
1970



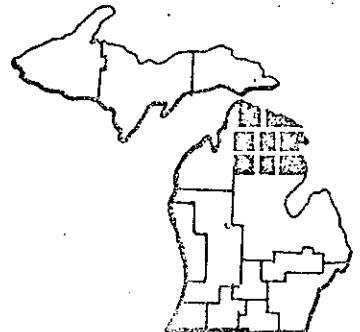
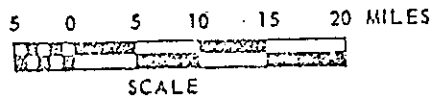
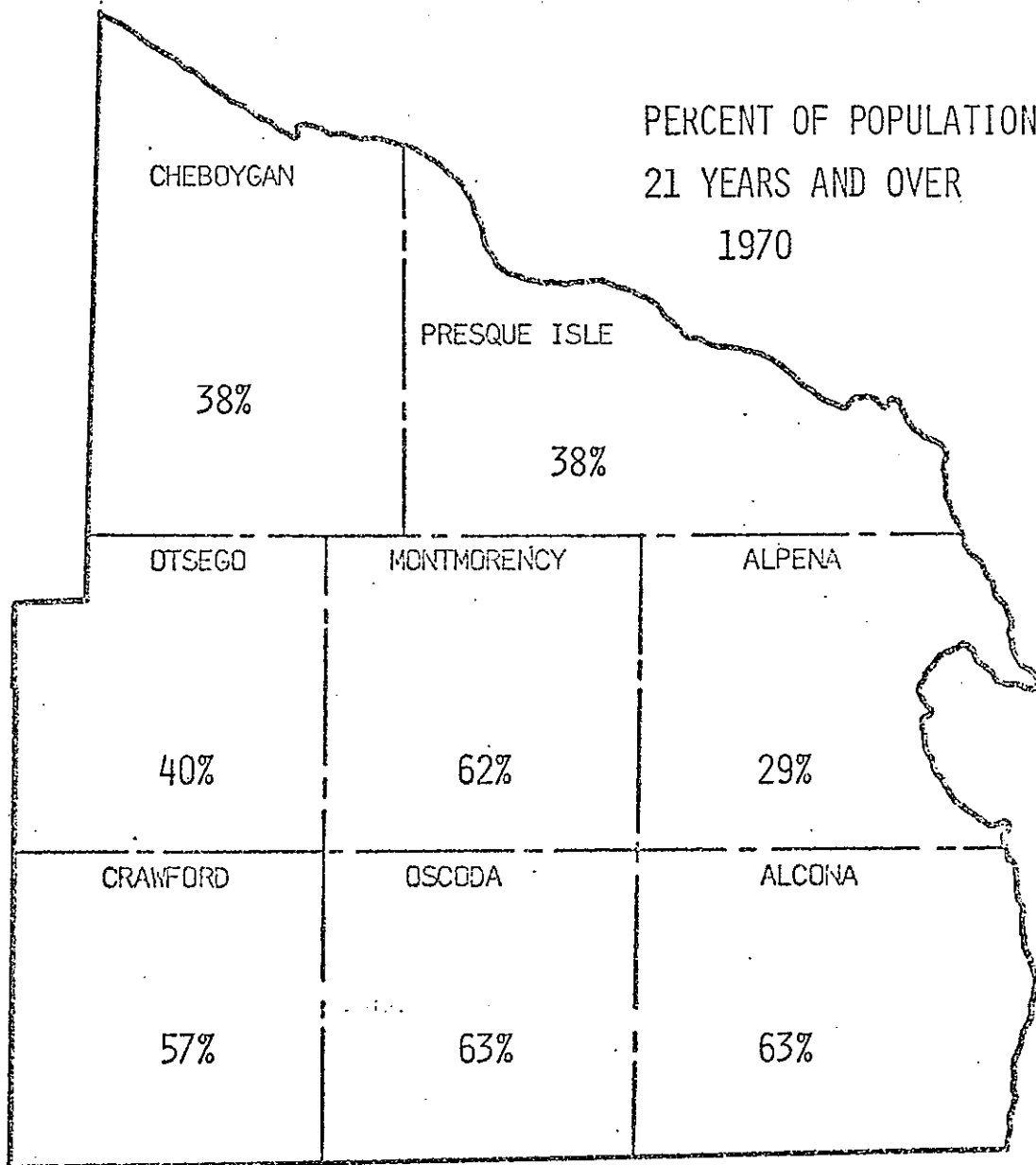
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PER CENT OF POPULATION
65 YEARS AND OVER
1970



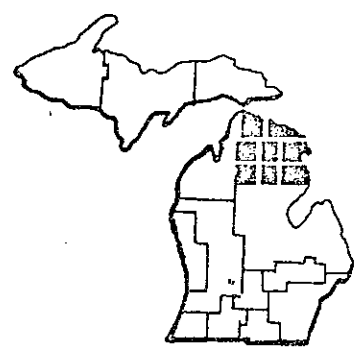
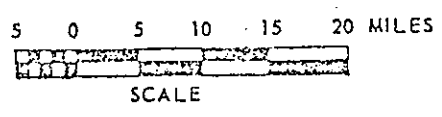
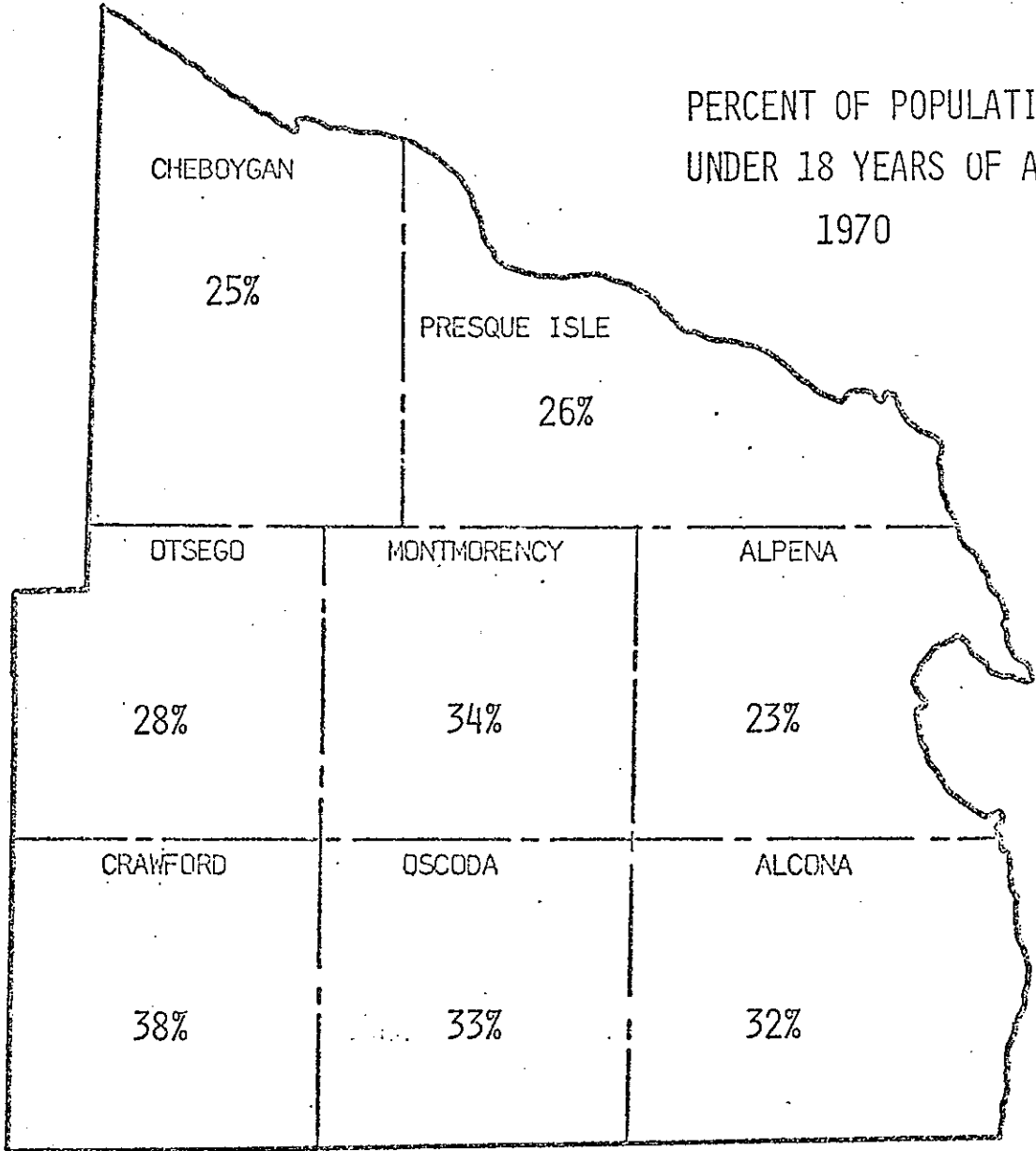
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PERCENT OF POPULATION
21 YEARS AND OVER
1970



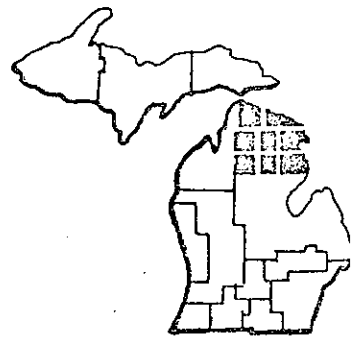
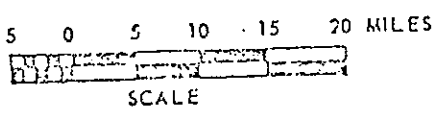
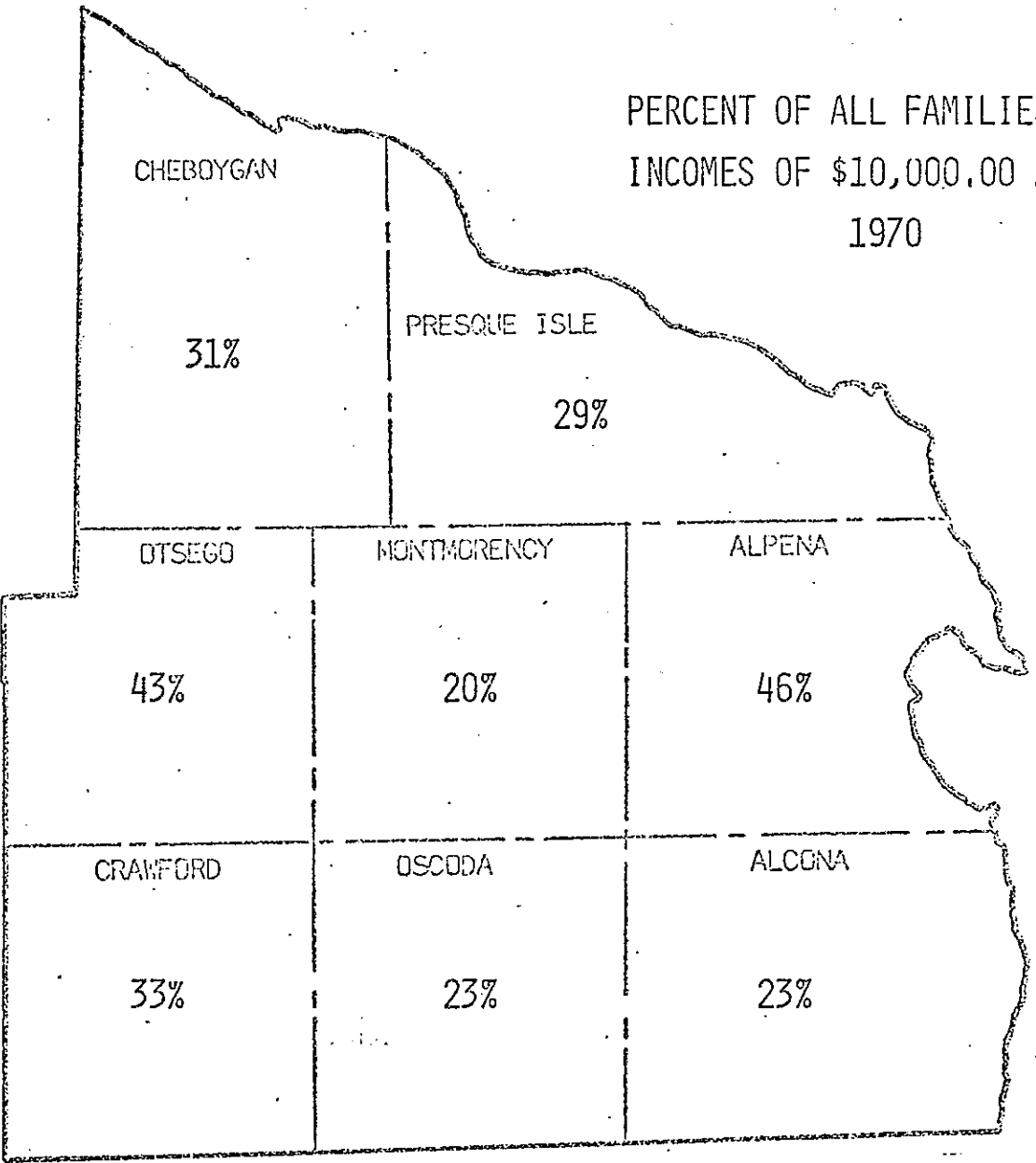
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PERCENT OF POPULATION
UNDER 18 YEARS OF AGE
1970



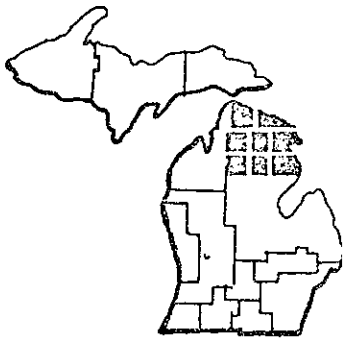
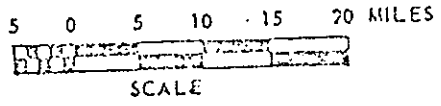
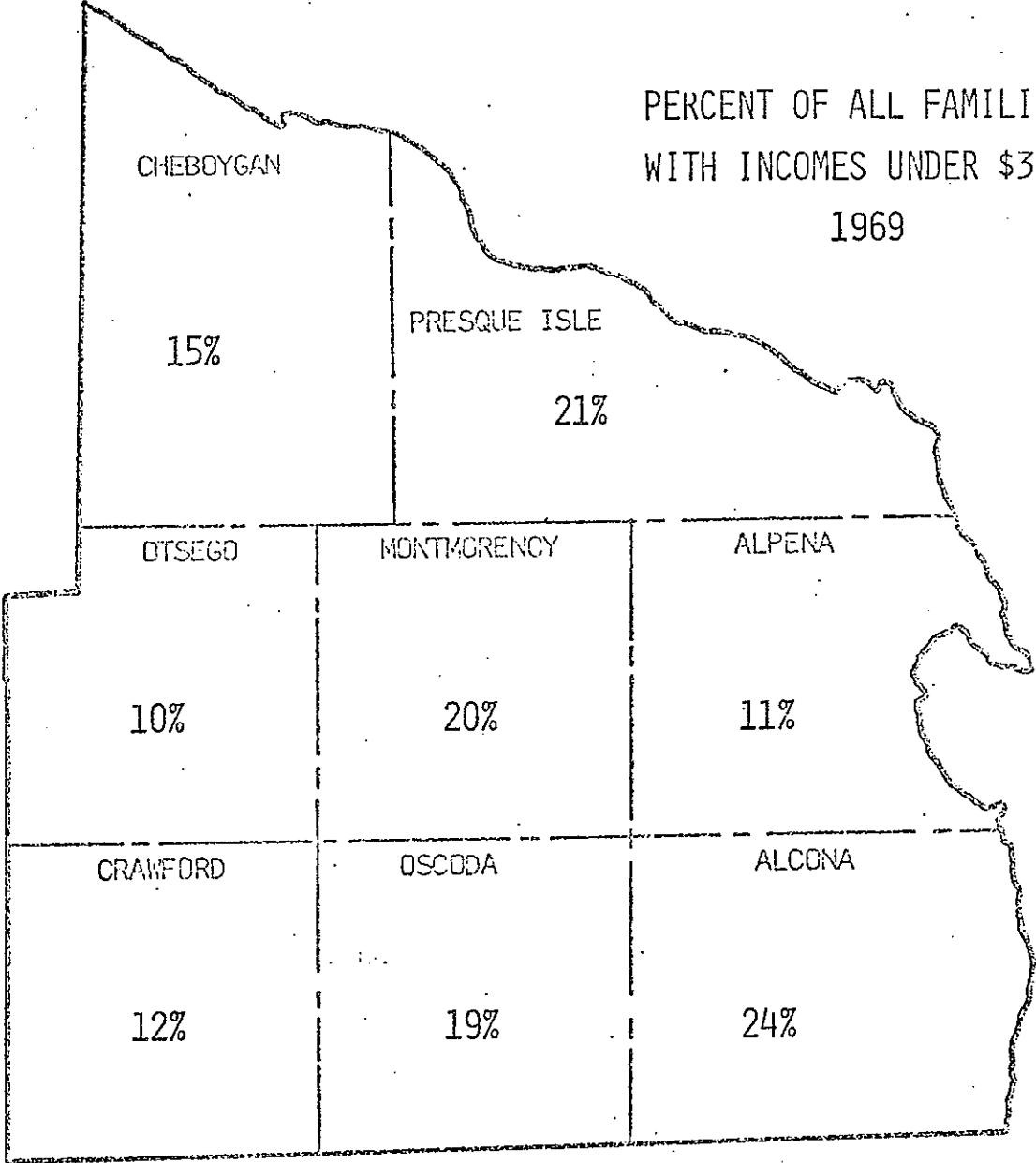
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PERCENT OF ALL FAMILIES WITH
INCOMES OF \$10,000.00 AND OVER
1970



NEMCOG

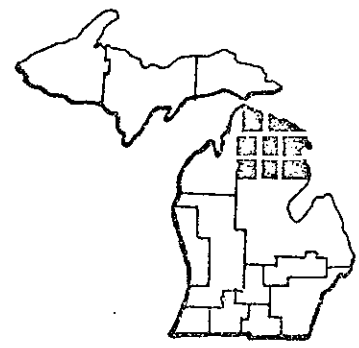
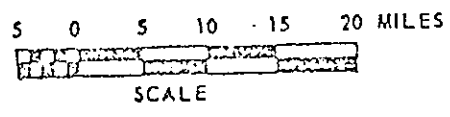
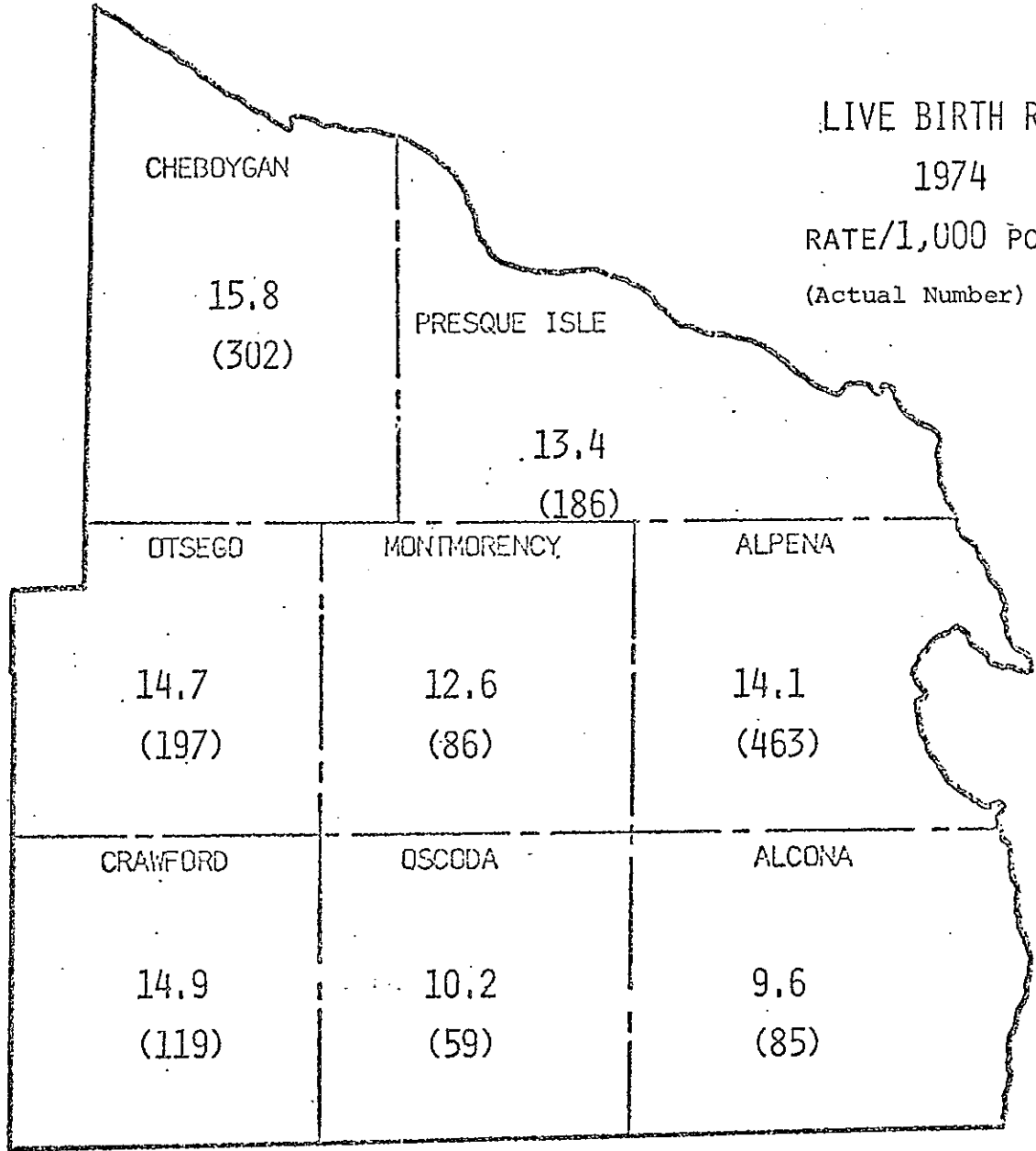
PERCENT OF ALL FAMILIES
WITH INCOMES UNDER \$3,000.00
1969



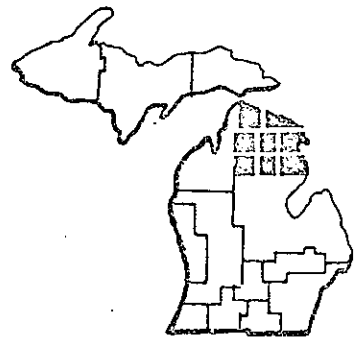
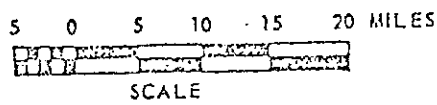
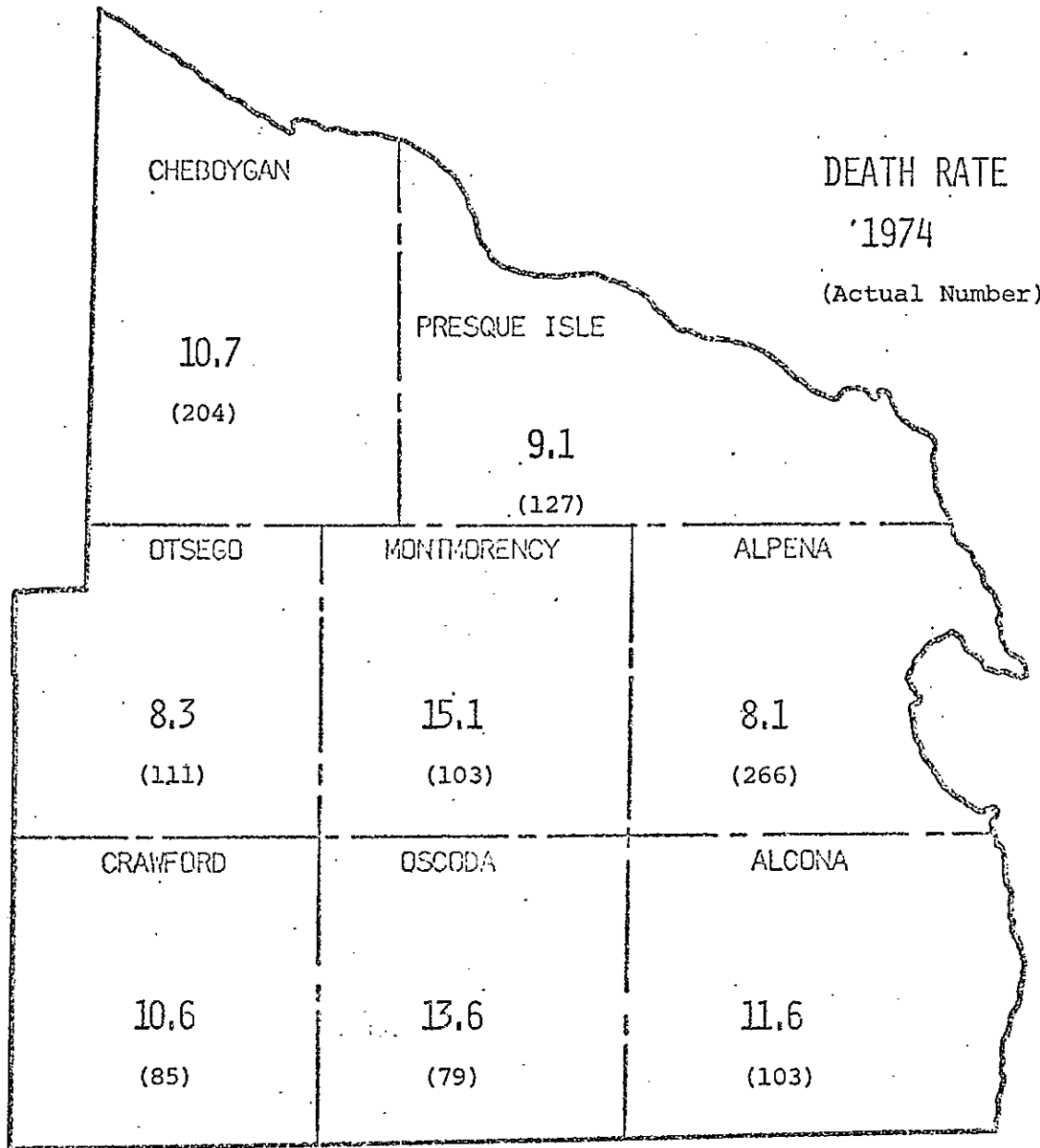
NEMCOG

LIVE BIRTH RATE
1974

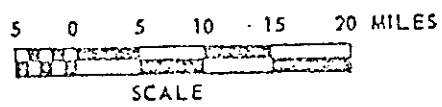
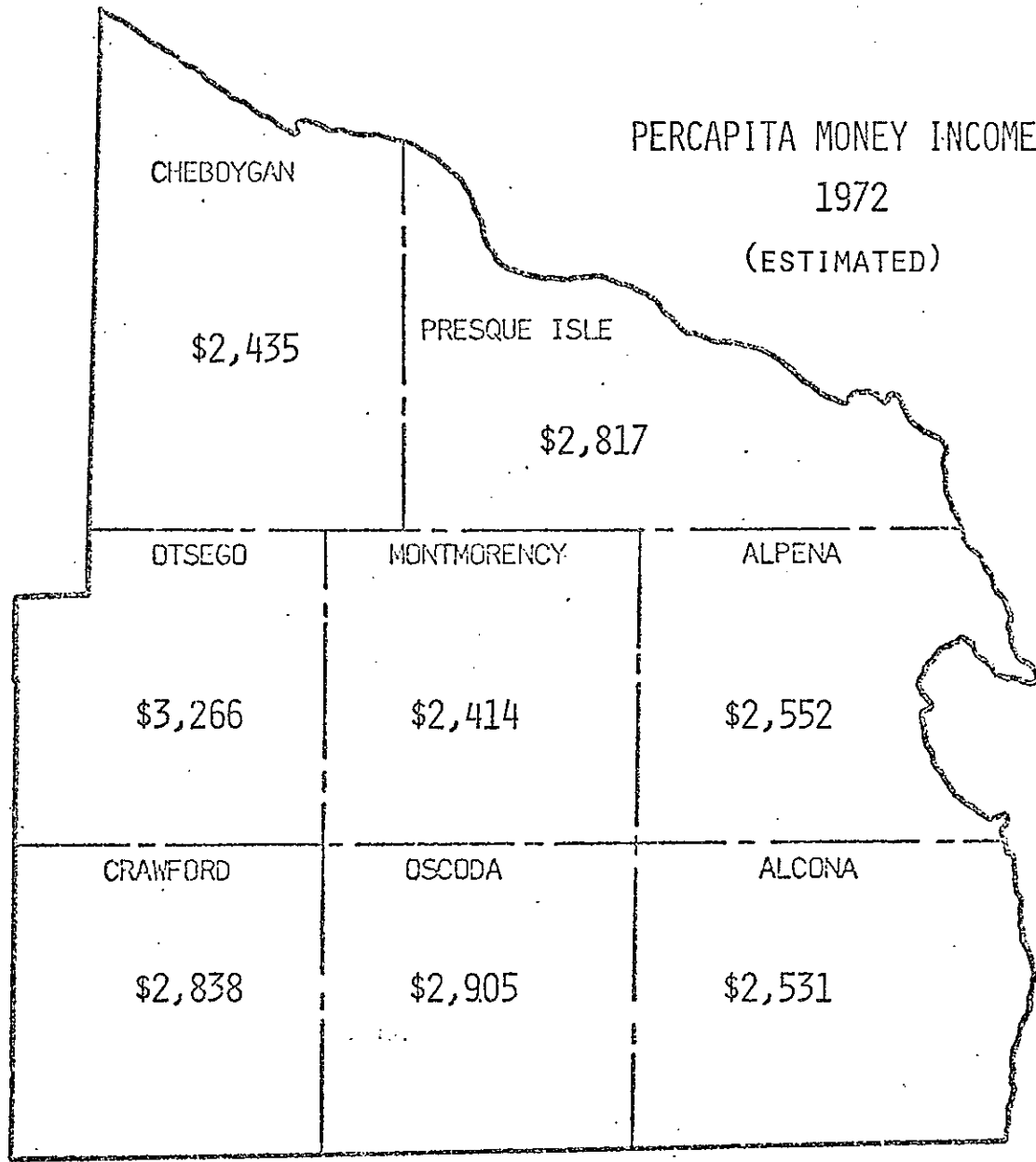
RATE/1,000 POP.
(Actual Number)



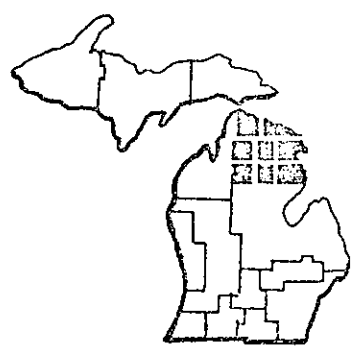
NEMCOG



NEMCOG

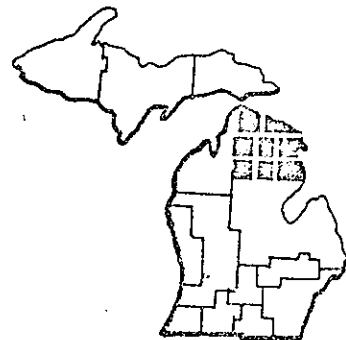
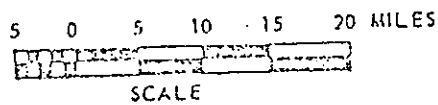
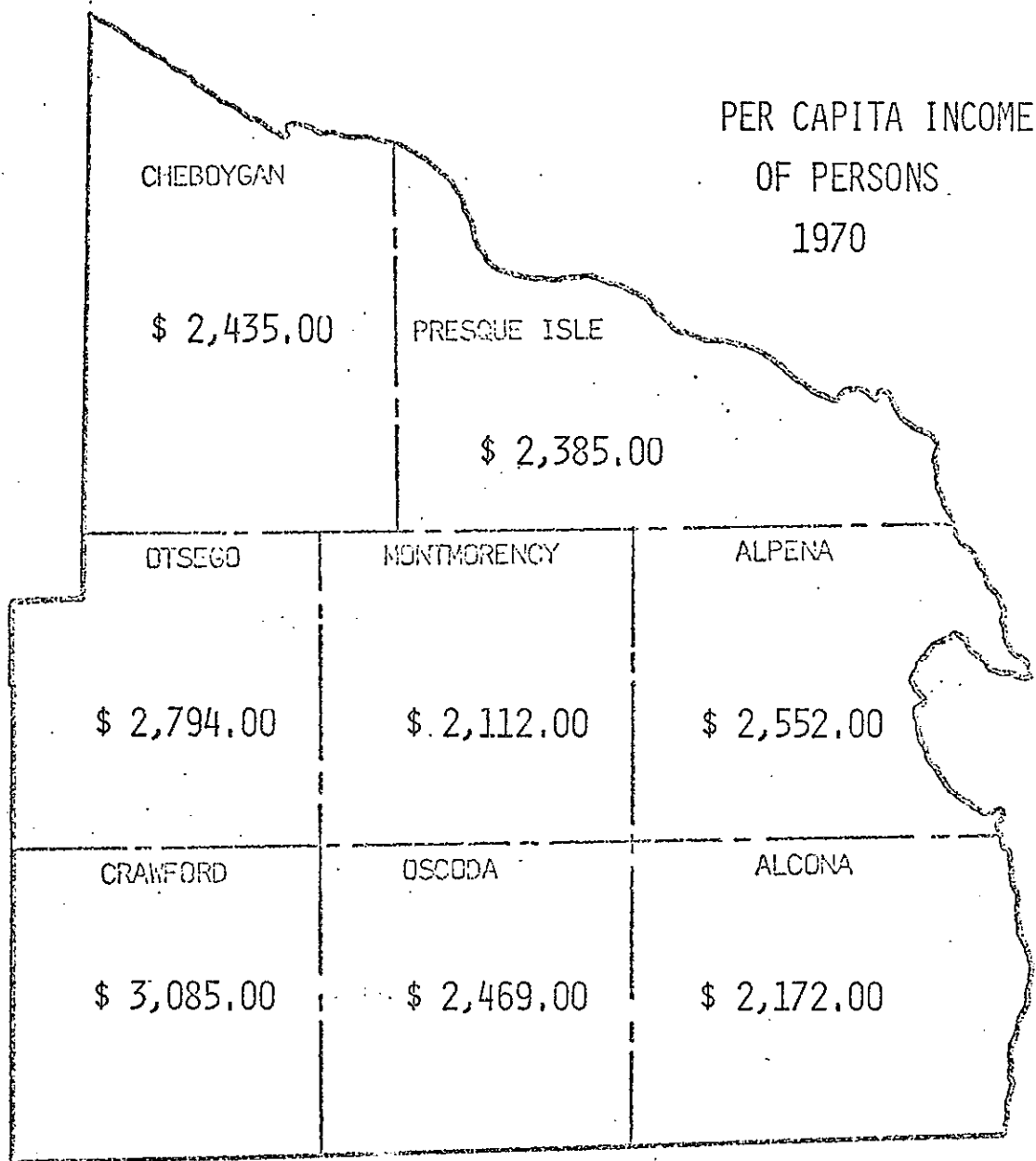


STATE OF MICHIGAN \$3,984



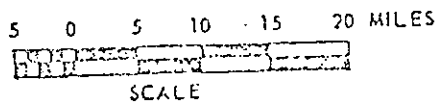
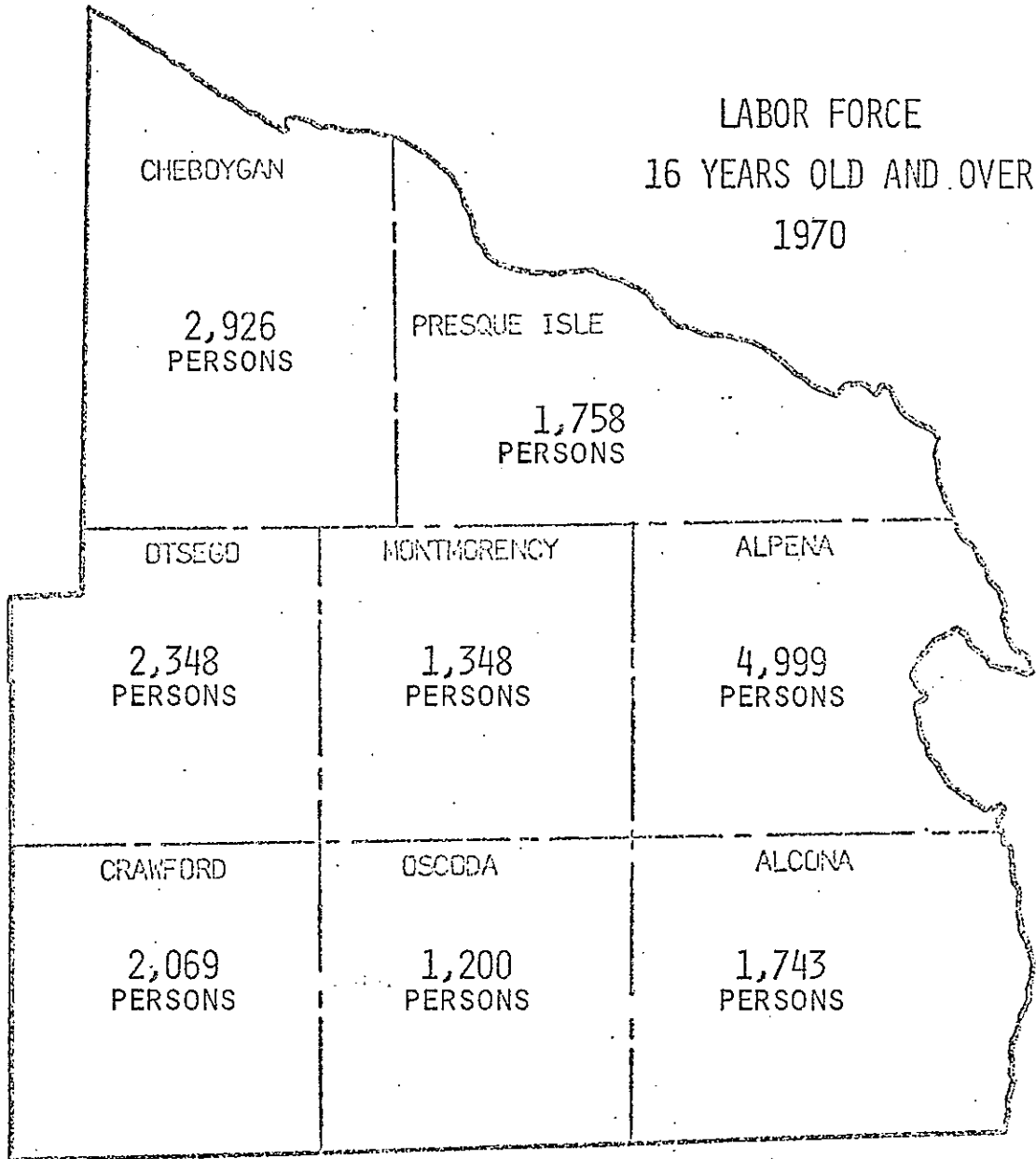
NEMCOG

PER CAPITA INCOME
OF PERSONS
1970

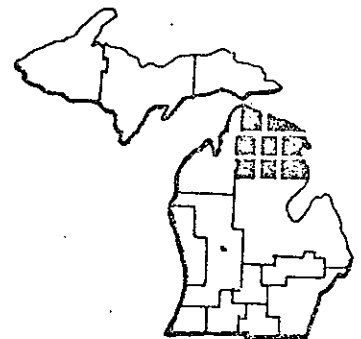
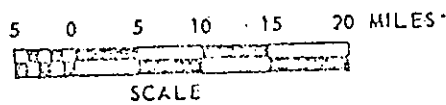
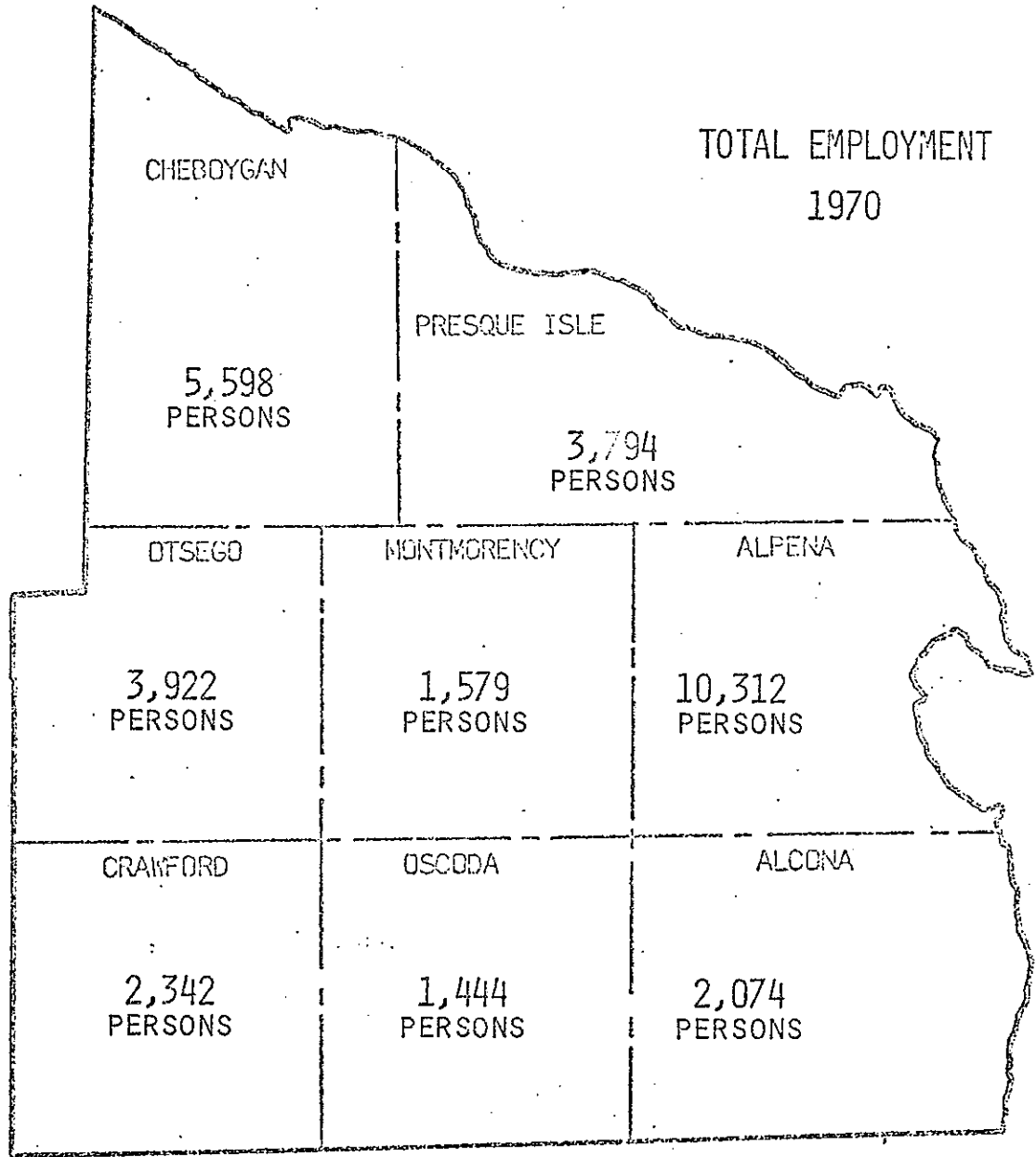


NEMCOG

LABOR FORCE
16 YEARS OLD AND OVER
1970

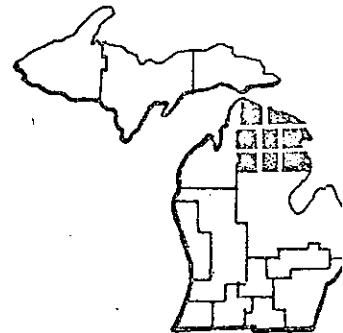
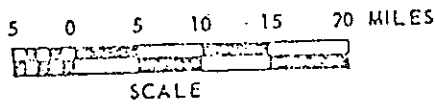
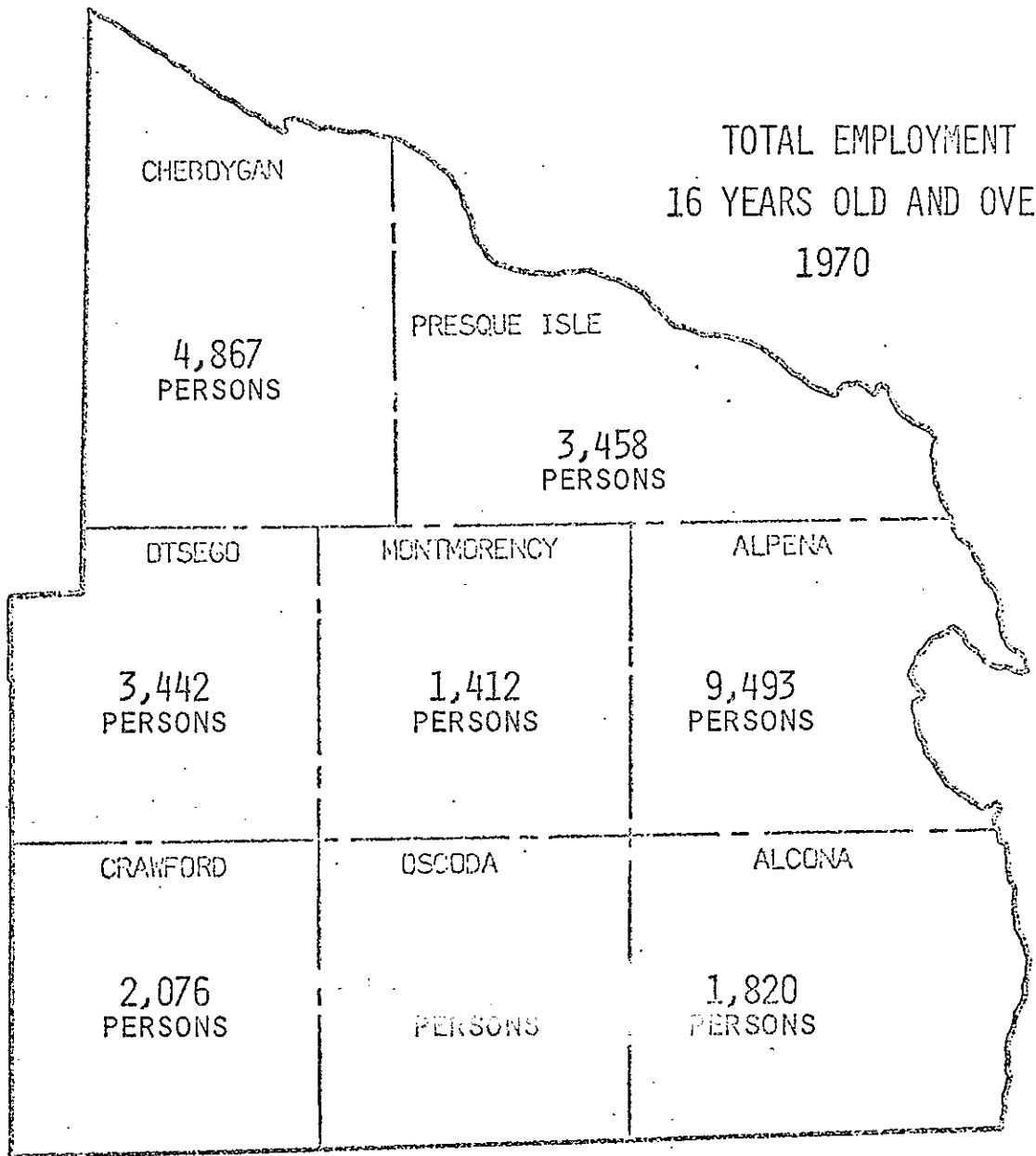


NEMCOG



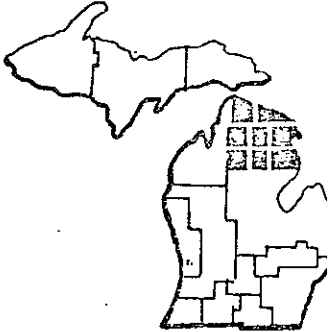
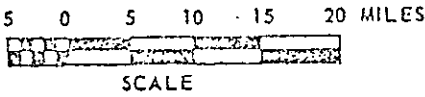
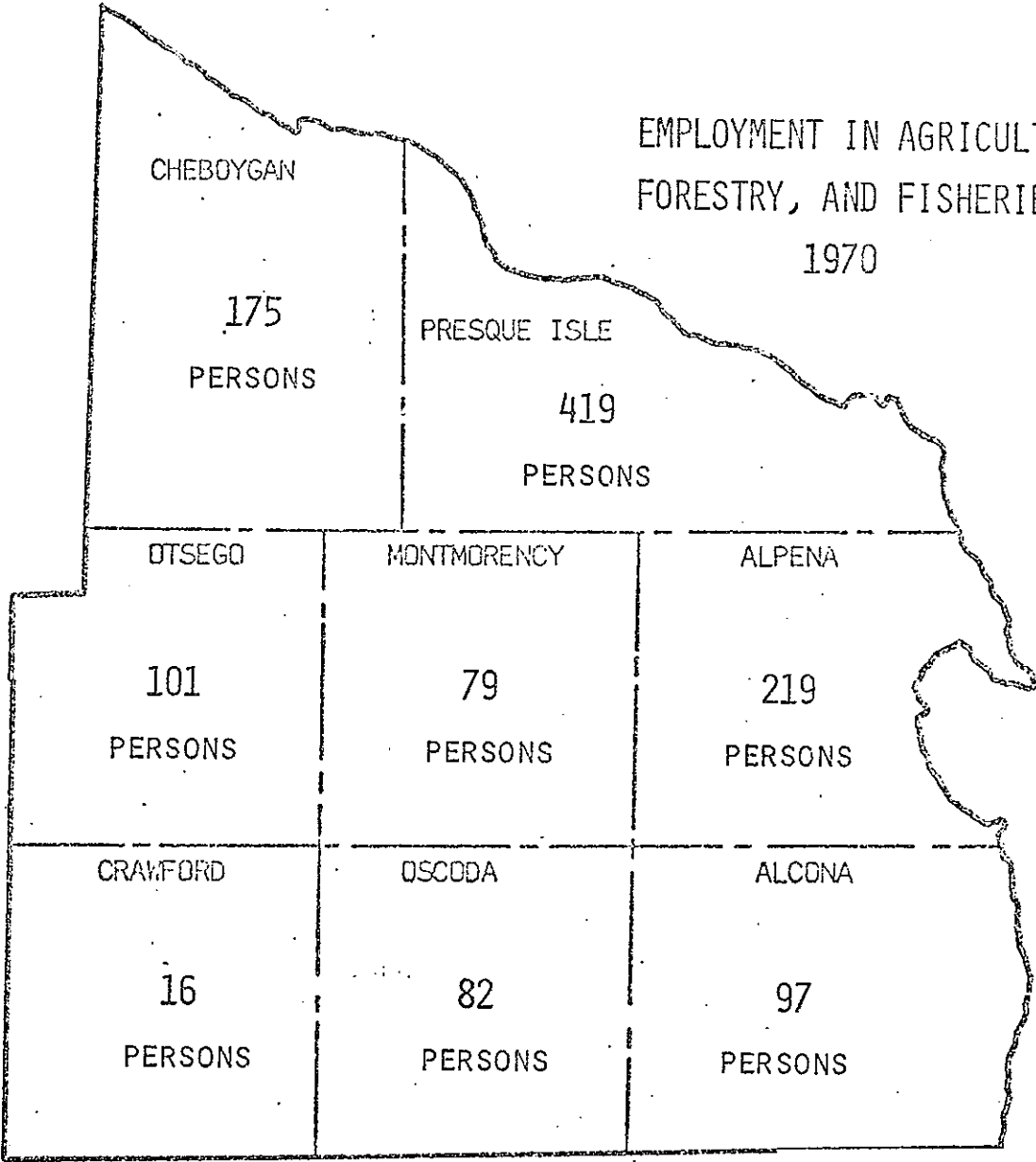
NEMCOG

TOTAL EMPLOYMENT
16 YEARS OLD AND OVER
1970



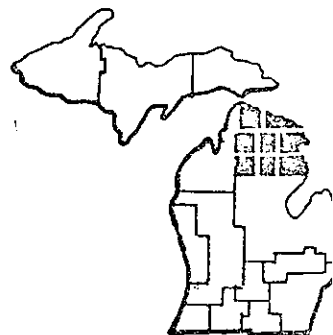
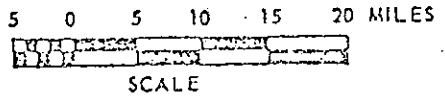
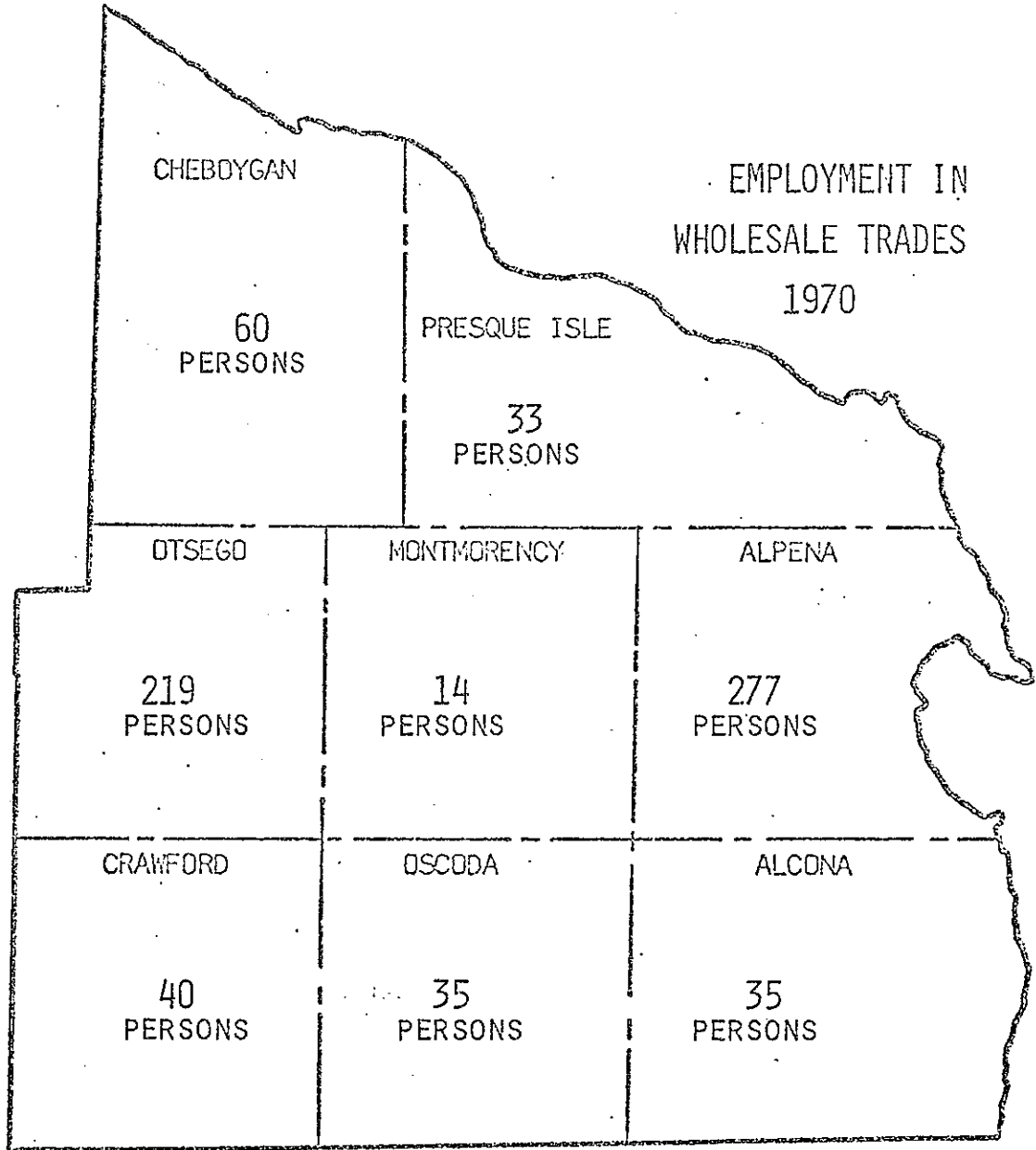
NEMCOG

EMPLOYMENT IN AGRICULTURE,
FORESTRY, AND FISHERIES
1970



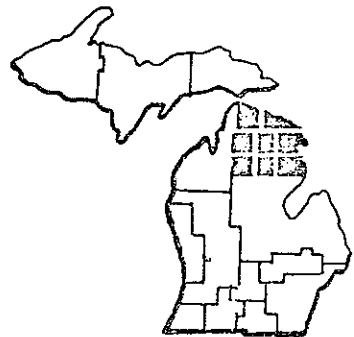
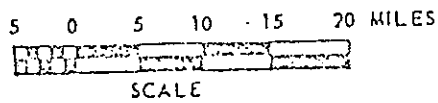
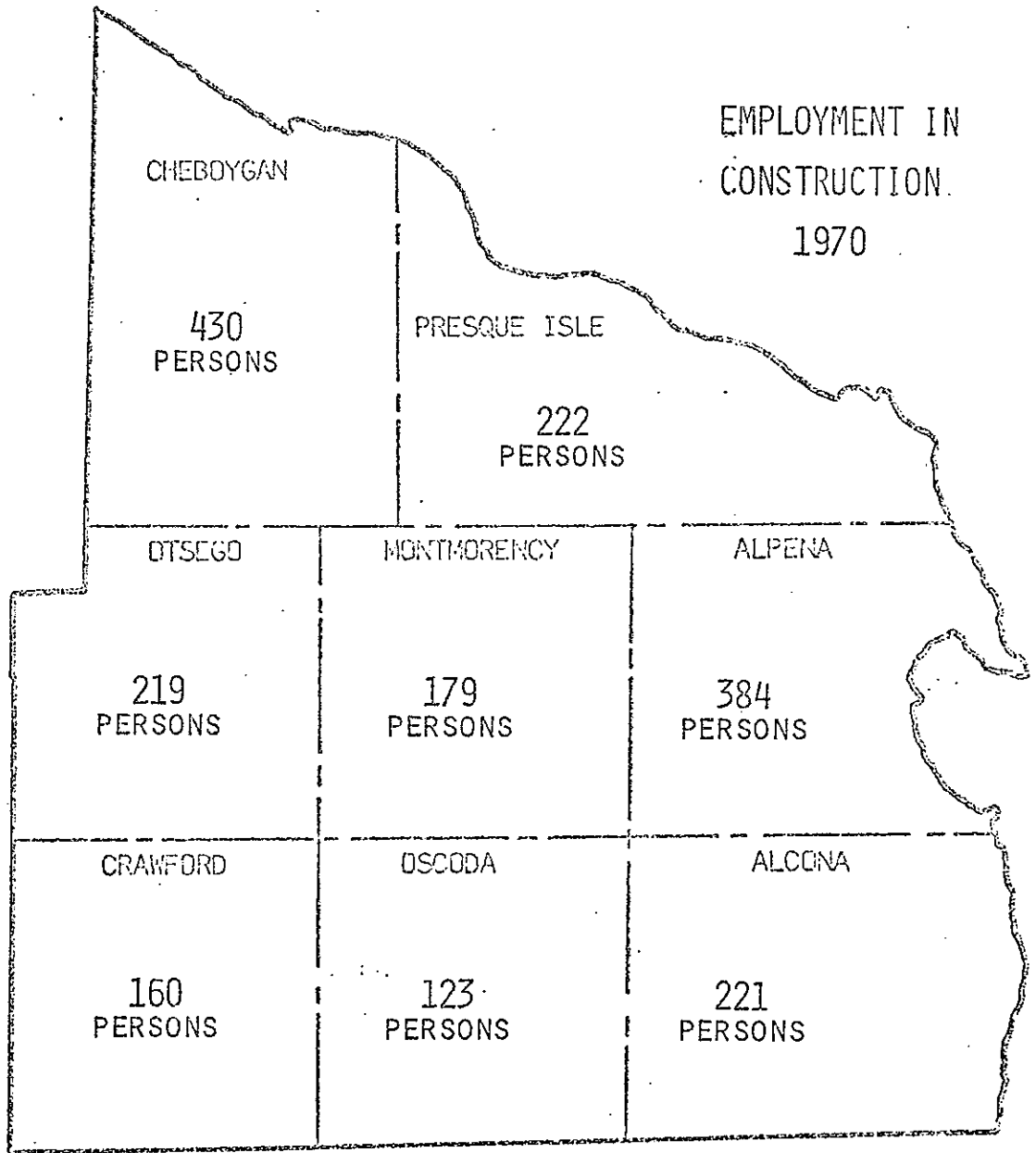
NEMCOG

EMPLOYMENT IN
WHOLESALE TRADES
1970



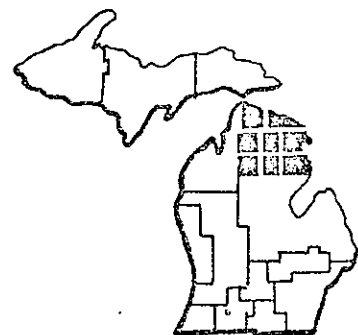
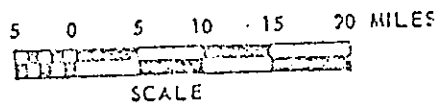
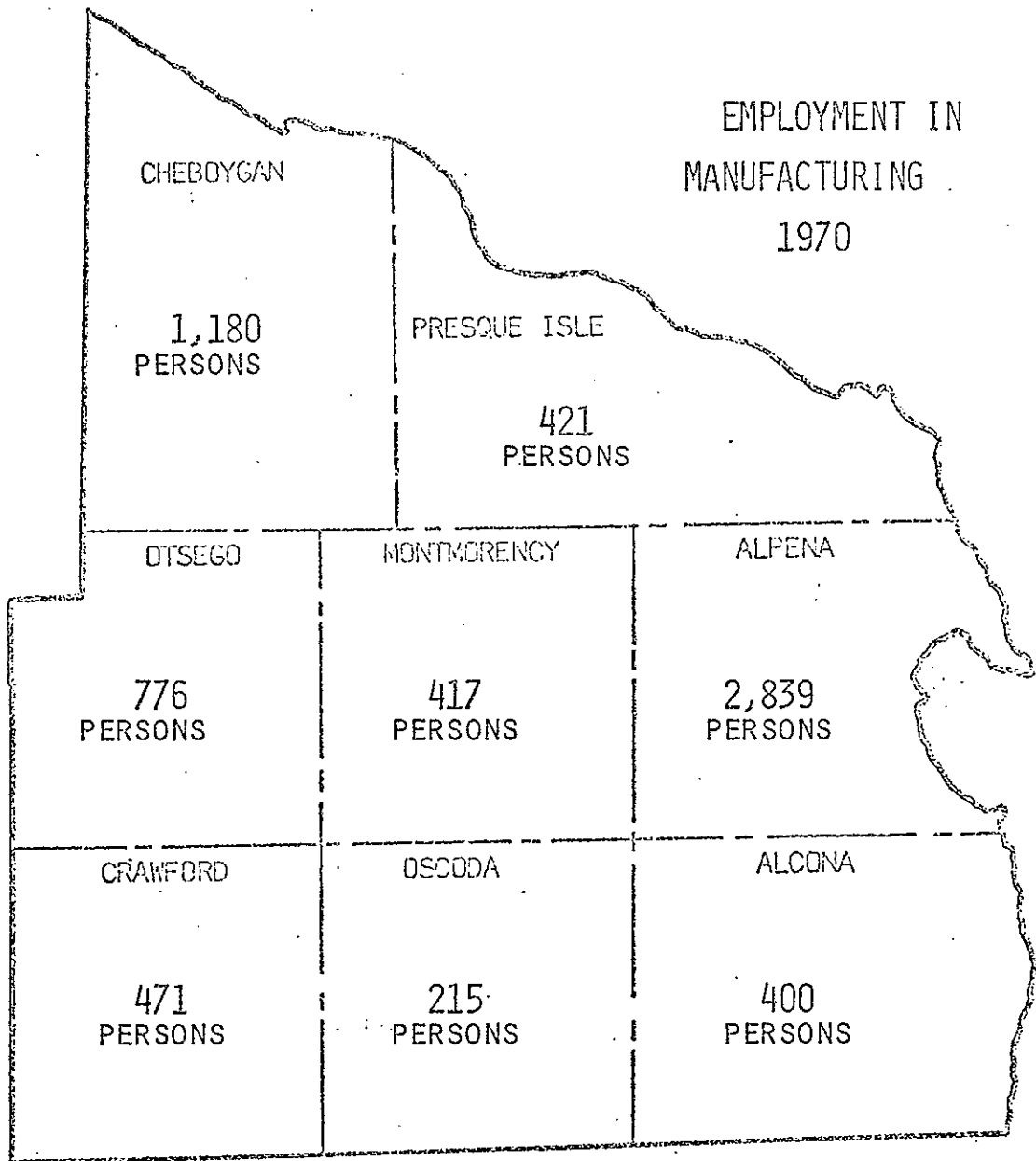
NEMCOG

EMPLOYMENT IN
CONSTRUCTION.
1970



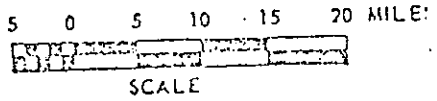
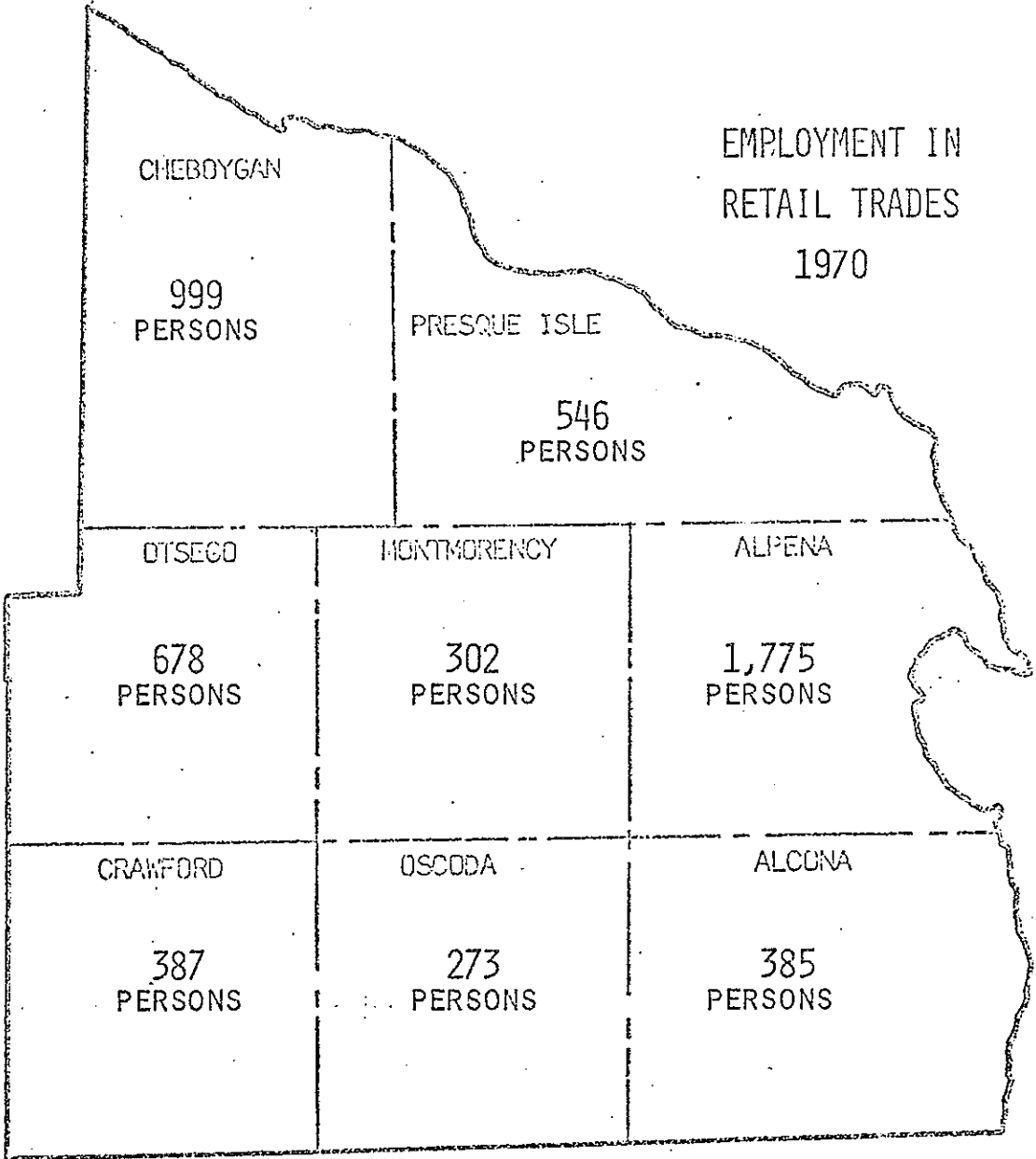
NEMCOG

EMPLOYMENT IN MANUFACTURING 1970



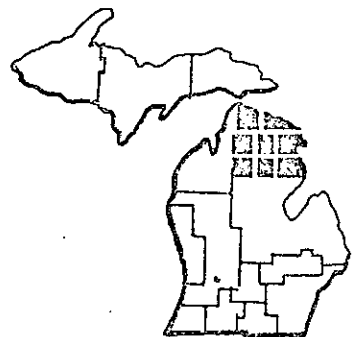
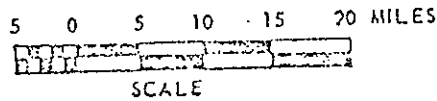
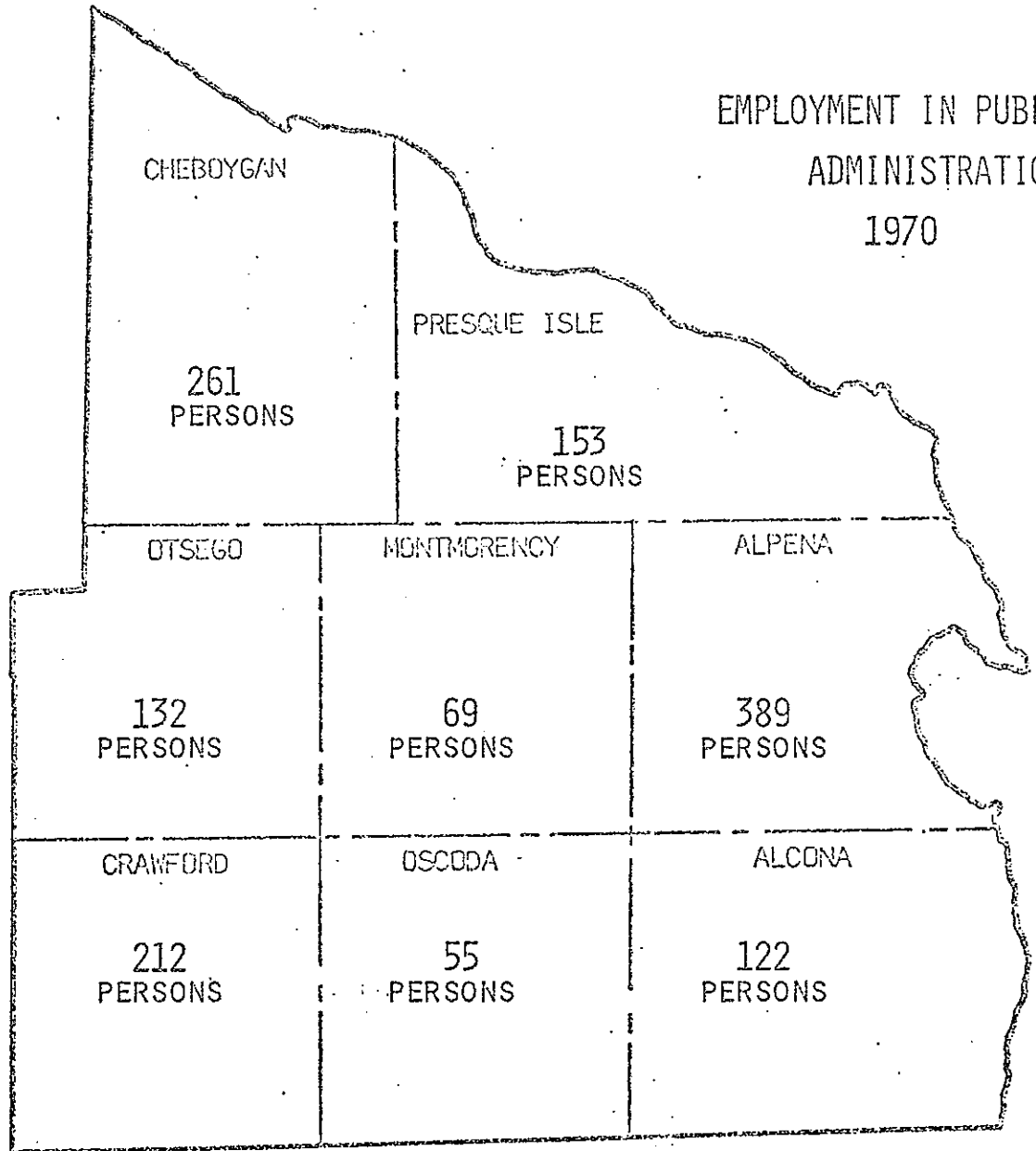
NEMCOG

EMPLOYMENT IN
RETAIL TRADES
1970



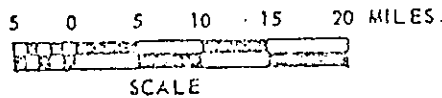
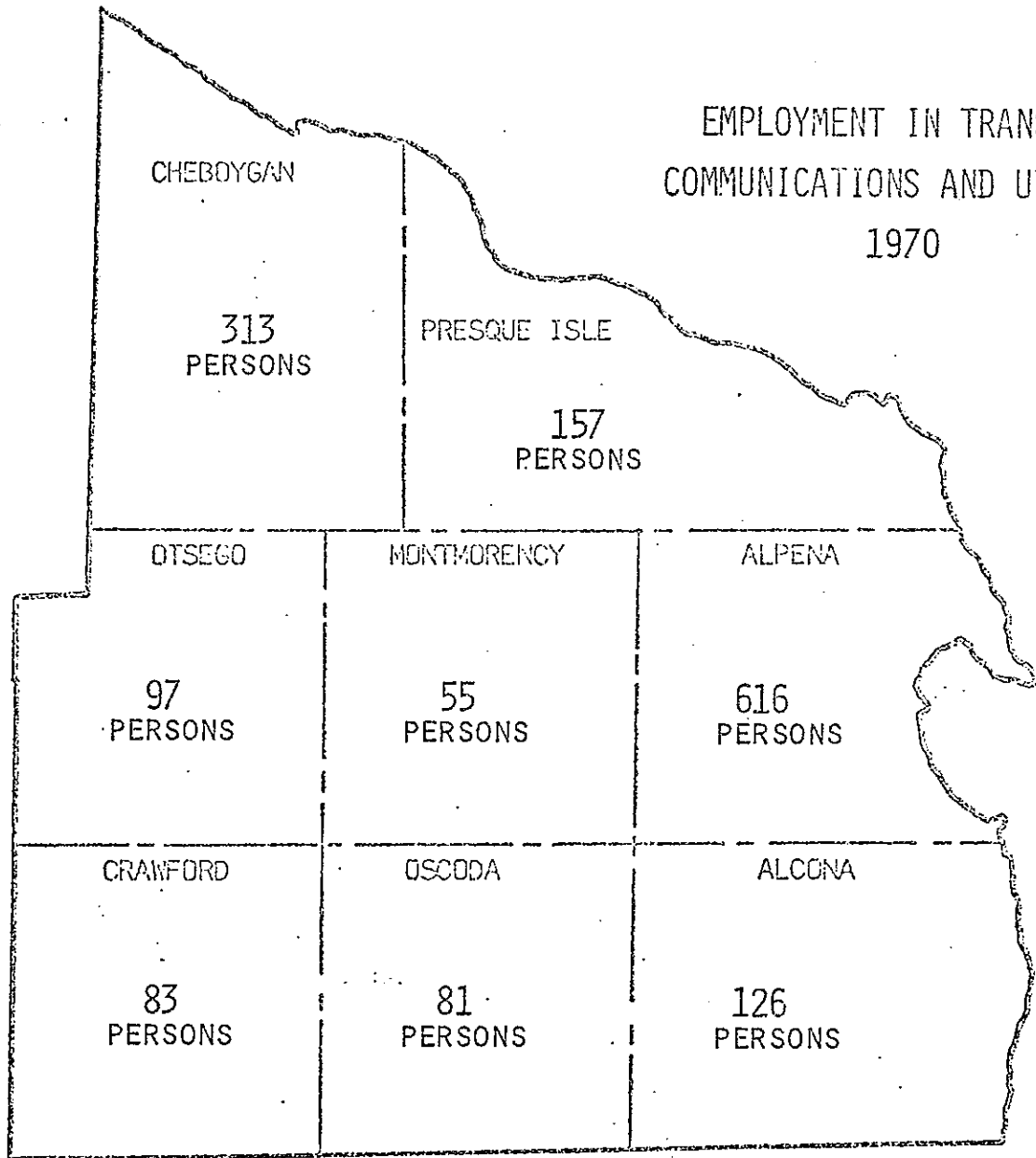
NEMCOG

EMPLOYMENT IN PUBLIC
ADMINISTRATION
1970

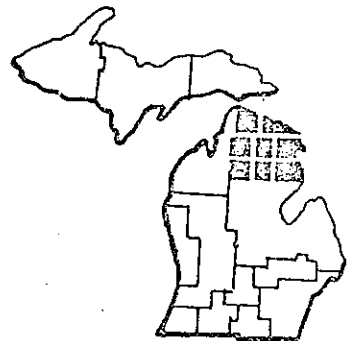


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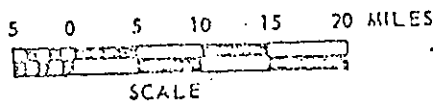
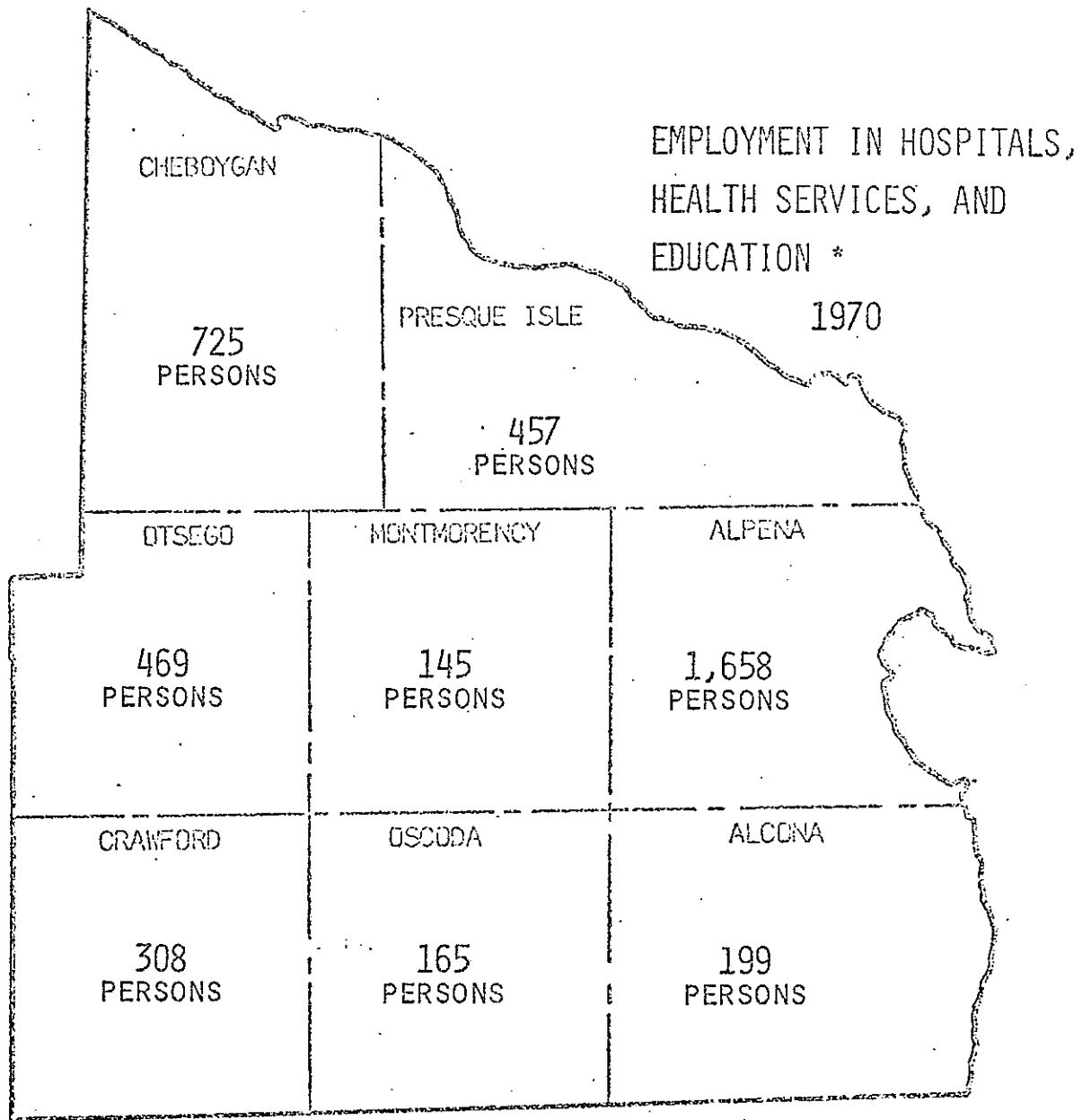
EMPLOYMENT IN TRANSPORTATION
COMMUNICATIONS AND UTILITIES
1970



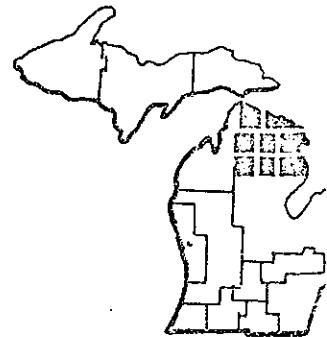
- * Railroad and Railway Express Service
- Trucking Service & Warehousing
- Other Transportation
- Communications
- Utilities & Sanitary Services



NEMCOG

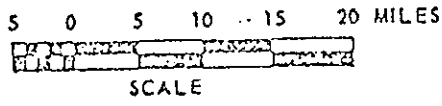
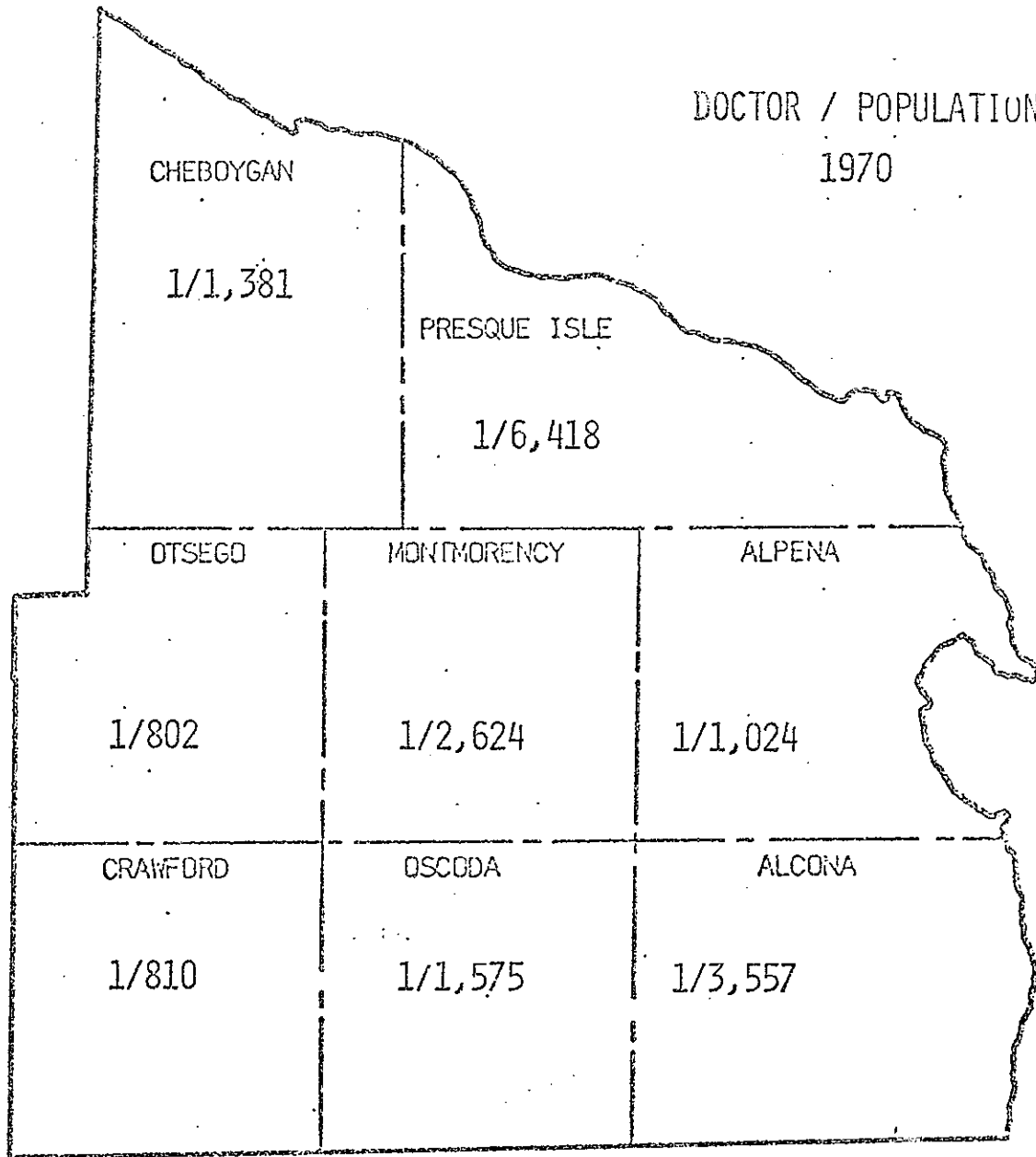


* Hospitals
 Health Services except Hospitals
 Elementary, Sec. Schools, Colleges - Gov't.
 Elementary, Sec. Schools, Colleges - Private
 Other Education & Kindred Services

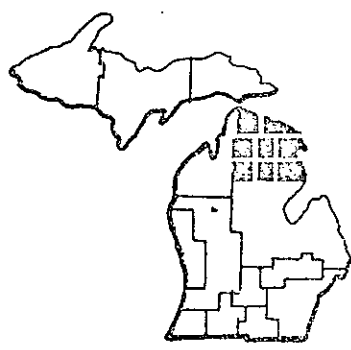


NEMCOG

DOCTOR / POPULATION RATIO
1970



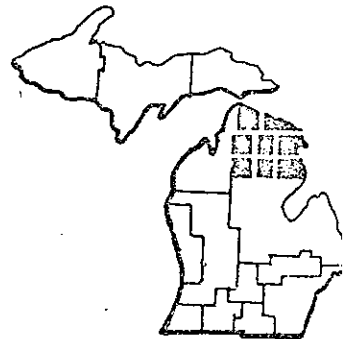
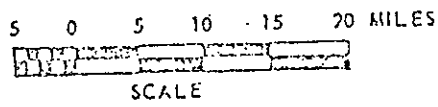
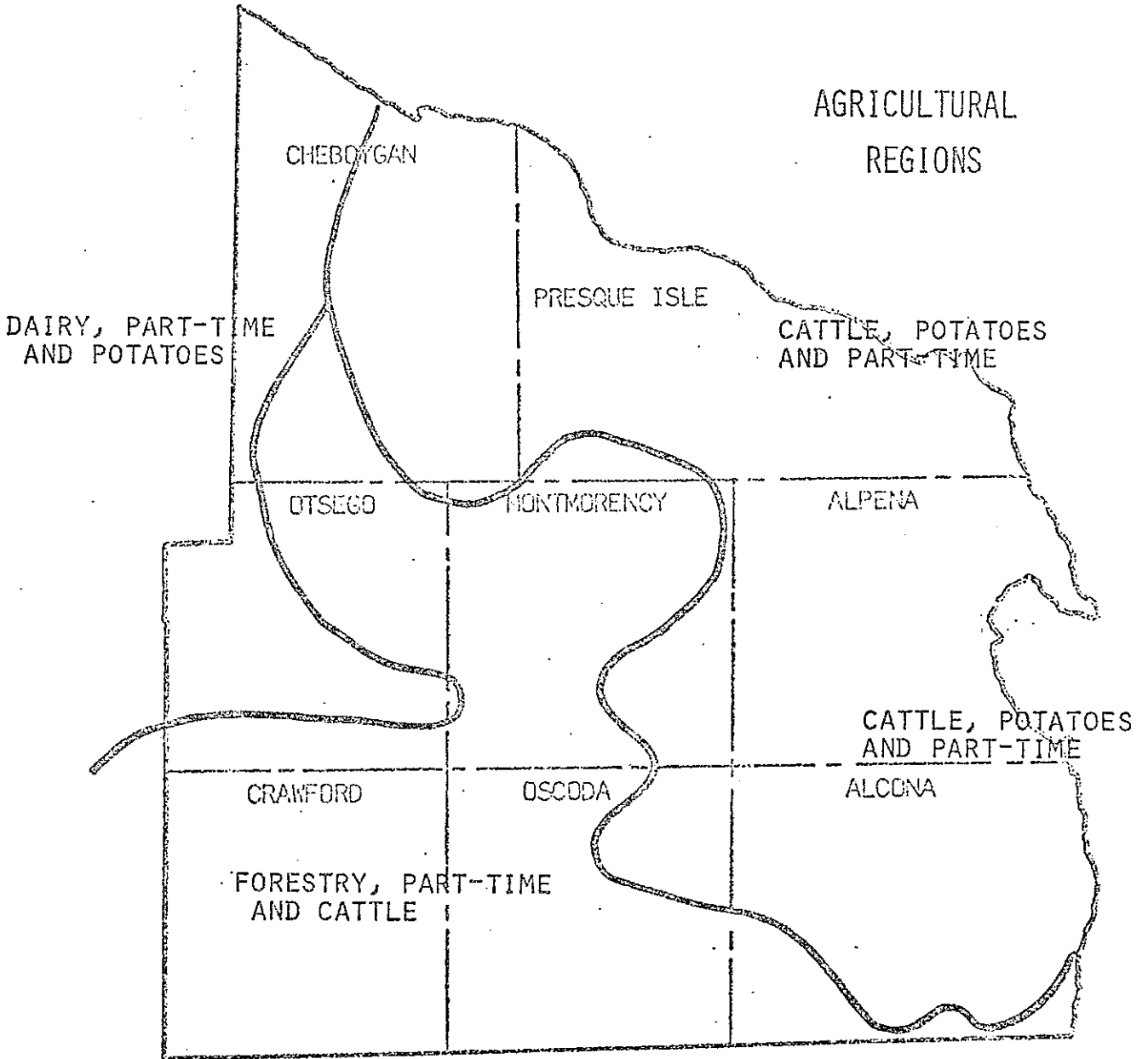
STATE - 1/824



NEMCOG

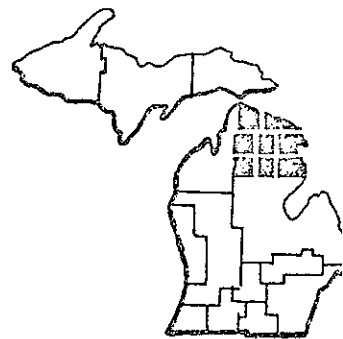
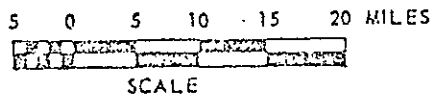
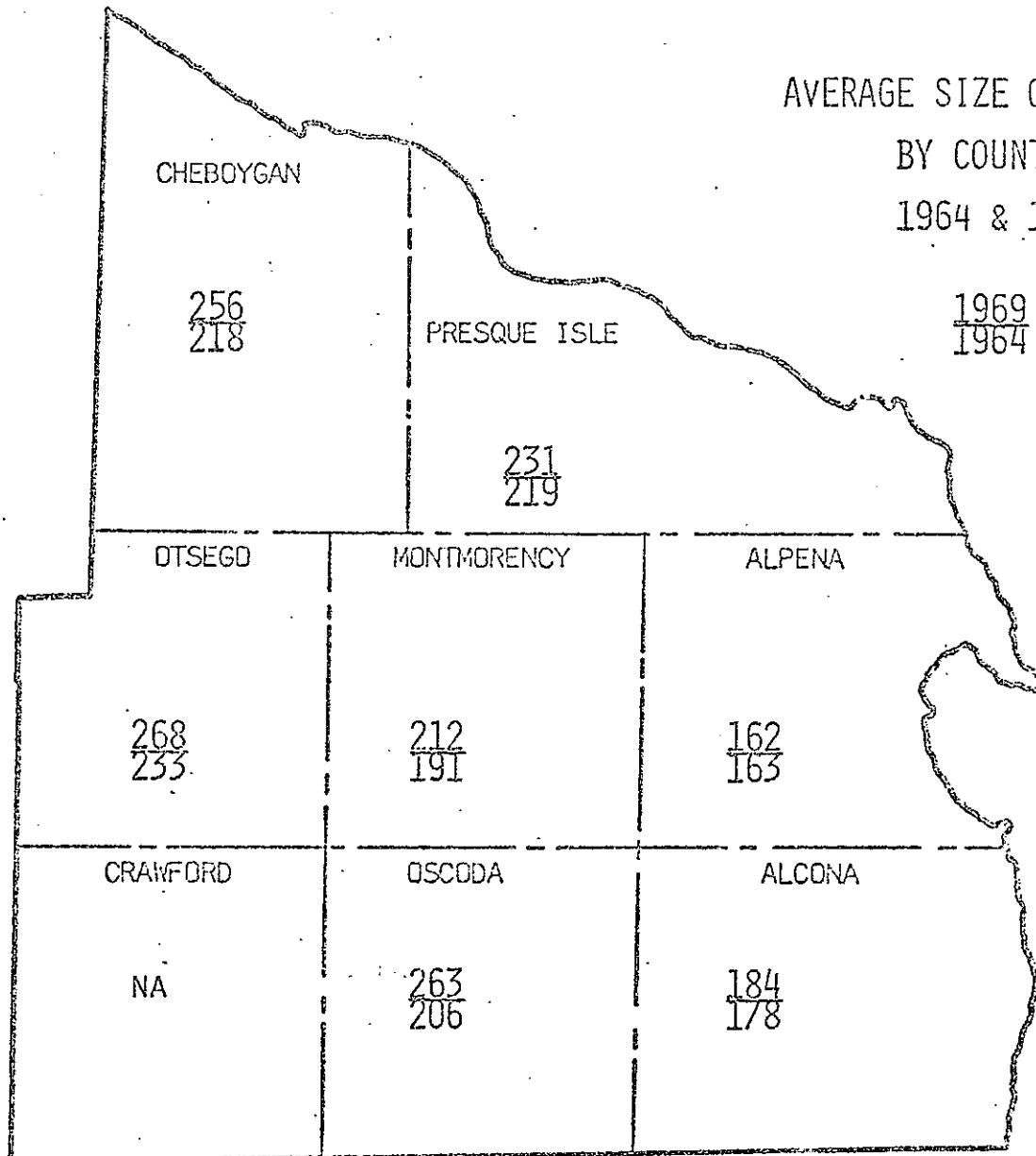
ACTIVITIES

AGRICULTURAL
REGIONS



NEMCOG

AVERAGE SIZE OF ALL FAI
BY COUNTIES
1964 & 1969



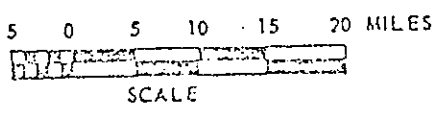
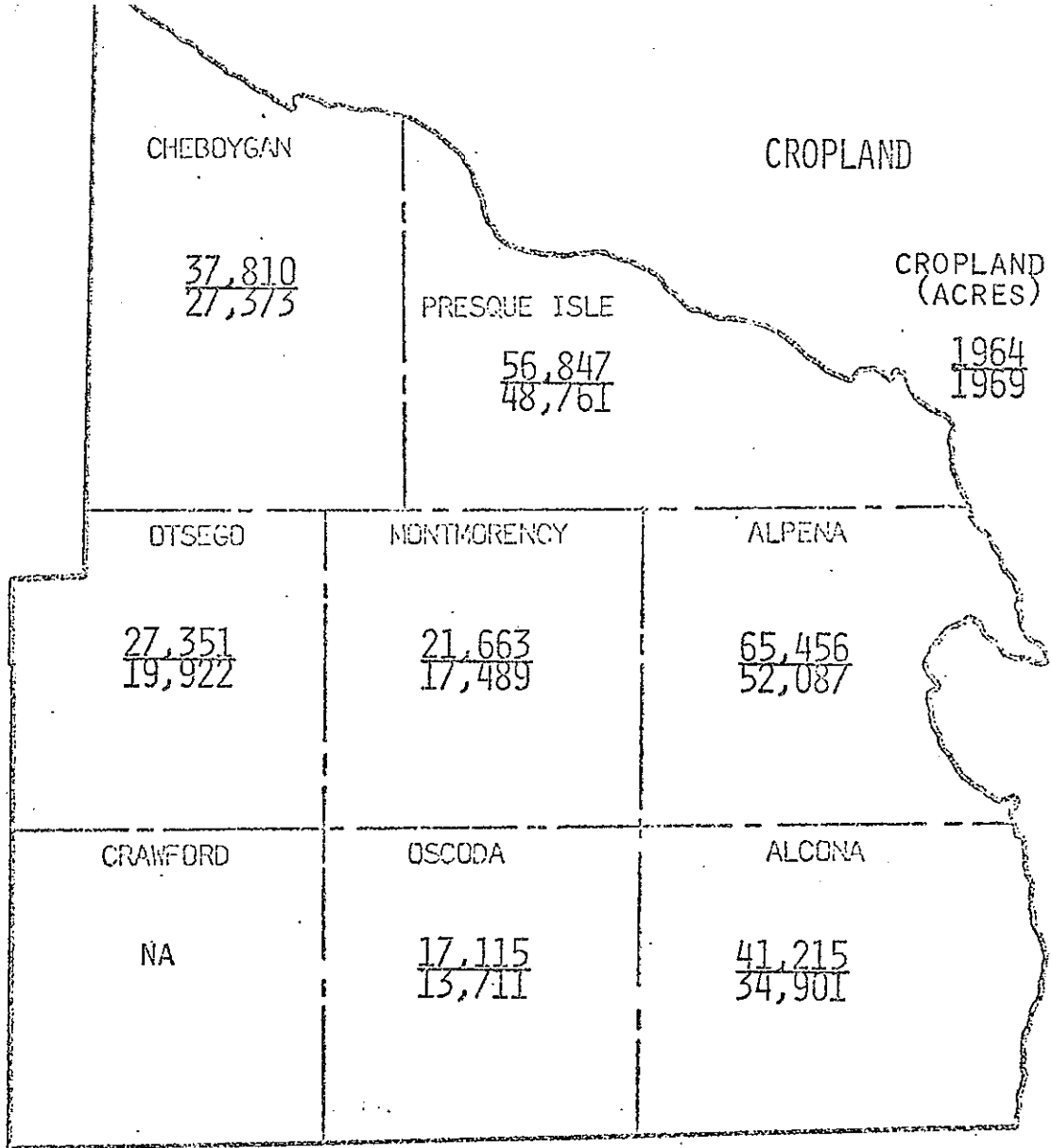
NE MICHIGAN AVERAGE

1969 - 225

1964 - 201

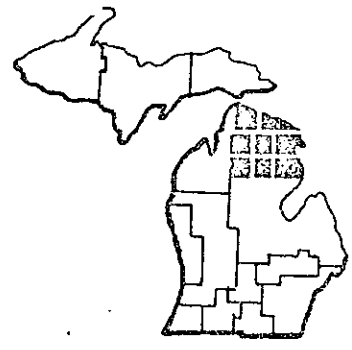
----- INCREASE 10.7%

NEMCOG

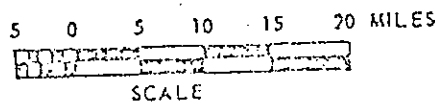
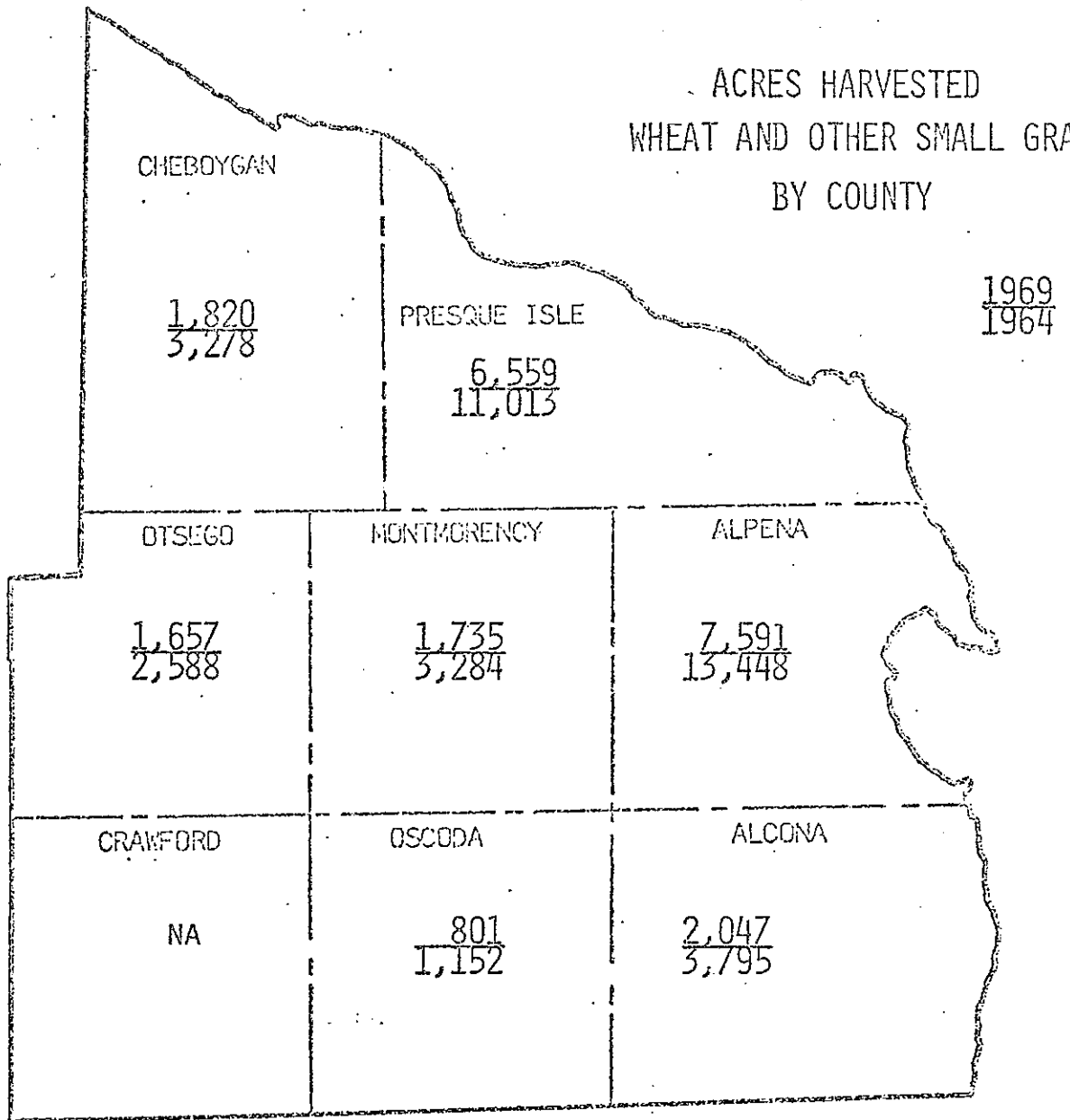


NE MICHIGAN REGION -

1969 TOTAL CROPLAND = 267,457 % OF TOTAL FARMLAND = 50.9
 1964 TOTAL CROPLAND = 214,244 % OF TOTAL FARMLAND = 46.3



ACRES HARVESTED
WHEAT AND OTHER SMALL GRAIN
BY COUNTY

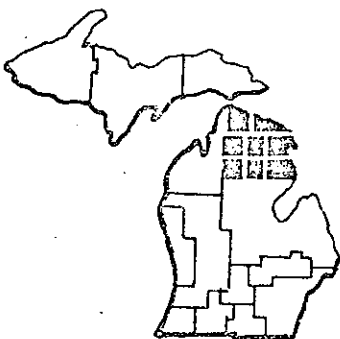


NE MICHIGAN REGION

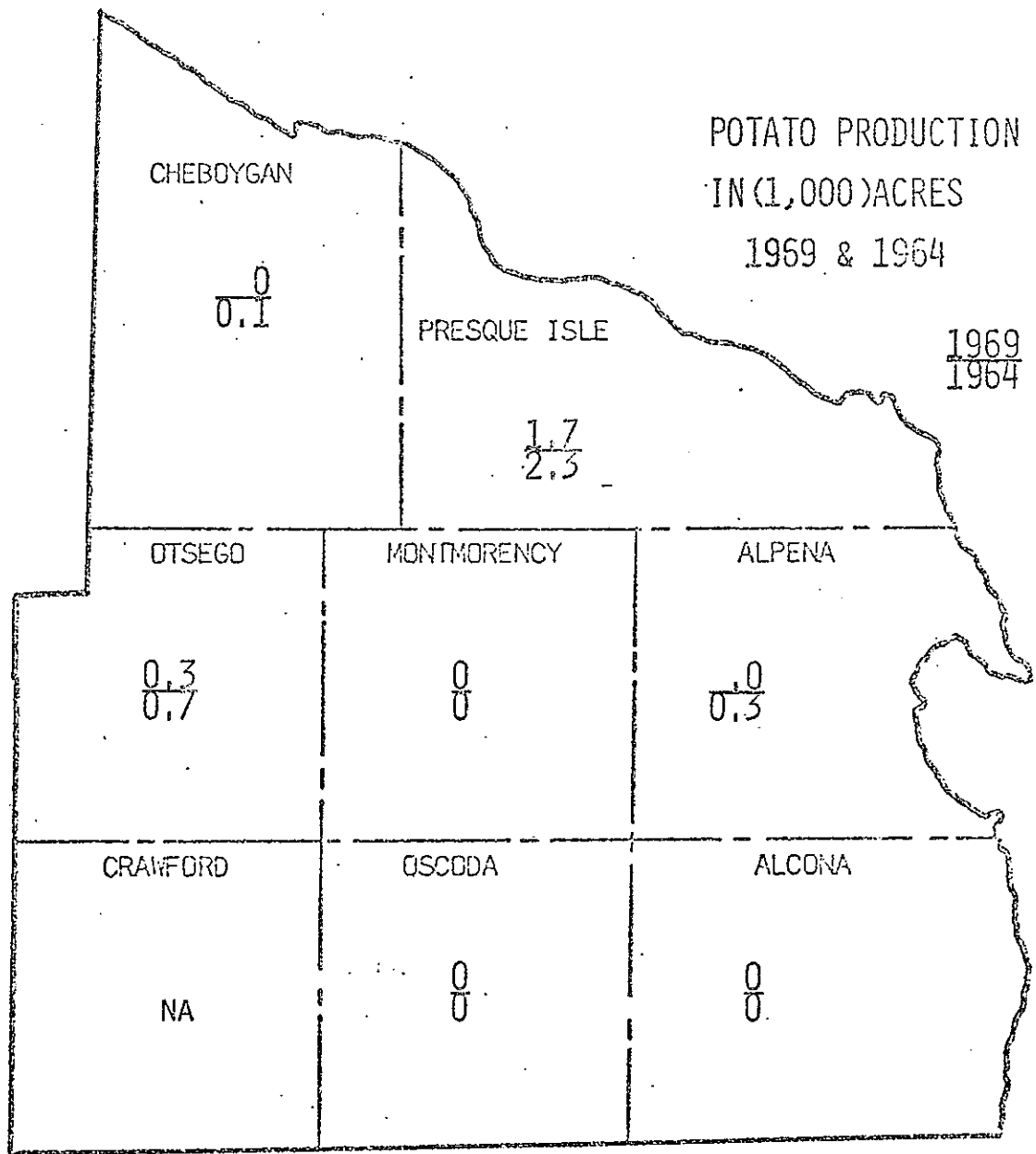
1964 - 38,558

1969 - 22,210

-----% DECREASE 42.4

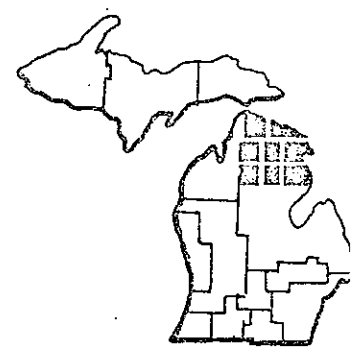
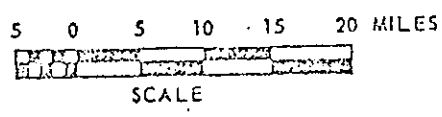


NEMCOG



POTATO PRODUCTION
IN (1,000) ACRES
1969 & 1964

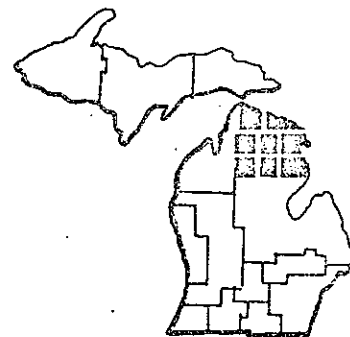
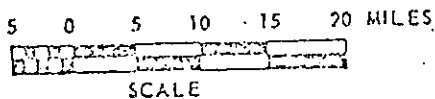
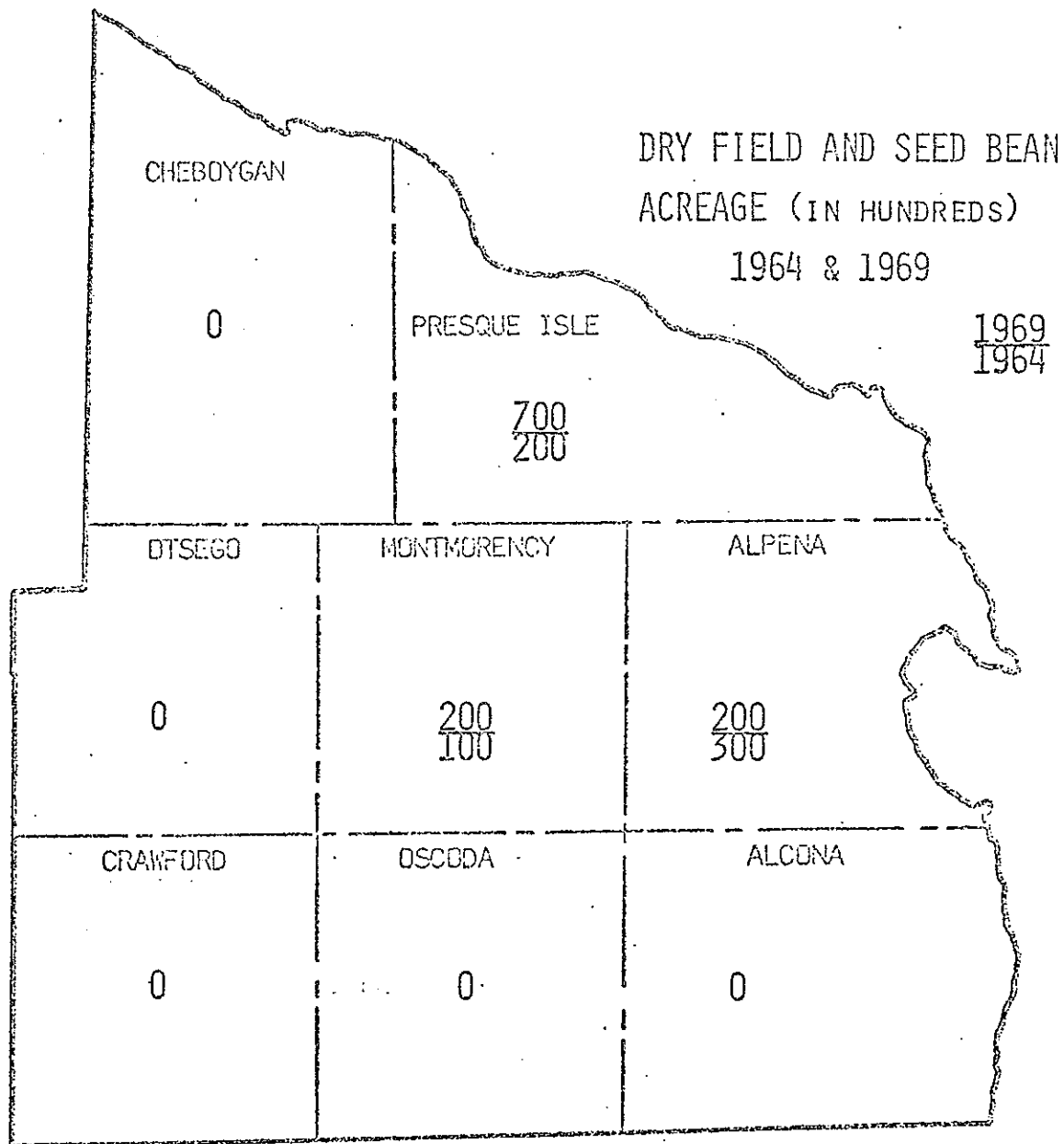
1969
1964



N.E. MICHIGAN REGION
(1,000) ACRES

NEMCOG

1964 - 3.4
1969 - 2.0 ----- % DECREASE 41.2



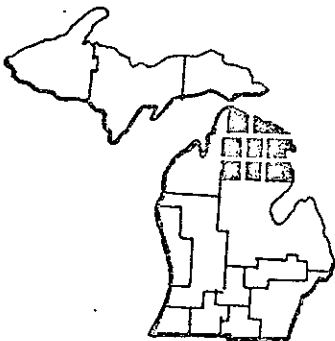
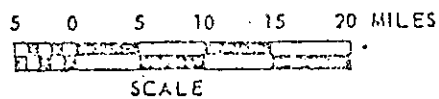
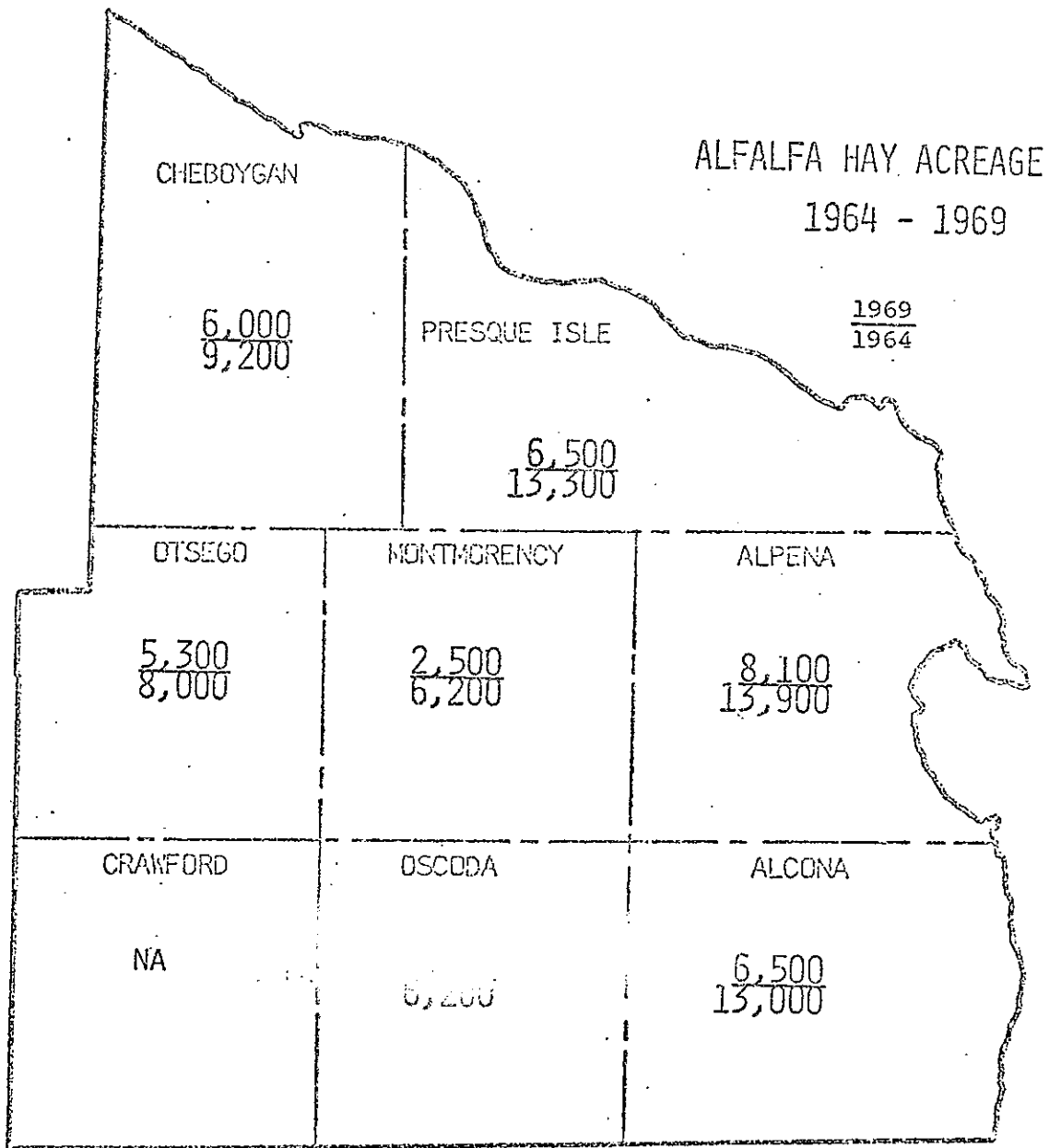
NE MICHIGAN REGION

1964 - 600

1969 - 1100

-----% INCREASE 83.3

NEMCOG



NEMCOG

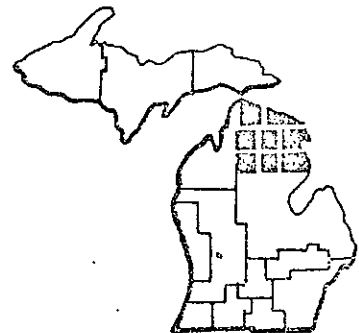
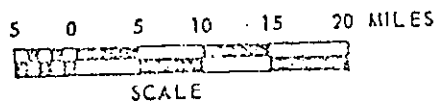
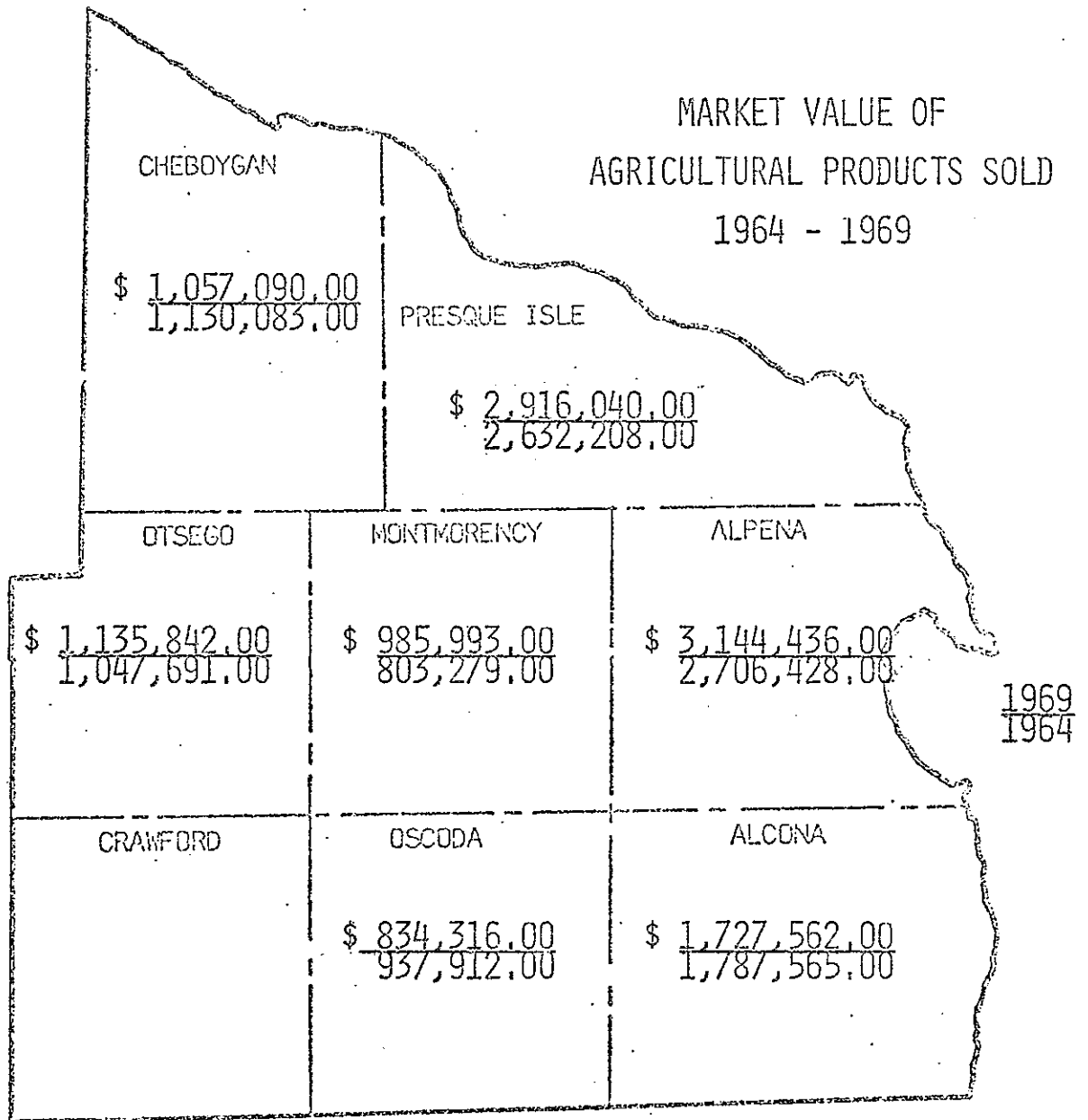
NE MICHIGAN REGION

1964 - 69,800

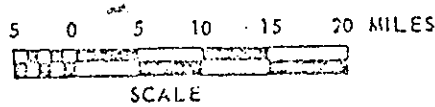
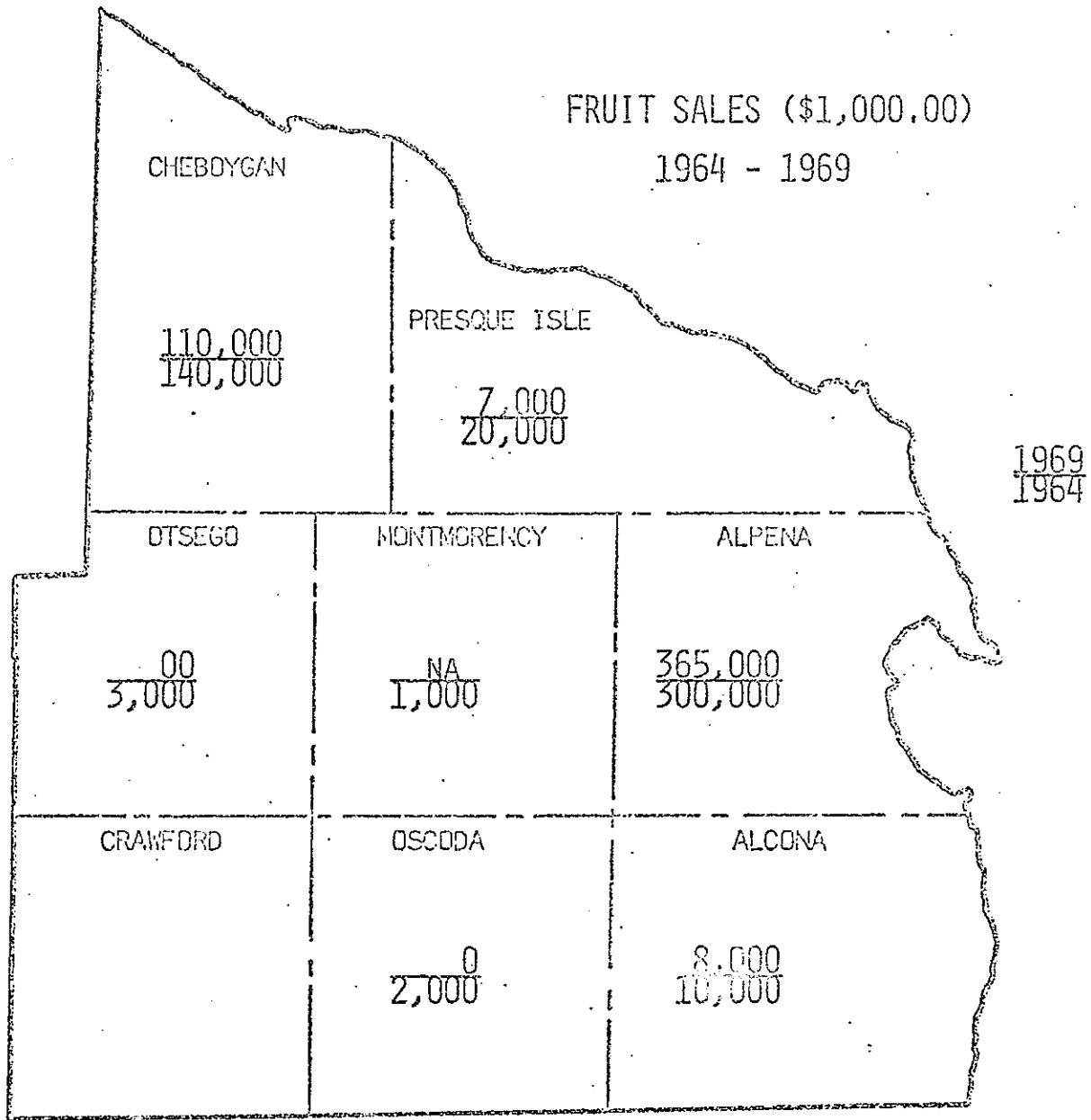
1969 - 39,200

-----% DECREASE 43.8

MARKET VALUE OF
 AGRICULTURAL PRODUCTS SOLD
 1964 - 1969



NEMCOG

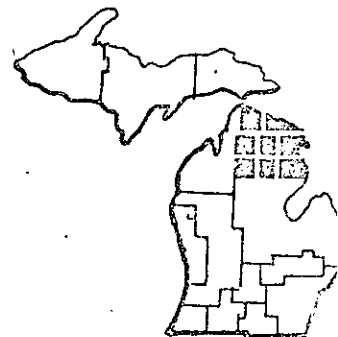


NE MICHIGAN REGION

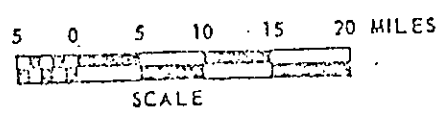
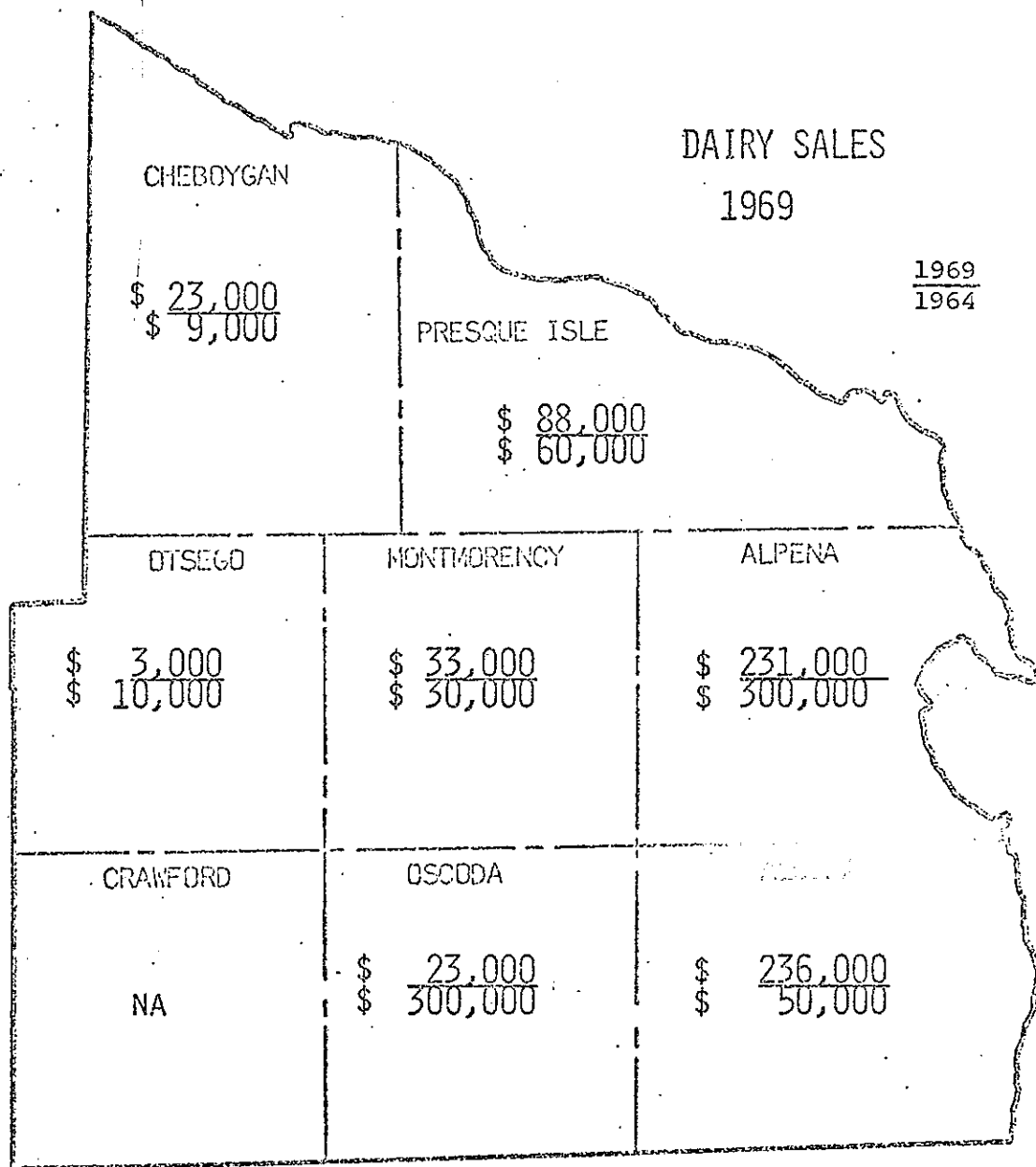
1964 - 496,000

1969 - 490,000

-----% DECREASE 1.2



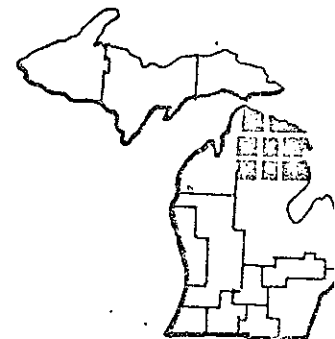
NEMCOG



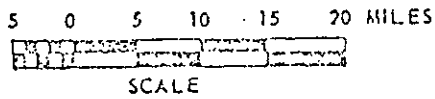
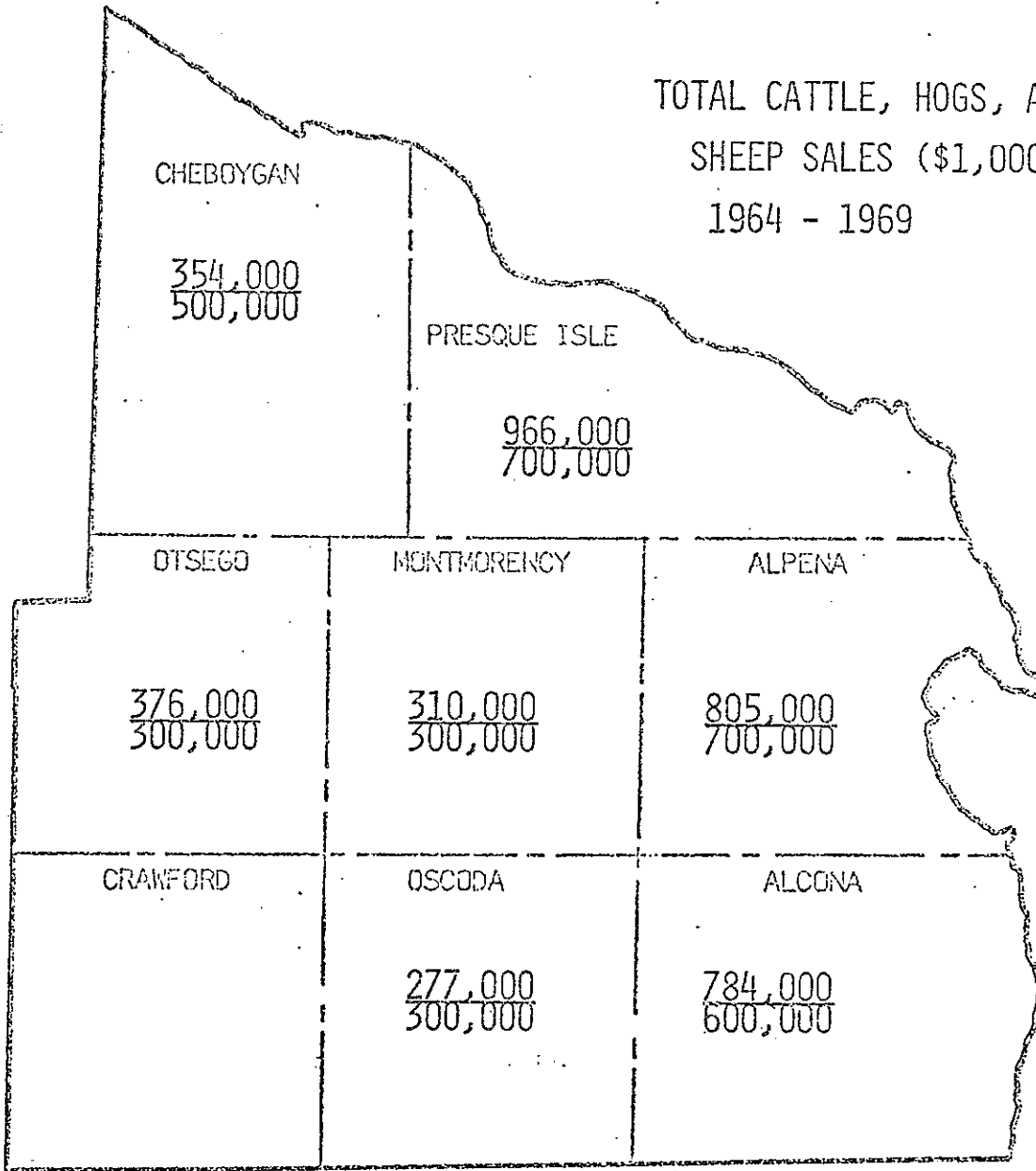
NE MICHIGAN REGION

1964 -\$759,000

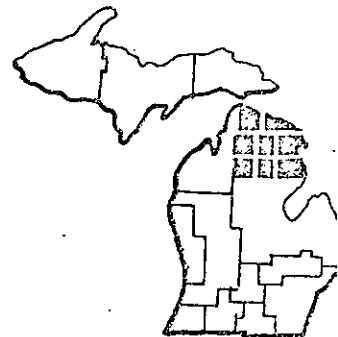
1969 -\$637,000 -----% DECREASE - 16.1



TOTAL CATTLE, HOGS, AND
SHEEP SALES (\$1,000,00)
1964 - 1969



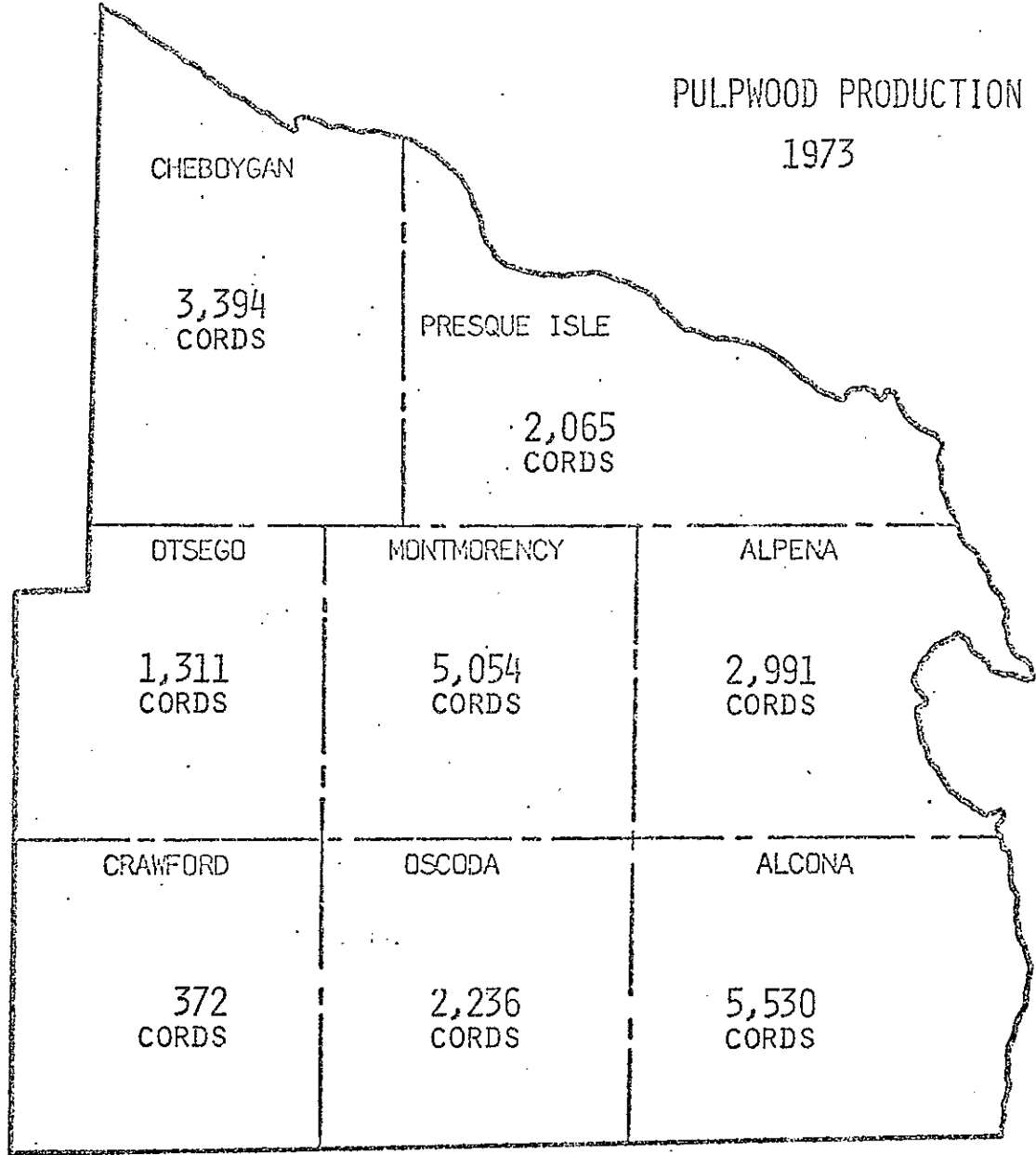
NE MICHIGAN REGION
1964 - 3,400,000
1969 - 3,872,000 -----% INCREASE 13.9



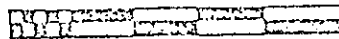
NEMCOG

PULPWOOD PRODUCTION

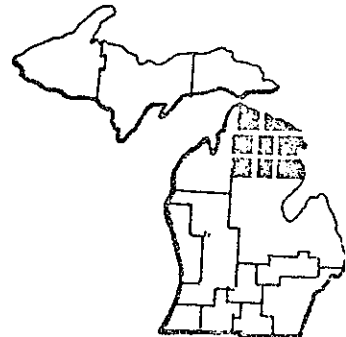
1973



5 0 5 10 15 20 MILES

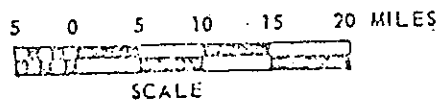
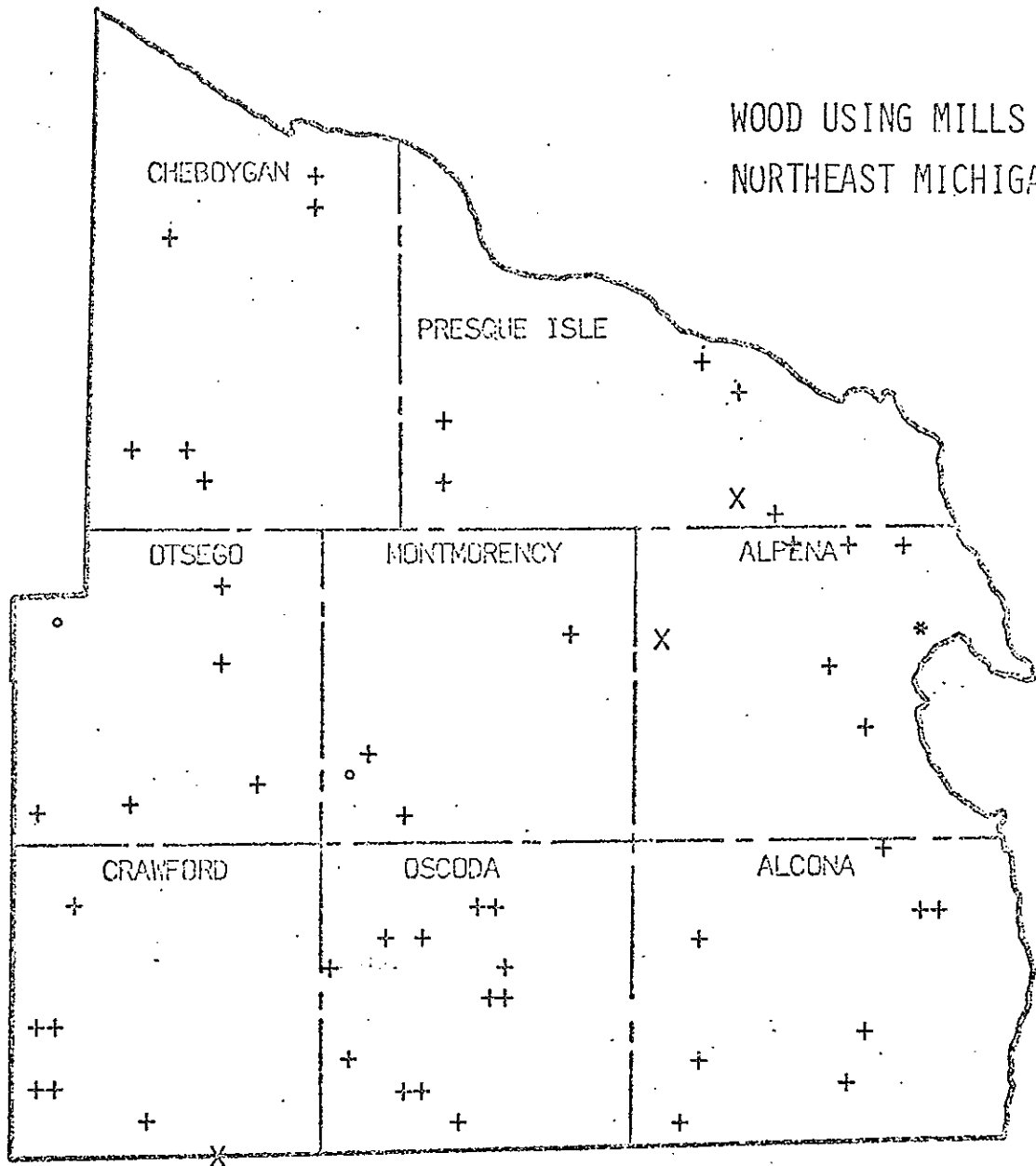


SCALE



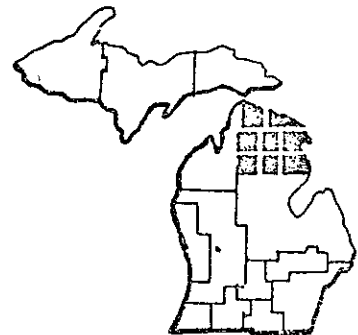
NEMCOG

WOOD USING MILLS IN NORTHEAST MICHIGAN



LEGEND

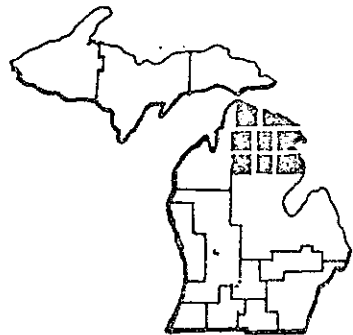
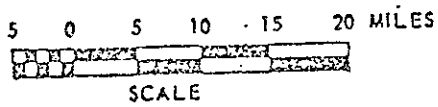
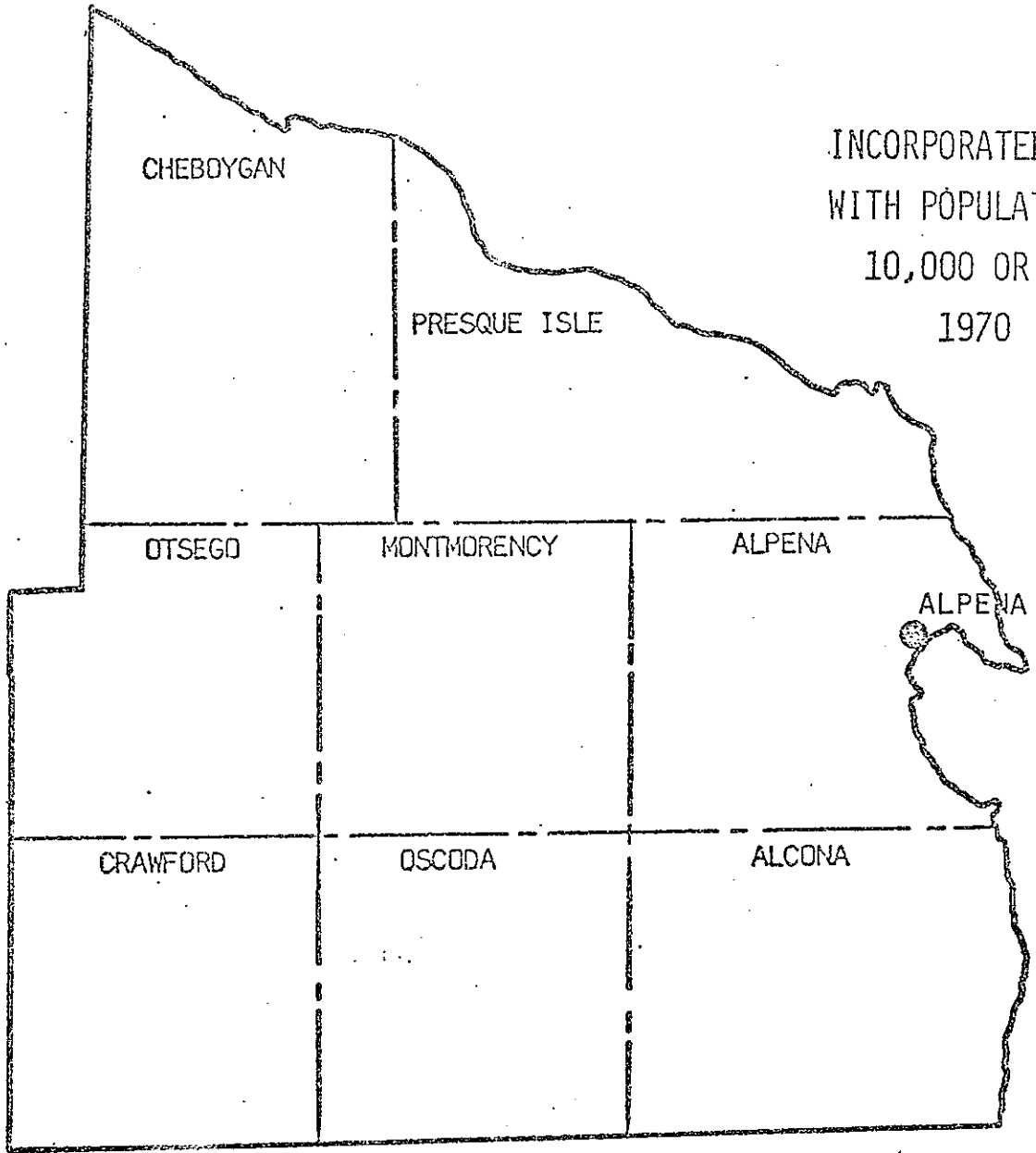
- * HARD BOARD
- + SAW MILL
- X CEDAR FENCE
- o CEDAR LOG



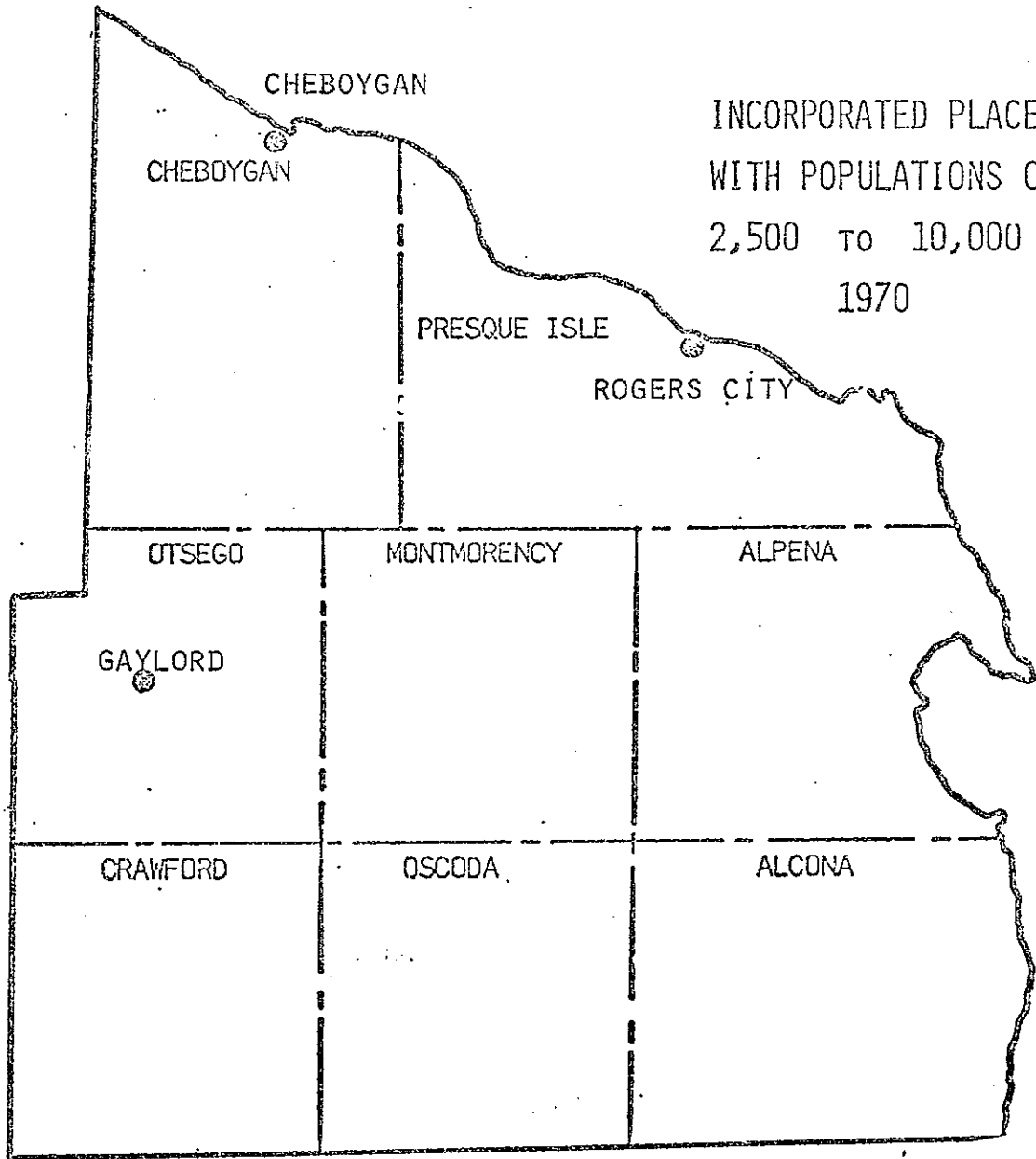
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SERVICES

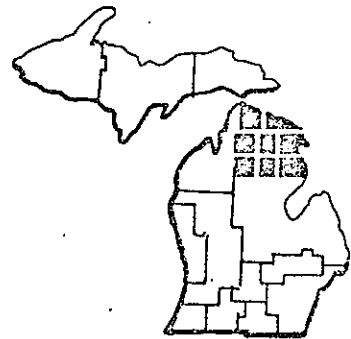
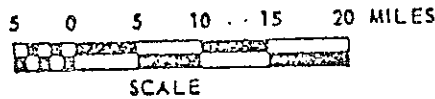
INCORPORATED PLACES
WITH POPULATIONS OF
10,000 OR MORE
1970



NEMCOG

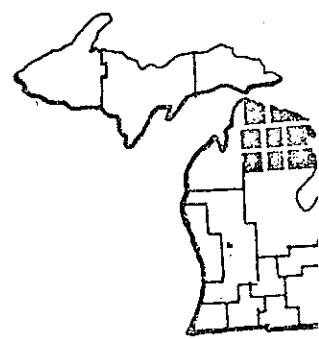
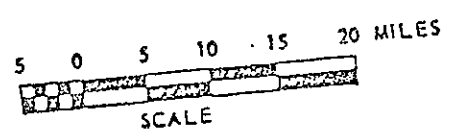
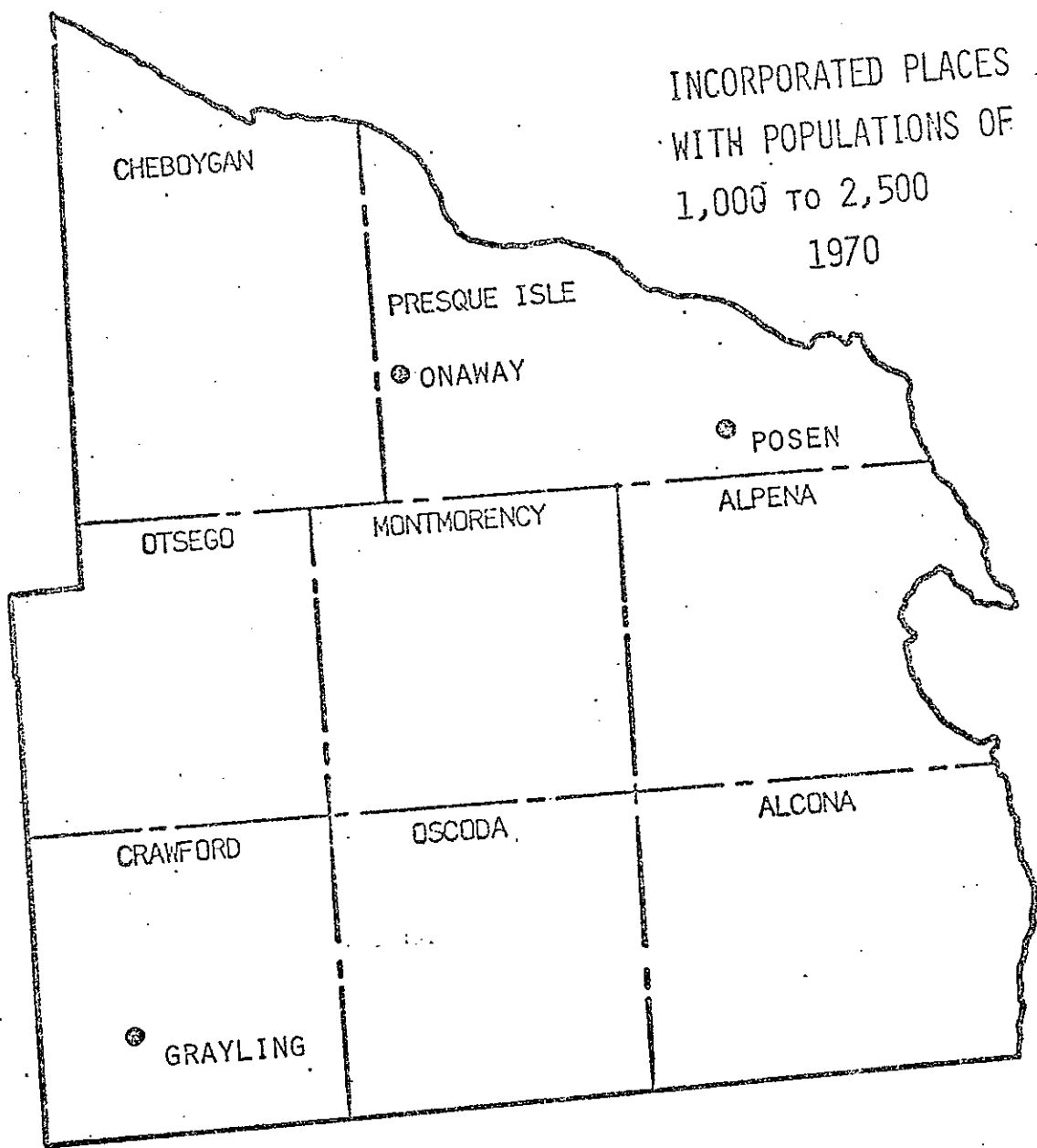


INCORPORATED PLACES
WITH POPULATIONS OF
2,500 TO 10,000
1970

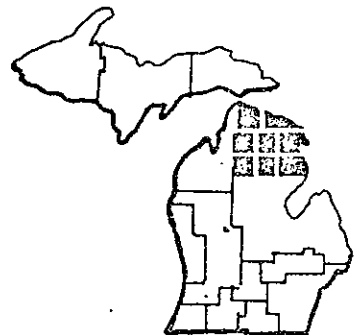
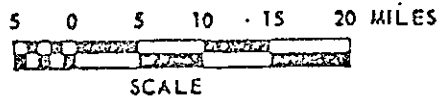
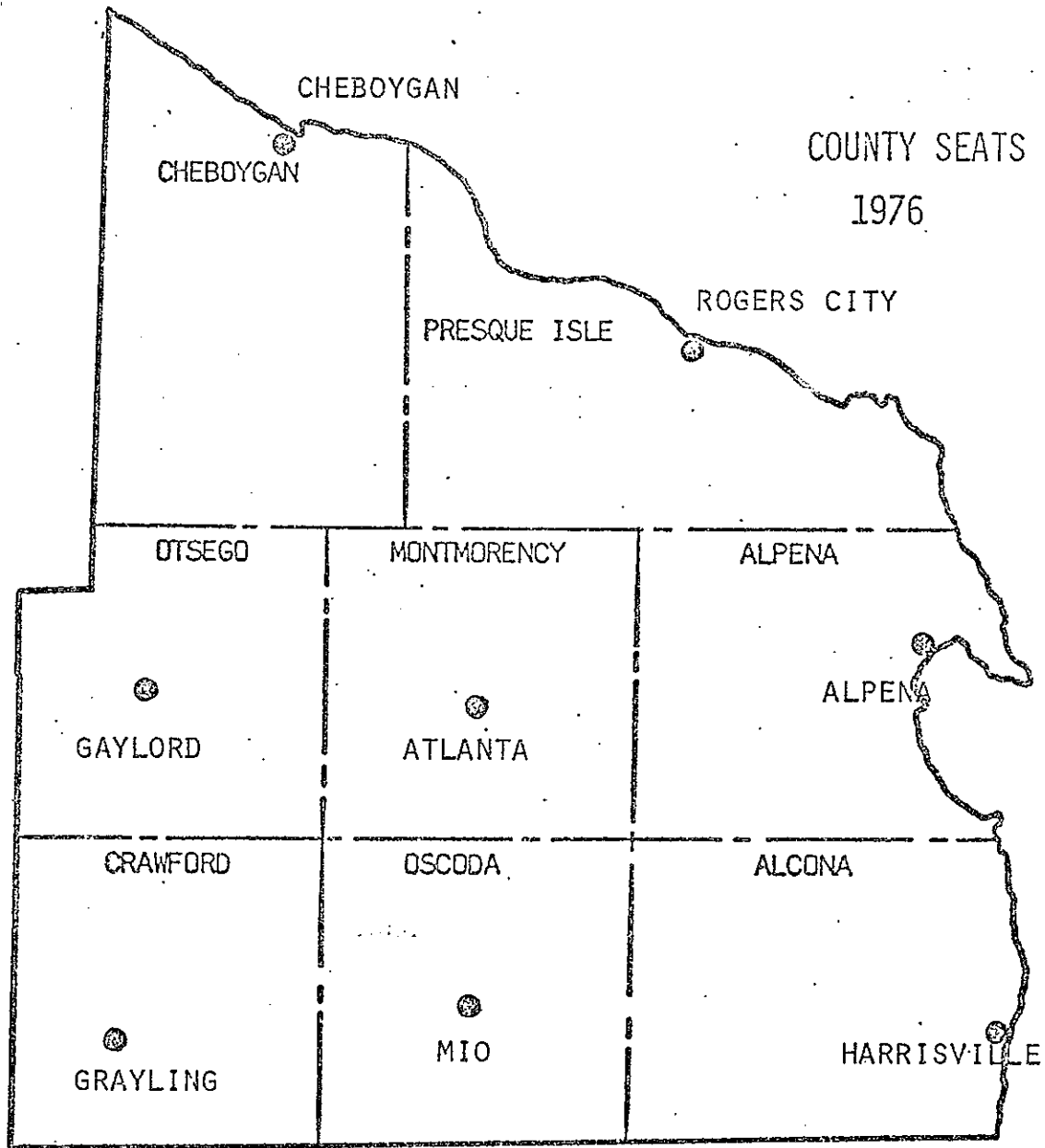


NEMCOG

INCORPORATED PLACES
WITH POPULATIONS OF
1,000 TO 2,500
1970

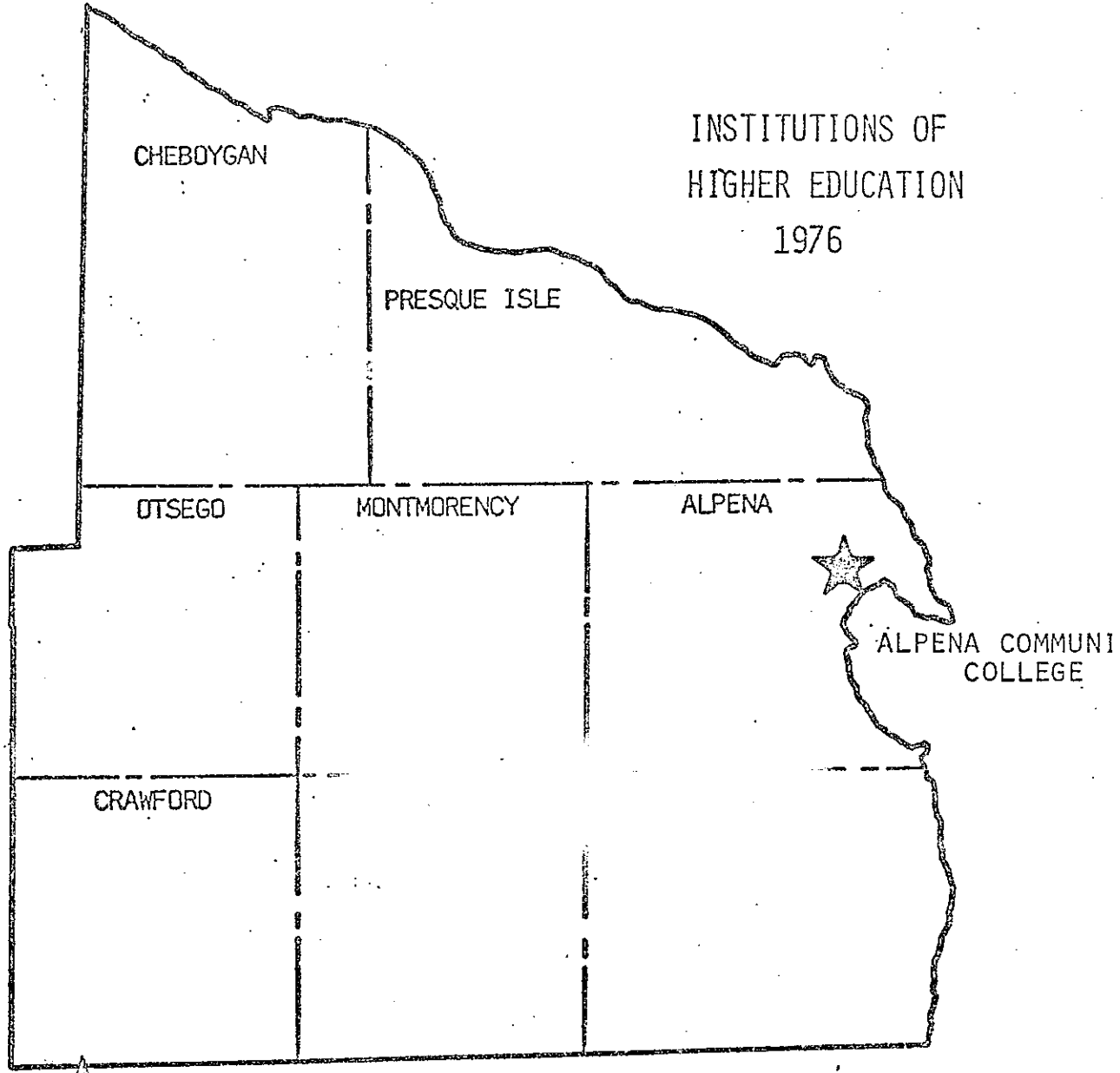


NEMCO

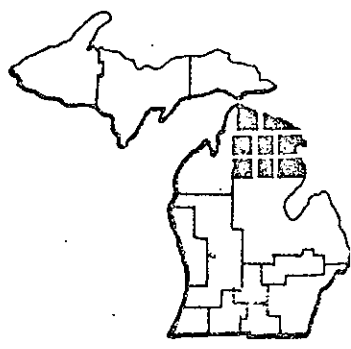
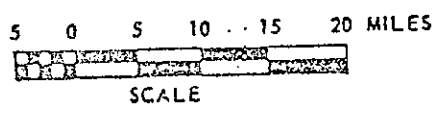


NEMCOG

INSTITUTIONS OF
HIGHER EDUCATION
1976

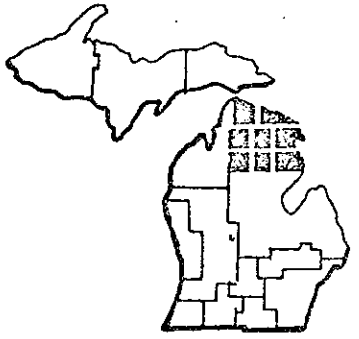
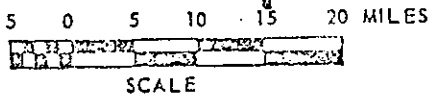
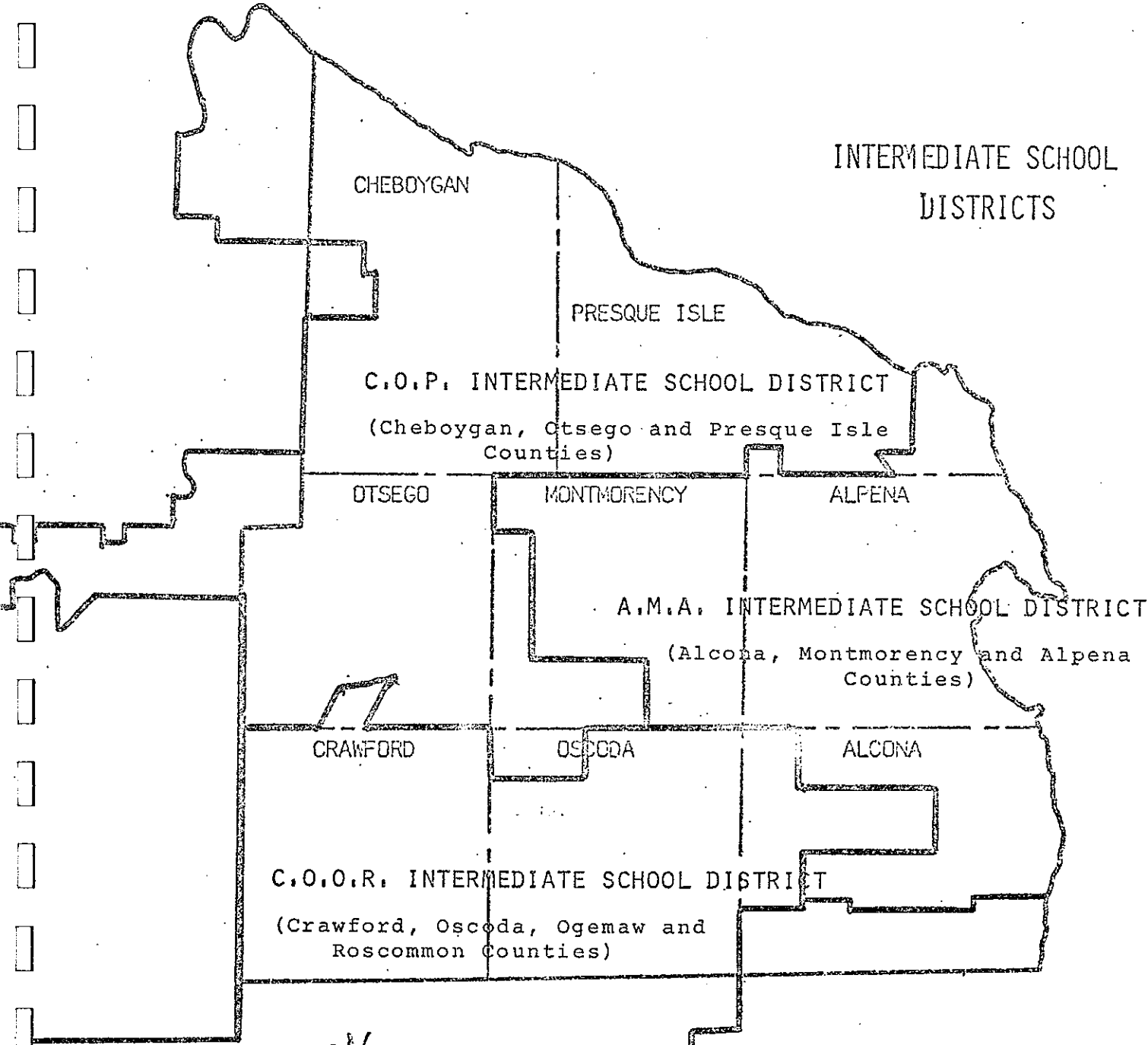


KIRTLAND COMMUNITY COLLEGE



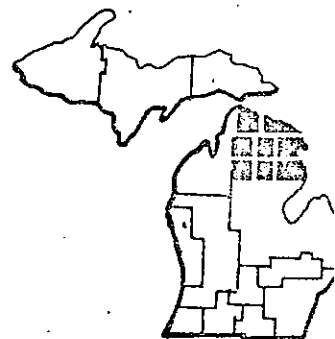
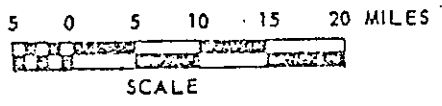
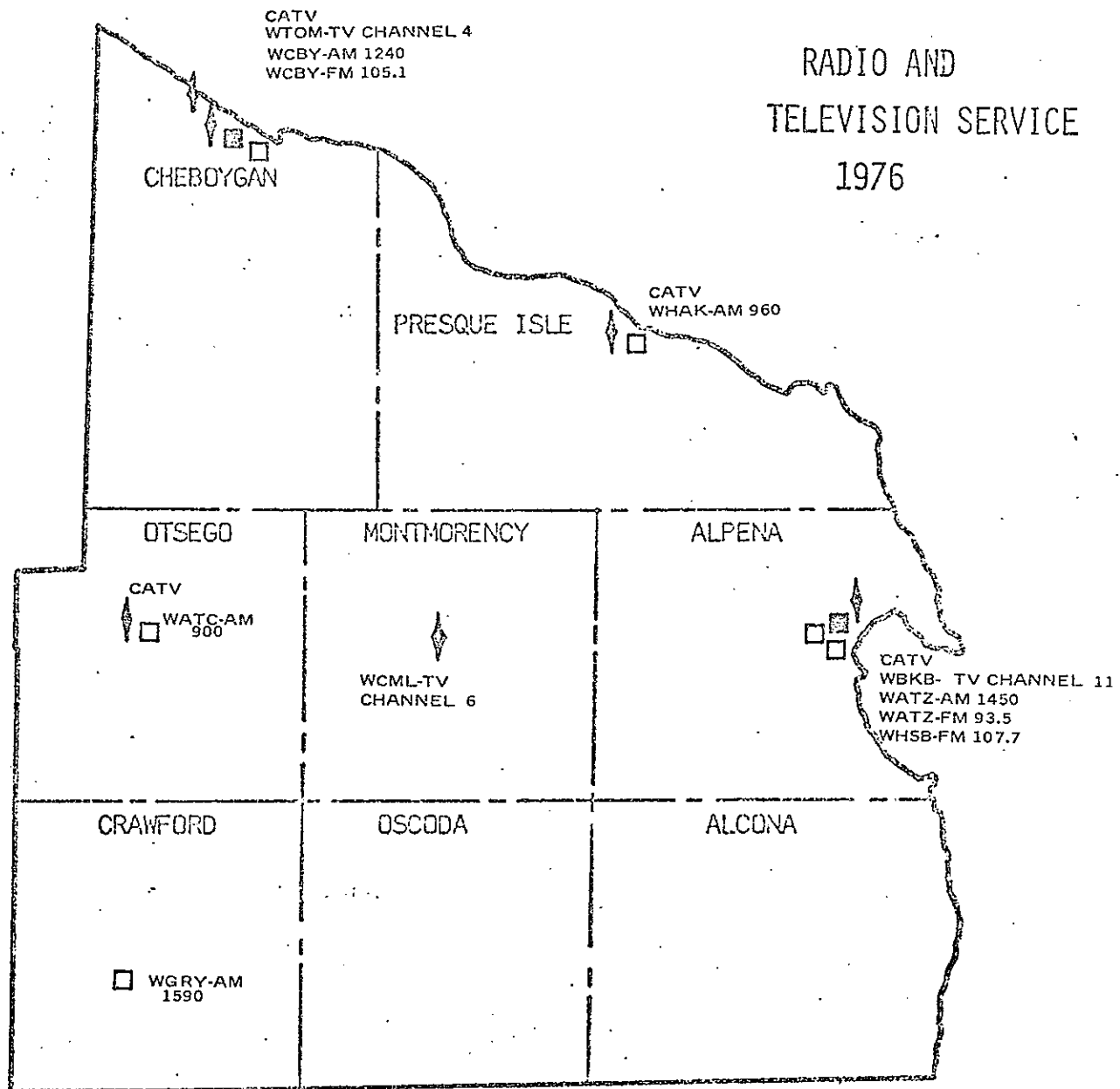
NEMCOG

INTERMEDIATE SCHOOL DISTRICTS

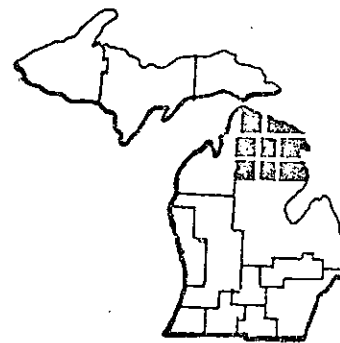
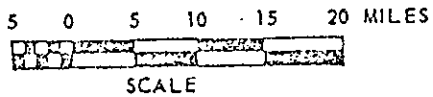
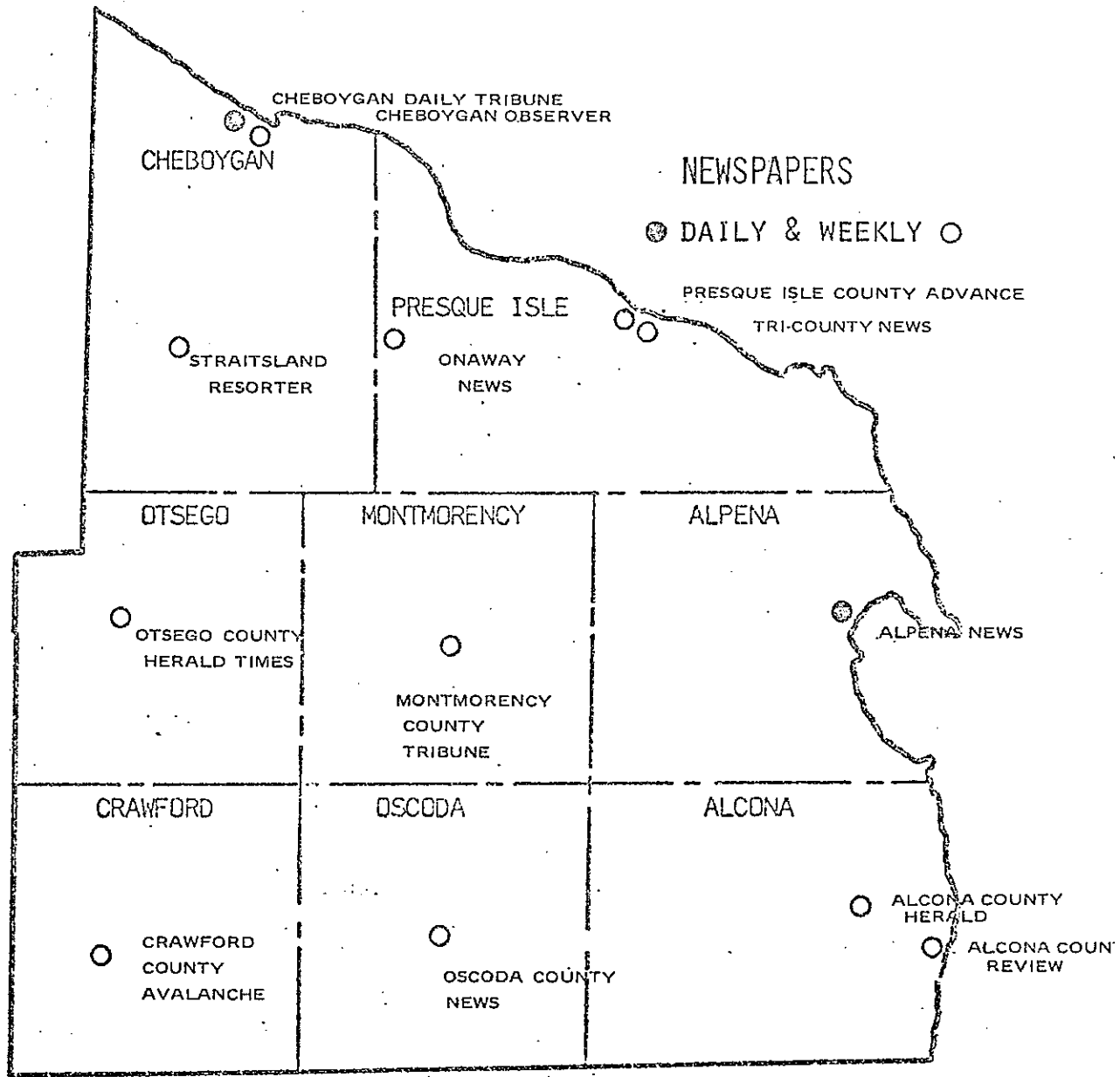


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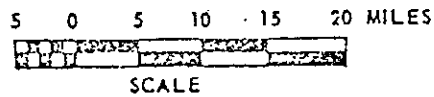
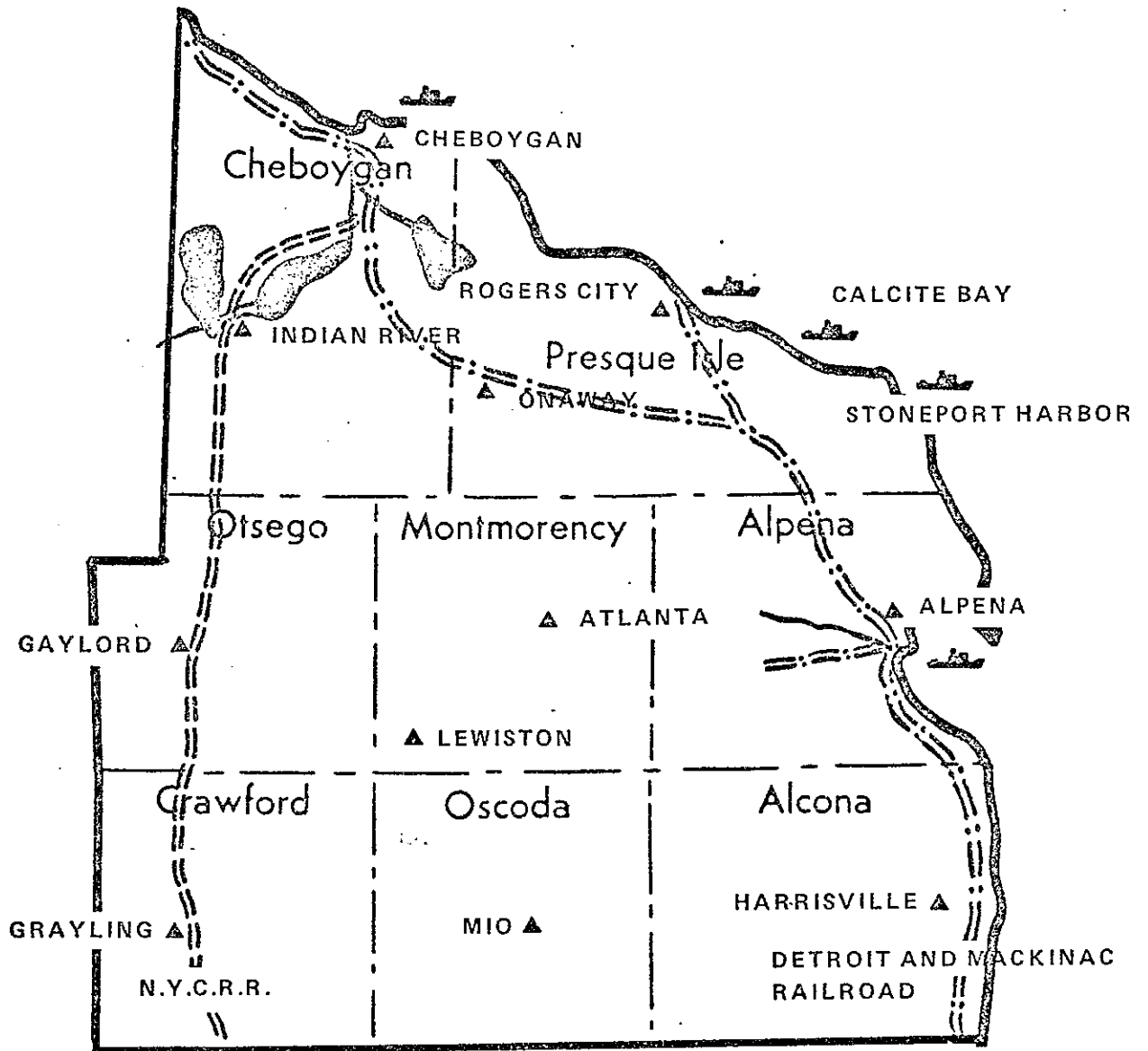
RADIO AND TELEVISION SERVICE 1976


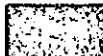
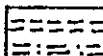
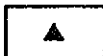


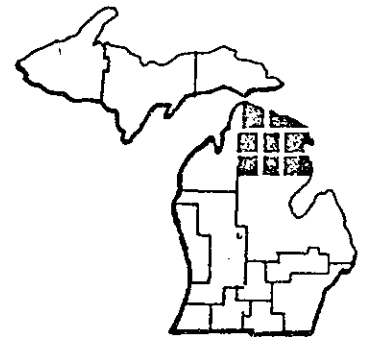
NEMCOG



NEMCOG

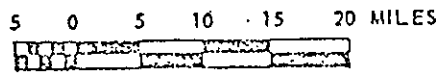
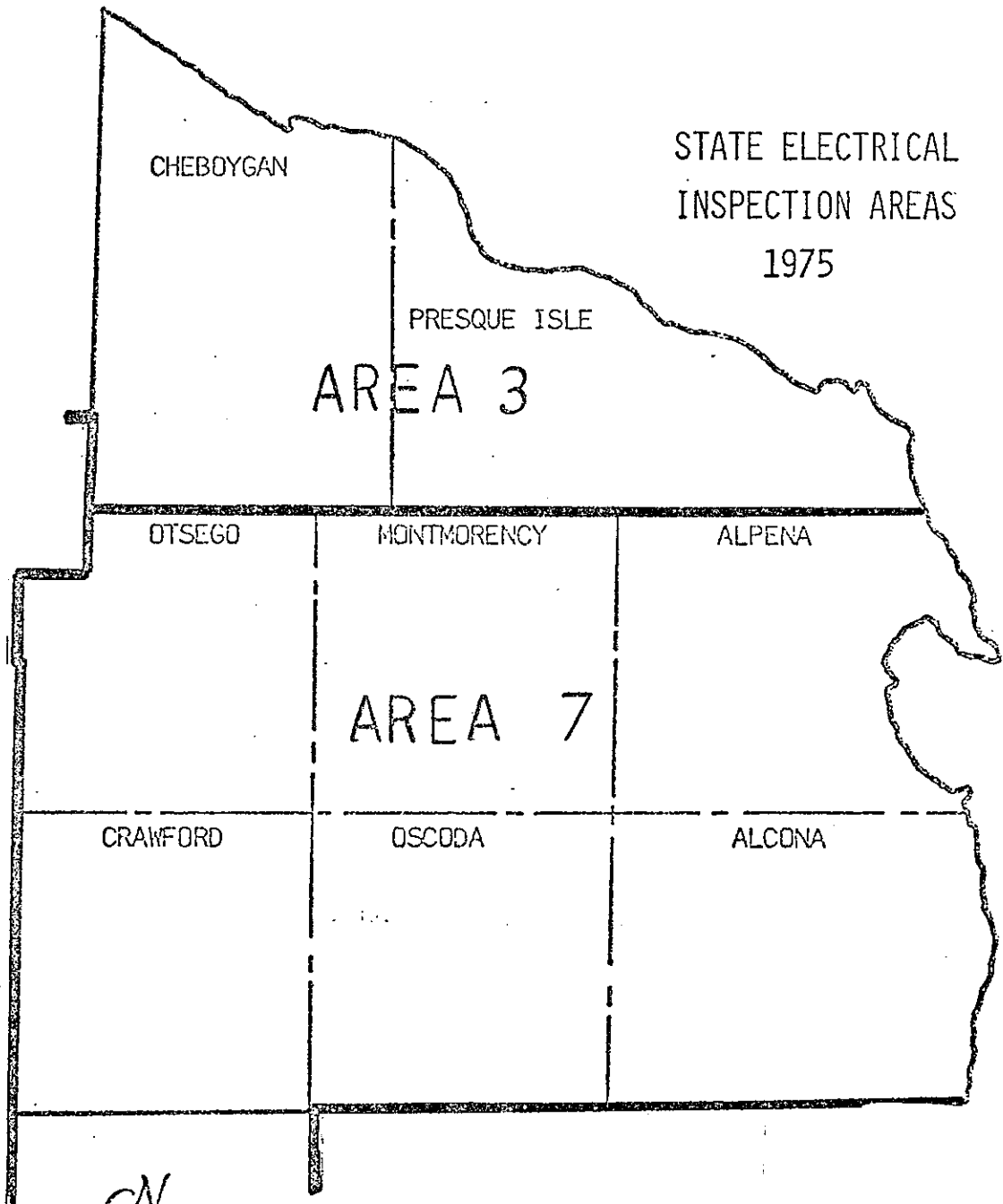


-  Shipping
-  Waterway
-  Railroad
-  Airport



NEMCOG

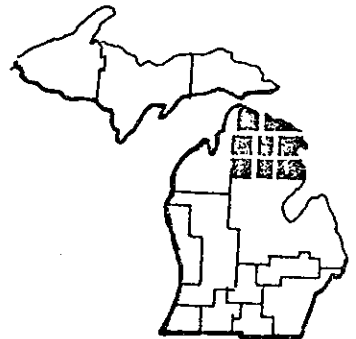
STATE ELECTRICAL
INSPECTION AREAS
1975



SCALE

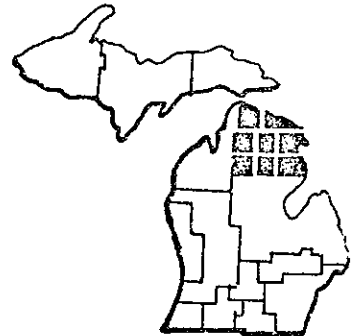
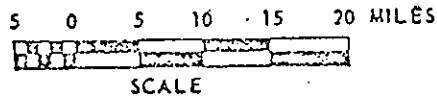
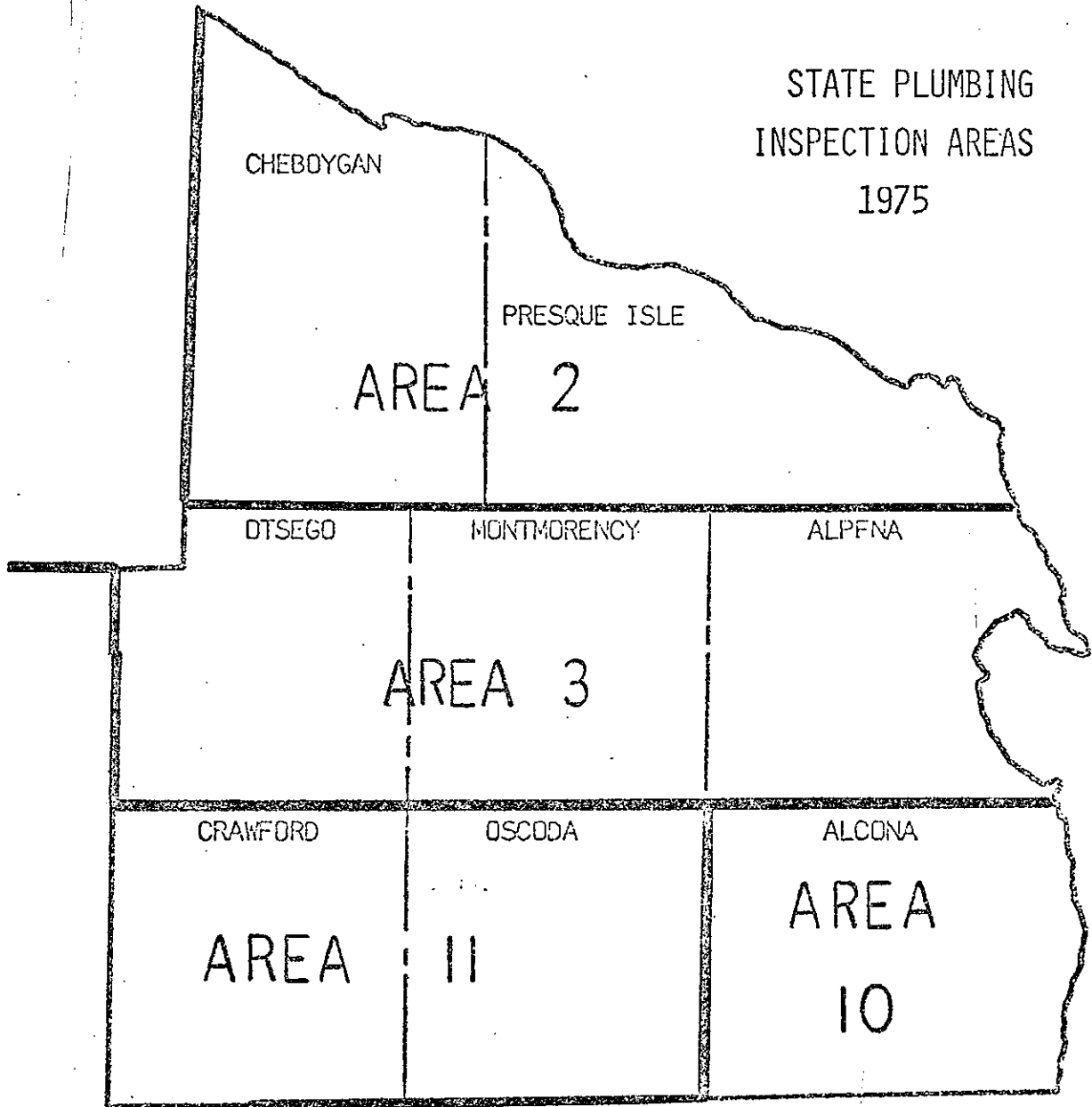
Inspectors

Area 3 - Lawrence Yax
Area 7 - Daniel Waltz



NEMCOG

STATE PLUMBING
INSPECTION AREAS
1975

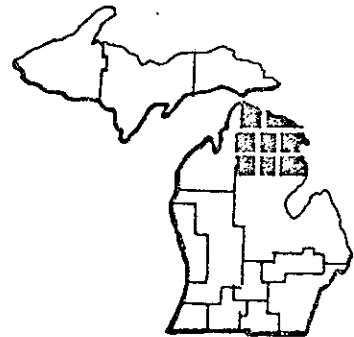
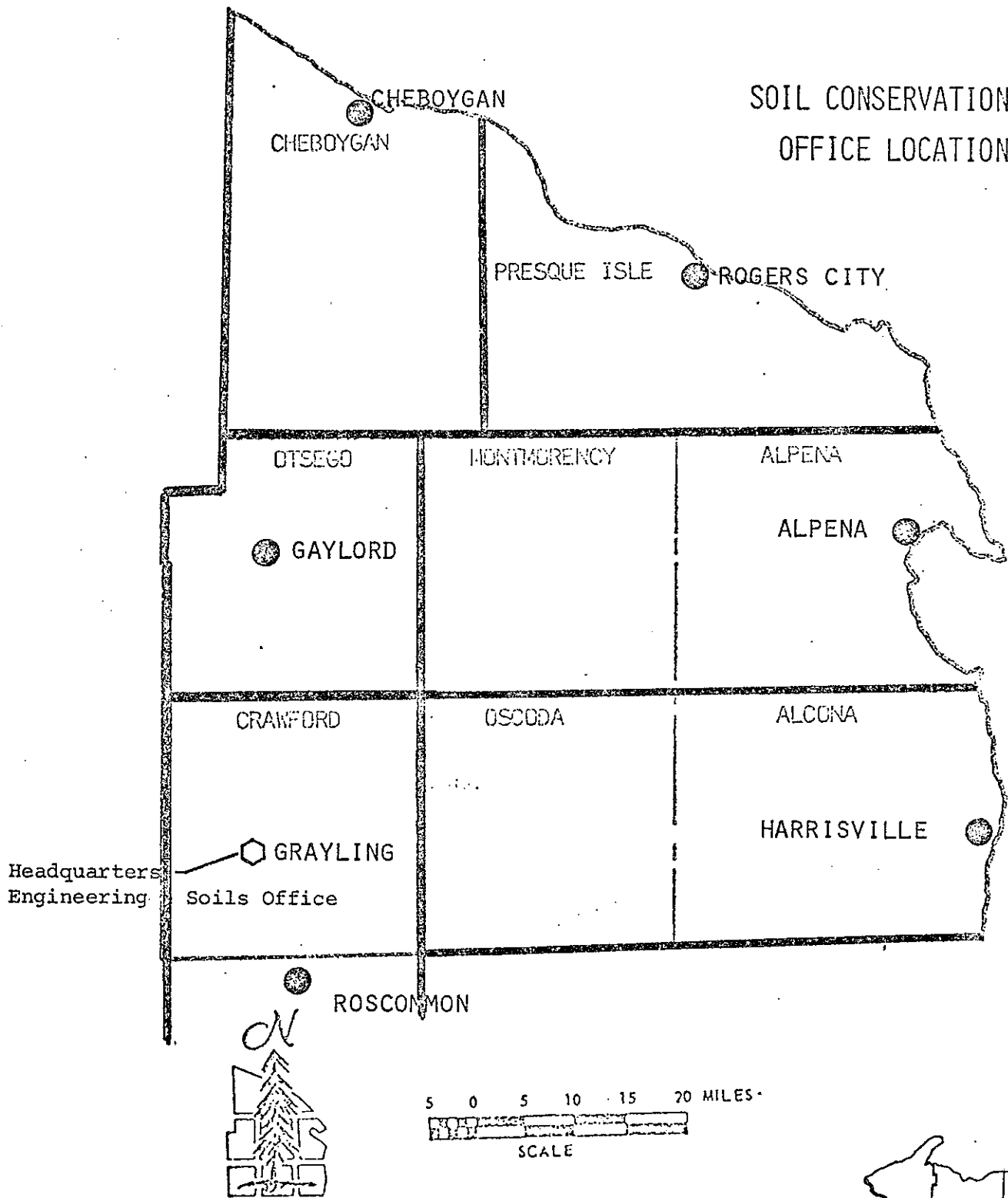


Inspectors

- 2- T. Duncan MacLaren (906) 635-1314
- 3- James Cummings (517) 742-4456
- 10- Edwin Carter (517) 389-4149
- 11- Alvin Schultz (517) 366-7509

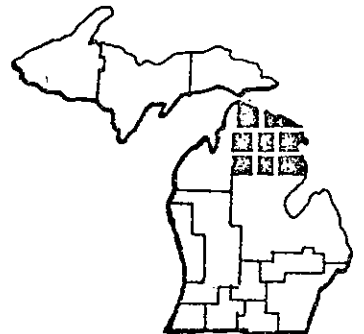
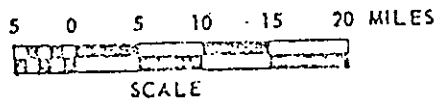
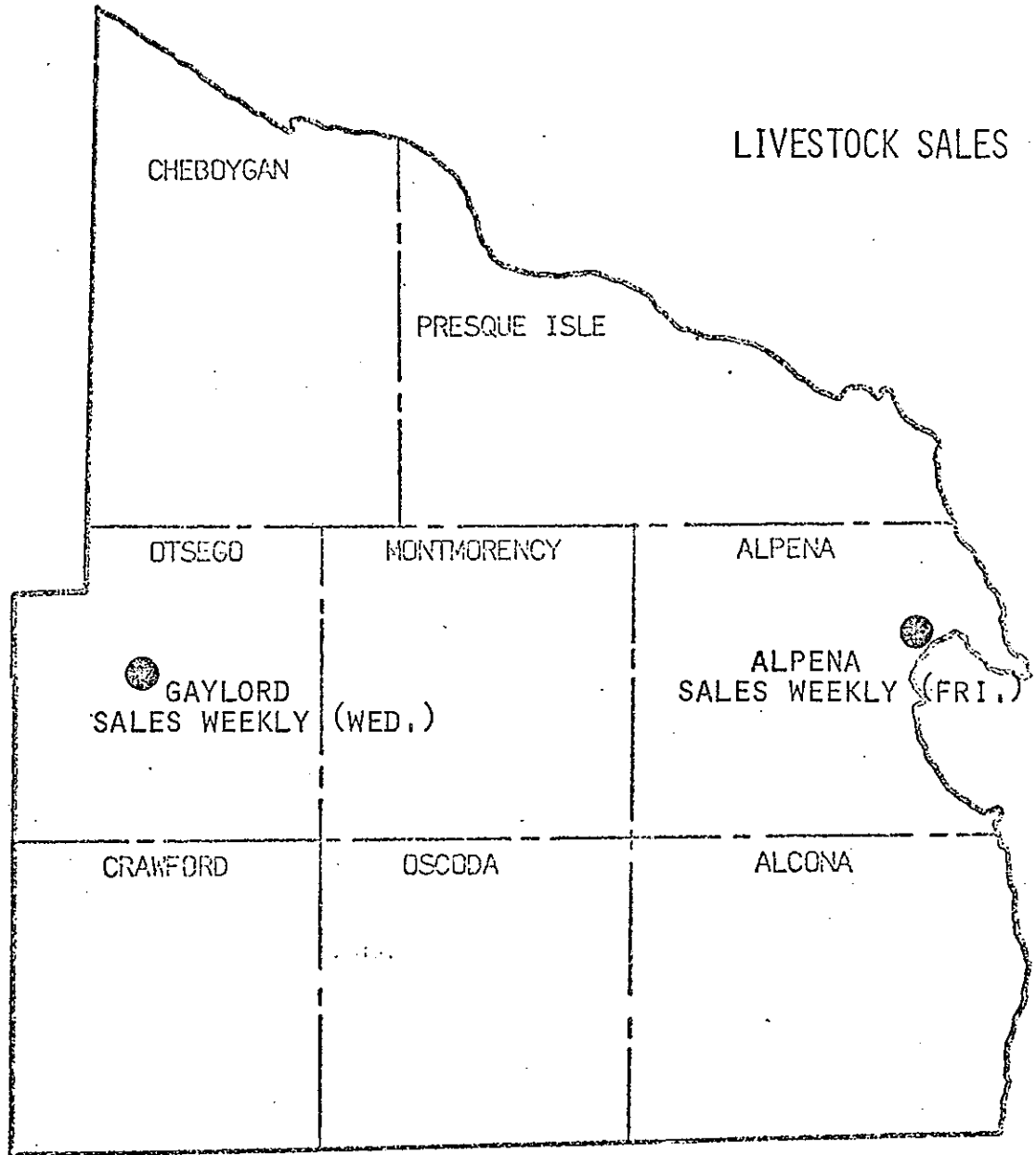
NEMCOG

SOIL CONSERVATION SERVICE OFFICE LOCATIONS



NEMCOG

LIVESTOCK SALES

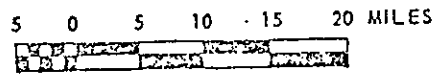
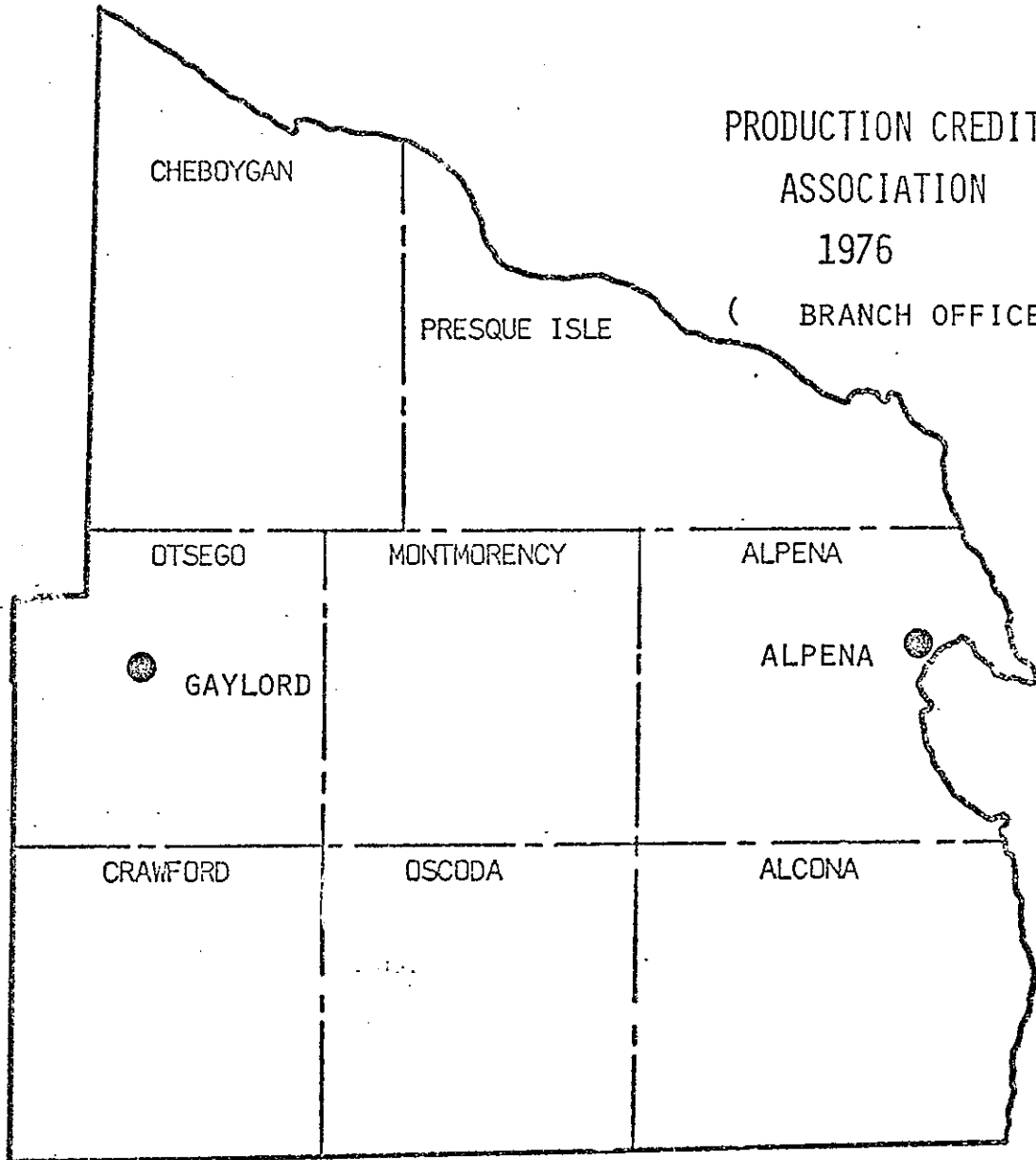


NEMCOG

PRODUCTION CREDIT
ASSOCIATION

1976

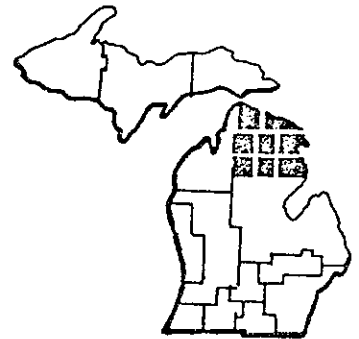
(BRANCH OFFICE)



SCALE

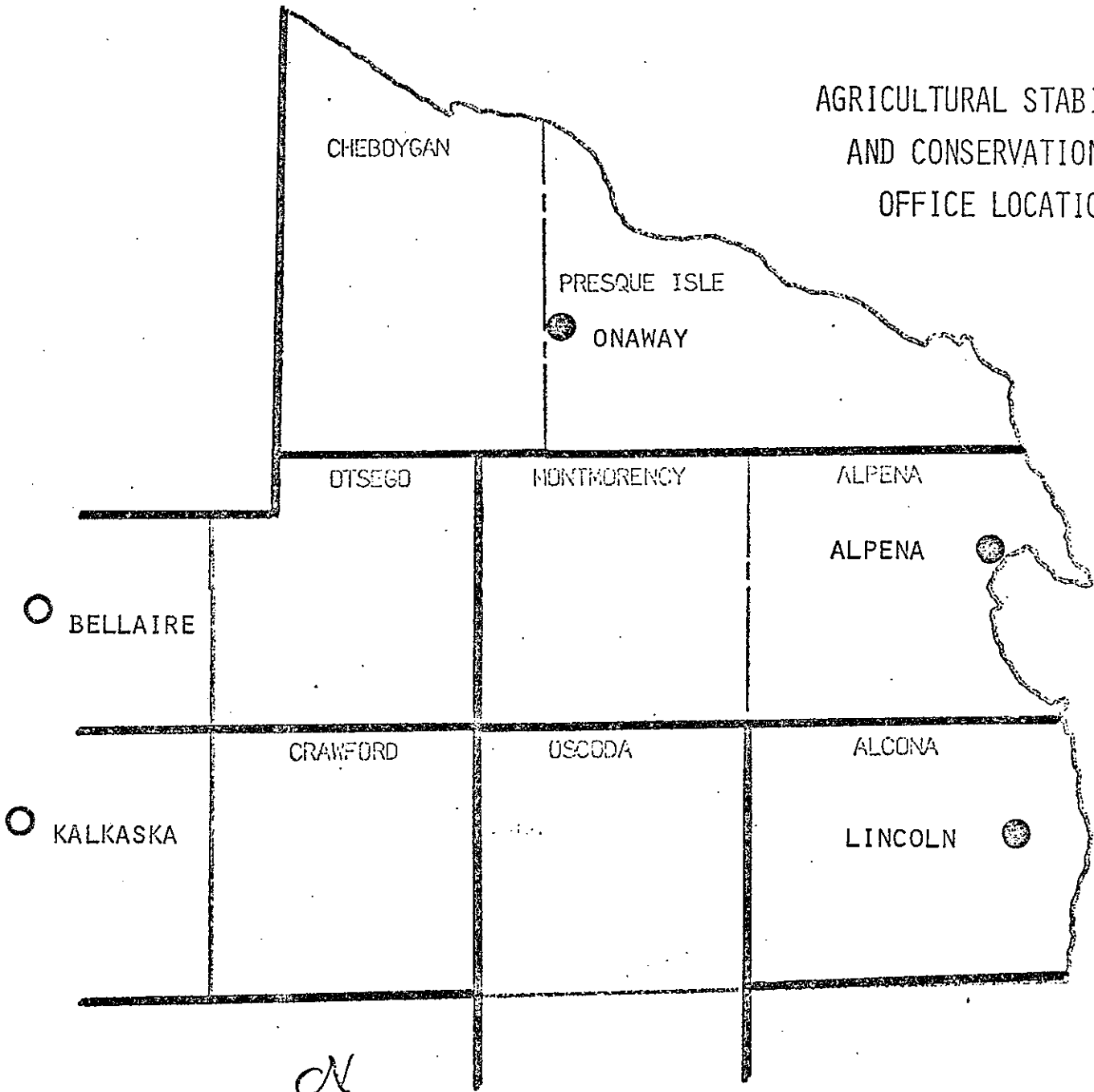


WEST BRANCH

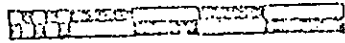


NEMCOG

AGRICULTURAL STABILIZATION
AND CONSERVATION SERVICE
OFFICE LOCATIONS

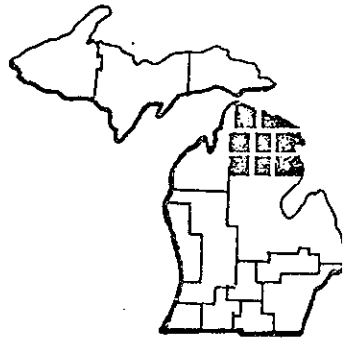


5 0 5 10 15 20 MILES



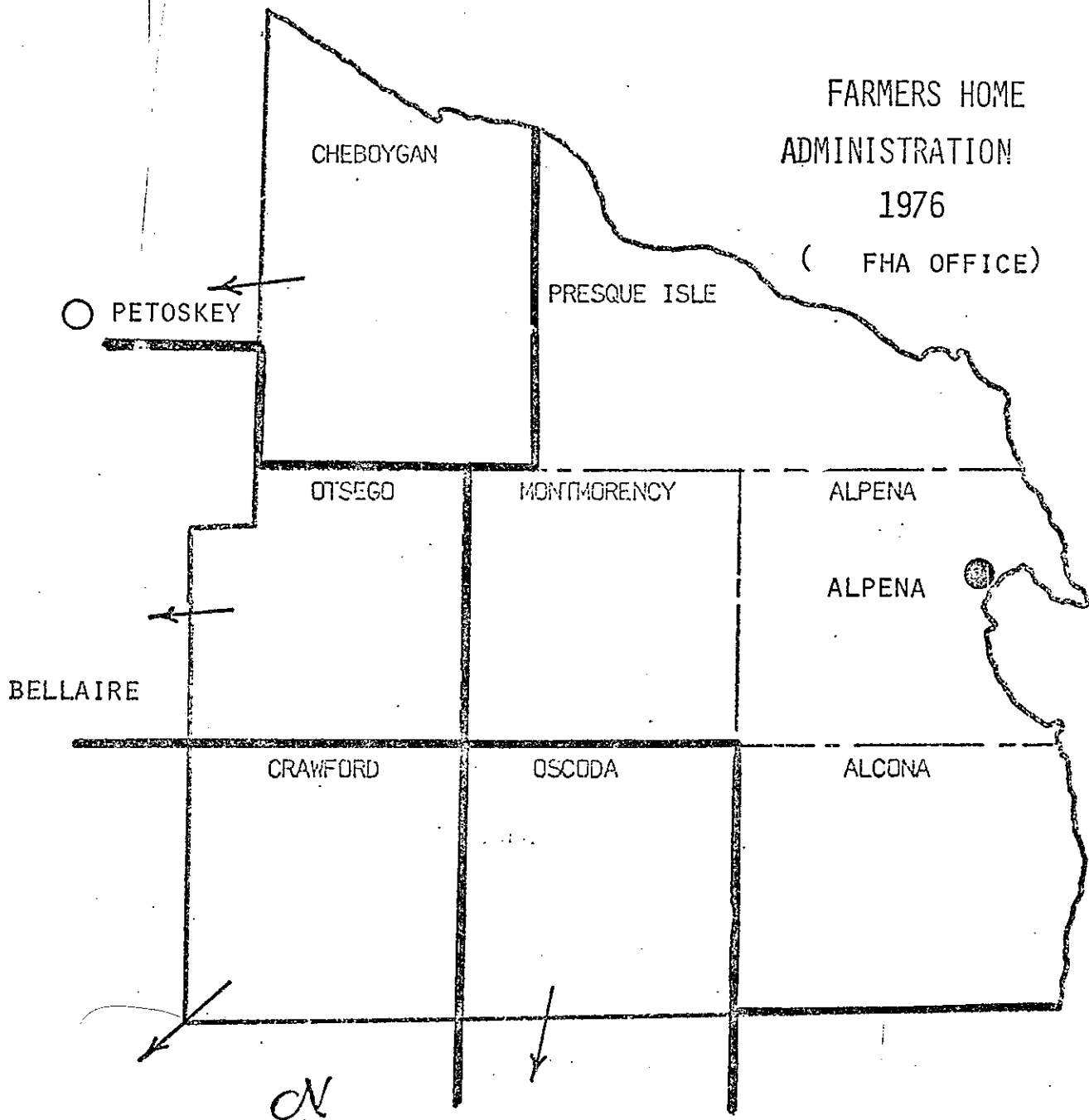
SCALE

○ WEST BRANCH

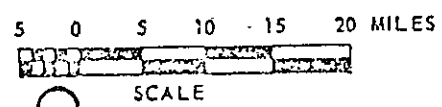


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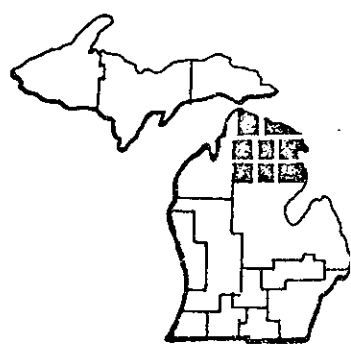
FARMERS HOME
ADMINISTRATION
1976
(FHA OFFICE)



○ LAKE CITY

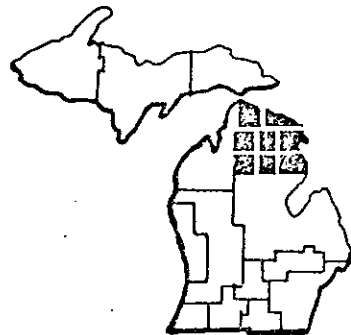
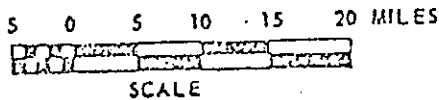
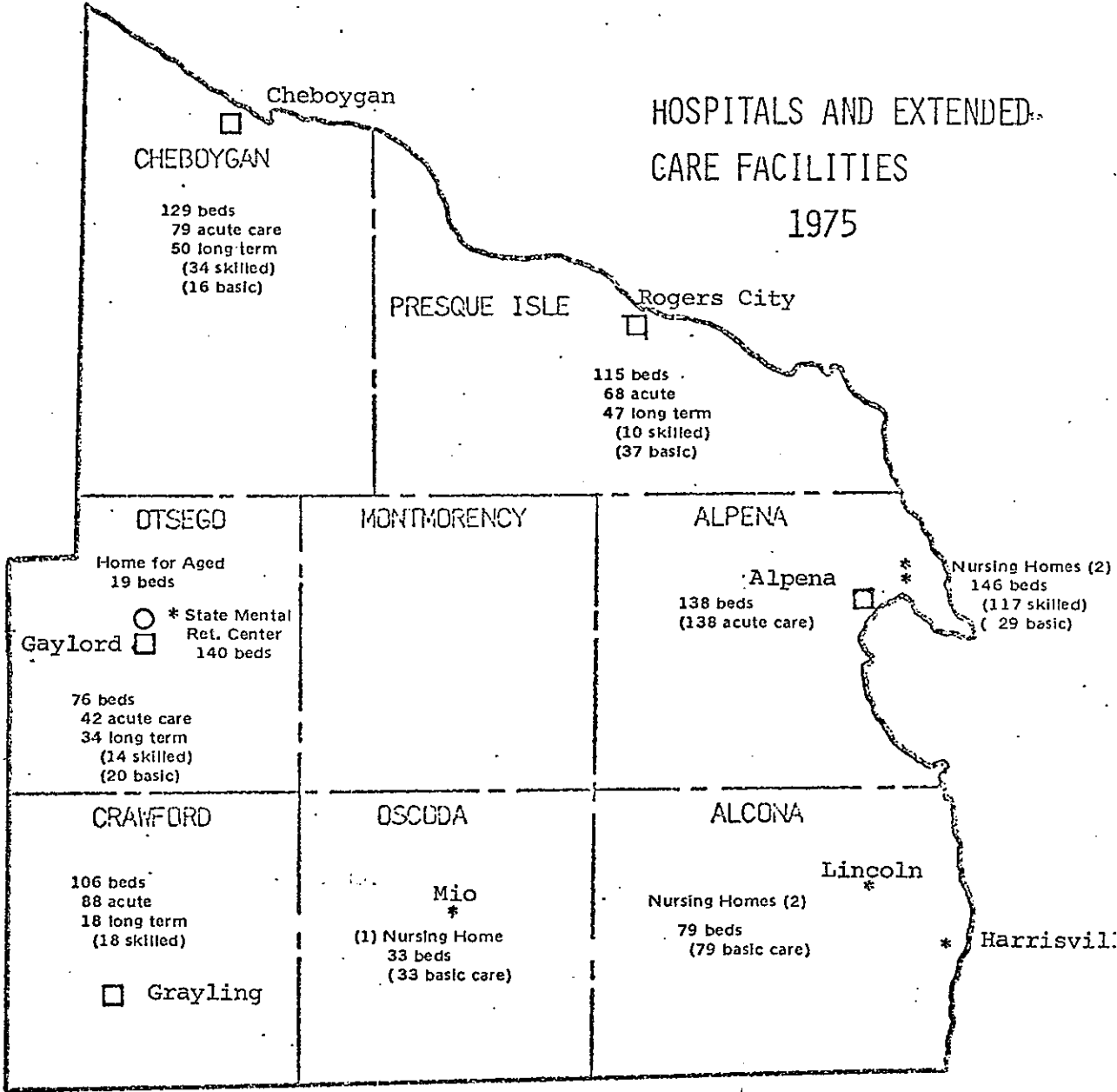


WEST BRANCH



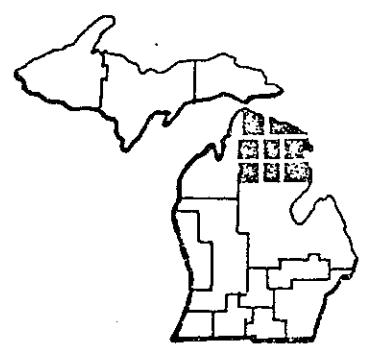
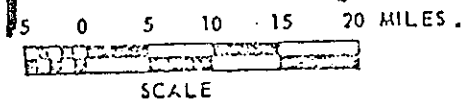
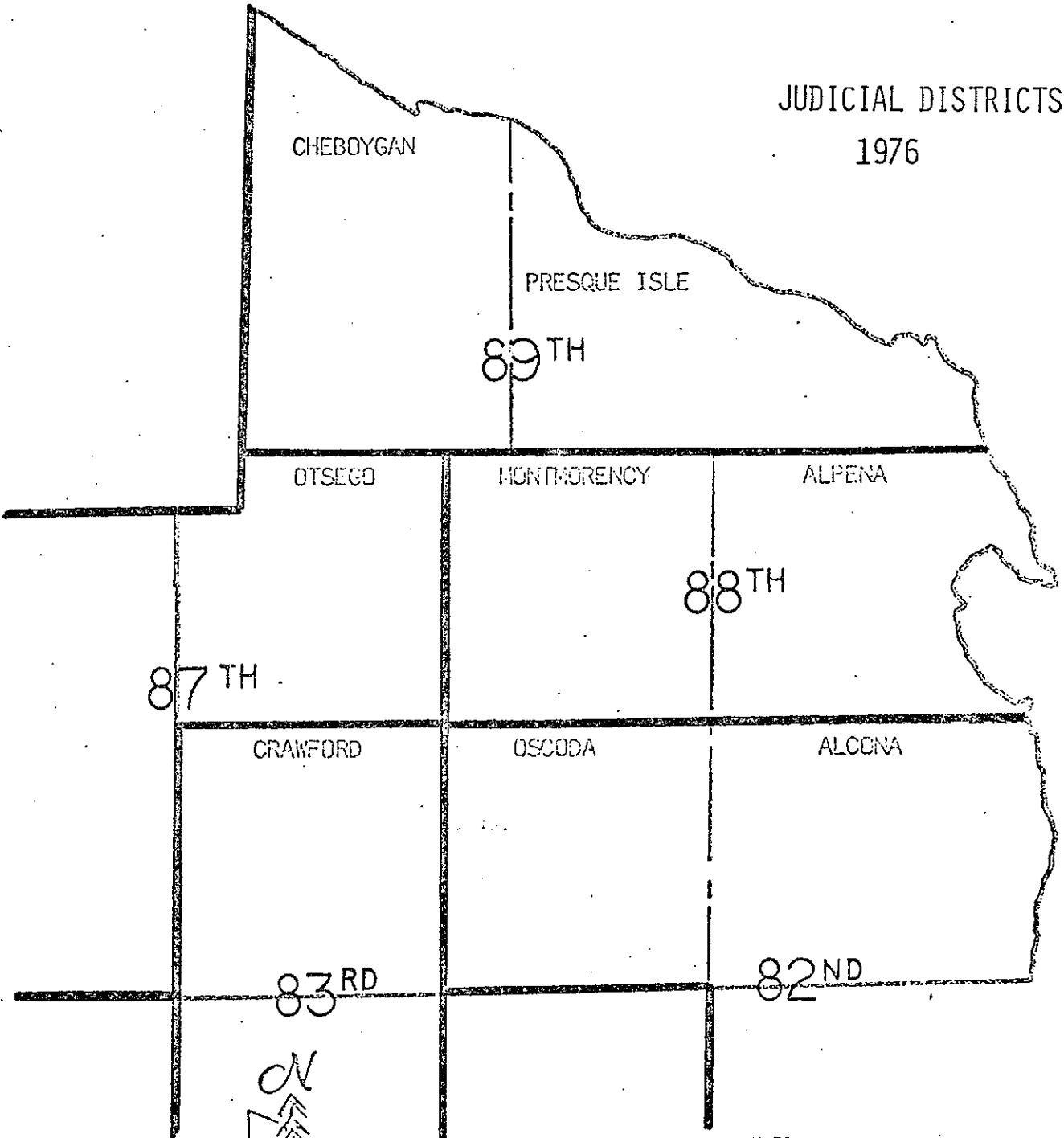
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HOSPITALS AND EXTENDED-CARE FACILITIES 1975



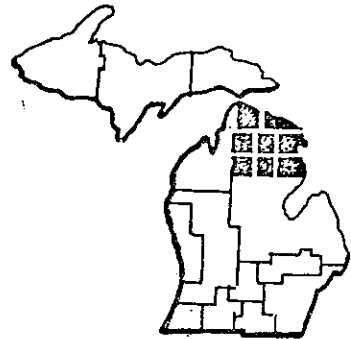
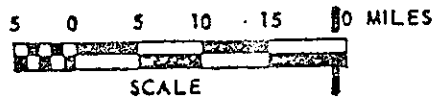
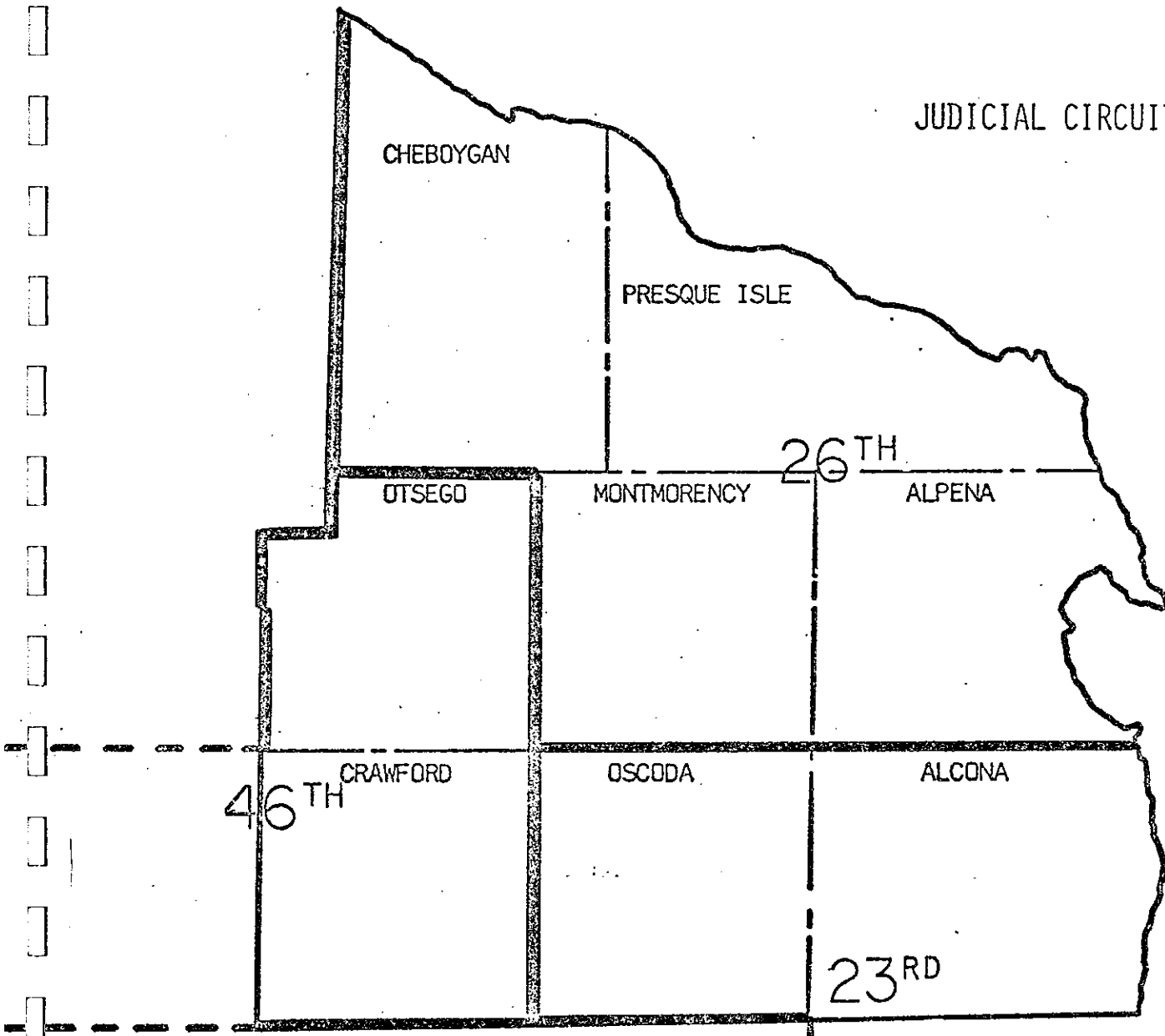
NEMCOG

JUDICIAL DISTRICTS 1976



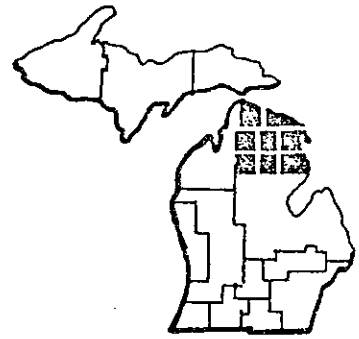
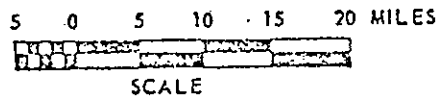
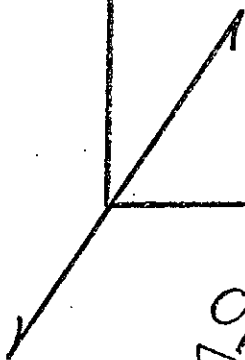
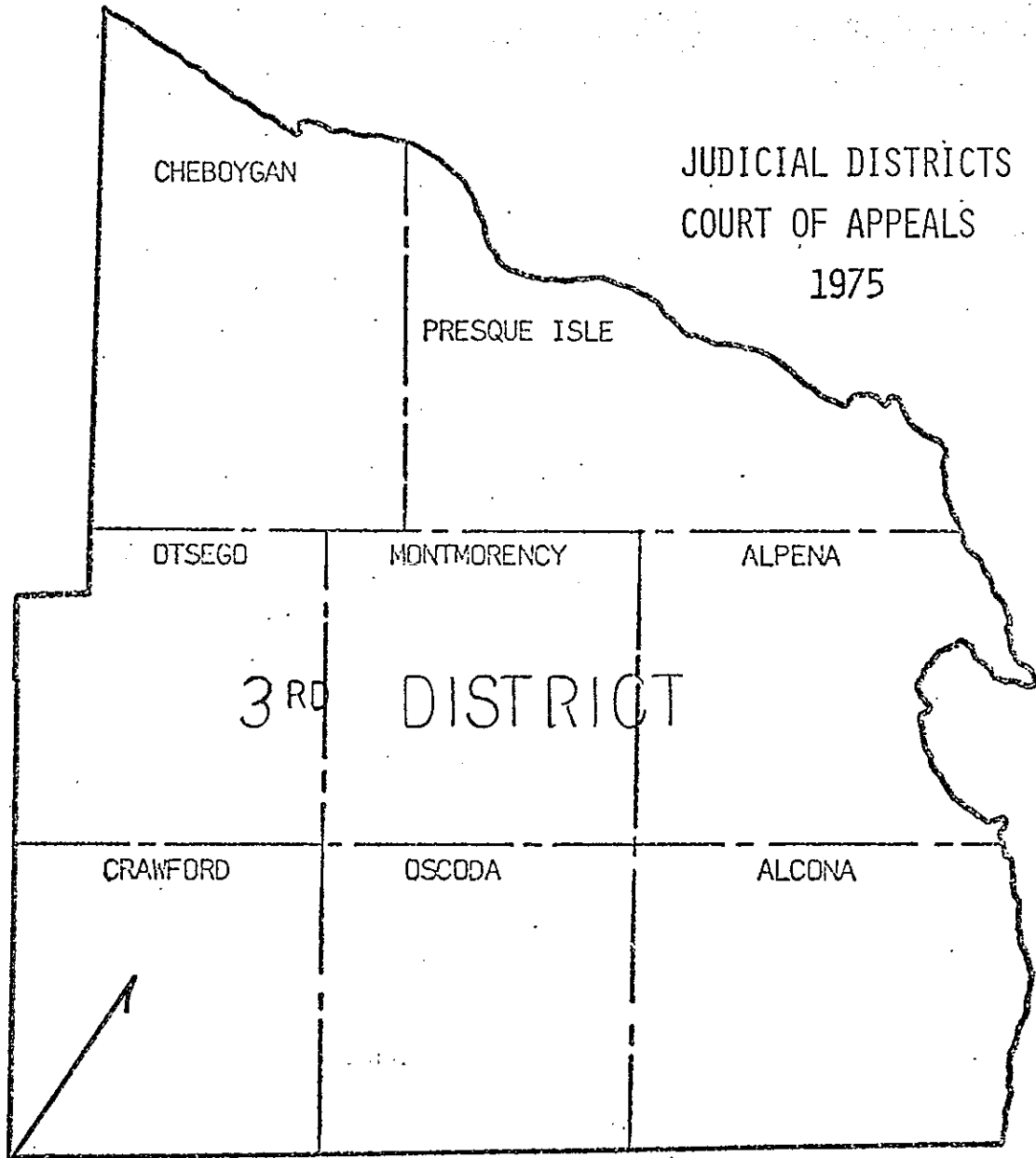
NEMCOG

JUDICIAL CIRCUITS



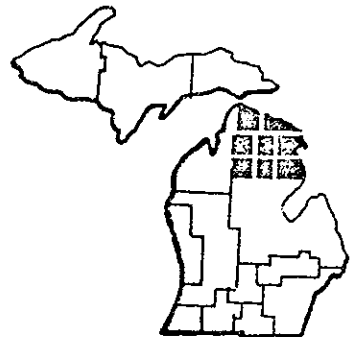
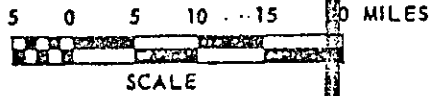
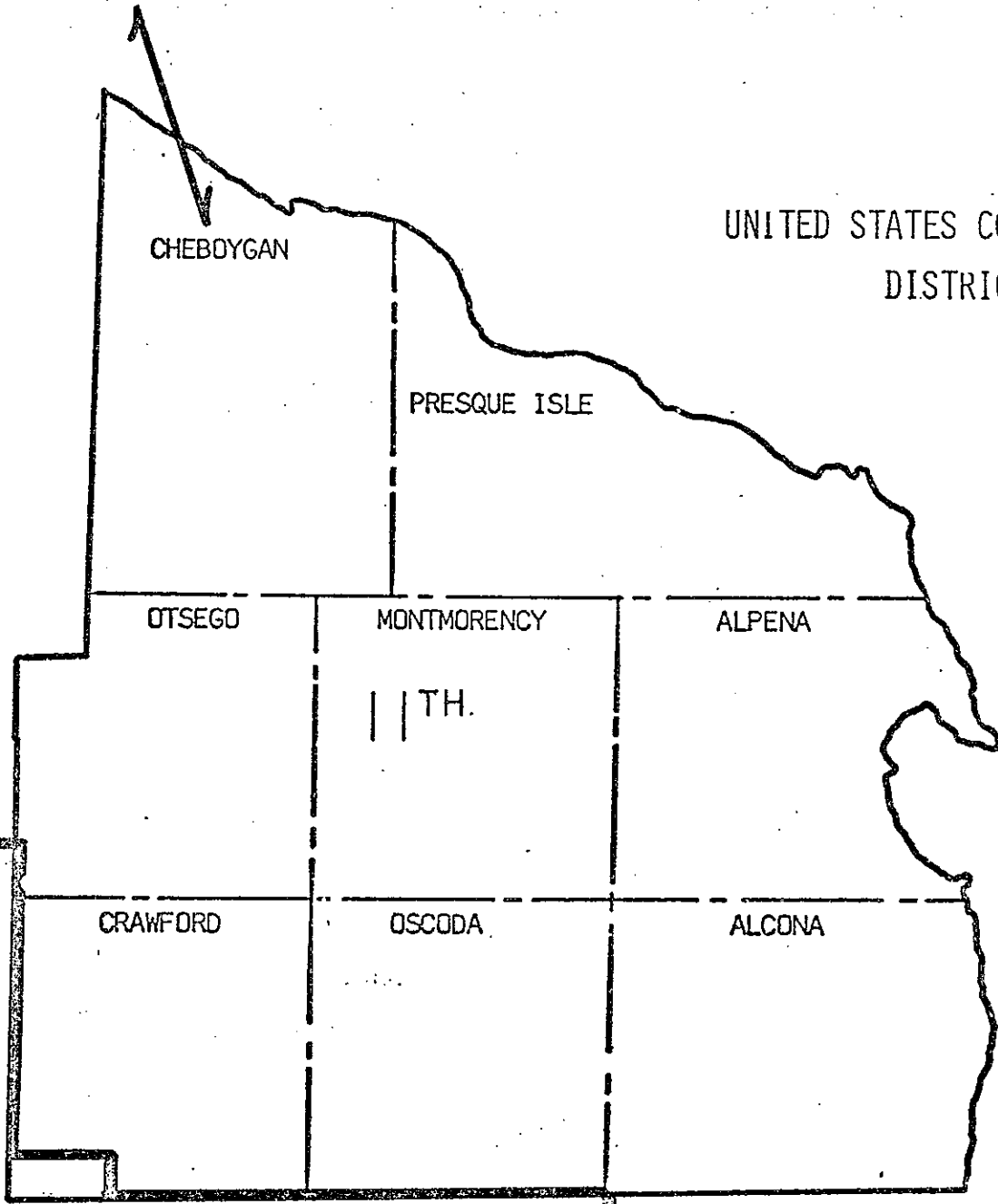
NEMCOG

JUDICIAL DISTRICTS
COURT OF APPEALS
1975



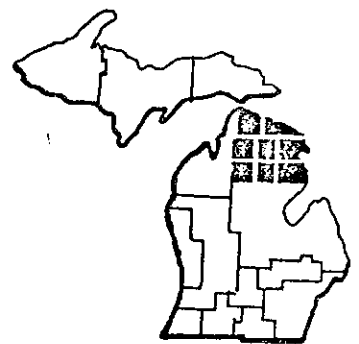
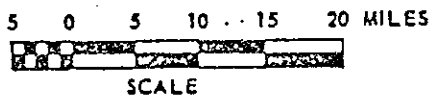
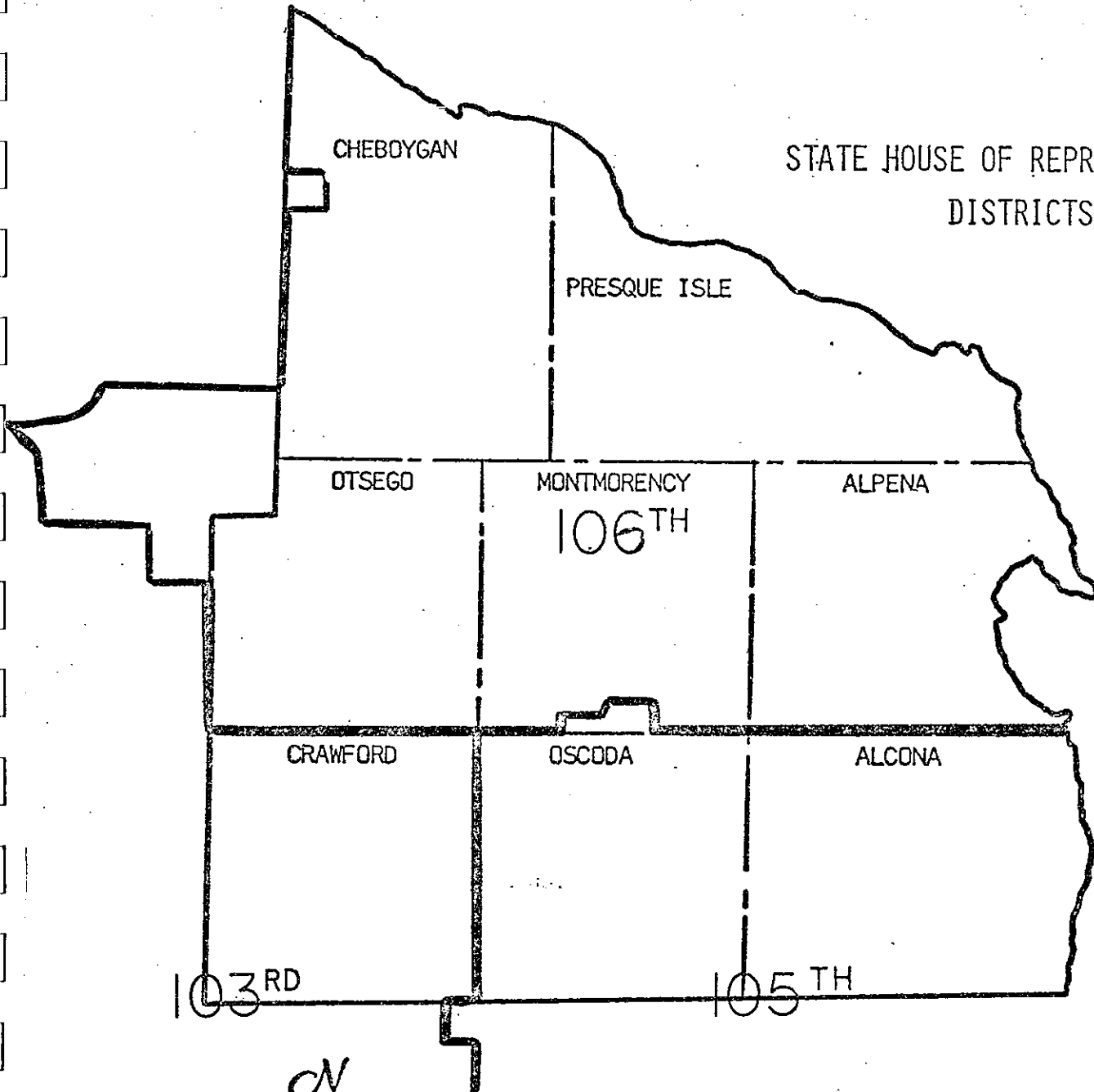
NEMCOG

UNITED STATES CONGRESSION
DISTRICTS



NEMCOG

STATE HOUSE OF REPRESENTATIVE
DISTRICTS



NEMCOG

STATE SENATORIAL
DISTRICTS

CHEBOYGAN

PRESQUE ISLE

OTSEGO

MONTMORENCY

ALPENA

37 T.H

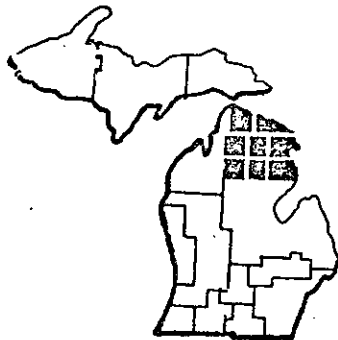
CRAWFORD

OSCODA

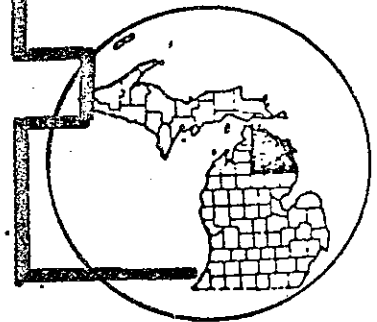
ALCONA

5 0 5 10 15 20 MILES

SCALE

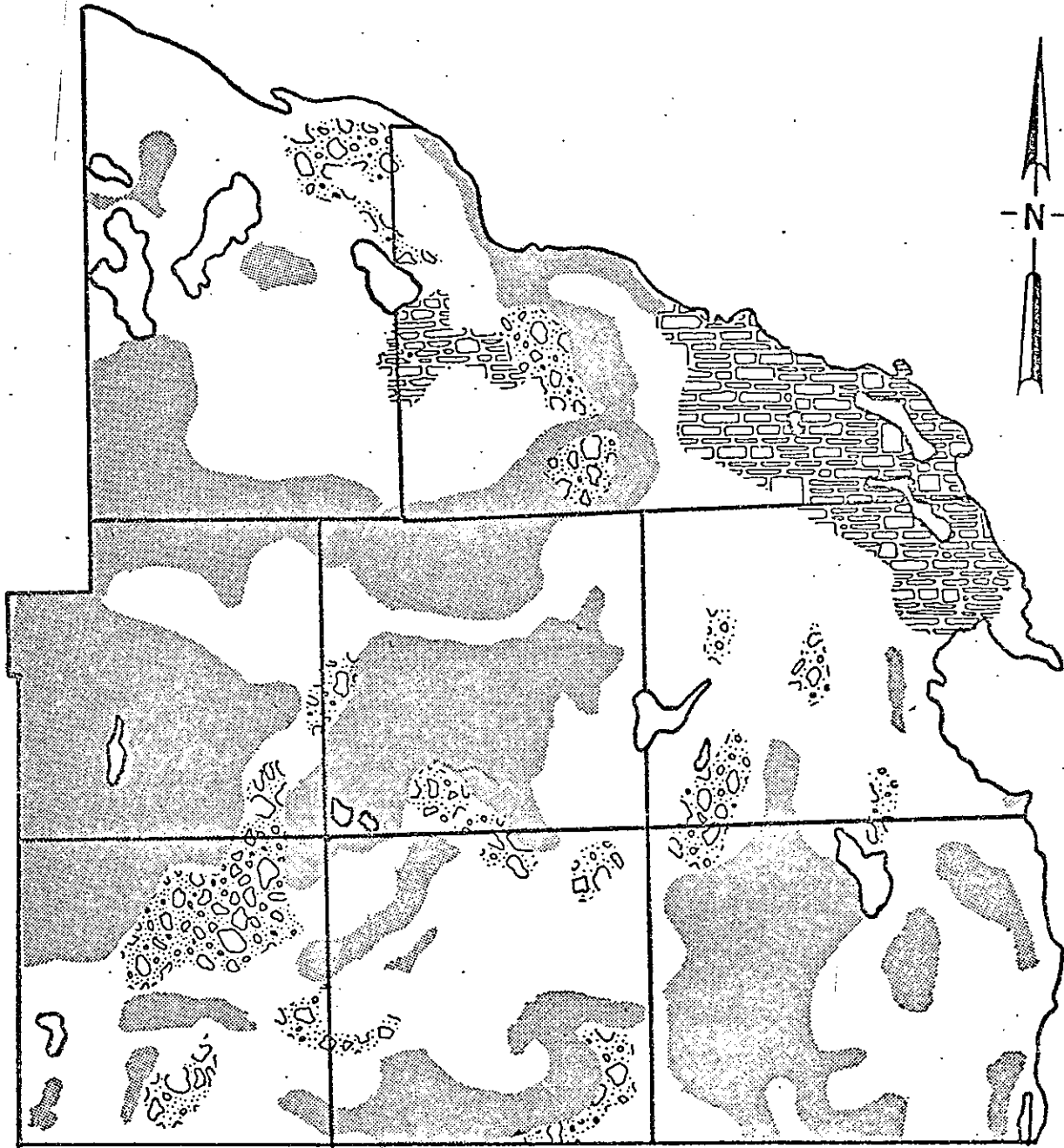


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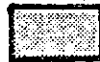


ENVIRONMENT

GENERAL LOCATION OF MINERAL DEPOSITS
IN NORTHEAST MICHIGAN



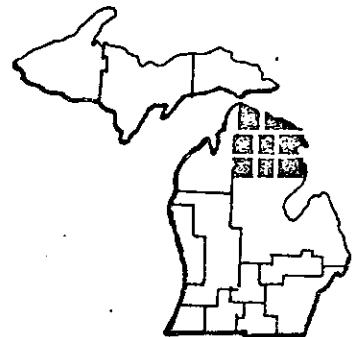
SAND



GRAVEL

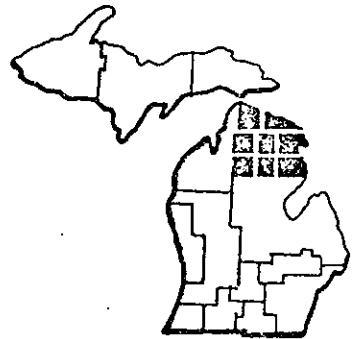
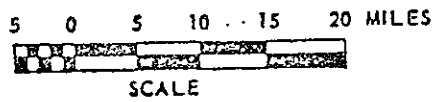
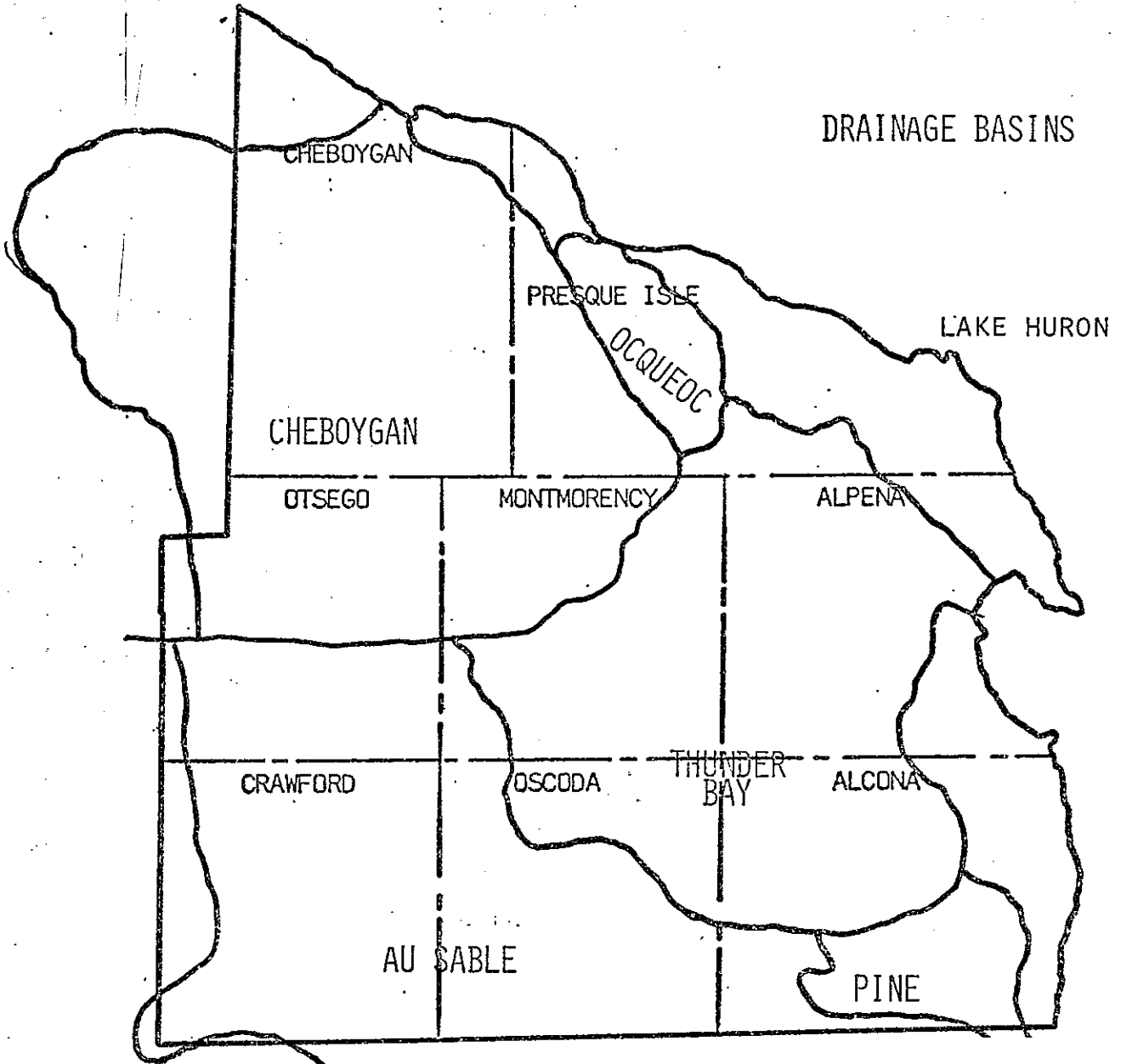


LIMESTONE



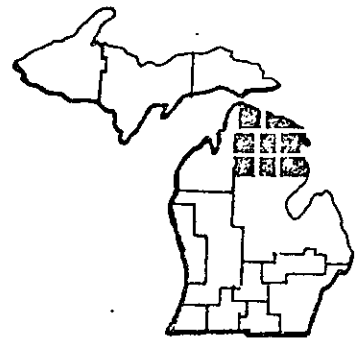
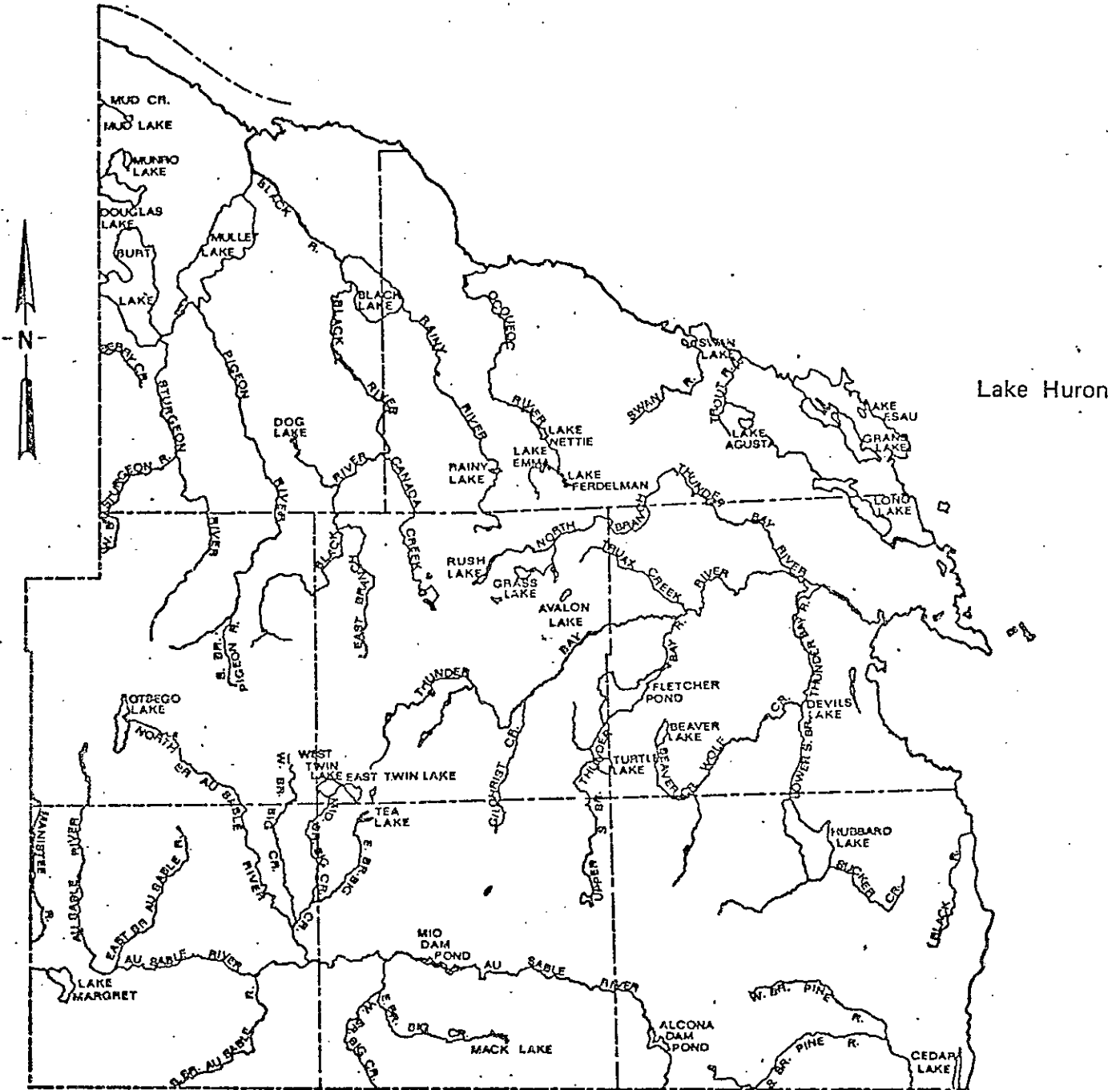
NEMCOG

DRAINAGE BASINS



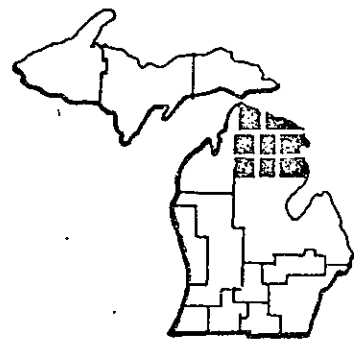
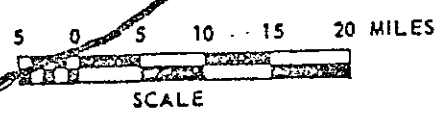
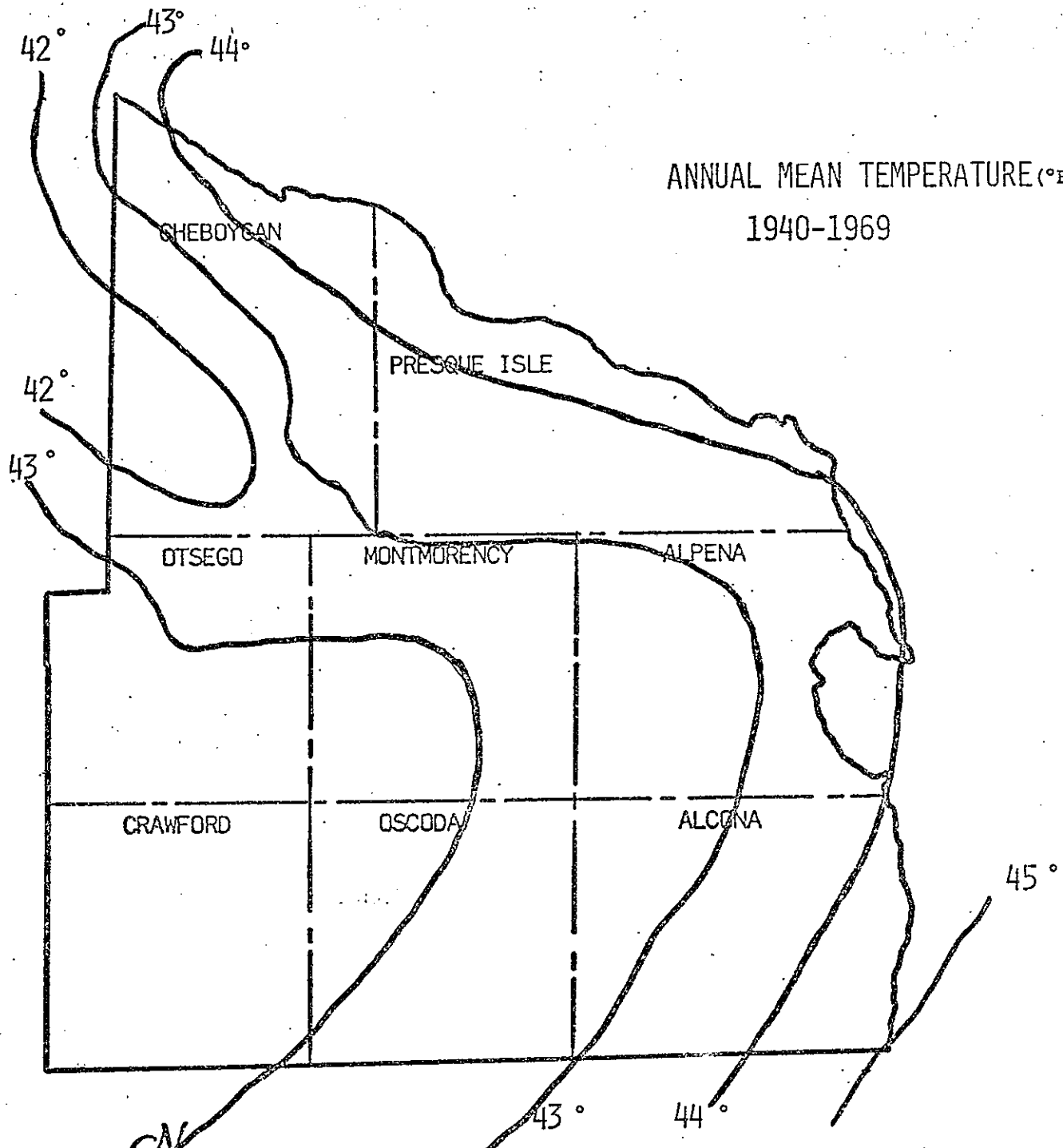
NEMCOG

REGIONAL LAKES AND STREAMS



NEMCOG

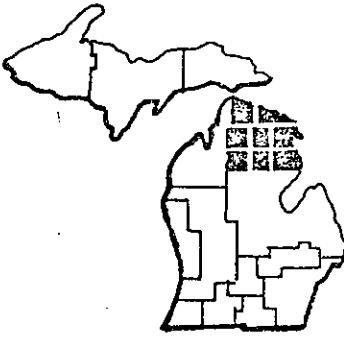
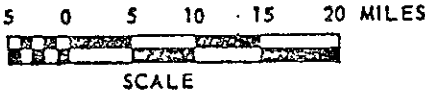
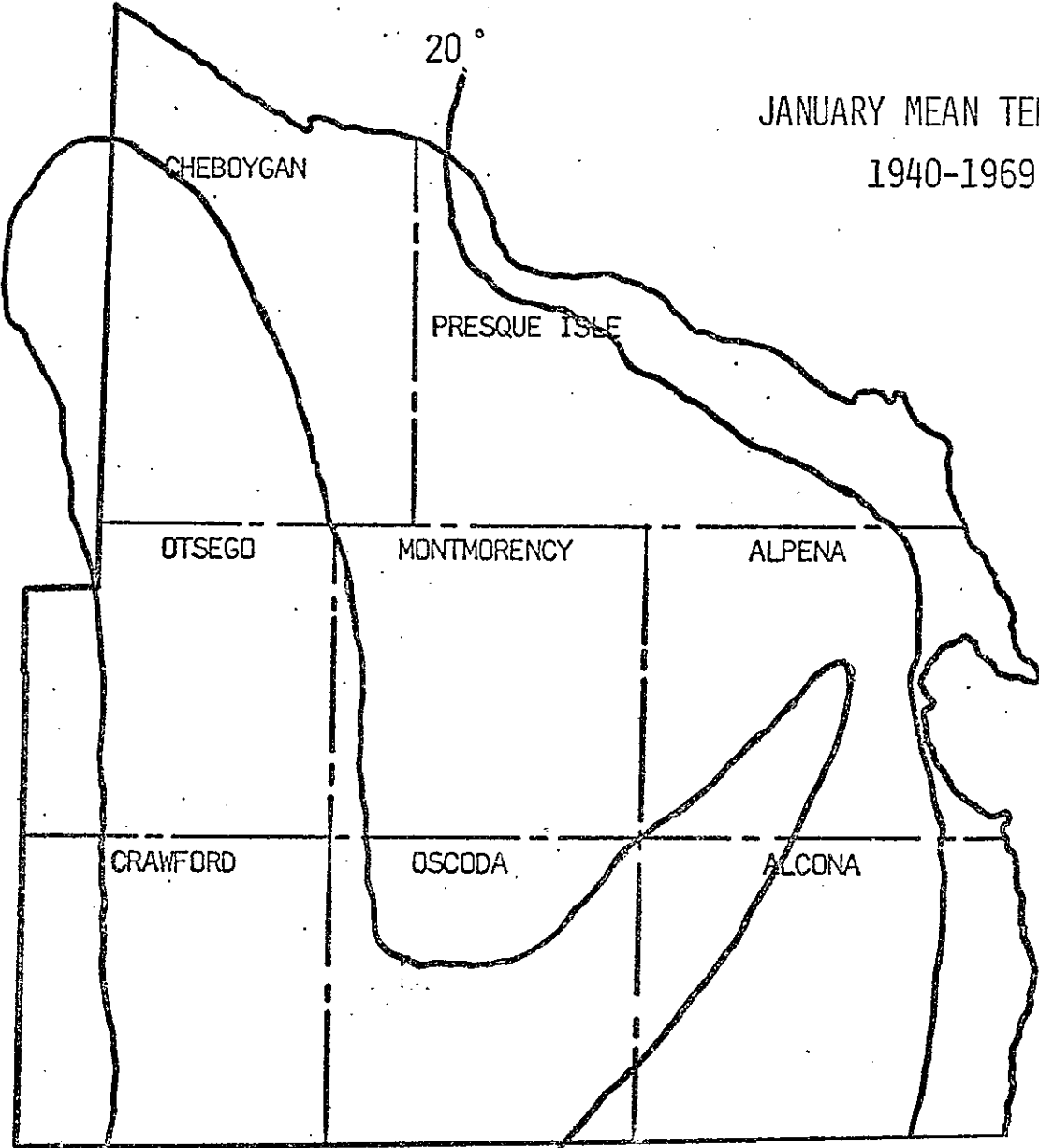
ANNUAL MEAN TEMPERATURE (°F)
1940-1969



NEMCOG

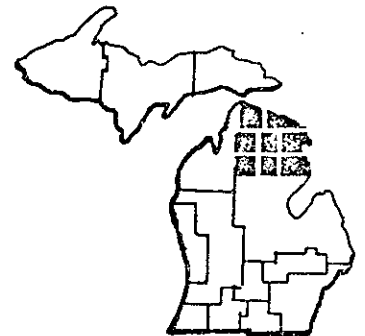
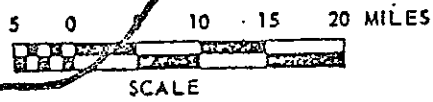
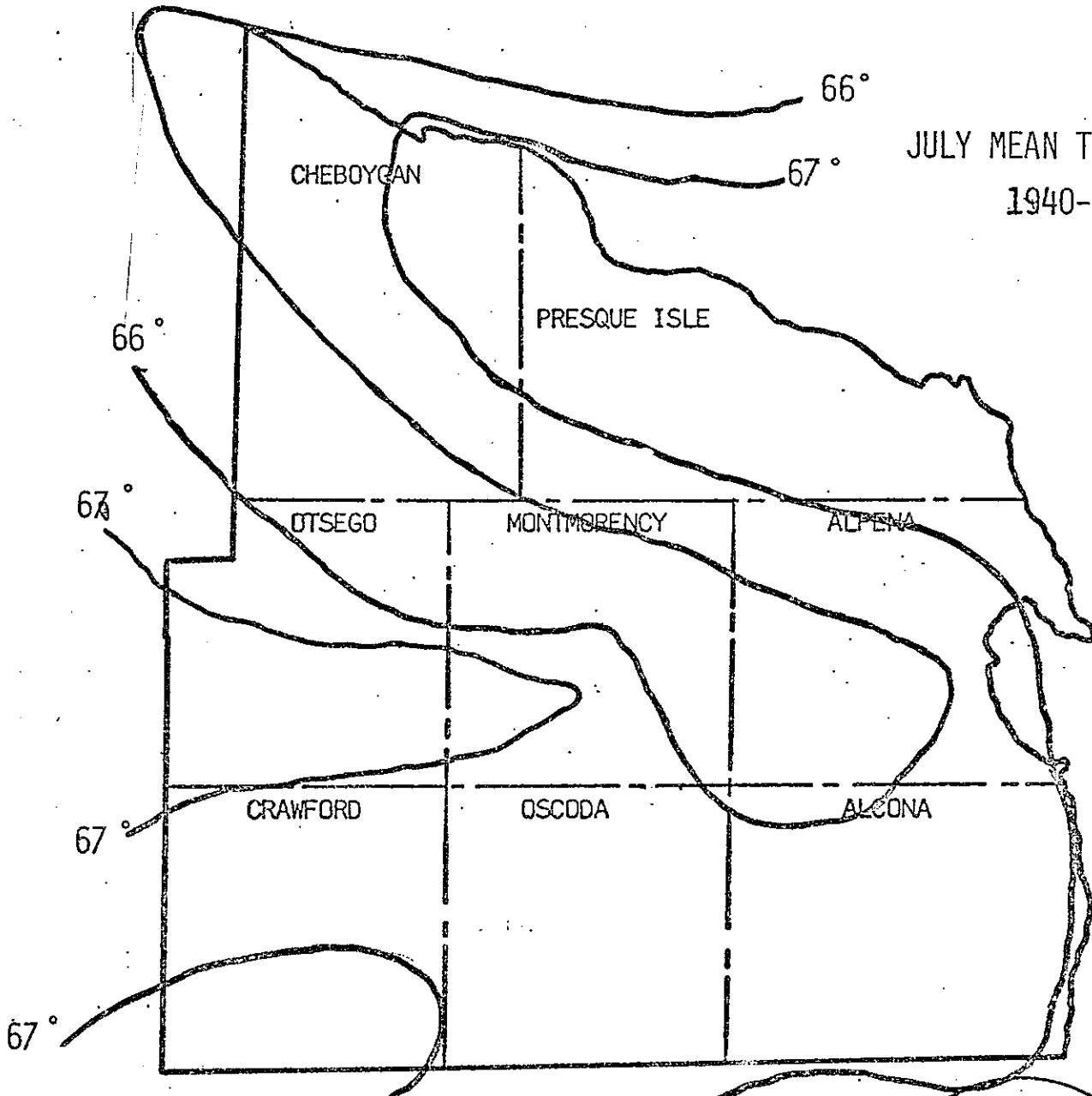
JANUARY MEAN TEMPERATURE

1940-1969 (°F)



NEMCOG

JULY MEAN TEMPERATURE
1940-1969 (°F)

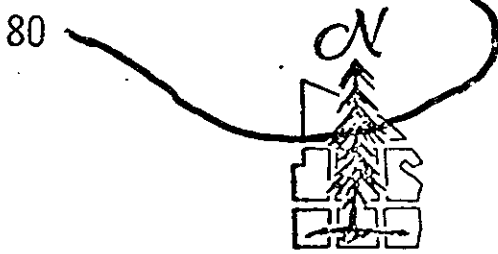
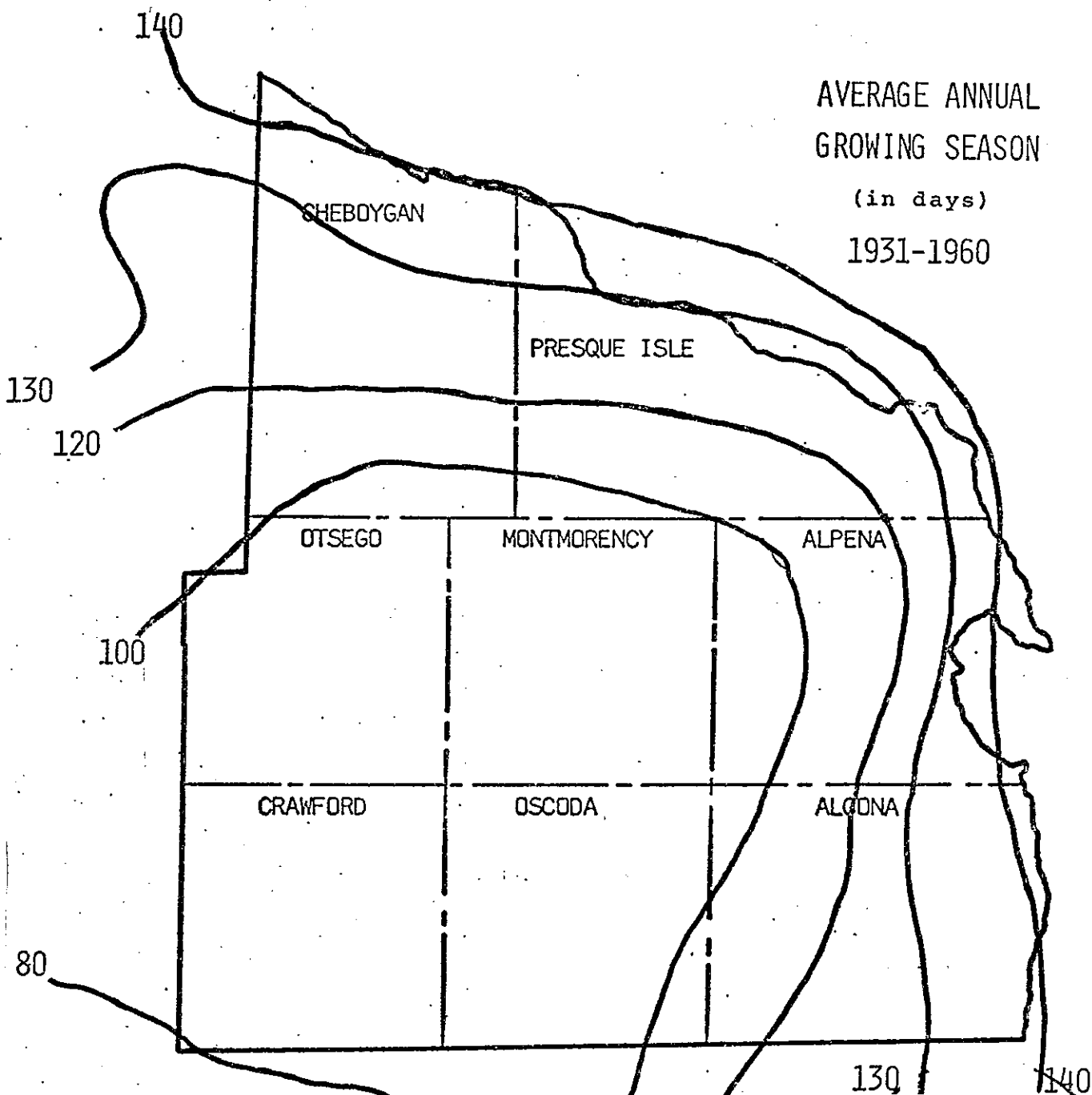


NEMCOG

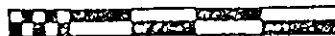
AVERAGE ANNUAL GROWING SEASON

(in days)

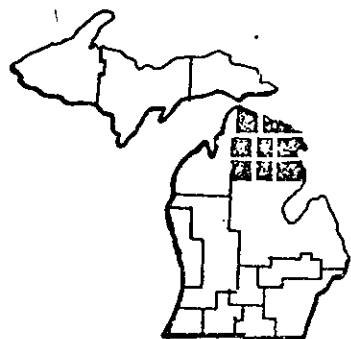
1931-1960



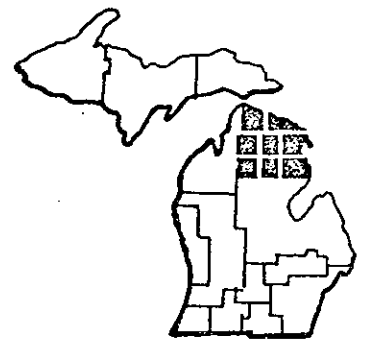
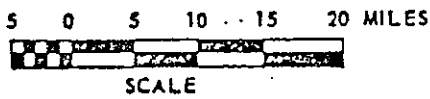
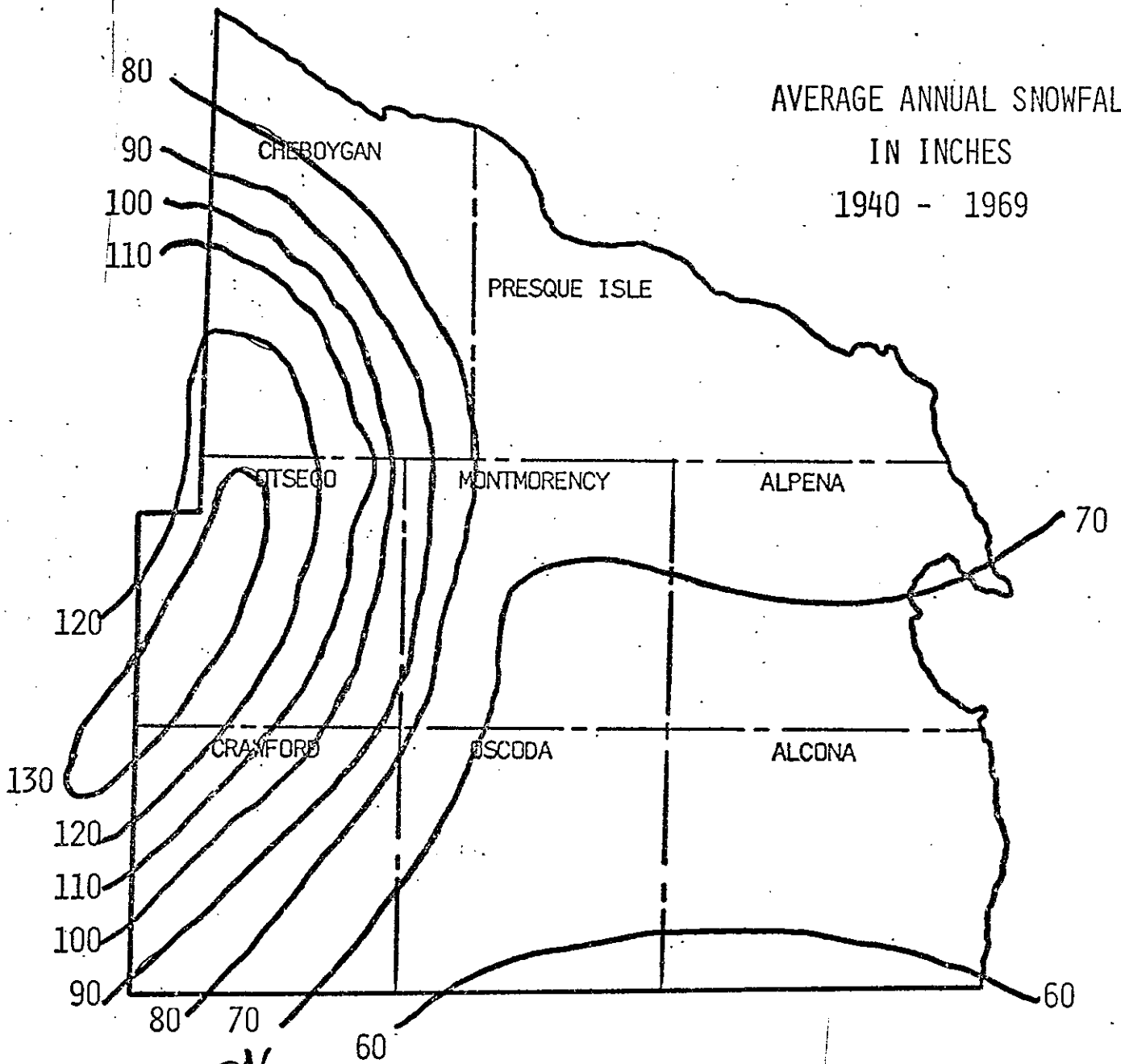
5 0 5 10 15 20 MILES



SCALE

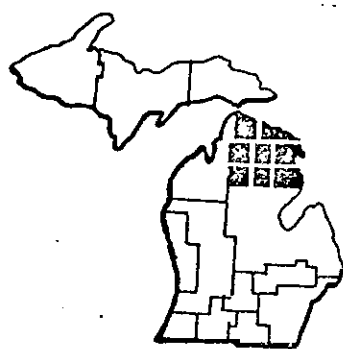
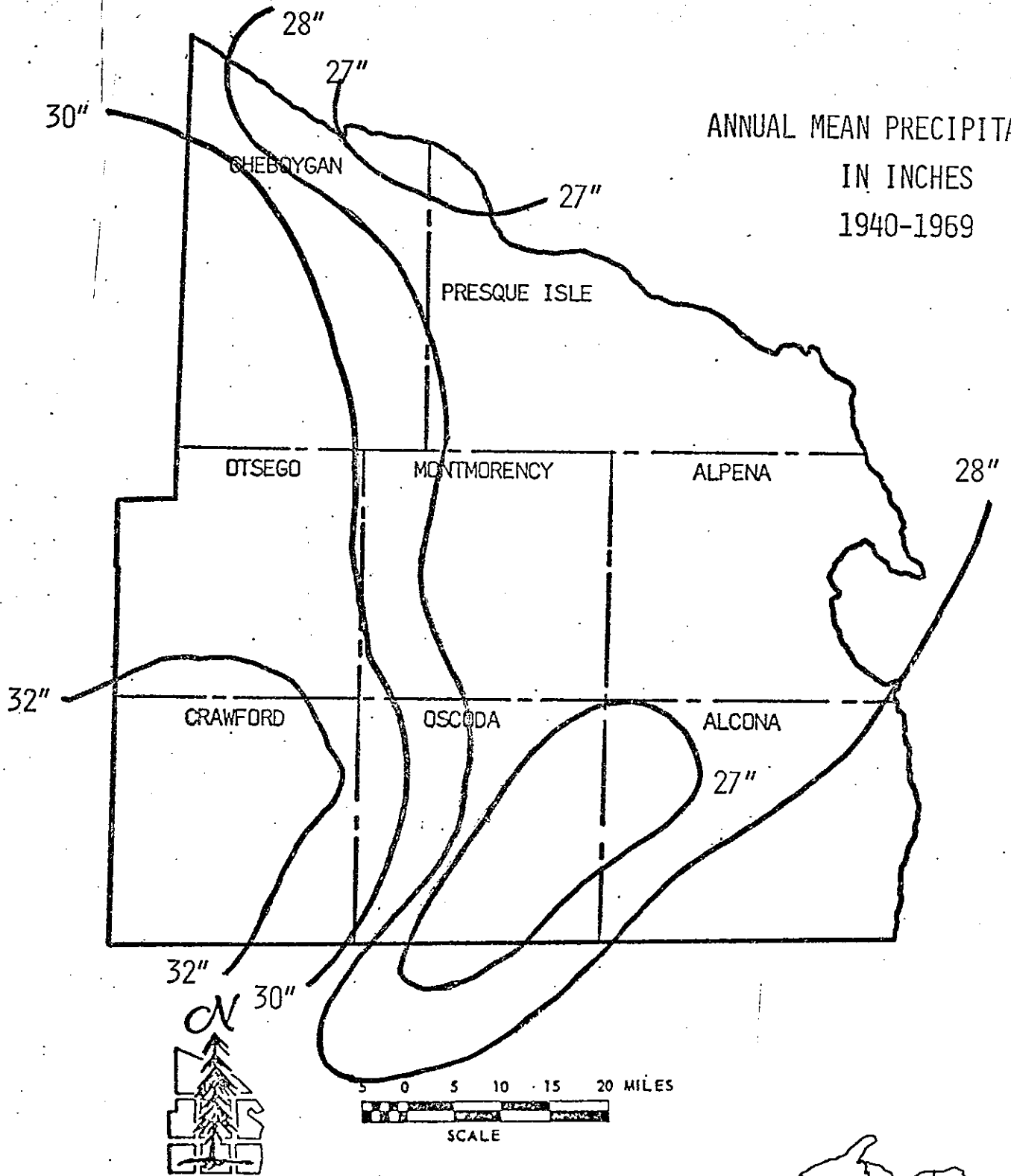


AVERAGE ANNUAL SNOWFALL
IN INCHES
1940 - 1969



NEMCOG

ANNUAL MEAN PRECIPITATION
IN INCHES
1940-1969



NEMCOG