
ANTRIM COUNTY MASTER PLAN 2012

Townships: Banks—Central Lake—Chestonia—Custer—Echo—Elk Rapids—Forest Home—Helena—Jordan—Kearney—Mancelona—Milton—Star—Torch Lake—Warner

Villages: Bellaire—Central Lake—Elk Rapids—Ellsworth—Mancelona



November 8, 2012

Submitted to:

Antrim County

Submitted by:

Antrim County Planning Commission

Excerpt from the November 8, 2012 Board of Commissioners Minutes

It was moved Howelman, seconded by Drenth that the 2012 Antrim County Master Plan be approved as presented. Motion carried as follows: Yes – Drenth, Dawson, Bary, Boettcher, Howelman, Crawford, Stanek, Blackmore, Ricksgers; No – None; Absent – None.

COUNTY OF ANTRIM, MICHIGAN
Resolution No. 1-2012
PLANNING COMMISSION RESOLUTION TO ADOPT THE MASTER PLAN

WHEREAS, the Michigan Planning Enabling Act (MPEA) authorizes the Planning Commission to prepare a Master Plan for the use, development and preservation of all lands in the County; and

WHEREAS, the Planning Commission prepared a proposed Master Plan and submitted the plan to the County Board of Commissioner for review and comment; and

WHEREAS, on May 15, 2012 the Antrim County Board of Commissioners received and reviewed the proposed Master Plan prepared by the Planning Commission and authorized distribution of the Master Plan to the Notice Group entities identified in the MPEA; and

WHEREAS, notice was provided to the Notice Group entities as provided in the Michigan Planning Enabling Act; and

WHEREAS, the Planning Commission held a public hearing on October 1, 2012 to consider public comment on the proposed Master Plan, and to further review and comment on the proposed Master Plan; and

WHEREAS, the Planning Commission finds that the proposed Master Plan is desirable and is the goal and strategy of the County;

WHEREAS, Pursuant to MCL 125.3843 the County Board of Commissioner by resolution asserted their right to make the final decision on the proposed Master Plan.

THEREFORE BE IT HEREBY RESOLVED AS FOLLOWS:

1. **Findings of Fact.** The Planning Commission has made the determination based on a review of existing land uses in the County, a review of the existing Master Plan provisions and maps, input received from the County Board of Commissioners and public hearing, and with the assistance of the County Planning Staff, finds that the new Master Plan will accurately reflect and implement the Counties goals and strategies for the use, preservation, and development of lands in Antrim County.
2. **Adoption of 2012 Master Plan.** The Planning Commission hereby approves and adopts the proposed 2012 Master Plan, including all of the chapters, figures, maps and tables contained therein.
3. **Adoption.** Finally, the Antrim County Planning Commission recommends the Antrim County Board of Commissioners adopt the Antrim County Master Plan.


Rick Teague, Secretary

Antrim County Planning Commission

ACKNOWLEDGEMENTS

Antrim County Board of Commissioners

Laura Stanek, Chair
Bernie Blackmore, Vice Chair
Mike Crawford
Gene Dawson
Dave Howelman
Brenda Ricksgers
Karen Bargy
Ed Boettcher
Jerroll Drenth

Antrim County Planning Commission

Allen Luurtsema, Chair
Jim Gurr, Vice-Chair
Rick Teague, Secretary
Dave Howelman, Board of Commissioner Representative
Jill Barnard
Barbara Bradford
Mike Hayes
Karen Bargy, Board of Commissioner Representative
Jim Schnackenberg
Stan Moore, MSU Extension Advisory Member

Antrim County Staff

Peter Garwood, Administrator
Joe Meyers, Associate Planner
Katie Verellen, Secretary
Tina Schrader, Administrative Assistant



ANTRIM COUNTY MASTER PLAN

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CHAPTER 1: WHAT IS A MASTER PLAN?

SUMMARY

A Master Plan is a comprehensive long range plan intended to guide growth and development of a community or region. It includes analysis, recommendations, and proposals for the community's population, economy, housing, transportation, community facilities, and land use. It is based on public input, surveys, planning initiatives, existing development, physical characteristics, and social and economic conditions.

A Master Plan is a policy based document, it does not, nor can it, regulate land use. A Master Plan is not a zoning document; therefore the recommendations in this plan are only for guidance, not to regulate properties or land use.

A Master Plan is a product of land use planning. Planning is an orderly, open approach in determining Antrim County's needs and goals and developing strategies to address those needs and meet those goals. The planning process involves working through four basic questions, which should be answered with the Master Plan:

1. Where is Antrim County now?
2. How did Antrim County get here?
3. Where does Antrim County want to go?
4. How does Antrim County get there?

While the plan has little direct authority, it is an expression of Antrim County's intention for the future and provides guidance to accomplish that vision. Local units of government, citizen groups, and individuals are encouraged to review this plan and make suggestions.

The benefits for having an updated plan include:

1. Consistency in decision making - the plan gives decision makers a steady point of reference for the land use-related actions.
2. Ability to make informed decisions - the plan provides facts on existing conditions and trends, enabling decision makers to better understand the impact of their decisions versus relying on a "gut instinct."
3. Achieve predictability - the plan describes where and what type of development the community desires. This information allows individuals to plan for the purchase and use of property consistent with community goals.
4. Wise use of resources - the plan includes information from different departments and sources. This information can be used in deciding and prioritizing which projects to undertake (such as promoting brownfield redevelopments, buying land for parks, or applying for grants for affordable housing, etc). It also can be used to direct the location of utility extensions and road improvements.
5. Preserving community character - the plan describes the county's vision for the future and establishes its existing and intended growth. It permits the community to identify what is important and how it should be protected.

6. Produce positive economic development - planning for a community helps existing residences and businesses better predict the future development of an area. This prediction creates a comfort zone of knowing what to expect on neighboring properties. It also encourages new businesses and residential developments because they also know what to expect. In addition, the planning process allows a community to consider workforce, education and local infrastructure capacity, among others, so that appropriate economic development strategies can be developed.

To remain viable, the Master Plan should be flexible and dynamic, not static. It must be able to respond to change as well as guide it. It will need to be evaluated and amended periodically (must be reviewed at least every five years) to keep it fresh and current, but each change should be evaluated on its merits (i.e., whether it enhances or detracts from the County's vision).

The Antrim County Planning Commission is charged with interpreting, evaluating, amending, and keeping the Master Plan current. If it becomes stale, outdated, or is ignored, it will not further the vision of Antrim County.

All public County decisions relating to land use, transportation, acquisition of land, and major capital improvements within Antrim County should be reviewed with the Master Plan to ensure compatibility. While the County Board can take action contrary to the Planning Commission's recommendations, the Commission has the authority, according to state law, to evaluate such proposals regarding their consistency with the Master Plan. This gives the Commission the important responsibility of making sure that the Master Plan is current and generally consistent with what the public and decision makers want the County to become in the future.

PA 33 of 2008, the Michigan Planning Enabling Act states that a local unit of Government may adopt, amend, or implement a master plan. "A planning commission shall make and approve a master plan as a guide for development within the planning jurisdiction.... for a county the master plan may include planning in cooperation with the constituted authorities for incorporated areas in whole or to the extent which, in the planning commission's judgment, they are related to planning of the unincorporated area or of the county as a whole."

CHAPTER 2: LAND USE CHANGE FROM 1978 TO 1998

SUMMARY

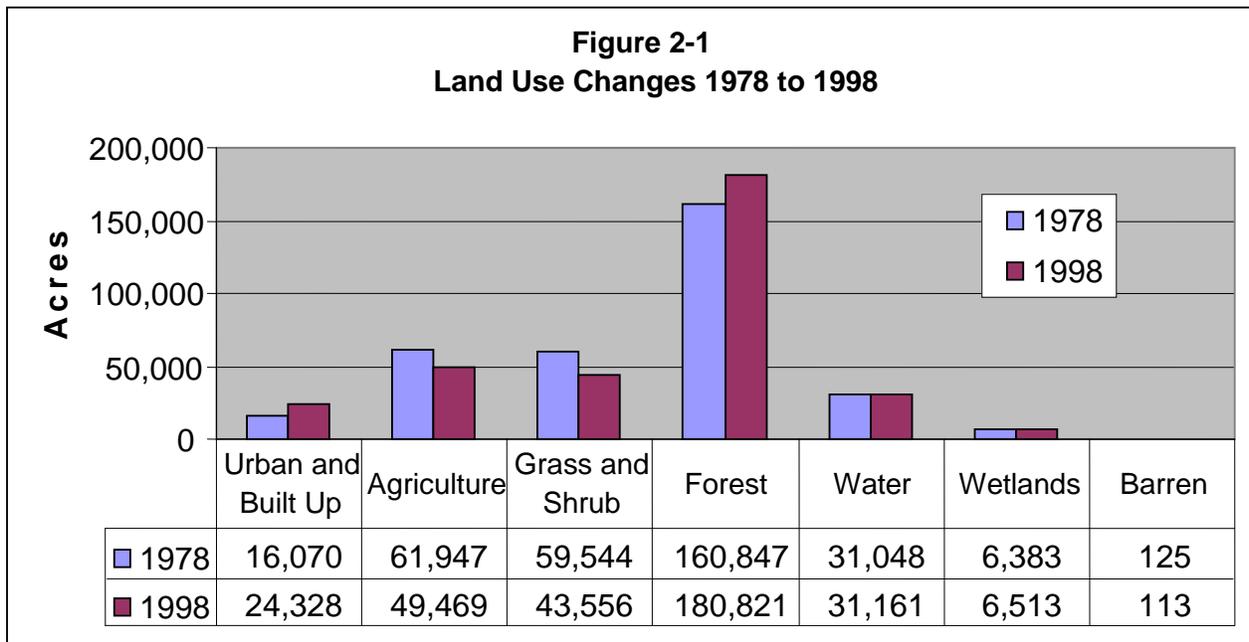
There are 335,961 acres (525 square miles) of land and water in Antrim County. A study performed by the Land Information Access Association (LIAA) indicated that 24.2% of the total area (81,226 acres) had undergone a land use change between 1978 and 1998. Much of the information in this section is taken from the LIAA study.

Figure 2-1 shows which land uses had the most pronounced changes. Figure 2-2 compares the land uses between 1978 and 1998.

Some land use changes between 1978 and 1998 are in the same general land use classification. This includes about 42.3 square miles or 27,045 acres of land. For example, an urban use may have changed, but it changed to another kind of urban use; or a forest use changed (or grew) into another kind of forest and thus remained in the forest use category. Figure 2-3 summarizes the changes within a particular land use classification between 1978 and 1998.

The amount of land that changed from one classification to another during this twenty-year period was 55,890 acres or 44.5 square miles. This represents approximately 8.5% of the total land and water area.

Note: Values may not equal 100% due to rounding.



Source: 2003 Land Information Access Association Study

Figure 2-2					
Land Use Changes 1978 to 1998 by Portion of County Area					
	1978 (acres)	% of County	1998 (acres)	% of County	Change (acres)
Urban and Built Up	16,070	5%	24,328	7%	8,258
Agriculture	61,947	18%	49,469	15%	-12,478
Grass and Shrub	59,544	18%	43,556	13%	-15,988
Forest	160,847	48%	180,821	54%	19,974
Water	31,048	9%	31,161	9%	113
Wetlands	6,383	2%	6,513	2%	130
Barren	125	0%	113	0%	-12
Total	335,964 acres		335,961 acres		

Source: 2003 Land Information Access Association Study

Figure 2-3			
Land Use Changes Within the Same Classification between 1978 and 1998			
Category of Use	Acres	Percent of Total Change	Square Miles
Urban and Built Up	223	0.3%	0.4
Agriculture	5,324	6.6%	8.3
Grass and Shrub	13,852	7.3%	9.3
Forest	13,882	17.1%	21.7
Wetland	1,739	2.1%	2.7
Total	27,045	33.4%	42.4

Source: 2003 Land Information Access Association Study

URBAN AND BUILT UP: (Where development has and is occurring...)

The urban and built up land use category includes uses that are related to human activity, except agriculture. This includes houses, businesses, factories, airports, utilities, and recreational grounds, such as athletic fields and campgrounds. Cemeteries are also in this category.

In 1978, there was a total of 16,070 acres in this category. According to the LIAA study, 8,258 acres were added to this category from 1978 to 1998, while 223 acres changed from one urban use to another urban use. Interestingly, there were 362.4 acres that changed to a use that was non-urban: 42.7% became classified as grass, 23.4% became agriculture, 29.4% became forestland, and 4.5% became classified as wetland.

As of 1978, 4.8% of the county was in the urban and built up category. At the end of the 20-year period of the study, 7.2% of the county had this classification. This increase equals 8,258 acres or 2.5% of Antrim County: 44.2% came from the grass and shrub classification, 32.9% came from agricultural lands, 22.7% came from forestland, and .2% came from the wetland classification.

In Antrim County, two thirds of urban use changes are stemming from grass and forest uses, while one-third came from agricultural uses. The major changes to urban use are summarized in Figure 2-5.

Most of converted acreage (6,660 acres or 80.6%) was classified to a subcategory use under urban, titled single family/duplex. It is assumed that most of this was for single family residences. The two thirds of the 6,660 acres that became single family/duplex are broken down by township in Figure 2-4.

These townships represent where the larger urban use growth areas occurred in the county during the period of study.

Figure 2-4 Township Urban Growth (Single Family/Duplex)		
Township	Acres to Urban	% of 6,660 Acres
Mancelona	796.6	12.0%
Banks	736	11.1%
Milton	699.1	10.6%
Jordan	648.24	9.7%
Central Lake	574.5	8.6%
Kearney	545.6	8.2%
Echo	454.6	6.8%

There were small use changes to business and industrial during the twenty-year period. Of the 8,258 acres converted to urban use, only 391.8 acres were converted to the sub category of commercial, services, and institutional uses. In addition, only 425.9 acres were converted to industrial uses. This pattern may have some bearing on the employment needs in the county. Antrim County seems to be a place that one either both lives or works, but not necessarily both.

As stated, 6,660 acres changed to single family/duplex use from the period 1978 to 1998. In the period of the census count, from 1980 to 2000, the county population gained 6,916 persons.

**Figure 2-5
Changes in Urban and Built Up Uses (1978 to 1998)**

Changes to Urban and Built Up from Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Grass to Urban	3,807	44.0%
Agriculture to Urban	2,799.7	32.8%
Forest to Urban	1,982.3	22.9%
Wetland to Urban	119.7	0.2%
Barren to Urban	12.3	0.1%
Sub-Total	8,721	
Changes from Urban and Built Up to Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Urban to Grass	154.8	42.8%
Urban to Agriculture	84.9	23.5%
Urban to Forest	106.4	29.4%
Urban to Wetland	16.4	4.4%
Sub-Total	362.5	
Urban County Total = 8721 acres – 362.5 acres = 8358.5 acres gained		

AGRICULTURE: (Where the farming has and is occurring....)

The major loss of agricultural uses in the county is not to urban uses, most of it is a conversion of grass and forest uses. Of the agricultural uses that changed to other uses, 84% converted to grass and forest uses, see Figure 2-6. This would indicate a loss of farming activity resulting in previous farmland being allowed to return to a natural state. Additionally, urban uses from agricultural uses converted 15.5 %. Most of the urban growth came from previous grass and forest uses.

The following list shows those townships where 81% of the Agricultural uses changed to grass:

Township	Acres of Agricultural to Grass	Percent of 1978 Agricultural Acreage
Jordan	1,666.0	38.8%
Banks	1,656.2	13.5%
Mancelona	1,326.2	35.1%
Echo	1,256.2	25.5%
Warner	952.9	15.4%
Milton	882.1	12.4%
Star	858.4	17%
Chestonia	690.86	60.1%
Custer	480.9	28.9%

Central Lake, Forest Home, Kearney, Elk Rapids, Helena, and Torch Lake Townships had relatively small number of acreage converted to grass.

Jordan, Banks, Mancelona, and Milton Townships also had larger changes to urban uses.

There were also changes in use to agricultural uses. About 5,527.7 acres of new agricultural uses were observed between 1978 and 1998. Most of this change, 98%, was from grass and forest uses. Nearly half of the change from grass to agricultural was in the following townships: Forest Home, 769 acres, Echo, 488 acres, Central Lake, 481 acres, and Helena, 380 acres. This may indicate a modest increase in farming type activities in these townships.

It is also important to note that Torch Lake Township increased its agriculture acreage by 149 acres and Forest Home Township by 77 acres.

Figure 2-6		
Changes in Agricultural Uses (1978 to 1998)		
Changes <i>from</i> Agricultural Lands to Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Agricultural to Grass	10,633.5	59.1%
Agriculture to Forest	4,495.6	25%
Agricultural to Urban	2,799.7	15.5%
Agricultural to Wetland	73.4	0.4%
Sub-Total	18,002.2	
Changes <i>to</i> Agriculture from Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Grass to Agriculture	4,359	78.9%
Forest to Agriculture	1,073.3	19.4%
Urban to Agriculture	84.9	1.5%
Wetland to Agriculture	10.9	0.2%
Sub-Total	5,528.1	
County Total = 18,002.2 acres – 5,528.1 acres = 12,474.1 acres		

GRASS AND SHRUB LAND: (Where non-forested undeveloped areas are located...)

There was a large change in the county in the grass and shrub land classification. There was a net change of 15,987.6 acres (see Figure 2-7) to other uses from grass and shrub land. Approximately 72% or 21,343.1 acres changed to forest uses. An additional 4,359 acres was converted to agricultural uses. Urban growth comprises 3,807 acres of formally grass use areas. As it was previously noted, 44% of the change to urban uses came from grass uses. There was, however, a large gain of grass acreage.

A total of 10,633.5 acres of agricultural uses existing in 1978 became grass use by 1998. A lesser amount, 2,871.2 acres, was created from previous forest acreage. Some of this may have come from timber cutting.

**Figure 2-7
Changes in Grass and Shrub (1978 to 1998)**

Changes from Grass and Shrub Land to Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Grass to Forest	21,343.1	72%
Grass to Agriculture	4,358.5	14.7%
Grass to Urban	3,807	12.8%
Grass to Wetland	153.8	0.5%
Sub-Total	29,662.4	
Changes to Grass and Shrub Land from Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Agriculture to Grass	10,633.5	77.8%
Forest to Grass	2,871.2	21.0%
Urban to Grass	154.8	1.1%
Wetland to Grass	15.3	0.1%
Sub-Total	13,674.8	
Grass/Shrub Land County Total = 29,662.4 acres – 13,674.8 acres = 15,987.6 acres lost		

The large change from grass to forest is in part due to a natural process called succession. If an area were to begin with bare ground, there would be an initial growth of plants on that ground that could survive under those conditions. These plants would then begin to create conditions that would be conducive to a next stage of plants. In Antrim County this would be grass and low-to-the-ground broader leafed plants. Next, short woody shrubs and bushes appear. These create conditions for larger bushes and shrubs and then some fast growing softwood trees. As these trees mature, they create conditions for larger, long-lived evergreens and hardwood trees. This resulting forest, which often takes hundreds of years to mature, continues, unless dramatically challenged by environmental changes or natural disasters. This final condition is called a Climax Forest or Climax Fauna.

The grass and shrub acreage of Antrim County has become, for the most part, a young forest. In the twenty-year period of the study, the county had a net loss of 15,987.6 acres of grass uses. It gained, however, 19,974 acres of forest uses.

FOREST LAND: (Where treed undeveloped areas are located...)

The county had a net gain of forest uses of 19,974 acres (see Figure 2-8). Most of this was from the natural succession process from grass and shrub acreage. There was also a gain of 4,495.6 acres from uses that were agricultural in 1978. If both the grass use loss and the forest use gain is combined, the county gained 3989 acres of new natural kinds of areas. As noted in the previous section, 4,358.5 acres of grass uses were converted to agricultural uses. However, there was a conversion of 4,495.6 acres that was in agriculture uses 1978 to forest uses in 1998.

Antrim County continues to be forested county with over 180,000 acres of forested land. This is more than half the area of the entire county. Eight townships contain 74.2% of the forest use acreage in the county.

<u>Township</u>	<u>Forest acres</u>
Mancelona	29,593
Chestonia	18,556
Jordan	15,885
Kearney	15,402
Custer	14,538
Warner	14,348
Echo	14,277
Banks	11,819
Star	11,542
Central Lake	8,838
Forest Home	8,565
Milton	5,841
Helena	5,644
Torch Lake	4,506
<u>Elk Rapids</u>	<u>1,346</u>
Total	180,718

It should be noted that all of these townships are east of the county seat, Bellaire. Only one township located west of Bellaire, Banks Township has a comparable amount of forest uses totaling 11,819 acres. The forested lands are a highly valued natural resource.

**Figure 2-8
Changes in Forest Land Uses (1978 to 1998)**

Changes to Forest Land from Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Grass to Forest	21,343.1	82.1%
Agriculture to Forest	4,495.6	17.3%
Wetland to Forest	62.7	0.2%
Urban to Forest	106.4	0.4%
Sub-Total	26,008	
Changes from Forest Land to Other Categories of Land Use		
Category Change	Total Acres	Percent of Total Acres
Forest to Grass	2,871.2	47.5%
Forest to Urban	1,982.3	32.9%
Forest to Agriculture	1,073.3	17.8%
Forest to Wetland	107.2	1.8%
Sub-Total	6,034	
Forest Land County Total = 26,008 acres – 6034 acres = 19,974 acres gained		

WATER AND WETLANDS: (Where significant features are located...)

In both the water and wetland categories, there was a small gain in acreage. Antrim County gained 113 acres of water and 130 acres of wetlands. It is not clear from the LIAA data the source of this additional acreage. It may relate to the amount of accumulated precipitation up to 1998 as compared to the beginning of the study in 1978. It may also be related to the time of year the land use data was collected or to construction of various kinds, such as large buildings, roads, marinas, and lake/river enhancements that created additional water areas or wetlands. It may also represent awareness on the part of the people of the county to keep the water and wetland areas safe from unreasonable intrusion.

Jordan Township during this period gained 38 acres of water, but lost 66 acres of wetland area. Echo Township gained 54 acres of wetland. There is not a clear pattern suggested by the data. The county gained a total of 243 acres of water and wetlands during this twenty-year period.

IMPLEMENTATION: (What should be done next?)

1. Commission a new aerial land use study and compare the findings to the 1978 and 1998 results.

CHAPTER 3: NATURAL RESOURCES AND ENVIRONMENT

SUMMARY

Natural features, such as wetlands, woodlands, lakes, and streams help shape community identity. This is especially true in Antrim County. New land developments can significantly impact natural features and consequently impact community character. The purpose of this section is to describe the significant natural features that exist in Antrim County.

This information will help the Antrim County Planning Commissioners recommend development into areas which are the least environmentally sensitive and minimize adverse impacts to these areas.

The natural features discussed in this chapter include: geology, topography, soils, climate, wetlands, lakes, rivers, streams, watersheds, fisheries and wildlife, vegetation, groundwater, extraction sites, the sky, and the environment.

PHYSICAL FEATURES (Surface characteristics that give shape to a community)

Geology

The surface geology, like much of Northern Michigan, is characterized by upland areas or moraines, coastal areas and lakebeds, dunes along Lake Michigan, and outwash and glacial channels.

Topography

The surface topography in Antrim County ranges from flat marshy areas to very steep and rolling hilly sections. The highest point in the county is approximately 1,460 feet above sea level, which is located in the extreme southeast corner of Antrim County. The lowest surface elevation is the lake level in Grand Traverse Bay that averages 580 feet above sea level (see Map 3-1, Antrim County Topography).

As depicted on Map 3-2, there are several areas that have slopes exceeding 15%. These areas are located primarily in Kearney, Forest Home, Echo and Banks Townships. Much of the eastern shore line along Torch Lake also has steep slopes.

Soils

Generally soils in the area tend to be sand, acidic, and low in fertility. Upland soils are characterized by Kalkaska-Montcalm soils, which are well-drained, nearly level to very steep, sandy soils on hills, ridges, and knolls. According to the 1978 United States Department of Agriculture Soil Survey, soils along rivers, streams and riparian to lakes are often characterized as Tawas-Ensley-Roscommon soil types that are considered very poorly drained, nearly level, mucky, loamy, and sandy soils in depressions on plains. See Map 3-3, Antrim County Soils and Map 3-4, Antrim County Drainage Classification.

Climate (Michigan Department of Agriculture's Climatologic Division provided this data)

In winter months, the temperature ranges in the high to mid-20's for an average high and the average low temperature is in the mid-teens. During the growing season, the average highs are about 70 degrees and the lows are near 50 degrees at night. The temperatures are modified in the spring and fall from the lake effects. This "Great Lake effect" provides cooler temperatures in the spring and warmer temperatures in the fall. This temperature modification makes for more ideal conditions for the production of specialty crops such as cherries and grapes.

Growing degree-days are equivalent to the "heat units." During the month, growing degree-days accumulate by the amount that the average temperature each day exceeds a base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall. The scheduling of pesticide application is also based on degree days.

The total annual rainfall ranges from 30 to 33 inches. Of this rainfall, 18.7 inches usually fall in April through September. The growing season for most crops falls within this period. Evaporation generally exceeds rainfall during the growing season.

The average seasonal snowfall, as recorded by the Road Commission is 156 inches and the winter storage of water in the root zone is important for the production of forest and agricultural crops for the upcoming year. Thunderstorms occur on approximately 31 days of each year.

The average relative humidity in mid-afternoon is about 63%. The sun shines 75% of the time possible in summer and 40% in winter. The prevailing wind is from the southwest. Lake Michigan on the western portion of the County impacts the weather for an average distance of 10 to 15 miles inland.

In the west half of the County, the presence of Lake Michigan tends to lessen extremes in temperature and creates a climate favorable to the growing of fruits. The inland lakes and soil conditions of this western area permit such types of agriculture not otherwise feasible at this high latitude. During the summer, the off-the-lake air currents tend to prevent high temperatures and maintain humidity. In the fall, they retain heat and in the spring retard premature growth with the cold retained in the lakes.

Wetlands, Lakes, Rivers, and Streams

Antrim County has more than 31,000 acres of inland water area (lakes, rivers and streams), and more than 6,500 acres of wetlands. Based on the information presented in Land Use Changes 1978 to 1998 section, Antrim County gained 113 acres of water acreage and 130 acres of wetland acreage. Because of the relatively small size of these acreage changes, the gain in acreage may reflect a higher water table in 1998 compared to 1978. Future land studies will allow acreage comparisons as a means of verifying the size of these areas.

It is estimated that wetlands make up 2% of Antrim County (see Map 3-5, Wetlands). Wetlands are a part of floodwater control, groundwater recharge and discharge, water quality, sediment entrapment, shoreline stabilization, fish and wildlife habitat, and recreation. Although regulated by the 1994 Natural Resources and Environmental Protection Act (NREPA), wetland environments can be impacted by draining and filling practices. Forest fractionalization, residential construction, golf course construction, and roads continue to affect the wetlands in the area.

Wetlands contain many species of plants and animals whose survival depends on this unique environment. Compared to other kinds of ecological areas, they may be no more or no less important to the health of the larger ecosystem. However, because they are often associated with lake, river and stream shorelines, they have received considerable attention as the pressure to develop along these shorelines increases.

The Natural Resources and Environmental Protection Act defines a wetland and describes what types of activities are permitted on or adjacent to a wetland. The United States Army Corps of Engineers and the Michigan Department of Environmental Quality (DEQ) regulate water and wetlands that adjoin the Great Lakes. Permits from these agencies are required prior to development on a property that has a wetland, as defined by the DEQ and/or Army Corps of Engineers.

There are 76 inland lakes in Antrim County, with more than 25 miles of Great Lakes shoreline. The streams total 264 miles in length and most are high quality fishing

streams (see Map 3-6, Antrim County Lakes, Rivers, and Streams). The lakes and rivers in Antrim County comprise of an area of nearly 20,480 acres.

The headwater for the Jordan River is in Antrim County and it flows all but two miles in Antrim County. Over 30,000 acres of state forestlands border this river.

The Manistee River, part of the Upper Manistee River watershed, is located in the northwestern portion of Michigan's Lower Peninsula. It has a drainage area of 590 square miles. The watershed includes parts of five counties: Antrim, Otsego, Crawford, Kalkaska and Missaukee. The mainstream is approximately 78 miles long and originates in southeast Antrim County (approximately six miles from the village of Alba), at an elevation of 1,250 feet.

Quick Note
Antrim County has over 155 public access sites on most of the 76 inland lakes and Grand Traverse Bay.

The Cedar River known as “A Blue Ribbon Trout Stream” is a popular fishing area. It flows mostly westward through Antrim County into the Intermediate River in Bellaire. The Cedar River rises in southwest Chestonia Township, near the boundary with Mancelona Township.

Chain of Lakes (*the following information was derived from Fish of the Elk River Chain of Lakes publication*)

A key natural resource in Antrim County is the Chain of Lakes, commonly referred to as the Chain ‘O’ Lakes by the locals. The Chain of Lakes has over 200 miles of shoreline and almost 60 square miles of water. This continual connection of water embraces 14 lakes and interconnecting rivers. In addition, there are more than 200 high quality groundwater fed tributaries (many of which are trout streams such as the Cedar and Rapid Rivers).

The 14 lakes include: Beals, Scotts, Six Mile, St. Clair, Ellsworth, Wilson, Benway, Hanley, Intermediate, Bellaire, Clam, Torch, Skegemog, and Elk.

Beals Lake is 41 acres, has a maximum depth of 16 feet, a mean depth of 10.2 feet, and is 0.50 miles long. It is the uppermost lake of the chain and is also the smallest.

Scotts Lake is 63 acres, has a maximum depth of 30 feet, a mean depth of 13 feet, and is 0.70 miles long. At this time, this is the only lake that does not have a public boat launch.

Six Mile Lake is 378 acres, has a maximum depth of 31 feet, a mean depth of 13 feet, and is 4 miles long. This lake has more tributaries than any other lake in the chain; however most of the tributaries are unnamed.

St. Clair Lake is 91 acres, has a maximum depth of 32 feet, a mean depth of 10 feet, and is 1.25 miles long. This lake was once known as Campbell Lake.

Ellsworth Lake is 120 acres, has a maximum depth of 42 feet, a mean depth of 17 feet, and is 1.6 miles long. At one time, property abutting Ellsworth Lake was the highest-ranking ground water contamination site in Michigan. The fish and other aquatic wildlife

were found to contain contaminants, but in low levels. This site was cleaned by the Michigan Department of Environmental Quality.

Wilson Lake is 106 acres, has a maximum depth of 48 feet, a mean depth of 11.5 feet, and is 1.4 miles long. Much of the west shore is undeveloped because of a railroad right-of-way that existed until the 1980s.

Benway Lake is 131 acres, has a maximum depth of 42 feet, a mean depth of 15 feet, and is 1.1 miles long. Similar to Wilson Lake, much of the west shore is undeveloped because of a former railroad grade.

Hanley Lake is 93 acres, has a maximum depth of 27 feet, a mean depth of 10.6 feet, and is 1.5 mile long.

Intermediate Lake is 1,520 acres, has a maximum depth of 80 feet, a mean depth of 28 feet, and is 8 miles long. This lake was once known as Central Lake. A 1999 survey found that this lake's fish population appeared to be in excellent shape. This is a popular fishing and boating spot.

Lake Bellaire is 1,793 acres, has a maximum depth of 95 feet, a mean depth of 42 feet, and is 4.5 miles long. This lake was once known as Grass Lake and has deemed to be moderately productive. This is a popular fishing and boating spot.

Clam Lake is 439 acres, has a maximum depth of 27 feet, a mean depth of 13 feet, and is 3.25 miles long. This is another popular site in Antrim County. The majority of the banks have been developed with homes, restaurants, and marinas.

Torch Lake is 18,473 acres, has a maximum depth of 302 feet, a mean depth of 140 feet, and is 18 miles long. It was called "Was-Wah-go-nink" or "lake of torches" by the Native Americans, reference being made by the use of torches in spearing of whitefish and trout. Torch Lake is commonly known as one of the worlds most beautiful lakes in the world.

Lake Skegemog is 2,560 acres, has a maximum depth of 29 feet, a mean depth of 12.4 feet, and is 3.7 miles long. Approximately 80% of the shoreline property parcels have been developed. Lake Skegemog the home of the lake sturgeon, muskellunge, and walleye among others, providing fishing and ice fishing activities in Antrim County.

Elk Lake is 7,730 acres, has a maximum depth of 192 feet, a mean depth of 71 feet, and is 9 miles long. This lake divides the Village of Elk Rapids and is a popular boating spot. It also has a high level of calcium carbonate; which creates a minimal amount of aquatic plant growth.

Grass River and Grass River Natural Area

The Grass River is 2.5 miles long and connects Lake Bellaire to Clam Lake. Its overall watershed is about 175 square miles. It has been deemed one of the most scenic spots along the Chain of Lakes. It flows through an expansive marsh and dense conifer swamp. Most of the river is undeveloped and is protected by the Grass River Natural Area, a 1,443-acre Antrim County preserve, which, in addition to the river, includes over a mile of Clam Lake shoreline, a half mile on the Intermediate River, and two miles on

Lake Bellaire. The Natural Area's trail guide lists 49 species of mammals, 33 species of reptiles and amphibians, 65 species of birds, and more than 400 species of plants.

The Grass River Natural Area, Inc. administers the area under contract with Antrim County. More information regarding recreational and educational activities is available at www.grassriver.org.

Watersheds

A watershed is a land area, also known as a drainage area, which collects precipitation and contributes runoff to a receiving body of water or point along a water course. In the southern corner of the County is the headwater area of the Manistee River Basin. The Manistee River drains southwesterly to Lake Michigan, and drains approximately 30-40 square miles of Antrim County.

The Jordan River originates in Antrim County, flows westerly then north into Lake Charlevoix at East Jordan. The Jordan River drains approximately 127 square miles in Antrim and Charlevoix counties.

The largest watershed in Antrim County is the Elk River Chain of Lakes Watershed, which supplies 60 % of the water flowing into the Grand Traverse Bay each day. The Elk River Chain of Lakes Watershed covers an area of approximately 316 square miles or 202,060 acres in Antrim, Charlevoix, and Kalkaska Counties. Over 90 % of the Elk River Chain of Lakes Watershed is in Antrim County. A small area in the northeast corner of Antrim County contains portions of the Boyne Watershed. There is 81 acres of the South Arm of Lake Charlevoix Watershed in the northern tip. See Map 3-7, Antrim County Watershed for their locations.

Fisheries and Wildlife

Antrim County offers sport fisherman an abundance of fishing opportunities with over 264 miles of quality fishing streams. This area is a focal point for trout and salmon fishing. With the introduction of the salmon into Lake Michigan in the mid 1960's came a fishery-industry that is unsurpassed in fresh water fishing. Fish and wildlife in Antrim County is an important industry which relies on maintaining a high level of water quality.

Hunting for whitetail deer attracts many people to the county annually. The deer harvest in Antrim County is approximately 2,000 – 4,000 annually. The stag or buck harvest is approximately 1,600 annually.

A variety of habitat also provides the hunter with good ruffed grouse, woodcock, squirrel, rabbit, and turkey hunting opportunities.

Game species of importance to trappers are bear, beaver, otter, muskrat, raccoon, opossum, skunk, red fox, coyotes and weasel.

An environmental review through the Michigan Natural Features Inventory database (MNFI) identified 15 threatened species and 9 species of concern that exist within Antrim County. The MNFI is continuously updating this information.

Vegetation

More than half of Antrim County is forested; (180,000 acres or 282 square miles). The land use study discussed in Chapter 2 shows that an additional twenty thousand acres became an established forest during this time period. This occurred from the natural ecological succession from grass and shrub land and from the loss of farmland. Most of the forest in Antrim County is privately owned and it is the largest single natural resource.

Commercial Forest Land

Antrim County has 4,938 acres enrolled in the Commercial Forest Act as of 2001. The Commercial Forest Act was enacted in 1925 as a way to encourage management of private forestlands and production of forest products. Landowners interested in long-term forest management can enroll their land through a process administered by the Michigan Department of Natural Resources and the local county agencies. Land enrolled is put on a special tax roll and annual property taxes are substantially reduced. Land must be 40 contiguous acres or more, have no buildings and not producing any income other than forest products. Land shall be open to public hunting and fishing. It is not otherwise public and users must obey and respect private property rights. There is a withdrawal fee and a substantial penalty to remove lands from listing. Information can be obtained at local DNR offices and on the DNR web site at www.michigan.gov/dnr/ and clicking on the Forest, Lands, and Water link.

Antrim County Owned Forest Lands

Antrim County has approximately 2,745 acres of land classified as Antrim County Forest Land. Antrim County received most of these parcels from the State of Michigan in the 1930's under what is now PA 451 NREPA. Most of the land was considered tax reverted land and deeded to the County to be utilized for "forestry purposes". It is understood that the term "forestry purposes" relates to the management of these parcels for the production of forest products as well as forestry education within the community. Additionally, recreational activities such as hunting, fishing, hiking, snowmobile and other low impact uses are permitted on the parcels. Antrim County Forest Lands are administered by the Antrim Conservation District Forester through the County Parks and Lands Committee under the supervision of the County Commissioners, see Map 3-8, Antrim County Managed Areas.

Forest Lands in Antrim County contain the following species:

Northern Hardwood Forest	1,669 acres	60%
Pine Forest	317 acres	11%
Aspen Forest	249 acres	9%
Lowland Conifer Forest	292 acres	10%
Upland brush/open	85 acres	3%
Oak Forest	120 acres	4%

SUBSURFACE TRAITS (Underground elements that impact community design...)

Groundwater/Wells

Groundwater in varying amounts can be found from both glacial drift and in the various kinds of bedrock geology found in Antrim County. Map 3-9 shows the Groundwater Contours and Wells.

The quality of the water from the water-bearing aquifers varies considerably. Some nitrate testing has been completed to determine the movement and possible sources for contamination. Additional monitoring and sampling should be completed to thoroughly comprehend the complexity of the groundwater resource. Protection of our wellheads should be addressed in all areas of the county to help maintain the integrity of our groundwater.

Surface Water

Surface water has the same concerns as groundwater. Most surface water pollution stems from cleaning products, automotive fluids, paints, and yard products. Old storage tanks for gasoline and other fuels can leak, old dumpsites, and businesses can produce hazardous or toxic substances. With our sandy soils, steep slope concerns, and close groundwater to surface water levels, it is easy to see how such materials can cause major clean-up problems and possibly health issues.

Extraction Sites

Oil and natural gas sites are regulated by the State. Individual homeowners may sign individually with companies regarding the use of their own private property. Drilling on publicly owned property produces revenue for the Michigan Natural Resources Trust Fund that provides funds for development and land acquisition throughout the state.

Sand and gravel pits are governed by State Law, however people may challenge the extraction of valuable natural resources if very serious consequences would result from the extraction of the natural resources.

ABOVE GROUND ATTRIBUTES (Night Sky Visibility)

The ability to view the stars at night is an essential rural characteristic for Antrim County. An abundance of artificial light from the ground will deter this objective. Antrim County residents have expressed their concerns in preserving this view. Many surrounding communities are now concerned with growth and the growing amount of night illumination to the rural skies and have introduced ordinances to that effect.

ENVIRONMENT

It is worth noting that the Great Lakes states (including Michigan) contain one-fifth of the entire world supply of fresh water. Researchers predict that fresh water will be the most precious commodity on the planet by the year 2017.

There have been two major groundwater contaminations in Antrim County. The Tar Lake

Plume and Superfund site, a five and one half mile underground plume extending southwesterly of Mancelona/; and the trichloroethylene Plume (TCE), a 6 mile underground plume extending from just north of the Tar Lake Plume

Community Resource Development Inc, (CRD), a nonprofit organization, helped initiate and facilitate a grass roots community driven organization to respond to the existence of the superfund site. With the help from CRD as well as the Environmental Protection Agency (EPA) and DEQ, Antrim County United Through Ecology (ACUTE) was born to help investigate and mediate the TCE Plume.

Various solutions, over the period of several years, resulted from grass roots community organizations and advocacy. The EPA invested over fourteen million dollars in the cleanup and removal of 47,000 tons of contaminated material from a ground depression on the Tar Lake site. The DEQ installed a bio sparge system to remediate the groundwater moving off the site. The Mancelona Area Water and Sewer Authority (MAWSA) was created and the DEQ committed six and a half million dollars for the construction of a regional water system to provide safe water to all the properties affected by the Tar Lake and the TCE groundwater contamination plumes.

Over the past decade, ACUTE and CRD have worked closely with various parties to oversee the installation of monitoring wells tracking the advancement of the plumes. Estimates predict that the plumes could reach MAWSA's water wells within 10 to 40 years. The monitoring wells will be an early warning system. The main mission of ACUTE was to serve as an intermediary with the DEQ and look at innovative remediation technologies. In 2008, with all of the modeling of the plume completed and the wells in place, ACUTE felt they no longer needed to meet on a regular basis until new information indicates the need to address new threats from the TCE Plume.

IMPLEMENTATION: (What should be done next?)

1. Provide a countywide wetland educational program open to all property owners that would emphasize the legal definitions and uses of these properties.
2. There is a need for a comprehensive study of the water levels of the Chain of Lakes. It is recommended that various agencies of the state and federal government should be contacted for financial help and guidance for such a study.
3. Work with the County Forester to develop a tree planting plan. This plan should discuss the environmental, scenic, and financial benefits of hardwood trees to Antrim County. It should also have an outreach component.
4. Contact the Department of Environmental Quality and environmental consultants to pursue a Wellhead Protection Program.
5. Designate an area for a Green Business Park.

CHAPTER 4: EXISTING LAND USE PATTERNS

SUMMARY

It is important to know and understand the current land uses and development patterns of a community when planning for the future. The physical features such as the rivers, lakes, roadways, and publicly owned land have an impact on the current land patterns and will continue to do so. Economic and transportation changes will also impact growth.

The information for this generalized map of land use trends in Antrim County was developed through field observation and verification from County officials. It is not meant to be a comprehensive study. Chapter 2, Land Use Changes from 1978 to 1998 provides the detail, while this section provides the overall picture of current land use patterns.

The Graphic is divided between Primary Growth and Secondary Growth. Primary Growth has been areas of the County that have a faster growth rate, while the Secondary Growth areas have had smaller growth. This division shows that Townships that have a body of water or are in the southern location have had a greater increase in population. Townships that do not have these characteristics and/or have a large amount of publicly owned lands have had a smaller increase in population.

GENERALIZED LAND USE CATEGORIES

Villages:

There are five villages in Antrim County. Each of these villages has residential and commercial components.

The Village of Bellaire is the county seat; therefore it contains the government buildings. It is comprised of historic public buildings and a well-defined downtown.

The Village of Elk Rapids acts as an entranceway into Antrim County from the south west. This is a popular tourist destination and is the most populated village. It has a defined downtown and the Elk River traverses the center.

The Village of Mancelona is the second most populated village. It is an entranceway for the eastern portion of the county providing access to the rest of the county. This location has a defined downtown, public water and sewer system, and rail access.

The Village of Central Lake is adjacent to Intermediate Lake and has a small, but defined downtown.

The Village of Ellsworth is a small community, forested and very rural in character. Recently the village has promoted itself as part of the breezeway connecting the village with Boyne Falls, East Jordan, and Atwood.

Hamlets:

Many think that some of the hamlet areas are villages. Some of the hamlets, such as Alden, Eastport, and Alba appear to look and act as villages, but they are unincorporated. They are locations that have a distinct look. They have a commercial center that is made up of small, commercial buildings built in a town setting.

Highway Corridor:

These are the major roadways in the County. They have a symbiotic relationship to the adjacent properties. The land uses are impacted by the traffic on the roads, while the view from the roads is impacted by development on the properties.

Waterfront Residential:

These are the home sites built along the lakes and rivers. From a visual standpoint, it appears that the majority of the homes are older and smaller than newer buildings.

Recreational Area:

These are the public lands that are used for recreation and wildlife management. This area is heavily forested with mature woodlands and rivers.

Resort Recreation:

These are home sites built around a recreational amenity such as a ski hill, golf course, or water body.

Active Farming:

These are places that are actively being farmed. Farm products may include but are not limited to potatoes, corn, wheat, grapes, cherries, and livestock. Some of these farms have farm markets that sell produce to the public.

Rural Residential:

These locations are rural in nature and the properties are larger in acreage. They have limited infrastructure services such as well and septic.

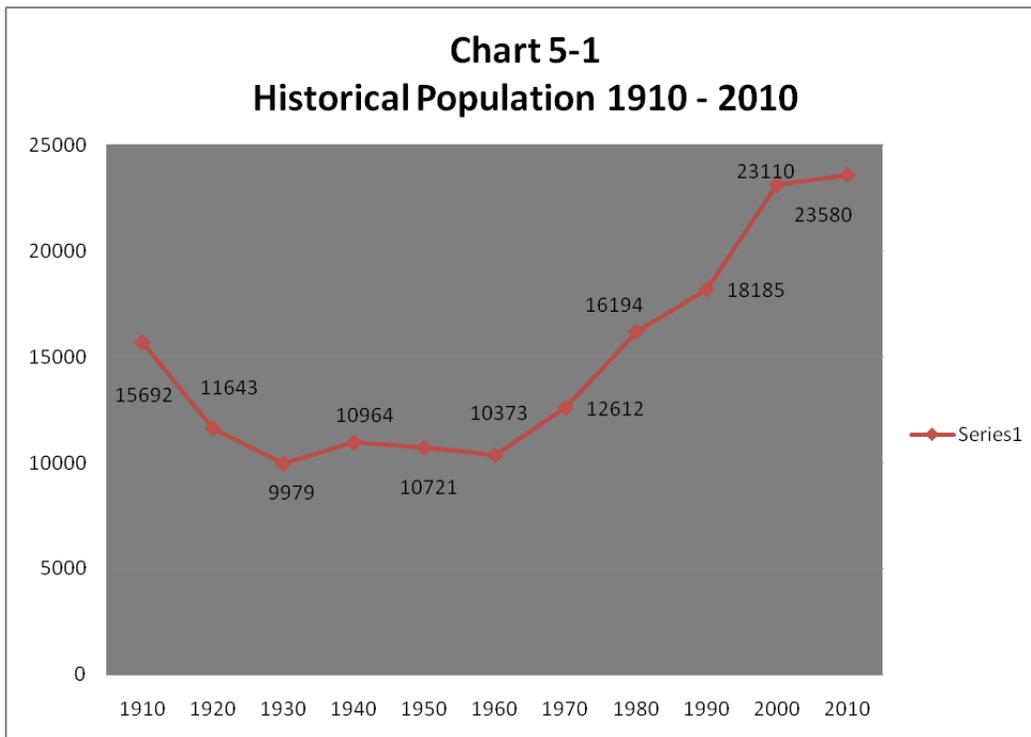
CHAPTER 5: DEMOGRAPHICS

SUMMARY

The demographic portion of this master plan provides background data to support the planning of future land uses. When planning for a community, it is important to know who will be affected by the plan and their characteristics. This portion of the master plan is essentially data presentation. The data will come from two sources, the 2010 United States Census Figures and the 2005-2009 American Community Survey (ACS). Please note that the census figures and the ACS are not taken at the same time for the same purposes. The Census is taken as the official count of the United States population while the ACS shows how people live (i.e. education, housing, jobs, etc.).

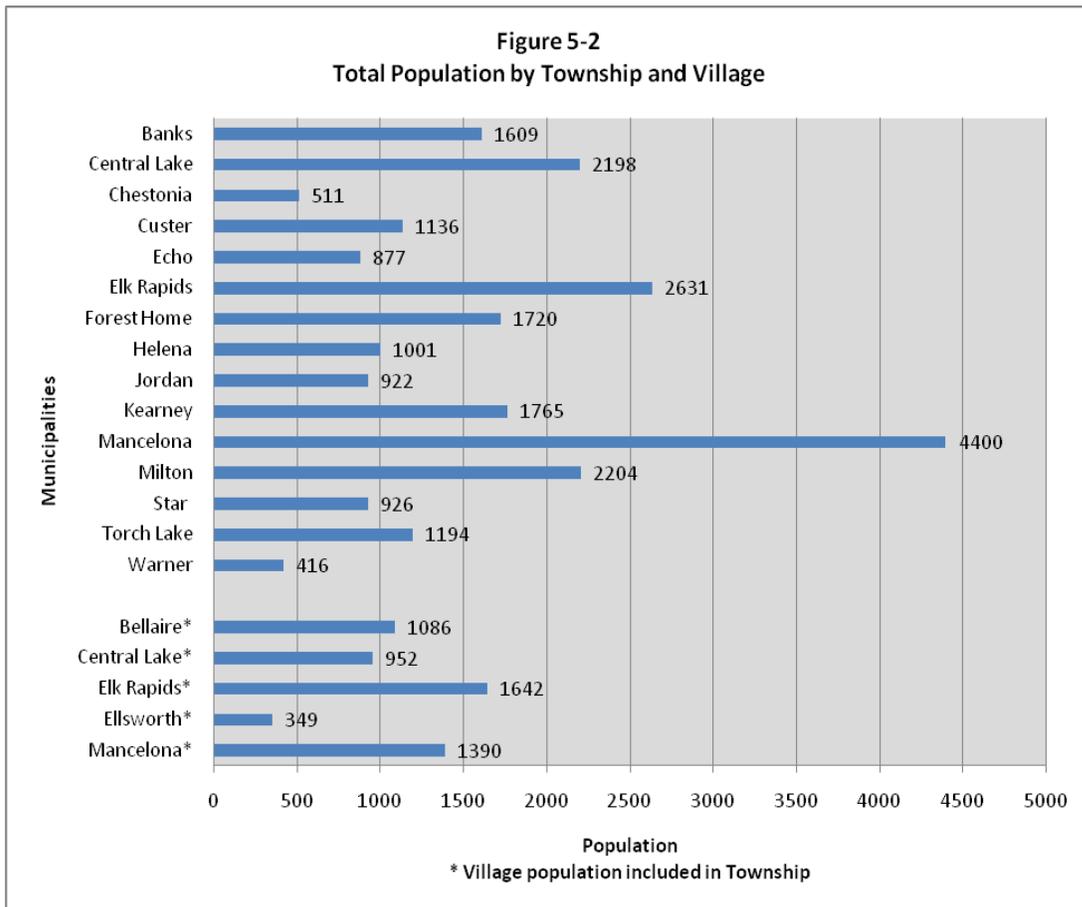
Antrim County has maintained a steady population, until a noticeable increase, beginning in 1970 through 2000, when it had a growth rate of 28% (refer to Figure 5-1). Between 2000 and 2010, the County experienced minimal growth of 2%. The 2010 Census reported that a total of 23,580 persons resided in Antrim County. The population change from 1910 to 2010 is depicted on Map 5-1.

The southern portion of the County has the highest population. It is expected that these areas will continue to have a majority of the population as it continues to grow. This is important when planning for infrastructure improvements and community building locations, especially for residents older than 65 and younger than 14. Both of these age groups are more dependent on community services.



COMMUNITY POPULATION: (This is where the people live...)

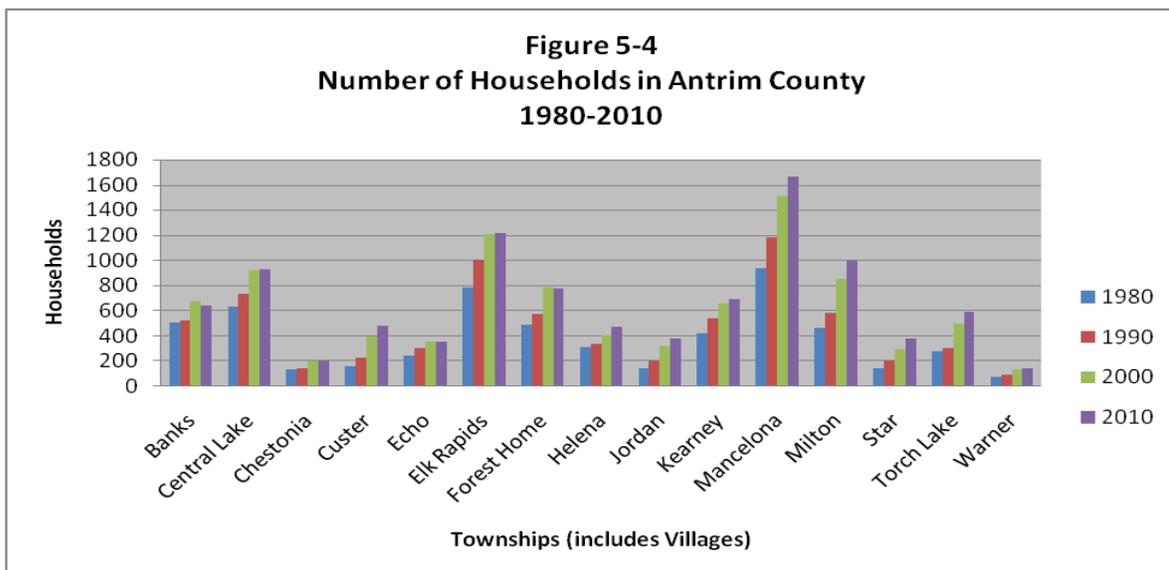
- Most of the County's population lives in the southern portion.
- Approximately 25% of the population (5,745 residents) live in an incorporated village.
- Map 5-2 indicates where the population of Antrim County lives.
- The public owned land in Warner, Chestonia, and Jordan limits the amount of developable land, thereby minimizing the population growth.
- Although the Mackinaw State Forest incorporates much of Mancelona Township, the Township is equivalent in size to two townships and contains the highest population.
- This information is depicted on the Map 5-3, Total Population.



HOUSEHOLD POPULATION: (These are the areas that have grown...)

Figure 5-3 Number of Households			
	1990	2000	2010
Banks	525	675	641
Central Lake	733	921	932
Chestonia	147	199	201
Custer	232	397	481
Echo	301	355	351
Elk Rapids	1,009	1,206	1,218
Forest Home	574	790	781
Helena	340	408	473
Jordan	206	323	378
Kearney	542	661	694
Mancelona	1,181	1,511	1,665
Milton	584	850	995
Star	204	295	384
Torch Lake	307	498	589
Warner	95	133	147

- A household consists of all the people who occupy a housing unit, including family and non-family members (U.S. Census).
- In 2010, there were 9,890 households in the County.
- This was an increase from the 1970 population which had 5,723 households.
- Household data is used to determine population growth projections.
- According to the US Census, the average household size was 2.36 in 2010.
- This information is depicted on Map 5-4, Total Number of Households.



POPULATION PROJECTION: (This is how much we plan to grow...)

- The County's population grew slightly from 2000 to 2010. The Villages shrunk at an average of 8.58%. The Townships grew at an average of 3.02%. Banks Township (-11.3%) and the Village of Ellsworth (-27.7%) lost the most population and Star Township (24.3%) gained the most population and the Village of Mancelona (-1.3%) lost the least population.
- Townships and villages will have different growth rates depending on their current size, location, infrastructure, and amount of publicly owned land, Figure 5-5 shows their growth projection. Please note that the Village numbers are included in the Township numbers.
- The 2020 Population projection was calculated using the growth in population over the past 20 years combined with the growth in households and with the amount of people per household averaged over the past 20 years.

Figure 5-5 Population Projections				
Community	US Census 2000	US Census 2010	Percent change	<i>Projected 2020</i>
Banks	1,813	1,609	-11.3%	1,729
Bellaire Village	1,164	1,086	-6.7%	1,170
Central Lake	2,254	2,198	-2.5%	2,465
Central Lake Village	990	952	-3.8%	1,072
Chestonia	546	511	-6.4%	576
Custer	988	1,136	15.0%	1,363
Echo	928	877	-5.5%	993
Elk Rapids	2,741	2,631	-4.0%	2,948
Elk Rapids Village	1,700	1,642	-3.4%	1,862
Ellsworth Village	483	349	-27.7%	352
Forest Home	1,858	1,720	-7.4%	1,902
Helena	878	1,001	14.0%	1,176
Jordan	875	922	5.4%	1,193
Kearney	1,764	1,765	0.0%	1,951
Mancelona	4,100	4,400	7.3%	5,221
Mancelona Village	1,408	1,390	-1.3%	1,565
Milton	2,072	2,204	6.4%	2,700
Star	745	926	24.3%	1,140
Torch Lake	1,159	1,194	3.0%	1,379
Warner	389	416	7.0%	488
Total	23,110	23,580	2.0%	27,224

POPULATION PROJECTION: (For the seasonal and year round residents....)

- Like much of Northern Michigan, Antrim County is a tourist destination, therefore it is important to consider seasonal residents in the population projection.
- US Census defines a seasonal home, “a housing unit held for occupancy only during limited portions of the year, such as, a beach cottage, ski cabin, or time-share condominium.
- In 2010, there were a total of 17,824 housing units in the County. Of these, 9,890 or 56% were occupied year round. Representing 36% of housing units, 5,152 were occupied only for seasonal, recreational, or occasional use. The remaining 8% of houses were classified as vacant.
- In 2000 there were 15,090 housing units (either owner or renter), 9,222 were occupied year round, while 5,152 were occupied only for seasonal, recreational, or occasional use. In 1990 this was 34% of the housing units.
- From these facts, it is likely that the number of seasonal homes will continue to increase, but remain approximately 35% of the total number of homes for the planning period.
- Using the population projection described in Part 1, it can be assumed that the number of housing units will increase by 26%. Therefore in 2020 there will be 2,852 more homes or a total of 20,676 housing units. Using 35% as a guide, it is expected that there will be 7,236 seasonal homes in 2020.
- Typically seasonal homes have a higher household size (4 to 6 people). Using the occupancy rate, the seasonal population would range from 23,472 to 35,208.
- Adding the seasonal population to the year round population (24,201) produces a population of 47,673 to 59,409 in the summer months (typically when the seasonal homes are occupied).
- In 2020, the year round population would inhabit the remaining 13,440 homes (20,676 total housing units minus 7,236 seasonal) for an average household size of 2.25.

Quick Summary:

The 2020 projected population is 24,201 year round and it is projected to be 47,673 to 68,955 in the summer months.

It is projected that there will be 20,676 housing units in 2020 with 7,236 being seasonal.

DEMOGRAPHIC DATA: (This is how old we are...)

- The total population in 2010 was 23,580 according to the census, and was equally divided between male and female. The median age was 47.4.
- Map 5-5, shows the portion of the population that is over 65 years of age. This is important in deciding where community services should be located.
- Map 5-6, shows where school age children live. Map 5-7 depicts the different school districts in Antrim County and enrollment. Future school locations should be located in areas that have a high population in this age group.

Figure 5-6 2010 Population: Age			
Age	2000	2010	Change
9 and younger	2,883	2,542	-12.0%
10 through 19	3,243	2,861	-12.0%
20 through 44	6,812	5,576	-18.1%
45 through 64	6,139	7,385	20.2%
65 through 74	2,353	3,054	30.0%
75 and older	1,680	2,162	29.0%
Total	23,110	23,580	2.0%

- 203 grandparents are raising their grandchildren.

DEMOGRAPHIC DATA: (This is how we described ourselves...)

- Of the 23,580 residents of Antrim County in 2010 (per the Census):
 - 22,815 are white
 - 404 are Hispanic or Latino
 - 48 are Native American
 - 41 are black
 - 8 are Asian/Hawaiian/Pacific Islander
 - 98 are of some other race
 - 334 are 2 or more races

- Of the 20,049 residents of Antrim County who are 15 years and older (per the ACS):
 - 4,541 people have never been married
 - 11,799 people are married
 - 239 are separated
 - 1,281 are widowed
 - 2161 are divorced

- Of the 17,137 residents of Antrim County who are 25 years and older (per the ACS):
 - 422 have an education less than 9th grade.
 - 1,557 have a 12th grade education, but no diploma.
 - 6,425 have a high school degree or equivalent.
 - 3,788 have some college education, but no degree
 - 1,076 have an associates degree
 - 2,302 have a bachelor's degree
 - 1,567 have a graduate or higher degree.

- 88.5% of the population over 25 has a high school diploma compared to the State of Michigan where 87.4% of the population over 25 has a high school diploma.

- 22.6% of the population over 25 has a bachelor's degree or higher, compared to the State of Michigan where 24.5% of the population over 25 has a bachelor's degree or higher.

HOUSEHOLD INCOME: (This is our workforce...)

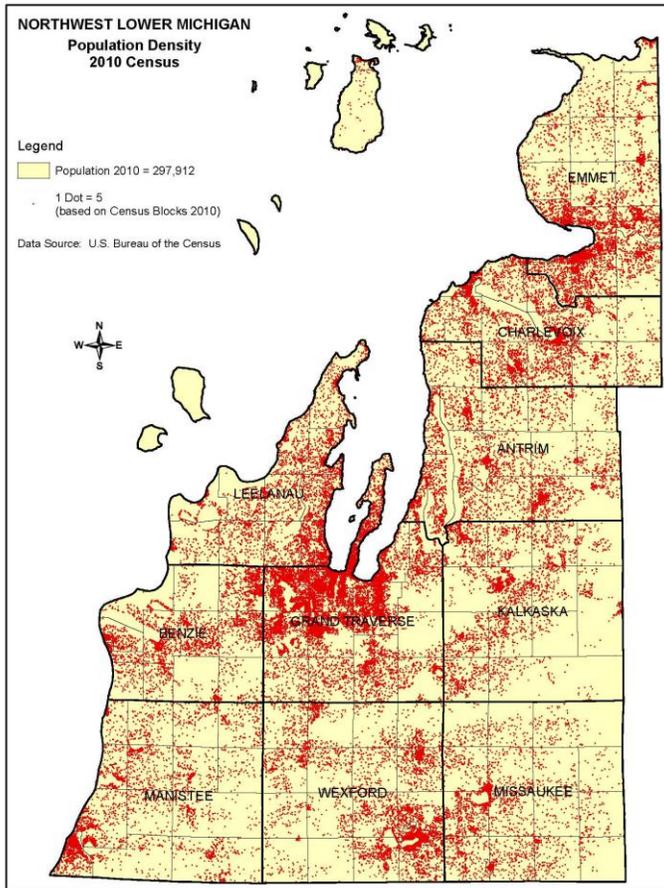
- The total number of people in the civilian labor force in Antrim County is 10,947 according to the ACS. Map 5-8 indicates where they live.
- The average commute time is 21.3 minutes.
- For a more detailed description, refer to Chapter 6, Economic Development.
- Average Median Income \$43,167
- Average Mean Income \$59,541

Figure 5-8 Antrim County Household Income (ACS)		
Household Income	Number	Percent
Less than 10,000	610	6.3
10,000 to 14,999	650	6.7
15,000 to 24,999	1,454	14.9
25,000 to 34,000	1,185	12.2
35,000 to 49,999	1,727	17.7
50,000 to 74,999	1,934	19.9
75,000 to 99,999	1,096	11.3
100,000 to 149,999	692	7.1
150,000 to 199,999	188	1.9
200,000 or more	205	2.1

Figure 5-7 Number of Workers in Antrim County (ACS)		
Occupation	Number of Workers	Percent of Job Force
Management, professional, and related	2,568	26.5
Sales and Office	2,186	22.6
Production, Transportation, and Material Moving	1,815	18.7
Service occupations	1,981	20.5
Construction, Extraction, and Maintenance	1,031	10.6
Farming, Fishing, and Forestry	106	1.1

NORTHWEST LOWER MICHIGAN: (This is how we compare ...)

- Northwest Lower Michigan gained 16,444 residents this past decade and grew an average of 5.8%.
- Out of the 10 counties in the region, Charlevoix County lost population (-0.5%) while Grand Traverse County gained the most population (12%).
- Out of the 10 Counties, Antrim is in the middle with respect to population size.



County	2000	2010
Antrim	23,110	23,580
Benzie	15,998	17,525
Charlevoix	26,090	25,949
Emmet	31,437	32,694
Grand Traverse	77,654	86,986
Kalkaska	16,571	17,153
Leelanau	21,119	21,708
Manistee	24,525	24,733
Missaukee	14,487	14,849
Wexford	30,484	32,735
Total	281,466	297,912

CHAPTER 6: ECONOMIC DEVELOPMENT

SUMMARY

Economic trends and climate are major factors impacting overall development and future land uses within the County. These factors influence development and affect land use in population centers, forests, farms, orchards, lakes, and riverfront areas. Demographic changes also influence land use, not only for housing and recreation considerations, but for economic development planning as well.

While Michigan is transitioning from more of a manufacturing-based to a service-based economy, Antrim County is affected by this shift as well. We also are experiencing a major demographic shift; the 55+ population is increasing at a rate approaching 30%, as predicted in previous planning forecasts, while the 20 - 45 year old population is declining at a rate near 20%. While these factors present challenges, leaders must be diligent in the pursuit of a strong, meaningful economic sector including service, technical, manufacturing, and agriculture and related strands while striving to support our educational systems, public services, and community infrastructure needs. During this transitional period, planning decisions need to recognize changing service needs of an aging population, with a decline in population among those of working age.

This portion of the master plan analyzes economic trends and demographic patterns related to the regional economy, so that recommendations and positions can be determined to assist local efforts in stimulating economic growth of business, creating opportunities for employment, and preserving the rural charm and character that makes us a desirable destination for work, leisure, and living.

Please note the supporting tables in this document are derived from various sources; please note that the dates of collection may vary from table to table.

EMPLOYMENT TRENDS

Number of Employed Workers

Michigan suffered its worst economic collapse since the Great Depression in the six-year period of 2005-2010, with Antrim County residents experiencing a decline of nearly 2,000 jobs across all major employment industry sectors. In 2005, 11,054 (47.1%) of the County's residents were employed compared to 9,100 (38.6%) by 2010.

2005	2010	% Change
11,054	9,100	-17.7%

Five-year Trend of Employment by Industry Sector

The Bureau of Labor Statistics (BLS) maintains employment figures categorized into 19 separate employment industries. As noted in Table 6-2, there was growth in some sectors, mainly health care and the service sector. Five of the six major employment industry sectors in Antrim County realized job losses exceeding 1,100 over the five-year period spanning 2005-2009. Several sectors experienced job growth this period which partially offsets these losses.

Employment Industry Sector	% / # of Jobs Gained/ Lost Per Sector
Health Care	35% / 150 more jobs
Professional & Technical Services	26% / 140 more jobs
Administrative Services	29% / 130 more jobs
Real Estate/ Rental & Leasing	16% / 125 more jobs
Arts, Entertainment, & Recreation	16% / 40 more jobs
Agriculture, Forestry, and Fishing	13% / 50 more jobs
Transportation & Warehousing	10% / 15 more jobs
Construction	32% / 425 fewer jobs
Manufacturing	28% / 350 fewer jobs
Government/Public Employees (including Schools)	11% / 150 fewer jobs
Lodging Accommodation / Food Service	9% / 125 fewer jobs
Retail Trade	6% / 60 fewer jobs

Source: Bureau of Labor Statistics (BLS). Economic Modeling Specialists, Inc. (EMSI). Northwest Michigan Council of Governments (NWMCOG). 2009

Economic Impact of Gained / Lost Jobs (Change in Spendable Wages in Local Economy)

Looking at the period from 2005-2009, it is important to analyze the economic impact of gained/lost jobs. For example, one \$40,000 job gain/loss has more economic impact on the local economy than two \$15,000 jobs.

Of the nearly 1,300 fewer jobs in Antrim County from 2005-2009, the lower spendable wages attributable to those jobs equals \$36.3 million. The average wage loss per job was \$28,291. Lost jobs not only impact the individual worker, but they also impact the local economy since local spending declines. Table 6-3 indicates the total impact of the job losses.

Employment Sector	Job Lost	Loss Per Job	Total Impact
Manufacturing	356	\$36,711	\$13,069,116
Construction	428	\$26,310	\$11,260,680
Government / Public (including Schools)	160	\$31,735	\$ 5,077,600
Wholesale Trade	93	\$20,502	\$ 1,906,686
Lodging Accommodation / Food Service	125	\$14,505	\$1,813,125
Retail Trade	66	\$20,502	\$1,353,132

Source: Bureau of Labor Statistics (BLS). Economic Modeling Specialists, Inc. (EMSI). Northwest Michigan Council of Governments (NWMCOG). 2010.

The reduction of higher wage manufacturing and construction jobs in Antrim County during the period 2005-2009 has been significant. These account for 784 fewer jobs and a removal of more than \$24M in spending power in the local economy. These two areas equate to more than 60% of the total lost jobs and more than two thirds of the total reduction in spendable wages in the County during this five-year period.

If you add the number of lost government/public employee jobs, these three employment industry sectors collectively account for nearly \$30M in reduced wages/spending (81% of the total spending lost) and nearly 75% of the total jobs lost.

Antrim County did gain 725 jobs 2005-2009. The spendable wages attributable to those jobs equal \$16.2 million. The average wage gained was \$22,345. Table 6-4 indicates the economic benefit of the gained jobs.

Employment Sector	Jobs Gained	Gain per job	Total Impact
Health Care	150	\$35,692	\$5,354,000
Professional & Technical Services	145	\$24,366	\$3,557,000
Administrative Services	135	\$19,152	\$2,586,000
Real Estate / Rental & Leasing	125	\$26,243	\$3,280,000
Arts, Entertainment & Recreation	40	\$20,274	\$811,000
Transportation & Warehousing	17	\$38,589	\$656,000

Source: Bureau of Labor Statistics (BLS). Economic Modeling Specialists, Inc. (EMSI). Northwest Michigan Council of Governments (NWMCOG). 2010.

It is encouraging that the highest job growth area is in a higher wage sector. Growth in high wage health care jobs is a desirable trend and reflects a comparable wage to manufacturing jobs.

Number of Workers by Employment Industry Sector (Total Number of Jobs)

In 2009, after significant lost jobs in several major employment sectors and moderate job gains in several mid-range employment sectors, the majority of Antrim County's jobs were spread across six major industry sectors. In spite of significant job cuts to the construction, manufacturing, and government/public employee sectors, each remained in the top six employment sectors. The workforce breakdown is presented in Table 6-5.

Employment Sector	% of Workforce	Number of Jobs
Government / Public Employees (including schools)	12%	1250 Jobs
Lodging Accommodation / Food Service	12%	1250 Jobs
Retail Trade	10%	1000 Jobs
Construction	9%	900 Jobs
Real Estate / Rental & Leasing	9%	900 Jobs
Manufacturing	9%	900 Jobs
Professional & Technical Services	7%	700 Jobs
Administrative Services	6%	600 Jobs
Health Care	6%	575 Jobs
Other Professional Services	6%	575 Jobs
Agriculture, Forestry, & Fishing	4%	450 Jobs
Finance & Insurance	3%	350 Jobs
Transportation & Warehousing	2%	175 Jobs
Six other minor areas	6%	725 Jobs

Source: Bureau of Labor Statistics (BLS). Economic Modeling Specialists, Inc. (EMSI). Northwest Michigan Council of Governments (NWMCOG). 2009

While not a major source of jobs, Antrim County farms provide a significant economic impact on the local economy as a large portion of total agricultural revenues are spent on farm expenses within the County. Production on Antrim County farms is also significant compared to neighboring counties (Table 6-6).

County	Total Agriculture Revenues	Crop Sales	Livestock Sales	# Farms	% of Acreage in Farmland
Antrim	\$23,322,000	\$17,244,000	\$6,078,000	411	22%
Charlevoix	\$7,678,000	\$4,441,000	\$3,237,000	336	16%
Grand Traverse	\$19,244,000	\$15,440,000	\$3,804,000	522	21%
Kalkaska	\$6,055,000	\$5,253,000	\$802,000	211	7%

Source: Michigan Department of Agriculture, "Michigan Food and Agricultural Systems Profiles-Revised October 2009.

Antrim County's agricultural significance in Michigan places them in the top ten of Michigan counties in the total number of aquaculture operations, acres of tart cherries, number of

domestic rabbits, number of domestic pheasants, total acres of potatoes, and total revenues from fruits/tree, nuts/berries.

Employers / Total Payroll / Employees / Wages

County Business Pattern (CBP) data is collected by the US Census Bureau. Included in this data (Table 6-7) is the total number of establishments with paid employees (employers), total number of employees working on a given week (week of March 12), the annual total payroll, and the average annual wage per employee. Data for the five-year span beginning 2005 and ending 2009 indicates the significance of the economic decline not only on the number of Antrim County employees but also in the number of employers. There was a loss of more than one in eight employers in the five-year period.

Antrim County	2005	2009	Change	% Change
Total # of Employers	654	560	91 Fewer Employers	14% fewer
Annual Payroll	\$136,336,000	\$103,430,000	\$32,906,000 less in annual payroll	24% loss
Total # of Employees	5,466	3,727	1,739 fewer employees	32% less
Average Annual Salary	\$24,943	\$27,752	\$2,809 higher annual salary	11% increase

Source: Regional Economic Information System for Michigan Counties Table CA34, 1969-2009.

This data also indicates the 2009 average wage for an employee in Antrim County was \$27,752 compared to the Northwest Michigan Regional average wage of \$32,866, and statewide average wage of \$40,137. In 2009, Antrim County had the fourth lowest average wage per job of all Michigan's 83 counties; the average wage in Antrim County was 62.5% of the state average. For comparison, the average wage for the counties surrounding Antrim was also lower than the state average: Charlevoix 82.2%; Grand Traverse 83.5%; Kalkaska 86.0%.

The per-capita income in Antrim County which includes retiree pension income is slightly higher than the average wage in Antrim County in 2008. The per-capita income is \$30,727 and ranks 31st out of 83 Michigan counties, per the American Community Survey, and 87.9% of the state average. For comparison, the per-capita income for the counties surrounding Antrim was: Charlevoix 9th in state at \$36,120 (103.3%); Grand Traverse 8th in state at \$36,129 (103.6%); Kalkaska 76th in state at \$24,632 (70.5%).

Unemployment

Unemployment rates report the percentage of people in the "labor force" who are not employed. In 2010, approximately 39% of the County population was employed. This does not mean, however, that the other 61% of the County's populace were unemployed. Significant portions of the County's population are over the age of 65 or under the age of 16. Neither age group is recognized as part of the labor force and therefore not included in unemployment statistics.

Between 2006 and 2010, unemployment figures in Antrim County more than doubled, exceeding declines on the regional, state, and national level. In the first ten months of 2011, however, unemployment in Antrim County improved at a rate outpacing the region and state, while the US unemployment rate worsened slightly compared to the prior year. This improvement in the County is attributable not only to new jobs being added in several employment sectors but also to declining population in the labor force (Table 6-8).

Annual Average	2006	2008	2010	2011	2010-2011
Antrim	7.6%	9.5%	15.4%	12.8%	-2.6%
Region	7.1%	8.7%	13.3%	11.2%	-2.1%
Michigan	6.9%	8.3%	12.5%	10.4%	-2.1%
US	4.6%	5.8%	9.6%	8.9%	-0.7%

Source: Department of Technology, Management, & Budget (DTMB): Bureau of Labor Market Information and Strategic Initiatives; Michigan Department of Energy, Labor, Economic Growth, Bureau of Labor market Information, May 2011.

DEMOGRAPHIC TRENDS RELATED TO THE WORKFORCE

The total population in Antrim County increased by 470 people or 2% from 2000-2010. The population of the County's primary workforce, ages 19-60 decreased by 3%. Significant within this figure, however, was the age group 25 – 45 which showed a drop of more than 20%; a loss of 1,181 of the County's prime workforce age group. Another significant decrease was experienced in the group age 20 and younger which dropped by 643, a 14% decline. This trend of a shrinking workforce comes during a time of slight population growth (Table 6-9).

Antrim County	2000	2010	Change	% Change
Total Population	23,110	23,580	+470	2% increase
Age 19 and younger	6,126	5,403	-723	11% decrease
Age 20-24	969	914	-55	6% decrease
Age 25-44	5,843	4,662	-1,181	20% decrease
Age 45-64	6,139	7,385	+1246	20% increase
Age 65 and above	4,033	5,216	+1183	29% increase

Source: U.S. Census Bureau, compiled by Northwest Michigan Council of Governments

Another highly significant demographic trend is the aging of the County's population. The demographic for residents age 65 and above increased by 1,580; a surge of 29%. The population age 55 – 65 also increased by 795, a 27% jump signaling that the aging of the County's population is a trend that is likely to continue into the next decade. Currently, nearly one third of the County's population is age 55 or above, and if this trend continues that proportion will continue to expand.

These changing demographics need to be weighed carefully as the County experiences a reduction in the population of people of working age and an increasing population of retirees. The impact on workforce availability and a potential change in services desired by an aging population, have numerous and significant ramifications for economic development planning.

The aging of the County's population and decline in the number of residents of workforce age is further evidenced by looking at household demographic information for the period 2000-2010. As noted in Table 6-10, the number of single person households, which accounted for nearly one of every four households in the County in 2000, also increased substantially.

Antrim County	2000	2010	Change	% Change
Total Households	9,222	9,890	+668	+7.2%
Households with individuals under 18	2,938	2,574	-364	-12.4%
Households with individuals over 65	2,734	3,517	+783	+28.6%
Householder living alone	2,156	2,519	+363	+16.8%

Source: U.S. Census Bureau, compiled by Northwest Michigan Council of Governments.

In addition to significant changes in the ages of persons living in households, the proportion of households in each of these categories changed dramatically in the decade of 2000 – 2010 as well, Table 6-11.

Antrim County	2000	2010
Households with individuals under 18	32%	26%
Households with individuals over 65	29%	36%
Householder living alone	23%	26%

Source: U.S. Census Bureau, compiled by Northwest Michigan Council of Governments.

REGIONAL EMPLOYMENT FORECAST

Growth for the ten-county region of northwest Lower Michigan, including Antrim, Benzie, Kalkaska, Grand Traverse, Missaukee, Wexford, Emmet, Charlevoix, Leelanau, and Manistee, indicates promise of employment growth in a number of areas into this decade while some sectors are projected to grow slightly or shrink according to the Michigan Department of Technology, Management, and Budget (MDTMB) (Table 6-12).

Employment Industry Sector	Projected Job Change 2006-2016	% Change in Sector	2010 wage	Total Projected Impact on Regional Economy
Health Care	+2,635	22.6%	\$35,692	+\$114,051,000
Professional & Technical Services	+2,485	12.3%	\$24,366	+\$83,923,000
Construction	+1,475	10.1%	\$26,366	+\$66,418,000
Lodging Accommodation/Food Service	+3,320	12.1%	\$14,505	+\$63,040,000
Transportation & Warehousing	+370	+4.4%	\$38,589	+\$14,058,000
Manufacturing	+360	+2.7%	\$36,711	+\$19,456,000
Agriculture, Forestry, & Fishing	-50	-2.1%	\$29,390	-\$1,469,500

Source: Department of Technology, Management, & Budget (DTMB): Bureau of Labor Market Information and Strategic Initiatives, May 2011; US Bureau of Labor Statistics (BLS)

The MDTMB also projects specific occupations identified in the ten-county region with the highest projected growth for the ten-year period ending in 2016, (Table 6-13).

Occupation	Projected Job Growth 2006-2016	% Growth
Retail Sales	750	12.5%
Registered Nurse	730	25.8%
Office Clerk	475	13.5%
Customer Service	455	28.7%
Landscaping Workers	350	17.0%
Nursing Aids	340	16.5%
Food Service / Fast Foods	340	15.0%
Janitor / Housekeeping	315	13.2%
Book Keeping	280	11.9%
Carpenters	255	11.8%
Medical Assistants	225	39.6%

Source: Department of Technology, Management, & Budget (DTMB): Bureau of Labor Market Information and Strategic Initiatives.

Registered nurses (\$54,995 average annual wage) are projected to be the most abundant, high-demand, high-wage jobs in the region with as many as 120 annual openings projected through 2016. Customer Service representatives (\$27,456) are projected as the tenth most abundant, high-demand, high-wage jobs in the region with as many as 90 annual openings through 2016. The remaining occupations are high demand, but are not considered high wage.

FUTURE ECONOMIC PLANNING

The Antrim County Planning Commission has a well-established working relationship with the Antrim County Economic Development Corporation. This partnership advocates a cooperative approach toward supporting and creating economic opportunities throughout the County. Using the data in this Master Plan, the Planning Commission will be able to assist the Economic Development Corporation to proactively plan for economic development.

Both groups agree that the long-term viability of Antrim County will be strengthened by utilizing collective strategies and collaborative partnerships specific to economic and community development efforts consistent with sound planning principles.

In pursuit of economic and community development opportunities, Antrim County will work towards these economic guiding principles:

- Diversify the County's economy.
- Preserve and protect our natural resources, our rural identity, and our scenic beauty.
- Follow appropriate land use and planning principles.
- Recognize the importance of continued input from all sectors of the community at large.

Based on the economic picture of Antrim County, the outlined economic guiding principles, and demographic data, the Economic Development Corporation outlined the following Goals and Objectives for the County. The Antrim County Planning Commission endorses these goals and will work to support the Economic Development Corporation to implement them.

Implementation Steps (What should be done next?)

Strategies to support the County during and through this transition period should focus on three areas:

1. Community & Economic Development
2. Education
3. Planning and Municipal Considerations

In order to leverage community and economic development resources and opportunities, the County should:

- Maintain and strengthen ties with neighboring counties through associations such as the Northern Lakes Economic Alliance, the Michigan Small Business & Technology Development Center, the Northwest Michigan Council of Governments, all local townships and municipalities, and other agencies and entities to assist in facilitating community and economic development.
- Promote balanced economic growth with preservation of rural climate, scenic beauty, and preservation of natural resources in mind.
- Endeavor to establish a business friendly and entrepreneurial environment.
- Promote utilization of technology to create greater access to new markets, training, education, and access to planning information.
- Promote continued maintenance of a list of currently unused facilities, brownfield sites, and properties for sale as one strategy to leverage brownfield sites and vacant unused facilities to support reuse and redevelopment.
- Promote the network of Business Resource Centers designed to provide support and assistance for business counseling, start-up, expansion, growth, demographic analysis, and planning.
- Promote utilization of technology to create new e-markets, access to training and other resources.
- Take advantage of and optimize regional, state and federal support resources when applicable including Economic Development Planning and Infrastructure Grants, Transportation Economic Development Fund Grants, Brownfield Tax Credits, Historic Preservation Credits, Industrial Facility Property Tax Abatements, Federal Small Business Administration Loan Program, Rail Loan Assistance, Freight Economic Development Assistance, Revolving Loan Funds, Michigan Economic Development Corporation resources, Community Development Block Grants, HUBZones, Downtown Development Authorities, Tax Increment Financing Authorities, Brownfield Authorities, Economic Development Job Training Programs, and other programs and resources.

The County should endeavor to educate County residents in areas of development by:

- Maintaining and strengthening ties with existing Chambers of Commerce, K-12 schools and Intermediate School District, Charter Schools and regional Community College partners to assist in expanding educational efforts.
- Encouraging development of collaborative programs that provide training and competitive skills related to regionally identified workforce needs for students and adults.
- Advocating business, self-employment, and entrepreneurship educational programs.
- Promoting growth/expansion of value added agricultural opportunities and use of local products.

The County should encourage principles of planning among all municipal jurisdictions that promote:

- Linking future wind and solar energy production with protection of the long term viability of agriculture land.
- Preserving the scenic beauty of the region.
- Enhancement of culture and entertainment assets as attractors for additional economic investment.
- Targeted community investments on infrastructure maintenance and improvements to attract business establishment including adequate commercial centers, communication infrastructure, broadband data and internet services, public roads, airport, transit, port, sewer, storm sewer, and water facility.
- Targeted community investments on place-based improvements to attract knowledge workers and their families with a special focus on green infrastructure investments, parks, trails, recreation areas, and bicycle and pedestrian connections throughout the community and with adjoining rural areas.
- Targeted investments in rural communities that support expansion of their natural asset-bases economies and provide quality living opportunities to those talented workers who prefer a rural environment and its amenities.

CHAPTER 7: HUMAN ELEMENT

SUMMARY

Typically when a master plan is developed it focuses on existing land uses, demographic trends, and economic development aspects. Social planning, which is defined as understanding the needs and trends of human environment, is often overlooked. As described in the Demographic chapter of this master plan, Antrim County has a diverse population with different needs. This chapter focuses on the social aspects of physical planning. When applicable, it references specific reports or plans (i.e. The Antrim County Solid Waste Plan or the Antrim County Parks, Lands, and Recreation Plan) that focused on an issue. These reports or plans are more comprehensive and provide greater detail on the particular issue. These concerns are summarized in this chapter so that decision makers are aware of these issues when making land use policies.

This section focuses on human needs, such as affordable housing, elderly care, health care, recreation, solid waste disposal, and the historical perspective. All of these issues are related to actions of individuals and can directly impact the physical landscape. Although services for these various items are administered by different groups, their decisions can influence surrounding land uses in positive or negative ways (endorsing the construction of a senior housing complex near a park would be beneficial versus siting it in areas where there are no recreational opportunities). These different groups also have similar goals (such as not building a new landfill) and may need endorsements from one another to fully implement their plans. It is important to know that these issues exist and support specific studies and implementation measures.

AFFORDABLE HOUSING

A simple definition for affordable housing is “housing unit where the occupant is paying no more than 30 percent of gross income for housing costs, including taxes and utilities.” (A Planner’s Dictionary). The median income for an Antrim County household was \$43,167 according to the American Community Survey ACS). Using the described methodology, the median household should not pay more than \$1,079 a month for their housing costs.

Quick Note:

36% of homeowners are paying more than what is deemed affordable for their housing costs.

Home ownership is an issue for people at all income levels.

The ACS stated that the median mortgage payment was \$1,162 a month, which indicates that the majority of the residents in Antrim County are living a little over what is deemed affordable. The ACS also reported that 36% of homeowners pay 35% or more for their housing costs.

A Housing Needs Assessment for Antrim County that was prepared by Community Research Group, LLC in December of 2003 studied the housing needs in Antrim County and concluded the following:

- The amount of household growth in the county (an important indicator of housing demand) is quite large, and widespread throughout the county. Much of the fastest growth is taking place in a small number of areas concentrated around Custer Township, the coastal strip of Torch Lake and Milton Townships, and the northwestern corner of the county.
- The number of houses in the “starter” category (in terms of affordability to first time, moderate-income homebuyers) is moderately large, and may meet the needs of persons who manage to save enough capital to afford a large down-payment.
- The stock of starter homes that does exist is quite aged, and will require investments to continue its useful economic life.
- Affordable housing is difficult for many types of households to purchase, even though they have income levels that generally have been associated with homeownership. This is due partly to the “fixed” costs of maintaining a household in the area (food, transportation, health care, etc.), and partly to the costs of “starter” stock in the county relative to wages.
- The amount of rental housing is not meeting current demand (in terms of households with income less than that needed to purchase a home); this situation will likely continue to worsen as these households increase in number.
- In the past 10 years every township in the county has increased its percentage of household expenses to its income. The percentage of households that pay over 30% of their income has more than doubled from 15% to 36%. This is seen most prominently in the Central Lake, Alba, Elk Rapids, and Eastport areas. New affordable housing projects should be located in these areas.
- Local Section 8 rental voucher program administrators say that while the program has a long waiting list (at least a year long), renters have a difficult time finding

lodging that conforms to Housing and Urban Development (HUD) standards, and so do not benefit from the program.

Various Groups throughout the county are committed to helping low income families find housing options. These include but are not limited to Antrim County Habitat for Humanity and the Antrim County Housing Program.

ELDERLY CARE

Antrim County's population of senior citizens (people aged 65 and older) has increased significantly according to the past few Censuses. While the County's population grew slightly from 2000 to 2010, the growth was only in the 55 and older populations. There was a population decrease in every population range under 55.

Private groups are pursuing senior housing strategies to provide them attainable housing. The success or failure of these strategies will in part be determined by the availability of services in reasonable proximity to the senior housing complexes.

Quick Note:

The age group 70 and above is the fastest growing population segment for senior citizens.

Services such as nursing homes will be needed as this population group increases.

It is important that a long range view of senior needs includes planning for transportation services. Currently most of the shopping areas are outside Antrim County. This lack of service can create a hardship for senior citizens who lose their mobility. When this occurs, many of them rely on public transportation or on more mobile friends or neighbors. Transportation is a primary issue when the nearest major shopping is in Traverse City, Charlevoix, Petoskey, or Gaylord. None of these communities are a short commute for most Antrim County senior citizens.

Adult Day Care

One of the inevitable consequences of living longer for senior citizens is that their capabilities may be diminished to the level where they need assistance. Many times that assistance is provided by other family members. However, these family members often have obligations with their own younger families and employment locations. These responsibilities can limit the time available for senior care. A possible solution would be to encourage the establishment of an adult day care center in Antrim County.

Meadow Brook Medical Care facility is the largest nursing facility in Antrim County. Sometimes referred to as the jewel of Antrim County, it receives wide support from the residents and enjoys strong support from the Antrim County Board of Commissioners. In 2010, the community as a whole passed a measure to upgrade and expand the facility. This will benefit the quality of life of many seniors and the community as a whole.

Antrim County Commission on Aging

The mission of the Antrim County Commission on Aging (COA) is to improve the quality of life and maintain the highest level of independence for those persons age 60 and over who reside in Antrim County.

The Commission on Aging offers numerous services to Antrim County residents including Information and Assistance, Project LifeSaver, Activities, Loan Closet, Foot Care Clinics, Blood Pressure Checks, Income Tax preparation, Congregate and Home Delivered Meals, Personal Care services, Respite Care, Homemaker Program, and the HomeChore program.

Information and Assistance

The Commission on Aging is an excellent source of information for seniors, able to answer questions about specific services and how to access programs and agencies throughout the state. Office hours are 8:30 to 4:30 Monday through Friday.

Congregate and Home Delivered Meals

There are four nutrition sites located throughout Antrim County. The Bellaire and Mancelona Senior Centers serve meals Monday through Friday at noon. In addition to lunch, the Bellaire Senior Center serves breakfast on Friday at 9:00 am. The Central Lake Meal Site, located in the Central Lake Government Building, serves lunch at noon, Monday through Thursday. The Elk Rapids Meal Site, located at Sacred Heart Church, serves lunch at noon Tuesday through Friday. The COA served 26,108 congregate meals in 2010.

In addition to these sites, the COA provides Home Delivered Meals (Meals-on-Wheels) to eligible homebound seniors who are unable to prepare nutritious meals. The program provides up to five hot meals and nine frozen meals every week. The program is designed to enable individuals to continue to live independently. The COA delivered 25,620 Home Delivered Meals in 2010.

Personal Care Services

Certified Nursing Assistants provide in-home assistance with activities of daily living for homebound, frail individuals including ambulation, bathing, dressing, grooming, transferring, toileting, and vital signs. The COA staff provided 4,040 hours of personal care services to 78 individuals in 2010.

Respite Care

As a needed break for the caregiver, a Certified Nursing Assistant (CNA) will provide assistance to mentally or physically disabled and frail elderly in accomplishing daily activities. This also includes companionship, and supervision. The COA provided 2,535 hours of Respite Care to 30 individuals in 2010.

Homemaker Program

Homemakers provide routine household cleaning to maintain a healthy living environment for individuals with functional limitations. The COA provided 3,619 hours to 126 individuals in 2010.

Project LifeSaver

The COA, working with the Antrim County Sheriff, recently started the Project LifeSaver Program. This program provides transmitters designed like a wrist watch that can be worn by at-risk walk-aways, i.e. persons with Dementia, Alzheimer's or Autism. On notification of a missing person, the Sheriff Department dispatches a Deputy to the area. Using a hand-held receiver that can receive the signal from the client's transmitter in up to a mile radius, the missing individual can be located in a very short time.

Activities

The Commission on Aging offers day trips during the spring, summer, and fall. The COA also offers activities at the senior centers including Bingo, Wii Bowling, Yoga, Billiards, Crafts, Cribbage, Mah Jongg, Dances, Euchre, Exercise Classes, Picnics, Potlucks, and Speakers.

Loan Closet

The Loan Closet is available to all individuals over the age of 55 who require items such as wheel chairs, hospital beds, canes, walkers, bedside commodes, bath benches, electric mobility carts, bed pads & depends, and Hoyer lifts among other items. There is no charge and loans are based on availability.

HomeChore Program

HomeChore services are able to provide the following: snow removal, removing and replacement of screens and storm windows, installation of weather stripping, washing walls and windows, trimming low hanging branches, minor repairs to correct health and safety concerns, spring cleanups, summer lawn mowing and fall cleanups. The COA provided more than 3,500 hours for 235 individuals people through the HomeChore program in 2010.

Nifty Thrifty Resale Store

The Nifty Thrifty Resale Store, located on Broad Street in Bellaire, offers the residents of Antrim County a place to obtain quality, reusable household items and clothing. People with special needs following a catastrophic incident such as fire, flood, or job loss, may obtain items that are needed to maintain daily living at below or no cost on a case-by-case basis. Donations of quality reusable items are accepted at the store Monday through Friday between 9 A.M. and 3 P.M. For more information, please contact Nifty-Thrifty at.

The COA relies on millage funding for more than half of their funding. The next largest portion of income is from individual program donations. The Area Agency on Aging of Northwest Michigan provides federal and state funds for the meal programs in addition to purchasing in-home services through the Medicaid Waiver Program. The COA also receives funding from FEMA, Medicaid, sales tax, interest, in-kind, memorials, Nifty

Thrifty income, and transportation. In addition to the Director, the COA currently has 7 full time and 20 part time staff members.

HEALTH CARE

Primary health care facilities are located in the villages of Antrim County, with the exception of Ellsworth. Residents do not have to travel a great distance to receive health care. Northern and far eastern points of the County can respectively access primary health care through Charlevoix, East Jordan, Boyne City, or Gaylord. In essence, primary health care is accessible to all Antrim County residents within reasonable travel distances.

Quick Note:

As the population increases in Antrim County, there will be a need to expand health care services.

Emergency Services Facilities

While there are no 24/7 emergency rooms in Antrim County, there are many comprehensive facilities that can treat most symptoms. In an emergency, county residents can call an ambulance to provide quick transportation to a major emergency facility such as Traverse City or Petoskey. Any expansion of an existing clinic in the county should have the capability of handling routine emergencies and be fully supported from the County through various incentives.

Specialists

According to the 2010 Census, the population of Antrim County is 23,580 residents, with 5,216 being senior citizens. Doctors and dentists who are general practitioners are available in Antrim County. There are also several physical therapy locations throughout the county. If medical specialists are needed, choices usually have to be made from specialists in Gaylord, Petoskey, Charlevoix, or Traverse City. This distance of service can create a hardship on the residents, especially the senior population and the disabled. Currently, Antrim County Transportation provides a van service to Traverse City on Tuesday and Thursday for appointments.

Ambulance Service

The Majority of the County has ambulance service through the Township Ambulance Authority which is a 9 township authority which contracts with Allied EMS to provide service to the various hospitals in the region. Their two bases of operation are located in Bellaire and Mancelona. The authority is funded by a millage that is a vote of the people in all 9 Townships. Townships not in the authority provide ambulance services on a township by township basis. In addition, Munson Health System operates North Flight EMS. North Flight EMS provides Nationwide fixed-wing services, Helicopter services throughout the county, ground ambulance services to select townships, and additional services.

Volunteerism

Antrim County has a strong history of volunteerism. This not only supports the people that need a little help in the County, but it also greatly impacts the economy. Most agencies in the County rely on volunteers on a daily basis. The following are two examples of how agencies are relying on volunteers to run their operations.

The Commission on Aging alone had 230 volunteers who worked 15,263 hours in 2010. That equates to \$106,800 of "in kind" that the COA would have had to spend to accomplish the various requirements if the volunteers had not provided their time. The

Mancelona Baby Pantry has more than 70 volunteers that logged more than 3,000 hours collecting 30,000 diapers and over 3,000 jars of baby food.

It is nearly impossible to quantify the economic benefit of volunteerism because some agencies don't fully document their volunteer hours, but the economic benefit is clear and valuable to the county and region.

RECREATION

An important component when planning for a community is understanding the need for recreation facilities and how they improve the mental, physical, and social involvement of individuals. The Antrim County Parks and Recreation Advisory Board and staff updated the Antrim County Parks, Lands, and Recreation Plan in 2011. This Plan was developed with an in-depth public input process that included a county-wide opinion survey, visioning sessions, and Parks and Recreation forums. The goal setting session ranked trail development; additional parks and recreation resource development; publicity of resources; and public access to water. The results of the planning process were an inventory of every recreational facility in the County and a prioritization of recreation projects for the next five years.

The recreation inventory is detailed in the 2011 Parks, Lands, and Recreation plan and on the Antrim County website, www.antrimcounty.org. The Action Program describes maintaining the existing facilities as a main priority. It also describes lake-accessibility as an important objective. Based on these considerations, the Parks and Recreation Commission will focus on the following projects until 2015. Afterwards, the Plan will be reviewed and revised for future projects.

Grass River Natural Area: With the Construction of the Grass River Natural Center, Grass River would like to develop more educational programs to serve more of the public.

Barnes Park: The only large waterfront camping facility in the County will need improvements, including, upgrading the electrical pedestals at the original electrical sites, repaving the main road in the park, and installing solar tube lighting in the bathhouse to help conserve energy.

Elk Rapids Day Park: Improve and encourage increased utilization by building a pavilion where the former pavilion stood and installing playground equipment in the park.

Maintenance of County Forest Lands: Maintaining and providing the County with inventories of forestry resources, improving forestry management plans, improving access, and timber harvesting, mapping and inventory of the newly purchased Glacial Hills Pathway and Natural Area property, addressing the spread and containment of the emerald ash borer, and continued implementation of sustainable forestry/forest improvement cuts.

Other Parks and Recreation Plans: Creation of a Parks Department, developing network of trails strategically in the county to connect existing trails, and improving public access to all of our lakes including a boat launch on Lake Michigan.

SOLID WASTE AND RECYCLING

Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended requires every county in Michigan to have a solid waste management plan. This plan is to assure that all the non-hazardous solid waste generated in the county is collected and recovered, processed, or disposed of for a ten-year period at facilities' which comply with state laws and rules.

The Board of Commissioners adopted a Solid Waste Management Plan in August of 1999. This plan listed specific goals and objectives that focused on reducing waste sent to landfills and maximizing resource recovery efforts. These goals and objectives were developed to comply with Michigan's solid waste goal to reduce the amount of material sent to landfills to only "unusable residuals" by 2005.

Currently the Department of Environmental Quality is updating their solid waste management plan requirements. Once the requirements have been updated, Antrim County will begin the process of amending their solid waste plan. The Board of Commissioners appointed a Solid Waste Management Planning Committee who will be responsible for updating and implementing the solid waste plan. Their efforts will be supplemented by the Antrim County Solid Waste and Recycling Council.

The 1999 Solid Waste Plan stresses the importance of recycling and mentioned the limited number of recycling locations as being a major deficiency. It also discussed the lack of coordination for recycling and composting facilities in the County.

In 1998, the total tons generated for solid waste was 16,850. The 1999 Solid Waste Plan projected that the total number of tons would be 19,197 in 2003 without recycling and composting efforts. 10,543 tons would come from residential, 5,653 tons would come from commercial, and 3,001 tons would come from industrial uses. It is projected that the tonnage would be reduced by 4,900 tons resulting in 14,297 tons to the landfills if more aggressive recycling efforts were implemented. Of these 4,900 tons, 1,850 would go to drop-off recycling locations, 675 tons would go to curbside recycling, 1,875 tons would go to commercial recycling, and 500 tons would be composted yard waste. The current data will have to be reviewed during the Solid Waste Plan update.

In October of 2009 the County Board of Commissioners created a county-wide drop-off recycling program with locations in Alba, Alden, Bellaire, Central Lake, Elk Rapids, Ellsworth, Kewadin, and Mancelona. As of May 2011 the program accepted Paper, Cardboard, Glass, Tin/Metal, and Plastic (# 1, 2, 3, 4, 5, 6, and 7 jugs and containers) and had diverted over 1,300 tons of trash from the landfill.

Quick Note:

At this time, there is no need for a new landfill in Antrim County. However, if recycling and composting efforts are not increased, there could be a need in the future.

HISTORICAL PERSPECTIVE

The area currently known as Antrim County was originally called Meguzee County (meaning Eagle). In 1843, the name was officially changed to Antrim County, after County Antrim in Ireland. In 1863, the Michigan legislature organized Antrim County, attaching the unincorporated counties of Kalkaska, Crawford and Otsego. During this time, the county seat was renamed from Meguzee to Elk Rapids. In 1879 the county seat was moved to a tract of land in the geographical center of the county. Originally the post office at this point was called Keno but was later renamed Bellaire. The present courthouse was built in 1905.

The original inhabitants of this area were Native Americans. Native American artifacts can be found throughout Antrim County, indicating widespread occupation of the area by hunters and gatherers. European hunters and trappers first settled Antrim County in the latter part of the 1700's. The flow of homesteaders increased after the end of the Civil War.

Lumbering and the processing of Upper Peninsula iron ore were the primary economic forces in the 1800's. These industries altered the landscape drastically, changing large swaths of forests to become open fields. Once the timber industry slowed, agricultural uses were established in the cleared areas. The agricultural industry slowed during the twentieth century as the population declined. In the second half of the twentieth century, the economy became more tourism and recreation based.

Any effort to preserve sites, structures, and/or artifacts from the historic past of Antrim County should take into account the circumstances of those earliest ancestors of Antrim County residents – native and immigrant alike. A single visit to the Antrim City town site in Banks Township will demonstrate that a long- established tradition of re-using building materials seems a part of the Antrim County ethos. Reminders of a once well-established industrial past exist currently in western Antrim County.

More lasting private, public, and civic buildings can be found in vital Antrim County villages. Efforts should be made to preserve them. Dedication of structures as historic buildings can be a method of preserving individual buildings. The designation of Historic Districts is another method that can be used. Various State of Michigan, Federal and Tribal programs exist which might benefit the preservation of identified and qualified sites.

It is important to note, that some of these programs can bring with them a higher threshold of compliance and expense when structural requirements need to be addressed. In no case, should efforts be made to include buildings and sites into programs without the agreement of affected parties.

CHAPTER 8: AGRICULTURE

SUMMARY

A farm consists of land and buildings used in the production of crops and livestock. The U.S. Department of Agriculture defines a farm as generating at least \$1,000 a year in the sale of crops or livestock. According to the 2007 Census of Agriculture, the average farm in Antrim County generated \$56,766 in total sales in 2007. The average farm in Michigan generated \$102,710. These figures represent the market value of agricultural products sold, which represents the gross market value before taxes and production expenses of all agricultural products sold or removed from the place. It does not include payment received for participation in federal farm programs or income for farm related sources such as woodworking.

Farms typically consist of a farmstead, which includes a farmhouse and buildings used to shelter livestock and store crops, livestock feed, and farming equipment, and land used to grow crops or pasture grazing livestock. The 2007 Census of Agriculture reported that there were 411 farms in Antrim County and 56,014 in Michigan. According to the 2007 Census the average size of a farm in Antrim County was 164 acres and there were 67,351 acres dedicated to farming.

NUMBER OF FARMS

According to the 2007 Census of Agriculture, there were 411 farms in Antrim County, which was an increase from 1997 and 2007. The trend of having more farms occurred throughout northern Michigan during this time period.

During this time in Michigan, many farmlands were converted to other uses, such as residential developments. The increase in the number of farms may be due to smaller farm lots and the increased interest in farming activity (as a secondary activity not as a primary activity, such as hobby farms). The average farm size in Antrim County was 164 acres, while the median size was 78 acres. This acreage is similar to other counties in northern Michigan. For the State of Michigan, the average size was 179 acres and the median size was 60 acres.

Figure 8-1 Number of Farms in Northern Michigan			
	Number of Farms in 1997	Number of Farms in 2002	Number of Farms in 2007
Antrim County	301	382	411
Benzie	165	181	205
Charlevoix	230	299	336
Emmet	248	274	291
Grand Traverse	485	489	522
Kalkaska	162	175	221
Leelanau	420	429	449
Manistee	330	315	358
Missaukee	377	412	391
Wexford	298	395	371
Northern Michigan	3,016	3,351	3,555
State of Michigan	53,519	53,315	56,014

TOTAL SALES FROM FARM OPERATIONS

During this time, the average total number of sales increased for northern Michigan farmers and throughout the State. The market value is the gross market value before taxes and production expenses of all agricultural products sold or removed from the place in 2007, regardless of who received the payment. It includes sales by the operator(s) as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. It does not include payment received for participation in other federal farm programs, nor does it include income farm-related sources such as custom work. The 1997 information has been adjusted for the 2002 inflation.

Figure 8-2 Market Value of Farms in Northern Michigan			
	Market Value of Farms in 1997 (average per farm)	Market Value of Farms in 2002 (average per farm)	Market Value of Farms in 2007 (average per farm)
Antrim County	\$58,131	\$41,501	\$56,766
Benzie	\$40,873	\$23,324	\$38,933
Charlevoix	\$18,818	\$13,349	\$22,762
Emmet	\$22,848	\$21,412	\$25,600
Grand Traverse	\$38,744	\$23,243	\$36,865
Kalkaska	\$33,906	\$32,203	\$27,397
Leelanau	\$72,863	\$37,268	\$78,628
Manistee	\$29,072	\$25,494	\$25,732
Missaukee	\$94,589	\$95,983	\$180,652
Wexford	\$30,167	\$24,101	\$18,542
Northern Michigan	\$47,535	\$35,816	\$54,497
State of Michigan	\$69,035	\$70,035	\$101,710

FARM SIZE

The 2007 Census of Agriculture recorded that there were 67,351 acres in Antrim County that were considered farm land. There are 335,961 acres in Antrim County; therefore 20% of the County is considered actively farming.

Grand Traverse County and Leelanau County have similar farm acreage (62,577 and 55,571 respectively). Kalkaska and Benzie have the smallest farm acreage at 23,464 and 21,069 acres respectively.

The majority of farms in Antrim County range from 50 to 179 acres, as shown in Figure 8-3.

Figure 8-3 Size of Farms in Northern Michigan										
Farms by Size (acres)	Antrim	Benzie	Charlevoix	Emmet	Grand Traverse	Kalkaska	Leelanau	Manistee	Missaukee	Wexford
1-9	21	28	26	18	62	15	36	12	37	18
10-49	134	68	115	91	215	92	134	101	99	136
50-179	171	81	131	115	164	81	199	176	148	165
180-499	61	22	50	51	55	28	66	58	65	41
500-999	15	4	11	14	20	1	10	11	22	10
1,000 or more	9	2	3	2	6	4	4	0	20	1

FARMLAND PROTECTION

Farming can be considered part of the region's rural character. A dilemma for many communities is how to promote the preservation of farmland while addressing the demand for development. If a community wishes to protect their agricultural lands, their focus should be twofold: limiting development in predominantly agricultural areas and providing for development away from prime agricultural lands. A successful program is dependent on having the appropriate planning option that will result in a balanced development pattern.

Recent studies have shown that providing for farmland preservation in an orderly matter may provide economic benefit to the community. In a study by the American Farmland Trust an example showed that for every \$1 in tax revenue generated by farms and open land in Marshall Township, Calhoun County, only 27 cents was required for associated services. For every \$1 in tax revenue generated from residential development in that township, \$1.47 was required in public services.

Map 8-1 shows where the prime farmland areas are located. This map was based on designating the most productive areas for farming. In addition, the farming areas are shown close together and not fragmented over a large area. To assist in Farmland Preservation, the State of Michigan has an active Purchase of Development Rights Program that will pay a farmer for the development rights on a site and allow them to continue farming.

Antrim County joined with Grand Traverse County to have a Bi-County Farmland and Open Space Development Rights Ordinance in 2003 to promote a similar program. The Antrim County Farmland and Open Space Preservation Board consists of six (6) members, appointed by the Board of Commissioners. The Farmland and Open Space Preservation Board administers the County's farmland preservation program and is responsible for:

- Establishing selection criteria for ranking and prioritizing of applications to the program.
- Establishing a points-based appraisal formula for determining the value of the agricultural conservation easements.
- Reviewing and providing oversight in scoring all applications according to the adopted selection criteria.
- Ranking and prioritizing the top scoring applications for acquisition and determining whether the development rights should be purchased.
- Approving the restrictions and permitted uses under the agricultural conservation easement.
- Establishing the price to be offered to the property owner and authorize negotiations for the purchase of development rights and agricultural conservation easement.
- Establishing monitoring procedures and overseeing subsequent monitoring to insure compliance with the agricultural conservation easement. Enforcement of the agricultural conservation easement in the case of non-compliance shall be the responsibility of the respective County Board of Commissioners.

IMPLEMENTATION STEPS (What should be done next?)

1. Work with farm groups and the Michigan State Extension and Northern Lakes Economic Alliance offices to promote agricultural related businesses.

CHAPTER 9: TRANSPORTATION, INFRASTRUCTURE, AND COMMUNITY SERVICES

SUMMARY

Effective transportation and infrastructure systems are critical to maintain the productivity, health, and safety of a region. People travel to work, for pleasure and drive to stores and services. Medical and emergency vehicles are required to reach all areas of the region to provide their services. And while the villages in Antrim County are walkable communities, they do not provide all the necessary services families may rely upon. Therefore, people travel to other communities and locations to meet their needs. Since this travel is usually by vehicle, it is important to understand the current road conditions and future plans.

Antrim County is growing in population, but the overall density of that population is not sufficient for improved services such as water and sewer throughout the County. However, many of the denser locations, such as the villages, do provide improved services. The remainder of the County is serviced by well and septic.

In addition to transportation and infrastructure, community services are equally important to meet the local needs and demands of a community. They are vital in providing a diverse range of recreation, leisure, social, and community services.

Prior to land areas being designated for certain density and uses, the infrastructure capacity should be studied. It would not be advisable for a high intensity use, such as a manufacturing operation to be located on a limited access road with a well and septic field. Nor would it be advisable for a subdivision to have five acre lots when it is serviced by water and sewer. The availability of services will impact future growth in terms of use and rate.

EXISTING ROADWAYS

The majority of the roads in Antrim County are paved; however there are many unpaved, less-traveled roads as well. There are many well-developed and direct routes in the County such as Highway 593 which runs from Elk Rapids through Kewadin, Torch River, Alden, Clam River, Central Lake, Ellsworth, and north to Charlevoix. Highway 618 is an east-west connection from Alden to Mancelona. Highway 620 extends from Bellaire through Green River, Alba, and to Otsego County. Highway 624 branches from Michigan Highway 66 to Central Lake. There are a number of other paved County roads that generally provide adequate circulation for development. It should be noted that Torch Lake makes it difficult to have an east-west roadway because it almost completely traverses the County from north to south.

There are two State trunk lines traversing Antrim County. The length of US-31 is approximately 24 miles and provides a north-south route through the County. It is located along the western edge and in some locations near Lake Michigan. It passes through Banks, Torch Lake, Milton, and Elk Rapids Townships. US-131 enters the County at the southern edge and travels through Custer, Mancelona, Chestonia, Star, and Warner Townships. It is approximately 18 miles long within the County.

There are three State highways. Michigan Highway M-66 branches north from US-131 in Mancelona Township and provides a fairly direct route to Charlevoix. It is approximately 14 miles long within the County. Highway M-88 also branches from US-131 in Mancelona and travels to US-31 in Eastport. This roadway provides an integral connection in the County and is approximately 26 miles long. State Highway M-32 extends a short distance through the northeast section of Antrim County; it runs through Warner and Jordan Township, north to Highway 66 in Charlevoix County. It is approximately 9 miles long within Antrim County.

According to the Antrim County Road Commission, there are 664 miles of local County roads, 210 miles of primary County roads, and 99 miles of State trunklines. The Antrim County Road Commission is responsible for the maintenance and snow plowing of these roadways. The Michigan Department of Transportation (MDOT) contracts with Antrim County for the maintenance and snow plowing of the State trunklines.

The Road Commission receives its funds through taxation, via the Michigan Department of Transportation (MDOT). The Road Commission is only responsible for publicly owned roads. The Road Commission and MDOT are not responsible for private roads; snow removal and maintenance of these roads are funded privately.

ASSET MANAGEMENT

In October 2010, members from Antrim County Road Commission, Traverse City Transportation Service, Michigan Department of Transportation, and Northwest Council of Governments studied the road surfaces in Antrim County. This study was part of an Asset Management study for the counties in the region (Antrim, Benzie, Charlevoix, Emmet, Grand Traverse, Kalkaska, Leelanau, Manistee, Missaukee, and Wexford). Asset Management involves visually inventorying the county roads and prioritizing any needed improvements. This inventory includes collecting and assessing data about the following characteristics: roughness (ride), surface distress (condition), surface skid characteristics, and structure (pavement strength and deflection).

The outcome of this study showed that 29.6% of Antrim County's roads were rated "very good to excellent". Among the ten counties in the region, this was the highest percentage of roads with this rating. Only 9.7% roads were rated "failing to fair". The remainder of the roads received a "fair to good" rating. (Source: 2006 Northwest Michigan Council of Government Asset Management study).

FUTURE ROAD PLANS

In December of 2009, the Antrim County Road Commission adopted their road improvement plan for 2012 to 2013. This road improvement plan is required so that the Road Commission can receive funding. This plan lists the following projects:

2012 County wide pavement marking

2013 No projects

PRIVATE ROADS

The majority of newer development is served by private roads. State law encourages the development of private roads during land division. Private roads are privately maintained. At this time, there are no county-wide standards or inventory for private roads.

ALTERNATIVE MODES OF TRANSPORTATION

Mass Transit

A bus system called Antrim County Transportation (ACT) was established in 1977 and provides public transit services to all citizens in Antrim County. It operates Monday through Friday, 6 am to 6 pm. This operation has 15 vehicles, 14 of which are capable of lifting wheelchairs.

In the 2009 fiscal year, 47,253 riders utilized this service (this number includes the total amount of people on a bus every day; therefore a person riding a bus every day would have been counted every day).

At this time, ACT does not have a descriptive long range plan; however they would like to increase their ridership by focusing on areas that have higher densities. They are also working with surrounding counties to create a more comprehensive transit system. Many of the riders travel to Traverse City, Gaylord, or Petoskey for their services and shops. Eventually, ACT would like to provide consistent travel to these areas.

Indian Trails Bus Route

The State of Michigan subsidizes a daily bus service in Mancelona. The service takes you to two transportation hubs, either north to St. Ignace, which can take you to various other destinations in the Upper Peninsula, or south to Grand Rapids where busses and trains depart.

Harbors

There is one public harbor in Antrim County on Lake Michigan and it is located in Elk Rapids. The marina, located in Downtown Elk Rapids offers multiple amenities including water, electric, WIFI, Cable, Restrooms, Showers, Gasoline/Diesel, Pumping Station, Courtesy Vehicle, Dog Run, and Laundry, they have 161 Seasonal Slips, 50 Transient Slips, and 2 Commercial Slips. Additionally, there is a public harbor on Torch Lake and it is in Alden.

TRAILS

As the population increases, people become more demanding of services that are offered in higher density areas. One of these services is trails. Although Antrim County has a rustic character, it does not have a comprehensive trail system. There are some organizations that are focusing on providing trails in Antrim County. All of these projects are preliminary, however if they are built, they will improve the quality of life for residents by offering a different form of transportation and providing additional recreation. The following list of trail projects is preliminary, there may be more projects that are being pursued, but are not being promoted.

Preliminary list of trail projects in Antrim County:

- Grass River Natural Area: a trail built between Alden and the Bellaire Trail. This trail would be a 2.4 mile stretch through the Natural Area.
- Elk Rapids Rotary Trail: a trail linking the Village of Elk Rapids to Whitewater Township in Grand Traverse County.
- Little Traverse Wheelway: a trail connecting Antrim County to the Little Traverse Wheelway in Charlevoix County.

AIRPORTS

Antrim County Airport

The Antrim County Airport is a vital component to the transportation and infrastructure in Antrim County and Northwest Michigan.

The airport is owned and operated by Antrim County and is located ½ mile northeast of the Village of Bellaire in Kearney Township

Basic Information

- Airport Reference Point: Latitude 44° 59' 18.874"N, Longitude 85° 11' 54.078"W.
- FAA Site Number: 09562.*A
- National Plan of Intergraded Airport System Classification: General Aviation.
- Acreage: 363 Acres.
- Mean Normal Maximum Temperature: 81.3° F.
- Runways: Runway 02/20 is 5,000 feet in length and 100 feet wide.
- Pavement: Constructed of bituminous pavement with a gross weight bearing capacity of 55,000 pounds dual wheel main landing gear configuration.
- Lighting: Medium intensity runway lights.
- Landing Aids: PAPI REIL and GPS.

The airport is capable of handling corporate jets with hanger space for rent. North Country Aviation provides charter service to and from the airport.

With Cherry Capitol Airport and the Pellston Regional Airport within 60 miles of Antrim County, a scheduled commuter service is unlikely.

There are four other airports in Antrim County. These airports serve mainly private individuals and do not have the capacity to serve the public with regularly scheduled flights throughout the United States and the world. The airports include:

- Air Park North in Alba
- Lake of the North Airport in Mancelona
- Mancelona Municipal Airport in Mancelona
- Torchport Airpark in Eastport

INFRASTRUCTURE AND SERVICES

Water and Sewer

The majority of County residents are served by well and septic systems. The following locations provide water and sewer to their residents: Village of Elk Rapids, Village of Central Lake, Village of Bellaire, Schuss Mountain, and Shanty Creek Resort. The following locations only provide water to their residents: Village of Mancelona, Mancelona Township, and Village of Ellsworth. Businesses in the Village of Mancelona, Mancelona Township, and Custer Township have access to a Public Sewer.

Areas serviced by water and sewer are able to have higher density and more intensive land uses. However, higher densities are needed to fund these improvements. At the current density levels in the County, it is unknown if any other locations will be able to provide improved infrastructure services.

Ambulance

Central Lake, Chestonia, Custer, Forest Home, Helena, Kearney, Mancelona, Star and Warner work together through a Township Ambulance Authority through a millage levied together. Torch Lake and Milton levy their own millage to provide their own ambulance service. Echo Township levies a millage for ambulance and fire. Banks, Jordan, and Elk Rapids do not levy a millage for ambulance services though do fund through their general fund.

Police

The villages in Antrim County provide some form of police protection. The villages of Elk Rapids, Mancelona, Bellaire, Ellsworth, and Central Lake all have their own police force but do not provide a 24 hour 7 day a week police force. The Antrim County Sheriff's Office, which patrols the unincorporated areas of the County, also covers these areas when their police force is not working. In addition, Torch Lake Township and Mancelona Township have Constables.

Fire

Most Townships levy a Millage for fire protection in their township:

Banks, Central Lake, Chestonia, Custer, Echo, Elk Rapids, Forest Home, Helena, Kearney, Mancelona, Milton, Star, and Warner. Jordan Township does not levy a Millage for fire.

Land-line phone services, gas, electricity, cable services, and high speed internet are available in the County to some degree. Most cable television, high speed internet, and natural gas is available in the in the villages, major resort developments, and M-88 with a few exceptions as shown in Figure 9-1.

At this time, many of the utility lines are above ground.

Municipality	Figure 9-1 Public Utility Service Area							
	Water	Sewer	Electrical	Natural Gas	Cable Television	High Speed Internet	Cell Phone Coverage	Master Plan
Villages								
Bellaire	SA	SA	SA	SA	SA	C,W	SA	Yes
Central Lake	SA	PLS	SA	SA	SA	C,W	SA	Yes
Elk Rapids	SA	SA	SA	SA	SA	C,D,W	SA	Yes
Ellsworth	SA	NS	SA	NS	SA	C,W	SA	Yes
Mancelona	SA	PLS	SA	SA	SA	C,D,W	SA	No
Townships								
Banks	PLS	NS	SA	NS	PLS	C,D,W	SA	Yes
Central Lake	PLS	PLS	SA	PLS	PLS	C,W	SA	No
Chestonia	NS	NS	SA	PLS	PLS	C,W	SA	No
Custer	PLS	NS	SA	PLS	PLS	C,D,W	SA	No
Echo	NS	NS	SA	NS	PLS	C,W	SA	No
Elk Rapids	PLS	PLS	SA	SA	SA	C,D,W	SA	Yes
Forest Home	PLS	PLS	SA	PLS	PLS	C,W	SA	Yes
Helena	NS	NS	SA	PLS	PLS	C,W	SA	Yes
Jordan	NS	NS	SA	PLS	NS	D,W	SA	No
Kearney	PLS	PLS	SA	PLS	PLS	C,W	SA	Yes
Mancelona	PLS	PLS	SA	PLS	PLS	C,D,W	SA	No
Milton	NS	NS	SA	PLS	PLS	C,D,W	SA	Yes
Star	NS	NS	SA	NS	PLS	C,D,W	SA	No
Torch Lake	NS	NS	SA	PLS	PLS	C,W	SA	Yes
Warner	NS	NS	SA	NS	PLS	C,D,W	SA	No
<p>SA - Service Available PLS - Partial or Limited Service Available NS - No Service</p> <p>Internet* C - Cable Internet D - DSL W - Wireless</p> <p>*these municipalities have service but not complete service from all internet providers</p>								

COMMUNITY SERVICES

Although private civic organizations in Antrim County are not affiliated with any governmental unit, they are listed in this chapter because of the important services they provide to the County's residents. As shown in figure 9-2, Antrim County communities have multiple organizations within them. If there is not one in the nearest town, then there is usually one close enough to utilize their services.

Many communities and nonprofits provide services that benefit a particular portion of the community or a community at large. Senior and health services such as the Antrim County Commission on Aging and medical facilities are noted in Chapter 7 (Human Element).

	Alba	Alden	Bellaire	Central Lake	Elk Rapids	Ellsworth	Mancelona	Torch Lake
Alden Volunteers		X						
American Legion			X		X	X	X	
AmVets					X			
Area Seniors			X					
Art Rapids					X			
Business Association		X						
Chamber of Commerce			X	X	X	X	X	
Educational Foundation							X	
Free Masons			X	X	X			X
Garden Club		X	X		X		X	
Historical Museum	X	X	X		X	X		
Historical Society	X	X	X	X	X	X	X	
Lionesses			X	X	X	X		
Lions			X	X	X	X		
Men's Club		X						
Moose Lodge							X	
Order of the Eastern Star			X		X			
Parks Side Arts Council			X					
Rainbow Girls			X					
Rotary			X	X	X		X	
Veterans of Foreign Wars				X				

Various other groups (Boy Scouts, Girl Scouts, School Mentors, and 4-H) are located throughout the county in various locations. Please contact your local school district or the county MSU Extension office for further information.

IMPLEMENTATION: (What should be done next?)

1. To compete in a global economy, communities should include in their infrastructure development plans, wireless and broadband technology. Northern Lakes Economic Alliance (NLEA) has undertaken an initiative to bring wireless and broadband technology to this area. The County is encouraged to be active participants in this process and to include their village and township counterparts as key stakeholders as well. A broad coalition of government, private sector, and providers of these services should be convened, updated, and included in the ongoing efforts of NLEA to bring these technological resources into the local communities countywide.
2. Northwest Michigan Community Health Agency (NWMCHA) has created a “Septage Waste Disposal Committee.” This committee is actively working toward sanitary code implementation strategy intended to address increasing problems related to septage disposal and related problems in terms of (related) water quality, and wetlands protection. New and emerging technologies, advanced treatment systems for waste disposal offer tremendous potential for protecting our groundwater, surface water, and wetland resources.

It is recommended that the County work closely with NWMCHA, environmental advocacy groups, villages, townships, the MDEQ and the EPA, in order to research, develop, and implement decentralized clustered septage disposal systems that take full advantage of cutting edge technologies that provide for protection and preservation of our freshwater and wetland resources.

3. Assist in the development of private road standards. These standards should address design speed, right-of-way width, pavement width, and the proper use of traffic control devices.
4. Work with the utility companies to develop an educational booklet describing the benefits of undergrounding utilities and how homeowners can underground utility lines on their property.

CHAPTER 10: GUIDING PRINCIPLES

SUMMARY

Guiding Principles are statements that focus and direct decision making for future land use, transportation, and public improvements. These are the statements that represent the essence of what a community values most and wishes either to encourage or, not to have changed as growth occurs.

Each Guiding Principle has been tailored to aid Antrim County in guiding growth. They should be reviewed when considering projects, regulations, or improvements that can impact the county's future land uses. These policies should be reviewed in conjunction with Township Master Plans and Zoning Ordinances for implementation. The Guiding Principles are based on the results from the 2001 Antrim County Community Opinion Survey, 2003 Visioning Sessions, and input from the Planning Commission members and interested public. The following pages describe each guiding principle in detail and list a set of policies to be implemented to achieve each Principle. There is no priority assigned to the guiding principles, the corresponding number is for reference only.

ANTRIM COUNTY'S GUIDING PRINCIPLES

- #1 Keep Antrim County Rural
- #2 Protect the Water
- #3 Promote Healthy Living
- #4 Direct Development towards Existing Communities
- #5 Provide Housing for Everyone
- #6 Retain Farming and Farmlands
- #7 Promote Diverse Working Opportunities.
- #8 Maintain the Rural Appearance of the Highway and Road Corridors.
- #9 Balance Property Rights with the Public Interest

#1 Keep Antrim County Rural

There are many different ways to define “rural character.” In some communities it means low density housing, in others it means dirt roads. In Antrim County, it has many components. It is defined as the ability to:

See stars at night; live near wildlife; view open space from the road; recreate in forested areas; and purchase food from nearby farms.

The people of Antrim County wish to preserve this lifestyle, therefore the following policies are recommended:

- Facilitate development and land use consistent with the rural environment.
- Encourage cooperation with townships, villages, businesses, and community leaders to minimize outdoor lighting. Endorse and promote local lighting ordinances that lessen night time glare.
- Provide education to elected and appointed officials about wildlife protection.
- Promote and educate community leaders about different road designs that fit the rural character of the area.
- Encourage the use of native vegetation; especially in County building projects and in local landscape ordinances.
- When appropriate, work to establish incentives that can be used to encourage the incorporation of desirable views and vistas, woodlands, farmlands, and the protection of ridgelines into development plans. This could include a Purchase of Development Rights program (PDR).
- Coordinate county park projects with open space and protection initiatives by other groups (such as Townships, conservancies, and State government) to create a comprehensive countywide open space and trail network.
- Encourage trees and landscaping along the corridors
- Encourage appropriate signage and signage size along roadways that is consistent with the rural character.

#2 Protect the Water.

One of Antrim County’s most notable and precious resources is its water resources. Antrim County has approximately 264 total miles of rivers and streams, covering about 28,480 acres. The county also has 27 miles of shoreline along Grand Traverse Bay (Lake Michigan). These water areas provide scenic beauty, wildlife habitat, and recreation. They should be protected, or they will not be able to continue these functions. To help implement protection measures, the following polices are recommended:

- Encourage intensive land uses that could impact water quality be placed at a distance from streams, rivers, wetlands, and creeks.
- Encourage alternative wastewater disposal systems in areas with sensitive characteristics.

- Help townships and municipalities develop an ordinance to minimize intensive uses on a single lot when the lot is adjacent to a body of water (“key-holing” or “funneling” ordinance).
- Support community wellhead protection plans. Incorporate wellhead delineation maps into County plans.
- Support education programs about septic system maintenance. Encourage this education in the schools.
- Be an active partner with soil erosion control.

#3 Promote Healthy Living.

Residents responding in the Opinion Survey and Visioning Sessions frequently expressed how much they enjoy living in Antrim County. People want to live here. This is a community where people of all ages can live and thrive. To ensure that this desire continues, the following polices are recommended to address individual health needs:

- Encourage the creation of a healthy living site plan guidebook that promotes development designs for a healthier living. Encourage walkable neighborhood designs when possible.
- Encourage cluster-housing techniques to establish neighborhoods that are organized around open space areas.
- Encourage road designs that enhance safety for children and pedestrians. Show community leaders how these designs will improve the community.
- Recommend to community leaders performance standards that minimize noise, visual access, odor, vibration, dust and particulate matter, and the other potential impacts of industrial, commercial, and resource based land uses when they abut residentially zoned areas.
- Work with local school districts to coordinate growth plans.
- Plan for a medical compound in the county and designate a location for this service.
- Support transit service.
- Encourage recreational planning.
- Encourage Access to Recreational Activities

#4 Direct Development towards Existing Communities.

Encourage development and investment in communities that possess infrastructure. Directing this development to existing communities increases the efficiency of developed land and infrastructure, and reduces development pressures in rural areas. It is the intent of the County to promote this growth by:

- Encourage higher density development in the "infrastructured" communities.
- Encourage businesses to locate within “infrastructured” communities.

- Discuss growth strategies with the “infrastructured” communities and assist them when possible.
- Assist each “infrastructured” community in their “placemaking” and promoting their uniqueness.
- Discourage intense development from occurring outside communities with infrastructure.

#5 Provide Housing for Everyone

Not everyone will wish to live in the same house for as long as they live in Antrim County, and then have to move away from familiar surroundings when their housing needs change. People need housing that is affordable in reasonably close proximity to their jobs. It is the intent of the County to provide opportunities for a variety of housing as follows:

- Encourage a wide range of housing opportunities to satisfy the lifecycle housing needs of residents of all income and age levels.
- Support a range of quality affordable housing types to satisfy the needs of residents.
- Encourage affordable housing throughout the county rather than concentrate it in monotype developments.
- Promote homes on small lots where there is infrastructure.
- Encourage work/live environments in rural areas to allow for home owners to operate small scale businesses from their homes when the impact will be minimal.

#6 Retain Farming and Farmlands

Agriculture plays an important role in Antrim County’s history and current character. It is important to think of these areas as perpetually being farmed and not as future residential areas. Once these lands are developed into residential or commercial developments, it is nearly impossible for them to be farmed in the future; therefore it is important to employ the following:

- Encourage new agricultural activity within the community.
- Think of agriculture as employment locations; work with farmers and interested agencies to develop agricultural related businesses such as U-pick operations, nurseries, and wineries.
- Encourage the sale of agricultural products at farm locations.
- When appropriate, work with farmland preservation groups and land conservancies to retain larger areas of contiguous agricultural lands in the agricultural designated areas.
- Support Purchase of Development Rights program to purchase large farmlands.

- Proactively help farmers continue agricultural operations through the Michigan State University Extension and other USDA offices.
- Encourage the most flexible regulation of farms and farm markets.

#7 Promote Diverse Working Opportunities

One of the important components a community needs to be sustainable is a solid job force. This can be accomplished by a mixture of job opportunities, including professional, manufacturing and service oriented. Although it is not the county's responsibility to create these job opportunities, the county should encourage viable locations for them.

- When appropriate, work with responsible parties to ensure that high-speed internet and wireless communication is available throughout the County.
- Designate areas where small businesses can afford to operate.
- Encourage homegrown businesses and incubator businesses.

#8 Maintain the Rural Appearance of the Highway and Road Corridors

Antrim County has many beautiful, highly visible vantage points. People enjoy these views while traveling. The forest vegetation, open space, and views of Lake Michigan along with all other lakes are magnificent to look at. They are important resources and preserving them is a high priority. These are not just attractive sites, they add to the quality of life and tourism experience. A main objective is to protect these areas from highly visible, inappropriate development or ill-suited development such as signage, billboards, multiple access points, and obtrusive building placement.

- Encourage clean highway corridors and encourage businesses along the highway to landscape.
- Work to become a partner with the County Road Commission, Villages, Townships, and MDOT in roadway planning and access management.
- When appropriate, work with community leaders, townships, villages, and businesses to control signage and limit billboards.
- Encourage access management provisions in local ordinances.
 - Reduce driveway access points wherever possible.
 - Encourage internal connections between business properties.
 - Promote alternative access, such as frontage roads.
- Work to keep the long vistas of open space and wooded areas along the roads.
- Encourage compact development, rather than allowing development to "strip" down the roadway.
- Work to become a partner with the County Road Commission, villages, townships, utility companies, and the private sector to improve utility location.

- Assist in the development of private road standards. These standards should address design speed, right-of-way width, pavement width, and proper use of traffic control devices.

#9 Balance property rights with the public interest

The United States Constitution specifically states that a person can not be deprived of their property without due process. A person's ability and freedom to own property is essential in the United States. While balancing the rights of property owners and the public interest is always difficult, equal consideration should be given to the benefits a community receives when good public policy is implemented.

It is the intent of the County to carefully balance the rights of property owners with the public interest by:

- Evaluating each public interest and determine if alternative approaches can be used to minimize affects on property rights.
- To the extent possible, ascertain and publicly reveal the facts of any land use issue before making a decision.
- Making recommendations on the basis of sound land use practice
- Keeping the public informed and involved in key land use issues. The more difficult the issue, the more input should be elicited from the public, including going beyond the normal required public hearing requirements when there is a major issue of concern.
- The County should encourage grass roots activism to actively support and engage directly in the process.

CHAPTER 11: FUTURE LAND USE

SUMMARY

Planning is defined as, “a method of doing something that is usually in some detail before it is begun and that may be written down in some form.....” (Encarta Dictionary). People plan every day, whether it is for vacations or dinner. The people in Antrim County live in a wonderful place: the vegetation, shoreline, small towns, water bodies, and rustic nature make this an area where people want to live.

The goal of this master plan is not to create regulations or zoning. The goal is to simply recognize what is special about Antrim County and provide recommendations that individual units of governments can choose to use to help sustain the quality of life. A thriving community involves many aspects; it goes beyond a person’s house and backyard. It involves a good school system, protection from crime and other disasters, a manageable journey to work, the availability of shops and services, the opportunity for growth, we well as children and the elderly to continue living in the community. Livability depends on these things, as well as the preserving what is unique: the natural settings, the farmlands, the country roads, the historic villages, and the views and access to the water.

To accomplish these objectives, many different groups, such as school districts, road commission, business owners, and government agencies have to work together. The Planning Commission’s charge is to recognize what challenges exist, what opportunities exist, what can be changed and what can not be changed, and then work to accomplish what they see is achievable.

The following descriptions are to provide guidance to the Planning Commission to assist them in this charge and are displayed on the Graphic Representation of Future Land Uses. It should be noted that this graphic is very similar to the Generalized Land Use Plan in Chapter 4. The reason for this duplication is that the existing land use patterns are what the populace would like to see in the future. It is a more of “keep what we have” attitude; therefore the focus is on maintaining the existing characteristics in Antrim County rather than creating new land uses or intensities.

Village Centers

There are five Villages in Antrim County. Each one has a unique character. Some are more developed than others; however, each one has a combination of residential and commercial uses in a small vicinity. This compactness makes them suited for walkability, mass transit, and improved services such as water and sewer. It is hoped that these Villages will continue to thrive and remain social centers for people living in Antrim County.

These are ideal locations for senior housing, medical services, education centers, and employers. People can travel from their homes to these locations and have their needs met. If they desire to live in these environments, suitable housing can be provided.

It is important to help these villages to continue to thrive. This can be achieved by working with the Economic Development Corporation and the Northern Lakes Economic Alliance to provide jobs within these locations; promoting higher density; working with the Antrim County Transportation operations to ensure that each Village has regular public transportation; and communicating with the school boards to build new structures within these areas. It is projected that these Villages will grow in residential and commercial population.

Hamlets

Although these areas resemble villages, they are not incorporated. They serve the nearby populations and traveling public. Like the villages, these locations are mixed use and social centers. It is expected that they will continue to grow, but will not experience any substantial growth due to minimal infrastructure. These areas should be thought of as second tier villages and encouraged to continue their current functions.

Agricultural Preservation

The intent of this classification is to identify the areas that are actively farmed or have characteristics that make them suitable for farming. This identification is to maintain, promote, and encourage existing operations and protect them from incompatible uses. These areas should focus on agricultural operations rather than residential development.

The primary uses of lands in area should focus on agricultural activities including crops, horticulture, fruit growing, forestry, ranching, beekeeping, poultry and egg production, animal breeding, stabling, kenneling, milk production and similar uses, and the associated storage relating to these uses and activities permitted by the Michigan Right to Farm Act.

Agricultural related businesses such as value-added agriculture, grazing, wineries, corn mazes, bed and breakfasts, riding stables, and farm markets are attractions for tourists as well as being self-sustaining businesses. In order to encourage and maintain a balanced and diversified economy, these agricultural related enterprises should be encouraged. These are the places where Purchase of Development Rights (PDR) or Transfer of Development Rights (TDR) could be implemented. The TDR program allows for the purchase of density in one location to be moved to another location. The PDR program involves the purchasing of development rights. In 2003, Antrim County joined with Grand Traverse County in a Bi-County Farmland and Open Space Preservation

Program. Currently the joint board is being created. This program allows townships to participate in purchasing development rights. Areas that are perceived for potential purchases should have this classification.

Rural Country

People living in Antrim County tend to enjoy a relaxed, rustic lifestyle. People living here take pleasure in having larger size properties and limited infrastructure services such as well and septic. Broadband connections are encouraged to allow for more people to work from home. The plan for this area is to retain rural characteristics and allow individuals to continue their standard of living.

Resort Community

Antrim County is known as a recreation area. There are a couple of locations that primarily function as a resort for skiing, golfing, boating or a combination. The majority of the homes in these areas are for individuals who wish to live (either year round or seasonal) in these locations. Homes are sited around the resort amenities, creating a live/play environment. These homes are usually on smaller lots and developments are more concentrated than in the rural country. It is projected that these areas may increase in population, but will not have a substantial increase in size, resulting in development that is more infill.

Public Recreation

These are the publicly owned lands that offer recreation, wildlife habitat, and visual beauty. These lands are owned by the state, county or township. It is projected that these areas will remain in public ownership. If there is a change, it is desired that the properties will transfer from one government entity to another. If a property is privately obtained, the road and infrastructure services should be studied to ensure any future use of the property will be appropriate.

Visual Highway Corridor

The land areas along the designated roadways in the County are among the most valuable open space visual areas in the region. The majority of these areas are undeveloped and provides spectacular views of the landscape. The views from the roadway reinforce northern Michigan's rural character. People who live here and visit here enjoy this amenity. The majority of these areas are also privately owned. It is recommended that incentives, such as increased density or reductions in development requirements be given to property owners who design their developments to maintain the visual corridor. Strip development should not be encouraged.

In addition, access management should be recommended to be implemented by the Michigan Department of Transportation or the Road Commission. Access management is a set of techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, prevent crashes, preserve existing capacity, and preserve investment in roads by managing the location, design, and type of access to property.

Access management focuses on the number, location, and design of driveways as they relate to the following elements within the road right-of-way: travel lanes, medians, by-

pass lanes, dedicated turn lanes, and signal operations. It is more efficient to apply access management to properties along a roadway prior development, than retrofitting to developed properties. Access management can be achieved by one or more of the following:

- Encourage shared access to parcels and consolidate driveways where possible.
- Encourage passing lanes over road widening.
- Encourage front or rear access driveways (frontage roads) where applicable...
- Promote internal connections and alternative accesses where applicable.

Shoreline

Much of the buildable land areas along Lake Michigan and surrounding the interior lakes have been developed. Most of the development is single family homes on smaller lots. These are desired locations and it is projected that most of the future growth will actually be rebuilding of homes versus building new homes due to the limited amount of developable land. Communities with these developments should be aware of the environmental constraints these properties may have and work with the owners to minimize negative environmental impacts.

CHAPTER 12: IMPLEMENTATION

An often overlooked, but important section of a master plan is the Implementation section. Sometimes, people believe a master plan solely exists as a basis for the zoning ordinance. Although zoning can be an implementation tool for a master plan, there are other means to achieve the goals of a master plan. The Antrim County Planning Commission has chosen **not** to use zoning as one of their tools, instead they would like to fulfill the master plan's goals using other mechanisms.

The mechanisms are listed as tasks in a timeline, but are not listed by priority. The Planning Commission will determine the priority based on the request from the Board of Commissioners. After an item has been finished, it can be checked off as completed or in progress. The items in the listing were identified as an issue during the master plan process.

Immediate Priorities (2011)

Distribute copies of the Revised Master Plan to the following townships: Banks, Torch Lake, Milton, Elk Rapids, Central Lake, Forest Home, Echo, Helena, Kearney, Custer, Jordan, Chestonia, Mancelona, Warner, and Star. Distribute copies to the following villages: Ellsworth, Elk Rapids, Central Lake, Mancelona, and Bellaire.

Distribute copies of the Revised Master Plan to the surrounding counties and townships.

Work with the Economic Development Corporation to assist in their goal implementation.

When reviewing a township or village master plan, look at the Guiding Principles listed in the Antrim County Master Plan and note areas where the community's master plan could be amended to further implement the Guiding Principles.

When reviewing a township or village zoning ordinance, look at the Guiding Principles listed in the Antrim County Master Plan and note where the ordinance applies the Guiding Principles.

One To Four Years

Work with the County Forester to develop a Countywide tree planting plan. This plan should discuss the environmental, scenic, and financial benefits of hardwood trees to the Antrim County. It should also have an outreach component.

Contact the Department of Environmental Quality and environmental consultants to pursue a Wellhead Protection Program.

- Designate an area for an Environmental Green Business Park.
- Encourage the development of a countywide wetland educational program that will emphasize the legal definitions and uses of wetlands.
- Commission a new aerial land use study and compare the findings to the 1978 and 1998 results.
- Work with farm groups and the Michigan State Extension and Northern Lakes Economic Alliance offices to promote agricultural related businesses.
- Work to secure funds from oil revenue for natural resources.

In Five Years

- Continue to monitor the development of alternative wastewater disposal systems. This may result in a significant change that should be addressed in the 2015 master plan update.
- Compare development densities with improvements, such as road connections and sewer availability. Use this information when updating the master plan.
- Review this task list to identify projects not accomplished.
- Review this master plan and update where needed.

CHECKLIST FOR REVIEW OF MASTER PLANS
PC11-12 Antrim County
Master Plan

Reviewing Entity: Leelanau County Planning Commission

Date of Review: July 24, 2012

SECTION 1: GENERAL INFORMATION	
<i>Date Request Received:</i>	June 1, 2012
<i>Requested Action:</i>	Review and comment on the proposed Antrim County Master Plan – 63 day review period runs until August 6, 2012.
<i>Applicant:</i>	Antrim County Planning Commission PO Box 187 Bellaire MI 49615

SECTION 2: PLANNING COMMISSION ACTION
At its May 10, 2012 meeting, the Antrim County Board of Commissioners approved distribution of the proposed 2012 Antrim County Master Plan, pursuant to requirements of Public Act 33 of 2008, as amended. The 63-day review period runs until August 6, per the Associate Planner for Antrim County.

SECTION 3: BASIS FOR PLAN REVIEW
The Leelanau County Planning Commission, as a contiguous unit of government, is provided a copy of the draft plan and an opportunity to review and comment, as noted in accordance with MCL 125.3839 of the Michigan Planning Enabling Act (PA33 of 2008, as amended).

SECTION 4: HISTORY
The Antrim County website shows the previous Master Plan as being more than 40 years old. This is a new Master Plan for the County, covering 15 townships, and its 5 Villages.

New Business B-1

SECTION 5: ANALYSIS			
<p><i>The Principal Goal of the Leelanau General Plan is to establish a strategy for meaningful growth that protects, and where possible, enhances the unique character and quality of life on the peninsula by focusing on the balance of environmental protection, resource management and economic development so as to provide a foundation for a sustainable economy that permits long term prosperity for all present and future Leelanau County residents. The proposed Master Plan has been reviewed for consistency with these policies.</i></p>			
Policy Guidelines of the Leelanau General Plan	Yes	No	NA
<p>A. Intergovernmental and Regional Context <i>A partnership founded on mutual respect and mutual support in achievement of the common goals of the General Plan should guide the development and implementation of new relationships between the County and local units of government in the County and between the County and adjoining counties in the region.</i></p>			
<p>1. Does the proposed plan strive for greater cooperation between neighboring units of government?</p>	X		
<p>B. Preservation of Peninsula Character <i>The interdependence of the natural and people-made features on the peninsula that make up its rural character, with the activities that comprise its economic base require that future land use change on the peninsula not undermine and where possible enhance the character of the area around it, and in so doing contribute to the unique rural character of the area around it, and to protection of the unique rural character of the entire Leelanau Peninsula.</i></p>			
<p>1. Does the proposed plan include strategies for the preservation of rural and small-town character?</p>	X		
<p>C. Working with Nature <i>Extensive and diverse sensitive natural features found throughout the peninsula provide the foundation for the present and future quality of life on the peninsula and should be protected where pristine, restored where damaged and have access and use managed for long term sustainability everywhere else.</i></p>			
<p>1. Does the proposed plan include strategies for environmental protection, restoration, and management?</p>	X		
<p>D. Managed Growth <i>Local land use or comprehensive plans and local development regulations should be updated and thereafter maintained to include goals, objectives, policies and strategies for managed future growth consistent with the Leelanau General Plan. Local plans should include more specific land use and density proposals at the parcel specific level. Local regulations should focus on design and other issues of local significance. Public facilities should all be constructed according to local capital improvement programs that are coordinated at all governmental levels on the Peninsula.</i></p>			
<p>1. Does the proposed plan include parcel-specific future land use recommendations (map)?</p>	X		
<p>2. Does the proposed plan include design guidelines?</p>	X		

New Business B-1

SECTION 6. STAFF COMMENTS

The draft Master Plan for Antrim County has been presented to the Leelanau County Planning Commission, as provided for in the Michigan Planning Enabling Act. The County Planning Commission has the opportunity to review, and provide comments on the draft. The Draft Master Plan was discussed at the May 1, 2012 meeting of the Antrim County Planning Commission and a motion passed to forward the Plan on to other agencies. At the May 10, 2012 meeting of the Antrim County Board of Commissioners, the Commissioners approved distribution of the Plan for the 63-day review and comment period.

This draft Master Plan is a new document, and will replace the existing Plan, which is over 40 years old. This Plan, and the Implementation steps outlined in Chapter 12, will assist in guiding decisions to incorporate the community visions for Antrim County.

Staff offers the following comments and suggestions, some of which relate to formatting or minor corrections to the document:

It is unclear 'who' prepared the Plan. If a consultant and/or city staff worked on the document – names, addresses and contact information are helpful for those picking up a copy of the Plan, and for historical purposes.

Some of the pages have a footer that show a date of May 4, 2012 while others show a date of September 28, 2011. This should be corrected.

Page 7-2 is titled Historical Perspective, and this information would be better placed in the beginning of the document to show the history of the area and give a lead-in to the Master Plan.

Chapter 2, the 1st paragraph under Summary mentions the study performed by the Land Information Access Association (LIAA) but does not state 'when' the study was performed. What year? Paragraph 3, change the word 'an' to 'a' before forest to read: "...or a forest use changed (or grew) into another..."

Figure 2-1 on page 2-1, the 'Barren' category on the chart could show the decline if the 1978 and 1998 bars were shown beneath the line. The current chart does not show any bars for this category.

The County Planning Commission minutes for May 1 2012 mention a Placemaking Summit. Leelanau County has participated in the Placemaking Summits the last few years and are currently working with the Michigan State Housing Development Authority (MSHDA) to incorporate Placemaking language into our Plan and other documents. There is more consideration being placed on grant applications and programs which embrace Placemaking and Antrim County may wish to consider wording in the proposed Plan.

Page 2-8, 2nd paragraph states: "The following **eight** townships..." and 15 townships are then listed. Page 2-9, Figure 2-8, is the Title "Changes to Forest Land to Other Categories of Land Use" the correct title for this data?

Page 3-7, last sentence under **Commercial Forest Land** is confusing. It appears a reader should go to this website and then follow the link for Forest Management.

Page 3-9, 1st paragraph, correct spelling: "**trichloroethylene**". Also, it would be helpful for the reader if the acronyms for EPA and DEQ (MDEQ) were spelled out first before using. And, if only MDEQ or

New Business B-1

DEQ were used in the document; not both. Last paragraph on this page, change the word 'has' to 'have' in the first sentence to read: "Over the past decade, ACUTE and CRD **have** worked closely...."

Page 3-10, Implementation #5 appears out of place here. Or, it should include text in the chapter discussing a Green Business park prior to it being listed under Implementation. Perhaps it should be listed in Chapter 6 - Economic Development

Page 4-3, 1st sentence under Rural Residential – delete the word 'that' to read: "These locations are rural in nature and the properties are larger in acreage".

Page 5-2, 5th bullet under Community Population, insert the words 'the township' to read: "Although the Mackinaw State Forest incorporates much of Mancelona Township, the Township is equivalent in size...." Otherwise, it reads as if the State Forest is equivalent in size to 2 townships.

The maps and demographic data in the Plan are quite extensive and paint a good picture of the County. It is interesting to note that the Villages have lost population over the years, while most of the Townships gained population.

Page 5-6, 1st bullet under Demographic Data, insert 'and' to read: "The total population in 2010 was 23,580 according to the census, **and** was equally...."

Page 6-9, Future Economic Planning – this section shows a positive approach to economic planning with the County Planning Commission and Economic Development Corporation working together to meet its goals.

Page 6-10, 'brownfield sites' are mentioned but never defined. A brief explanation would be helpful for the reader.

Page 7-2, 2nd to last bullet on the page, change the 1st sentence to read: "In the past 10 years every township in the county has increased **its** percentage of household expenses to **its** income."

Page 7-6, under Nifty Thrift Resale Store, staff suggests removing the phone number from the document. This is the only store listed in the Plan where a phone number is listed.

Page 7-10, Recreation, 1st paragraph says: "The goal setting session ranked trail development; additional parks...." How did they rank? What was their level of importance?

Section 125.3833 of the Act spells out what should be addressed in a Master Plan:

(1) A master plan shall address land use and infrastructure issues and may project 20 years or more into the future. A master plan **shall include maps, plats, charts, and descriptive, explanatory, and other related matter and shall show the planning commission's recommendations for the physical development of the planning jurisdiction.**

(2) A master plan **shall also include those of the following subjects that reasonably can be considered as pertinent to the future development of the planning jurisdiction:**

(a) A land use plan that consists in part of a classification and allocation of land for agriculture, residences, commerce, industry, recreation, ways and grounds, public buildings, schools, soil conservation, forests, woodlots, open space, wildlife refuges, and other uses and purposes. If a county has not adopted a zoning ordinance under former 1943 PA 183 or the Michigan zoning enabling act, 2006 PA 110, MCL 125.3101 to 125.3702, a land use plan and program for the county may be a general plan with a generalized future land use map.

New Business B-1

(b) The general location, character, and extent of streets, railroads, airports, bicycle paths, pedestrian ways, bridges, waterways, and waterfront developments; sanitary sewers and water supply systems; facilities for flood prevention, drainage, pollution prevention, and maintenance of water levels; and public utilities and structures.

(c) Recommendations as to the general character, extent, and layout of redevelopment or rehabilitation of blighted areas; and the removal, relocation, widening, narrowing, vacating, abandonment, change of use, or extension of streets, grounds, open spaces, buildings, utilities, or other facilities.

(d) For a local unit of government that has adopted a zoning ordinance, a zoning plan for various zoning districts controlling the height, area, bulk, location, and use of buildings and premises. The zoning plan shall include an explanation of how the land use categories on the future land use map relate to the districts on the zoning map.

(e) Recommendations for implementing any of the master plan's proposals.

(3) If a master plan is or includes a master street plan, the means for implementing the master street plan in cooperation with the county road commission and the state transportation department shall be specified in the master street plan in a manner consistent with the respective powers and duties of and any written agreements between these entities and the municipality.

The County may wish to consider text to address such things as: vacant buildings, blighted buildings, brownfield redevelopment, placemaking, form-based code, and conditional rezonings. The global publication of the Urban Planning and Economic Development News Magazine, January 2012 issue, includes an article from Flora McCormack, Director of Special Projects for the Michigan Association of Counties. The article is titled “Brownfield Redevelopment in Michigan, The Forgotten Element of Community Planning”. Ms. McCormack assisted Leelanau County in the establishment of the Brownfield Redevelopment Authority, Land Bank Authority, and Policies & Procedures for both bodies. This article discusses the importance of including brownfield redevelopment in planning efforts.

Overall, the proposed Master Plan was easy to read and structured nicely. Inclusion of 2010 Census Data and American Community Survey (ACS) results were very beneficial to the document. Leelanau County Planning & Community Development staff found the document easy to follow and understand and commends the Antrim County Planning Commission and Planning staff on the hard work, effort, and time put into this new document.

Charlevoix County Planning Department

COUNTY BUILDING
301 STATE STREET, SUITE 11
CHARLEVOIX, MICHIGAN 49720

TELEPHONE 231 547-7234
FAX 231 547-7246

August 16, 2012

Joe Meyers
Associate Planner
Antrim County Planning Department
203 E. Cayuga St.
Bellaire, MI 49615

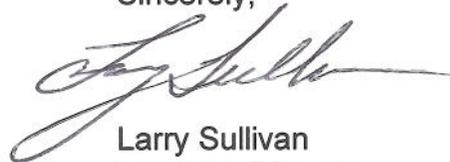
Joe,

At their meeting on August 9, 2012, the Charlevoix County Planning Commission reviewed the Draft 2012 Antrim County Master Plan. After reviewing the proposed new plan as well as the Planning Department Staff Report, the Commission took the following action:

MOTION by Tom Wieland, seconded by Larry Levensgood, to send a letter to Antrim County stating that no substantive conflicts were identified between the proposed new Antrim County Master Plan and the Charlevoix County Future Land Use Plan or the plans adopted by the townships in our County that border Antrim County. Voice vote: all in favor. Motion passed.

Please refer to the enclosed draft minutes from the Commission meeting and the Planning Department Staff Report for details of the Commission's discussion and action on the proposed new Antrim County Master Plan. Should you have any questions, please give me a call at (231) 547-7234.

Sincerely,



Larry Sullivan
Planning Director

LS/kjs

Encl. Excerpts from the Draft Minutes of the August 9, 2012 P.C. Meeting
Planning Department Staff Report

Charlevoix County Planning Commission

COUNTY BUILDING
301 STATE STREET, SUITE 11
CHARLEVOIX, MICHIGAN 49720

TELEPHONE 231 547-7234
FAX 231 547-7246

Excerpts from DRAFT Meeting Minutes August 9, 2012

I. Call to Order

Chairman Jason called the meeting to order at 7:02 p.m.

Members present: Dennis Jason, Tom Wieland, Larry Levensgood, Michael Buttigieg,
Nancy Ferguson, Bob Draves, and Patrick Howard

Members absent: None

Others present: Larry Sullivan (Planning Director) and Kiersten Stark (Planning
Assistant)

IV. County Business Items

Antrim County Master Plan

Sullivan reviewed the Planning Department Staff Report on the proposed 2012 Antrim County Master Plan. Overall, Staff did not see any major conflicts between the Antrim County Master Plan and the Charlevoix County Future Land Use Plan or the plans adopted by the townships in Charlevoix County that border Antrim County. During the review of the Antrim County Plan, Staff had noted some minor corrections needed. However, since these corrections did not have a bearing on how the Plan interacts with the Charlevoix County Plan, Staff will transmit these comments directly to the Antrim County Planning Department.

Sullivan provided some additional comments beyond what was stated in the Staff Report. He recommended that the Kitchen and Makarewicz farms be designated as prime agricultural lands because this represents a substantial amount of farmland in Antrim County. He also said some of the headings in the Plan were wrong, such as map titles.

Sullivan recommended sending a letter to the Antrim County Planning Department, indicating that no significant conflicts exist between their proposed plan and the

Charlevoix County Future Land Use Plan or the plans adopted by the townships in our County that border Antrim County.

Sullivan noted that one way in which the Antrim County Master Plan differs from the Charlevoix County Future Land Use Plan is that the Antrim County Plan is a 5-year plan, while the Charlevoix County Plan is a 20-year plan. Sullivan said, because the Antrim County Plan is a 5-year plan, a totally new plan will need to be written and adopted in 5 years. On the other hand, because the Charlevoix County Plan is a long range plan, it can be amended, but will not require a total rewrite in 5 years. He also noted that the Antrim County Plan contains short term recommendations, while the Charlevoix County Plan contains both short and long range recommendations.

MOTION by Tom Wieland, seconded by Larry Levensgood, to send a letter to Antrim County stating that no substantive conflicts were identified between the proposed new Antrim County Master Plan and the Charlevoix County Future Land Use Plan or the plans adopted by the townships in our County that border Antrim County. Discussion: Levensgood commented that Antrim County is interesting from a demographic standpoint. Five years ago, we reviewed a draft plan for Antrim County, but the new plan is different. Levensgood said the Antrim County Plan seemed a little light on land use. However, he thought the guiding principles were a good concept. They were defensible, straight forward and simple. Levensgood also appreciated how Antrim County approached the issue of zoning in light of the fact that some townships in the County have zoning, while others are not zoned. He liked the statement that zoning will not be used as a means to accomplish the goals in the Master Plan. Levensgood said, personally, he thinks the townships in Antrim County that are not zoned will likely face some type of land use issue in the future that will cause them to reconsider zoning (i.e., a proposed landfill, salvage yard, etc.). Discussion took place regarding salvage yards located in Antrim County. In addition, Levensgood recommended that the Antrim County Plan should emphasize the recreational and employment opportunities provided by the golf courses because this is a huge industry in the County. Back on the topic of controversial land use issues, Sullivan said one issue in Antrim County was the deep injection well proposed near Alba. Another example was the waste energy plant that was proposed near Kalkaska, but was then planned to be built near Mancelona where there is no zoning. Sullivan emphasized that zoning serves to regulate the potential environmental impact of these types of land uses. He also pointed out that communities with higher value property in Antrim County tend to be zoned. Voice vote on the motion: all in favor. Motion passed.

Antrim County Master Plan 2012

Staff Review

Staff has reviewed the proposed 2012 Antrim County Master Plan and has a number of comments. In reviewing a plan, our first and primary responsibility is to review it in comparison with our plan to ensure there are no inconsistencies or conflicts, especially along the border where the adjoining community may plan for uses that might conflict with land uses we are proposing on "our side" of the border.

The major differences between the Charlevoix County Future Land Use Plan and the Antrim County Master Plan may be the result of the way each plan classifies land uses. The Antrim County Plan only recognizes Agricultural Lands that should be preserved, whereas the Charlevoix County Plan groups forested lands with the better agricultural lands in the County and designates them as Working Lands. The Antrim County Plan does not recognize Sensitive Lands as does the Charlevoix County Plan. The Antrim County Plan designates public forest lands as "Public Recreation" as opposed to Working Lands as they are classed in our Plan. Despite these structural differences between the Future Land Use Maps in the two plans, the plans are quite similar. Both plans direct major development to existing centers of commerce and higher density residential development. Both plans also allow for lower density residential development throughout the County; although the Antrim County Plan provides for a greater area than does our plan.

Despite the structural differences, Staff sees no major conflicts between the Charlevoix and Antrim County Plans.

Our secondary responsibility is to review the neighboring county plan with the plans adopted by the townships and cities in our County that border Antrim County.

The bordering townships in Charlevoix County are:

- Norwood
- Marion
- Eveline
- South Arm
- Wilson
- Boyne Valley
- Hudson

Of the above listed townships, Eveline and Hudson Townships only touch Antrim County with a corner of the township.

Norwood Township - No visible conflicts

Marion Township - No visible conflicts

Eveline Township - No visible conflicts

South Arm Township - One potential conflict appears to exist at the south end of South Arm Township between M-66 and the Jordan River where the South Arm Township Master Plan calls for medium density residential, while the Antrim County Master Plan calls for Agricultural Preservation. Given the soils in the area, the abutting land in South Arm Township appears to be better suited for agricultural uses and as a result, perhaps this conflict should be resolved when South Arm Township revises their plan, which is overdue.

Wilson Township - The portion of Antrim County to the south of Wilson Township is shown as rural country, while the property on the north side of the border in Wilson Township is shown as primarily "Agricultural/Rural Residential" with a small amount of "Medium Residential" and "Public/Semi Public" lands. With the exception of the Medium Residential being a little higher in density than what is shown in Antrim County, no substantive conflict exists.

Boyne Valley Township - Given that the Boyne Valley Township Sketch Land Use Plan does not contain a future land use map, it is difficult to determine exactly where in the Township various types of development should be located. Given the lack of information on which to base a decision, Staff concluded that there does not appear to be a conflict between the Draft Antrim County Master Plan and the Boyne Valley Township Sketch Land Use Plan.

Hudson Township - The southwest corner of Hudson Township touches the north east corner of Antrim County. The Hudson Township Future Land Use Map designates the connecting area as "Low Density Residential", while the Antrim County Future Land Use Map designates that portion of Antrim County as "Public Recreation". Staff does not believe this constitutes a conflict.

Given the above comments, Staff feels comfortable in concluding that no significant conflicts exist between the Antrim County Master Plan and any of the County or township plans in Charlevoix County.

During the review of the Antrim County Master Plan, Staff noted a number of corrections that should be made. Since these needed corrections do not have a bearing on how the plan impacts or interacts with the Charlevoix County Future Land Use Plan, Staff has chosen to transmit these comments directly to the Antrim County Planning Department and not consume our time or resources at the Charlevoix County Planning Commission meeting.



WHITEWATER TOWNSHIP

5777 Vinton Road • P.O. Box 159 • Williamsburg, MI 49690
(231) 267-5141 • FAX (231) 267-9020

August 15, 2012

Antrim County Planning Commission
203 E. Cayuga Street
Bellaire, MI 49615
Attn: Joe Meyers, Associate Planner

RE: Antrim County Master Plan Review

Dear Mr. Meyers:

On behalf of the Whitewater Township Planning Commission, I would like to take this opportunity to thank you for the opportunity to comment and review your draft Master Plan.

As we are working on a complete re-write of our plan, it was very educational that your review was requested at this time. In particular, the PC was intrigued by your choice of using "guiding principles" instead of goals. We are also struggling with balancing property rights and property protections.

While we previously sent a copy of our draft minutes for your review as well as the plan with housekeeping issues identified, this letter allows the opportunity to let you know that we support your plan, and its vision. We commend you for the Plan's focus on protecting the waters that impact both Antrim County and Whitewater Township.

Thank you for your consideration.

Yours in Planning,

Leslie Meyers
Planning/Zoning Administrator





PLANNING & DEVELOPMENT

400 BOARDMAN AVENUE
TRAVERSE CITY, MI 49684
(P) 231.922.4676
(F) 231.922.4636
www.grandtraverse.org/planning

Planning
Land Bank
Housing Initiatives
Economic Development
Brownfield Redevelopment

July 24, 2012

Antrim County Planning Commission
P.O. Box 187
Bellaire, MI 49615



Re: Antrim County Master Plan

Dear Commissioners:

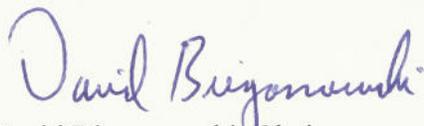
The Grand Traverse County Planning Commission reviewed the proposed 2012 Antrim County Master Plan pursuant to the Michigan Planning Enabling Act at its meeting on July 17, 2012. Overall, the Commission felt the Plan was thorough and well done. The Commission determined the Antrim County Master Plan is consistent with the Grand Traverse County Comprehensive Plan and adjacent township plans. The Committee also provided the following comments regarding the Plan:

- a) Each county in northwest lower Michigan is part of a region with a common relationship in areas such as tourism, agriculture and transportation. It would be helpful to see how Antrim County believes it fits within the context of the region. What is Antrim County's identity in the region?
- b) In a region where water quality is a high priority, the groundwater contours map (Map 3-9) is an excellent resource provided in the Plan. It may be beneficial to also include a pre-settlement vegetation map in the Plan.
- c) The Implementation section on Page 3-10 has some great ideas but could use some clarification. For example, which lands would the tree planting plan be applied to? Why do water levels need to be studied? What is a wellhead protection program for those not familiar with municipal water systems? And, what is a green business park?
- d) The Plan identifies townships, villages and hamlets (unincorporated villages). However, in the data analysis, hamlets are not identified. Consider recognizing the hamlets in with the townships and the villages for data analysis. To obtain data for these unincorporated areas, the areas could be identified as Census Designated Places in the next Census.
- e) The economic guiding principles on Page 6-9 may need some clarification. It sounds like the County wants economic development to go hand in hand with natural resources?
- f) The Plan is very good at referencing and incorporating other plans and strategies.

- g) The comment on Page 7-4 regarding access to services for seniors is well done. It would be helpful to expand upon this issue in relation to other transportation, including shipping of agriculture products, travel to work for residents, etc.
- h) Good conclusion in the first paragraph on Page 7-8 regarding traveling distances.
- i) The Quick Notes interspersed throughout the Plan are very helpful.
- j) On Page 9-9, there is a reference to the development of private road standards. As an item for consideration, private and public road standards have been an issue for discussion by the Grand Traverse County Planning Commission for many years. While it is good to have private road standards in the short term to address concerns regarding emergency services, access, etc., the maintenance of private roads in the long term is problematic. The experience in Grand Traverse County regarding private roads has recognized that public road standards need to change. Revised public road standards that address all kinds of development will result in a better managed road system.
- k) The definition of rural character at the top of Page 10-2 is well written.
- l) The Plan makes some important points in the recognition of work/live environments under Principle #5 on Page 10-4 along with flexible regulation of farms and farm markets under Principle #6 on Page 10-5.
- m) The second paragraph on Page 11-1 does a good job at illustrating the purpose of the Plan.
- n) The bullet points on Page 11-4 are very good.

If you have any questions regarding these comments from the Grand Traverse County Planning Commission, please feel free to contact John Sych, Grand Traverse County Director of Planning & Development, at 922-4677 or at jsych@grandtraverse.org.

Sincerely,



David Bieganowski, Chair
Grand Traverse County Planning Commission

Diane Franckowiak,
Supervisor
P.O. Box 117
Elmira, MI 49730
231-546-3241

Susan Shaedig, Clerk
7252 Alba Road
Gaylord, MI 49735
989-732-2920

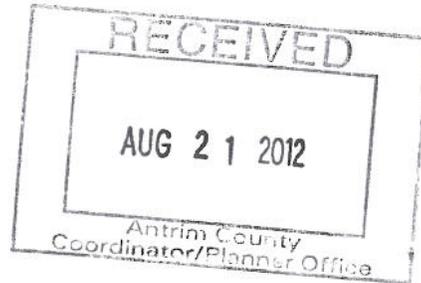


Township of Elmira
Leonard Skop, Trustee • Theresa Plachta, Trustee

Diane Purgiel, Treasurer
1404 N. Townline Road
Gaylord, MI 49735
989-732-4560
989-732-9702 Fax

D & D Assessing
831 Knollwood Lane
Gaylord, MI 49735
989-732-1099

Antrim County Planning Commission
C/O Joe Meyers
P.O. Box 187
Bellaire, Michigan 49615



August 19, 2012

Dear Joe:

The Elmira Township Planning Commission reviewed the proposed 2012 Antrim County Master Plan.

The PC has no objections.

Sincerely,


Susan Schaedig, Clerk

RAPID RIVER TOWNSHIP PLANNING COMMISSION

**1010 Phelps Road
Kalkaska, MI 49646
Phone 231-258-2943**

August 10, 2012

Mr. Joe Meyers, Associate Planner
Antrim County Planning Department
203 E. Cayuga St. Rm 206
P.O. Box 187
Bellaire, MI 49615

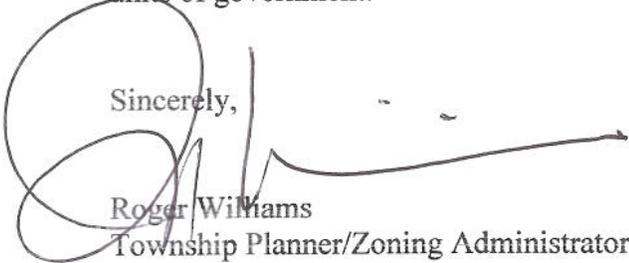
RE: Antrim County Master Plan

Dear Mr. Meyer:

Thanks you for the opportunity to review the Antrim County Master Plan.

The Rapid River Township Planning Commission has found the Plan to be satisfactory and appropriate for use as a guide for the future of Antrim County and your neighboring units of government.

Sincerely,



Roger Williams
Township Planner/Zoning Administrator

cc: Stuart McKinnon, Chairman



Meyers, Joe

From: Larry Tomlinson <eei@mtu.edu>
Sent: Wednesday, June 06, 2012 8:44 AM
To: Meyers, Joe
Cc: George Parker
Subject: Master Plan

Joe

A followup to the phone message 6-6. The map 1-1 does not indicate the boundary between Torch Lake Twp and Central Lake. Also need a section on seasonal housing. If there is one I missed it. Thanks.

Larry Tomlinson
Torch lake Twp