HANCOCK-HOUGHTON REGION

FUTURE LAND USE DEVELOPMENT PLAN for the City of Hancock and the City of Houghton

June, 1972

PREPARED FOR:

THE HANCOCK-HOU GHTON REGIONAL PLANNING COMMISSION

BY:

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FOREWORD

This report summarizes the findings and recommendations of a series of preliminary Comprehensive Plan reports prepared for the Cities of Hancock and Houghton. The two Cities are organized as a Regional Planning Commission and have cooperated fully in the structuring, evolvement and completion of this Future Land U se Plan.

The following list identifies the supporting preliminary plan reports prepared during the past three years. These references contain the detailed concepts, data, and alternative plan recommendations which underlie the summary information presented in this Plan.

	Work Element	Date	Funding
1.	Population Analysis	Oct. 1969	HUD & Local
2.	Land U se, U tilities, Traffic		
	and Parking	Nov. 1964	HUD & Local
3.	Housing Conditions & Neighborhood	•	
	Analysis	Dec. 1969	HU D & Local
4.	Housing Study	Dec. 1969	HUD & Local
5.	Neighborhood U nit Plan	Mar.1970	HUD & Local
6.	Commercial Land Use Plan	Nov. 1970	HUD & Local
7.	Central Business District		
	Plan -Houghton	Feb. 1971	HUD & Local
8.	Central Business District Plan-		
	Hancock	Mar. 1971	HUD & Local
9.	Housing Demand and		
	Effectuation	May 1971	HUD & Local
10.	Comprehensive Recreation		
	Plan	May 1971	HUD & Local
11.	Community Facilities Analysis	Oct. 1971	Local (100%)
12.	Industrial Land U se Plan	Dec. 1971	Local (100%)
13.	Thorofare Plan	Dec. 1971	Local (100%)
14.	Suggested Z oning		
	Standards	Feb. 1972	Local (100%)
15.	Subdivision Review		
	Guide	May 1972	Local (100%)
16.	Public Improvements		
	Program	June 1972	Local (100%)
17.	Comprehensive Land U se		
	Plan	June 1972	Local (100%)

The Hancock-Houghton Regional Planning Commission officially began to work on the Comprehensive Land Use Plan in July 1969. At that time, contracts were executed with two consulting firms, Vilican-Leman & Associates, Inc., and Williams & Works Consulting Engineers. The firm of Williams and Works was responsible for researching and completing the first Work Element. This includes the studies of Land Use, Utilities, Traffic and Parking, as well as planning base maps for Hancock, Houghton, and the regional area. The remaining work elements were prepared by Vilican-Leman & Associates, Inc.

In addition to the work elements listed above, the Planning Commission is preparing a Comprehensive Sewer and Water Plan for the two- City region.

LONG RANGE DEVELOPMENT POLICY

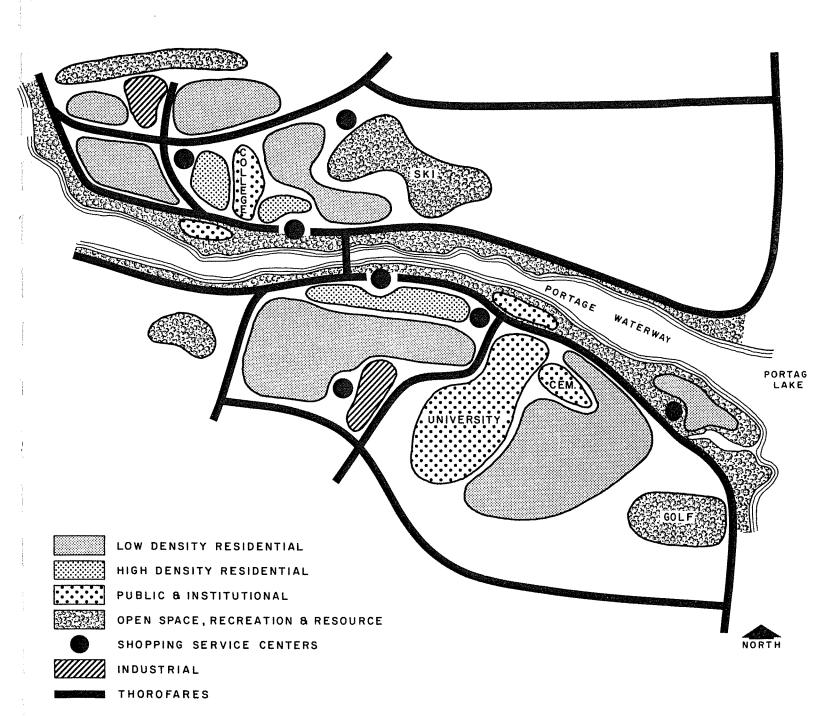
The Future Development Plan of the Hancock-Houghton Region presents many specific objectives, and they are discussed within the various chapters of this report, or illustrated on the accompanying maps. In addition, there are some general development goals for the planning area, that underlie the detailed recommendations. These may be regarded as suggested policies on the long range use of lands in the two-city region.

The following paragraphs generally outline what is believed to be valid long range policy guidelines pertinent to area-wide planning.

- 1. Endeavor to provide services and facilities that will encourage a reasonable balance in population with respect to family income, occupational expertise, age distribution, education, cultural backgrounds and the like.
- 2. Continue local efforts to achieve increased efficiencies in the provision and operation of municipal services, of which measures related to political consolidation and/or territorial annexation may be important.
- 3. Broaden the role of architectural heritage, historical buildings, and historical sites in the Portage Lake Region as a mark of local community character and environmental interest.
- 4. Develop a use priority policy for lands bordering Portage Lake (or Portage Canal), perhaps as follows:
 - a) Human scale activity such as open parks, walkways and bicycle paths.
 - b) More intensive recreation services, such as playgrounds, marinas, and recreation buildings.
 - c) Institutional uses and other public buildings.
 - d) Residential uses
 - e) Tourist services, commercial uses, and industrial activity.
 - f) Overriding the above are uses locationally dependent upon water resources.

- 5. Upgrade retail centers to become more pleasing, more attractive and more convenient. Provide future retail sites with expansion potential to allow ancillary retail functions.
- Concentrate industrial type land uses within planned industrial parks to make community utility extensions more efficient and simplify commuter travel patterns.
- 7. Concur in the concept that all land should not be intensively used or developed, and designate areas that are to be retained in a broad scale natural resource character particularly among topographic features where natural vegetation and soils should not be disturbed.
- 8. Develop natural resource corridors to link the urban communities with the rural and forest areas, giving consideration to hiking trails, bicycle paths, and snowmobile routes.
- 9. Preserve and upgrade the overall image of community areas through land use controls, architectural reviews, strategic application of plant materials, and general structural rehabilitation in older developed areas.
- 10. To the extent practical within the region endeavor to diversify basic land use functions, particularly the housing inventory to serve the needs of students, the elderly, low income families, educators, professionals and the like.
- 11. Evolve a circulation pattern designed to inter-relate each functional area of the community and at the same time recognize the individual traffic needs of neighborhoods, tourist services, centers of employment and major community services.

The above policy guides for the Comprehensive Plan should be approved by the communities in the Hancock-Houghton Region, and thereafter expanded, updated or detailed as necessary.



Generalized
LONG RANGE DEVELOPMENT CONCEPT
HANCOCK-HOUGHTON REGION

vilican · leman & associates inc community planning consultant:

PLAN DIMENSIONS

An integral step in the process of Comprehensive Planning is gauging demands for municipal lands and services. This establishes the general framework or scope of the plan and gives a picture of the expected pace of future development.

Demand determination usually has two major facets: One is the quantitive measure of need and the second relates to the rate or pace at which demands will arise. In short, the dimensions of the plan spell out the general nature of the community including population achievement, regional influence, existing deficiencies, economic vitality and overall size.

For some plan factors there are measurable and foreseeable quantities while for others the dynamics of growth and change establish less certainty about the future.

POPULATION

In 1960, Houghton County ranked second out of 15 Upper Peninsula Counties in population numbers and only, Marquette County housed more population in the Upper Peninsula. By 1970, both Marquette and Delta Counties reported more population with Houghton third in rank.

Houghton County had a population of 66,063 in 1900. This increased to a peak of 88,098 persons by 1910, but has dropped gradually ever since.

The County's history of population change is illustrated on TABLE 1.

TABLE 1
HISTORY OF POPULATION CHANGE
Houghton County

Census Year	Population
1900	66,063
1910	88,098
1920	71,930
1930	52,851
1940	47,631
1950	39,771
1960	35,654
1970	34,652

SOURCE: U.S. Census of Population

Hancock-Houghton Area Trends - 1940 to 1970

TABLE 2 summarizes the history of population change for selected communities in and adjacent to the Hancock-Houghton Planning Area. The base population figures are presented as reported in the decennial U.S. Census reports, hence, no adjustments are included for college and university student enrollments. All resident students are counted in the population regardless of their community of origin. Commuting students are counted in their home communities only.

The history of population change in the planning area reflects a pattern of net out migration. Moreover, no community experienced consistent population growth in each Census year. Portage Township's past growth is attributable to enrollment gains at Michigan Technological University. However, the severe loss between 1960 and 1970 was due to a change in the Houghton City boundaries through annexation, and the City therefore reported a strong population increase (mostly M.T.U. students)

TABLE 2

POPULATION CHANGE IN SELECTED COMMUNITIES

Hancock-Houghton Area

North Side of		Percent				Percent			
Portage Lake	1940	Change	1950	Change	1960	Change	1970		
City of Hancock	5,554	-6.0	5,223	-3,8	5,022	-4.0	4,820		
Franklin Township	2,362	-30.7	1,637	-23.7	1,249	-0.6	1,180		
Hancock Township	272	-41.1	160	-10.6	143	18.2	169		
Quincy Township	590	-27.8	426	-25,1	319	-4.1	306		
Sub Total	8,778		7,446		6,733		6,475		
South Side of Portage Lake									
City of Houghton	3,693	3,7	3,829	-11.4	3,393	78.8	6,067		
Adams Township	5,177	-34.4	3,392	-18.4	2,767	-6.1	2,599		
Portage Township	3,593	5.4	3,787	13.7	4,306	-40.1	2,579		
Sub Total	12,463		11,008		10,466		11,245		
Grand Total	21,241	-13.1%	18,454	-6.8%	17,199	3.0%	17,720		
Houghton Cty.	47,631	-16.5%	39.771	-10.4%	35,654	-2,8%	34,652		

NOTES:

- 1. Source: U.S. Census of Population
- 2. Between 1960 and 1970 a portion of Portage Township was annexed to the City of Houghton.

Population figures reflected on TABLES 1 and 2 are dominated by downward trends in most Portage Lake area communities. Except for a minor 1960-1970 increase in Hancock Township, all of the north side canal area experienced population losses in every decade since 1940.

Statistics for the south side canal area have been influenced by the student population residing on the M.T. U. Campus as well as by territorial annexation. This accounts for the Portage Township loss and the resultant City of Houghton increase.

Perhaps the most significant past trend is the fact that the total population is decreasing at a decreasing rate in Houghton County. For the Portage Lake area communities, the past rate of decrease was also decreasing, and by 1970 there was a reported population increase of 3.0 percent.

TABLE 3 shows another long term trend in that the Portage Lake communities are accounting for a larger proportion of the Houghton County population in each decade. In 1970, over half of the County's population resided in the Portage Lake communities. Nearly one third of the 1970 County population resided in the Cities of Hancock and Houghton. The combined factors of a decreasing County population and an increasing in migrated student population has resulted in a dramatic change in the proportion of students in the County. In 1930, less than one percent of the population was in-migrated students and by 1970 the proportion was nearly 13%.

The following section summarizes the long term trend in University-College enrollment. It is of interest to observe the continual enrollment increase of both, Houghton County students and in migrated students from outside of Houghton County. Between 1930 and 1970, the County population decreased by 34% while the in migrated student enrollment increased 870 percent. Both Suomi College and Michigan Technological University are counted in the student enrollment data.

TABLE 3

POPULATION AS A PERCENT OF TOTAL COUNTY

Hancock-Houghton Area

	1930	1940	1950	1960	1970
County Population	52,851	47,631	39,771	35,654	34,652
City of Hancock Franklin, Hancock, and	10.96%	11.66%	13.13%	14.08%	13.90%
Quincy Townships .	. 6.74%	6.76%	. 5.58%	4. 79%	4.77%
City of Houghton	7.10%	7.75%	9.62%	9.51%	17.50%
Total	42.89%	44.58%	46.38%	48.0	51.11
In-migrated College and University students	.88%	1.60%	2.83%	6.79%	12.9%

SOURCES:

- a. U.S. Census of Population
- b. M.T.U. Registrar
- c. Suomi College Director of Admissions

Population Projections

Inherent limitations in estimating community population for any year are compounded in projections to future years. Below is a list of conditions that will qualify the projections for the Hancock-Houghton Region.

- The most precise and scientific formulae still result in estimates of future population, hence, they are not absolute predictions.
- Smaller communities are by nature the most difficult areas for which to forecast population.
- . Historic fluctuations in population growth create trend conditions that are highly variable and long range trends may differ markedly from short range patterns.
- . Migration factors among particular age groups tend to skew the communities age structure and, therefore, weaken forecast conclusions.
- The strong input of University and College enrollments is an added variable in the population analysis. This growth is somewhat independent of population related to commerce, industry and other services.

Although there are numerous complicating factors in local population projections, some indications of future trends are necessary to assess the degree of population change thay may occur. TABLE 4 illustrated the University-College factors which influence the estimates and projections of population in the Hancock-Houghton Region. Nearly 9,000 persons may be added to the area's 1990 population from this factor alone.

TABLE 4

UNIVERSITY AND COLLEGE ENROLLMENTS
Hancock-Houghton Area

	1930	<u>1940</u>	1950	<u>196</u>	0 1970	Projected 1990
Michigan Technological University- Houghton						
Houghton County Students In-migrated Students Totals	200 424 625	234 704 938	203 1,061 1,264	323 2,349 2,672	587 4,316 4,903	900 8,371 9,271
Suomi College- Hancock.						
Houghton County Students In-migrated Students Totals	41 40 81	63 60 123	74 66 140	123 ⁻ 75 198	154 184 338	300 450 750
Grand Total in all In- migrated Students, Major factor influencing 1990 population projections	465	764	1,127	2,424	4,500	8,821

SOURCE

- (a) Director of Admissions, Suomi College, Hancock, Michigan
- (b) Registrar, Michigan Technological University, Houghton, Michigan

The detailed procedures and methods used to project population in Hancock and Houghton are documented in the Preliminary Comprehensive Plan report titled "Population Analysis", October 1969. Current publications by the U.S. Census of Population substantiate the general estimates of population that were made for the year 1968, hence, it is reasonable to assume that the projections also represent good working estimates of future populations. The Hancock figures are probably more valid than Houghton's because there are fewer variables affecting the basic data.

The critical elements of the population projections for Hancock and Houghton are summarized in TABLE 5. Figures for 1960 and 1970 are accurate for those years, and the TABLE equates the distribution between in-migrated college-university students and families. The families or Base Population figure represents all City residents including professors and other personnel from Suomi College and Michigan Technological University.

TABLE 5

POPULATION PROJECTIONS

Hancock-Houghton

Census and Enrollment Equatement

	1960	1970	1990 Projected Population by Critical Segment
(a) Base Population (b) In migrated Suomi	2,793	4,666	4,160
students	75	154	450
Total City	5,022	4,820	4,610
City of Houghton:			
(a) Base Population(b) In-migrated M.T.U.	2,793	3,067	4,130
students	1,800	3,000	5,020
Total City	4,593	6,067	9,150
Grand Total	9,615	10,887	13,760

NOTE:

The Base Population on this TABLE refers all families and individuals who reside in the City Limits, except College-U niversity students from outside Houghton County.

SOU RCE:

Population Analysis, October 1964.

All population forecasts have one common limitation, and that is the introduction of unforeseen future conditions in the community that affect employment or other population related factors. This means that every projection, if not proven correct by the passage of time, is either high or low. Therefore, the pace and direction of population change in Hancock and Houghton must be continually monitored and evaluated in terms of the scope of this plan. Some facilities may be needed earlier or later than anticipated, and the size may also be affected. For example, the 1990 population working estimates, may in the course of time, prove closer to being 1980 or the year 2000.

Age Group Characteristics

As of this writing complete 1970 age group statistics for the Cities of Hancock and Houghton have not been published in U.S. Census reports. However, a fairly complete analysis of 1950 to 1960 trends were presented in the preliminary population analysis. Since that data is now ten years out of date it will not be repeated herein. When specific 1970 data is available a general re-assessment of these trends should be undertaken.

TABLE 6 presents current age group statistics for Houghton County. These are assumed to give a valid over view of trends in the entire region, since County data tends to balance the unusual characteristics that may impact one community more severely than another.

TABLE 6

AGE GROUP CHARACTERISTICS

Houghton County

	1960 Population		1970 Popul	ation	1960 to 1970 Change			
Age G roups in Years	Number	Percent	Number	Percent	Number	Percent		
Pre-School Under 5	3,174	8.9%	2,453	7.1%	-721	-23%		
Elementary- 5 to 14	5,956	16.7%	5,619	16.2%	-337	-6%		
Secondary & College								
15 to 24	6,096	17.1%	7,923	22.9%	+1,827	+30%		
Secondary & College								
Adjusted for in-migrated								
students (Suomi and M.T.U.)	(3,672)		(3,423)		(-249)	(-7%)		
Young Labor Force								
25 to 44	7,157	20.1%	5,888	17.0%	-1,269	-18%		
Mature Labor Force								
45 to 64	8,170	22.9%	8.025	23.1%	-145	-2%		
Retirement - 65 and								
over	5,101	14.3%	4,744	13.7%	-357	-7%		
Totals	35,654	100.0%	34,652	100.0%	-1,002	-3%		
(Adjusted Totals)	(33,230)		(30,152)		(-3,078)	(-9%)		

SOURCE: U.S. Census of Population

Trends indicated by TABLE 6 generally parallel those attained between 1950 and 1960. A significant difference is the fewer number of retirement age persons, curtailing what previously was an increasing trend. Elderly persons declined both in numbers (-357) and as a percent of total County population in 1970. Information for the City of Hancock shows that the elderly comprised 17.2% of the population in 1970, up from 14.6% in 1960.

Preschool age children showed a marked decline involving 721 individuals, for a 1960 to 1970 loss of 23%. This loss is some 300 persons greater than the 50 to 60 decade loss of 412. Children aged 5 to 14 also declined, but the loss was somewhat less than the previous decade.

Secondary school and college age (15 to 24) persons increased substantially over the previous decade at 30%. This of course reflects the impact of Suomi College and Michigan Technological University. If this age group is adjusted for in-migrated students, a loss trend would have been indicated for every age group tabulated.

The most ominous age group trend is the continued losses am ong young and mature labor force persons. Although the young labor force loss was not as severe as in the 1950 to 1960 decade (-3,614 persons), some 1,269 persons out migrated for an 18% decline. The mature labor force declined at a much lower rate reflecting trends of the past decade.

Family Income Characteristics

In 1959 the median income of families and unrelated individuals was as follows:

Total Houghton County	\$3,175
City of Hancock	\$4,958
City of Houghton	\$3,817

In the same U.S. Census year (1960), the State of Michigan median income was \$5,534. Hence, Houghton County's median income was 43% lower than the State. The City of Houghton reported an average income 31% lower than the State median. Hancock reflects a higher average income than Houghton, and was only 10% below the State median.

Density Characteristics

Population density in Hancock and Houghton varies substantially from one area to another. Perhaps the greatest variance is between newly developing areas and older platted lots in the central portions of each City. Some of this differential is indicated from the following selected block statistics:

Block Reference Houghton:	Dwelling Units Per Net Acre
a) Edwards,4th, Douglass, & 6th	9.1
b) Quincy,South, Bridge & Houghton	8.6
c) College, Emerald, Agate & Ruby	5.7
d) Clark, Seventh, Hubbell & US-41	3.4
Block Reference	Dwelling Units Per Net Acre
Hancock:	
a) Lakeview Manor Senior Citizen Home	50.9
b) Atlantic, Wolverine, & Anthony	
Private apartment units)	10.4
c) Jasperg Street (East Side)	3.5
d) Elevation, Elm, Pine & Scott	11.0
e) Mill, Lake, S. Elevation & Scott	6.6
f) Center, Harris, Mason, & Vivian	
g) Mobile Home Court	13.0

As a general observation the older areas of residential development are of a high density in both Hancock and Houghton. However, new homes are tending to develop on larger lots as a result of new platting standards, or by combining two or more existing platted lots.

EXISTING LAND USE

The study of land use in the Comprehensive Plan has several objectives related to understanding present development and guiding future planning decisions. Foremost, the land use inventory provides both a graphic and statistical picture of the community, emphasizing the impact of man-made features.

The inventory of existing land use was accomplished by field inspections during the Summer and Fall of 1969. Each use of land was recorded on field maps and transcribed to City base maps. The field inspection technique is not 100% accurate since all uses in buildings are not apparent from the street and there may be uses in wooded areas and on large private properties generally inaccessible by vehicle. Common limitations are accurate counts of apartments within dwelling structures. Overall, however, the field inspection technique is a valuable means of assessing the character of uses, and it consumes less time and cost than other inventory systems.

TABLE 7 presents a statistical summary of land uses in Hancock and Houghton. An interesting observation is that less than half of the land area in both Cities is developed. However, severe topography, large blocks of institutional land, and mining properties combine to reduce the availability of suitable space for new development. This results in the paradox situation of land scaracity admidst plenty.

With respect to individual land use types, it is significant that both Cities have more land in the commercial classification than in the industrial. Also, the proportion of commercial use is higher than what is regarded as typical for other Upper Peninsula communities. Bona fide manufacturing has nearly passed from this land use scene.

Despite the low acreage proportions among commercial-industrial uses, the percent of residential land is typical for self contained urban communities. This is possible because of the impact of public and institutional land uses, of which Michigan Technological University and Suomi College are the most significant. Other regional services which include medical facilities and public agencies add to this aspect of land use.

TABLE 7

EXISTING LAND USE
Hancock-Houghton Region

	City of Hancock		City of Houghton		•
Land Use	Acreage	Percent	Acreage	Percent	Hancock & Houghton Percentage
Residential	184.2	35.9%	171,6	29.7	32.5%
Public & Quasi	83.4	16.2	192.5	33,3	25.3%
Commercial & Parking	23.6	4.6	23.0	4.0	4.3%
Industrial	13.9	2.7	9.0	1.6	2.1%
Streets	171,61	33.5	152.8	26.4	29.8%
Railroads	36.3	7.1	28.6	5.0	6.0%
Total Developed	513.0	100.0%	577,5	100.0%	100.0%
Vacant	617.0		807.5		
Percent of City					
Area that is developed		45.4%		41.7%	

SOURCE: Hancock-Houghton Regional Planning Commission, Land Use Inventory, November, 1969.

The physiography of the Hancock-Houghton region is a major determinant of the land use pattern. Steep topography which defines the Portage Lake Valley caused railroads and major highways to follow the gentle grades along the Portage waterway. These were accompanied by the development of subdivisions, business centers, industries and public services, and the two city region evolved in a strip pattern of land use. Only in recent years have major efforts been taken to extend development in northerly and southerly direction, thereby mounting the historic topographic barrier.

In Houghton, the following events are changing the traditional east-west development pattern, by pushing services and new land uses south and uphill from the Portage waterway.

- A new M.T.U. ice arena, as part of an expanding Campus Plan, to displace Dee Stadium.
- 2. The Portage Township School District is ready for the construction of a new central elementary school near Hurontown.

- 3. Public water and sewer utilities, and improved streets are being extended to upland areas.
- 4. New plats and residential sites are opening up along Sharon Avenue and in other upland locations.

In Hancock, the traditional valley floor land use concentration is being altered by the following:

- 1. New homes in locations north of Condon Field, and in areas near the City Park off Reservation and Ingot Streets.
- 2. Cypress Manor Nursing Home at the extreme north City Limits.
- 3. Proposals to construct a new central elementary school just east of Reservation Street in the Township.
- 4. Extension and upgrading of water-sewer utilities in the upland areas.
- 5. Planned construction: of a community ice arena at the Diriving Park I location.

It is apparent that the "natural" forces of community growth are altering development from historical east-west patterns. Perhaps, the linear extent of the community has reached proportions where use inconvenience and land values, have forced new growth directions, despite natural barriers. This is an expression of concentric growth theory and the natural convenience aspect of nearness to centers of activity.

The "Existing Land Use" maps for Hancock and Houghton cannot be included in this plan because they were prepared as color rendered wall maps and therefore are not in a practical format suitable for publication;¹

Maps prepared by Williams & Works, Consulting Engineer, November, 1969.