Houghton County
Michigan

Land Use Plan
(County Development Plan)

DRAFT January 4, 2006
Recommended:

_______________________________________________
Guy St. Germain, Chair
Houghton county Planning Commission

Date

Accepted:

_______________________________________________
For the Board of Commissioners
Houghton County, Michigan

Date
A Vision for Houghton County ................................................................. 5
Introduction ........................................................................................................ 5
Overview of Houghton County ............................................................................ 7
  Table 1-1. Historic and Projected County Population ....................................... 7
Population and Demographics ................................................................. 7
  Table 1-2. Houghton County Population Change ........................................ 8
Geography and the Environment ............................................................................. 9
  Major Rivers ......................................................................................................... 9
  Climate .................................................................................................................. 9
  Geology ................................................................................................................ 10
Present Land Use and Development ........................................................................ 10
Housing and Community Development ................................................................. 11
  Table 1-3. Housing Statistics ............................................................................. 11
Schools .................................................................................................................. 12
  Table 1-4. Schools ................................................................................................ 12
Historic Features .................................................................................................... 15
Employment and Industry .................................................................................... 16
Transportation and Commuting Patterns ............................................................. 16
  Roads ....................................................................................................................... 17
  Rail .......................................................................................................................... 17
  Ports ....................................................................................................................... 17
  Airports ................................................................................................................ 17
  Transit .................................................................................................................. 18
Public Review and Participation ............................................................................. 19
  Issues and concerns expressed at October, 2003 Town Meetings .................. 21
Planning in harmony with winter ......................................................................... 24
Land Use Planning Trends and Critical Development Issues Facing Houghton County .... 26
  Changes in the Houghton/Hancock area ............................................................... 26
  Waterfront development ....................................................................................... 26
  Fragmentation of large land holdings ................................................................. 27
  Commercial strip development ........................................................................... 27
  Trails and recreational access ............................................................................. 27
  Portage Lake Lift Bridge ....................................................................................... 28
  Scenic, historic, cultural resource preservation and management .................... 29
  Unusual agricultural potentials due to microclimates ........................................... 30
  Torch Lake Superfund Site .................................................................................. 30
  Penturbia – the desire for a rural, yet close-in, lifestyle ...................................... 31
  Enforcement of existing ordinances ................................................................... 32
Living the Plan -- ................................................................................................. 33
  county-wide planning and zoning vs. planning and zoning by individual townships and  
  villages .................................................................................................................. 33
Future Land Use Descriptions by Township ......................................................... 35
  Duncan Township ................................................................................................ 35
Laird Township......................................................................................................... 35
Elm River Township................................................................................................. 35
Adams Township ...................................................................................................... 36
Stanton Township ..................................................................................................... 36
Chassell Township .................................................................................................... 36
Portage Township ..................................................................................................... 36
Franklin Township.................................................................................................... 36
Quincy Township...................................................................................................... 37
Hancock Township ................................................................................................... 37
Osceola Township..................................................................................................... 37
Torch Lake Township............................................................................................... 37
Calumet Township.................................................................................................... 37
Schoolcraft Township ................................................................................................ 37

Map: Future Land Use in Houghton County ................................................................. 38
  Map: Duncan Township................................................................................................ 38
  Map: Stanton Township................................................................................................ 38
  Map: Stanton Township................................................................................................ 38
  Map: Chassell Township............................................................................................. 38
  Map: Chassell Township............................................................................................. 38
  Map: Portage Township............................................................................................. 38
  Map: Portage Township............................................................................................. 38
  Map: Franklin Township............................................................................................. 38
  Map: Franklin Township............................................................................................. 38
  Map: Quincy Township.............................................................................................. 38
  Map: Quincy Township.............................................................................................. 38
  Map: Hancock Township............................................................................................ 38
  Map: Hancock Township............................................................................................ 38
  Map: Osceola Township ............................................................................................. 38
  Map: Osceola Township ............................................................................................. 38
  Map: Torch Lake Township........................................................................................ 38
  Map: Torch Lake Township........................................................................................ 38
  Map: Calumet Township ............................................................................................ 38
  Map: Calumet Township ............................................................................................ 38
  Map: Schoolcraft Township........................................................................................ 38

Preparation of this plan:.............................................................................................. 38
A Vision for Houghton County

Houghton County is a special place where outstanding natural resources, scenic beauty, outdoor recreation, a four season climate, and unique historical landscapes combine to create a high quality of life for residents. The purpose of the Houghton County Land Use Plan is to provide a guide for Houghton County, and its cities, townships and villages, to use in decision-making and coordination related to future land use, so that the qualities that make Houghton County special are not lost or compromised for future generations. The following statements are guiding principles for the Plan.

- A comprehensive Land Use Plan is necessary to guide the development of Houghton County in a way that enhances and promotes the health, safety and welfare of its residents.
- Promote economic well-being while simultaneously protecting the quality of life.
- Community development is best sustained when natural resources, health and welfare and key cultural assets are protected.
- The goals and values of our citizens must be the sustaining force behind the planning that guides development.

Introduction

After a period of 20 years, Houghton County re-established a County Planning Commission in 2001 to draft a general land use and county development plan, in accordance with the Michigan County Planning Act, M.C.L. 125.101 et. seq. This plan was developed with input from the 14 townships in Houghton County, town hall meetings held in 2003, and data from land use forums and attitude surveys conducted in 1994 and 1997.

This plan is a description of what the county sees for itself in the next 10 to 20 years. It is general in tone and forms the broadest of templates upon which zoning ordinances of local governments in Houghton County may rest.

It is a vision for the development and growth of this area, guiding that development in ways that serve the interests of private individuals while protecting the common good.

The plan begins with a discussion of Houghton County’s history, and its current population, climate, geography, social structures, and land use patterns.

The general plan addresses county-wide concerns about growth, economics, historic preservation, health, and community services. These and other land use concerns resulted in eight overall themes.
1. Protection of resources
2. Setting growth priorities
3. Economic development
4. Enhancing historic character and identity
5. Landmarks and public art
6. Residential development patterns
7. Commercial development patterns
8. Recreational activities – paths, trails, lake access, etc.

The description of future land use and the accompanying maps for Houghton County were presented to Houghton County residents at public meetings during the winter of 2006. With revisions incorporating public comments, this plan was adopted by the Houghton County Planning Commission on ________________ and accepted by the Houghton County Board of Commissioners on _________________.

This plan is a multi-year plan, and is intended to be the first in a series of planning documents for Houghton County. An ongoing review and evaluation process is envisioned which will update this planning instrument.
Overview of Houghton County

Houghton County is located in the northwestern portion of Michigan’s Upper Peninsula, on the southern shore of Lake Superior. The county lies on the Keweenaw Peninsula, a stretch of land that extends 75 miles into the lake. There are varied perceptions of the boundaries of the Keweenaw Peninsula – some view “The Keweenaw” as only Keweenaw County; others define it as Keweenaw County and that portion of the peninsula beyond the Keweenaw Waterway. Most geologists and geographers describe the Keweenaw Peninsula as a land form jutting into Lake Superior, whose eastern base is at the head of Keweenaw Bay and whose western base is in the Porcupine Mountains region. Houghton County’s north and south portions are connected by the Portage Lake Lift Bridge which crosses the Keweenaw Waterway between the cities of Houghton and Hancock.

The county was organized in 1848 and named after Douglass Houghton, Michigan’s first geologist, who confirmed the existence of copper in the Keweenaw Peninsula. The City of Houghton serves as the county seat. Houghton County’s history is tied to the copper mining industry, which flourished in the area from 1843 until 1968 when the Calumet & Hecla Mining Company ceased operations. Due to the success of copper mining, Houghton County was once the fourth most populous county in Michigan, attracting thousands of Finnish, Scandinavian, Cornish, French Canadian, German, Slovak, and other immigrants. However, low copper prices and the high cost of operating deep underground mines forced the decline and eventual closure of the mining industry. The region suffered, with population decreasing by over 50% between 1920 and 1970 (See Table 1-1).

Table 1-1. Historic and Projected County Population

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Houghton County</td>
<td>66,063</td>
<td>71,930</td>
<td>39,771</td>
<td>34,652</td>
<td>37,872</td>
<td>35,446</td>
<td>36,016</td>
<td>37,500</td>
<td>38,600</td>
</tr>
</tbody>
</table>

Today, education, health care, tourism, light manufacturing, forest products and retail trade have replaced mining as the major sources of employment. Houghton County’s two universities, Michigan Technological University and Finlandia University, draw students from around the world. The county is a popular place for retirees and summer cottages. The tourism industry is built around the area’s historical resources, geology and its many recreational opportunities. Lake Superior, the numerous inland lakes and streams, abundant forests, the various trail systems, and an annual average of 200 inches of snow make the county a destination for summer and winter outdoor recreation enthusiasts. These attributes attract increasing numbers of permanent residents as well.

Population and Demographics

Houghton County has 14 townships, two incorporated cities, and five incorporated villages. It has numerous unincorporated small former mining communities (“locations”),
remnants of larger settlements. The County’s total population is about 36,000 concentrated in the northern half of the county. (See Table 1-2). Population distribution is influenced by Michigan Technological University and Finlandia University, whose students are nearly 20 percent of the population.

Table 1-2. Houghton County Population Change

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Township¹</td>
<td>2,388</td>
<td>2,747</td>
<td>15</td>
</tr>
<tr>
<td>Calumet Township²</td>
<td>7,015</td>
<td>6,997</td>
<td>-0.3</td>
</tr>
<tr>
<td>Chassell Township</td>
<td>1,686</td>
<td>1,822</td>
<td>8.1</td>
</tr>
<tr>
<td>Duncan Township</td>
<td>304</td>
<td>280</td>
<td>-7.9</td>
</tr>
<tr>
<td>Elm River Township</td>
<td>159</td>
<td>169</td>
<td>6.3</td>
</tr>
<tr>
<td>Franklin Township</td>
<td>1,164</td>
<td>1,320</td>
<td>13.4</td>
</tr>
<tr>
<td>Hancock Township</td>
<td>287</td>
<td>408</td>
<td>42.2</td>
</tr>
<tr>
<td>Laird Township</td>
<td>582</td>
<td>634</td>
<td>8.9</td>
</tr>
<tr>
<td>Osceola Township</td>
<td>1,878</td>
<td>1,908</td>
<td>1.6</td>
</tr>
<tr>
<td>Portage Township</td>
<td>2,941</td>
<td>3,156</td>
<td>7.3</td>
</tr>
<tr>
<td>Quincy Township</td>
<td>223</td>
<td>251</td>
<td>12.6</td>
</tr>
<tr>
<td>Schoolcraft Township³</td>
<td>2,037</td>
<td>1,863</td>
<td>-8.5</td>
</tr>
<tr>
<td>Stanton Township</td>
<td>1,184</td>
<td>1,268</td>
<td>7.1</td>
</tr>
<tr>
<td>Torch Lake Township</td>
<td>1,553</td>
<td>1,860</td>
<td>19.8</td>
</tr>
<tr>
<td>Calumet Village</td>
<td>818</td>
<td>879</td>
<td>7.5</td>
</tr>
<tr>
<td>Copper City Village</td>
<td>198</td>
<td>205</td>
<td>3.5</td>
</tr>
<tr>
<td>Lake Linden Village</td>
<td>1,203</td>
<td>1,081</td>
<td>-10.1</td>
</tr>
<tr>
<td>Laurium Village</td>
<td>2,268</td>
<td>2,126</td>
<td>-6.3</td>
</tr>
<tr>
<td>South Range Village</td>
<td>745</td>
<td>727</td>
<td>-2.4</td>
</tr>
<tr>
<td>City of Hancock</td>
<td>4,547</td>
<td>4,323</td>
<td>-4.9</td>
</tr>
<tr>
<td>City of Houghton</td>
<td>7,498</td>
<td>7,010</td>
<td>-6.5</td>
</tr>
<tr>
<td>Houghton County</td>
<td>35,446</td>
<td>36,016</td>
<td>1.6</td>
</tr>
</tbody>
</table>

¹Includes Village of South Range
²Includes Village of Calumet, Village of Laurium and Copper City
³Includes Village of Lake Linden

Despite the county’s slight overall gain in population (1.7 percent) between 1990 and 2000, the population centers of Houghton, Hancock, Laurium, Hubbell, and Lake Linden actually lost 5 percent or more of their residents. This shows that population growth, for the most part, took place outside of cities and villages in the rural areas.

About 22 percent of the population is under the age of 18, while 19 percent of the population is in the 18-24 age range, again due to the influence of Michigan Tech and Finlandia. About 15 percent of the population is over the age of 65, which is slightly higher than the Michigan and national averages of about 12 percent. About 95 percent of the population is white, with Asians being the largest minority. Many Houghton County residents are of Finnish heritage.
Geography and the Environment

Houghton County’s 1,044 square miles (667,904 acres) are mostly highlands, upland plains, and lake-border plains. Over 80 percent of this land is covered by forest, mainly upland hardwoods. Farming still occurs on 7% of the county’s land. The county contains 923 miles of rivers and streams, over 20,000 acres of lakes and ponds, and 50 miles of Lake Superior shoreline. Elevation varies between about 600 and 1,600 feet above sea level. The County is divided by the Keweenaw Waterway (also known as the Portage Lake Ship Canal) which cuts through the area from northwest to southeast.

Major Rivers
Houghton County’s major rivers are the Sturgeon, Otter, Trap Rock, Salmon-Trout, Pilgrim, Graveraet, Elm, Misery, Silver, Jumbo, and Ontonagon Rivers. The rivers are all within the Lake Superior basin. There are five watershed sub-basins within the County including: Ontonagon, Keweenaw Peninsula, Sturgeon, Dead-Kelsey and Lake Superior.

Climate
Houghton County lies within the Lake Superior Basin which has a typical continental climate characterized by cold dry winters and warm humid summers. However, the lake exerts a strong microclimate influence on the immediate shoreline, resulting in cooler summers and milder winters than those experienced a few miles inland. This is due to the moderating effect of Lake Superior on the air temperatures and the prevailing westerly winds.

The moderating effect of the lake is experienced in spring and summer months when the cool water tends to level out temperature extremes and reduces the likelihood of frost. The areas adjacent to Lake Superior with good air drainage patterns experience the area’s longest growing season and have a good potential for the production of fruit crops.

A significant effect of Lake Superior is the formation of persistent snow fall when cold air passes over the lake in late fall and early winter. This causes early and heavy snow, referred to as “lake effect” snow. This “lake effect” snow diminishes as the distance from Lake Superior increases.

The growing season in Houghton County is 132 days; frosts have been recorded in every summer month. Average temperatures in January are a low of 8 degrees Fahrenheit and high of 21 degrees Fahrenheit. In July averages temps are a low of 56 and a high of 75. Annual precipitation averages 34.1 inches, while average snowfalls are in excess of 200 inches with records of over 300 inches of snow. The ground is generally snow covered from mid-November to mid-April, thus snow-covered ground is rarely frozen to any depth. The large amount of winter snowfall often results in heavy
spring runoffs. Weather conditions can vary greatly from the northern (near the lake) to the southern (away from the lake) portions of the County.

**Geology**

A combination of geological and glacial forces have determined the area’s topographic features, ranging from steep, rocky ridges and dissected glacial deposits to gently sloping lake plains and nearly level outwash plains.

The surface geology of Houghton County is a complex of ground moraines, end moraines, outwash deposits, glacial lake shorelines, and lake outlet channels, all with related deposits. These relatively recent glacial features are superimposed on a copper-rich “spine” marking one edge of a syncline of the mid-continental rift, associated with igneous rocks dating back more than one billion years. The bedrock geology and glacial activity have played key roles in shaping the present topography and resulting land use patterns. Much of the landscape is dissected by drainage ways. Soils vary greatly throughout the County with dune areas near Traverse Bay and F.J. McLain State Park to extensive deposits of stratified alluvium and organic deposits in the Sturgeon River valley south of Chassell. Because of this diverse geology and glaciations there are 152 soil mapping units found in the published Houghton County Soil Survey.

**Present Land Use and Development**

Residential development is concentrated in established communities in the northern part of the county, with the largest numbers in Houghton/Hancock and Calumet/Laurium. Low-density homes, cabins, cottages, and camps are found in rural areas throughout the county. The waterfronts are dominated by residential development except for more rural areas of the County where road access is unavailable.

Business development tends to be centered in Houghton/Hancock and Calumet/Laurium with commercial development radiating outward from these business cores. Downtown areas continue to play a significant role in local commerce but chain store and franchise restaurant development outside of the downtowns has an increasing impact on the area.

The Ottawa National Forest in southern Houghton County occupies the majority of the land in Laird and Duncan Townships and 23 percent of the entire county. Copper Country State Forest is made up of three large parcels in Elm River, Laird, Portage, and Chassell Townships. Two small portions of Baraga State Forest are located in Chassell and Torch Lake Townships. There are 44,200 acres of land in the state forests. In addition, F.J. McLain State Park and Twin Lakes State Park occupy nearly 600 acres. Altogether, 201,941 acres, or 30 percent of Houghton County is part of a state or national forest, park, or recreational area.

Land use and development is directed by zoning regulations in less than half of Houghton County’s municipalities (See Figure 1-5: Western Upper Peninsula Zoning Coverage). The lack of Land Use Planning and zoning leaves much of the County vulnerable to poorly planned land uses. The following municipalities have zoning ordinances: City of Hancock, City of Houghton, Village of Calumet, Village of South
Range, Calumet Township, Chassell Township, Duncan Township, Portage Township. There are no zoning ordinances in place for the Village of Laurium, Village of Lake Linden, Adams Township, Elm River Township, Franklin Township, Hancock Township, Laird Township, Osceola Township, Schoolcraft Township, Torch Lake Township or Quincy Township.

**Housing and Community Development**

Three-quarters of the housing stock in Houghton County is single-family, detached housing, with almost half of the homes built before 1940. Some growth is occurring, as 9 percent of all homes have been built within the last 10 years. This is below the national average of 17 percent. The median housing value in Houghton County is $54,800, which is less than half of both the Michigan and the national medians. The lower housing cost leads to a higher homeownership rate, although this is not indicated in the census figures because of the large number of students who rent.

Compared to Michigan as a whole (5.5 percent), Houghton County has a large proportion of seasonal housing, 15 percent. This reflects the importance of the area as a vacation destination and retirement community.

**Table 1-3. Housing Statistics**

<table>
<thead>
<tr>
<th>Area</th>
<th>Housing Units</th>
<th>Occupied Units</th>
<th>Median Value</th>
<th>Seasonal Units</th>
<th>Built Before 1940</th>
<th>Built in last 10 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Township</td>
<td>1,160</td>
<td>1,011</td>
<td>$37,400</td>
<td>67</td>
<td>684</td>
<td>89</td>
</tr>
<tr>
<td>Calumet Township</td>
<td>3,573</td>
<td>2,892</td>
<td>$42,600</td>
<td>250</td>
<td>2,692</td>
<td>100</td>
</tr>
<tr>
<td>Chassell Township</td>
<td>955</td>
<td>728</td>
<td>$73,000</td>
<td>174</td>
<td>281</td>
<td>153</td>
</tr>
<tr>
<td>Duncan Township</td>
<td>399</td>
<td>146</td>
<td>$41,200</td>
<td>237</td>
<td>106</td>
<td>38</td>
</tr>
<tr>
<td>Elm River Township</td>
<td>319</td>
<td>70</td>
<td>$71,000</td>
<td>241</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td>Franklin Township</td>
<td>574</td>
<td>500</td>
<td>$49,700</td>
<td>37</td>
<td>324</td>
<td>56</td>
</tr>
<tr>
<td>Hancock Township</td>
<td>274</td>
<td>156</td>
<td>$94,300</td>
<td>100</td>
<td>61</td>
<td>57</td>
</tr>
<tr>
<td>Laird Township</td>
<td>436</td>
<td>253</td>
<td>$60,800</td>
<td>170</td>
<td>123</td>
<td>61</td>
</tr>
<tr>
<td>Osceola Township</td>
<td>894</td>
<td>779</td>
<td>$46,100</td>
<td>41</td>
<td>513</td>
<td>52</td>
</tr>
<tr>
<td>Portage Township</td>
<td>1,584</td>
<td>1,257</td>
<td>$68,500</td>
<td>218</td>
<td>534</td>
<td>219</td>
</tr>
<tr>
<td>Quincy Township</td>
<td>114</td>
<td>105</td>
<td>$75,600</td>
<td>3</td>
<td>66</td>
<td>9</td>
</tr>
<tr>
<td>School District / School Name</td>
<td>Location</td>
<td>Grades</td>
<td>Students</td>
<td>Instructors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams Township Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Range Elementary School</td>
<td>South Range</td>
<td>K – 6</td>
<td>230</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jeffers High School</td>
<td>Painesdale</td>
<td>7 – 12</td>
<td>300</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Schools**

There are nine school districts in Houghton County, which are served by the Copper Country Intermediate School District. The following table shows the school districts, grade levels, number of students, and number of instructors at each of the schools in Houghton County (See Table 1-4).

Table 1-4. Schools

<table>
<thead>
<tr>
<th>School District / School Name</th>
<th>Location</th>
<th>Grades</th>
<th>Students</th>
<th>Instructors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Township Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Range Elementary School</td>
<td>South Range</td>
<td>K – 6</td>
<td>230</td>
<td>15</td>
</tr>
<tr>
<td>Jeffers High School</td>
<td>Painesdale</td>
<td>7 – 12</td>
<td>300</td>
<td>18</td>
</tr>
<tr>
<td>School District</td>
<td>School Name</td>
<td>Location</td>
<td>Grade(s)</td>
<td>Students</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-----------------------------------</td>
<td>----------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td><strong>Public Schools of Calumet, Laurium, &amp; Keweenaw</strong></td>
<td>CLK Early Childhood Center</td>
<td>Mohawk</td>
<td>Pre – K</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>CLK Elementary School</td>
<td>Calumet</td>
<td>1 – 5</td>
<td>416/715</td>
</tr>
<tr>
<td></td>
<td>Washington Middle School</td>
<td>Calumet</td>
<td>6 – 8</td>
<td>375</td>
</tr>
<tr>
<td></td>
<td>Calumet High School</td>
<td>Calumet</td>
<td>9 – 12</td>
<td>460</td>
</tr>
<tr>
<td><strong>Chassell Township Schools</strong></td>
<td>Chassell K-12 School</td>
<td>Chassell</td>
<td>K – 12</td>
<td>314</td>
</tr>
<tr>
<td><strong>Dollar Bay-Tamarack City Area Schools</strong></td>
<td>Thomas R. Davis Elementary School</td>
<td>Dollar Bay</td>
<td>K – 6</td>
<td>160</td>
</tr>
<tr>
<td></td>
<td>Dollar Bay High School</td>
<td>Dollar Bay</td>
<td>7 – 12</td>
<td>120</td>
</tr>
<tr>
<td><strong>Elm River Township School</strong></td>
<td>Elm River Township School</td>
<td>Toivola</td>
<td>K – 8</td>
<td>10</td>
</tr>
<tr>
<td><strong>Hancock Public Schools</strong></td>
<td>Hancock Elementary School</td>
<td>Hancock</td>
<td>K – 5</td>
<td>420</td>
</tr>
<tr>
<td></td>
<td>Hancock Middle School</td>
<td>Hancock</td>
<td>6 – 8</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>Hancock Central High School</td>
<td>Hancock</td>
<td>9 – 12</td>
<td>330</td>
</tr>
<tr>
<td><strong>Houghton-Portage Township School Dist.</strong></td>
<td>Houghton Elementary School</td>
<td>Houghton</td>
<td>K – 5</td>
<td>520</td>
</tr>
<tr>
<td></td>
<td>Houghton Middle School</td>
<td>Houghton</td>
<td>6 – 8</td>
<td>310</td>
</tr>
<tr>
<td></td>
<td>Houghton-Portage High School</td>
<td>Houghton</td>
<td>9 – 12</td>
<td>470</td>
</tr>
<tr>
<td><strong>Lake Linden-Hubbell Public Schools</strong></td>
<td>Lake Linden-Hubbell</td>
<td>Lake Linden</td>
<td>K – 6</td>
<td>300</td>
</tr>
<tr>
<td>Elementary School</td>
<td>Location</td>
<td>Grade</td>
<td>Students</td>
<td>Teachers</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------</td>
<td>-------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Lake Linden-Hubbell High School</td>
<td>Lake Linden</td>
<td>7 – 12</td>
<td>285</td>
<td>18</td>
</tr>
<tr>
<td>Stanton Township Public Schools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.B. Holman School</td>
<td>Atlantic Mine</td>
<td>Pre-K 8</td>
<td>140</td>
<td>12</td>
</tr>
</tbody>
</table>
**Historic Features**

At one time Houghton County was dotted with mine shafts, rock houses, stamp mills, and smelters, and communities all dedicated to the processing of copper. Many remnants of these activities remain, though not all are protected or have been explored completely. The historical ruins and sites are rich and generally undisturbed; development should be sensitive to the historic character of the area. Preservation efforts are expected to continue, making more of these sites assets to a growing heritage tourism industry.

**Keweenaw National Historical Park**

Keweenaw National Historical Park was established in 1992 to preserve the heritage of copper mining on the Keweenaw Peninsula, the only place in the world where commercially abundant quantities of elemental copper occurred. The copper mines were critical to the industrial development of the United States and were America’s first large scale hard-rock industrial mining operations. Many mine shafts in the area reached over 9,000 feet deep.

The park consists of approximately 1,700 acres within two units. Much of the area is and will remain in private ownership. The KNHP acquires and preserves key structures and sites for interpretive activities. The park includes a cooperative of 16 separate sites, stretching more than 100 miles from Copper Harbor in Keweenaw County to the Porcupine Mountains in Ontonagon County. These are: the A.E. Seaman Mineral Museum on the Michigan Tech campus in Houghton, the Calumet Theatre in downtown Calumet, the Copper Range Historical Museum in South Range, the Coppertown USA Museum in Calumet, the Houghton County Historical Museum complex in Lake Linden, the Keweenaw Heritage Center at St. Anne’s in downtown Calumet, the Laurium Manor Inn in Laurium, F.J. McLain State Park located on M-203 between Calumet and Hancock, the Quincy Mine Hoist & Underground Mine on US-41 just north of Hancock, and the Upper Peninsula Firefighters Memorial Museum in downtown Calumet.

**Copper Country Archives**

The Copper Country Archives were established in 1969 to preserve and make available for research printed and manuscript materials relating to the Copper Country. The archives are located at the J.R. Van Pelt Library on the campus of Michigan Technological University in Houghton.

**Finnish American Heritage Center**

The center is located on the campus of Finlandia University in Hancock. The Finnish American Heritage Center houses a theater, art gallery, museum, family history center, and the Finnish-American Historical Archives. The archival collection is said to be the most comprehensive Finnish-American collection in the world.

**Chassell Heritage Center**

The Chassell Heritage Center is a museum and cultural center run by the Chassell Historical Society and located at the old Chassell Elementary School. It is dedicated to the cultural & historical heritage of Chassell, and the restoration and maintenance of the
historic Chassell school. It is also home to the Friends of Fashion vintage fashion collection.

**Hancock Pewabic House and Museum**
The Hancock Pewabic House and Museum, located in Hancock is dedicated to the research, preservation and display of the life and career of Mary Chase Perry Stratton (founder of Pewabic Pottery) and the City of Hancock.

**Champion #4 Shaft-Rockhouse**
The shaft is located on the Chassell-Painesdale Road, ¼ mile off M-26. Originally constructed in 1902, the Champion #4 Shaft-Rockhouse is the oldest shaft-rockhouse standing in the Keweenaw. Painesdale Mine and Shaft, Inc. offers tours of the hoist and shaft house and is working to preserve and restore the structure.

**Employment and Industry**

Eighty five percent of Houghton County residents age 25 and older have the equivalent of a high school diploma or more education, and about 23 percent are college graduates. Of those in the civilian labor force, 7.9 percent are unemployed. Nearly 45 percent of the population 16 years and over is not in the labor force, which may reflect the large number of students in the county. In 1999 the median household income was $28,817 and the per capita income was $15,078. This varies from a median household income of $30,404 in Laurium to $17,404 in the Village of Calumet. In Houghton County, about 17 percent of the population lives in what the Census Bureau defines as poverty.

Over 25 percent of the civilian workers in the county are employed by state and local government. The government sector is dominant because Michigan Technological University is a state institution and several federal and state service agencies maintain branch offices in Houghton County. Other major employment sectors include services (27 percent of jobs) and retail (22 percent), reflecting the area’s growing tourist economy. The construction industry accounts for 7 percent of all jobs. Less than 6 percent of jobs are in manufacturing, mainly centered around lumber, newspaper publication, and some high-tech industries.

Michigan Tech has a major influence on the region’s economy, especially Houghton and Hancock. It is the area’s largest employer, and it has been estimated that the university contributed approximately $100 million locally in 2000-01, including employee compensation, the purchase of supplies and services, and dollars spent by students and visitors. Health services account for the second, third, and fourth largest employers, Portage Health System, the County of Houghton, and Keweenaw Memorial Medical Center.

**Transportation and Commuting Patterns**
Roads
Houghton County is crossed by several State and US highways. Thirty-four miles of US-41, which starts in the northernmost part of the Keweenaw Peninsula and runs 1,990 miles to Miami, Florida, are in Houghton County. M-26 starts in Copper Harbor in Keweenaw County and runs southwest until it intersects US-45, about five miles beyond Mass City in Ontonagon County. Forty-six miles of M-26 are in Houghton County, including a four-mile stretch shared with US-41. Twelve miles of M-38 traverse central Houghton County, passing through Nisula en route from Baraga to Ontonagon. M-28, which spans virtually the entire Upper Peninsula, runs from I-75 in the east to US-2 at the City of Wakefield in the west. Fifteen miles of M-28 cross southern Houghton County passing through Kenton and Sidnaw. To reach the southern portion of Houghton County via State or National Highway, it is necessary to drive through other counties. In addition to these major routes, there are 858 miles of roads owned and maintained by the Houghton County Road Commission.

The Houghton County Road Commission operates from 6 locations with their headquarters in Ripley and garages in Calumet, Trimountain, Elo, Alston, and Kenton. The county contains many miles of seasonal roads with a number in southern Houghton County built and maintained by the U.S. Forest Service. Each incorporated city owns and maintains the local streets.

Rail
Although rail service played a critical role in the development and economic growth of the Keweenaw Peninsula, most tracks that connected population centers, mines, and ports have been removed. Today these corridors serve as snowmobile, off-road vehicle, hiking and biking trails. Only the Escanaba and Lake Superior Railroad, which runs through southern Houghton County Escanaba to Ontonagon, is still in operation.

Ports
Domestic port facilities are available in Houghton. The Keweenaw Waterway provides refuge to ships/boats seeking an alternate route when Lake Superior seas do not allow safe passage around the Keweenaw tip. Ships up to about 600 feet in length navigate the Waterway, with the main limit being the 104 foot vertical clearance of the Lift Bridge. The National Park Service’s M/V Ranger III, providing service to and from Isle Royale National Park, operates from a dock in Houghton, as does the M/V Keweenaw Star, a major tour boat. The Houghton County Marina is just to the east of the Lift Bridge, on the Hancock side.

Airports
Houghton County Memorial Airport (CMX) is located four miles northeast of Hancock at an elevation of 1095 feet. The untowered airport is owned by Houghton County and operates year-round. The airport maintains two paved runways, with the longest one, 13/31, extending 6501 feet. Only runway 13/31 is open November 1 – April 15. Commercial air service to Minneapolis is provided by Northwest Airlines Airlink (Mesaba). Charter service to and from Isle Royale National Park operates out of the airport. The airport also offers fuel, parking/hangars, airframe and powerplant service, and flight instruction. Aircraft operations average 44 flights per day, with 67 percent being general aviation, 19 percent commercial, and 13 percent air taxi service.
Prickett-Grooms Field Airport (6Y9) is located one mile northeast of Sidnaw at 1372 feet. The 2000-ft turf runway is rough and in poor condition, becoming soft when wet. The airport is closed November – April and when snow-covered, since the runway is not plowed. The airport has no facilities and provides no services except free parking and camping on the field. It sees an average of 160 operations per year, all of which are transient general aviation.

**Transit**

Greyhound Bus Company serves Houghton and Hancock with daily direct trips to Green Bay, Wisconsin. Transfers can be made in Rapid River, Michigan to buses headed for other destinations. Both the cities of Houghton and Hancock operate transit systems. The Houghton Motor Transit Line provides both scheduled and on-demand services. The Hancock Public Transit provides on demand bus services. Superior Coach and Delivery in Franklin Township offers charter bus service. Cab service is available in the Calumet, Hancock, and Houghton areas.
Public Review and Participation

The people of Houghton County shared their thoughts, ideas, and feelings about land use in a visioning workshop in 1994, a survey in 1997 and in town hall meetings in 2003. There are agreements and differences about what we value and want to protect. Citizen involvement is critical to the creation of a vision and plan for county-wide land use and its implementation.

The County Planning Act (PA. 282 of 1945, as amended) requires that members of the Planning Commission be appointed as representatives of the community. Community involvement is critical for the plan to represent the desires of the people. Public participation will need to be an on-going part of Land Use Planning in Houghton County.

One source of community attitudes considered by the Planning Commission was a 1997 “Shaping Our Future” survey conducted by the MTU GEM Center. 2000 people completed the survey, which measured attitudes toward Land Use Planning and general development issues in Houghton County. The survey featured a detailed tabulation of results and individual comments, by township and city.

To begin to engage the people of Houghton County in Land Use Planning, the Houghton County Planning Commission held three town meetings in October, 2003. To accommodate the extended geographic area of the county, these meetings were held in Allston, Laird Township, in the southern part of the county, Chassell in the central and Lake Linden in the north.

At the meetings, attendees were asked to identify land use issues, trends and opportunities. The meetings were well attended, particularly in Chassell and Lake Linden. Many attending expressed appreciation for the planning project and being asked for their opinions and concerns. Several opinions were also expressed questioning the need for a Land Use Plan in Houghton County, although these were in the minority.

In Alston, much of the land in the south part of Houghton County is owned by the large land or timber companies, or the State and Federal governments, so land use issues were primarily related to access and trails. Another common thread was that “folks like it the way it is”, although there was recognition that change was occurring, whether they liked it or not.

In Chassell, some attention was given to future of the rail grade trail between Chassell and Houghton. Also discussed were public access, the highway corridors, and allowing but managing development to fit the environment and community.

There is common agreement about the need for Land Use Planning, guiding growth and development, preserving what is unique and special about this place and our quality of life, and balancing property rights and common good/public interest. Unrestricted development is seen as a danger to what we care about

The citizens of our communities clearly value the scenic beauty, the natural resources, access to lakeshore and recreation as well as preserving the culture and history of this place.
Some of the identified challenges include development of waterfront properties which limits access to waterfront and rural residential growth which limits access to land that was previously open. Concerns about rural growth include the cost of providing infrastructure and services as well as preservation of wildlife habitat and care of the environment and preserving open spaces.

Unregulated commercial development is seen as a mixed blessing with both benefits and negative consequences. There is concern about managing development, growing intelligently to fit both the environment and the community. Good jobs are a priority but not at the expense of destroying what makes living here special.

The need for a county-wide vision was voiced as well as promoting cooperation among governmental entities with the possibility of consolidating services. Appearance and design of buildings, signage, and scenic roads are of interest.
Issues and concerns expressed at October, 2003 Town Meetings

LAND USE ISSUES identified at Chassell Township community meeting, October 20, 2003:

- Need Land Use Plan – to grow intelligently
- Not sure we need plan
- Conflicts: Mechanized vs. non-mechanized on rail grade
- Un-named waterfall by Redridge – protect
- Houghton-Chassell rail grade – non-motorized is ok, keep it non-paved
- Need sensible growth – plan
- It’s time for serious planning for the US 41 corridor
- Large lots and maximum coverage limits are needed
- Highway corridors
- Wealgate Bluff – public ownership
- Good to have input
- Development is happening – need thoughtful site plans
- Coordinated development/local government planning
- Poor image of snowmobilers is not accurate
- Public access to Lake Superior in Stanton Township
  - Acquisition
  - Non-Motorized
- Large undeveloped areas for skiing, etc.
- Concentrate development – conservation design
- Minimum shoreline setbacks -
  - Protect view from water
  - Environmental concerns
- Zero tolerance for point-source pollution
- Light/Noise pollution
- Individual property rights are important
- Jobs to keep young people here
- Traffic has increased

Land use issues identified at Lake Linden community meeting, October 21, 2003

- US-41 corridor
- New homes in country
- New residents want better roads
- Drainage
- Some rural areas may need utilities in future
- Shoreline development
- Lack of pedestrian facilities
- Walkways
- KNHP (Keweenaw National Historic Park)
- Encourage new development to be compatible with KNHP
- Rural development changes character
• Large lots = not good solution
• 10 acre lots
• Cluster Development may be better solution
• County is better vehicle for planning and zoning
• Bigger is better
• Less subject to politics
• Trend is to locate out of village/developed areas
• Land companies selling
• Now Sold!
• Lakeshore
• No plan
• Little regulation
• “The other side of the road” along the lake
• No regulation
• Potential for conflicts with residential lakeshore
• Need to preserve some open space/special places
• Non-motorized
• For residents and tourists
• Beach access
• Garbage in woods
• Dumping
• Need recycling: hazardous waste disposal
• Communication of “DUMP” information, hours, etc.
• Access to County property
• Sands behind Tamarack
• Remediated sands on Torch Lake are being developed
• Loss of access
• Limited public access on Lake Superior
• Wise use of lakeshore
• Erosion of developed shoreline
• Loss of wildlife habitat
• It’s how growth occurs that matters
• Land values are not high enough to justify road/subdivision
• Piecemeal dev. along roads
• Aquifer impacts
• Unique geography limits development
• Well contamination
• Need for education awareness
• Signage
• Douglass Houghton Falls should be in public ownership
• White City beach
• Is zoning too expensive?

Land use issues identified at Alston-Laird Township. community meeting, October 22, 2003

• Camps turning to year – round
  Will need winter access
Lack of all season roads
Constrains growth
How does a private road become a county road?

- Twin Lakes – bedroom community
- Not much interest in Land Use Plan
- National forest lands
- Restricted access to state land – roads are gated
- Gravel roads limit development
- No school
- Distance from services
- No 3 phase power
- Folks like things “as is”
- Trail easements for snowmobile trails
  Difficult to get
- MTA web survey on land use
- Protection of land and family farms
- Home business
- Protect trails systems
  Land splits
  Incompatible land use
  Use state land

- Protect trails!
- Long-term planning needed for trails
Planning in harmony with winter

Winter dominates Houghton County. Snow cover normally lasts from mid-November until late April or early May. Anecdotal reports indicate snow has been observed in every month of the year. Winter impacts Houghton County communities and our citizens. Creating more awareness and understanding of who we are and where we live can result in more attention to solving winter’s problems and making the most of our opportunities.

By using creative planning approaches to solving winter problems, and embracing a positive attitude toward the winter season, a community can mitigate some of the discomforts and inconveniences of winter. In addition, taking advantage of the positive aspects of winter can improve resident attitudes and the area’s appeal for new businesses and residents.

The winter season is often noted by the national media as a time to be dreaded. This negative portrayal of winter is strong in American culture, because of perceived discomfort, inconvenience and added cost.

Northern communities or “winter cities” must be more competitive than their southern counterparts to find their place in today’s global marketplace. A 1996 study by an economic development expert regarding the former K.I Sawyer Air Force Base near Marquette said “it’s a matter of snow, cold and isolation that is against you from the get-go”.

Some of the negative aspects of winter are:

- Cost for snow management for both the public and private sectors.
- Costs associated with accidents, both auto-related and pedestrian.
- Decrease in daylight.
- Difficult mobility, especially for seniors and the disabled, on foot or in automobiles.
- Prolonged cold, snow and icy conditions.
- Limited outdoor activity for many persons.
- Increased heating costs and energy consumption.
- A visual environment dominated by white and gray.

Many positive aspects of winter exist, including, but not limited to the list below:

- Outdoor recreational opportunities, including downhill and cross-country skiing, snowmobiling, ice fishing, snow shoeing, ice skating and hockey.
- Indoor arts, culture and social activities.
- Winter tourism, special events, and festivals.
- Using ice and snow for civic art.
- Opportunities for innovation and improvement in many areas, services, building and product design.
The following list of recommendations is suggested for Houghton County to improve winter livability:

- Generate local pride in the community by rejecting negative thinking about winter, its potentials and opportunities.
- Recognize innovative efforts in the community to design facilities and buildings that respond to the winter season, and use appropriate technology and materials.
- Public facilities and buildings should be designed to function and look good in all seasons.
- Consider the effects of snow, ice, wind and rain on facilities through the site plan review process.
- Consider lighting treatments for buildings and landscapes to create more light and beauty during the darkness that accompanies the winter season.
- Promote a compact, denser development pattern in and around existing communities.
- Support efforts to increase winter recreation opportunities for residents and visitors, such as ski trails and snowmobile/multi-use trail corridors.
- Support multi-seasonal recreational use of existing public land and parks.
- Evaluate the impacts of winter winds and drifting snow on county roads, identify areas where wind is problematic, and take mitigation measures, such as creating earth forms and planting areas to reduce wind discomfort and drifting snow.
Land Use Planning Trends and Critical Development Issues Facing Houghton County

*Changes in the Houghton/Hancock area*

In the early part of the Twentieth Century, much of the economic activity of the Keweenaw Peninsula was centered in the Calumet area. The Houghton and Hancock area was the major transportation hub for the region, providing facilities for rail and maritime services. There were modest commercial districts in both Houghton and Hancock, and the population was about half of what it is today. The Calumet area had a population more than double that of the present time and was a much more significant focus for commerce in the Keweenaw.

The close of the Twentieth Century found the economic roles of the Calumet area and the Houghton, Hancock area reversed. The major economic engine for the Keweenaw is now centered in the Houghton, Hancock area. The two universities, one of the two hospitals, most governmental offices, the major shopping centers, cultural and arts venues, most of the newly constructed residential and commercial property, the convergence of the two major access highways – are now found in the Houghton and Hancock area.

The resulting growth pressures have been handled reasonably well within the cities of Houghton and Hancock. New commercial and residential development has generally been in accordance with current community development principles. Much of the area within the two cities has now been either developed or planned for development. The result is that additional development will more and more be found in the adjoining Townships, only one of which, Portage, has zoning, and none of which have professional municipal management or functional land use and development plans.

*Waterfront development*

Houghton County has miles of Lake Superior shoreline, numerous inland lakes, and the Keweenaw Waterway system including Torch and Portage Lakes. Significant amounts of new residential development have occurred along waterfront areas since the early 1990s. This has included frontage on Lake Superior and the Keweenaw Waterway, as well as inland lakes and streams. In the last 20 years, waterfront property values have increased five-fold in some areas. Seasonal cottages are being converted to year round residences. Vacant lots are being developed with homes, many of them large. In some areas, remediated stamp sands will increase the supply of lots available.

Such development has negative and positive impacts. On the negative side, concerns are diminished public access to recreational waters, and potential problems with rural wells and septic systems. Very few areas on the waterfront have municipal utilities, so most wastewater is treated on-site, with implications for water quality. This growth can impact local townships with increased traffic and demands for public services. Positive
impacts include increasing tax bases and an influx of new residents with greater amounts of income to spend locally.

**Fragmentation of large land holdings**

In the past much of the undeveloped land of the county was held by a few large landowners, the mining companies. These large land parcels had a direct effect on land use patterns in the county. Much of the land was unavailable for development.

These companies tolerated extensive informal use of their holdings for fishing and hunting. Later, these large holdings were placed in Commercial Forest Reserve status, permitting lower property taxes in exchange for access for hunting and fishing. As the holdings of the mining companies have passed to successor companies who then sold prime areas to individual owners in smaller plots, the access to prime recreational lands and waters has become restricted, especially in the northern half of the county, where the majority of the people live.

New owners are posting this land “No trespassing.” Former forested and waterfront areas are being developed for home sites and some commercial development. The US 41 Highway corridor between Hancock and Calumet is an example.

**Commercial strip development**

The downtown districts of Houghton, Hancock, Calumet, Laurium, South Range and Lake Linden are in various states of decline and rebirth, challenged by strip centers, highway commercial areas and growing square footage of “big box retail” stores. These developments take advantage of perceptions related to convenience and parking. Highway strip commercial development changes traffic patterns in communities, sometimes with negative impacts.

**Trails and recreational access**

Tourism and recreation play an important role in the Houghton County economy. Recreational trails are important for residents as well as visitors. Trails, over land and over water, date back to the earliest human use of the Keweenaw.

Today Houghton County has a both land and water trail systems. The North Country National Scenic Trail traverses the southern reaches of Houghton County, primarily on lands of the Ottawa National Forest. Contrast this wild route with the paved trail on the old Soo Line grade along Houghton’s waterfront, running nearly four and half miles. Some years ago community members installed a short, wheelchair-accessible trail through the Houghton School Forest. There are numerous short trails, such as at the Sturgeon River Sloughs near Chassell or the Silver Mountain trail in the southern part of the county.
There is an extensive formal trail system, primarily using old railroad grades or logging roads, that is professionally groomed for snowmobiling in the winter. Many of these routes are used by ATVs or mountain bicycles in the warmer months. There is an extensive network of well-groomed cross-country ski trails in Houghton County. The Tech Trails also provide summer mountain biking and hiking opportunities. Many of the primary and secondary roads in the county are suitable for road biking and see significant use in this way.

The county has numerous abandoned rail grades and old road traces that are informally used for snowmobiling, ATV riding, mountain biking, walking, running, cross-country skiing, snow shoeing and even mushing (running sled dogs). However, few of these trails have permanent easements or fee ownership. The impact of this is that a trail long used may suddenly become unavailable for public use. Changes in land use, ownership and attitudes have the potential to close down important and irreplaceable trail segments. In addition, there is potential for placing motorized trails in locations unsuitable because of adjacent land use, such as residential neighborhoods.

The Keweenaw Waterway, in addition to its use by motorized vessels up to 600 feet long, is part of the Keweenaw Water Trail, which permits small craft such as canoes and kayaks to explore the natural and cultural heritage of the Keweenaw from the water. Since the tip of the Keweenaw Peninsula, from Hancock northeasterly, is an island, the Water Trail is a loop trail. The Hancock City Campground provides a convenient starting and ending point for Water Trail users. Numerous inland lakes and several area rivers also provide water trail opportunities.

Provision for preserving and maintaining access to recreation areas, designating these places and providing for upkeep needs to be included in our Land Use Plan.

**Portage Lake Lift Bridge**

The Keweenaw Waterway connects Portage Lake, which extends to Lake Superior on the east, with Lake Superior on the west of the Keweenaw Peninsula. This waterway splits the Keweenaw, creating an island of the peninsula’s top half. One third of Houghton County lies north of the waterway, two thirds south of it.

A bridge has connected the island portion with southern Houghton County since 1875. The current structure was built in 1959. The Portage Lake Lift Bridge is the heaviest dual deck aerial lift bridge in the world. Although it has not been out of operation for more than a day, the possibility of a mechanical failure or an impact by a wayward vessel could separate north Houghton County from land traffic for an extended period. The potential for problems related to public safety, human health and economic damages is very likely if traffic between the two parts of the county is disrupted.

Past development in the area has placed both acute care hospitals, the sole EMS provider, most of the physician clinics, the Michigan State Police post, many of the county’s fire units, the U.S. Coast Guard, the area’s only rescue hovercraft, the airport, the health department, all home health agencies and the majority of pharmacy suppliers on the island portion of north Houghton County.
The only emergency service providers located in south Houghton County are MTU Public Safety, Houghton County Sheriff, Houghton City Police, and many of the fire departments. In addition to inhibiting emergency services from traveling from the island to the south, an extended bridge malfunction would also prevent necessities like food, medicine and gasoline from reaching the population stranded north of the Keweenaw Waterway.

As the bridge ages, the potential for problems increases. It is the consensus of this commission that future county decision makers will have to work with state and federal partners to develop alternative solutions.

**Scenic, historic, cultural resource preservation and management**

Houghton County has an unusually rich concentration of nationally significant scenic, historic and cultural resources. In this county are found legislated Wilderness (the Sturgeon Gorge Wilderness on the Ottawa National Forest) the Quincy and Calumet Units of the Keweenaw National Historical Park, and the headquarters complex for Isle Royale National Park. Additionally, two units of the Michigan State Park System (F.J. McLain and Twin Lakes), along with significant lands protected by the state forest system, are located within the county.

In 2005, the U.S. 41 corridor north and east from the Portage Lake Lift Bridge was designated by the federal government as a National Scenic Byway, one of the few in the nation.

The Quincy and Calumet Units of the Keweenaw NHP are also designated National Historic Landmarks, and there are numerous properties and districts within the county listed on, or eligible for listing on, the National Register of Historic Places.

The people of Houghton County are asked to be the resident caretakers of these important resources by the people of Michigan and all the citizens of the United States. This is both an unusual privilege and a significant obligation.

There are not many counties in the United States with such a rich mix of nationally and state significant resources. The presence of these resources provides an unusual enhancement to the quality of life within Houghton County, which in turn helps to attract and retain businesses that recognize the strategic value of an excellent quality of life.

The riches of this asset can be squandered and abused, however, if the residents of an area are not attentive and supportive to the sound management and protection of these resources in accordance with state or national policies and laws. When residents appreciate and understand the nationally significant resources found in their “backyards” however, they will be able to work with the state and national land managers to be active stewards of these special places.

The richness of what is available to the public is tempered by the fact that certain prime places, such as spectacular waterfalls and scenic coastlines, are in private hands. Perhaps the future will provide opportunities to make these other special places publicly available through either public ownership or private enterprise.
Unusual agricultural potentials due to microclimates

During the mining era in Houghton County there were large numbers of people working in the mining enterprises, both above and below ground. In 1910 the County about 88,000 people resided here, and it was the State’s fourth most populous county. Among these residents were farmers who used both the mines and the logging camps as markets for their commodities. In 1934 the 2,000 farms located in Houghton County produced meat, dairy products, as well as strawberries, raspberries, blueberries and apples. These locally grown fruit crops were very productive and were grown successfully year after year.

A “Fruit Site Inventory” for Houghton County has been published by the USDA – Natural Resources Conservation Service. This inventory identifies areas with favorable combinations of: soil, climate, air flow drainage, moderating climatic lake effect, and land ownerships for the production of fruit crops. These areas are the most productive agricultural areas within Houghton County.

These sites are non-forested, elevated, have good air flow schemes and contain well drained soils. Due to their elevation and the well drained soils associated with these sites, they are choice locations for rural residential home building. This type of information is useful in many ways. The most important one is to identify and try to maintain these rather limited, specialized agricultural areas in continued agricultural usages. Dependable, productive fruit sites are in demand for other uses too.

Three factors were used to identify the most productive fruit site areas within Houghton County. Soils were analyzed based on drainage, texture and rooting depth. Physiographic factors such as air flow patterns, historic frost lines, forested areas, roads, fence rows and land forms were used in this analysis. Lastly, climatic factors were used and a 1.5 mile inland moderating “lake effect” buffer was selected to impact these productive fruit and agricultural sites.

These fruit sites located within the designated agricultural areas will hopefully be maintained in agricultural use. Once they are fragmented and built on for scattered rural residential use, they lose a great deal of their agricultural worth and promise.

Torch Lake Superfund Site

Most of the copper mining and smelting activity in Houghton County occurred prior to current environmental laws. Potentially hazardous by-products, mainly stamp sands and the chemicals used in reprocessing the stamp sands for additional copper recovery were left on lands and waterways when the mining activity ceased in the late 1960s. Environmental concerns led to the designation of a number of sites within the county as the Torch Lake Superfund Site.

The USDA – Natural Resources Conservation Service (NRCS), working with the EPA, the State of Michigan’s Department of Environmental Quality (DEQ) and the local Public Action Committee (PAC), spent from 1999 through 2005 remediating 790 acres of
stamp sand sites at a cost of 12.7 million dollars. These 12 remediated sites located in Houghton County were covered with soil and then vegetated in an effort to lessen both the wind and water erosion which over time had deposited many tons of sediments in to the adjacent water bodies. This constant sediment deposition negatively affected both the water column as well as the benthic community. Once the remediation was complete; “natural processes” again take over and the environmental parameters at these sites will continue to improve. The remediated acres will remain covered and the vast majority of the acreage will be used for residences.

**Penturbia – the desire for a rural, yet close-in, lifestyle**

Social scientists, city planners and economists track, analyze and explain the movements of population in our country, and the corresponding effects of population shifts on development and economy. People movement is of obvious interest to local planners, as well.

Houghton County residents are moving to the rural areas, as evidenced by the 2000 Census, which revealed the growth of many townships and population declines in the cities and villages of the county, with little net change in the county’s overall population.

There seems to be an increasing life-style choice to locate outside the confines of developed urban areas. The perceived lower cost of living in low tax rate townships, as compared to cities is also cited as a reason for this growth. Improved winter driving conditions created by all-wheel drive vehicles have made rural living more convenient, as well.

The rural residential growth is occurring on small lot splits and land divisions along existing road systems in the county. Very few, if any, new roads are being constructed for this development, and most lots are not platted, but rather land divisions, with few restrictions or requirements. Most rural residential is constructed to avoid long driveways because of snow issues. The result is a strip of residential land use visible along most every road in the county.

This trend was identified by land economist Jack Lessinger in 1986 as “penturbia”. It is an important trend for planners in Houghton County to understand, because of its potential impacts on development patterns and needs.

He points out that America has seen four distinct migration patterns in its history. The colonial period was characterized by forts enclosing the population, with fields outside. The move westward produced dispersed local markets based on an agrarian economy. Population moved back to cities with the age of industrialization, and then, after World War II, moved out to suburbia. The fifth wave is of interest to this area: Lessinger posits the shift from suburbia to the anti-suburbia, or penturbia.

Penturbia has an abundance of what suburbia lacks, open space, uncongested rural roads, clean air and water, and rather than small core cities, a network of farms, open space, tiny villages and larger towns diffused throughout a county. Rather than being connected to cities, penturbias are typically three to four hours from metro hubs and are economically independent from them. Penturbia tends, moreover, to flourish in areas
with colleges, good infrastructure, available capital and human services, and an emphasis on environmental health and artist communities.

Although some disagree with these predictions, the possibility that Houghton County could become a magnet for migration in the next 20 years must not be ignored. Since the penturbia concept emerged, technological advances have made telecommuting a reality, giving even more strength to the projection.

Planners in Houghton County need to develop future plans with consideration for growth. Although little in its history would predict population growth, the lifestyle attraction inherent in penturbia may be reason to think otherwise. And, following the lines of this concept, new residents will look for open land outside of Houghton’s incorporated cities. The spreading out of population, whether or not absolute growth comes to pass, will have important consequences for public services, community infrastructure, and the tax base which supports it.

This planning commission notes these issues, not because we can know what will happen in 10 years, but because this penturbia concept seems to have particular relevance to this area. Its implications should, at least, be considered by future planners and county decision makers.

**Enforcement of existing ordinances**

Frequently mentioned in comments from county residents was the query about why ordinances already in place are not enforced. If we have them, why aren’t we taking advantage of them? Lack of enforcement leads to growth of scoff laws and sets a precedent whether for signage, noise pollution, speeding, illegal dumping, etc.
Living the Plan -- county-wide planning and zoning vs. planning and zoning by individual townships and villages

Much of Houghton County is without any land use or zoning regulations. This may have worked well when there was very little growth and limited land available for development, but increasing development pressures are creating potential conflicts. While there are long-standing expressions of hostility toward any land use regulation, such as zoning, there is now a growing concern about the negative impacts on property values and quality of life from inappropriate, unregulated land uses.

The Houghton County Planning Commission was created by the Board of County Commissioners to prepare a future Land Use Plan. This Land Use Plan is advisory in nature, as Houghton County has not approved a zoning ordinance, which provides the means of implementation of a Land Use Plan.

Currently in Houghton County, the following have their own zoning and Land Use Planning functions: the Cities of Houghton and Hancock, the Village of Calumet, the Charter Townships of Calumet and Portage, and the Townships of Chassell and Duncan. The following units of government have no zoning: of Adams, Franklin, Hancock, Lair, Osceola, Schoolcraft, Torch Lake, and Quincy Townships; and the Villages of Laurium, Lake Linden, South Range and Copper City.

In the communities that do have planning and zoning, few have kept pace with changes in planning laws, court decisions and community planning trends. Calumet Township is an exception; in recent years developed a new Land Use Plan and updated its zoning ordinance. Others modify or change zoning provisions as the need arises. Quite often, these are reactionary changes in response to one issue or another. Most zoning ordinances in effect in Houghton County are old and out-of-date.

This Land Use Plan encourages communities to develop a zoning ordinance based upon the county Land Use Plan framework. Some townships in Houghton County may believe they cannot afford to create and administer a zoning ordinance and would like the County to relieve them of this cost and responsibility. In some communities, attitudes may not be in favor of zoning or a historical lack of growth and development leads them to believe zoning is not necessary.

The problem with having no plan and zoning ordinance is that when a community needs or desires control over a new, inappropriate land use situation, there is no regulatory authority.

Some communities may view zoning as an unnecessary roadblock to development and don’t want to enact regulations that may cause a proposed project to go to another community. Experience shows that this is false. The most growth and development is occurring in those communities with planning and zoning. The lack of zoning and the potential for incompatible land uses limits development. Developers and property investors want to know what might happen on adjacent lands. In communities with no zoning, that could be anything, and it is usually assumed to be bad.
Only a handful of Michigan counties have enacted and administer a county-wide zoning ordinance. Keweenaw County is one of those; it is mostly rural, with no incorporated cities or villages.

There are advantages and disadvantages to county-wide zoning.

**Advantages:**
- Cost is spread over a larger population base.
- Revenue from permit fees is greater, allowing for more efficient administration.
- Coordination of Land Use Planning.
- Ability to have professional staffing (e.g. a planner or zoning administrator).
- Larger base for recruiting and training persons to serve on the planning commission.
- Planning better addresses the “big picture,” rather than one small part of the county.

**Disadvantages:**
- Loss of local control
- Diverse views from a large geographic area make it harder to achieve consensus on planning and zoning issues.

There are advantages and disadvantages to local (township, village, or city) planning and zoning:

**Advantages:**
- Local control
- Local knowledge
- More flexibility

**Disadvantages:**
- Cost is spread over a smaller population base.
- Low permit revenues.
- Difficult to have professional staff (e.g. a planner or zoning administrator).
- Difficult to update the plan and ordinance.
- Harder to recruit and train qualified planning commissioners
- Difficult to make the “tough decisions.”
Future Land Use Descriptions by Township

The attached maps describe the existing and projected land uses in Houghton County. No line or color on the map is absolute. These maps show the major categories of future land use which allow for growth while protecting values identified by members of the public.

The following land uses are shown on the maps: [greater detail in defs?]
- Forest (private, public)
- Commercial/Industrial
- Agricultural
- Recreation (non-forest)
- Rural Residential (includes year around, second home, lake shore, camps – not dense. Year around access limited by local residents.)
- Stream Preservation
- Residential (more dense, communities, villages, small towns)
- Urban (areas inside cities)

The Land Use Plan (County Development Plan) encourages the preservation of existing open spaces, minimizing the growth of Rural Residential “sprawl.”

Discussion for Houghton County Townships, starting in the south. Level of detail generally goes to the Section level only; finer detail when appropriate.

Duncan Township  The Land Use Plan for Duncan Township was impacted by the Ottawa National Forest. A small industrial area west of Sidnaw is identified (good confluence of highways, railroad, and airport). Wise management of forest land is best done with large tracts of non-fragmented land. Hwy M-28 passes through E-W; FH16 N-S. Rural Residential exists, but not encouraged for significant future growth (Goldenglow Road and Lake 13 Road, also coming down from the Silver Mtn. tracts in Laird Township). Maintaining land in large tracts is most conducive to maintaining and developing trail systems. Duncan Township. has an existing zoning ordinance in effect.

Laird Township  The Land Use Plan for Laird Township is dominated by the Ottawa National Forest and the Copper Country State Forest; an agricultural strip roughly along M-38; and rural residential area along the Pike Lake Rd and in the Silver River (Silver Mountain) Area. Two population concentrations are at Nisula and Alston with small commercial/industrial areas around them. Wise management of forest land and agricultural land is best done with large tracts of non-fragmented land; these encourage multiple recreational uses such as trails. Prickett Lake area is a key recreational area whose future land use should be maintained (primary mission of the impoundment remains power production).

Elm River Township  Elm River Land Use Plan preserves land which is a mix of public and private forest but has rural residential around the lakes and along the M-26 corridor and the major county roads. A commercial section is shown along M-26 in the
Twin Lakes area, and recreational use on Lake Roland (Twin Lakes State Park), the golf course and Emily Lake.

Adams Township  The Land Use Plan for Adams Township shows rural residential continuing from Elm River Township to Toivola, a forest corridor along M-26 north of Toivola and south of Painesdale, and between the established communities of Painesdale and Trimountain and the Village of South Range to maintain a “northwoods feeling” approaching the Houghton/Hancock area. New residential development is encouraged within the existing communities, which have appropriate infrastructure. This helps preserve the “northwoods feeling” and a sense of the area’s mining heritage. The Cole’s Creek drainage as it approaches the Keweenaw Waterway at the north edge of the township is shown with a stream preservation emphasis.

Stanton Township  The Land Use Plan for Stanton Township shows a mix of agricultural, rural residential, and forest in the inland portions. A mix of rural residential, recreational, and some agriculture uses exists along the Keweenaw Waterway and Lake Superior shoreline, as well as the Salmon-Trout River and Coles Creek. Coles Creek serves as an important DNR benchmark for cold-water trout fisheries. There are three areas of agricultural land in the township that have unique micro climates conducive to fruit crops. These areas, even if forested, should be considered appropriate for agricultural use. Stanton Township plays a very important role in Houghton County’s recreational access to Lake Superior, with significant public park development at North Entry and Agate Beach. Recreational Use is identified for the township’s widely known Covered Road. Rural residential runs along the Lake Superior shoreline from the edge of the Township park at north entry to the SW, as far as Graveraet River. Beyond that point the lake shore will be preserved primarily for public recreation.

Chassell Township  The Land Use Plan for Chassell Township is rural residential along the Canal and Portage Lake, and recreational land just inside the rural residential land along Portage Lake. Agricultural land is west of US 41 and south of Snake River Hill; these are traditionally good berry lands. Rural residential is shown along most county roads and a stream buffer is along the Sturgeon River where flooding may occur during snow melt. Chassell Township has an existing Land Use Plan and zoning ordinance in effect.

Portage Township  Portage Township Land Use Plan has forest land in the southwest portion with a stream preservation area shown for the Huron Creek and Huron Lake (potentially some transfer to City of Houghton), and for the Otter River stream corridors. An agricultural section is shown on the lower center of the Township and rural residential along the major county roads and around Otter Lake. Urban and commercial are shown in the northern part of the Township. Portage Township has an existing Land Use Plan and zoning ordinance in effect.

Franklin Township  The Land Use Plan for Franklin Township reflects the township’s role as home to the Houghton County Memorial Airport and the Airport Industrial Park and Renaissance Zone. Additionally, the Quincy Smelter and Quincy Hoist are critical community assets. Rural residential development along several county roads allows for continuing growth supporting the Houghton-Hancock area. Much of the land away from the county roads and U.S. 41 will remain forested. Existing agricultural lands should be maintained. Boston Pond should continue to be available for public recreational use.
The existing snowmobile trail corridor is a community asset. The recent designation of U.S. 41 as a National Scenic Byway through this township is an economic stimulus to the County. Controlling adverse development within this corridor is key.

**Quincy Township**  
Quincy Township is relatively small, undergoing significant annexation pressures from Hancock. It has a significant portion of the Quincy Unit of Keweenaw National Historical Park. The snowmobile trail corridor is an important community asset. The recent designation of U.S. 41 as a National Scenic Byway through this township is an economic stimulus to the County. Controlling adverse development is a key strategy. Rural residential development along several county roads allows for continuing growth supporting the Houghton-Hancock area.

**Hancock Township**  
F. J. McLain State Park (a Cooperating Site of the Keweenaw National Historical Park) is located in Hancock Township. While there will be continuing pressure for rural residential development along the road corridors in this Township, the aquifers in this area are becoming rapidly depleted and are not expected to support additional growth.

**Osceola Township**  
Osceola Township is a long, narrow township that ranges from Torch Lake on the south almost to the Houghton County line on the north. The snowmobile trail corridor is a community asset. The recent designation of U.S. 41 as a National Scenic Byway through this township is an important economic stimulus. Controlling adverse development within this corridor is a key strategy to be undertaken by this Township. Osceola snakes around and through intensive residential development in the Calumet area, requiring extensive cooperation among units of government. Rural residential characterizes the Torch Lake waterfront, a part of the Torch Lake Remediation project. Inland areas of the Township support agricultural uses.

**Torch Lake Township**  
Torch Lake Township is divided by Torch Lake. Most of the county roads support Rural Residential use; the exception being along seasonal roads. Torch Lake Township has extensive Lake Superior frontage with sections that should be preserved for public recreational access. Most of the interior of the Township is either forest or agricultural. The Rice Lake shoreline supports Rural Residential. The area of Point Louis should be preserved for public recreational use.

**Calumet Township**  
Calumet Township has an extensive Land Use Planning and zoning process in place. The area around the Douglass Houghton Falls is recreational in the hope that this scenic area might potentially gain public access. Rural Residential is shown along some county roads, with agricultural areas along other roads preserving scenic values and agricultural potential. Industrial uses are shown to support the existing Renaissance Zone. Calumet Township, in conjunction with the Villages of Calumet and Laurium, is an important component of the Keweenaw National Historical Park.

**Schoolcraft Township**  
Extensive areas of Schoolcraft Township are agricultural. Forested land is along the eastern edge of the Township. Rural residential is shown along the entire Trap Rock
Valley area, as well as along Torch Lake and the Rice Lake/Grand Traverse area, reflecting long standing patterns. Recreational use is in the Superfund remediation area.

(Insert Houghton County map here, followed by the 14 township maps)

This is the last page:

**Preparation of this plan:**

This plan was prepared by the Houghton County Planning Commission.

The members of the planning commission are:

  - Truman Obermeyer
  - Pat Coleman
  - Bruce Petersen
  - Susan Burack
  - Jack Duweke
  - Guy St. Germain
  - Don Van Uum
  - Bill Fink
  - Paul Luoma, representative from the County Board of Commissioners

Extensive assistance and advice has been graciously offered by:

  - Jim Boyce, former Houghton County Commissioner
  - Russell Slatton, former Michigan Technological University student
  - The GEM Center for Science and Environmental Outreach at MTU.

Much of the statistical information about the county was borrowed from the work of the Western Upper Peninsula Planning and Development Region.

*Cover photos by Bill Fink Communications, LLC*