

ROSCOMMON COUNTY PLANNING COMMISSION



**ROSCOMMON COUNTY
MASTER PLAN
FOR
LAND USE**

**GOALS AND OBJECTIVES FOR
DEVELOPMENT AND GROWTH MANAGEMENT**

July 19, 2010

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ROSCOMMON COUNTY PLANNING COMMISSION

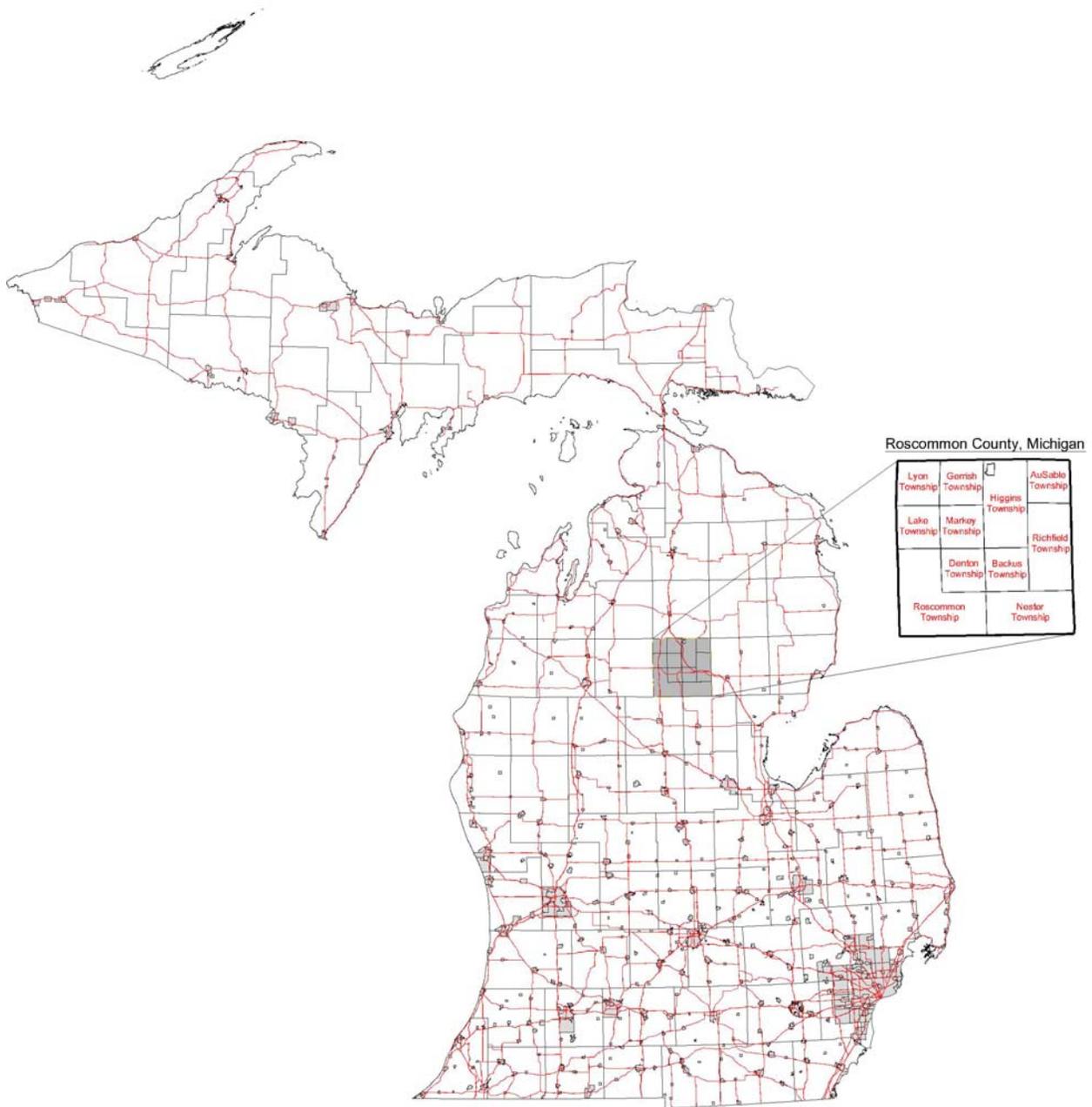
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Roscommon County, Michigan

Roscommon County Master Plan

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SECTION ONE

SECTION ONE INTRODUCTION

The County of Roscommon Michigan is a rural northern Michigan county blessed by prodigious natural resources – Higgins Lake, one of the most beautiful lakes in the world; Houghton Lake, Michigan’s largest inland lake; the headwaters of the Muskegon and AuSable Rivers; and jack pine forests where the Kirtland Warbler has recovered from near extinction. And it also has the benefit of numerous man-made resources – two interstate highways pass through on opposite sides of the county, joining just north of the county line; the still active Lake State Rail Line goes through St Helen and Roscommon; and the Roscommon County Blodgett Memorial Airport has a planned expansion to allow the operation of jet aircraft.

When this plan was begun in 2008 its emphasis was to be economic development. The stormy unfolding of the Great Recession has reinforced and magnified the need for this focus. The 2010 Roscommon County Master Plan examines the county’s situation as best as can be done from within the tumult and puts forth its vision for the future of the county and the proposed means to achieve it.

SECTION TWO

SECTION TWO BACKGROUND

A. Regional History

Roscommon County originally was a portion of the lands called “Mikenauk” which was named for Chief Mikenauk, an Ottawa Indian, referred to in the Washington Treaty of 1836. Native Americans occupied Roscommon County for many years prior to the arrival of the European settlers, and several villages were located in Roscommon County as well as burial grounds and mounds. The Grand Traverse-Saginaw Trail, a main Native American trail, ran through the middle of Roscommon County.

The area that today encompasses Roscommon County was separated from Midland County in 1875. Nester Township was the first township formed in Roscommon County in May of 1878. In 1879 the Village of Roscommon was named the seat of government for Roscommon County. State Representative Charles O’Malley, from Roscommon Ireland in 1843, named Roscommon County. Roscommon is an Irish word derived from the words “Ros” meaning wooded promontory or pleasant place and “Coman” an Irish saint.

The period from 1803 to 1874 saw the settlement of two major problems, namely the ceding of Indian title by treaty and the near completion of the rectangular survey by the General Land Office (GLO). These actions in turn spurred interest in pine logging along major rivers and pioneer settlement. Indian conflicts had earlier displaced the Sauk (Saginaw means place of the Sauk), Fox and Sioux from the northern Lower Peninsula. President Jackson forcefully moved most of the Potawatomi west of the Mississippi leaving the Ottawa and Ojibwa (Chippewa) as the dominant Indian tribes in Michigan.

Settlement in Roscommon County was founded on the lumbering industry. Thomas Nester emigrated from Ireland to the United States in December of 1833. In the 1870’s he began buying timberland in Roscommon, Gladwin and Clare Counties. In 1877 he and his partners began building a road from Ogemaw Springs to what is today called Atchell Lake in the southern Roscommon County. From Lake Atchell Mr. Nester built a railroad south to the Sugar River. This was known as the Lake Thomas and Tittabawassee Railroad. This railroad provided a means of transporting lumber from Roscommon County to the Tittabawassee River via the Sugar River.



A Michigan Central passenger train takes on passengers in Roscommon. The old LaRocque Lumber Company is shown on the left side of the photo. [Alan Loftis Collection]

The formation of railroads provided a means of transportation throughout Roscommon County. By the late 1800's these railways provided transportation for people from the Detroit area and other cities along the way to Roscommon. This was the beginning of the resort industry in Roscommon County. The population increased rapidly between 1880 and 1884 as a result of the pine logging operations. After 1884, as the pine forests were being exhausted, the population decreased. By 1900 no significant development was being undertaken or seemed likely for the near future. The logging operations had left great areas of cutover pine land, much of which had been burned by forest fires. At least partly because of the poor soils farm settlement was not successful on most of these cutover lands. By the early 1900's, many lands reverted back to the State of Michigan and became state forests. Between 1933 and 1941 the Civil Conservation Corps were utilized to reforest areas burned out in forest fires and to create parks and other recreational facilities. The 1930's brought about the installation of new infrastructure such as electricity and the paving of (Old) US-27 bringing more settlers and tourists to the area.



The Michigan Central depot in July, 1935. Note that by this time, the main crossing had automatic crossing protection. [Charles Milliken photo, Doug Leffler Collection]

The Michigan Central Railroad as successor of the “Jackson” line was one of the major players in platting vast areas of its land into small lots (25 by 100 feet) and promoting sale of lots nationwide at county fairs. Typically the lot title was a free prize provided the abstract was purchased. Excursions by horse and buggy were organized between the railhead at Roscommon Village and the various plats as well as to the small farms of eastern Gerrish Township. Some of the prime Higgins Lake east shore resorts date from this era and were a major factor in the early resort industry of Roscommon County. Other developers of large tracts of former “Jackson” line land extensively promoted small tracts (5 to 10 acres) of “golden muck” (i.e. sand soil) farms as wells as platted lots at Lake St. Helen. Duck hunting resources were purchased at Houghton Lake and Lake St. Helen and major absentee ownership resulted. Other wilderness land blocks of as much as 29 sections created club ownerships which continue to this day.

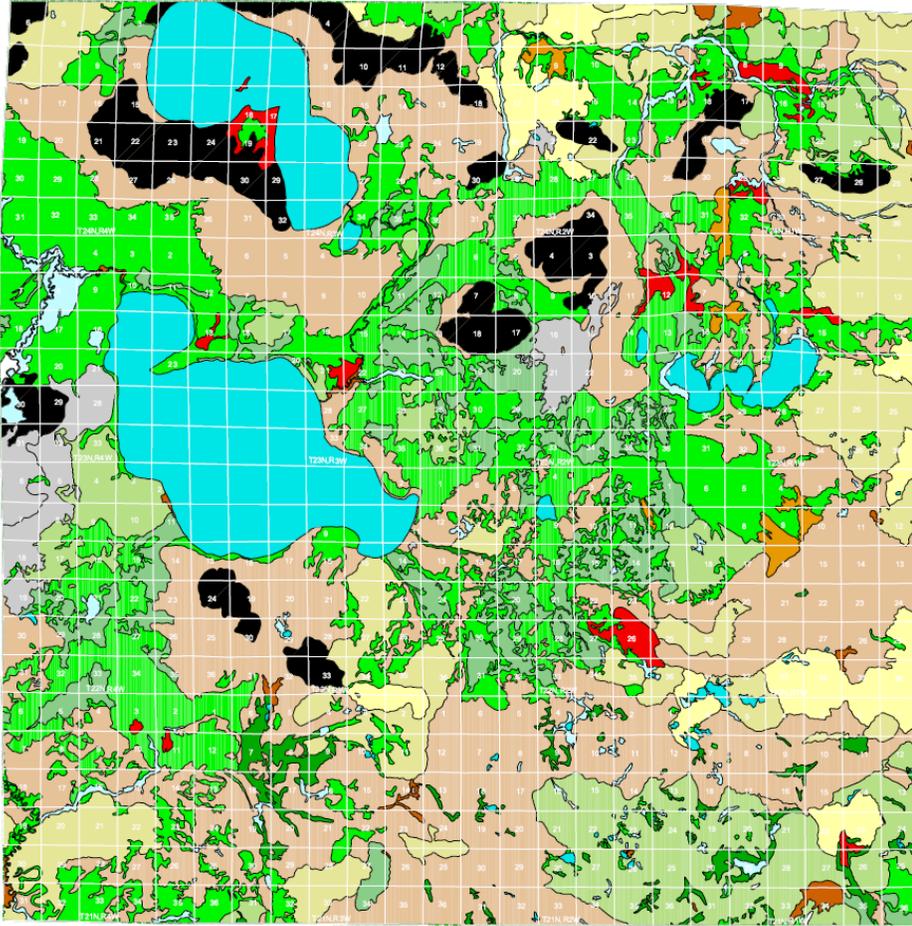
Farming continued in favored sites in Nester, Richfield, and AuSable Townships during the 1930’s and 1940’s as land was cleared by lumbering. Farms supplied lumber camps and mills with their various needs, but especially hay and other feed for their work animals. But, as lumbering camps moved on, most farms were abandoned because of the marginally sandy soils. Elsewhere, it survived by serving various resorts and summer visitors with specialty crops such as apples, raspberries, dewberries, cabbage, onions and mint. Existing resort and club ownership tended to be near self-sufficient with low employee needs, contributing

little but tax payments to the local economy. Farmlands never exceeded 13% of the county.



Road improvement was recognized as an absolute minimum for expansion of the resort industry at Houghton Lake, Michigan's largest inland lake and fabulous fishing resource. Earl Johnson of Johnson's Resort led the campaign. Major state highway construction on US-27, M-76, M-18 and M-55 was delayed by World War II but resumed in 1948. This road activity was accompanied by new resorts and motel construction. Small machine shops and auto industry parts manufactories were established at Prudenville and Roscommon Village after the roads were built.

A five-year moratorium on property taxes during the Great Depression ended with the day of reckoning in 1938. Over four and one-half million acres were deeded to the state in 1939: named the "Land Nobody Wanted" in one writing. The state Conservation Department created a local planning effort to help evaluate land suitable for farming or that to be included in expanded state forests and held for recreational use and future timber production. These tax-delinquent lands are the majority of the current state ownership in Roscommon County. This first major local planning effort largely set the pattern of future county development. Fire control and game regulations permitted forest regeneration and an exponential deer-herd expansion allowed hunting after years of prohibition.



Legend

- ✓ ■ ASPEN-BIRCH FOREST
 - ✓ ■ BEECH-SUGAR MAPLE FOREST
 - ✓ ■ BEECH-SUGAR MAPLE-HEMLOCK FOREST
 - ✓ ■ BLACK ASH SWAMP
 - ✓ ■ BLACK OAK BARREN
 - ✓ ■ CEDAR SWAMP
 - ✓ ■ GRASSLAND
 - ✓ ■ HEMLOCK-WHITE PINE FOREST
 - ✓ ■ HEMLOCK-YELLOW BIRCH FOREST
 - ✓ ■ JACK PINE-RED PINE FOREST
 - ✓ ■ LAKE/RIVER
 - ✓ ■ MIXED CONIFER SWAMP
 - ✓ ■ MIXED HARDWOOD SWAMP
 - ✓ ■ MIXED OAK FOREST
 - ✓ ■ MIXED OAK SAVANNA
 - ✓ ■ MIXED PINE-OAK FOREST
 - ✓ ■ MUSKEG/BOG
 - ✓ ■ OAK-HICKORY FOREST
 - ✓ ■ OAK-PINE BARREN
 - ✓ ■ PINE BARREN
 - ✓ ■ SAND DUNE
 - ✓ ■ SHRUB SWAMP/EMERGENT MARSH
 - ✓ ■ SPRUCE-FIR-CEDAR FOREST
 - ✓ ■ WET PRAIRIE
 - ✓ ■ WHITE PINE-MIXED HARDWOOD FOREST
 - ✓ ■ WHITE PINE-RED PINE FOREST
 - ✓ ■ WHITE PINE-WHITE OAK FOREST
- ✓ = LAND COVER TYPE PRESENT ON THIS MAP

Vegetation circa 1800

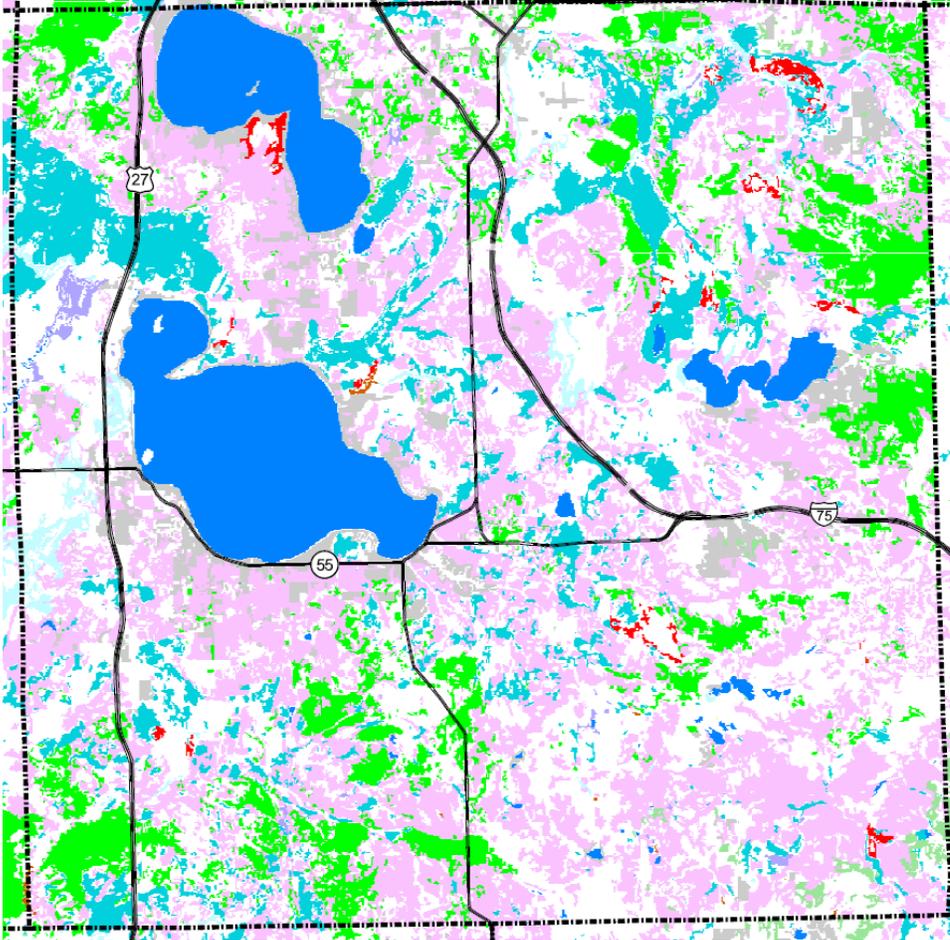
Creation of divided limited access Interstate Highways US-27 and I-75 in the 1960's dramatically shortened driving time from population centers to the south and has forever changed the character of the county. Many summer residencies were and are being upgraded into permanent homes. Major subdivision and house construction accelerated with special

concentration on the lands around the three major lakes. Zoning and planning was sought to bring order from potential chaos especially in dealing with problems of sewerage waste and water supplies. Roscommon County encouraged local-township zoning and planning and created a county planning commission whose initial charge was to promote the township boards.

School construction and improvements surged to meet expanding enrollment. Kirtland Community College was established in 1972 in AuSable Township. Its primary charge was to serve the post high school education needs of the four counties of Oscoda, Ogemaw, Crawford and Roscommon Counties.

Recent, Past & Present

From 1976-2000 Roscommon County was one of the top 10 counties in population increases in Michigan. Many residents of densely populated areas of southeast Michigan have moved north to what was formerly resort areas. The convenience of rapid transportation and a population have enabled both retirees, small entrepreneurs and those just wishing to be away from the city to relocate to Roscommon County. This placed pressure on scarce revenues of all local governments to provide for expanding service needs. Many new county, township or school buildings were constructed using voted bond funds. But new trends are having significant effects. Local school district enrollments have been declining and the immediate consequences of the current recession (although the ultimate consequences cannot yet be forecast) are causing the county, townships and village to curtail some services and constrict the level of all their activities.



Roscommon County Land Cover Change, 1800's to 1978

- | | |
|--|--|
| <ul style="list-style-type: none"> Major Roads County Lines Land Cover Change Class Herbaceous Openland Unchanged Savanna Unchanged Aspen/Birch Unchanged Central Hardwood Unchanged Northern Hardwood Unchanged Other Upland Conifer Unchanged Pine Unchanged | <ul style="list-style-type: none"> Lowland Conifer Unchanged Lowland Deciduous Unchanged Emergent Wetland Unchanged Shrub Wetland Unchanged Water Unchanged Sparsely Vegetated Unchanged Bedrock Unchanged Changed to Aspen Changed to Urban or Agriculture Other Change |
|--|--|

B. Geography

General Geography

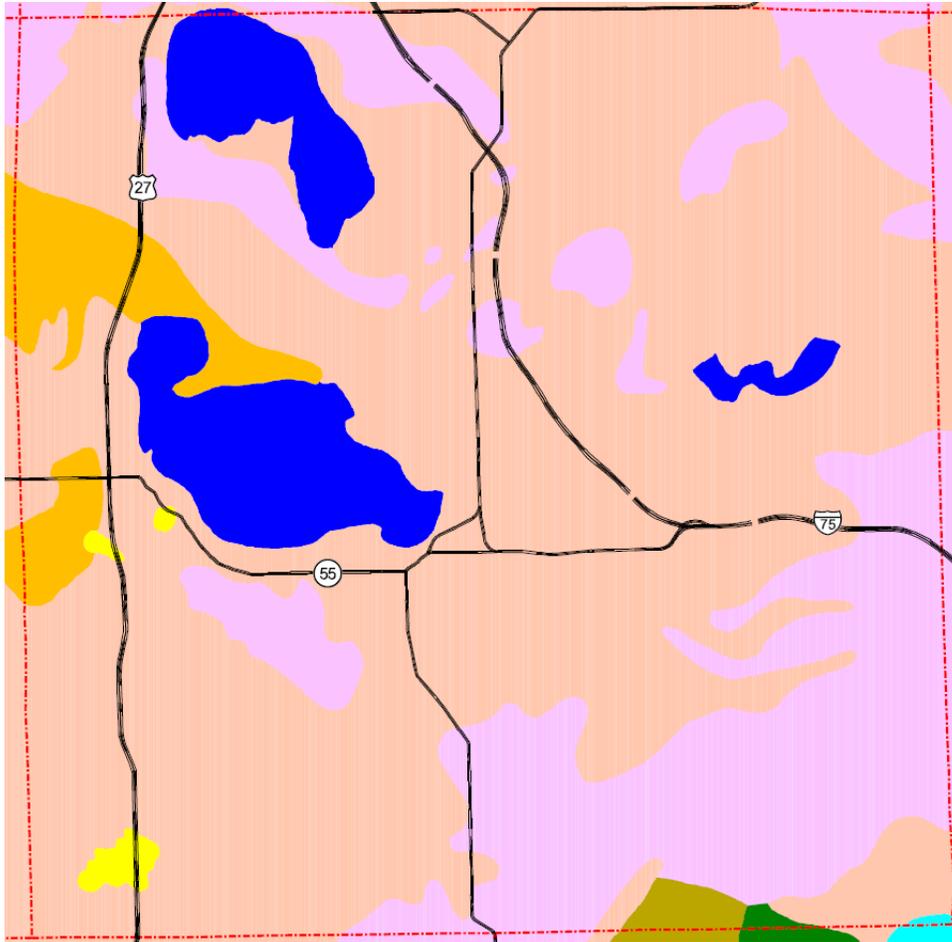
Roscommon County is in the north-central part of Michigan's Lower Peninsula and is surrounded by Crawford County to the north, Ogemaw County to the east, Gladwin and Clare Counties to the south, and Missaukee County to the west. The county comprises approximately 580 square miles with approximately 521 square miles of land and 58 square miles of water.

The terrain of the county is fairly flat to undulating with some hills on the easterly side of the county primarily east and south of the Village of Roscommon. Most of the westerly part of Roscommon County generally slopes from the east side to the west side, the northeasterly portion sloping to the northeast and with a portion of the southeast corner of the county sloping to the southeast. This drainage pattern generally follows the three major watershed within the county.

The highest elevation in the county is 1,579 feet at Indian Springs lookout tower, Richfield Township, Section 14, R.1W., T.22N. The lowest elevation is 850 feet in Nester Township, in the southeast corner of the county, Section 35, R.1W., T.20N

Geology

The topography of Roscommon County is mainly the result of the deposition and movement of materials during the Late Wisconsinan Glaciation. This glaciation was the last glacial epoch that affected Michigan. It lasted in this area from around 14,000 to 8,000 years before the present. Roscommon County is in the Michigan-Saginaw interlobate area, the southeast corner of the county having been slightly affected by the Saginaw Lobe. Kame moraines in the county date from the Port Bruce age, which approximates the advance of the Saginaw Lobe. The largest of these kame moraines extends from southeastern Richfield Township (the Indian Springs kamic area) to southeastern Roscommon Township. Other morainic features are found scattered throughout the county. Several of the more prominent ones are south of Houghton Lake and north, south, and southeast of Higgins Lake. Other landform features are end moraines, ground moraines, collapsed lake plains, and the Saint Helen outwash plain, which makes up most of the county and accounts for its sandy, nearly level appearance. Poned areas and bogs are also common throughout the county.



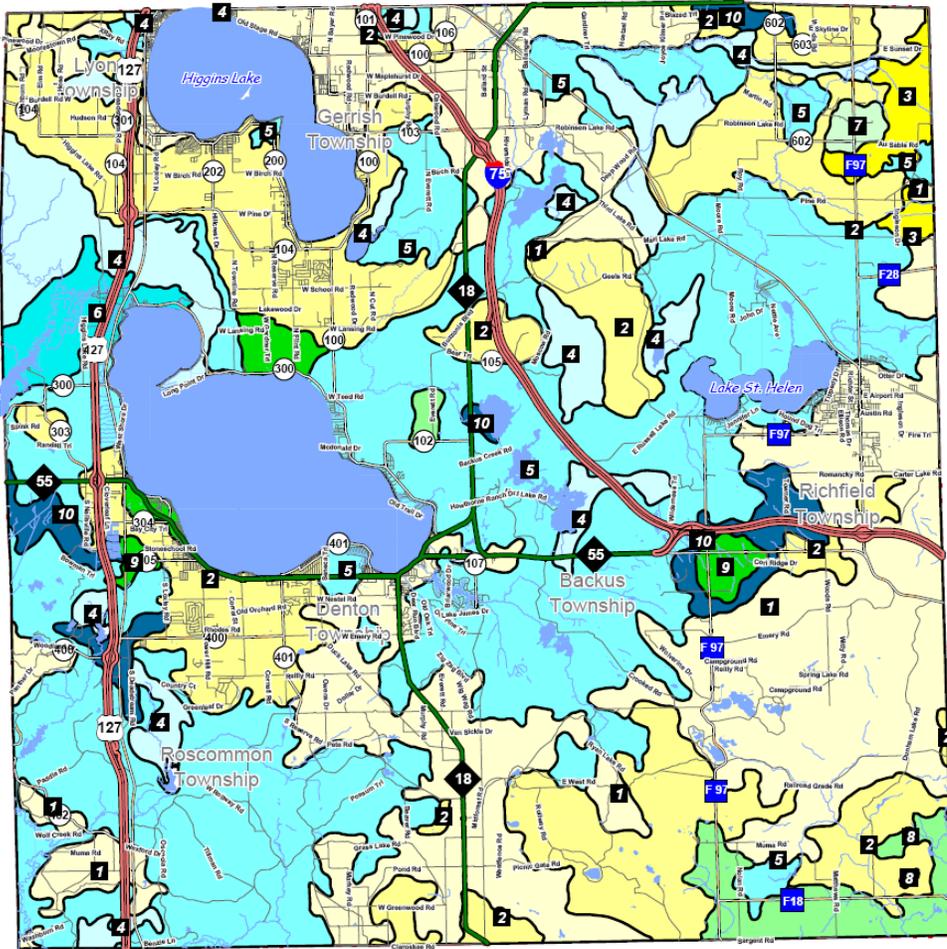
Roscommon County Quaternary Geological Map

Legend	
Major Roads	Ice-contact outwash sand and gravel
County Lines	Fine-textured glacial till
Geology class	
Water	End moraines of fine-textured till
Peat and muck	Medium-textured glacial till
Postglacial alluvium	End moraines of medium-textured till
Dune Sand	Coarse-textured glacial till
Lacustrine clay and silt	End moraines of coarse-textured till
Lacustrine sand and gravel	Thin to discontinuous glacial till over bedrock
Glacial outwash sand and gravel and postglacial alluvium	Exposed bedrock surfaces
	Artificial fill

Soils

Soils (unconsolidated) lying over the bedrock formations range in thickness from 400 to 700 feet. These materials for the most part were glacially deposited. Roscommon County soils consist of 10 primary soil associations. These include the Graycalm-Grayling Association, the Graycalm-Klacking-Perecheney Association, the Kellogg-Allendale Association, the Tawas-Lupton-Leafriver Association, the Croswell-Au Gres-Tawas Association, the Wakeley-Au Gres-Deford Association, the Debolt-Pinewood Association, the Nester-Morganlake-Rubicon

Association, the Kawkawlin-Sims-Nester Association, and the Wakeley-Allendale Association (see soils map below). Within these soil associations there are a total of 79 different types of soil map units. These soils include sands, sandy loam, loam, loamy sandy, sandy mucky, and muck in texture. There are also significant gravel deposits in Markey Township. The range of drainage class of these soils includes excessively drained, moderately well drained, well drained, somewhat poorly drained, poorly drained, and very poorly drained.



Soils Legend

- | | |
|---|---|
| 1 - Graycalm-Grayling association | 6 - Wakeley-Au Gres-Deford association |
| 2 - Graycalm-Klacking-Perechney association | 7 - Debolt-Pinewood association |
| 3 - Kellogg-Allendale association | 8 - Nester-Morganlake-Rubicon association |
| 4 - Tawas-Lupton-Leafriver association | 9 - Kawkawlin-Sims-Nester association |
| 5 - Croswell-Au Gres-Tawas association | Wakeley-Allendale association |

Roscommon County General Soils Map

Several of these soil types are not good for development. The soils that are somewhat poorly drained, poorly drained, and very poorly drained typically have high water tables throughout much of the growing season. This includes 37 of the 79 soil types. The unstable soil material and/or

high water table requires sufficient enhancements to provide proper support for building foundations, parking lots, septic system absorption fields, and other proposed uses that require solid ground for construction activities. Field review of such sites is recommended to determine soil properties in early planning stages.

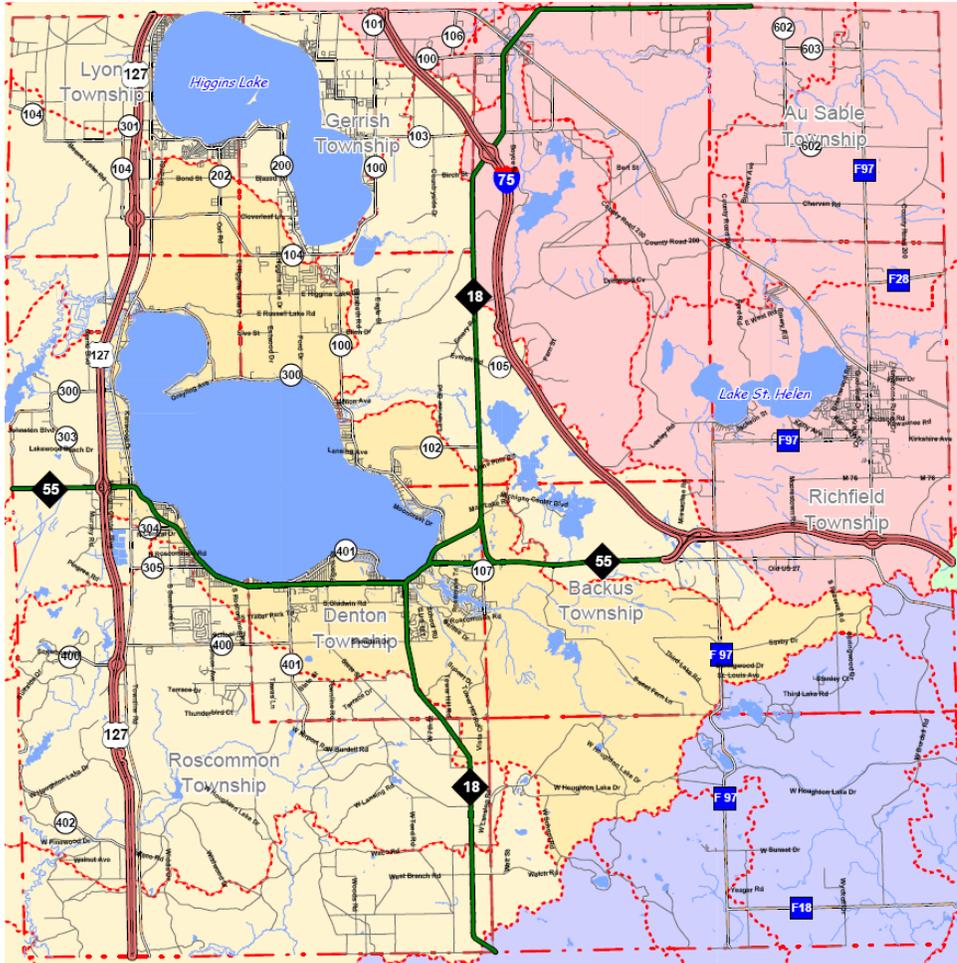
Hydrology

There are three principle watersheds in Roscommon County with numerous sub and sub-sub watersheds. The principle watersheds in the county include the Au Sable, Saginaw, and Muskegon. The Au Sable watershed is in the northeast portion of Roscommon County, roughly north and east of Interstate 75, and drains southeasterly into Lake Huron. The Saginaw watershed, from just north of the west and east Twin Lakes, is located in southeastern Roscommon County and also drains southeasterly, eventually emptying into Lake Huron. The Muskegon watershed, with the Muskegon River headwaters originating at the northwest end of Houghton Lake, drains westerly into Lake Michigan. The Muskegon watershed encompasses the area south and west of Interstate 75, excluding the southeast corner of the county.

The three largest lakes in the county are Houghton Lake, Higgins Lake, and Lake Saint Helen. Houghton Lake, the largest inland lake in Michigan, covers approximately 20,044 acres, has a maximum depth of about 20 ft., and has approximately 30 miles of shoreline. Higgins Lake, about 3.5 miles north of Houghton Lake, covers roughly 9,600 acres, has a maximum depth of around 141 feet, and has been referred to as the 6th most beautiful lake in the world. Lake Saint Helen, the third largest lake in the county and located east of Houghton Lake is about 2,400 acres in size and has a maximum depth of about 25 ft.

About 10 percent of the total land surface in the county is covered by water which includes additional numerous smaller lakes, ponds, and stream systems.

The major rivers found within Roscommon County are the Au Sable, Muskegon, Cut, and Tittabawassee Rivers. Additional streams and creeks can be found meandering throughout the county. Many of these are named and unnamed tributaries of larger watercourses. Some of these include the South Branch of the Au Sable River, West Branch of the Tittabawassee River, Backus Creek, Cameron Creek, Denton Creek, East Creek, and Hudson Creek, to name a few.



Watersheds Legend

-  AU GRES-RIFLE
-  AU SABLE
-  TITTABAWASSEE
-  MUSKEGON
-  MUSKEGON
-  MANISTEE

Roscommon County Watersheds

These lakes and streams, many of which are accessible to the general public, provide numerous opportunities for various types of recreational activities including power boating, canoeing, sailing, swimming, and fishing. The three largest lakes in the county are well known for their exceptional fisheries, providing countless hours of enjoyment for the novice as well as the experienced angler. An extensive variety of fish can be found in these lakes. Some of the sport fishes include large and small mouth bass, walleye, northern pike, yellow perch, channel catfish and bullheads, various trout species, and sunfishes including bluegill, crappie, rock bass, and pumpkinseed.

Protection of these water resources is crucial to the general welfare of the local communities not only for their value of promoting tourism and outdoor enjoyment, but also for their necessity of replenishing the underground aquifers that provide clean water for drinking, household, and other local uses.

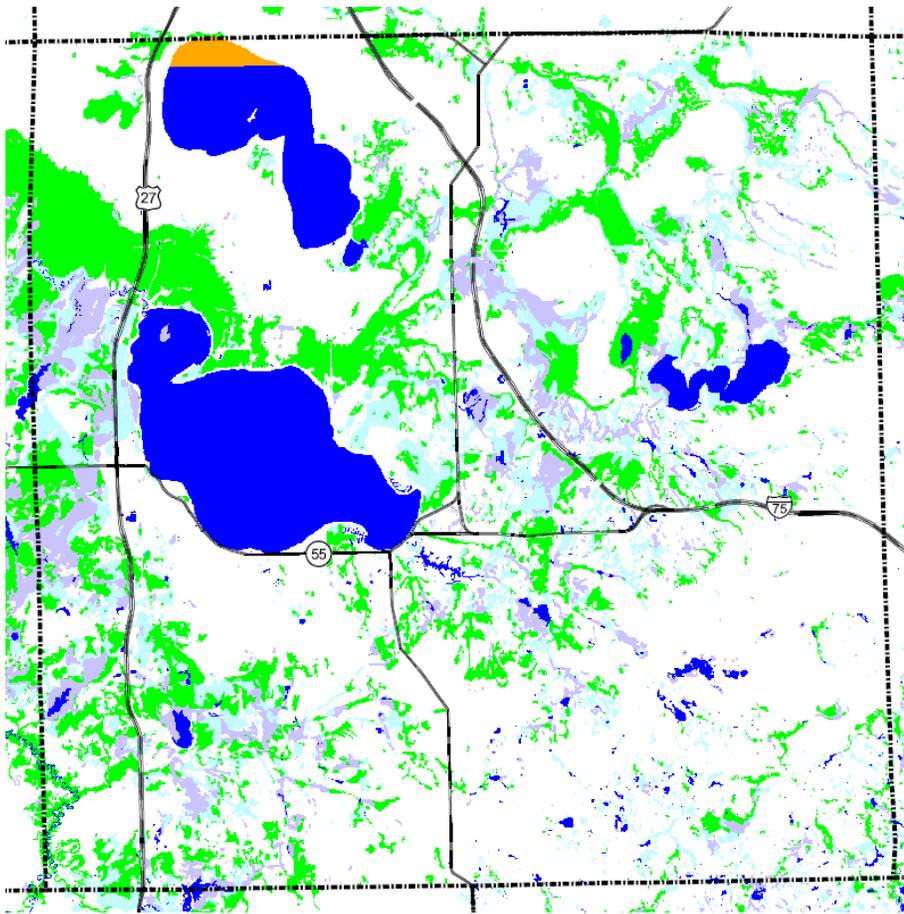
Climate

Roscommon County's climate varies greatly throughout the year, as does most of Michigan. In the winter the average temperature is 20.1 degrees F, with the lowest recorded temperature being -48 degrees F on February 1, 1918. In the summer the average temperature is 65.6 degrees, with the record high of 107 degrees on June 1, 1934. Total annual precipitation is 29.1 inches. The most precipitation falls between April and September adding up to 17.8 inches. Most thunderstorms occur in the month of July with an average of about 28 days of each year. The heaviest one-day rainfall of record fell on July 8, 1957 -- 5.18 inches. The average snowfall is 60.4 inches. On average, 108 days a year have at least one inch of snow on the ground. The greatest recorded seasonal snowfall of 124.1 inches fell in the winter of 1970-71. The lowest recorded seasonal snowfall was 24.0 inches in 1936-37.

The National Weather Service office at Houghton Lake (Roscommon County Airport) reports that the average relative humidity in mid-afternoon is about 64%. Humidity is higher at night, and average at dawn is about 85%. The sun shines 68 percent of time possible in summer and 32% in winter. The prevailing wind is from the southwest. Average wind speed is highest, 10.1 miles per hour, in January.

Freezing temperatures typically include the months of November through March with occasional freezes in September, April and May. The frost-free season is about 120 days. The average last killing frost is June 10th and the earliest is September 10th, but killing frosts have been recorded in every month of the year.

These climate factors, as well as the relatively poor quality of soils for agriculture previously discussed, have made attempts to farm in Roscommon County mostly unsuccessful. There are still a few cattle raising operations, but, by and large, the county has developed as part of a residential, tourism and light industrial region.



Roscommon County National Wetland Inventory



Fauna and Flora

The Au Sable State Forest encompasses much of Roscommon County and provides the area with a rich variety of natural resources and habitat types. These areas range from just a few acres to several hundred or even thousands of acres in size. These include dry northern and dry-mesic northern forests that are pine or pine-hardwood dominated communities often found on glacial lake plains. Additionally with these forested and scrub-shrub uplands, there are muskegs, bogs, northern fens, northern hardwood-conifer swamps, northern wet meadows, emergent and scrub-

shrub wetlands, and small private wood lots interspersed throughout the county.

The expansive Dead Stream Swamp area just west of US-27, consisting of over 11,000 acres, contains northern white cedar swamp, deciduous upland forests, as well as scrub-shrub and sedge meadow wetlands. Flooded portions of the swamp, developed as a result of the Reedsburg Dam, provide a vast wetland complex supporting a variety of wildlife species.

The abundant wildlife, which relies on these varied habitats, provides recreational opportunities not only for the residents of Roscommon County, but also for the multitude of visitors to the area. Large and small game hunting for species including white-tail deer, black bear, varying hare, cotton-tail rabbit, gray and fox squirrels, ruffed grouse, wild turkey, and numerous waterfowl are activities enjoyed by many.

Bird watching, wildlife observation, and nature photography, which have become preferred recreational activities not only in Michigan but in most other parts of the country as well can be easily pursued in the county. Roscommon County affords the participants of these activities extraordinary viewing opportunities made possible due to the great variety of available habitats and accessible state lands.

A host of mammals including red fox, coyote, muskrat, beaver, ground squirrel, chipmunk, mink, raccoon, porcupine, bobcat, and many others utilize the assorted environments in the county for raising young and maintaining the life cycle. Many types of plants, smaller animals, reptiles, amphibians, waterfowl, shorebirds, birds of prey such as bald eagles, hawks, and ospreys, and bird species including neo-tropical migrant songbirds as well as those that remain in the area all year long, all live and thrive in the area.

The large tracts of pine-forested canopies can be seen from the roadways while traveling throughout the area. The blaze of yellow and red hardwood leaves in the fall, seen throughout the county adds a welcome splendor prior to the drab browns and dark silhouettes of winter. The colorful profusion of spring, summer, and fall flowers in the open fields, along the roadways, and in the forests is a delight to gardeners, botanists and the general public. Numerous wildflowers, such as asters, daisies, goldenrods, milkweeds, and violets are just a tiny sampling of the existing species. Native grasses such as bromes, ryes, blue stems, panic grass, along with many others can be found dispersed within many portions of the county. Trees and shrubs including ash, aspen, maple, oak, pine, alders, dogwoods, Michigan holly, willows, and numerous additional

species abound throughout Roscommon County and the surrounding areas.

Within the many forms of the local wildlife including mammals, reptiles, amphibians, birds, insects, aquatic species, trees and flowers normally observed, there are some species which are not as readily visible. This is due in part to the rarity of the species, the preference for isolation and solitude, or requirements for areas of undisturbed habitat. The Michigan Department of Natural Resources and Environment, Wildlife Division has provided a listing of several species of wildlife shown as endangered, threatened, or special concern under federal and or state law that have been identified as having occurred within portions of Roscommon County. These include various plants, birds, reptiles, insects, and fish species.

One particular species of interest is the Kirtland's Warbler – *Dendroica kirtlandii*, a small migratory songbird that prefers specific aged stands of jack pine for breeding, nesting and rearing its young. A significant area of state land in the eastern portion of Roscommon County has been included with adjacent counties to the north and east as part of the Michigan Department of Natural Resources managed habitat to help sustain this small warbler. The management of these lands also results in habitat that is utilized by many other wildlife species.

The federally enacted Endangered Species Act of 1973, along with Part 365, Endangered Species Protection of the Michigan Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, provides protection for these important special resources. The presence of threatened or endangered species, however, does not preclude activities or development, but may require alterations to project plans. Other state statutes are in place to help protect and preserve the natural resources of the local communities, a few of which include wetlands, and inland lakes and streams protection.

The vast diversity of the natural resources found within Roscommon County provides education, recreation, and opportunities to appreciate the bounties of the natural world for those who reside and visit Roscommon County and its environment.

Roscommon County Special Animals & Plants

Scientific Name	Common Name	Federal Status	State Status
<i>Alasmidonta viridis</i>	Slippershell		T
<i>Appalachia arcana</i>	Secretive locust		SC
<i>Brachionycha borealis</i>	Boreal brachionyncha		SC
<i>Buteo lineatus</i>	Red-shouldered hawk		T
<i>Calypso bulbosa</i>	Calypso or fairy-slipper		T
<i>Chlidonias niger</i>	Black tern		SC
<i>Cirsium hillii</i>	Hill's thistle		SC
<i>Clemmys guttata</i>	Spotted turtle		T
<i>Clemmys insculpta</i>	Wood turtle		SC
<i>Coregonus artedi</i>	Lake herring or Cisco		T
<i>Coturnicops noveboracensis</i>	Yellow rail		T
<i>Cypripedium arietinum</i>	Ram's head lady's-slipper		SC
<i>Dendroica kirtlandii</i>	Kirtland's warbler	LE	E
<i>Emys blandingii</i>	Blanding's turtle		SC
<i>Festuca scabrella</i>	Rough fescue		T
<i>Gallinula chloropus</i>	Common moorhen		T
<i>Gavia immer</i>	Common loon		T
Great Blue Heron Rookery	Great Blue Heron Rookery		
<i>Haliaeetus leucocephalus</i>	Bald eagle		SC
<i>Ixobrychus exilis</i>	Least bittern		T
<i>Merolonche dolli</i>	Doll's merolonche		SC
<i>Notropis dorsalis</i>	Bigmouth shiner		SC
<i>Pandion haliaetus</i>	Osprey		SC
<i>Prunus alleghaniensis</i> var. <i>davisii</i>	Alleghany or Sloe plum		SC
<i>Rallus elegans</i>	King rail		E
<i>Sistrurus catenatus catenatus</i>	Eastern massasauga	C	SC
<i>Stagnicola contracta</i>	Deepwater pondsnail		E
<i>Villosa iris</i>	Rainbow		SC

State Protection Status Code Definitions

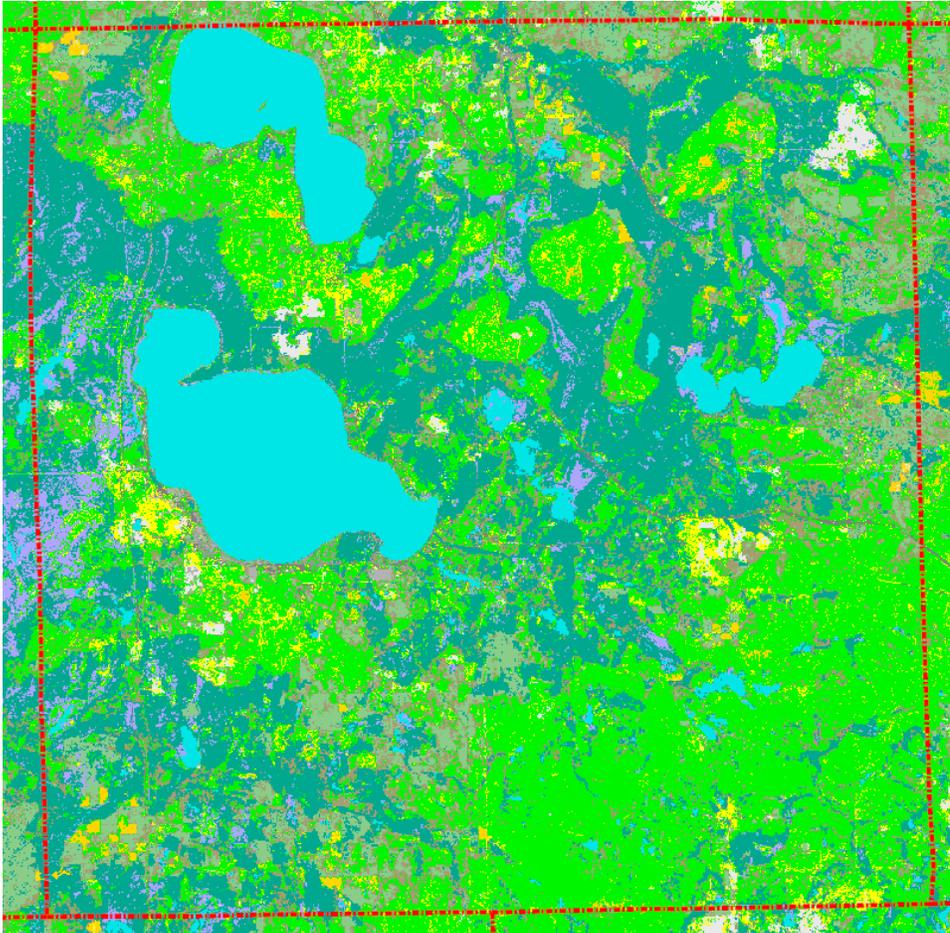
E	Endangered
T	Threatened
SC	Special concern

Federal Protection Status Code Definitions

LE	Listed endangered
C	Species being considered for federal status

C. Land Use and Development Patterns

Roscommon County consists of total area of 580 square miles with 521 square miles of land and 58 square miles of water (10%). The majority of the land in Roscommon County is wooded forestlands. Both Deciduous and Evergreen Forest are the dominant land cover from the 1992 Land Cover dataset provided by the United States Geological Survey (USGS) National Land Cover Data (NLCD).

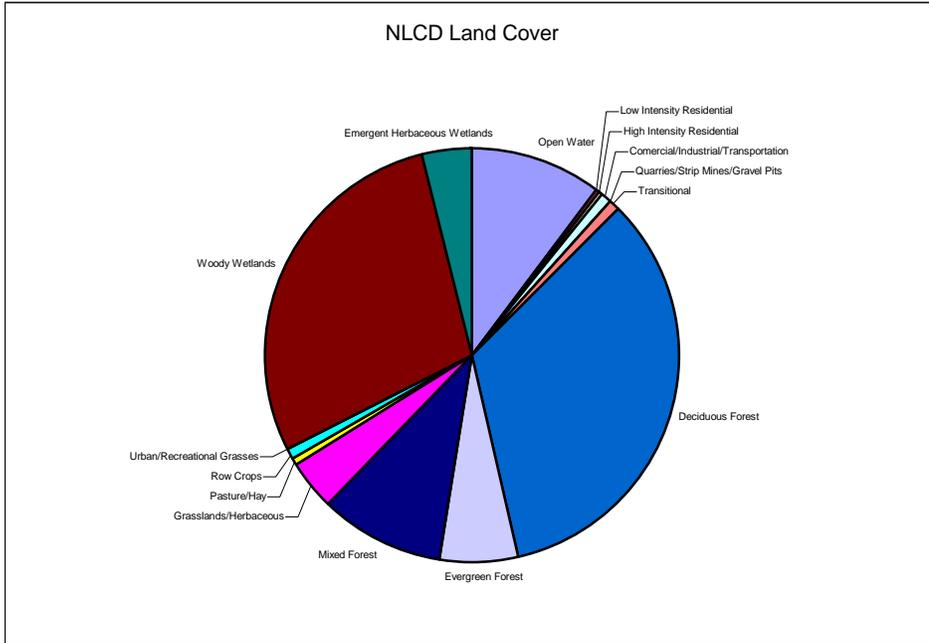


Roscommon County 1992 Land Cover



The NLCD is derived from the early to mid-1990s Landsat Thematic Mapper satellite data, the National Land Cover Data (NLCD) is a 21-class

land cover classification scheme applied consistently over the United States. The spatial resolution of the data is 30 meters and mapped in the Albers Conic Equal Area projection, NAD 83. This data has been included to determine types of land cover and perspective land uses for those covers. The chart and table below identify the designated land covers located in Roscommon county and the amount of each land cover.



Land Cover	% of Roscommon	Acres
Open Water	10.4%	38579.33
Low Intensity Residential	0.1%	532.41
High Intensity Residential	0.3%	980.31
Commercial/Industrial/Transportation	0.9%	3164.20
Quarries/Strip Mines/Gravel Pits	0.0%	3.78
Transitional	0.8%	2816.38
Deciduous Forest	34.0%	126018.30
Evergreen Forest	6.1%	22460.09
Mixed Forest	9.8%	36380.53
Grasslands/Herbaceous	3.8%	14090.57
Pasture/Hay	0.7%	2524.60
Row Crops	0.7%	2569.08
Urban/Recreational Grasses	0.1%	451.46
Woody Wetlands	28.6%	105929.14
Emergent Herbaceous Wetlands	3.9%	14391.91

The TM multi-band mosaics were processed using an unsupervised clustering algorithm. Both leaves-off and leaves-on data sets were analyzed. The resulting clusters were then labeled using aerial

photography and ground observations. Clusters that represented more than one land cover category were also identified and, using various ancillary data sets, models developed to split the confused clusters into the correct land cover categories. A hierarchical land cover classification scheme of 21 classes (a modified Anderson Land Cover Classification) was developed and applied in a consistent manner across the entire United States. The following list provides the definitions for each land cover that is located within Roscommon County.

Open Water - all areas of open water, generally with less than 25% cover of vegetation/land cover.

Low Intensity Residential - Includes areas with a mixture of constructed materials and vegetation. Constructed materials account for 30-80 percent of the cover. Vegetation may account for 20 to 70 percent of the cover. These areas most commonly include single-family housing units. Population densities will be lower than in high intensity residential areas.

High Intensity Residential - Includes highly developed areas where people reside in high numbers. Examples include apartment complexes and row houses. Vegetation accounts for less than 20 percent of the cover. Constructed materials account for 80 to 100 percent of the cover.

Commercial/Industrial/Transportation - Includes infrastructure (e.g. roads, railroads, etc.) and all highly developed areas not classified as High Intensity Residential.

Quarries/Strip Mines/Gravel Pits - Areas of extractive mining activities with significant surface expression.

Transitional - Areas of sparse vegetative cover (less than 25 percent of cover) that are dynamically changing from one land cover to another, often because of land use activities. Examples include forest clearcuts, a transition phase between forest and agricultural land, the temporary clearing of vegetation, and changes due to natural causes (e.g. fire, flood, etc.).

Deciduous Forest - Areas dominated by trees where 75 percent or more of the tree species shed foliage simultaneously in response to seasonal change.

Evergreen Forest - Areas dominated by trees where 75 percent or more of the tree species maintain their leaves all year. Canopy is never without green foliage.

Mixed Forest - Areas dominated by trees where neither deciduous nor evergreen species represent more than 75 percent of the cover present.

Grasslands/Herbaceous - Areas dominated by upland grasses and forbs. In rare cases, herbaceous cover is less than 25 percent, but exceeds the combined cover of the woody species present. These areas are not subject to intensive management, but they are often utilized for grazing.

Pasture/Hay - Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops.

Row Crops - Areas used for the production of crops, such as corn, soybeans, vegetables, tobacco, and cotton.

Urban/Recreational Grasses - Vegetation (primarily grasses) planted in developed settings for recreation, erosion control, or aesthetic purposes. Examples include parks, lawns, golf courses, airport grasses, and industrial site grasses.

Woody Wetlands - Areas where forest or shrubland vegetation accounts for 25-100 percent of the cover and the soil or substrate is periodically saturated with or covered with water.

Emergent Herbaceous Wetlands - Areas where perennial herbaceous vegetation accounts for 75-100 percent of the cover and the soil or substrate is periodically saturated with or covered with water.

Much of Roscommon County is owned by the State of Michigan as part of the Ausable State Forest. There are also a large number of privately owned clubs owning large tracts. The Mid Forest Lodge in Nester Township owns more than 18,000 acres and is the largest private landowner in Roscommon County. Most developed, privately-held land is resort-residential land around Lake St. Helen, Higgins Lake, and Houghton Lake.



Sign at the entrance of the “Mid Forest Lodge”. The largest private property owner in Roscommon County.

Political Divisions

Roscommon County is divided into eleven townships with only one incorporated village and no cities. Because of the terrain and large undeveloped areas of land the townships vary greatly in size and population.

Townships

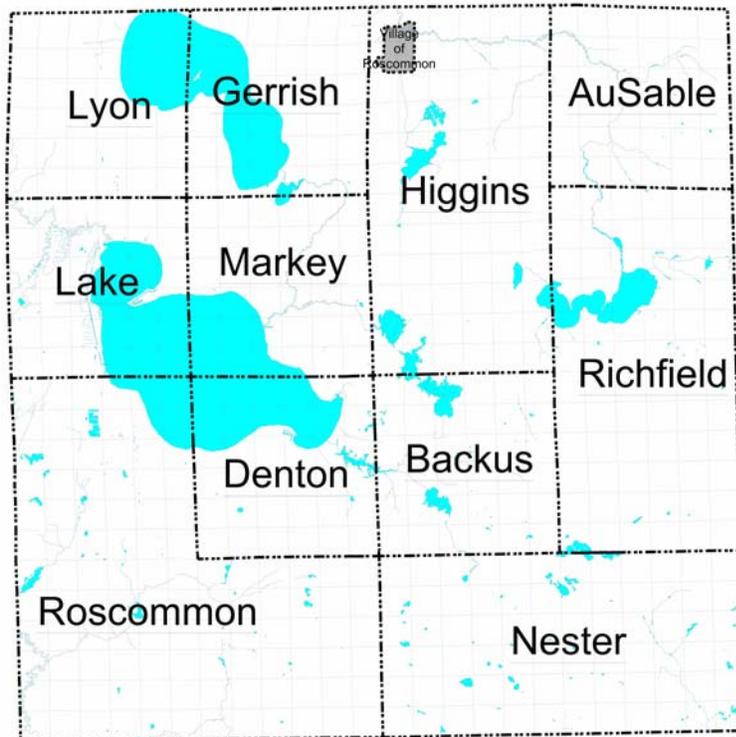
- AuSable Township – population 281
- Backus Township – population 350
- Denton Township – population 5,817
- Gerrish Township – population 3,072
- Higgins Township – population 2,061
- Lake Township – population 1,351
- Lyon Township – population 1,426
- Markey Township – population 2,424
- Nester Township – population 263
- Richfield Township – population 4,139
- Roscommon Township – population 4,249

Unincorporated Places

- Higgins Lake
- Houghton Lake
- Houghton Lake Heights
- Prudenville
- St. Helen
- Nester

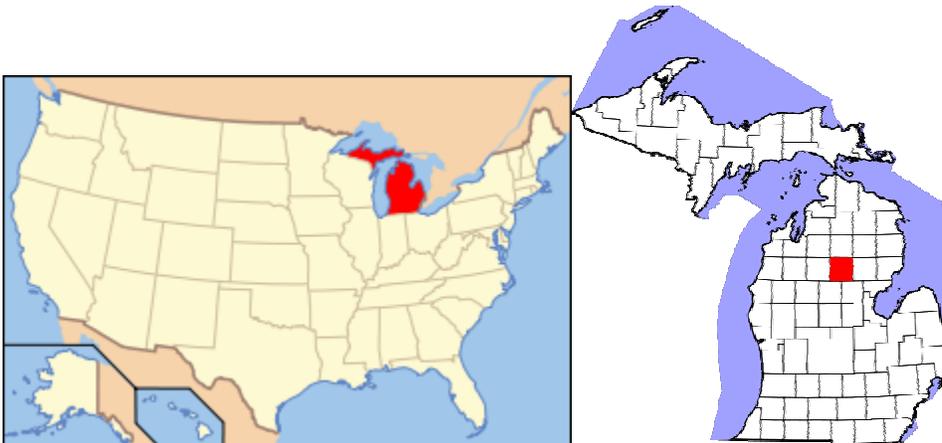
Incorporated Village

- Village of Roscommon – population 1,133



Each of the townships and village has zoning to regulate growth and development, to protect natural resources and property values, and to provide needed services and business opportunities. There are three main areas of commercial activity in the county. In Roscommon Township and Lake Township around the M-55 / US-127 intersection, in Roscommon and Denton Townships along M-55, and in the Village of Roscommon. Backus Township also has considerable area zoned for business at the intersection of M-55 and I-75, and along M-55 west. In the “unincorporated places” indicated above, there are various businesses that serve mostly local residents and seasonal visitors.

Dense residential areas surround the large lakes and are in the Village of Roscommon and the other unincorporated places. Within these areas, resorts and other tourist related uses are often allowed. Elsewhere there are residential subdivisions, scattered rural residences, and a few farms.



Regional Perspective

Roscommon County is considered part of Northern Michigan, that area of the state located north of Clare. In general this area has no large metropolitan areas, has vast forests, lakes, streams and other natural areas with relatively low population densities. Because of relatively poor soils and a shorter growing season than most of southern Michigan, agriculture plays a small role in the region. The county is at the center of a triangle of moderate size cities – Cadillac, West Branch and Grayling / Gaylord where some manufacturing and other businesses are more prevalent. On the west Cadillac is located on US-131 and on the east is West Branch on I-75. US-127 runs north from Clare through Roscommon County where it joins I-75 just north of the Crawford County line and continues north through Grayling and Gaylord to the Mackinaw Bridge and beyond.

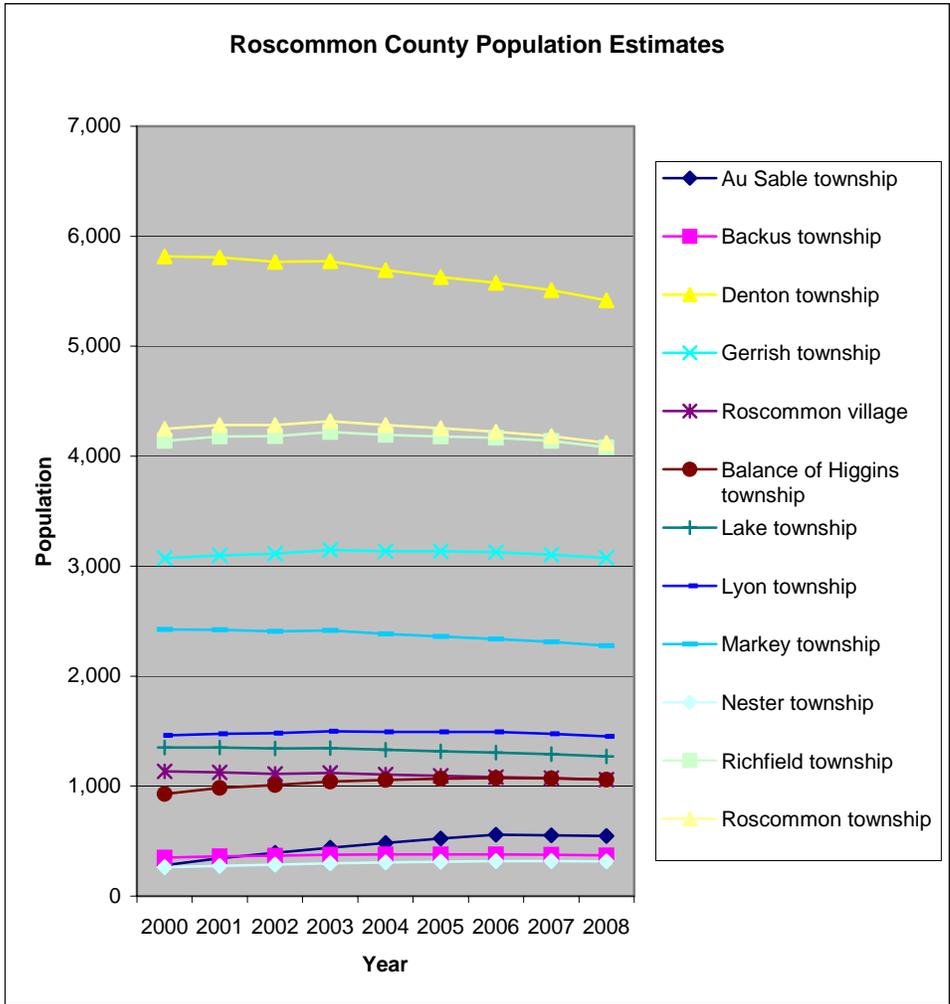
D. Demographic Trends

The population of Roscommon County is estimated to be 25,042, continuing a declining trend from the estimated 2003 population (-1.7% since 2000). Up until the 2003 the Roscommon County population had grown substantially increasing between 1990 and 2000 by almost 6,000 persons, a 29% increase. Because of the recent and on-going national and worldwide recession, this decreasing population trend may continue or accelerate. Not all of the county's townships are following this trend, but most are.

Population Trends				
	2000	Est. 2003	Est. 2007	% Change from 2003 to 2007
Roscommon County Townships				
AuSable Township	281	441	556	26%
Backus Township	350	376	277	-26%
Denton Township	5,817	5,774	5,533	-4%
Gerrish Township	3,072	3,147	3,120	-1%
Village of Roscommon	1,133	1,121	1,078	-4%
Higgins Township	928	1,042	1,076	3%
Lake Township	1,351	1,347	1,296	-4%
Lyon Township	1,462	1,498	1,484	-1%
Markey Township	2,424	2,415	2,323	-4%
Nester Township	263	299	318	6%
Richfield Township	4,139	4,220	4,157	-1%
Roscommon Township	4,249	4,318	4,199	-3%
Roscommon County & Surrounding Counties				
Roscommon County	25,469	25,998	25,517	-2%
Clare County	31,252	31,405	30,697	-2%
Crawford County	14,273	14,621	14,550	<-1%
Gladwin County	26,023	26,859	26,287	-2%
Kalkaska County	16,571	17,129	17,188	<1%
Missaukee County	14,478	15,012	14,976	<-1%
Ogemaw County	21,645	21,723	21,338	-2%
Oscoda County	9,418	9,380	8,938	-5%
Michigan	9,938,444	10,065,881	10,071,822	<1%

Source: Michigan Department of History, Arts and Libraries

Residents are primarily rural or live within urbanized clusters such as around the lakes or unincorporated places.



The county’s population is also aging. The current estimated median age is 47.2 years of age. In 1990 it was 44.9 years of age; and in 1980 it was 40.5. The number of persons over age 65 is increasing quite substantially while those nine and under are decreasing almost as quickly (as we note in the section on schools regarding the declining student enrollments).

Median Age			
	1980	1990	2000
Roscommon County	40.5	44.9	47.2
State of Michigan	28.8	32.6	35.5
United States	30.0	33.0	35.3

Possible reasons for this trend are lower birth rates (9.9/1,000 persons in 1990 vs. 7.9/1,000 persons in 2000), younger wage earners leaving (20-29 year olds are two cohorts with the fewest number of people) and these folks then perhaps returning to retire, as well as, former seasonal residents from elsewhere (most from southeast Michigan) making Roscommon County their permanent home. Following national trends, the number of households is increasing rapidly (8,516 in 1990 vs. 11,250 in 2000) while the size of households is decreasing (2.74 in 1990 vs. 2.23 in 2000). Education attainment is increasing in the county yet still lags behind the rest of the Michigan. Eighty percent of the population of the county are high school graduates versus eighty-three percent of the state, but only 10.9% have bachelor's degrees as opposed to 21.8% of the state's residents.

Roscommon County Population Composition			
	1990	2000	2007 Estimate
White	19,597	25,005	25,364
Black	37	82	107
American Indian / Alaskan Native	101	163	197
Asian or Pacific Islander	23	60	25
Two or more races	18	159	290
Total	19,776	25,469	25,074
Hispanic or Latino (of any race)	94	204	248

About 95.7% of county residents are white. About 86% own their homes and well over half have lived in the same house at least since 1995, the median value of the house being \$78,900. These home values as well as median household income of Roscommon County residents are about two-thirds of state values. The county median income in 2007 was estimated to be \$31,676 while Michigan's was \$44,931. About 20.5% of the county's population in 2007 were considered to be below the poverty level (vs. 13.9% in the state).

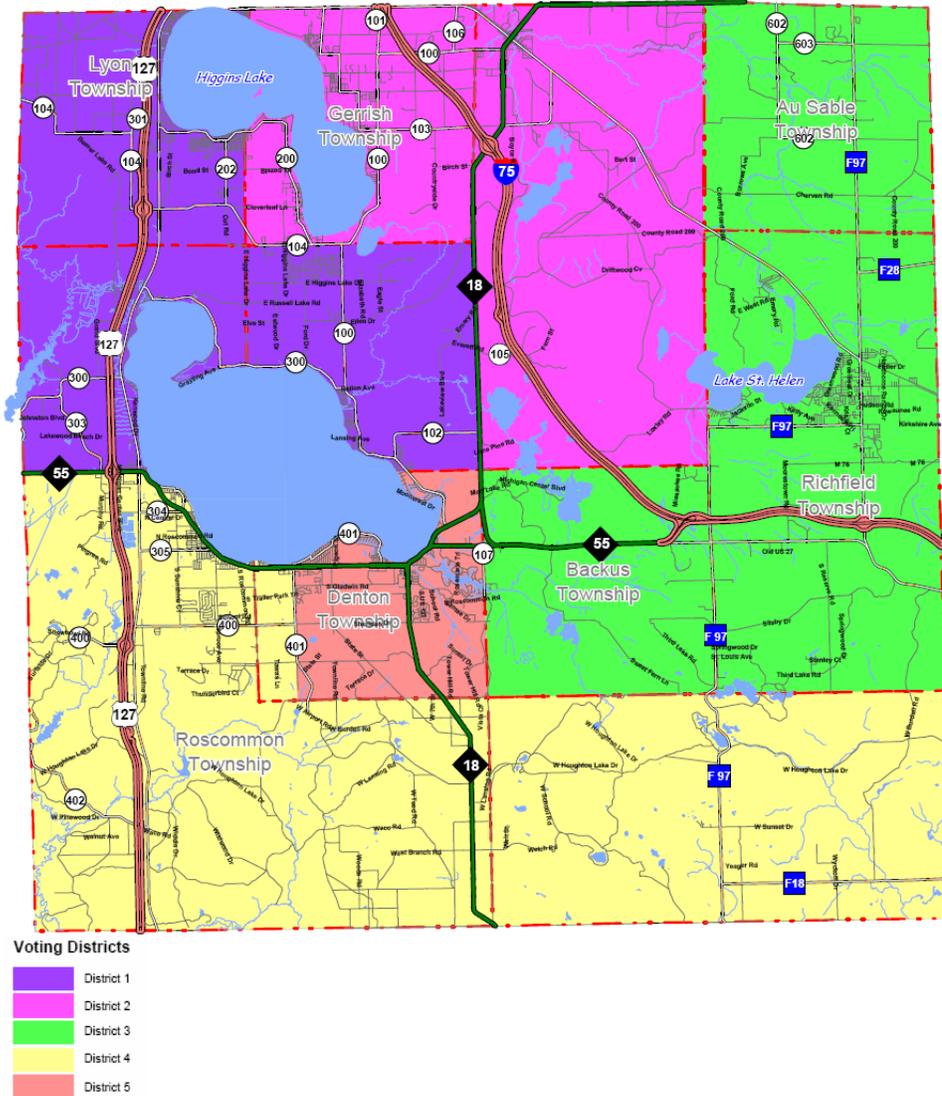
E. Community Facilities and Services

County Government & Services

Roscommon County is governed by its elected Board of Commissioners consisting of five commissioners, each representing a distinct district. The county government operates the jail, maintains rural roads, operates the major local courts, keeps files of deeds and mortgages, maintains vital records, administers public health regulations, and participates with the state in the provision of welfare and other social services. The county board of commissioners controls its budget, but under state law, it has limited authority to make laws or ordinances. In Michigan, local government functions such as elections, fire suppression and emergency medical services, building and zoning, tax assessments and street maintenance are the responsibility of individual cities and townships.

The county seat is in the Village of Roscommon where the courthouse, jail and most of the other county department offices are located. These departments include the offices of the:

- Controller
- Prosecuting Attorney
- Sheriff
- Central Dispatch
- Emergency Services
- Clerk / Register of Deeds
- Treasurer
- Equalization
- Mapping & Systems Coordinator
- Commission on Aging
- Housing Commission
- Veterans Affairs
- MSU Extension
- Drain Commission
- Gypsy Moth Suppression Program
- The Courts
 - 34th District Court
 - Friend of the Court and Community Corrections, CCAB
 - Probate Court
 - Second Chance Academy



The Animal Control Building is in Prudenville as is the Roscommon County Road Commission, County Health Department and the Roscommon County Transit Authority. The Juvenile Detention center is in the CRAF Center Building in Roscommon. The Roscommon County – Blodgett Memorial Airport is in Markey Township. The Houghton Lake Building Agency and the Houghton Lake Sewer Authority are in Roscommon Township.

The State of Michigan has offices of the Department of Human Services, Conservation Services and Department of Natural Resources in the Village of Roscommon. The offices of the Secretary of State are located at the Denton Township Hall in Prudenville.

Roscommon County does not have a licensed landfill within the county. The individual townships contract with waste haulers for solid waste management. The county has a Recycling Coordinator and an appointed Solid Waste Recycling Committee.

The Sheriff is aided in law enforcement by the Michigan State Police, Denton Township Police, the Richfield Township Police and the Gerrish Township Police. Most department heads and/or officers in the county are appointed or hired, but the sheriff, road commissioners, drain commissioner, clerk, treasurer, judges and prosecuting attorney are elected. The county also provides planning services through its Planning Commission of seven appointed planning commissioners.

Denton Township has its own Fire Department that services Denton Township. Richfield Township has its Department of Emergency Services, Fire Division that services Richfield Township. Gerrish Township Fire/EMS Department services Gerrish Township. Higgins Township Fire/EMS Department services Higgins Township and the Village of Roscommon. Markey Township Fire/EMS Department services Markey Township. Roscommon Township Fire Department services Roscommon Township.

Emergency Medical Services are provided in Roscommon County by a number of different facilities. The Denton Township Ambulance Service provides coverage with two Advanced Life Support Ambulances full time to Denton Township. Richfield Township has its Department of Emergency Services, EMS Division that provides ambulance service to the township. Gerrish Township Fire/EMS Department provides Gerrish Township with ambulance services. Higgins Township Fire/EMS Department provides Higgins Township and the Village of Roscommon with ambulance services. Markey Township Fire Department provides Markey Township with ambulance services. Houghton Lake EMS provides Roscommon and Lake Townships with ambulance services.

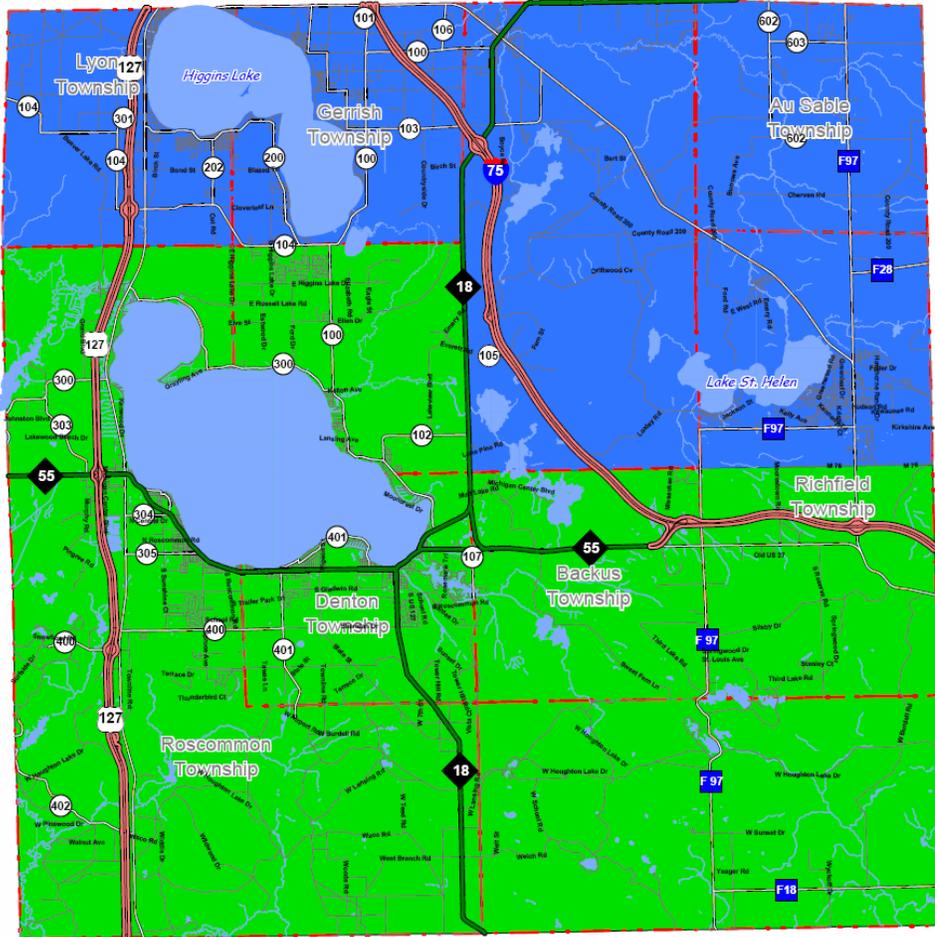
Area hospitals include the West Branch Regional Medical Center (WBRMC) in West Branch offers full medical and surgical services including cardiopulmonary services, nutrition services, laboratory services, diagnostic services, rehabilitation services, pain clinic, general surgical services, plastic/reconstructive services, orthopedic services and gynecological / urology services. WBRMC has a 24-hour emergency room staffed with board certified medical doctors. WBRMC also collaborated with St. Mary's Hospital of Saginaw to construct the Seton Cancer Institute that offers oncology services, radiation, chemotherapy, and hematological services. WBRMC also maintains Lakeside Medical Arts Center in Prudenville offer both primary and specialty care.

Mercy Hospital in Grayling serves the community. Services include Inpatient care, extended care, 24-hour physician-staffed Emergency Department, general and specialty surgery services and outpatient services including: Radiology, Laboratory, Cardiopulmonary, Cardiac Rehabilitation, Physical Therapy, Occupational Therapy, Speech Therapy, Diabetic Education, Nutrition Services, Occupational Health, Holistic Health, and Sleep Lab

MidMichigan Medical Center of Gladwin also provides the area with medical services. MidMichigan Medical Center-Gladwin is a 25-bed primary care hospital providing general medical and surgical care for inpatients and 24-hour emergency room coverage. They also provide a wide range of services including: Cardiopulmonary, Imaging services, Laboratory, Pharmacy, Rehabilitation services, and Sleep Lab. MidMichigan Health Park is a medical outpatient facility with a full range of outpatient services including primary and specialty care by physicians from the Medical Centers in Clare and Midland, as well as an Urgent Care facility in Houghton Lake.

Schools & Libraries

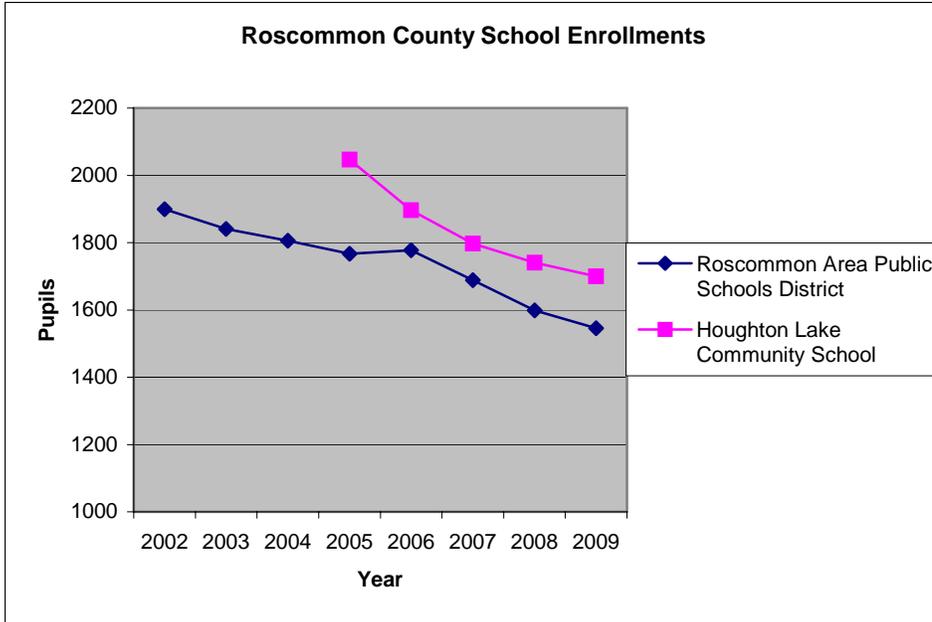
Primary and secondary education is supplied by two school districts the Roscommon Area Public Schools and the Houghton Lake Community Schools. The COOR Intermediate School District includes the counties of Crawford, Oscoda, Ogemaw and Roscommon, an area covering 2400 square miles. Within this area C.O.O.R. serves six local public school districts, Crawford-AuSable, Mio AuSable, Fairview, Houghton Lake, West Branch-Rose City and Roscommon Area Public Schools. The ISD acts as a link between the Michigan Department of Education and local school districts. The ISD provides Special Education, Career and Technical Education, Information Technology and General Education programs and services on request that single local districts find difficult or impossible to provide.



School District Map for Roscommon County. The Blue area is Roscommon Area Public Schools District and the Green is The Houghton Lake Community School District.

The Roscommon Area Public Schools District serves about 1,500 pupils in a 350 square mile area of central Northern portion of the Lower Peninsula of Michigan in Roscommon County. The Roscommon Area Public Schools District includes the northern portion of Roscommon County and a portion of southeastern Crawford County. Houghton Lake Community School District serves about 1,700 pupils in a nearly 500 square mile area that comprises of the southern portion of Roscommon County and the eastern portion of Missaukee County.

The Roscommon Area Public Schools District includes Roscommon Elementary School, Roscommon High School, and Roscommon Middle School. The Houghton Lake Community School District includes Collins Elementary School, Houghton Lake Middle School and Houghton Lake High School. Houghton Lake Community Schools closed Merritt Elementary School and Prudenville Elementary in 2005 due to declining enrollment and funding.



It is important to note that school enrollments have been declining drastically causing great financial difficulties. The Roscommon Area Public Schools District enrollment dropped by almost 20% from 2002 to 2009. The Houghton Lake Community School District enrollment similarly declined almost 20% from 2005 to 2009. These are trends that must be addressed in planning for the county.

Higher education is available to the township through Kirtland Community College, Delta College in Bay City, Saginaw Valley State University in Saginaw and Mid-Michigan Community College in Harrison as well as other state universities such as MSU, U. of M. and CMU. Kirtland Community College has enlarged its capacity by constructing new buildings to house new health care training and police academy training on an expandable scale. In addition more recent expansion of academic programs in automotive technology, computer sciences and industrial technologies have allowed the college to continue to provide advanced education and career opportunities for the surrounding community.

On March 7, 1966, in accordance with provisions of Public Act 188 of the Michigan Public Acts of 1955, Kirtland Community College was created by a vote of the electorate from six local K-12 school districts: Crawford-AuSable, Fairview Area, Gerrish-Higgins Schools, Houghton Lake, Mio-AuSable, and West Branch-Rose City. Kirtland is the largest Michigan community college district, totaling 2,500 square miles and consisting of all or part of nine counties. Approximately 65,000 people reside within the Kirtland district.



Sign at the entrance of Kirtland Community College.

Kirtland Community College, located close to the geographic center of the college's district, is accessible by F-97 from the north and south and by M-18 to County Road 603 from the west.

Kirtland Community College offers transfer degrees in the following areas:

- **Associate in Arts** – majors include: Art, Anthropology, Archaeology, Communications, Criminal Justice, English, Geography, History, Humanities, Journalism, Music, Political, Science, Pre-Law, Psychology, Social Science, Social Work, Sociology, Theatre
- **Associate in Business Administration**
- **Associate in Computers** - Computer Science or Information Systems
- **Associate in Criminal Justice** - Generalist
- **Associate in Fine Arts:** Creative Writing, Studio Art or Theatre Arts
- **Associate in Science** - Life Science or Physical Science – majors include: Actuary, Audiologist/speech, Biology, Chemistry, Clinical laboratory science, Dentist, Dietician, Math and Science Education, Engineering, Forensics, Medicine, Occupational therapist, Ophthalmologist, Pharmacist, Physical therapy, Physics. Veterinarian
- **Associate in Teaching** – majors include: Elementary, Secondary or Special Education

Kirtland Community College offers two-year applied science degrees in the following areas:

- 3-D Product Design
- Administrative Assistant
- Advanced Word Processing Specialist
- Animation and Game Design

- Automotive Technology
- Business Management
- Cardiac Sonography
- Carpentry
- Corrections Administration
- Corrections Administration - Jail Administration
- Cosmetology
- Criminal Justice Administration
- Criminal Justice Pre-Service
- Electrical Technology
- Emergency Medical Services
- Fire Science Administration
- Graphic Design
- Heating/Ventilation/AC/Refrigeration
- Industrial Maintenance
- Legal Secretary
- Medical Secretary
- Medical Transcription
- Nursing-Associate Degree in Nursing Level II
- Outdoor Power Engines
- Paraprofessional
- Radiography (partnership program)
- Surgical Technology
- Technology Management
- Welding and Fabricating

Kirtland Community College offers one-year certificated in the following areas:

- Automotive Chassis Specialist
- Automotive Diesel Service Specialist
- Automotive Electrical Systems Specialist
- Automotive General
- Automotive Powertrain Specialist
- Automotive Technology Auto Body Specialist
- Automotive Technology Master Certification
- Basic Emergency Medical Technician (EMT)
- Bookkeeping
- Carpentry
- Computer Technician
- Correctional Officer
- Cosmetology
- Cosmetology Instructor
- Electrical Technology
- Entrepreneurship
- Fire Science
- General Business
- General Studies
- Graphic Design
- Heating/Ventilation/AC/Refrigeration
- Industrial Maintenance
- Limited Specialist – Manicure Instructor
- Limited Specialist – Natural Hair Cultivation Instructor
- Limited Specialist – Skin Care Instructor
- Medical Billing and Coding
- Medical Clerk
- Medical Transcription
- Nail Technician
- Natural Hair Cultivation
- Nursing - Practical Nursing – Level I
- Office Assistant
- Outdoor Power Engines
- Paramedic
- Skin Care Technician
- Surgical Technology
- Web Master
- Welding & Fabricating
- Word Processing Specialist

There are 3 public libraries in Roscommon County as well as the library located at Kirtland Community College. The Roscommon Area Public Schools District has a public library located at the Roscommon High School in Roscommon that is open Monday through Thursday all year round and Monday through Friday during the school year. They also have a branch library located on the west side of Higgins Lake in the Lyon

Township Hall. The library has three-drop boxes for public convenience. They are located at the Board of Education Office, Public Library, and the Lyon Township Branch.

The Houghton Lake Public Library is located in Houghton Lake and is open Monday through Saturday. Established originally as a school district public library in 1964, the Library Board of Trustees chose to become a district library in 1995 and passed a successful millage in 1996 to provide a stable funding source for the library. Named in March 2005 as one of the best small libraries in America by Library Journal and the Bill & Melinda Gates Foundation, the Houghton Lake Public Library offers services, programs, a collection of almost 42,000 items in various formats (books, audio books, music CDs, DVDs, videos, magazines, newspapers, large print materials, and more), and free Internet access (including wireless). Most library services are free except for minimal charges for printing or photocopying and overdue fines on videos or DVDs. Other free services include interlibrary loan, reserves on materials, and online access (both in-house and remote) to reference databases. Awarded the first State Librarian's Excellence Award in Michigan in 2001, the library was cited for exemplary public service. Though small and rural, the Houghton Lake Public Library strives to provide the same kinds of services and programming that larger libraries provide. The library remains patron-centered with the Board of Trustees, staff, and volunteers working together to provide a quality library with excellent services.

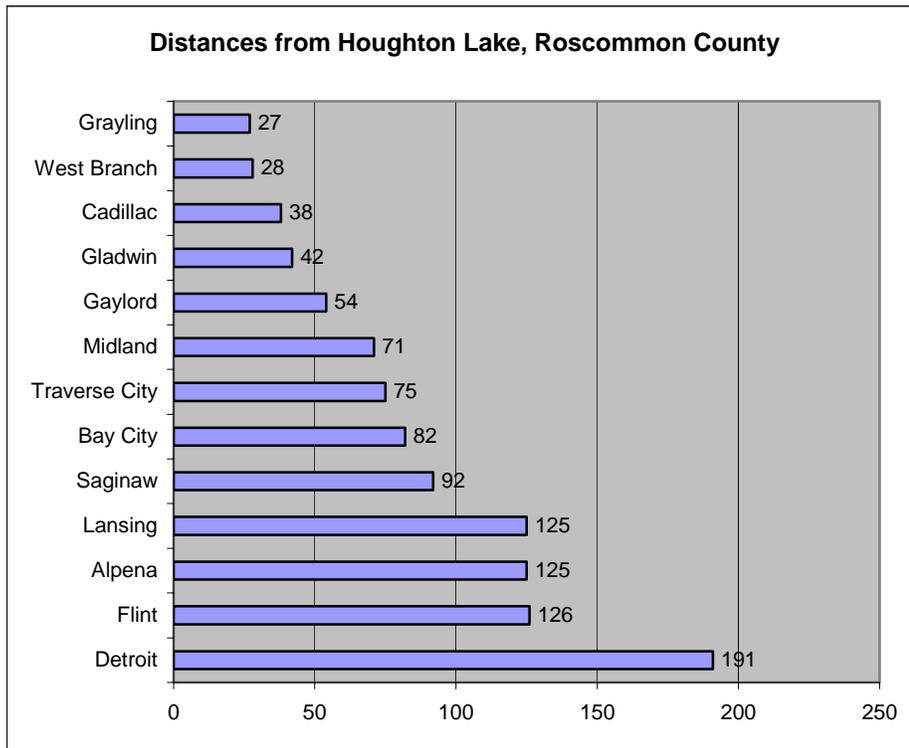
Richfield Township Public Library located in St. Helen also provides many of the same services as the Houghton Lake Libraries.

The Library at Kirtland Community College is also open to the general public and offers a number of services. A large number of reference materials are available and reference librarians are available to assist in research. Librarians are available to help find demographic, marketing, and other information necessary for preparing a successful business plan. The Library also has lists of wholesalers and suppliers, and online resources to help the businessperson. The Kirtland Library offers a online catalog, WebCat. Kirtland Library subscribes to a variety of online indexes. These indexes help you find articles in magazines, journals, newspapers, and professional literature. The online indexes are available from within the Library. Residents of Michigan can use some of the indexes from home.

F. Transportation and Utilities

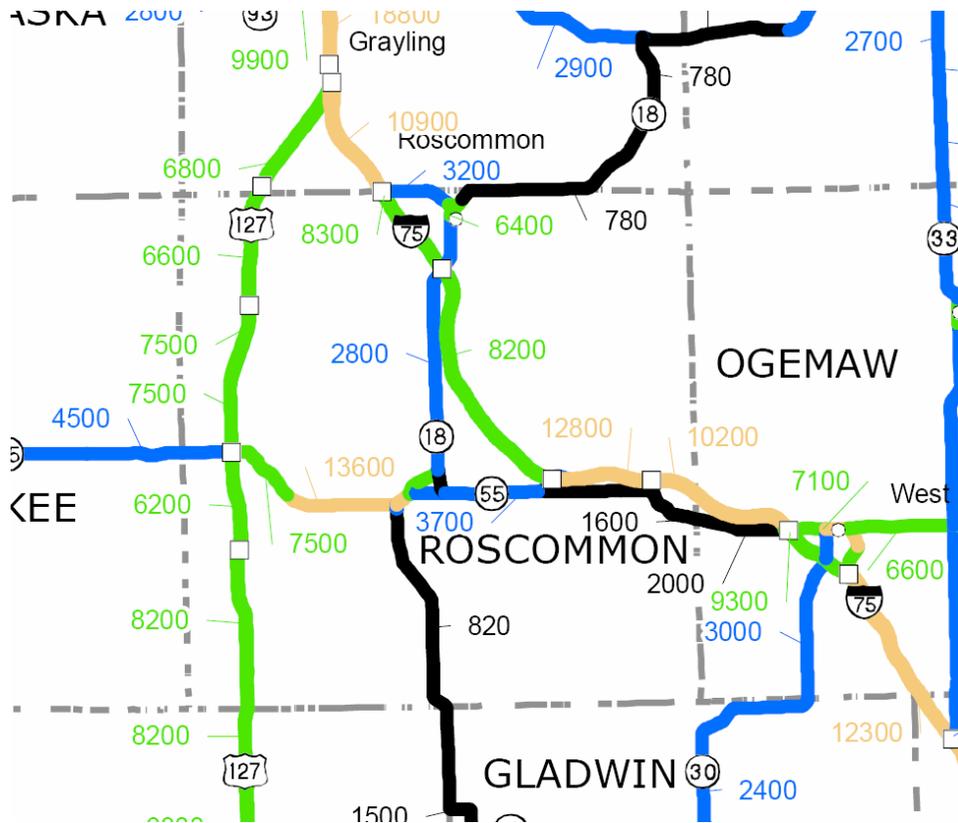
Transportation

Roscommon County has several major state highways that traverse the county and provide access to many surrounding communities. The county lies within a one-hour drive of several small communities including Grayling, Gaylord, Cadillac, West Branch and Gladwin. Interstate I-75 and US-127 as well as M-18 and M-55 provide residents the means drive to Cadillac, Gaylord, Grayling, Saginaw, Midland, Bay City and even Flint allowing them to be within the modern commuter's range.



Source: Map Quest

Access to Interstate I-75 and US-127 also provides Roscommon County residents with access to the recreational and vacation opportunities throughout northern Michigan and elsewhere in the United States and Canada. The state and federal road system provides access for farmers, commercial and industrial, producers to market their products efficiently throughout the region. The Roscommon County Road Commission is responsible for maintaining all other public roads with funds provided by state gasoline taxes and property tax millages. Five commissioners that are elected to six-year terms govern the Roscommon County Road Commission. Currently the road commission employs 35 people.

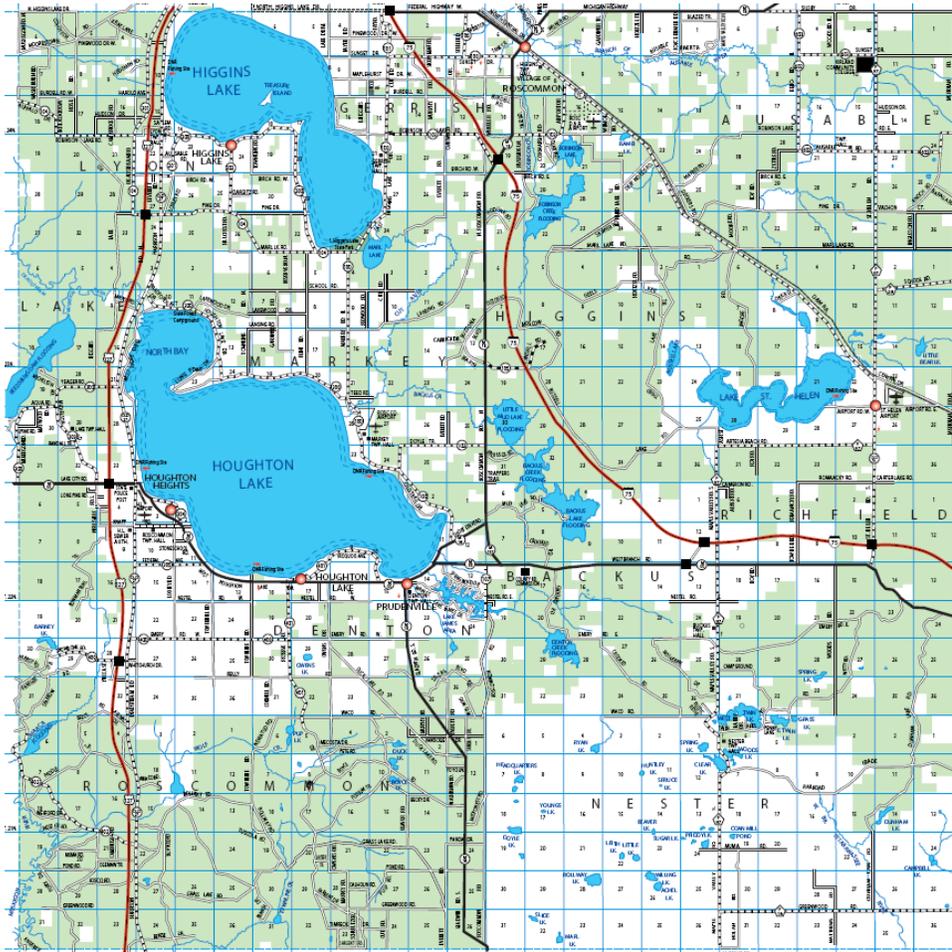


State of Michigan Department of Transportation's 2008 Average Daily Traffic Map of Roscommon County and surrounding area.

Roscommon County has 195 miles of Primary roads and 673 miles of local roads with 357 lane miles maintained under contract with MDOT. There are 12 all season routes within Roscommon County. These roads are open all year without seasonal weight restriction in accordance with the Michigan Vehicle Code, PA 300 of 1949. The following is a list of the current all-season routes:

- **MOORESTOWN ROAD** - Commencing at the West county line, Section 6, T24N, R4W, and ending at the North county line, Section 4, T24N, R4W.
- **OLD 27** - Commencing at County Road 400 (Snow Bowl Road), Section 28, T22N, R4W, and ending at the North county line, Section 3, T24N,R4W.
- **COUNTY ROAD 305** - The entire length.
- **OLD 76** - Commencing at the intersection of M-18, Section 6, T24N, R2W, and ending at M-55, Section 10, T22N, R1W.
- **F-97** - Commencing at the intersection of Old 76, Section 23, T23N, R1W, and ending at the North county line, Section 2, T24N, R1W.
- **COUNTY ROAD 100** - The entire length.
- **COUNTY ROAD 104** - Commencing at the West county line Section 18, T24N, R4W, and ending at the intersection of County Road 100, Section 4, T23N, R3W.

- **COUNTY ROAD 103** - Commencing at the intersection of County Road 100, Section 22, T24N, R3W, and ending at the intersection of M-18, Section 30, T24N, R2W.
- **COUNTY ROAD 400** - Commencing at the intersection of US-127, Section 28, T22N, R4W, and ending at the intersection of M-18, Section 22, T22N, R3W.
- **COUNTY ROAD 401** - Commencing at the intersection of County Road 400, Section 19, T22N, R3W, and ending at the intersection of M-55, Section 18, T22N, R3W.
- **F-97** - Commencing at the South county line and ending at the intersection of M-55, Section 18, T22N, R1W.
- **COUNTY ROAD 306 (Loxley Road)** - Commencing at the intersection County Road 305, Section 15, T22N, R4W and ending at the intersection of Robinson Lane, Section 10, T22N, R4W.



Roscommon County Road Map

Roscommon County has passed an ORV Ordinance that permits off road vehicles to travel on the far-right side of the maintained portion of a road or street within the county given certain restrictions as to the time of operation, speed limits, and noise. Furthermore this ordinance provides the authority to impose civil fines for violations, restitution for damages,

and restrict various routes if deemed necessary. Roscommon County has several Department of Natural Resources designated ORV trails and currently has 4 trail head locations with parking provided to permit access to this trail system. These ORV trails include:

- **Leota Trail** – 52.1 miles of trails west of US-127
- **Denton Creek Trail** – 37.3 miles of trails between US 127 and highway M-18
- **Denton Creek Route** – 28.6 miles of trails between Highway M-18 and Maple Valley Road
- **St. Helen Trail** – 43.7 miles of trails between Waco Road and St. Helen
- **St. Helen Route** – 8.7 miles of trails between Waco Road and St. Helen
- **M-30 to St. Helen #3 Michigan Cross Country Cycle Trail** – 14.5 miles of trails between Gladwin County and St Helen Trail
- **St. Helen to Geels Trail** – 13.7 miles of trails between St. Helen and Geels
- **Geels Trails** – 46.2 miles of trails east of I-75
- **Geels to Roscommon Route** – 9.0 miles of trails from Geels to the Village of Roscommon
- **Beaver Creek Trail Michigan Cross Country Cycle Trail** – 30.9 miles of trails between Geels and West Higgins Lake Trail
- **West Higgins Lake Trail** – 35.3 miles of trails west of Higgins Lake

The State of Michigan also maintains designated trails for hiking, biking and cross-country skiing within Roscommon County. South Higgins Lake State Park contains three of these trail systems. The Blue trail is 5.5 miles in length, the Green Trail is 2.0 miles long, and the Red Trail is 3.5 miles long. All three of these trails are used for hiking and cross-country skiing. The Tisdale Triangle east of Roscommon is a 10.1-mile trail system used for biking, hiking and cross-country skiing. Lost Twin Lakes is a 3.0-mile trail system located southeast of Houghton Lake used for biking and hiking. The Red Pine Nature Area north of St Helen has 1.5 miles of interpretive foot trail.

Rail transportation for freight in Roscommon County is provided through the Lake State Railway, formerly the Detroit & Mackinaw Rail Road. The railway runs generally northwest from the east side of the county through St. Helen to the north side of the county just past the Village of Roscommon. Currently the railway primarily serves the Weyerhaeuser Company's Oriented Strand Board Mill on West 4 Mile Road in Grayling.

The Roscommon Transportation Authority provides intra-county bus services for the county residents. Roscommon County Transportation Authority (RCTA) started as the countywide "Dial a Ride" in 1976 but funding concerns and facility problems forced the system to temporarily close in 1977. November of 1980 brought some Michigan Department of Transportation funding commitments and Federal 5311 operating assistance and the Roscommon County Mini Bus System was born. Rosco

Mini Bus, as it was affectionately called, started in the old Denton Township offices and that was where it stayed until 1984 when the administration and fleet were moved to a rear office and warehouse area of what is now known as Oxford Automotive.

The Roscommon County Board of Commissioners continued to improve the program and received grants from the State and Federal Governments for capital money to build our own facility. The County authorized the land for the transportation building and we dedicated our building in November 1988. Continuing the process of growth and improvement in 2004 we became an Authority with our own governing board and a new name "Roscommon County Transportation Authority".



Photo by Bev Smith, with Brad Smith piloting. Taken in June 2008 from their Cessna 172 at 1000 feet AGL

There are four small community airports in Roscommon County the Blodgett Memorial Airport located five miles northeast of Houghton Lake, the Roscommon Conservation Airport located two miles southeast of the Village of Roscommon, The St. Helen Airport in St. Helen and the Houghton Lake Airport in Houghton Lake. The Midland-Bay City-Saginaw International Airport (MBS) is about an hour away from anywhere in the county. The MBS International Airport is the closest commercial airport capable of handling large jets, while the Alpena Regional offers daily flights to Detroit and is a Northwest Airlines airlink.

Utilities

Utility services in the county are provided by Consumers Energy (electric service), DTE Energy (natural gas service), and both AT&T and Verizon (phone service). Cable Television and High-speed Internet services are provided to portions of the county by Charter Communications.

Public sanitary sewer service is available in the Houghton Lake area through the Houghton Lake Sewer Authority. The Authority was created in 1973 by the townships of Denton, Lake and Roscommon of Roscommon County for the purpose of operating, maintaining, administering and managing a sanitary sewage facility for the benefit of the forenamed three townships and for any other township or municipality which hereafter joins in and becomes a part of such sewer system and the related agreement, all for the betterment of the health, safety, economy and general welfare of the participating municipalities. Beginning January 1, 2007, the Authority took control and ownership of the sewer facilities as allowed for under Act 233 of 1955. The Authority includes sewer systems of Denton, Lake, Roscommon and Markey Townships. The townships contributed all of their assets in cash to the Authority. The Houghton Lake Authority oversees three separate treatment facilities located in Roscommon Township, Denton Township and Markey Township. The Roscommon Township wastewater treatment plant (WWTP) has a capacity of 1.1 million gallons per day and currently is treating between 700,000 to 800,000 gallons per day. The Denton Township WWTP has a capacity of 700,000 gallons per day and is currently treating around 550,000 gallons per day. And the Markey Township WWTP has a capacity of 300,000 gallons per day and is currently treating approximately 110,000 gallons per day. From these figures it appears that the sanitary sewer capacity in these areas is sufficient and has room for expansion of future development.

The area of Camp Curnalia (American Legion) cottages located on the northwesterly side of Higgins Lake located mostly in Lyon Township of Roscommon County, with the remainder in Beaver Creek Township of Crawford County, have public sanitary sewer service. In May 2007, the townships formed the Higgins Lake Utilities Authority to finance, design, build and operate the sewer system and treatment plant. The treatment plant is a spray irrigation system located on 60 acres. The collection system services 405 persons. The Utilities Authority has contracted with Wade-Trim to provide operational services for the wastewater treatment facility and sewer collection system, including the grinder pump stations

Public water and sanitary sewer services are available in the Village of Roscommon through their Department of Public Works. The Village maintains a lagoon system for wastewater treatment that has a design

capacity of 300,000 gallons per day. Currently the village processes between 100,000 to 125,000 gallons per day. There appears to be sufficient capacity in the sanitary sewer system for expansion and further development.



*Photo of the Water Tower in the Village of Roscommon after cleaning in October 2009.
Photo by the Village of Roscommon.*

G. Economic Trends and Profile of Roscommon County

Roscommon County is predominately rural and forested. It is about 60 - 90 minutes northwest of the industrial tri-city region of Midland, Bay City and Saginaw. The economic base of the county includes recreation, agriculture, manufacturing and government employment. The cost of living index is low at 79.2 (U.S. average is 100.0). Per capita personal income for 2005 in Roscommon County was \$23,141 versus \$32,804 per person for the State of Michigan. The median household income was estimated at \$32,236 in 2007 versus \$47,950 for Michigan.

Major transportation routes cross Roscommon County: Interstate I-75 transects the northeastern portion while US-127 runs north and south through the middle of the county. These two major highways meet in Crawford County just north of the Roscommon County line. There are four truck companies that deal in the county. Greyhound in Bay City provides bus passenger service. The Lake State Railroad hauls freight in the county. Air travel and freight can go through the MBS International Airport. The largest airlines serving this airport are Northwest and United. The county also has the Roscommon County Airport in Markey Township and the Roscommon Conservation Airport.

Total Labor Force in 2007	
Roscommon County	10,514
Michigan.....	5,024,000
Total Employed in 2007	
Roscommon County	9,501
Michigan.....	4,667,000
Average Household Size	
Roscommon County	2.2
Michigan.....	2.6
Estimated median household income in 2007	
Roscommon County (was \$30,029 in 2000)	\$32,236
Michigan.....	\$47,950
Median contract rent in 2007 for apartments	
Roscommon County (lowest quartile \$323, upper quartile \$498)	\$412
Michigan.....	\$573
Estimated median household house value in 2007	
Roscommon County (was \$76,600 in 2000)	\$107,906
Michigan.....	\$153,580

The population of the county is estimated to be 25,469, increasing by more than 20% per decade since 1970, but beginning to decline in 2003. The county has a work force of about 10,100 persons that typically commute over 24 miles to work. Unemployment in the county is relatively high (11.4% 2008 unemployment rate) when compared to both state and national rates. The unemployment rate peaked in March of 2009 at 16.5% and remained over 16% at 16.1% in November of 2009.

Annual Unemployment Rates				
	1990	2000	2005	2008
Roscommon Co.	9.1%	5.5%	8.4%	11.4%
Clare Co.	10.7%	5.4%	9.6%	11.9%
Crawford Co.	6.7%	4.6%	7.0%	9.7%
Gladwin Co.	9.7%	5.3%	10.2%	11.1%
Ogemaw Co.	9.9%	5.4%	7.6%	9.6%
Missaukee Co.	10.5%	4.4%	7.4%	10.7%
Michigan	7.7%	3.7%	6.9%	8.4%

Retail Trade is among Roscommon County’s largest economic sectors, generating more than \$38 million versus \$24 million for construction (2005). The largest economic sector though is the Government producing annually \$72,192,000 (2005). The services and retail trades employ almost as many people as all the other sectors combined. Many of the jobs in the county are minimum wage with those in the manufacturing sector offering the best wages. The average annual wage in the county was \$24,376 in 2003. Per capita income in 2005 was \$23,141.

In 2006 there were 671 non-farm establishments with paid employees in Roscommon County providing work for about 4,825 people. There were also 1640 non-employer establishments. Non-farm employment had decreased by 5.6% between 2000 and 2006.

Income by Industry (in Thousands of Dollars)				
Industry	2002	2003	2004	2005
Farm earnings	-115	0	0	0
Nonfarm earnings	236,690	247,379	256,364	256,150
Private earnings	166,773	175,975	183,438	183,958
Forestry, fishing, related activities, and other	0	300	250	0
Mining	0	0	0	0
Utilities	0	0	0	0
Construction	21,410	22,107	24,130	24,979
Manufacturing	0	0	25,833	22,776
Durable goods manufacturing	0	0	0	0
Wholesale trade	7,607	7,010	7,235	7,021
Retail Trade	39,870	38,260	38,603	38,842
Transportation and warehousing	0	0	0	0
Information	2,066	2,070	1,922	1,854
Finance and insurance	6,522	7,681	8,239	8,601
Real estate and rental and leasing	7,492	6,391	7,708	8,322
Professional and technical services	4,429	4,427	4,887	5,184
Government and government enterprises	69,917	71,404	72,926	72,192
Federal, civilian	1,889	1,918	1,920	1,776
Military	1,094	1,573	1,694	1,920
State and local	66,934	67,913	69,312	68,496
Source: Bureau of Economic Analysis, US Department of Commerce, Issued May 2007				

EMPLOYMENT BY INDUSTRY (Number of Jobs)				
Components by Type	2002	2003	2004	2005
Total employment	9,214	9,278	9,408	9,245
Wage and salary employment	7,352	7,288	7,325	7,049
Proprietors employment	1,862	1,990	2,083	2,196
Farm employment	44	43	43	43
Nonfarm employment	9,170	9,235	9,365	9,202
Components by Industry	2002	2003	2004	2005
<i>Private employment</i>	7,480	7,527	7,670	7,638
Forestry, fishing, related activities, and other	0	24	26	0
Mining	0	0	0	0
Utilities	0	0	0	0
Construction	812	814	855	892
Manufacturing	0	0	701	564
Wholesale trade	287	252	233	225
Retail Trade	1,779	1,735	1,698	1,679
Transportation and warehousing	0	0	0	0
Finance and insurance	257	255	257	259
Real estate and rental and leasing	394	422	483	524
Professional and technical services	208	219	226	233
<i>Government and government enterprises</i>	1,690	1,708	1,695	1,564
Federal, civilian	34	33	30	29
Military	52	51	50	47
State and local	1,604	1,624	1,615	1,488
Source: Bureau of Economic Analysis, US Department of Commerce, Issued May 2007				

The four largest employers in the county are Kirtland Community College, Lear Corp., ROOC, Inc. and Wal-mart.

MAJOR EMPLOYERS

FIRM	LOCATION	EMPLOYEES	PRODUCT
Kirtland Community College	Roscommon	300	Junior College College/University
Lear Corp	Roscommon	200	Manufactures motor vehicle electrical equipment; wholesales automotive supplies & parts; manufactures stamped automotive products
ROOC Inc	Roscommon	150	Job Training/Related Services
Wal-Mart Stores Inc	Houghton Lake	150	Department Store Ret Drugs/Sundries
Home Depot USA Inc	Houghton Lake	108	Lumber other Bdg Mats
Roscommon County Board of	Roscommon	99	Public Finance/Taxation/Monetary Policy
Houghton Lake Community	Houghton Lake	80	Elementary/Secondary School
Catt's Realty Co. (Glens)	Houghton Lake	80	Ret Groceries
Coyles Inc	Houghton Lake	70	Eating Place Ret Gifts/Novelties Drinking Place
Denton Township	Prudenville	70	Executive Office
Spartan Stores Inc	Roscommon	65	Ret Groceries
Hub Super Market Inc	Prudenville	65	Supermarket
St Vincent Depaul Society Inc	Prudenville	60	Individual/Family Services
Roscommon Area Public Schools Dist	Roscommon	55	Elementary/Secondary School
Midmichigan Health Services	Houghton Lake	55	Medical Doctor's Office
Roscommon Area Public Schools Dist	Roscommon	50	Elementary/Secondary School

Spicer's Boat City	Houghton Lake	50	Retails motor boats; builds & repairs boats; snowmobile dealer; boat yard providing storage & incidental repair services
C A Hanes Realty	Saint Helen	50	Real Estate Agent/Manager
King Nursing Centre Inc	Houghton Lake	50	Skilled Nursing Care Facility
Township of Gerrish	Roscommon	44	Township Government
Department of Human Services	Prudenville	43	Administrative Social/Manpower Programs
Tedle Enterprises Inc	Houghton Lake	42	Fast-Food Rest Chain
Michigan Department of Natural	Roscommon	40	Business Services
Department of Human Services	Roscommon	40	Pension/Health/Welfare Fund
Halliday Sand & Gravel Inc	Houghton Lake	40	Construction sand mining
Kmart Corp	Houghton Lake	40	Dept Stores Discount
Quest Golf Club Ltd	Houghton Lake	40	Public Golf Course & Residential Real Estate Developers & Golf Course Consulting
Mercy Family Care	Prudenville	35	Medical Doctor's Office
Michigan Department of Natural	Roscommon	35	Land/Mineral/Wildlife Conservation
Michigan Department of Natural	Roscommon	32	Land/Mineral/Wildlife Conservation
Don Nester Chevrolet Olds	Roscommon	32	New & Used Cars
Buccilli Inc	Houghton Lake	30	Eating Place

Joseph Nicklyn	Roscommon	30	Fast-Food Rest Chain
State Electronics Inc	Houghton Lake	30	Ret Radio/Tv/Electronics
Aloha Center Inc	Houghton Lake	30	Residential Care
Township of Gerrish	Roscommon	29	Fire Protection
Hart Ford Lincoln	Roscommon	28	Ret Used Automobiles Passenger Car Rental Ret New/Used Automobiles
Senior Citizens Center Inc	Houghton Lake	28	Civic/Social Association
K F C of Houghton Lake Inc	Mount Pleasant	25	Fast-Food Rest Chain
Brook Retirement Community Inc	Roscommon	25	Residential Care Services
State & County Associates Inc	Houghton Lake	25	General Contractor
E R A Johnson Realty Inc	Prudenville	25	Real Estate Agent/Manager
Oberon Properties LLC	Houghton Lake	25	Ret New/Used Automobiles Ret Auto Supplies
Richfield Township Fire Dept	Saint Helen	23	Fire Protection
Camping World	Houghton Lake	23	Ret Recreational Vhcls Ret Boats
Markey Township Fire Dept	Houghton Lake	22	V Fire Dept

Lake Township, Roscommon Cnty	Houghton Lake	22	Fire Protection
Silver Harold's Dollar Inc	Roscommon	21	Eating Place Drinking Place
St Helen Duck Club Corp	Saint Helen	21	Membership Organization
Michigan Department of State	Houghton Lake	21	Police Protection

Source: Harris Publishing Company, 2008 InfoSource;
Corrected by the Roscommon Co. Planning Commission 2010

Crime in Roscommon County is relatively low appears to have decreased from 2000 to 2005. In 2000 and 2005 the following crimes were reported by the sheriff's office:

	2000	2005
Murders:	0	0
Rapes:	11	6
Robberies:	0	1
Assaults:	66	21
Burglaries:	235	59
Thefts:	593	183
Auto Thefts:	95	47

Seventy-nine percent of Roscommon County's residents over 25 have high school diplomas with only a little more than sixteen percent of persons over 25 years of age with bachelor's degrees.

The county has two public school districts and four colleges within close proximity: Kirtland Community College in Roscommon County; Saginaw Valley State University in Saginaw County; Delta Community College in Bay County; and Mid Michigan Community College in Clare County. There are also major universities with in the State and elsewhere available for advanced education.

Roscommon County has three large lakes and many smaller ones. Houghton Lake, with 20,044 acres and 30 miles of shoreline, is the largest and home of the nationally famous Tip-Up-Town USA winter festival. Higgins Lake, covering 9,600 acres and reaching a depth of 141 feet, is commonly referred to as the 6th most beautiful lake in the world. Lake St. Helen has an annual Bluegill Festival that attracts a huge crowd each summer.

Among the beautiful streams in the county that provide excellent fishing and scenic canoeing are the headwaters of the Muskegon, AuSable and Tittabawassee rivers. Besides the lakes and streams, there are approximately 2,000 acres of backwater above the Reedsburg Dam. The Dead Stream Swamp area covers about 25,000 acres, including 2,000 acres of flooded lands.

There are about 185,000 acres of public land furnishing hunting for deer, grouse, woodcock, squirrels and ducks. Roscommon County welcomes visitors to the area by providing beautiful scenery, hiking trails, golfing, camping facilities, fishing, hunting, boating, swimming, water skiing, snow skiing, ice skating, sledding, snowmobiling, bowling and airplane rides at the airport. (see Attractions and Activities in Roscommon County)

The largest class of property by far in Roscommon County is residential (89.1%); commercial property is next with 8.4%. The balance of the industrial, timber cut-over constitute less than 1% each. Personal Property accounts for about 2.1% of equalized values. (2007 values) Property values have risen steeply in recent years but the effect of the current recession will certainly dampen and may reverse this trend.

Property Values			
	2005	2009	% Change 2005/2009
Roscommon County			
Real	1,119,064,794	1,342,931,953	20.0%
Personal	40,396,993	40,476,878	0.2%
Clare County			
Real	766,621,081	936,649,673	22.2%
Personal	100,075,031	106,773,663	6.7%
Crawford County			
Real	465,362,239	544,836,768	17.1%
Personal	52,683,074	54,154,345	2.8%
Gladwin County			
Real	772,988,700	941,828,001	21.8%
Personal	34,164,307	33,785,977	-1.1%
Missaukee County			
Real	402,482,086	488,200,436	21.3%
Personal	42,762,420	46,082,487	7.8%
Ogemaw County			
Real	658,769,861	794,225,279	20.6%
Personal	49,236,995	53,487,796	8.6%

H. Attractions and Activities in Roscommon County

Roscommon County is endowed with much to do and see. It is covered with jack pine barrens, white pine-red pine forests, and northern hardwood forests. Large lakes were created by glacial action. Houghton Lake, Higgins Lake and Lake St. Helen are large all-sports lakes and the Au Sable River also is a primary water recreational source. Wildlife includes bear, deer, eagles, Kirtland's Warblers, and turkeys.

Local attractions and activities include:

- Birding
- Bluegill Festival each summer in St. Helen.
- Boating, Paddling (canoe and kayak)
- Fishing, particularly trout fishing.
- Hiking
- Hunting
- Kirtland Warbler Habitat and Festival is to the north, a must for avid bird-watchers.
- Michigan Shore-to-Shore Trail passes through the area. It runs from Empire to Oscoda, but also to points north and south. It is a 500 mile interconnected system of trails.
- Nordic skiing
- ORV and groomed snowmobile trails.
- Sailing
- Tip-up-town winter festival, Houghton Lake last two weekends in January.
- Oldsmobile Club
- Pumpkin Run Car Show
- ATV Jamboree

RECREATION HIGHLIGHTS

Tip-Up Town Festival, Houghton Lake (January);
Guided color tour, Houghton Lake (early October);
Arts & Crafts Fair, Houghton Lake (mid-July);
Bluegill Festival, Lake St. Helen (July);
Michigan Fireman's Association Memorial, Roscommon (mid-September);
Roscommon County Fair (early August);
Au Sable Forest;
North Higgins Lake State Park;
Backus Creek State Game Area;
ORV trail network;
South Higgins Lake State Park;
Tisdale Triangle X-country ski trails (11 groomed trails);
Kirtland Community College (with athletic and cultural facilities);
Houghton Lake Wildlife Research Area;
Bear Creek Waterfowl Flooding;
Tittabawassee, the Cut, Muskegon and AuSable Rivers;
5 public golf courses;
7 additional cross-country trails;
boating resources (204 public access sites).

Source: Local County Economic Development Contact



The Pioneer House in the Village of Roscommon.

There are three official Michigan historic markers in Roscommon County. The first is Gerrish where on April 5, 1880, area residents met at the

Gerrish Logging Camp to elect officers for their newly formed township. The second is The Pioneer House opened in the early 1870s as a boardinghouse for lumbermen. Beginning as one and one-half story building, it underwent three major renovations between 1885 and 1936 evolving into a hotel with twenty-two guest rooms and three apartments. During the 1920s and 1930s, it was the hotel of choice for visitors from as far away as Hollywood, California and Havana, Cuba. And the third is the Terney House. William J. Terney, lumber baron and Civil War veteran, moved to the Roscommon area in 1887 and erected this house in the late 1880s. Shortly afterwards, he began extensive lumbering here and was instrumental in bringing the railroad through the village. Its interior features white oak parquet flooring and ornate paneling, linking it to the once booming lumbering epoch of Roscommon.

SECTION THREE

SECTION THREE FUTURE LAND USE

A. The Great Recession

Since Roscommon County began this master plan the national and international recession has had profound effects upon the Michigan and Roscommon economies. Michigan's population has been declining precipitously since the recession began. And even before the recession Michigan's population was declining: "Michigan was one of only two states to lose population between 2006-2008. Rhode Island lost 7,000 people, while Michigan lost 80,000."¹ The decline of Roscommon's population, as noted earlier, began in 2003 and it is expected that this trend has probably accelerated. Michigan and Roscommon County have not been attracting population either from within the U.S. or internationally.²

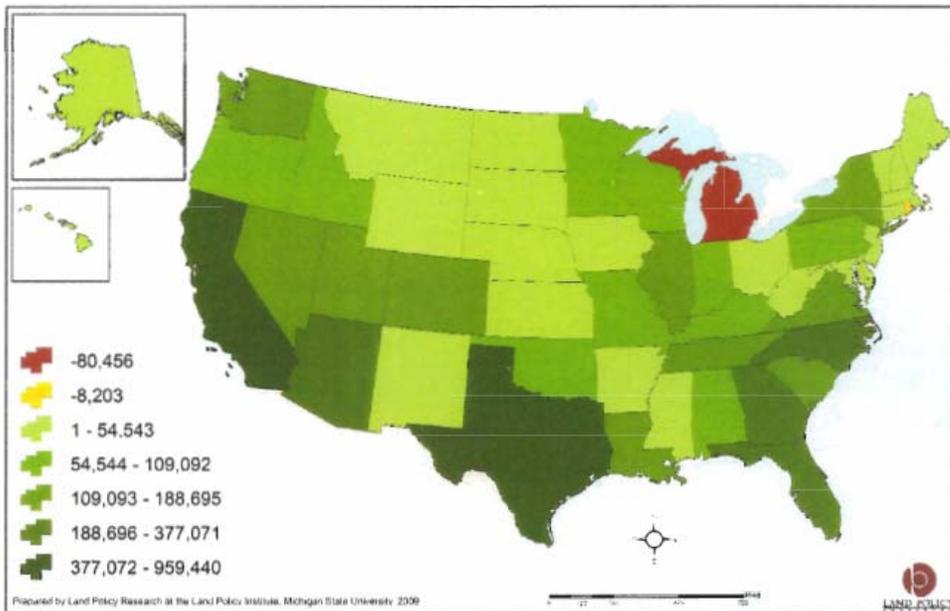
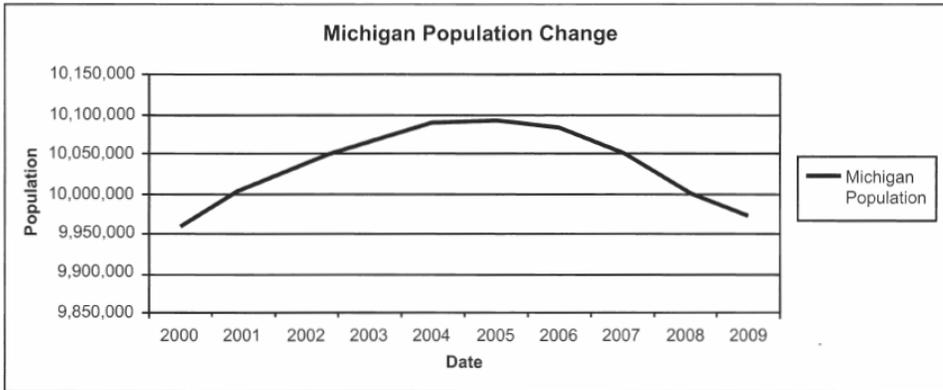
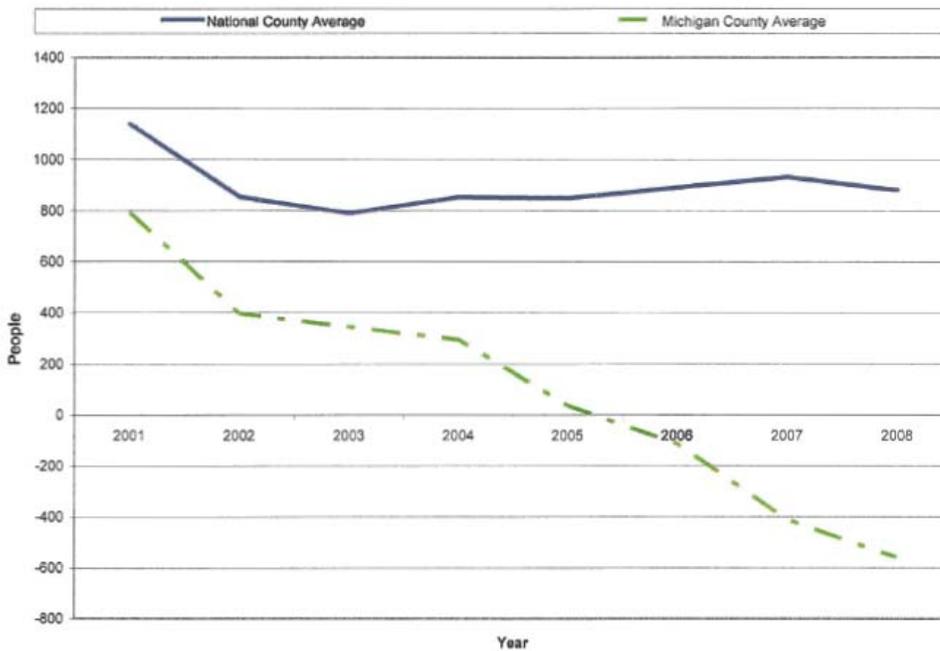


Fig. 1 Population Change 2006-2009



source The Land Policy Institute at Michigan State University

Fig 2 Michigan Population Change



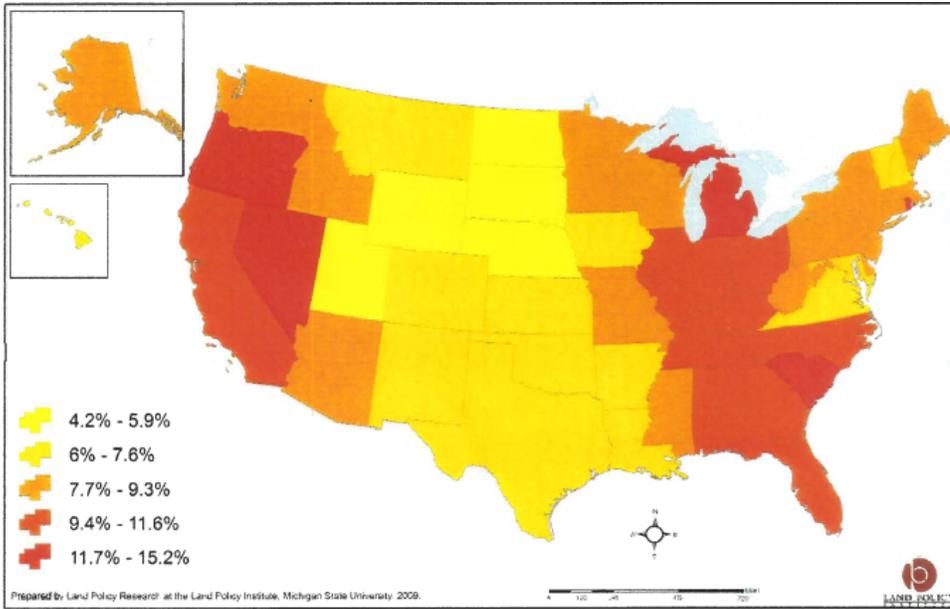
source The Land Policy Institute at Michigan State University

Fig 3 Average County Population Change

Unemployment in Michigan has been the highest in the nation for most of the decade of 2000, and Roscommon County’s unemployment (at +16%) has been among the highest in Michigan. Some of the effects of population loss and unemployment are losses in support services and associated jobs, wages, rent, mortgage payments and other economic outputs. Tax revenues related to these losses include state income taxes, sales taxes and local property taxes. “It is estimated that the economic impacts in Michigan due to county population losses from 2000-2005 are a total loss of:

- \$245,571,468 in labor income

- 164,395,510 in property type income
- 7,327 jobs and
- \$789,638,222 in value of economic output.³



source The Land Policy Institute at Michigan State University

Fig 4 Unemployment Rate by State in June 2009

Manufacturing, as a share of Michigan’s economy, has been shrinking for decades and now General Motors’ bankruptcy, the largest ever, epitomizes the profundity of that decline. Roscommon County has also lost manufacturers during the last decade, Oxford Automotive being the foremost.

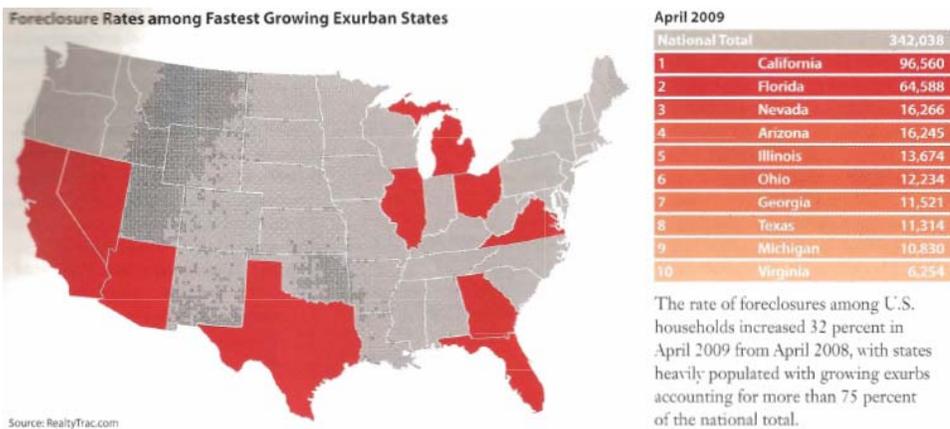
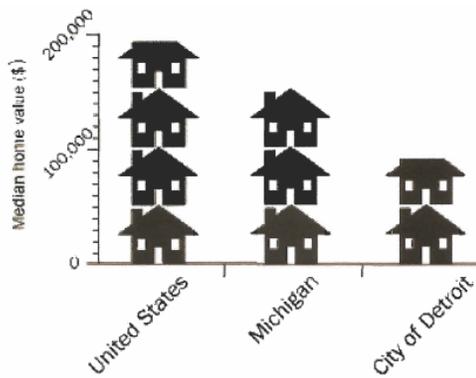


Fig 5 Foreclosure Rates

But the sectors most effected by population loss and unemployment are in healthcare and foodservice and drinking establishments. Notably the majority of the closed businesses identified in Section G “Major Employers” were eating-places. And tax losses from owner-occupied dwellings represent the greatest reductions.⁴ (See Appendix for tables of economic impacts for counties with largest population declines.) The impact of emigration and unemployment on housing values has been tremendous. Home values in Michigan are almost \$100,000 below the national average. Local property tax values are expected to decline tremendously in many districts. In Roscommon County the average tax value declined by 2% last year.



source The Land Policy Institute at Michigan State University

Fig 6 Relative Home Values

¹ “The Economic Impacts of County Population Changes in Michigan,” The Land Policy Institute at Michigan State University, 2009

²Ibid

³Ibid

⁴Ibid

B. Analysis of Issues and Trends

Population losses and unemployment have had direct effects upon property values and the wealth base of Roscommon County. Job losses have come from the main economic sectors of the county and those that make the county a desirable place to live.

Table of Output Loss for Impacted Service Sectors

Output Loss	Impacted Sectors
Economic Value-Added	<ul style="list-style-type: none"> Owner-Occupied Dwellings Food Service and Drinking Places Real Estate Establishments Private Hospitals Offices of Physicians, Dentists and Other Healthcare Providers Wholesale Trade Monetary Authorities and Depository Credit Intermediaries Power Generation and Supply Motor Vehicle and Parts Dealers Insurance Carriers
Labor Income	<ul style="list-style-type: none"> Offices of Physicians, Dentists and Other Healthcare Providers Private Hospitals Food Service and Drinking Places Wholesale Trade Motor Vehicle and Parts Dealers Real Estate Establishments Food and Beverage Stores Legal Services Nursing and Residential Care Facilities Monetary Authorities and Depository Credit Intermediaries
Indirect Business Taxes	<ul style="list-style-type: none"> Owner-Occupied Dwellings Real Estate Establishments Wholesale Trade Motor Vehicle and Parts Dealers Food Service and Drinking Places Electric Power Generation and Supply General Merchandise Stores Food and Beverage Stores Building Material and Garden Supply Stores Clothing and Clothing Accessories Stores

Table of Output Loss for Impacted Service Sectors (cont.)

Output Loss	Impacted Sectors
Employment	Food Services and Drinking Places Offices of Physicians, Dentists and Other Healthcare Providers Private Hospitals Food and Beverage Stores General Merchandise Stores Nursing and Residential Care Facilities Wholesale Trade Motor Vehicle and Parts Dealers Real Estate Establishments Non-Store Retailers

The losses above are from services provided in the local economy. “Local residents consume many services that are collateral to their local existence (dining, dry cleaners, doctors, lawyers, etc.). In an increasingly service oriented economy where people are more apt to move, these services and also more likely to move with them.”¹ This is cause for concern and a call to action to stop and reverse population loss and unemployment to prevent further economic erosion and to stimulate new economic growth. County planners must see existing trends clearly and act to counter them if negative, and to foster them, if positive. The primary economic goal for Roscommon County should be to boost its prosperity: “a state of stable, reliable and secure growth, with rising employment, income and other elements of quality of life that ensures transcendental success.”² The barriers to economic growth in Roscommon County we have shown are:

- A low and diminishing population
- Relatively low incomes
- An older population
- Some social problems, including illegal drugs
- High unemployment
- Declining home values
- A lower percentage of college and advanced degreed residents.
- Cold climate
- Negative reputation of the Midwest
- Lack of sufficient health care personnel and facilities
- Inadequate Internet access and cell phone reception
- Poor electrical grid.

But the tremendous assets of the County begin with its natural resources:

- Forests
- Lakes and streams

Gravel and sand deposits
Wildlife
Clean air and clean water
Peace and quiet
Winter and abundant snow

These resources have been outlined in the first sections of this plan and it is clear they are the basis for the county's wealth and they will be the base for the county's economic growth and development. Roscommon County also benefits by having the two major interstate highways passing through and joining just north of the county line. These and Lake State Railroad, which cuts across the north east quadrant of the county, make Roscommon County an easy driving destination and facilitate the movement of goods in and out of the county. Major businesses have developed to cater to tourists and travelers including Spicers, Hackers, Camping World, and Travel Land.

Of great importance as well are the citizens of the county and the leadership being provided by the county commissioners, the Economic Development Committee, Kirtland College, the Chambers of Commerce and many others striving to improve the conditions in Roscommon County. Good governance is necessary that will lead to improving education and education opportunities, improved infrastructure, a vision to see what must be done and to use power for the sake of community economic development, and to establish and maintain regulations conducive to starting and running businesses.³

Therefore, in order to promote economic prosperity, the following strategies are put forth:

- Attract people to the county, especially educated 25-34 year olds and seniors and others with assets-- job creators
- Continue to improve education-- public, private, charter schools, Kirtland Community College with alliances with universities and other higher education institutions
- Take actions to attract more tourists
- Placemaking for quality of life
- Economic gardening-- promoting entrepreneurship and targeted businesses

Factors Affecting Firm Location and Recruiting	
Abbreviation	Description
Natural areas	Proximity to natural areas (undeveloped parks and forests, wildlife sanctuaries)
Quality of schools	Quality of primary/secondary education
Outdoor recreation	Availability of outdoor land-based recreational opportunities (local parks, trails, and pathways)
Culture and entertainment	Variety of cultural and entertainment opportunities
Colleges and universities	Proximity to colleges or universities
Water recreation	Water-based recreational opportunities (boating, swimming, fishing)
Community	Community characteristics (housing costs, crime rate, public services, public safety, diversity of residential environments)
Transportation	Access to transportation (e.g., roads, airports, railways)
Recreational infrastructure	Community recreational infrastructure (e.g., water parks, golf courses, swimming pools, etc.)
Healthy downtowns	Healthy and vibrant downtowns and historic town centers
Proximity to customers	Proximity to customers, competitors, or suppliers
Labor and costs	Labor and costs (wage rates, labor quality and availability, costs of land and buildings, operating costs)
Government support	Government support for business location

SOURCE: Public Sector Consultants Inc., Oakland County Business Location/Retention Survey, June 2008.
NOTE: The question used to assess recruiting did not include the final three factors.

Fig 8 Factors Affecting Firm Location and Recruiting

Although these strategies are all interrelated, “Placemaking for Quality” may take precedence or include the other elements. As is evident in Figure 8, above, Roscommon County does not lack for attractions to firms or individuals seeking to locate their businesses or families in the county. Roscommon County is full of natural areas and has an abundance of outdoor recreational opportunities. The communities in the county are safe, housing costs are relatively low, and there are various types of housing available. Land and labor costs are also relatively low. And with good transportation much of the U. S. population is within 600 miles of Roscommon County.

The recent investments by the Royal Medical & Technical Consultants, Inc. of Chicago in Roscommon Township are a welcome addition to the economy of the township and county, that might be built upon. The company, lead by Screedhar Thota and Dr. Srivinas Gaddam, has purchased the Atrium Plaza Hotel and Conference Center at the U.S. 27/M-55 interchange and are using it for housing and instructing foreign doctors and other medical personnel to pass U.S. medical board exams. They are now beginning a project to create a private school in Houghton Lake for high school age children where they plan to attract students from all over North America for intensive pre-professional instruction. Among the reasons cited by the company for locating these institutions in Roscommon County are the beauty and “lack of distractions” students normally have in other areas.

Efforts are underway to extend the Roscommon Airport runway to 5000' which would make it serviceable for larger jets and possible charter service. The Houghton Lake District Library in Denton Township will soon be the hub of the county for fiber optic Internet.

Houghton Lake and Roscommon Area Public Schools consistently score well on state exams and its schools are considered "very good" to "excellent." But as cited earlier the enrollments of school children has been declining and may be accelerating if families are moving away from the area due the effects of the recession. And property values are also declining, lessening the tax revenues to the school district. Continuing the high quality of K-12 public education may be challenging, but must and will be addressed. Enrollment at Kirtland Community College has increased over the past ten years. The college has since its inception striven to provide relevant and up-to-date instruction and education to citizens of its five county service area. Dr. Thomas Quinn, its president, is much involved in efforts to train and educate local residents for local jobs. Dr. Quinn and other community leaders spearheaded by the Roscommon Economic Development Committee and the Roscommon Community Foundation are striving to create the conditions for businesses and growth in Roscommon County. Brownfield redevelopment and the rehabilitation of the Oxford Automotive are projects which may contribute to a healthy entrepreneurial climate.

The recent organization of the Northeast Michigan Future, Inc. by state representative Joel Sheltroun is precisely the regional collaboration recommended by the US Economic Development Administration as the way to compete in today's global market.⁴

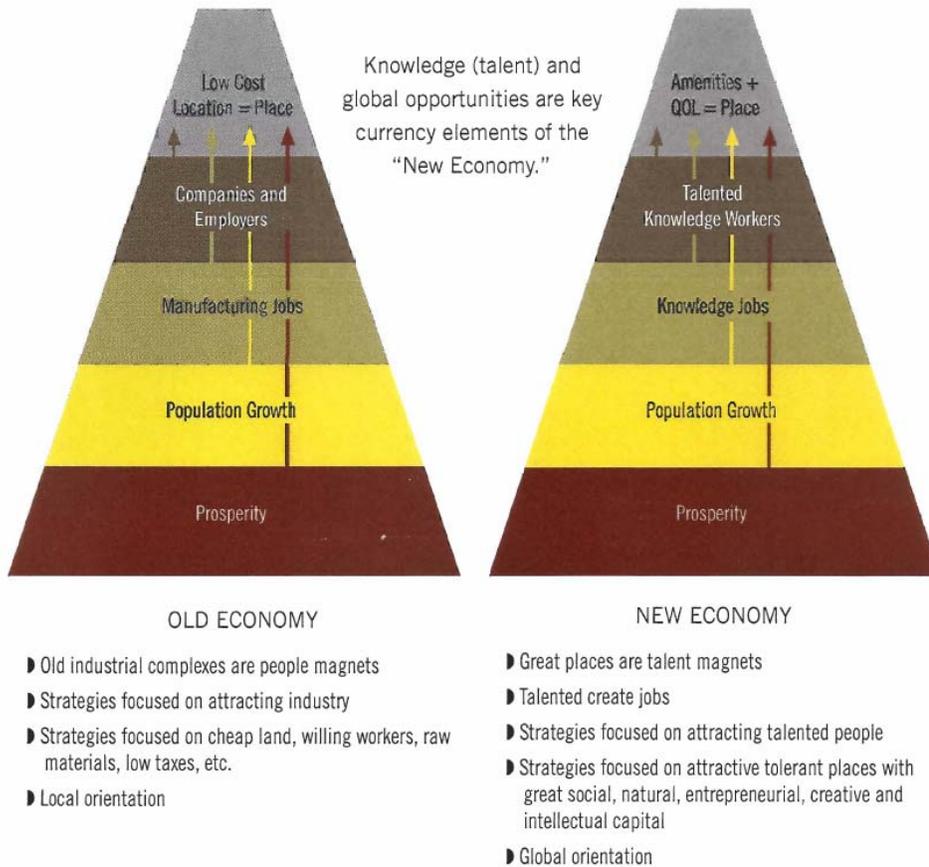


Fig 9 Place and Placemaking in the New Economy

But there are lacks in the county as well. There are no county parks and not a public swimming pool in the county. There are incipient “healthy and vibrant downtowns and historic areas” — Roscommon, St. Helen, and Houghton Lake-- but not yet fully formed; and there is also a lack of cultural and entertainment opportunities. There is a shortage of transient lodging in the county and also a need for more health providers. The closest hospital is either in Grayling or West Branch 15-30 miles away.

More basic, as stated earlier, is the poor state of the electrical grid and Internet and cell phone reception in the county. Nothing has affected and is driving economic change in the world more than information and communications technologies. These must be addressed.



The “Ten Tenets of Smart Growth” cited here provide guidelines for creating the kinds of communities attractive to entrepreneurs and others looking to relocate to Roscommon County.

These guidelines also will help create communities attractive to tourists and will supplement and complement the natural rural attributes of the county. “Capital is more likely to follow knowledge workers to quality places that are rich in amenities.”⁵

Fig 10 The Ten Tenets of Smart Growth

¹ “Chasing the Past or Investing in Our Future” Land Policy Institute at Michigan State University

² Ibid

³ Thomas L. Freidman, *The World is Flat*

⁴ “Crossing the West Regional Frontier” USEDA, 2009

⁵ Ob cit: “Investing in the Future”

C. Course of Action

Potential sources of future growth in Michigan are automotive and other industrial high technology research, biotechnology and informational technology, alternative energy, health-care services, health-related manufacturing, and tourism.¹ Roscommon County should identify which niches it could fill among these, or to identify others, then to develop the strategies to pursue them. Although the county has barriers, it also has assets that many other places do not have and it does not have the negative baggage many other places have. Michigan has the eighth largest economy of the 50 states, but is the fourth largest exporting state.² Are there products that could be produced in Roscommon County for export?

Given the conditions of Roscommon County outlined in the plan, we propose the following actions:

- Determine potential target industries; designate districts for these targeted industries
- Develop and nurture a pool of educated workers; job training for targeted industries and establish an incubator
- Perform “Economic Gardening” to attract and keep entrepreneurs in targeted industries; identify Stage I, II and III businesses to aid
- Ensure that Zoning and other regulations are clear, fair and quick for economic development – expedited permitting and approvals
- Provide assistance through the EDC and elsewhere for developers and entrepreneurs
- Build and maintain sufficient infrastructure where required – roads, water, sanitary sewer and storm sewer, Internet and cellular coverage
- Attract venture capital to the county
- Improve the electrical grid and broadband availability in the county
- Aggressively market for entrepreneurs and tourism
- Coordinate marketing with consistent incentives
- Maintain good intergovernmental communication and cooperation countywide and region-wide
- Promote and encourage public recreational facilities – parks, trails and recreational activities.

In addition to engendering a research and manufacturing sector for the county economy, Roscommon County should foster its other existing assets, seniors and tourism, by cultivating high quality service providers for them:

- Develop a high-class health care sector
- Encourage farm markets and specialty farm products
- Encourage hospitality providers to create more bed and breakfast establishments, more up-scale restaurants, more hotel accommodations
- Develop arts and crafts cultural events and districts as well as mixed-use village downtowns.
- Aggressively market the county and its products, attractions and services
- Pursue grant opportunities for recreational, economic, planning, infrastructure and other needed capital improvements and programs
- Prepare a recreational master plan to expand and improve recreational facilities.

¹ Ballard, Charles, *Michigan's Economic Future*, 2006

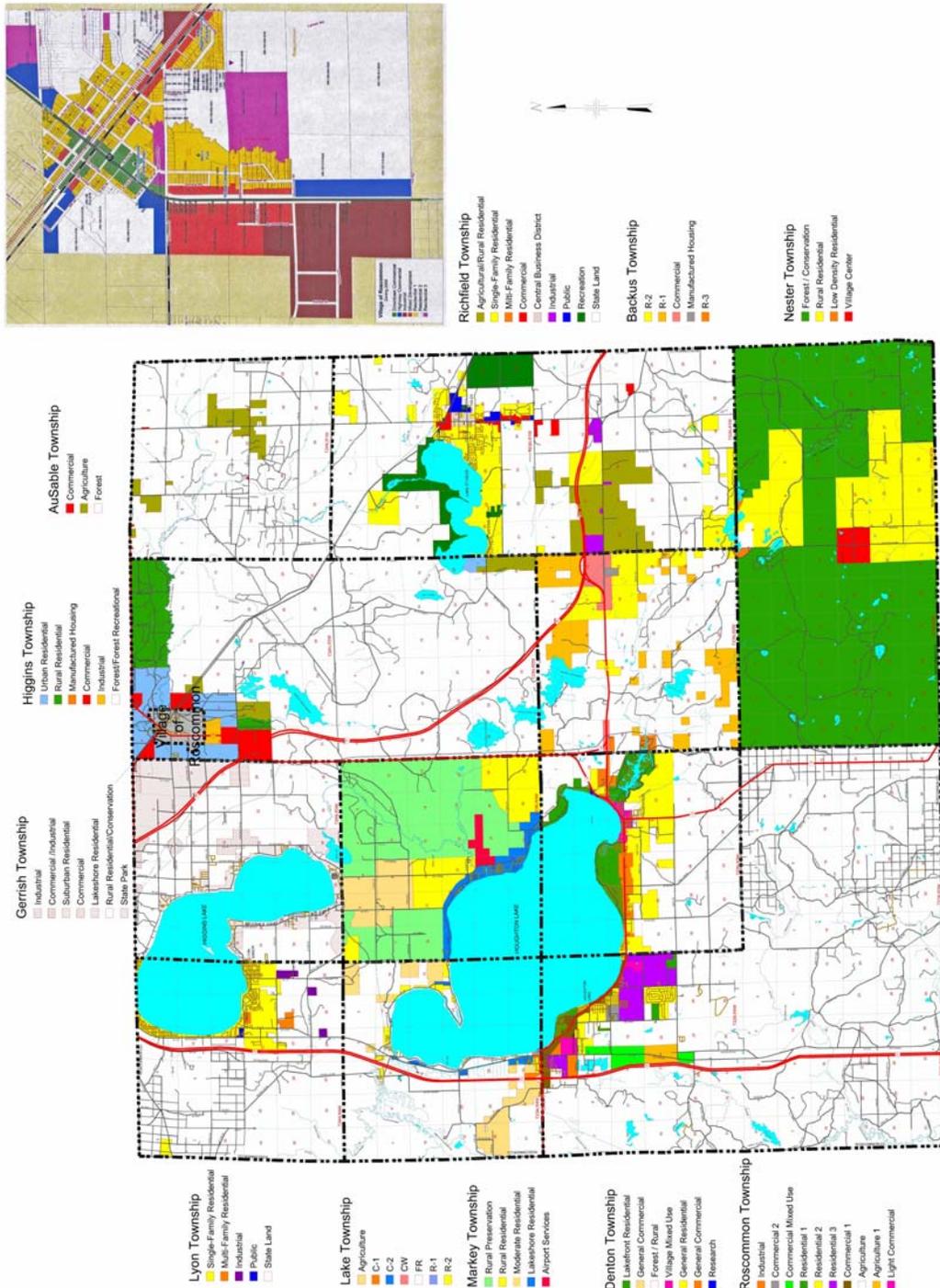
² Ibid

D. Future Land Use

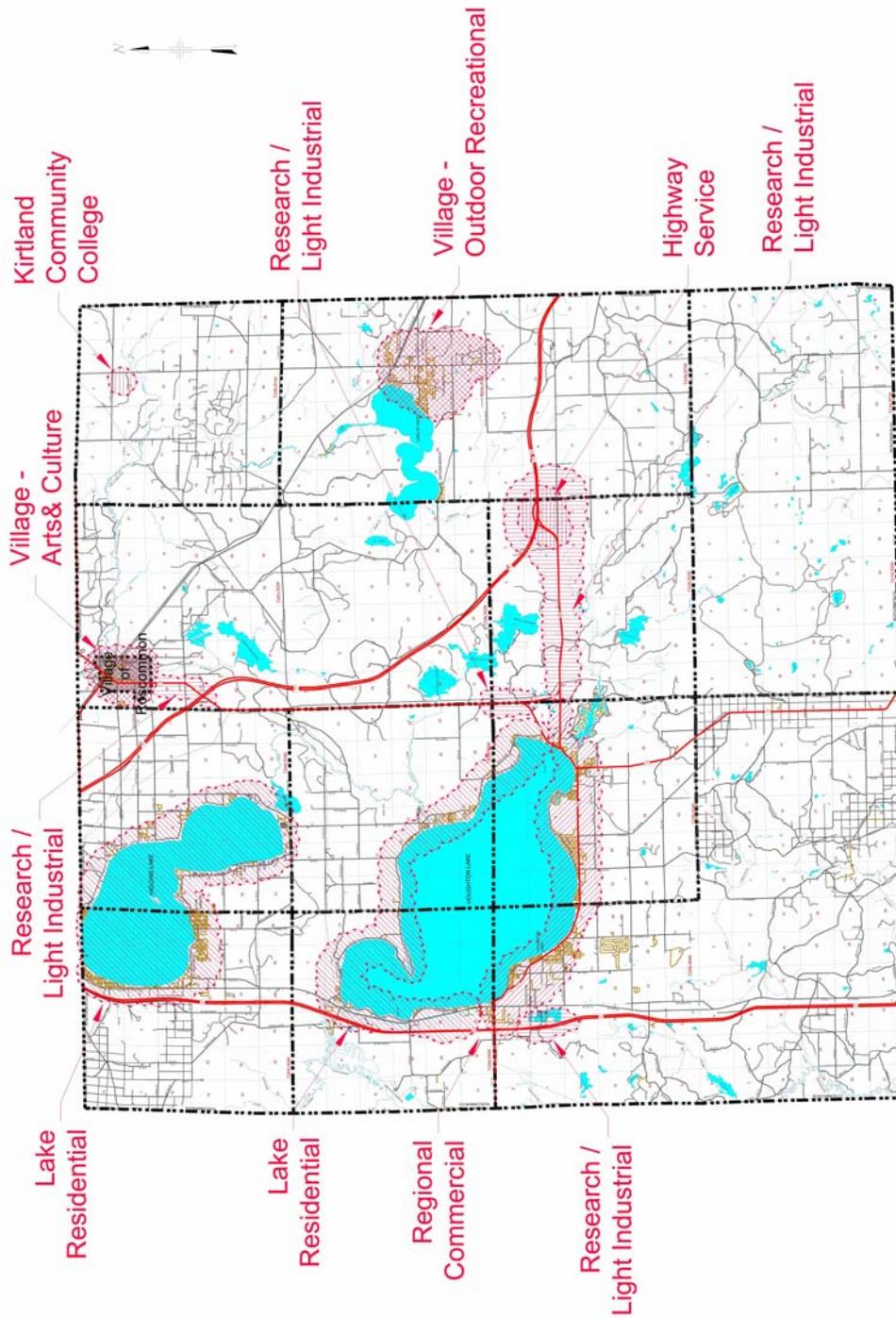
All the townships of Roscommon and the Village of Roscommon have their own master plans for land use (see composite map of land uses in Roscommon County) and have designated in detail the uses they intend for lands within their boundaries. The Future Land Use Map set forth in this plan for Roscommon County indicates broad categories of land use intended to preserve the existing and future residential and commercial areas, to set out areas for village mixed use development, and for research and light industrial. And it shows the vast forested recreational and residential areas of the county.

The major transportation routes are shown and Kirtland Community College is highlighted indicating its importance for the future of the county. The map speaks to cultural centers, winter and summer outdoor sports and activities and regional shopping. The areas set forth are not meant to recommend exclusively any one use, but are meant to suggest focuses for certain areas. The townships and village will determine the finer details.

The next Future Land Use Plan, it is hoped, will have a map showing complete coverage of cellular telephone, broadband Internet and an updated electrical grid.



Composite Land Use Plan of Roscommon County, Michigan.



All other land areas are designated
Forest Recreational / Residential

Future Land Use Plan of Roscommon County, Michigan.

Appendix 1 Distribution of the Estimated Economic Impacts by Sector 2005-2008

Most Affected Industries (Top 10)	Wayne		Genesee		Saginaw		Oakland		Ingham		All Others	
	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total
Labor Income												
1. Offices of Physicians, Dentists, & other Healthcare Providers	-\$37,777,672	10.5%	-\$6,427,650	13.3%	-\$3,139,325	12.9%	-\$3,119,763	10.6%	-\$1,704,123	14.3%	-\$12,095,684	11.0%
2. Private Hospitals	-\$31,312,524	8.7%	-\$4,082,991	8.4%	-\$2,174,055	9.0%	-\$2,759,417	9.4%	-\$935,777	8.8%	-\$8,838,198	8.0%
3. Food Service & Drinking Places	-\$21,456,988	6.0%	-\$2,921,509	6.0%	-\$1,474,437	6.1%	-\$1,575,814	5.4%	-\$789,600	6.8%	-\$7,296,690	6.6%
4. Wholesale Trade Businesses	-\$18,422,588	5.1%	-\$2,700,053	5.6%	-\$1,305,968	5.4%	-\$1,591,832	5.4%	-\$513,360	5.0%	-\$4,390,836	4.0%
5. Monetary Authorities & Depository Credit Intermediaries	-\$13,484,107	3.8%	-\$1,925,035	4.0%	-\$1,002,935	4.1%	-\$960,626	3.3%	-\$520,450	4.5%	-\$3,954,609	3.6%
6. Real Estate Establishments	-\$11,448,756	3.2%	-\$1,736,425	3.6%	-\$856,779	3.5%	-\$755,464	2.6%	-\$457,054	4.1%	-\$4,496,860	4.1%
7. Motor Vehicle & Parts Dealers	-\$10,427,600	2.9%	-\$1,803,037	3.7%	-\$806,282	3.3%	-\$1,100,788	3.8%	-\$485,124	3.2%	-\$4,330,757	3.9%
8. Food & Beverage Stores	-\$9,988,605	2.8%	-\$1,452,323	3.0%	-\$604,008	2.5%			-\$386,837		-\$3,818,316	3.5%
9. Legal Services	-\$8,037,351	2.2%					-\$721,498	2.5%	-\$328,257	2.5%		
10. General Merchandise Stores	-\$7,877,249	2.2%	-\$1,357,556	2.8%	-\$680,426	2.8%	-\$804,895	2.7%	-\$362,257	2.9%	\$3,652,462	3.3%
11. Nursing & Residential Care Facilities			-\$1,076,318	2.2%			-\$701,881	2.4%			-\$2,901,203	2.6%
12. Medical Diagnostic Labs & Outpatient					-\$557,650	2.3%						
TOTAL	-\$359,548,593	100.0%	-\$48,466,977	100.0%	-\$24,261,051	100.0%	-\$29,328,910	100.0%	-\$12,860,203	100.0%	-\$110,275,468	100.0%
Indirect Business Taxes												
1. Owner-Occupied Dwellings	-\$13,567,963	20.5%	-\$2,023,188	21.1%	-\$1,011,040	20.8%	-\$1,270,297	22.7%	-\$537,145	21.4%	-\$5,420,990	22.3%
2. Real Estate Establishments	-\$9,031,327	13.6%	-\$1,361,979	14.2%	-\$678,436	13.9%	-\$596,298	10.6%	-\$362,246	14.4%	-\$3,507,785	14.4%
3. Wholesale Trade Businesses	-\$6,835,554	10.3%	-\$1,003,800	10.5%	-\$485,872	10.0%	-\$591,673	10.6%	-\$189,582	7.6%	-\$1,629,328	6.7%
4. Food Service & Drinking Places	-\$3,420,682	5.2%	-\$466,283	4.9%	-\$235,600	4.8%	-\$251,356	4.5%	-\$126,100	5.0%	-\$1,164,398	4.8%
5. Food & Beverage Stores	-\$3,266,693	4.9%	-\$478,321	5.0%	-\$198,851	4.1%	-\$214,954	3.8%	-\$127,347	5.1%	-\$1,254,666	5.2%
6. Motor Vehicle & Parts Dealers	-\$3,236,096	4.9%	-\$557,046	5.8%	-\$248,764	5.1%	-\$337,706	6.0%	-\$149,078	5.9%	-\$1,346,518	5.5%
7. Electric Power Generation & Supply	-\$3,216,801	4.8%	-\$325,140	3.4%	-\$205,848	4.2%	-\$173,638	3.1%			-\$1,404,713	5.8%
8. General Merchandise Stores	-\$2,686,572	4.1%	-\$466,414	4.9%	-\$233,733	4.8%	-\$275,315	4.9%	-\$124,431	5.0%	-\$1,249,891	5.1%
9. Building Material & Garden Supply Stores	-\$1,794,342	2.7%	-\$330,082	3.4%	-\$165,896	3.4%	-\$173,667	3.1%	-\$88,269	3.5%	-\$889,214	3.7%
10. Health & Personal Care Stores	-\$1,564,941	2.4%	-\$235,618	3.6%					-\$62,271	2.5%	-\$613,748	2.5%
11. Clothing & Clothing Accessories Stores					-\$145,565	3.0%	-\$169,201	3.0%	-\$77,338	3.1%		
TOTAL	-\$66,332,641	100.0%	-\$9,597,786	100.0%	-\$4,870,984	100.0%	-\$5,600,369	100.0%	-\$2,509,055	100.0%	-\$24,325,875	100.0%

Appendix 1 Distribution of the Estimated Economic Impacts by Sector 2005-2008 (continued)

Most Affected Industries (Top 10)	Wayne		Genesee		Saginaw		Oakland		Ingham		All Others	
	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total	Amount Impacted	Percent of Total
Employment (people)												
1. Food Service & Drinking Places	-1,160	13.1%	-192	13.4%	-96	13.0%	-87	12.2%	-51	13.8%	-524	14.0%
2. Office of Physicians, Dentists & Other Healthcare Providers	-584	6.6%	-94	6.5%	-52	7.1%	-46	6.5%	-26	7.0%	-226	6.0%
3. Private Hospitals	-538	6.1%	-70	4.9%	-46	6.2%	-45	6.3%	-16	4.4%	-182	4.9%
4. Real Estate Establishments	-370	4.2%	-60	4.2%	-31	4.2%	-24	3.3%	-16	4.2%	-160	4.3%
5. General Merchandise Stores	-349	3.9%	-59	4.1%	-30	4.0%	-31	4.3%	-16	4.3%	-163	4.4%
6. Food & Beverage Stores	-336	3.8%	-66	4.6%	-28	3.8%	-24	3.3%	-17	4.5%	-171	4.6%
7. Wholesale trade Businesses	-246	2.8%	-39	2.7%	-24	3.2%						
8. Non-Store Retailers	-238	2.7%	-40	2.8%			-22	3.0%	-11	2.9	-114	3.1%
9. Nursing & Residential Care Facilities	-234	2.6%	-41	2.8%	-19	2.6%	-23	3.3%			-105	2.8%
10. Motor Vehicle & Parts Dealers	-217	2.5%	-42	2.9%	-21	2.8%	-20	2.8%	-11	3.0%	-113	3.0%
11. Clothing & Clothing Accessories Stores					-19	2.6%			-11	290.0%		
12. Private Household Operations							-22	3.1%			-91	2.4%
13. Monetary Authorities & Depository Credit Intermediaries									-9	250.0%		
TOTAL (people)	-8,852	100.0%	-1,436	100.0%	-736	100.0%	-714	100.0%	-367	100.0%	-3,751	100.0%
Output												
1. Owner-Occupied Dwellings	-\$123,688,816	11.10%	-\$18,443,866	12.1%	-9,216,883	12.2%	-\$11,580,330	13.3%	-\$4,896,747	12.2%	-\$49,419,036	12.7%
2. Real Estate Establishments	-\$73,438,896	6.60%	-\$11,085,868	7.3%	-5,512,780	7.3%	-\$4,848,295	5.6%	-\$2,943,001	7.3%	-\$28,584,972	7.3%
3. Offices of Physicians, Dentists & Other Healthcare Providers	-\$63,399,208	5.70%	-\$10,660,578	7.0%	-5,350,068	7.1%	-\$5,184,759	6.0%	-\$2,845,931	7.1%	-\$21,171,288	5.4%
4. Food Service & Drinking Places	-\$63,276,336	5.70%	-\$9,427,167	6.2%	-4,726,359	6.3%	-\$4,700,594	5.4%	-\$2,516,927	6.3%	-\$24,569,596	6.3%
5. Private Hospitals	-\$61,920,632	5.60%	-\$8,060,926	5.3%	-4,738,009	6.3%	-\$5,340,956	6.1%	-\$1,853,808	4.6%	-\$19,029,808	4.6%
6. Wholesale Trade Businesses	-\$47,722,400	4.30%	-\$7,047,218	4.6%	-3,481,236	4.6%	-\$4,066,752	4.7%	-\$1,347,826	3.4%	-\$11,740,971	3.0%
7. Petroleum Refineries	-\$33,816,040	3.00%										
8. Electric Power Generation & Supply	-\$27,007,140	2.40%									-\$11,699,202	3.0%
9. Monetary Authorities & Depository Credit Intermediaries	-\$24,948,514	2.20%					-\$1,771,736	2.0%	-\$960,951	2.4%		
10. Insurance Carriers	-\$24,557,432		-\$4,038,939	2.6%	-1,714,882	2.3%	-\$2,355,820	2.7%	-\$1,072,560	2.7%	-\$10,648,641	2.7%
11. Securities, Commodity Contracts & Investments			-\$4,265,518	2.8%	-1,851,729	2.5%	-\$1,843,363	2.1%				
12. State/Local Government Non-Education			-\$4,053,224	2.7%	-2,053,774	2.7%			-\$1,788,236	4.4%	-\$14,607,680	3.8%
13. Motor Vehicle & Parts Dealers			-\$3,811,621	2.5%	-1,736,908	2.3%	-\$2,226	2.6%	-\$1,015,818	2.5%	-\$9,358,214	2.4%
TOTAL	-\$1,110,216,496	100%	-\$152,846,826	100.0%	-75,426,595	100.0%	-\$87,099,130	100.0%	-\$40,230,008	100.0%	-\$388,965,016	100.0%

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