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overall
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for the

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OVERALL ECONOMIC DEVELOPMENT GUIDE
for the
Arrowhead Region / 0

August, 1976

Prepared by [unclear]

Arrowhead Regional Development Commission,
200 Arrowhead Place
Duluth, Minnesota 55802

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of Commerce.

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PREFACE

This report, Overall Economic Development Guide for the Arrowhead Region, is considered an essential part of the economic planning effort of the Arrowhead Regional Development Commission. It has been published in both a hardcover and softcover version.

The hardcover version was selected to provide flexibility. It is assumed that assessment sections will be revised or added, that socio-economic information will be updated as new data becomes available, and that policies and programs will be reviewed as economic situations change. The hardcover (three-ring notebook) edition will allow the document, or portions thereof, to be updated through the replacement of existing sections with revised versions, or the insertion of new sections in the appropriate places.

The Arrowhead Regional Development Commission will attempt to maintain the current status of the hardcover documents that have been circulated. When a new or updated section is published, this section will be mailed to those who have received a hardcover version. A revised chapter index and the latest revision date will also be supplied to the document holders with each mailing. This type of updating system obviously necessitates a limited distribution.

Supplementing the hardcover version is the softcover edition, which has been printed for general distribution. At this initial publication, the two versions of the document are identical. However, no log will be kept of the recipients of the softcover version, and subsequently no attempt will be made to update these documents. Any and all updated or additional material will, of course, be available upon request.

Overall Economic Development Guide

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INTRODUCTION

In 1967, the six counties of Carlton, Cook, Itasca, Koochiching, Lake and St. Louis joined together for the purpose of forming a multi-county economic development district to facilitate the institution of an Economic Development District Organization as provided for in the Public Works and Economic Development Act, 1965. The Arrowhead Economic Development District was created as an instrument of challenge to the people of Northeastern Minnesota. This challenge stated simply that the area had consistently lagged behind the mainstream of the American economy, but that this need not continue.

In 1967, the Arrowhead Region was in a state of virtual depression. Unemployment rates were high and employment was dropping off at a rapid rate due to contractions in the region's most important industry - mining. Large numbers of people in the region, especially those from 18 to 30 were emigrating from the area. Concurrently, the region's one major service center, Duluth, which contains over 30% of the population, was losing population and facing a severe economic decline.

What was being said through the creation of this new organization was that chronic economic problems could be solved through a cooperative effort to pool the total resources of the District. The times called for an attempt to establish a meaningful and workable network mobilizing local communities against common economic ills. This district network, utilizing committee structure for direct local involvement, would coordinate efforts and serve as "liason with all organizations pertinent to the fulfillment of the economic development program".

An essential element of the economic game-plan proposed by this new

district organization was the injection into the economy of substantial amounts of federal economic development dollars. These dollars would be strategically aimed at areas of high potential and at areas of severe problems and deficiencies. The purpose and use of these funds would vary. They would act as a catalyst for industrial development. They would develop the tourist industry into an economic asset for the area. They would serve as the foundation for the infrastructure so obviously lacking, particularly in the major population and service center, Duluth. In short, federal assistance, although only a part of economic recovery, was no less an important part.

In order to qualify for federal economic development funds, the District organization was required to prepare an Overall Economic Development Program, or OEDP. The OEDP was an examination of the economic base of the Arrowhead District. More than just a qualifying report, this document was an initial learning process. Even though most of the information and data contained in the document was already available from various governmental and private agencies, universities, business and industrial firms, this was the first attempt at gathering this information on a multi-county scale in order to make decisions on that level. The uniqueness of the document, therefore, arose from the fact that the findings, recommendations, and priorities resulting from this economic examination, very clearly reflected the District's approach.

The Overall Economic Development Program of the Arrowhead Economic Development District listed in its introduction twelve major potentials for accelerated economic development in Northeastern Minnesota. These major potentials were:

1. Greater use of port facilities
2. Transportation improvement, particularly highways
3. National Park and tourist development

4. Forest products industry
5. Aggregate financial potential
6. Taconite and low grade ore development
7. Copper-nickel development
8. Expansion of existing business and industry
9. Water resources
10. Growth center concept
11. Attracting new industry
12. Human resources

These prescriptions for economic development and stability may seem obvious in retrospect. However, when the OEDP was written, the economic future of the area was much less apparent. The Port of Duluth-Superior was in its early stages of development, and at that, was falling short of its initial expectations. There was an insignificant portion of the district accessed by modern highway systems. Voyageur National Park was little more than a dream. Copper-nickel development was virtually unexplored. There were no viable industrial parks within the District. The growth center concept was just that - a concept.

In the eight brief years that have passed since the preparation of the original OEDP, significant, perhaps monumental changes have taken place in the Arrowhead Region. It is important at the outset of this new document to note that virtually all the major economic developments that have occurred since that time are listed at the beginning of the 1967 OEDP as areas of accelerated economic development potential. Therefore, although the original OEDP is statistically out-of-date, this list of potentials is in no way obsolete. Their continued importance is evidenced in the assessment sections of this new OEDP. Those activities deemed most essential to the economic welfare of the region eight years ago are those which are in the forefront today.

Despite the progress, many economic and related problems remain. There are sections of the state that have high unemployment rates and average incomes well below the state and regional averages. In those areas that are developing at a

rapid rate, economic deficiency problems have been replaced by problems in housing and the supply of other public and private services. Although the economic situation in the City of Duluth is being stabilized, the City is not yet functioning as the dynamic growth center required by a healthy regional economic state. Furthermore, it is realized that economic development in itself may not be a panacea. Certain developments may generate economic and other problems that far outweigh advantages of development. It is therefore appropriate to re-evaluate the economic situation within the region and thus arrive at new and further-reaching goals. Even more appropriate is to conduct this re-evaluation from the perspective of the Arrowhead Regional Development Commission rather than the Arrowhead Economic Development District.

In 1969, the Minnesota Legislature passed the Regional Development Act, dividing the state into eleven sub-state planning and development regions. The Arrowhead EDD was, as a result, and with the addition of Aitkin County, transformed into the Arrowhead RDC. Rather than a mere change in name or acronym, this represented a broadening of perspective and potential as an agency. Section 46239, Subdivision 3 Planning of the Act states, "The comprehensive plan shall recognize and encompass physical, social, and economic needs of the region and those future developments which will have an impact on the entire region including those not limited in such matters as land use, parks, open space, public hospitals, libraries, schools, public and private housing, and other public buildings".

The OEDP of 1967 was, in effect, the regional comprehensive plan from an economic development district perspective, touching where possible on other planning considerations, such as housing, recreation, and to a certain extent, environmental issues. Since 1969, the organization has gradually expanded

into virtually all of the planning areas mandated by the Act, and is treating them on a primary rather than secondary level. Physical planning, including land use, transportation and water quality planning have emerged as distinct elements of ARDC's overall planning program. This is balanced and complimented by human resources, criminal justice, and aging planning. Economic planning has thus evolved from the primary thrust of an essentially single-purpose agency to an element of a comprehensive planning program. This, however, should in no way be construed as a loss of relative importance as a planning function. Rather than narrowing the economic planning sphere, it has instead broadened its application. It allows economic planning and decision making a first-hand view of its inter-relationships with all other planning functions; and at the same time requires all other planning to consider the economic variables which are essential to their success.

It is this new perspective, therefore, rather than the outdating of statistics or the economic changes since 1967, that prompt the writing of a new OEDP. It is also this new perspective which prompts the name change to the Overall Economic Development Guide (OEDG). The change signifies nothing other than the fact that this document is viewed by its authors and contributors not merely as an updated OEDP, but as an essential element of the total comprehensive plan for the Arrowhead Region.

CHAPTER I

HISTORICAL ASSESSMENT

I. THE ARROWHEAD REGIONAL DEVELOPMENT COMMISSION

ADMINISTRATIVE ORGANIZATION

The Arrowhead Regional Development Commission is the state recognized agency for planning and review for Minnesota Development Region Three (3). The Commission was created in accord with the Minnesota Regional Development Act of 1969 (M.S. Chapter 1169, as amended). According to the terms of the Act, the ARDC is the agency designated to receive LEAA, EDA, and HUD 701 funds for multi-county planning.

Additional planning authorities of ARDC include:

- Planning agency designation by the State of Minnesota for water quality management planning, specifically the Lake Superior Basin Water Quality Management Plan under Section 3(c) of the Federal Water Pollution Control Act of 1966, and updated to authorize Section 303(e) planning as regulated in the Federal Water Pollution Control Act of 1972;
- Participation, via contract with the Minnesota State Planning Agency, in the state's coastal zone planning program, as authorized by the Coastal Zone Management Act of 1972;
- Planning agency designation by the State of Minnesota in accord with Section 112 of the 1973 Federal Highway Act, qualifying ARDC for receipt of UMTA, FHWA, and FAA transportation system funds for the Duluth-Superior urbanized area;
- Designation as the Area Agency on Aging by the Governor's Citizens Council on Aging through authority of the Older Americans Act.

Upon specific designation by the Governor, the Regional Commission may also be charged with the responsibility for multi-county planning required by other federal agencies such as OEO or the Department of Agriculture, and be named recipient of funds from these agencies for this purpose.

In addition to planning responsibilities, ARDC is charged with the review of state and local plans, including those of independent boards and commissions, as well as applications for loans and grants from the state or federal government. The Commission has also been designated as the Regional Clearinghouse for the seven-county area for those federal programs specified in Circular A-95

of the Office of Management and Budget.

MEMBERSHIP

The membership of ARDC is structured to provide representation from each county by publicly elected officials and citizens, as prescribed by the Regional Development Act and the By-laws of ARDC adopted in 1970. Membership on the Arrowhead Commission is as follows:

- 1 Chairperson
- 7 County Commissioners (one from each county)
- 1 additional County Commissioner from each county over 1000,000 population
- 7 Mayors or Councilmen from cities under 10,000 population (one from each county)
- 2 School Board members
- 4 Mayor or Councilmen from cities over 10,000 population
- 3 representatives from Indian Reservations (Fond du Lac, Nett Lake, Grand Portage)
- 7 representatives of township government (one from each county)
- 19 citizens representing public interests (commerce and industry, labor, transportation, crime prevention, forestry, mining, human welfare, health, communication, minorities, tourism and recreation, environmental quality, agriculture, and community action boards).

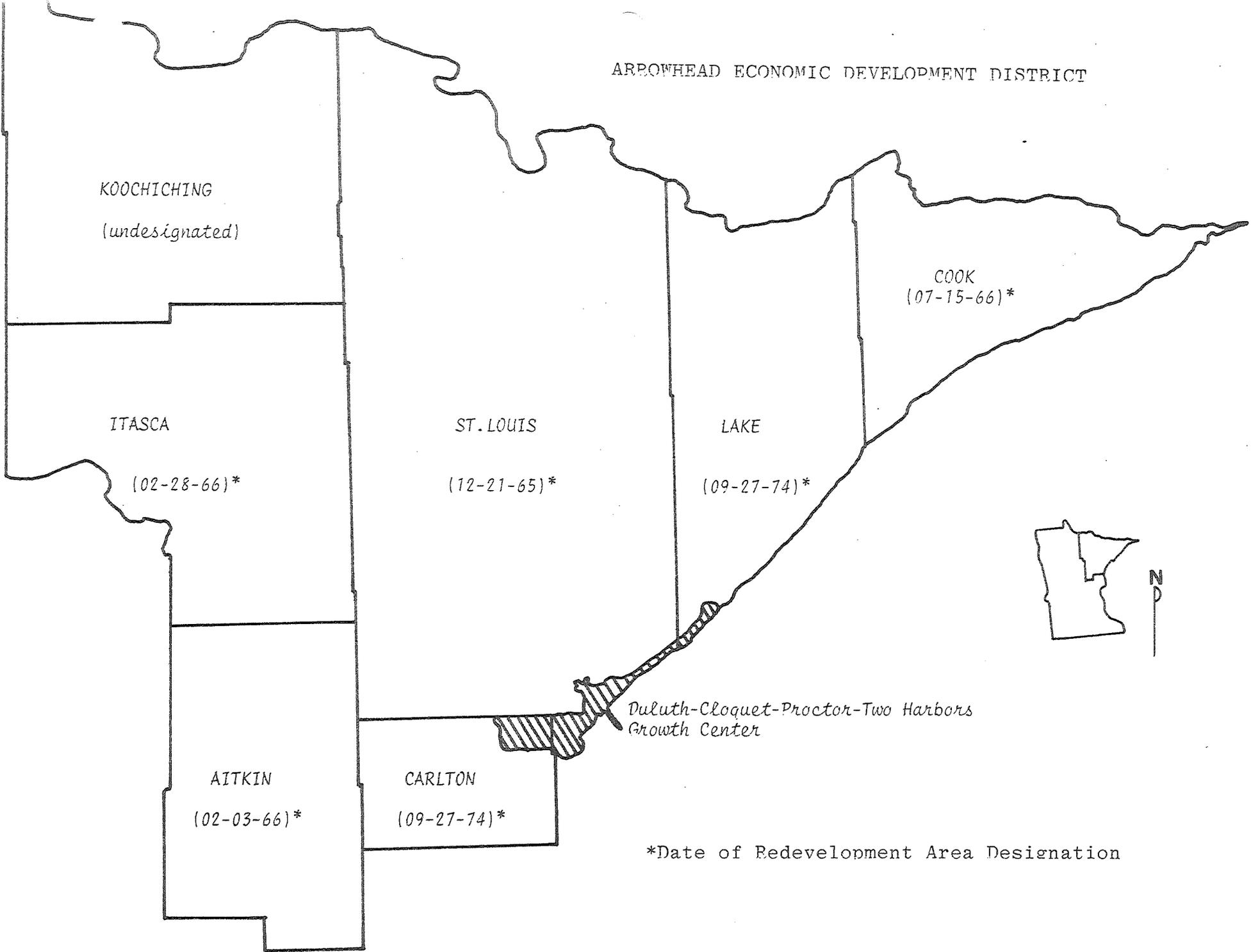
The Board of Directors, according to ARDC By-laws, consists of at least eight elected officials, at least one member of a minority group, and citizens to total thirteen members. The Chairman of the Board is elected from among the membership of the full Commission, and serves as Chairman to both of those bodies. The Commission, as the policy-making body, meets four times a year. The Board of Directors, as managing body of the Commission, meets monthly.

Membership of the Arrowhead Regional Development Commission and its Board of Directors is found in Appendix I.

PARTICIPATING GOVERNMENTS

The seven counties of the Arrowhead Region include Aitkin, Carlton, Cook, Itasca, Koochiching, Lake and St. Louis. The map on page I-3 identifies redevelopment areas, and dates of designation. All counties within the region, whether designated redevelopment areas or not, are active participants both in the District organization and in the District program. As evidence to

ARROWHEAD ECONOMIC DEVELOPMENT DISTRICT



Duluth-Cloquet-Proctor-Two Harbors
Growth Center

*Date of Redevelopment Area Designation

this participation, all redevelopment areas within the District have elected to have the District OEDP serve their planning needs and designation obligations. In conjunction with the publication of this new document, and in accordance with EDA planning grant requirements, a resolution has been put before the individual county boards restating and reinforcing their concurrence with the District program.

PLANNING FUNCTIONS AND RESPONSIBILITIES

Beyond a description of legal powers and organizational structure, it is appropriate to briefly summarize the scope of planning endeavors presently addressed by the Arrowhead Regional Development Commission. As alluded to within the introduction, this summary is not only appropriate, but essential, due to the fact that all of these planning functions are interrelated by virtue of common goals, economic planning being no exception. The capabilities of the organization as a development district are very much dependent upon the capabilities of the organization as a regional commission.

ARDC's planning activities are divided into three major areas: Human Resources Planning, Physical Planning, and Metropolitan Planning.

HUMAN RESOURCES PLANNING

Comprehensive Planning

ARDC's responsibilities in this area are two-fold: 1) to coordinate fragmented planning and program development presently occurring in the Region's human service system; and 2) to develop intergovernmental relationships and processes necessary to facilitate this coordination effort.

In order to implement its responsibilities in this area, ARDC created a Human Resources Coordinating Committee (HRCC) in May, 1975. As a major task for its first year, the HRCC has been engaged in determining the most appropriate means for ARDC to carry out its comprehensive planning and coordinating role. The HRCC has been gaining the knowledge and experience needed to make that determination through involvement in emerging human resources issues

such as: the mental health funding and planning problems of the Region; the development of a human resources information system; the reorganization efforts of the State Office of Human Services; and Human Service Board activities.

Aging

ARDC, in addition to funding and managing Title III grants as authorized by the Older Americans Act, is also responsible for providing technical assistance to agencies or individuals wishing to expand or initiate services for older adults.

Coinciding with these planning and service development activities, ARDC has also sought direct involvement and input from individuals, organizations and agencies throughout the Region. Through county-wide meetings and written invitation, concerned groups have been provided the opportunity to make the needs of the elderly known and to present suggestions on how to meet those needs.

An integral part of ARDC's Aging Program is its Advisory Committee on Aging. The Committee, composed primarily of senior citizens, has representation from public and private service agencies, County Councils on Aging, minority and low income citizens and the general public.

Criminal Justice

The Criminal Justice Committee of the Arrowhead Regional Development Commission, established under the provisions of the Crime Control Act of 1973, is responsible for reviewing all criminal justice grant applications having the potential to impact area communities.

The Regional Criminal Justice Plan, required by the Governor's Crime Commission to be developed annually on the basis of State Guidelines, includes a description of Criminal Justice Resources, an analysis of crime incidence data, the identification of Criminal Justice problems in the area and an examination of possible program alternatives available to resolve these problems.

PHYSICAL PLANNING

Coastal Zone Management

For the past two years, ARDC has been participating in a Coastal Zone Management program which has as its goal the development of a land and water resources management plan for the North Shore area of Lake Superior.

The primary focus of the Coastal Zone Management program thus far has been the collection and development of pertinent information needed to prepare a consistent management plan for the North Shore. Some of the work products prepared as a result of this effort include an overall base map of the area, illustrating such features as roads, rivers, lakes and other important natural and cultural features; a parcel-by-parcel field survey conducted to examine existing land uses in the Coastal Zone; a land ownership map and an inventory of significant historical, archeological, and scientific resources. In addition, a socio-economic report was completed, utilizing population, employment, and age structure information to provide an overview of the social and economic issues confronting the citizens of the North Shore.

With the data gathering phase of the Coastal Zone program primarily completed, analysis of the information collected has begun. Eventually, this data analysis will be expanded to include the entire Coastal Zone area and will serve as a guide to the development of a comprehensive plan for the North Shore area of Lake Superior.

Voyageurs Planning Area

Over the past several years, the Arrowhead Regional Development Commission has worked closely with Koochiching and St. Louis Counties, the State Planning Agency, and other state and federal agencies to insure that the area surrounding the Voyageurs National Park is properly planned and protected. These cooperative efforts climaxed in 1975 with the development of the "Sub-Regional Plan for the Voyageurs Planning Area". This comprehensive plan spells out general and specific goals and policies related to the development of communities, forestry, land use, outdoor recreation, emergency services, and

transportation in the Voyageurs Area.

ARDC has worked closely with local units of government in the Voyageurs Planning Area to develop effective land use management programs. Interaction with these local units increased significantly during 1975 with the placement of an ARDC planner in the community of International Falls. This action affords county and municipal governments the opportunity to have day-to-day contact with ARDC concerning a wide range of planning needs.

Water Resources Planning

Having completed the Water Quality Management Plan for the Lake Superior Basin in 1974, the water resources planning activities of the Arrowhead Regional Development Commission continued in 1975 with primary emphasis placed on two major projects; the St. Louis County Erosion Damage Survey and the Corps of Engineers' Urban Study program. Both projects are being conducted in conjunction with national programs initiated by the U.S. Army Corps of Engineers.

The St. Louis County Erosion Damage Survey was conducted by ARDC (under contract with the Minnesota Department of Natural Resources) in an attempt to determine the economic losses which resulted from high lake levels on Lake Superior between 1972 and 1974.

Also related to ARDC's water resources planning activities is the Corps of Engineers' Urban Studies program. A local public involvement committee has been established to advise the Corps of Engineers on various components of the Urban Studies Program. ARDC, under contract to the Corps, was instrumental in establishing this committee and will continue to provide technical assistance related to these programs.

Forest Management

In order to assist in the effective management of this vital resource, ARDC has developed an active forestry program. Three of the Region's major forest industries - Blandin Paper Company, Boise Cascade Corporation and

Potlatch Incorporated - have supported the Commission's activities in this direction by providing funds to maintain a forestry consultant on staff.

ARDC's forest management program is provided policy direction by a Forestry Advisory Committee. Created in 1974, the Committee is comprised of county land commissioners, state and federal foresters, representatives of private industry, and researchers. This group has been engaged in a number of important issues, such as the development of a forest land classification system and the revision of model forest land zoning ordinances. Each of these land management techniques are important to maintaining an adequate forest land base for future use by the Region's timber industries.

Housing

ARDC has been working to encourage developers, land owners, mortgage lending agencies, and local governmental officials to develop desirable housing projects which will reduce costs for potential residents. At the same time, it is a major policy of the Arrowhead Regional Development Commission to encourage high quality housing standards which will result in residential developments that are an asset to communities.

In light of rapid growth and development on the Iron Range, ARDC prepared a "Housing Guide Plan for Iron Range Communities" which is intended to serve as a basis for coordinated, orderly, and balanced residential growth in the area. The Plan projects estimated housing needs by three Iron Range market areas and has been utilized by government agencies and private developers in determining the feasibility for specific housing projects under consideration for federal housing funds.

Technical Assistance

Technical assistance to local units of government is one of ARDC's strongest roles and is a function evident in all of the Commission's planning programs - from human services to coastal zone management. Over the past several years, a particular need of local governments has been identified in

the area of comprehensive land use planning. ARDC has developed a technical assistance program to meet this need. Objectives of the program are:

- to provide technical assistance in the adoption of comprehensive land use plans and controls to implement the plans
- to assist counties and municipalities in land use enforcement programs (i.e. zoning ordinances, sub-division controls, sanitary controls, building and housing controls)
- to improve coordination between communities and counties
- to assist counties and municipalities in the standardization of planning and zoning methods to be compatible with regional and state standards.

Information Systems

A center for data collection and storage for use by the Commission and other governmental and private users has been in the process of development at ARDC for several years. An important step in this direction was taken in 1975 when ARDC obtained an intelligent remote batch computer terminal through the assistance of a grant from the Intergovernmental Information Services Advisory Council (IISAC). The terminal provides for a previously unavailable in-house data processing capability and a means to access other computerized data bases directly from ARDC offices. At the present time it is primarily used to access information and analysis packages on computer tapes at the University of Minnesota in Minneapolis.

ARDC has worked extensively with the Minnesota Land Management Information System (MLMIS) to create a reliable land resources information system for the Arrowhead Region.

Census information is another important data base frequently utilized by local units of government and agencies for a variety of planning purposes. Through cooperation with the Minnesota Analysis and Planning System (MAPS) in 1975, ARDC developed the capability to provide computerized census reports in standard or specially requested form.

The ability of the computer terminal to quickly analyze data required for specific projects and studies is a substantial asset to ARDC's planning efforts. Studies utilizing this capability in 1975 included the "Erosion Damage Survey", the "New and Expanded Industry" reports, the "Mental Health Indicators" report, and various economic planning studies.

METROPOLITAN PLANNING

Metropolitan Interstate Committee

Within the Duluth-Superior Metropolitan community there are many levels of local government - each attempting to resolve the physical and socio-economic problems of the area.

In order to promote greater coordination in the development of the metropolitan community, ARDC, in cooperation with Wisconsin's Northwest Regional Planning Commission, formed the Metropolitan Interstate Committee (MIC). The sixteen member Committee, formally organized in July, 1975, includes representation from county, city, and township governments.

The function of the MIC and the metropolitan planning staff is essentially twofold; it serves to coordinate planning activities of local units of government in the Metropolitan area, while it also facilitates Metropolitan/Regional communication. In addition, the Metropolitan Interstate Committee has the responsibility to:

- conduct and adopt metropolitan comprehensive plans;
- offer assistance to local governments within the metropolitan area;
- assure area eligibility for federal and state funding;
- develop policies and programs into effective governmental actions; and
- review and comment on plans and policies of local governmental bodies in the metropolitan area.

The Metropolitan Interstate Committee is a direct outgrowth of two previous planning agencies that served the Metropolitan community of Duluth-Superior; the Duluth-Superior Metropolitan Area Planning and Transportation Study (MAPS) and the Head of the Lakes Council of Governments (HOTL-COG).

COMMITTEE INVOLVEMENT

In briefly examining the above planning functions, two important observations are evident. First, economic and socio-economic considerations are present to some degree, no matter what the planning perspective. This relationship is reinforced in later chapters, such as in the "Economic Assessments". No economic element of the Region can be properly assessed without constant attention to other planning objectives. The economic development goals, policies, and programs cannot be formulated without first establishing common ground with those of other planning programs.

The second observation is that which must be made with regard to the value and, in fact, indispensability of the committee structure to the workings of the organization. The advisory committees involved with each of the planning programs are an integral part of those programs. It has always been critical to the ARDC philosophy that advisory committees play such a role. They provide the necessary link between the Commission staff and real problems and issues throughout the Region. They supply the local input and expertise accessible through no other avenue. The soundness of decisions made at the Board and Commission level, and the effectiveness of programs at the staff level, are directly related to the involvement of the advisory committee.

THE ECONOMIC POLICY COMMITTEE

There were many factors involved which prompted the creation of the Economic Policy Committee, and which simultaneously dictated the nature of the Committee. The first impetus was supplied simply by the fact that an update to the original District OEDP was long overdue. The Economic Development Committee, formed in conjunction with the preparation of that document, had long since become totally inactive. It was determined that an update could not logically be undertaken, let alone seen through to completion, without some form of committee to guide the effort.

A second factor contributing toward the creation of the committee was the addition of staff personnel to the economic development division of ARDC

with formidable training and experience in pure economics and analysis techniques. This would prompt new programs to be initiated by the division, such as impact analysis, economic monitoring, and attempting to establish an economic information system. A committee was thought necessary to add both direction and authority to these new planning approaches.

The crucial question was one of membership. The argument was made that the committee, which may be making important decisions and recommendations affecting the Region, must be representative of the region geographically; this must be the first criteria for selection of members.

A second argument stated that the Commission was regionally based, the major economic sectors were of regional influence, and recommendations emanating from the committee should subsequently be made on issues of regional significance. This being the case, specific industries, public sectors, and related interests with regional importance should provide the basis for committee selection.

The second approach was chosen, for one important reason. It allowed for the searching out of the most knowledgeable and qualified person for each position on the committee, without regard to geographic considerations. The Economic Policy Committee is made up of members from prominent positions in industry, transportation, energy, labor, agriculture, environmental organizations, and rural and urban government. The membership and by-laws of the Committee are contained in Appendix II. It is worth noting that a great degree of geographic representation was attained, despite the fact that this played a minor role in Committee selection.

The Economic Policy Committee has proven to be one of the most active and involved advisory committees of ARDC. The members are enthusiastic and sincere about their role within the Commission.

The Overall Economic Development Guide (OEDG) is a product of the Committee. Rather than merely overseeing staff output, the Committee took

the lead role in development of the OEDG. They are responsible for the format, scope, and contents of the document. At meeting after meeting, they reviewed, edited, and expanded staff writings. They submitted reports, oral and written, based on their own areas of expertise. They provided an invaluable resource of first-hand information and data, otherwise virtually inaccessible to ARDC.

The value of having a committee so actively involved in the planning process is obvious. If the committee is literally responsible for the OEDG, the members know it, and use it.

The Committee formulated the goals and policies contained in Chapter III. They structured the priority and review process contained in Chapter V. in a way that it would be responsive to those goals and policies. And most importantly, they conduct that process exactly as it has been prescribed. Programs and projects seeking state and federal economic development funds are subjected to a rigorous and unbiased review from all perspectives, including economic feasibility, environmental concerns, finance, minority considerations, and regional significance.

The economic planning process, as it relates to the goals of the Development District, the Regional Commission, and the Economic Development Administration, could not be better exemplified than it is by the Economic Policy Committee of ARDC.

II. DISTRICT PROGRAM

As part of the Introduction to this document, an important observation was made, which bears repetition at the outset of this chapter. The economic development potentials which were identified in the original OEDP are those which today continue to comprise the elements around which our efforts as a development district must concentrate. This fact is in no way a comment on the relative success of the District program. The physical nature of the region, i.e. its human and natural resources, is that which dictates its potential economically, independent of public or private attempts to capitalize on this potential.

It is to the District's credit, however, that these economic development potentials were singled out at a point in time when their critical importance to the area was far less evident than it is today. By capsulizing the economic potential of the area at the outset of the OEDP, the District was then in a position to develop goals, policies, and programs designed specifically to actualize on this potential. And this is precisely what was done. After examining the District at great length throughout the document, a list of sixty specific goals were formulated. It can be stated, almost a decade later, that virtually every one of those original goals, and many more have been addressed, either by the public or private sector, or both. Many goals have been met, some have been far exceeded, while others have been partially accomplished.

Realistically, such an energetic set of projects and programs must at that time have been considered a social and economic prescription for the District, rather than a work program or strategy for the District

organization. Although certainly an admirable set of objectives, they were substantially beyond the effective scope of the agency.

How then, can the success of the District program be assessed relative to the attainment of these far-reaching goals? The answer is simply that it cannot be measured in any quantifiable sense.

Over the years, businesses and industries have flourished and failed, communities have prospered and floundered, thousands of jobs have been created, saved, and lost. The net effect of all of this, if measurable at all, is not a true indicator of the success of the District program, whether that effect be positive or negative.

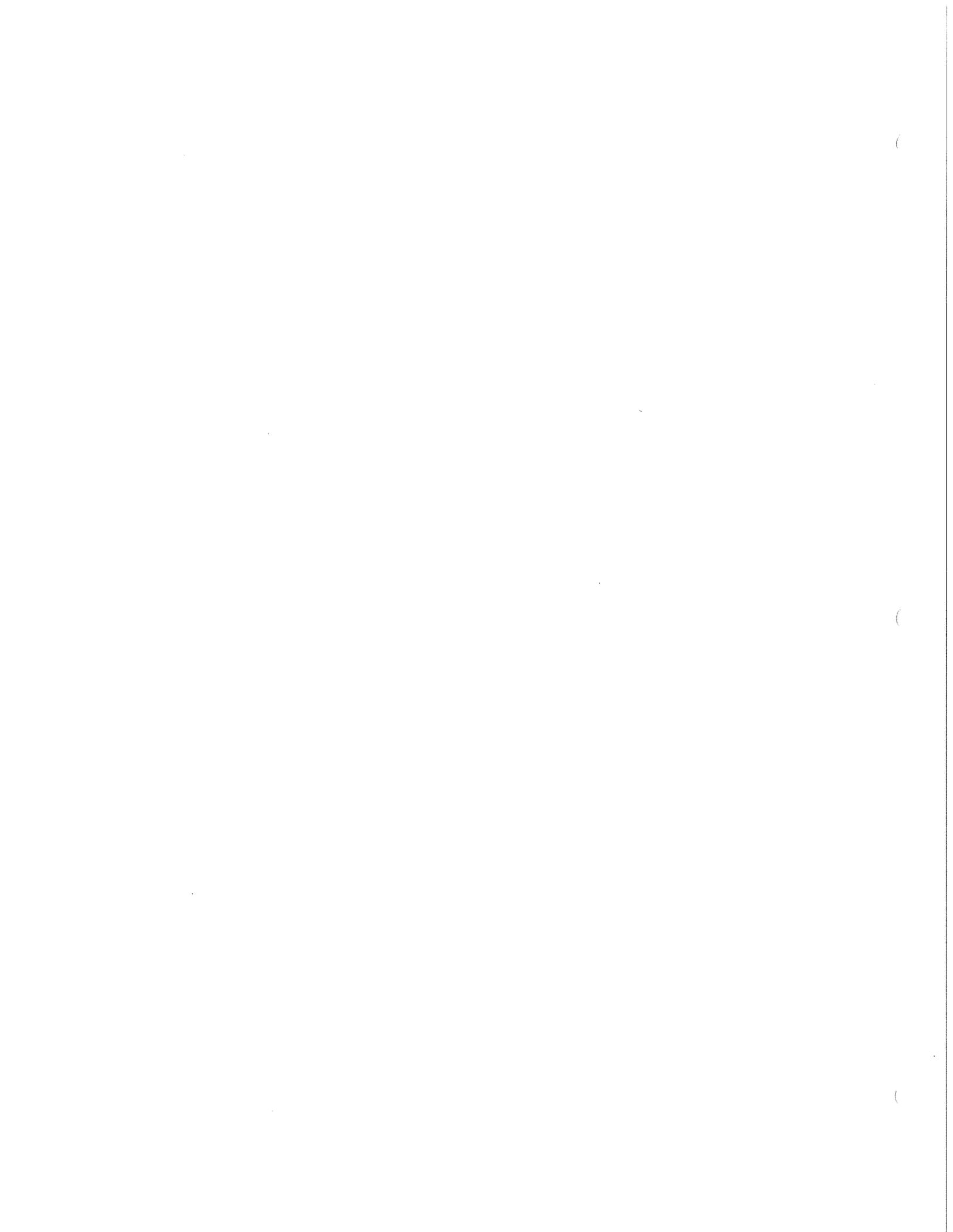
The key to assessing the District program over the past ten years lies in a reiteration of its intended role as it was originally spelled out, and how well it has played this role during that time. The Arrowhead EDD was intended to be a catalyst rather than a cause. If economic development can be compared to a chemical reaction requiring many ingredients, then perhaps the District can be considered the bunsen burner, supplying the catalyst of heat. Different reactions need varying degrees of heat in order to occur; others are spontaneous and occur simply by mixing the proper ingredients. The amount of heat required is unique to each reaction. Similarly, the involvement of the organization in particular projects, programs, and developments has been dictated primarily by the degree to which it was deemed necessary for accomplishment of the task at hand. In some cases, certainly, the 'heat' supplied by the District added the essential element to otherwise inert ingredients. In others, District involvement merely facilitated development by making contacts, cutting red tape, and offering technical assistance. And in still others, the District was simply a sideline proponent, contributing encouragement and support.

More appropriate, therefore, than an assessment of the District as an organization with a program or set of programs to promote, is an assessment of the District as a group of people, communities, and counties; as an economic entity. This is precisely what is offered in Chapter IV. Each major economic sector or concern, most or all of which relate directly to the aforementioned economic development potentials, is examined individually, not only from an historical perspective, but in light of present and future developments. These sub-chapters contain assessments of all pertinent sectors of the Arrowhead economy: a study of the Growth Center and its role related to the region as a whole; a summary of industrial park development; an examination of natural resource development and its relative dominance of the area economy; a report of the tremendous strides in transportation systems development; and an in-depth look at the tourism industry. Included also are assessments dealing with employment, income, migration, and manpower programs.

It is felt that the assessments contained in Chapter IV comprise the framework of the OEDG. They provide insight into the socio-economic inventory, and likewise supply the information necessary to formulate meaningful goals and policies.

With regard to Economic Development District involvement and the effect of District programs on these past, present, and future developments, it suffices to say that the Arrowhead EDD was there through it all, advocating, mediating differences, getting people together, honoring local priorities and decisions, and contributing where it could. The measure of success of the District programs lies somewhere in the gradual, but undeniable change in the collective attitude of the Arrowhead Region. The confidence manifested in the organization by the member communities, the optimism which has grown with respect to the future of the economy, and the teamwork and

communication which has been fostered through District participation at all levels of government, are the true, though immeasurable, factors with which to assess the overall effect of the District programs.



CHAPTER II

SOCIO-ECONOMIC INVENTORY OF THE ARROWHEAD REGION

Chapter II

SOCIO-ECONOMIC INVENTORY OF THE ARROWHEAD REGION

TOTAL POPULATION AND ABSOLUTE CHANGE, 1960 - 1970 - 1974 (Table II-1)

The Region's population followed an up and down pattern between 1960 and 1974, losing a net total number of people of 15,354 between 1960 and 1970 but gaining a total of 1,297 from 1970 to 1974.

Among the seven counties, the ten-year period revealed declining trends in all but Carlton and Cook Counties. The four year period was a complete reversal, where all except Lake and St. Louis Counties, gained in total population.

A lack of information exists for the City of Duluth for 1974, thus preventing further analysis. It might be assumed that for total population changes, the pattern would be similar to that of St. Louis County. An estimate by the Department of the Treasury, Office of Revenue Sharing, estimates the 1973 population for the City of Duluth to be 98,030.

With increased activity in the Iron Range area it is reasonable to expect some population increase. Most of the taconite plant expansions began in 1974 and should be completed by 1977. Announced employment expectations at five major developments indicate immediate construction employment total of approximately 5,800 and a permanent employment increase of between 2,600 and 3,000 persons. Due to the methodology used in the population estimates of the State Demographer, it is quite unlikely that consideration is given to major economic events as mentioned.

Another area of puzzling nature is the relatively rapid increase in population within Aitkin County. Several factors may have combined to

to produce the upward trend. First of all, the county is noted for a recent growth in its industrial development. Two industrial parks have been built since 1970, one at Aitkin and the other at McGregor. Prior declining population trends during the 1960's created a surplus housing market which may now have resulted in reasonably priced housing for many in-migrants. The area is also noted for its recreational amenities. Tourist industry employment may be on the upswing. Another factor which may have induced former residents to return is the economic hardships experienced in their previous labor market locations. These people may have returned home to familiar surroundings to ease the hardship and possibly take advantage of the developing agricultural industry in Aitkin County. Mining expansion on the Mesabe Iron Range may have provided new job opportunities for Aitkin County residents who were former Cuyuna Range workers.

Aitkin County is also characterized as having a relatively high percentage of persons over age 65, thus providing a strong incentive for elderly housing development, especially in Aitkin and McGregor. These factors seem to affect each age segment of the population, thus providing a plausible set of reasons for the noted upsurge in population.

PERCENT CHANGE IN POPULATION BY DECADE AND FOR 1974 (Table 2)

During the decade of the 40's, the percent change in total population in the Region declined. The trend changed during the 50's reflecting growth similar to that of the state and the nation. The 60's saw the Region declining again. The most recent period shows indications of a new growth pattern.

Aitkin County has experienced a continual decline since 1940, but is beginning to reveal a relatively large percentage gain since 1970. Four counties - Carlton, Cook, Itasca, and Lake have percent changes in excess

of the overall Regional rate from 1940 through 1974. Koochiching and St. Louis Counties reflect a slower growth rate than the Region during the same period.

POPULATION PROJECTIONS, 1975-2000 (Table II-2a)

The latest population projections available are those by the State of Minnesota, Office of State Demographer. Projections are presented in Table 2a for five year intervals from 1975 through 2000.

The State Demographer cautions users that these projections are not predictions. They are the result of making assumptions or judgments about the future levels of births, deaths, and migration. Once these judgments have been made, the population projections simply work out present and future relationships. The usefulness of population projections lies in their ability to focus concern where it should be focused on the components of change likely to produce the greatest future variations in the population.

The greatest service any projection can offer is to enhance our awareness of possible options and to provide insight into which "doors" should, or should not be closed. Projections are subject to change whenever it is evidenced the assumptions are not being realized. This indicates that a system of monitoring current population change would be desirable.

Statewide projections selected as reasonable and possible reflect a slowing of population growth in Minnesota for the rest of the century. Variations in growth by decade reveal impacts in several areas of concern, including, the number of children going to elementary schools, fewer persons below age 20, more people over age 65, and greater dispersion of the population throughout the State.

The Arrowhead Region is projected to decline slightly from 1975 to 1980, rise during the 1980's, and then decline again during the 1990's. The peak population should occur near 1985 and taper off to below the 1970 level by the year 2000.

During the next five years from 1975 to 1980, Aitkin and St. Louis counties are projected to decline by nearly one-percent. Cook County should remain stable, and the remaining counties should increase.

During the 1980's, all counties are projected to increase in population, except for St. Louis (a 1% decline) and Cook (no gain). The greatest projected gain is for Carlton County with 5.5%.

All counties are projected to lose population in the 1990's except for Aitkin (a 1.6% gain) and Cook (a 5.7% gain). The greatest percentage loss is shown for Itasca County (-2.9%).

POPULATION PROJECTIONS, 1975-2000 (Table II-2b)

The last set of projections published by the previous official source for the State of Minnesota, the State Department of Health, were released in June of 1972. A different set of assumptions produced a drastically accelerated rate of projected decline for the Region and its counties. Primary consideration in understanding this phenomenon was the high rate of out-migration experienced during the 1960's. As a result, the Region was projected to decline 3.6% in the last half of the 1970's, decline another 11.5% during the 1980's, and decline 13.1% during the 1990's. Aitkin County was shown to have the greatest rates of decline among the seven counties and Carlton County to have the lowest rates of decline. No county within the Arrowhead was projected to gain population.

These figures have been superceded by the projections of the State Demographer, prepared in June 1975.

MIGRATION IN THE ARROWHEAD REGION AND SUB-AREAS, 1960 - 1970 (Table II-3)

The Region as a whole experienced a net out-migration rate of 12.6% which resulted in an out-migration of 43,310 persons during the 60's. Lake County led the exodus with a rate of 17.3%, while Aitkin County had the lowest out-migration rate of 8.2%. In absolute terms, St. Louis County had the largest number of out-migrants, while Cook County had the least.

MIGRATION IN THE ARROWHEAD REGION AND SUB-AREAS, 1970 - 1974 (Table II-4)

Net migration trends have practically turned around since the 60's. Except for St. Louis County, Carlton County and Lake County, the region experienced a net in-migration from 1970 to 1974. The overall rate, however, including the three counties which had net out-migration rates, still reflected a slight net out-migration trend. There appears to be a trend toward a positive net in-migration developing for the majority of counties in the region.

URBAN AND RURAL POPULATION STRUCTURE, 1960 -1970 (Table II-5)

The significant fact about the urban-rural change is that the rural change was not as severe as the urban change during the 60's. Urban population declined in all counties of the Region, which was in direct contrast with the state and the national trends. Rural population declined in only three of the seven counties - Aitkin, Itasca, and Koochiching. This is also contrary to the state and national trends, where rural decline was more prevalent.

Observation of the migration data reveals a significantly lesser rate of out-migration of rural population than in the urban sector. This was true for all counties except Itasca.

The state trend for total population differed, revealing an increasing urban sector, but a declining rural population. Migration rates for the state followed the same pattern as for total population.

Data for the nation as a whole revealed an increasing population in the total urban sector and a decline in the rural population. The percent changes were about the same as for the state of Minnesota. No migration data were available on the national level.

The urban-rural dichotomy since 1970 appears to follow the same pattern of continued rural growth. Simple observation of the counties that gained population from 1970 to 1974 and those that lost, reveals that those that gained population were predominantly rural

areas. There were only two counties that lost population, St. Louis and Lake. Both were predominantly urban in nature, in terms of percent of urban population compared to total population. (See Table II-5)

AGE DISTRIBUTION STRUCTURE IN % OF TOTAL POPULATION, 1960 - 1970 (Table II-6).

The age distribution structure in the region in 1970 was about the same as that for the State. The largest differences, in terms of percentage-points, was in the 20-34 age group (3.1 points) and in the 35-64 age group (3.0 points). The spread in points was much less in 1960 between the region and State. (See Table II-6)

Slightly greater differences appear among the counties. Aitkin County has the lowest percent of persons under 5 years and the highest percent among those over 65 years. Koochiching County had the highest portion of 20-34 year olds and also was the only county that had a higher percent in this category than the U.S. average; Aitkin County had the lowest percent. Cook County had the highest percent in the 35-64 year old category; Koochiching County had the lowest portion.

Koochiching County	More in the 20-34 year old cohort, but less in the major productive years of 35-64 years old.
Lake County	Fewer under 5 years, but more in the 15-19 and 65 and over age groups.

LABOR FORCE PARTICIPATION (Table II-7)

The most noticeable change which occurred in the Region during the 60's was the mix among male and female participants. First of all, it is surprising to note a larger number of females than males in 1970 compared to 1960 in the total population 14 years and older. This pattern is generally true for most counties within the Region. (Note: All labor force data is from the U.S. Census Bureau which reflects persons who responded from the basis of their residence, not from the place of work.

LABOR FORCE PARTICIPATION RATE (Table II-8)

The total participation rate for the Region as a whole was down slightly, which was contrary to state and national trends. The only county in the Region which improved its rate was Aitkin.

Individual counties varied in the composition of labor force characteristics. Cook County had the highest overall rate in 1970 with 56.3% of its population over 14 years old participating in its labor force; it was also the highest in 1960 with 57.5%.

The lowest overall rate was found in Aitkin County in 1970 with less than half (45.2%) of its 14 years plus population in the labor force.

Lake County had the largest male participation rate (71.10%) while Aitkin County had the lowest, 59.8%.

The highest female participation rate was in Cook County (46.2%) and the lowest in Itasca County with 29.5%.

LABOR FORCE COMPONENTS, 1960-1970 (Table II-8a)

Information from the U.S. Census of Population reports figures on the basis of the place of residence of the worker, on April 1st of the Census year. This information differs from the monthly and annual reports published by the State Department of Employment Services (MDES) as shown in Table 8c, since the MDES data is based on figures reported at the place of work and are adjusted to reflect average annual monthly levels. Thus, comparisons between the two data sources is difficult in making valid conclusions.

According to the 1970 Census of Population, the total labor force in the Arrowhead Region numbered 121,585, down slightly from the 1960 level of 121,790. Employment, however, increased 2,201 from 1960 to 1970. Unemployed persons numbered 2,374 fewer in 1970 than in 1960. The unemployment rate dropped 1.9 percentage points since the last census. Thus, the economic growth occurring in the 1960's had some positive influence on the Region.

Although Carlton and Itasca Counties supported similar sized labor forces, there was a significant difference in their composition. The number of unemployed in Itasca County far out-numbered those in Carlton. This is reflected quite obviously in the wide difference in the rates of unemployed.

LABOR FORCE COMPONENTS OF THE MINORITY (NON-WHITE) POPULATION, 1970 (Table II-8b)

Although the minority labor force in the Region represents only 0.9% of the total labor force in the Region, it comprises 1.7% of the total number of unemployed. Significantly high rates of unemployment are found in the Region and in most of its counties. The Regional rate of unemployment is twice that of the State. The rates among the counties range from 0.0% in Lake County to a high of 43.5% in Cook County. High rates are also found in Aitkin, (21.1%) and, Carlton (26.2%) counties.

WORK FORCE ESTIMATES IN THE ARROWHEAD REGION AND SUB-AREAS, 1974 and 1966

The State of Minnesota, Department of Employment Services, generates work force estimates on a monthly and annual basis. These estimates differ from the information supplied by the U.S. Census Bureau in that the State gathers its data from the place of work (the employer). The Census Bureau obtains its data from the place of residence of the worker. Generally, the term "work force" has been used to designate the state information. In January of 1975, the state changed its methodology and began reporting its information in terms of a "labor force" concept, whereby a factor was applied to their original data to convert it to a figure representative of the place of residence of the worker, or the so-called "labor force" concept. All data are now reported in the labor force concept since January 1975.

Because analysis of labor force data from the Census Bureau is limited to decennial frequency, it is helpful to use the work force data generated by the MDES for observance of annual changes. Immediately it is apparent that the region has realized a severe increase in the number of unemployed from 1966 to 1974, rising 4,300 in the eight-year period. The rate of unemployed rose from 5.3% to 8.1%. In all counties, except Aitkin, the rate of unemployed increased.

By examining the three components of the work force, we begin to see what impact the economic downturn had on unemployment. During the eight-year period, the work force increased at a rate of 8.0%; the total employed rose only 4.7%. When we look at the trend in the number of unemployed, this component shot up by 66.3%.

Comparable data on the United States is not readily available. Monthly reports from the Bureau of Labor Statistics

and the MDES are summarized here for the month of June for 1975 and 1966 to give some idea of the relationship between the two geographic areas.

	<u>Minnesota</u> <u>Work Force Concept</u>	<u>United States</u> <u>Labor Force Concept</u>
<u>Work Force</u>		
June, 1975	1,966,000	94,000,000
June, 1966	1,564,000	77,600,000
% change	25.7	21.1
<u>Employed</u>		
June, 1975	1,812,300	85,400,000
June, 1966	1,515,400	74,000,000
% change	19.6	15.4
<u>Unemployed</u>		
June, 1975	153,600	8,600,000
June, 1966	48,600	3,600,000
% change	216.0	138.9
<u>Rate of Unemployed</u>		
June, 1975	7.8	9.1
June, 1966	3.1	4.6

Source: U. S. Department of Labor, Employment and Earnings periodical.
MDES, Employment and Earnings periodical.

FAMILY INCOME CHARACTERISTICS (Table II-9)

Median family income for the region, as measured in current dollars, remained below both the state and national levels at 88% and 92% respectively.

St. Louis County, at \$8,997 and the City of Duluth, at \$9,313, led the region's sub-areas in median family income in 1969. Neither surpassed the state (\$9,931) or national (\$9,590) levels. Aitkin County had the lowest median family income in 1969 at \$5,900.

Although St. Louis County had the largest number of families below the 1969 poverty level, Aitkin County led the way with the highest percentage of families below the poverty level - 32.1%. Lake County had the lowest percent with only 10.3%.

PER CAPITA INCOME ESTIMATES (Table II-9a)

Per capita income in the Arrowhead Region averaged \$4,494 in 1974 as estimated by the U.S. Department of Commerce, Bureau of the Census. This represents a 69.9% gain over the 1969 figure of \$2,645 as reported in the 1970 Census of Population by the U.S. Bureau of the Census. This gain was less than the increase experienced in the State of Minnesota over the same period.

Among the counties, St. Louis had the highest 1974 per capita income with \$4,839 and Aitkin had the lowest with \$3,149. The 1969 figures reflected mixed relative positions among all seven counties. None of the counties, however, had per capita incomes higher than the state average of \$5,421.

St. Louis County reflected the greatest growth from 1969 to 1974 gaining 76.2% in its per capita income. Itasca County followed with a 65.2% growth rate. Only St. Louis County reflected a growth rate surpassing that of both the regional and United States averages. The remaining

counties experienced lower growth rates than either the region or state experienced.

MINORITY POPULATION (Table II-10)

The 1970 minority population in the region numbered nearly 5,000 persons, up 22% from 1960. The corresponding increases were 63% and 24% for the state and U.S. respectively. The minority segment includes such classifications as Negro, American Indian, Japanese, Chinese, Filipino, and a category referred to as 'all others'. American Indians comprised about two-thirds of the entire minority population. Negroes accounted for about one-fifth. These two segments together made nearly 90% of the minority population in the region.

Indian Reservations are located in Carlton County (Fond du Lac Indian Reservation), Koochiching County (with the Nett Lake segment and the Vermilion Lake segment making up the Bois Forte Indian Reservation), and in Cook County (Grand Portage Indian Reservation). Parts of the Fond du Lac and Bois Forte reservations are located in St. Louis County.

The majority of Negro population is located in the City of Duluth where the U.S. Air Force maintains an air base.

COUNTY BUSINESS PATTERNS, 1965 and 1973 (Table II - 11a, b, c, d)

The U.S. Department of Commerce has published annually this series of reports for every state and county in the U.S.A, since 1964. County Business Patterns statistics provide information on reporting units, payroll, and employment by industry classification and county location. They are useful for analyzing market potential, measuring the effectiveness of sales and advertising programs, setting sales quotas and budgets, analyzing the industrial structure of regions, making basic economic studies of small areas, and serving other business uses. They are also useful to government agencies for administration and planning purposes.

The data is derived from employment and payroll information reported on Treasury Form 941, Schedule A, supplemented by a special survey of multi-unit companies. The Social Security Administration cooperates closely with the Bureau of the Census in the development and the assemblage of the data. The employment data source in this series is basically that employment covered by the Federal Insurance Contributions Act (FICA). Further definitions are contained in the actual County Business Patterns publication, and are available at most public libraries.

The Arrowhead Region was the location of 5,365 reporting units of business concerns as of 1973, employing 78,687 persons during the mid-March pay period, and providing a payroll of over \$142 million during the first quarter payroll increased by \$60,232,000 (73.6%) from 1965 to 1973.

The types of industry categories most prevalent in terms of reporting units were Retail Trade (1,813) and Services (1,515). Retail Trade with 17,551 employees, Manufacturing with 17,139 employees, and Services with 15,736 employees, in the mid-March pay period, were the industries of heaviest employment. Manufacturing and Mining were the sources of the highest payrolls providing \$36,666,000 and \$26,701,000 respectively.

Due to the concentration of taconite and related mining activities in the region, the percentage of employees in the mining category is many times that of the state percentage employment distribution among total statewide employment by industry. The region has a lower percentage of its employed in the manufacturing category than the state percentage. The only other categories exhibiting as much as two percentage point differences below the state employment percentage distribution were Finance, Insurance and Real Estate, and Wholesale Trade.

MANUFACTURING STRUCTURE BY EMPLOYMENT, VALUE ADDED, FOR 1972 and 1967 (Table II-12)

Within the manufacturing industry structure in the region, there were 419 establishments listed in the 1972 Census of Manufacturers. These establishments employed a total of 14,500 persons and disbursed a payroll of \$119 million. More than \$227 million in value added was contributed to the economy. Although employment dropped by 1,600 employees, value added increased by \$44.5 million or 24.4%.

St. Louis, Carlton, and Itasca Counties accounted for over 96% of the value added among the counties for which information was available.

1972 CENSUS OF BUSINESS: RETAIL, WHOLESALE, AND SELECTED SERVICES
(Tables II-13a, b, c)

Retail Trade:

Retail establishments numbered 3,447 in the Region in 1972. Total sales reached \$680 million and annual payrolls amounted to over \$79 million. Sales per establishments were only 85% of the State average.

Among the counties, sales ranged from \$8.8 million in Cook County to \$481 million in St. Louis County. Annual payrolls ranged from \$829,000 in Cook County to over \$58 million in St. Louis. Nearly three-fourths of the total number of paid employees as of the week of March 12, 1972 were employed in St. Louis County. Sales per establishment were only 75% of the State average, for St. Louis County. In Aitkin County, sales per establishment were only 48% of the State average.

Wholesale Trade:

There were 513 Wholesale establishments doing business in the Arrowhead Region during 1972. Sales generated were \$548 million and total annual payrolls amounted to over \$38 million. Wholesale businesses provided over 4500 jobs throughout the Region.

Sales per establishment averaged over one million dollars in the Region compared to \$1.7 million for the State average. Aitkin County had the highest sales per establishment average among the counties outside of St. Louis County.

Selected Services:

The Region's 2,468 Selected Services establishments had over \$98 million in receipts and provided a payroll of nearly \$25 million for almost 5200 employees.

Receipts per establishment for the Region were only two-thirds of the State average. St. Louis County receipts per establishment were about 86 percent of the State average.

TABLE II-1

TOTAL POPULATION AND ABSOLUTE CHANGE, 1960, 1970, and 1974

FOR ARROWHEAD REGION AND SUB-AREAS

	Total Population			Absolute Change		
	1960	1970	1974	60-70	70-74	60-74
Arrowhead Region	344,957	329,603	330,900	-15,354	1,297	-14,057
Minnesota	3,413,864	3,804,971	3,917,000	391,107	112,029	503,136
United States	179,323,175	203,235,298	211,389,000	23,888,751	8,177,074	32,065,825
Aitkin County	12,162	11,403	13,000	-759	1,597	838
Carlton County	27,932	28,072	28,600	140	528	668
Cook County	3,377	3,423	3,600	46	177	223
Itasca County	38,006	35,530	38,200	-2,476	2,670	194
Koochiching County	18,190	17,131	17,600	-1,059	469	-590
Lake County	13,702	13,351	13,100	-351	-251	-602
St. Louis County	231,588	220,693	216,800	-10,895	-3,893	-14,788
City of Duluth	106,884	100,578	NA	-6,306	NA	NA

NOTES: 1960 and 1970 data are for April 1; 1974 data are estimates as of July 1, 1974

SOURCE: U.S. Department of Commerce; Census Bureau; -1970 Census of Population; P-25, No. 598. State of Minnesota, State Planning Agency, Office of State Demographer-July 1, 1974 estimates (provisional)

PERCENT CHANGE IN POPULATION BY DECADE AND FOR 1973 FOR ARROWHEAD REGION AND SUB-AREAS, 1940-1973

Table II-2

	1940- 1950	1950- 1960	1960- 1970	1940- 1974	1950- 1974	1960- 1974	1970- 1974
Arrowhead Region	-1.0	12.8	-4.5	7.1	8.2	- 4.1	0.4
Minnesota	6.8	14.5	11.5	40.3	31.3	14.7	2.9
United States	14.5	16.5	13.3	59.9	39.7	17.9	4.0
Aitkin County	-11.9	-15.1	-6.3	-27.2	- 9.3	6.9	14.0
Carlton County	1.5	13.6	0.5	18.1	16.3	2.4	1.9
Cook County	-4.3	16.4	1.4	18.8	24.1	6.6	5.2
Itasca County	1.0	12.6	-6.5	15.8	14.6	0.5	7.5
Koochiching County	-0.1	7.2	-5.8	4.0	4.1	- 3.2	2.7
Lake County	11.9	77.5	-2.6	88.3	68.4	- 4.4	-1.9
St. Louis County	-0.5	15.1	-4.7	4.8	5.2	- 6.4	-1.8
City of Duluth	3.4	2.3	-5.9	NA	NA	NA	NA

Source: U.S. Department of Commerce, Census Bureau; Statistical Abstract of the United States, 1974

Table II-2a
POPULATION PROJECTIONS, 1975-2000

	1970	1975	1980	1985	1990	1995	2000
Arrowhead Region	329,603	331,100	330,300	332,700	332,300	330,200	325,400
Minnesota	3,305,069	3,923,000	4,076,800	4,252,200	4,421,500	4,555,700	4,652,800
United States (Series II)	204,875,000	213,450,000	222,769,000	234,068,000	245,075,000	254,495,000	262,494,000
Aitkin County	11,403	12,400	12,300	12,600	12,600	12,600	12,800
Carlton County	28,072	28,900	29,300	30,300	30,900	31,100	30,800
Cook County	3,423	3,500	3,500	3,500	3,500	3,600	3,700
Itasca County	35,530	36,500	36,600	37,700	37,700	37,500	36,400
Koochiching County	17,131	17,600	17,800	18,200	18,400	18,300	17,800
Lake County	13,351	13,500	13,700	14,000	14,200	14,200	13,900
St. Louis County	220,693	218,700	217,100	216,400	215,000	212,900	210,000

Source: State of Minnesota, Office of State Demographer, State Planning Agency (SPA), June 1975
 U.S. Department of Commerce, Bureau of the Census, 1970 Census of Population, April 1, 1970
 U.S. Department of Commerce, Bureau of the Census, Population Estimates & Projections
 Series P-25, No. 541, February 1975

TABLE II-2b

POPULATION PROJECTIONS 1975-2000

	1970	1975	1980	1985	1990	1995	2000
Arrowhead Region	329,603	315,355	303,856	285,497	269,055	251,706	233,941
Minnesota	3,304,971	3,969,113	4,155,146	4,347,279	4,530,759	4,689,399	4,836,278
United States	204,875,000	213,450,000	222,769,000	234,068,000	245,075,000	254,495,000	262,494,000
Aitkin County	11,403	10,784	9,345	9,005	8,117	7,274	6,433
Carlton County	28,072	27,236	26,192	25,160	24,182	23,114	21,863
Cook County	3,423	3,268	3,075	2,867	2,672	2,473	2,253
Itasca County	35,530	33,422	31,067	28,729	26,463	24,251	21,956
Koochiching County	17,131	16,130	15,052	14,001	12,966	11,941	10,862
Lake County	13,351	12,582	11,828	11,163	10,489	9,714	8,865
St. Louis County	220,693	211,933	203,697	194,572	184,166	172,939	161,709
City of Duluth	100,578	96,738	92,931	88,190	82,626	77,078	72,069

SOURCE: State of Minnesota, Department of Health, March 1972
U.S. Department of Commerce

Table II-3
MIGRATION IN THE ARROWHEAD REGION AND SUB-AREAS, 1960 to 1970

	1960	Total	Total	1970	Net Migration	
	<u>Population</u>	<u>Births</u> <u>60-69</u>	<u>Deaths</u> <u>60-69</u>	<u>Population</u>	<u>1960 to 1970</u> <u>Number</u>	<u>Rate</u>
Arrowhead Region	344,957	63,675	35,719	329,603	-43,310	-12.6
Minnesota (000's)	3,413.9	748.6	326.4	3,805.1	-31.0	0.9
United States (000's)	179,979	39,033	18,192	203,810	3,070	1.7
Aitkin County	12,162	1,857	1,617	11,403	-999	-8.2
Carlton County	27,932	5,658	2,638	28,072	-2,880	-10.3
Cook County	3,377	689	353	3,423	-290	-8.6
Itasca County	38,006	6,698	3,438	35,530	-5,736	-15.1
Koochiching County	18,190	3,646	1,684	17,131	-3,021	-16.6
Lake County	13,702	3,026	1,001	13,351	-2,376	-17.3
St. Louis County	321,588	42,101	24,988	220,693	-28,008	-12.1
City of Duluth	106,884	21,471	12,879	100,578	-14,898	-13.9

NOTES: Net migration determined by adding and subtracting total births and deaths from 1960 through 1969 using the 1960 population. The resulting figure is then subtracted from the 1970 population figure which becomes the net migration. If the net migration figure is negative, it represents out-migration; positive, in-migration. Net migration rate-is expressed as a percentage net migration is of the 1960 population.

SOURCE: U.S. Department of Commerce Census Bureau-1960 and 1970 Censuses of Population. Minnesota Department of Health--Vital Statistics and Health Statistics reports.

Table II-4

MIGRATION IN THE ARROWHEAD REGION AND SUB-AREAS, 1970 to 1974

	April 1 1970 Population	Total Births 70-74	Total Deaths ¹ 70-74	July 1, 1974 Population	Net Migration 1970 to 1974 Number	% of '70
Arrowhead Region ²	329,603	20,000	15,300	330,900	-3300	-1.0
Minnesota	3,805,069	250,500	144,700	3,917,000	5505	0.1
United States ³ (in thousands)	203,235	14,308	8,260	211,389	2107	1.0
Aitkin County	11,403	600	700	13,000	1700	15.2
Carlton County	28,072	1,800	1,200	28,600	- 200	- 0.6
Cook County	3,423	200	200	3,600	200	5.2
Itasca County	35,530	2,300	1,600	38,200	1900	5.4
Koochiching County	17,131	1,200	700	17,600	100	0.4
Lake County	13,351	900	500	13,100	- 500	- 4.8
St. Louis County	220,693	13,000	10,400	216,800	-6500	- 2.9
City of Duluth	100,578	NA	NA	NA	NA	NA

NOTES: Estimates are shown to the nearest hundred.

¹Births and deaths are based on reported vital statistics from April 1, 1970 to December 31, 1973, with extrapolations to June 30, 1974. Net migration is the difference between net change and natural increase.

²Calculated by Arrowhead Regional Development Commission staff.

³Resident population.

SOURCE: State of Minnesota, Office of State Demographer - Population Estimates for Minnesota Counties, 1974.

TABLE II-5

URBAN AND RURAL POPULATION STRUCTURE, 1960 to 1970

	URBAN		RURAL		URBAN		RURAL	
	1960	1970	1960	1970	Tot. Pop.	Migration	Tot. Pop.	Migration
Arrowhead Region	203,531	189,298	141,426	140,305	-7.0	-15.0	-0.8	-9.1
Minnesota (in thousands)	2,122.6	2,527.3	1,291.3	1,277.7	19.1	6.3	-1.1	-12.1
United States (in thousands)	125,269	149,325	54,054	53,887	19.2	NA	-0.4	NA
Aitkin County	0	0	12,162	11,403	-	-	-6.3	-8.2
Carlton County	9,013	8,699	18,919	19,373	-3.5	-15.2	2.4	-8.0
Cook County	0	0	3,377	3,423	-	-	1.4	-8.6
Itasca County	7,265	7,247	30,741	28,283	-0.3	-12.5	-8.0	-15.7
Koochiching County	6,778	6,439	11,412	10,692	-5.0	-21.4	-6.3	-13.8
Lake County	8,418	7,941	5,284	5,410	-5.7	-19.6	2.4	-13.7
St. Louis County	172,057	158,972	59,531	61,721	-7.6	-14.6	3.7	-5.0
City of Duluth	106,884	100,578	0	0	-5.9	-13.9	-	-

SOURCE: U.S. Department of Commerce, Bureau of the Census. Minnesota Department of Health.

NOTE: Percent change in migration represents net migration divided by total urban or rural population; which is the net migration rate.

TABLE II-6

AGE DISTRIBUTION STRUCTURE IN PERCENT OF TOTAL POPULATION, 1960 and 1970

	<u>Under 5 Years</u>	<u>5-14 Years</u>	<u>15-19 Years</u>	<u>20-34 Years</u>	<u>35-64 Years</u>	<u>Over 65 Years</u>
Arrowhead Region						
1960	11.9	21.0	7.3	16.1	33.0	10.8
1970	7.6	21.3	10.3	16.6	32.6	11.7
Minnesota						
1960	12.2	20.7	7.4	17.4	32.0	10.3
1970	8.7	21.5	9.8	19.7	29.6	10.7
United States						
1960	11.3	19.8	7.4	18.8	33.7	9.2
1970	8.4	20.0	9.4	20.3	32.0	9.9
Aitkin County						
1960	12.4	14.4	7.8	12.0	34.3	15.4
1970	6.1	20.3	8.6	11.4	34.4	19.2
Carlton County						
1960	12.2	21.2	6.9	16.4	32.8	10.5
1970	8.3	23.0	9.6	15.8	32.8	10.5
Cook County						
1960	12.2	21.9	6.8	16.2	33.8	9.1
1970	7.5	21.0	8.7	15.3	35.5	12.1
Itasca County						
1960	12.2	23.5	8.1	14.9	32.1	7.3
1970	7.7	22.9	11.0	14.0	33.1	11.3
Koochiching County						
1960	12.7	24.3	7.8	15.3	31.0	8.9
1970	8.0	22.9	11.0	20.7	27.4	9.7
Lake County						
1960	15.4	22.0	5.8	21.0	29.2	6.7
1970	8.1	25.0	10.0	17.0	31.6	8.4
St. Louis County						
1960	11.5	20.4	7.3	16.2	33.4	11.2
1970	7.6	20.6	10.3	17.0	32.7	11.8
City of Duluth						
1960	10.7	18.8	7.4	16.5	34.1	12.5
1970	7.6	18.8	10.1	18.8	31.4	13.4

TABLE II-7

LABOR FORCE PARTICIPATION OF POPULATION 14 YEARS OLD AND OVER

	Population 14+ Years			Labor Force 14+ Years		
	Male	Female	Total	Male	Female	Total
Arrowhead Region						
1960	119,125	117,583	236,708	87,034	34,756	121,790
1970	118,022	123,470	241,492	79,138	42,447	121,585
Minnesota						
1960	1,147,981	1,196,494	2,344,475	887,774	411,191	1,298,965
1970	1,317,587	1,418,152	2,735,739	963,315	592,214	1,555,529
United States						
1960	61,315,298	64,961,254	126,276,552	47,467,720	22,409,756	69,877,476
1970	71,492,364	77,914,869	149,407,233	52,076,663	30,820,770	82,897,433
Aitkin County						
1960	4,507	4,175	8,682	2,928	934	3,862
1970	4,322	4,305	8,627	2,587	1,315	3,902
Carlton County						
1960	9,701	9,294	18,995	7,117	2,904	10,021
1970	9,922	9,997	19,919	6,761	3,427	10,188
Cook County						
1960	1,221	1,058	2,279	912	403	1,315
1970	1,316	1,200	2,516	862	554	1,416
Itasca County						
1960	12,987	12,120	25,107	9,275	2,994	12,269
1970	12,792	12,849	25,641	8,294	3,789	12,083
Koochiching County						
1960	6,104	5,658	11,762	4,626	1,462	6,088
1970	6,175	6,062	12,237	4,226	2,072	6,298
Lake County						
1960	4,590	4,179	8,769	3,721	1,144	4,865
1970	4,714	4,576	9,290	3,349	1,451	4,800
St. Louis County						
1960	80,015	81,099	161,114	58,455	24,915	83,370
1970	78,781	84,481	163,262	53,059	29,839	82,898
City of Duluth						
1960	36,825	39,911	76,736	26,801	13,815	40,616
1970	35,327	40,680	76,007	23,922	16,134	40,056

SOURCE: U.S. Department of Commerce, Census Bureau

TABLE II-8

LABOR FORCE PARTICIPATION RATE OF POPULATION 14 YEARS OLD AND OVER

	Participation Rate		
	<u>Male</u>	<u>Female</u>	<u>Total</u>
Arrowhead Region			
1960	73.1	29.6	51.5
1970	67.1	34.4	50.3
Minnesota			
1960	77.3	34.4	55.4
1970	73.1	41.8	56.9
United States			
1960	77.4	34.5	55.3
1970	72.8	39.6	55.5
Aitkin County			
1960	65.0	22.4	44.5
1970	59.8	30.6	45.2
Carlton County			
1960	73.4	31.2	52.8
1970	68.1	34.3	51.1
Itasca County			
1960	71.4	24.7	48.9
1970	64.8	29.5	47.1
Koochiching County			
1960	75.8	25.8	51.8
1970	68.4	34.2	41.5
Lake County			
1960	81.1	27.4	55.5
1970	71.0	31.7	51.7
St. Louis County			
1960	73.1	30.7	51.7
1970	67.3	35.3	50.8
City of Duluth			
1960	72.8	34.6	52.9
1970	67.7	39.7	52.7

SOURCE: U.S. Department of Commerce, Census Bureau

TABL II-8b

LABOR FORCE COMPONENTS OF THE MINORITY (NON-WHITE) POPULATION, 1970

(Person 14 years old and over in civilian labor force)

	Total Labor Force	Total Employed	Total Unem- ployed	Rate Unem- ployed
Arrowhead Region	1,147	985	162	14.1
Minnesota	22,911	21,214	1,697	7.4
United States	8,956,879*	8,337,010	619,869	6.9
Aitkin County	38	30	8	21.1
Carlton County	130	96	34	26.2
Cook County	46	26	20	43.5
Itasca County	155	130	25	16.1
Koochiching County	38	31	7	18.4
Lake County	17	17	0	0.0
St. Louis County	723	655	68	9.4
City of Duluth	448	409	39	8.7

*ARDC staff calculation that excludes from total labor force figure an adjustment for females in Armed Forces not shown separately.

TABLE II-8c

WORK FORCE ESTIMATES, ARROWHEAD REGION AND COUNTIES

	Total Work Force	Total Employed	Total Unem- ployed	Rate Unem- ployed
Arrowhead Region				
1974	132,630	121,690	10,790	8.1
1966	122,760	116,190	6,490	5.3
Minnesota				
1974 (in thousands)	1866.4	1769.7	96.7	5.2
1966 (in thousands)	1488.7	1442.5	46.2	3.1
United States				
1974		NOT AVAILABLE		
1966		NOT AVAILABLE		
Aitkin County				
1974	4,600	4,000	520	11.3
1966	3,500	3,000	450	12.9
Carlton County				
1974	11,100	10,100	1,000	9.0
1966	9,500	9,100	370	3.9
Cook County				
1974	1,730	1,590	140	8.1
1966	1,460	1,390	70	4.8
Itasca County				
1974	14,300	12,700	1,560	10.9
1966	12,700	11,600	1,120	8.8
Koochiching County				
1974	6,700	6,200	540	8.1
1966	6,100	5,800	290	4.8
Lake County				
1974	4,600	4,200	330	7.2
1966	4,700	4,500	190	4.0
St. Louis County				
1974	89,600	82,900	6,700	7.5
1966	84,800	80,800	4,000	4.7
City of Duluth				
1974	47,500	44,200	3,300	6.9
1966	46,200	44,300	1,800	3.9

SOURCE: Minnesota Department of Employment Services (MDES)

TABLE II-9

FAMILY INCOME CHARACTERISTICS

	Number of Families		Median Family Income in Current Dol. in Constant Dol.				Families Below Poverty Level			
	1960	1970	1959	1969	1959	1969	Number	Percent	1959	1969
Arrowhead Region	85,962	81,940	\$5,334	\$8,774	\$6,976	\$8,774	16,672	12,458	19.4	15.2
Minnesota	836,723	921,332	5,573	9,931	7,896	9,931	178,766	127,095	21.4	13.8
United States	45,128,393	51,168,599	5,660	9,590	7,625	9,590	9,650,239	7,770,735	21.4	15.2
Aitkin County	3,187	3,041	3,064	5,900	4,691	5,900	1,561	974	49.0	32.1
Carlton County	6,724	6,760	5,641	8,994	7,151	8,994	1,165	914	17.4	13.6
Cook County	796	914	5,188	8,000	6,361	8,000	130	128	16.4	14.0
Itasca County	9,303	9,003	4,546	7,985	6,349	7,985	2,473	1,692	26.6	18.8
Koochiching County	4,284	4,248	5,683	8,508	6,765	8,508	661	733	15.5	17.3
Lake County	3,355	3,292	5,584	8,803	6,999	8,803	396	338	11.8	10.3
St. Louis County	58,313	54,682	5,455	8,997	7,153	8,997	10,286	7,679	17.7	14.1
City of Duluth	27,039	24,839	5,877	9,313	7,405	9,313	4,029	3,498	14.9	14.1

NOTE: Constant dollars are expressed in terms of constant 1969 dollars.

SOURCE: U.S. Department of Commerce, Census Bureau

TABLE II-9a

PER CAPITA INCOME ESTIMATES

	PER CAPITA INCOME			POPULATION		
	1974 (Estimate)	1969 (Census)	Percent Change	July 1, 1974 (Estimate)	April 1, 1970 (Census)	% Change 1970-1974
Arrowhead Region	\$4,494	\$2,645	69.9	330,900	329,603	0.4
Minnesota	5,421	3,038	78.4	3,917*	3,805*	2.9
U.S.A.	5,449	3,119	74.7	211,389*	203,235*	4.0
Aitkin County	3,149	2,094	50.4	13,000	11,403	14.0
Carlton County	4,065	2,513	61.8	28,600	28,072	1.9
Cook County	3,800	2,868	32.5	3,600	3,423	5.2
Itasca County	3,857	2,335	65.2	38,200	35,530	7.5
Koochiching Co.	3,836	2,580	48.7	17,600	17,131	2.7
Lake County	4,007	2,568	56.0	13,100	13,351	-1.9
St. Louis Co.	4,839	2,746	76.2	216,800	220,693	-1.8
City of Duluth	NA	2,989	xx	NA	100,578	xx

SOURCES: U.S. Department of Commerce, Bureau of the Census.
State of Minnesota, Office of State Demographer.
U.S. Department of Commerce, Bureau of Economic Analysis.

NOTE: The region's per capita income figures were calculated by staff.

*Population in thousands.

TABLE II-10

MINORITY POPULATION, 1960 and 1970

	Total Minority		Indian		Negro	
	Number	% of Tot.	Number	% of Tot.	Number	% of Tot.
Arrowhead Region						
1960	4,057	1.2	3,077	0.9	717	0.2
1970	4,956	1.5	3,371	1.0	1,070	0.3
Minnesota						
1960	42,261	1.2	15,496	0.5	22,263	0.7
1970	68,933	1.9	23,128	0.6	34,868	1.0
United States						
1960	20,491,443	11.4	523,591	0.3	18,871,831	10.5
1970	25,462,951	12.6	792,730	0.4	22,580,289	11.2
Aitkin County						
1960	71	0.6	70	0.6	3	-
1970	110	1.0	89	0.8	9	0.1
Carlton County						
1960	547	2.0	525	1.9	7	-
1970	525	1.9	486	1.7	8	-
Cook County						
1960	157	4.6	144	4.3	13	0.4
1970	135	3.9	117	3.4	14	0.4
Itasca County						
1960	806	2.1	770	2.0	21	0.1
1970	862	2.4	821	2.3	7	-
Koochiching County						
1960	297	1.6	283	1.6	3	-
1970	296	1.7	272	1.6	6	-
Lake County						
1960	45	0.3	26	0.2	17	0.1
1970	102	0.8	55	0.1	26	0.2
St. Louis County						
1960	2,128	0.9	1,259	0.5	565	0.2
1970	2,926	1.3	1,531	0.7	1,000	0.5
City of Duluth						
1960	1,125	1.1	402	0.4	565	0.5
1970	1,727		615	0.6	857	0.9

SOURCE: U.S. Department of Commerce; Census Bureau

NOTE: -indicates the percentage is less than 0.05 percent.

TABLE II-11a

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Contract Construction			Manufacturing			Transportation and other Public Utilities		
	# of Reporting Units	# Empl. Mid- March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid- March	Taxable Payrolls Jan-March	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-March.
Arrowhead Region									
65	356	3,253	4,818,000	533	17,822	25,214,000	252	3,470	4,820,000
73	378	3,732	10,300,000	435	17,139	36,666,000	273	4,448	9,218,000
% Change									
Minnesota									
65	5,480	41,094	61,404,000	5,270	247,135	312,133,000	3,206	53,529	73,330,000
73	6,108	56,035	149,569,000	5,348	313,862	764,810,000	3,322	68,995	179,408,000
% Change									
United States									
65	319,205	2,823,961	4,091,886,000	298,930	17,595,093	26,005,596,000	128,659	3,218,709	4,869,224,000
73	350,730	3,731,774	8,806,166	298,918	19,768,681	46,314,403,000	134,569	4,018,043	10,490,860,000
% Change									
Carlton County									
65	26	76	79,000	34	3,597	5,460,000	17	220	286,000
73	23	174	517,000	24	3,248	8,005,000	27	337	627,000
% Change									
Aitkin County									
65	10	16	11,000	24	161	179,000	11	79	89,000
73	20	39	37,000	19	356	484,000	10	67	118,000
Cook County									
65	9	50	71,000	26	161	126,000	5	21	26,000
73	8	73	185,000	24	151	193,000	3	D	D
% Change									
Itasca County									
65	30	196	230,000	77	1,124	1,650,000	27	198	258,000
73	36	197	497,000	62	1,500	3,423,000	35	310	676,000
% Change									
Koochiching									
65	13	103	155,000	81	2,427	3,625,000	25	109	109,000
73	13	98	213,000	55	2,405	5,190,000	25	130	218,000
% Change									
Lake County									
65	18	213	455,000	15	D	D	7	35	48,000

Table II-11a (continued)

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Contract Construction			Manufacturing			Transportation and other Public Utilities		
	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid- March	Taxable Payrolls Jan-Mar.	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-Mar.
Lake County									
73	18	58	74,000	18	402	826,000	6	35	48,000
% Change									
St. Louis									
65	250	2,599	3,817,000	276	10,352	14,174,000	160	2,808	4,004,000
73	264	3,093	8,777,000	233	9,077	18,545,000	167	3,570	7,511,000
% Change									
City of Duluth									
65	NA	NA	NA	NA	NA	NA	NA	NA	NA
73	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Change									

SOURCE: US. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, County Business Patterns, 1965 and 1973.

TABLE II-11b

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Total, All Industries			Agricultural Services Forestry, Fisheries			Mining		
	# of Reporting Units	# Empl. Mid March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid- March	Taxable Payrolls Jan-March	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-March.
Arrowhead Region									
65	5,591	66,426	81,812,000	26	75	33,000	60	10,469	16,748,000
73	5,365	78,687	142,044,000	24	143	292,000	39	9,955	26,701,000
% Change									
Minnesota									
65	64,913	799,295	978,634,000	576	2,135	1,708,000	209	13,431	21,414,000
73	67,015	1,107,220	2,129,879,000	533	3,311	4,414,000	153	12,910	34,437,000
% Change									
United States									
65	3,521,554	47,743,277	60,535,056,000	29,285	152,420	126,463,000	29,114	599,328	943,743,000
73	3,652,913	61,275,142	120,875,454,000	35,057	225,341	297,702,000	22,087	602,236	1,581,648,000
% Change									
Aitkin County									
65	192	1,006	823,000	3	D	D	1	D	D
73	184	1,562	1,783,000	1	D	D	1	D	D
% Change	-4.2	55.3	116.6						
Carlton County									
65	386	5,340	7,008,000	4	6	3,000	NA	NA	NA
73	393	6,119	11,762,000	1	D	D	NA	NA	NA
Cook County									
65	100	435	366,000	NA	NA	NA	NA	NA	NA
73	108	835	1,014,000	1	D	D	NA	NA	NA
% Change									
Itasca County									
65	589	5,440	6,443,000	7	D	D	12	1,948	2,649,000
73	588	6,745	11,953,000	6	33	72,000	7	1,635	3,802,000
% Change									
Koochiching									
65	347	3,579	4,635,000	1	D	D	1	D	D
73	318	3,982	7,074,000	2	D	D	NA	NA	NA
% Change									
Lake County									
65	185	2,442	3,681,000	1	D	D	2	D	D

TABLE II-11b (continued)

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Total, All Industries			Agricultural Services Forestry, Fisheries			Mining		
	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid- March	Taxable Payrolls Jan-Mar.	# of Reporting Units	#Empl. Mid- March	Taxable Payrolls Jan-Mar.
Lake County									
73	172	2,868	6,097,000	NA	NA	NA	2	D	D
% Change									
St. Louis									
65	3,792	48,184	58,856,000	10	69	30,000	44	8,521	14,099,000
73	3,602	56,576	102,361,000	13	110	220,000	29	8,320	22,899,000
% Change									
City of Duluth									
65	NA	NA	NA	NA	NA	NA	NA	NA	NA
73	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Change									

SOURCE: US. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, County Business Patterns, 1965 and 1973.

NOTE: The regional totals reflect only the data shown and thus may actually be understated.

TABLE II-11c

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Wholesale Trade			Retail Trade			Finance, Insurance, Real Estate		
	# of Reporting Units	# Empl. Mid-March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid-March	Taxable Payrolls Jan-March	# of Reporting Units	# Empl. Mid-March	Taxable Payrolls Jan-March.
Arrowhead Region									
65	429	3,705	5,403,000	1,980	12,752	10,243,000	477	3,016	3,401,000
73	389	4,541	10,098,000	1,813	17,551	19,204,000	454	3,285	5,653,000
% Change									
Minnesota									
65	6,458	70,136	107,583,000	21,186	171,476	141,121,000	5,412	55,148	68,987,000
73	6,179	85,279	212,586,000	20,134	253,192	295,707,000	6,126	73,263	149,861,000
% Change									
United States									
65	303,510	3,434,925	5,262,275,000	1,083,206	8,963,742	7,855,798,000	325,243	3,014,243	3,821,579,000
73	291,837	4,224,245	10,268,569,000	1,056,311	12,378,033	15,757,273,000	341,043	4,137,997	8,547,446,000
% Change									
Aitkin County									
65	9	49	64,000	80	366	255,000	13	58	65,000
73	11	73	111,000	76	415	407,000	12	74	123,000
% Change									
Carlton County									
65	20	98	20,000	156	821	640,000	31	127	115,000
73	22	168	257,000	164	1,300	1,298,000	32	186	241,000
Cook County									
65	5	D	D	34	105	82,000	2	D	D
73	6	76	200,000	30	144	132,000	2	D	D
% Change									
Itasca County									
65	40	180	211,000	219	1,095	858,000	40	164	173,000
73	42	293	537,000	207	1,507	1,568,000	43	207	321,000
% Change									
Koochiching									
65	22	87	93,000	116	506	426,000	16	87	75,000
73	14	72	125,000	111	713	788,000	18	171	194,000
% Change									
Lake County									
65	8	19	24,000	77	316	228,000	12	68	66,000

TABLE II-11c (continued)

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Wholesale Trade			Retail Trade			Finance, Insurance, Real Estate		
	# of Reporting Units	#Empl. Mid-March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid-March	Taxable Payrolls Jan-Mar.	# of Reporting Units	#Empl. Mid-March	Taxable Payrolls Jan-Mar.
Lake County									
73	4	22	54,000	64	410	444,000	11	78	105,000
% Change									
St. Louis									
65	325	3,272	4,991,000	1,298	9,543	17,754,000	363	2,512	2,907,000
73	290	3,837	8,814,000	1,161	13,062	14,567,000	336	2,569	4,669,000
% Change									
City of Duluth									
65	NA	NA	NA	NA	NA	NA	NA	NA	NA
73	NA	NA	NA	NA	NA	NA	NA	NA	NA
% Change									

SOURCE: US. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, County Business Patterns, 1965 and 1973.

TABLE II-11d

COUNTY BUSINESS PATTERNS IN ARROWHEAD REGION, 1965 and 1973

	Services			Unclassified		
	# of Reporting Units	#Empl. Mid-March	Taxable Payrolls Jan-Mar.	# of Reporting Units	# Empl. Mid-March	Taxable Payrolls Jan-Mar.
Arrowhead Region						
65	1,445	10,065	8,106,000	26	82	72,000
73	1,515	15,736	19,031,000	45	202	238,000
Minnesota						
65	16,198	142,197	123,478,000	895	2,868	2,383,000
73	17,931	235,042	331,846,000	1,181	5,331	7,241,000
United States						
65	935,797	7,709,154	7,373,155,000	68,605	231,709	185,337,000
73	1,038,505	11,830,536	18,339,224,000	83,856	353,256	472,163,000
Aitkin County						
65	36	248	138,000	1	D	D
73	33	532	496,000	1	D	D
Carlton County						
65	93	356	260,000	2	D	D
73	97	685	792,000	3	D	D
Cook County						
65	19	84	41,000	NA	NA	NA
73	32	342	237,000	2	D	D
Itasca County						
65	134	491	376,000	3	D	D
73	146	1,049	1,047,000	4	14	10,000
Koochiching County						
65	70	254	147,000	2	D	D
73	77	378	328,000	3	D	D
Lake County						
65	45	206	136,000	NA	NA	NA
73	50	D	D	3	D	D
St. Louis						
65	1,048	8,426	7,008,000	18	82	72,000
73	1,080	12,750	16,131,000	29	188	228,000
City of Duluth						
65	NA	NA	NA	NA	NA	NA
73	NA	NA	NA	NA	NA	NA

SOURCE: U.S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census, County Business Patterns, 1965 and 1973.

TABLE II-12

MANUFACTURING STRUCTURE BY EMPLOYMENT, VALUE ADDED, FOR 1972 and 1967

Area	1972					Value Added by Manuf'rs	1967	
	Estab- lishm'ts	All Employees No.	Payroll	Production Workers No.	Wages		All Employ- ees	Value Added
Arrowhead Region	419	14,500	119.9	11,200	48.0	227.1	16,100	182.6
Minnesota	5,602	300.0 (thou.)	2,869.2 (mil.)	194.6 (thou.)	1,546.6 (mil.)	5,551.4 (mil.)	299.8 (thous.)	4,080.2 (mil.)
United States	316,000	18.9 (mil.)	173 (bil.)	13.4 (mil.)	105 (bil.)	353 (bil.)	19.3 (mil.)	262 (bil.)
Aitkin County	28	400	2.1 (mil.)	300	1.4 (mil.)	3.6 (mil.)	400	2.3 (mil.)
Carlton	28	3,600	31.2 (mil.)	2,800	22.6 (mil.)	63.2 (mil.)	3,700	43.1 (mil.)
Cook County	NA	NA	NA	NA	NA	NA	NA	NA
Itasca County	70	1,400	13.0 (mil.)	1,100	9.3 (mil.)	25.4 (mil.)	1,200	21.2 (mil.)
Koochiching County	NA	NA	NA	NA	NA	NA	NA	NA
Lake County	13	300	2.3 (mil.)	300	1.8 (mil.)	4.5 (mil.)	200	2.0 (mil.)
St. Louis County	280	8,800	71.3 (mil.)	6,700	12.9 (mil.)	130.4 (mil.)	10,600	114.0 (mil.)
City of Duluth	NA	NA	NA	NA	NA	NA	NA	NA

SOURCE: U.S. Department of Commerce, 1972 Census of Business, Retail Sales, Minnesota, Table 6.

TABLE II-13a

1972 CENSUS OF BUSINESS: RETAIL SALES

	Number of Estab.		Sales (\$000)		Payroll (\$000)		Number Pd. Emp. as of wk. including March 12
	All Est.	W/Pay'l	All Est.	W/Pay'l	Annual	1st.Qtr.	
Arrowhead Region	3,447	2,364	680,888	652,414	79,182	18,477	17,658
Minnesota	36,176	24,281	8,352,397	8,049,879	1,017,348	239,926	224,830
United States	1,913,000	1,265,000	459 (bil.)	440 (bil.)	55.4 (bil.)	13.0 (bil)	11.2 (mil.)
Aitkin County	168	105	18,765	16,724	1,884	437	488
Carlton County	287	200	48,950	46,436	5,150	1,226	1,240
Cook County	73	54	8,873	8,187	829	173	212
Itasca County	387	257	64,802	61,575	6,561	1,532	1,463
Koochiching County	217	149	34,603	32,922	3,827	831	750
Lake County	147	95	23,159	21,905	2,195	504	464
St. Louis County	2,168	1,504	481,736	464,665	58,736	13,774	13,041
City of Duluth	973	680	275,151	267,906	36,051	8,470	7,735

Sources: U.S. Department of Commerce, 1972 Census of Business, Retail Sales, Minnesota, Table 6.
Statistical Abstract of the U.S., 1975.

TABLE II-13b

1972 CENSUS OF BUSINESS: WHOLESALE TRADE

	No. of Estab.	Sales (\$000)	Payroll (\$000) Annual	1st Qtr.	Number Pd. Emp. as of wk. of Mar. 12	Merchant Wholesalers Estab. No.	Sales (\$000)	Other op- erating types Estab. No.	Sales (\$000)
Arrowhead Region	513	548,037	38,949	9,549	4,577	393	421,715	120	97,735
Minnesota	8,716	15,053,914	785,749	188,087	85,874	6,646	7,971,233	2,070	7,082,681
United States	348,169	684.3 (bil)	35.9 (bil)		3,879,100	249,390	320,900,000	NA	NA
Aitkin County	12	11,355	461	136	61	7 (D)		5 (D)	
Carlton County	33	12,765	1,130	288	168	28 (D)		5 (D)	
Cook County	4	2,484	224	56	35	3 (D)		1 (D)	
Itasca County	58	27,020	2,298	530	298	45	23,642	13	3,378
Koochiching County	24	5,318	425	109	79	17	4,172	7	1,146
Lake County	9	1,983	127	42	25	6 (D)		3 (D)	
St. Louis County	373	487,112	34,284	8,388	3,911	287	393,901	86	93,211
City of Duluth	198	386,268	24,950	5,915	2,774	154	320,321	44	65,947

Sources: U.S. Department of Commerce, 1972 Census of Business, Wholesale Trade, Minnesota, Table 4.
Statistical Abstract of the U.S., 1975

TABLE II-13c

1972 CENSUS OF BUSINESS: SELECTED SERVICES

	No. of Estab.		Receipts (\$000)		Payroll (\$000)		No. of
	All	W/Pay'l	All	W/Pay'l	Annual	1st QTR	Pd. Empl.
Arrowhead Region	2,468	988	98,884	85,922	24,671	5,683	5,183
Minnesota	29,184	11,532	1,734,051	1,555,820	496,753	115,542	87,856
United States	1,370,600	569,900	92.8 (bil)	84.8 (bil)	17 (bil)	NA	4.7 (bil)
Aitkin County	131	34	2,982	2,128	582	131	142
Carlton County	159	50	3,404	2,475	504	116	118
Cook County	90	48	3,170	2,823	565	146	204
Itasca County	362	115	8,610	6,601	1,585	402	454
Koochiching Cty.	144	53	4,535	3,871	1,132	231	244
Lake Cty.	113	45	1,961	1,414	283	44	59
St. Louis Cty.	1,469	643	74,222	66,610	20,020	4,613	3,962
City of Duluth	734	345	47,659	44,102	13,547	3,214	2,760

Sources: U.S. Department of Commerce, 1972 Census of Selected Service Industries, Minnesota SC 72-A-24.

Statistical Abstract of the U.S., 1975

TABLE II-14

SELECTED FINANCIAL DATA FOR ARROWHEAD REGION COUNTIES, FISCAL YEAR 1972

	TOTAL REVENUE RECEIPTS	PROPERTY TAX RECEIPTS	% PROP. TAX OF T.REV.REC.	TOTAL CURRENT EXPENSE	TOTAL OUTSTANDING DEBT			
					CO.	C&V	TWP	TOT
Aitkin	\$ 3,267,726	812,794	24.9	\$ 2,770,509	275,000	669,000	12,000	956,000
Carlton	5,00,065	1,892,267	37.8	4,476,120	-0-	4,959,483	238,346	5,197,829
Cook	1,172,324	368,442	31.4	993,259	510,000	-0-	-0-	510,000
Itasca	8,759,934	3,403,335	38.9	7,517,176	1,450,000	2,352,000	110,000	3,912,000
Koochiching	3,894,708	1,259,591	32.3	3,265,263	265,000	2,370,000	-0-	2,635,000
Lake	2,034,467	457,931	22.5	1,462,583	45,000	2,253,000	-0-	2,298,000
St. Louis	41,571,471	14,720,151	35.4	36,747,390	1,560,000	22,516,594	947,123	25,023,717
Region Per Capita	65,700,695 \$199.33	22,914,511 \$69.52	34.9	57,232,200 \$173.64	4,105,000	35,120,077	1,307,469	40,532,546
State Per Capita	620,752,096 \$163.16	208,311,734 \$54.75	33.6	540,503,629 \$142.06	112,374,963	928,511,241	23,128,545	1,064,014,749

SOURCE: Report of the State Auditor of Minnesota on the revenues, expenditures and debt of state and local governments in Minnesota for the fiscal years endedJuly 1, 1971 to June 30, 1972.

CHAPTER III

OVERALL ECONOMIC DEVELOPMENT GOALS AND POLICIES FOR THE ARROWHEAD REGION

Chapter III
OVERALL ECONOMIC DEVELOPMENT GOALS AND POLICIES
FOR THE ARROWHEAD REGION

This section of the OEDG constitutes the main justification for an updated version of the document. Highly significant changes have taken place region-wide, statewide, and nationwide within the past decade. Within the region, a growth center has been outlined and has begun to develop. Expansion in the taconite industry will generate 4,000 new permanent jobs by 1985. Other resources such as copper-nickel and peat are now considered as having significant development potential.

A general awareness of the region as an economic as well as geographic entity has surfaced in the minds of decision makers. Statewide, a growing support for sub-state regions has resulted in programs aimed at cooperative economic development efforts. As a nation, we have become drastically aware of our fragile environment and our rapidly diminishing sources of energy, factors hardly yet conceived at the time the original OEDP was written. These changes and many more necessitate a thorough re-evaluation of economic goals, policies, and programs for the Arrowhead Region.

One of the most subtle, but important changes has been the gradual acceptance and utilization of comprehensive planning. The rationalization for this change is becoming more and more evident: harmonizing the frequently conflicting claims of our social, economic, and environmental objectives has the effect of achieving more satisfactory outcomes than those that have inadvertently flowed from the single-purpose programs of the past. The evolution of the Arrowhead Commission has paralleled this gradual change, and consequently, its approach to economic development must respond or will inevitably be discordant with other programs.

The Arrowhead Economic Development District was an essentially single-purpose agency created to help Northeastern Minnesota pull itself out of

general economic distress. In this respect, the goals and policies formulated by the District were logical prescriptions for the reduction of unemployment and the generation of economic activity. The programs and projects which have resulted have been consistent with those goals and policies, and as such, have maintained the OEDP as a workable document right up to the present time. Had the Arrowhead Commission remained a single-purpose agency, a statistical update and the addition of new programs would now suffice as a new OEDP.

The time has come, however, for the aforementioned re-evaluation to take place. The region has well supplied itself with the tools and the working knowledge of economic development. We must now formulate the proper use of those tools so as not to be at cross-purposes with other planning programs, programs which have essentially the same overall objectives.

The key to this re-evaluation process lies in the development of new general goals. If this task is accomplished, the policies will logically flow from these goals, and likewise, the programs of implementation will follow from the policies.

It must be stated that these goals are not new in that they contradict or revoke the goals of the original OEDP. On the contrary, they are designed merely to transform the original District goals into a form which acknowledges the interfaces between economic development planning and all other comprehensive planning and development functions.

Two important concerns must be kept in mind during the formulation of these general goals. First, although they are referred to as general goals, caution must be taken so as not to allow them to become platitudes. Platitudes are pleasant sounding, but unless there exists in these goals a

certain element of specificity and actual direction, they will not form the required foundation for meaningful policies. The other extreme must also be avoided, however. Should the goals become too specific, they will invariably be deemed static and unworkable.

Secondly, the general goals must be concerned primarily, if not entirely, with the planning function at hand, that is, economic development planning. There are, admittedly, many more goals which can be formulated to serve the comprehensive planning process. However, in this document, we are concerned with those objectives which incorporate economic development into that comprehensive process.

General Goals

The economic development goals for the Arrowhead Region are as follows:

1. TO INCREASE LONG-TERM EMPLOYMENT OPPORTUNITIES IN THE REGION THROUGH ECONOMIC DEVELOPMENT AND EXPANSIONS THAT CAPITALIZE ON THE INDIGENOUS ATTRIBUTES OF THE REGION.

The major emphasis here, which is followed through and supported by other goals and numerous policies, lies in a redefinition of "balanced" economic development. In short, a policy of balance does not mean the generous distribution of population and economic activity. It means instead a balanced access to public services, and to the distribution of economic opportunity and income. The difference here is subtle, but meaningful, and can probably be interpreted as an overall policy shift in economic planning for the region. Implied within this redefinition is the fact that "economic development for development sake" does not necessarily cure the economic ills of an area, and indeed may place an additional burden on an already over-burdened economy.

With this goal in mind, one might expect that the policies to follow would be restrictive or negative in nature. This need not be the case, however. They may instead comprise a positive attempt at programming the

most suitable type of development for each unique area in the region, based on such variables as size of a community, distance from major urbanized areas, and the presence or absence of the specific characteristics necessary to make a particular project or development feasible. The recognition of these "indigenous attributes" must be considered an essential element of economic development planning.

2. TO INCREASE AVERAGE PER CAPITA INCOME OF PEOPLE LIVING IN THE REGION THROUGH THE DEVELOPMENT AND EXPANSION OF HIGH PAYING INDUSTRIES AND THE PREPARATION OF THE CITIZENS OF THE REGION FOR EMPLOYMENT IN NEW AND EXISTING INDUSTRIES.

This goal is submitted as an alternate to goals of the past which stressed the need for the reduction of unemployment. The unemployment rate has historically been considered the best indication of the relative success, or failure, of the economic development efforts of an area. However, it has been shown repeatedly that the unemployment rate, although a meaningful and necessary measurement, is not necessarily an accurate barometer of economic growth and activity. This is especially evident in areas throughout the county which have experienced rapid growth, such as that which is presently occurring due to expansions in the taconite industry. Population is increasing in direct proportion to the accelerated economic activity, hence unaffected, or perhaps even raising the unemployment rate. Therefore, although the economy is essentially healthier, this is not so indicated by the unemployment statistics. By the same token, unemployment may be substantially reduced by the creation of a large number of short-term or low-paying jobs; an accomplishment that looks good statistically, but falls inevitably short of adding any real stability to the economy. The stability which is desired in the long run can only be accomplished by the development of high paying industries and a well-trained, and therefore adaptable work force. This emphasis on employment rather than

unemployment is not intended to de-emphasize the seriousness of unemployment to those desiring jobs. For this reason, the second part of this goal statement addresses the need for preparation of the citizens of the region for available employment opportunities.

3. TO RAISE THE STANDARD OF LIVING OF MINORITY GROUPS WITHIN THE REGION.

The minority population of the Arrowhead Region is admittedly small when compared to other parts of the country. This fact, however, does not decrease the importance of this goal. On the contrary, the smaller the minority population, the less likely it is that those people will become a factor when economic policy decisions are being made. If it can be shown that the standard of living of those who have been traditionally deprived of economic opportunities has been measurably improved upon, this is perhaps the best indication that economic development planning is accomplishing its objectives.

For our purposes at ARDC, this goal dictates a renewed emphasis on establishing good working relationships with the Indian population of Northeastern Minnesota. The independence of the Indians with respect to economic development funding requirements and programs has resulted in limited communication between them and ARDC. Rather than attempting to diminish this independence, it is merely our hope to improve communication to the point where the full range of technical assistance and services are made known and available to the Indian citizens of the Region.

4. TO SECURE ECONOMIC DEVELOPMENTS THAT ARE COMPATIBLE WITH ACCEPTED ENVIRONMENTAL STANDARDS AND WHERE POSSIBLE CAN BE LOCATED IN EXISTING POPULATION CENTERS.

The location of new economic development has economic, fiscal, and environmental dimensions. ARDC has formally taken the position that where possible, new developments should be located in existing population centers (Arrowhead Regional Policies Plan, page 19). A number of economic benefits

from this approach can be cited. Developments in existing population centers usually provide access to available labor force. Developments in these areas do not generally compete with land that has recreation or forestry potential. New developments in existing centers have spin-off effects that benefit existing firms in the area. Fiscal considerations are equally important. New firms in existing centers provide tax payments to these centers. Usually it is cheaper for governments and public utilities to provide services such as sewer and water to developments located in population centers. If the development is in a larger population center the public unit may provide public transit services that would minimize transportation and energy costs for the development's work force. Environmental considerations are yet another factor. To the extent that transportation costs are minimized, there are environmental gains through reduced automobile pollution. If the community has sewer and water facilities the dangers of water pollution can be minimized. Developments in existing areas curtail the growth of urban sprawl which consumes vast quantities of land and leads to environmental degradation. It is understood, however, that certain types of developments, such as power plants which are incompatible with urban life for environmental or safety reasons, are best located away from existing population centers. A reasonable development objective thus is to encourage developments compatible with the urban environment to locate in existing population centers and to encourage the remaining developments to locate in areas where the environmental and social costs of these operations can be minimized.

5. TO STIMULATE PUBLIC INVESTMENTS IN EXISTING POPULATION CENTERS THAT HAVE POTENTIAL FOR GROWTH.

A principal function of public units engaged in economic development is the provisioning of capital investments that support private economic

developments. Public investments are related to private economic developments, both directly and indirectly. An example of an indirect investment is a public library that makes an area more attractive to firms whose employees and their families want adequate library services. Transit systems and cultural facilities are other public investments that indirectly influence economic development. Although a new cultural facility may not pay its own way, it can be one of the attractions that draws people into the area and thus supports the tourist industry. An example of a public investment that is directly related to private development is the provisioning of an industrial park. Usually communities are unable to attract industrial development unless they can provide a location that has the necessary sewer and water and transportation access. By investing in an industrial park, the community provides the physical setting that permits firms to locate in the area if the necessary economic conditions are met. The provisioning of an industrial park in itself does not ensure private industrial development. For this reason, Goal 5 restricts public investment to population centers that have potential for growth. One service that can be provided by the regional commission is to steer industrial park and related developments into areas that have this potential.

Policy Development

Given the five general goals above, policies can be developed and programs and projects can be identified. Goals are statements of long term objectives, policies are specific directions that can be followed to achieve the general goals, and programs are courses of action that can be undertaken to implement the intent of the policy statement.

Policies can be developed in two ways. One procedure is to have decision makers in the region recommend courses of action that they feel will meet the intent of stated general goals. This is an ad hoc approach to policy development. The second approach involves the development of

policies from the analysis of existing situations. The assessment sections of this document are directed at the isolation of certain issues that require correction if the general goals are to be met. Once issues are identified, then policies aimed at correcting problematic situations can be developed. In this case, policies are aimed at correcting existing situations, the deficiencies of which can be substantiated through quantitative analysis.

An essential point to bear in mind concerning economic policies is that they need not be stone-cast commitments to a single course of action. They can instead provide a framework for weighing alternatives, mediating conflicting values, and making decisions. They can further be utilized to monitor those decisions in order that continuous adjustments can be made on the basis of actual results.

Program and Project Identification

There are some important points to be made concerning the programs and projects listed in this section. First of all, it is necessary to reflect upon the scope of implementation powers of ARDC in the realm of economic planning. Obviously, many of the programs and projects listed here, especially those requiring major capital investments, cannot be initiated by, nor are they realistically contingent upon the role of the Arrowhead Commission. Nonetheless, a resolution of support, a strong endorsement through the A-95 review process, or a study demonstrating the need or potential for a major development could conceivably be a contributing factor or a catalyst toward implementation. Secondly, and most significant with respect to the philosophy of this document, they are not in any way intended as an exclusive prescription for policy implementation.

The same reasoning applies regarding the establishment of priorities or priority ratings corresponding to these projects. The order in which the projects appear within this section does not imply a priority assignment. The ARDC Board of Directors has established a workable and equitable procedure for determining regional economic development priorities. This priority system, its history and procedures, is fully outlined in another section of the OEDG.

Summary Sheets

The summary sheets which follow attempt to establish the logical connections between goals, policies, and programs. As mentioned earlier, each policy is an outgrowth or a response to one or more of the general goals. To demonstrate this relationship, policies are accompanied by that combination of goals responsible for their development. The process is carried through on the other end by including those programs and projects which relate to the implementation of a specific policy.

An attempt is further made to isolate major issues under headings which represent the most appropriate elements of the regional economy. It is felt that economic planning and development in Northeastern Minnesota consists of investment in, improvement upon, and continuous research of these fundamental elements of the economy.

INDUSTRIAL DEVELOPMENT

General Goals

1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
2. To increase average per capita income of people living in the region through the development and expansion of high paying industries and the preparation of the citizens of the region for employment in new and existing industries.
3. To raise the standard of living of minority groups living in the region.
4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.
5. To stimulate public investments in existing population centers that have potential for growth.

Policies

To encourage the development of industrial parks and sites in urbanized areas that have exhibited a potential for industrial growth.

Programs

1. Appropriate zoning of areas conducive to industrial development, such as those adjacent to air and harbor facilities.
2. Physical upgrading of industrial land where development is most likely to occur.
3. Development of complete and continually updated industrial land inventory for the region.
4. On-going technical assistance to communities in determining assets and liabilities for industrial development.

SERVICE

General Goals

Policies

Programs

1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
2. To increase average per capita income of people living in the region through the development and expansion of high paying industries and the preparation of the citizens of the region for employment in new and existing industries.
3. To raise the standard of living of minority groups living in the region.
4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.
5. To stimulate public investments in existing population centers that have potential for growth.

To encourage the development of those service and support industries in and around the Duluth metropolitan area which allow it to better provide economic and social services to the region.

To support those localized services to rural areas which facilitate the general goals despite minimal economic activity in those areas.

The location of a foundry in the Duluth area.

The location of a copper-nickel smelter in the Duluth area if major copper-nickel mining emerges in Northeastern Minnesota.

Expansion of UMD to include mining, engineering, and medical schools.

Locate facilities within the Growth Center for production of grinding media for the taconite industry.

Develop manpower programs which are readily accessible to the rural under-employed.

Fully utilize grant and loan programs specifically designed for rural areas, such as FmHA and the Governor's Rural Development Grant Program.

Technical assistance to small communities in areas such as community and business development, fiscal management, etc.

Establish area vocational and technical training programs to compliment industry needs.

TRANSPORTATION (Port)

General Goals

Policies

Programs

- III-12
1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
 2. To increase average per capita income of people living in the region through the development and expansion of high paying industries and the preparation of the citizens of the region for employment in new and existing industries.
 4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.

To support the full development of the Port of Duluth in conjunction with a long range development plan.

To cultivate cooperation and coordinated effort between the Ports of Duluth and Superior, on the assumption that all growth and development logically benefit both.

Completion of a comprehensive port development plan.

Improve shipping channels to 27 feet and study feasibility of all changes necessary to accommodate larger vessels now in use.

Re-establish U.S. Flag service on the Great Lakes, and subsequently to Duluth.

Continue to investigate and promote bubbler systems and other methods of extending the shipping season.

Examine possibility of owning or chartering a vessel to establish a feeder service on the Great Lakes.

Increase efforts to promote Great Lakes shipping among Minnesota manufacturers.

TRANSPORTATION

General Goals	Policies	Programs
<p>1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.</p> <p>4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.</p> <p>5. To stimulate public investments in existing population centers that have potential for growth.</p>	<p>To support the improvement of ground and air transportation within the region.</p>	<p>Upgrade Highway #2 East-West and North Shore Highway #61 to accepted safety standards.</p> <p>Complete Cross Iron Range Expressway and portions of I-35.</p> <p>Study the concept of unit trains for movement of Western fuel, iron ore, and grain.</p> <p>Investigate the possibility of passenger rail service between major areas within the region.</p> <p>Development of truck service centers at strategic points throughout the area.</p> <p>Study the feasibility of establishing full commuter services between the Iron Range and Duluth.</p> <p>Support increase of Duluth's potential as a center for overseas air freight and charter flight stopover.</p> <p>Study potential of expanded air freight and passenger service to Fargo, Detroit and Cleveland.</p> <p>Support and further development of feeder air lines within the region.</p>

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RECREATION AND TOURISM

General Goals

1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
3. To raise the standard of living of minority groups living in the region.
4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.

Policies

To promote tourism and recreational projects which are both economically feasible and consistent with the best use of resources.

Programs

Implementation of goals, policies, and programs contained in the Sub-Regional Plan for the Voyageurs Planning Area.

Completion of Duluth Downtown Development District Programs.

Development of non-industrial waterfront land for recreational and tourist uses, such as a Mariner's Wharf and adequate marina facilities.

Completion of Harbors of Refuge along North Shore.

Continue expansion of year-round recreational facilities.

CULTURAL

General Goals

1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
3. To raise the standard of living of minority groups living in the region.
5. To stimulate public investments in existing population centers that have potential for growth.

Policies

To encourage the development of cultural programs and facilities which have the potential for both social and economic support.

To coordinate with specialized agencies, such as the Minnesota Historical Society in identifying duplication and determining cultural and historical project priorities.

Programs

Establishment of a regional library.

Support of Iron Range Interpretative Program.

Completion of all phases of the St. Louis County Heritage and Arts Center.

ENVIRONMENT AND ENERGY

General Goals

Policies

Programs

1. To increase long term employment opportunities in the Region through economic development and expansions that capitalize on the indigenous attributes of the region.

4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.

5. To stimulate public investments in existing population centers that have potential for growth.

To strike a sound and acceptable balance between environmental and economic objectives.

Other things being equal, to support economic developments which propose the most efficient use of related energy.

Support the research and development of alternative energy sources where economically and environmentally feasible.

Provide the City of Duluth and North Shore communities with adequate water filtration facilities.

ECONOMIC PLANNING AND INFORMATION

General Goals

Policies

Programs

1. To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.
2. To increase average per capita income of people living in the region through the development and expansion of high paying industries and the preparation of the citizens of the region for employment in new and existing industries.
3. To raise the standard of living of minority groups living in the region.
4. To secure economic developments that are compatible with accepted environmental standards and where possible can be located in existing population centers.
5. To stimulate public investments in existing population centers that have potential for growth.

To support all programs and efforts to improve the adequacy and reliability of economic data for the region.

Complete development of computerized economic information system.

Work closely with state data collection agencies to secure adequate and timely labor force and related data.

Completion of updated regional forest inventory.

Development of reliable and consistent tourism measurement techniques.

CHAPTER IV

**REGIONAL ECONOMIC
ASSESSTMENTS**

ASSESSMENT A GROWTH CENTER

Chapter IV
Assessment A
GROWTH CENTER

The Arrowhead Region has one designated growth center which encompasses the cities of Duluth, Proctor, Cloquet, Two Harbors and the contiguous urbanizing area. The urbanized area of the Iron Range has been considered for designation as a growth center but as yet no official action has been taken.

Between 1967 and 1975 designated growth centers received special assistance from the federal Economic Development Administration (EDA). EDA considered the strengthening of growth centers as being an integral part of their development strategy. Unofficial guidelines indicate that in the future EDA will de-emphasize the significance of the growth center status in their programs.

Independent of EDA's emphasis, growth centers play dominant roles in the economic development of a region. Growth centers are usually the principal population areas of a region. For example, over 1/3 of the population of the Arrowhead Region is concentrated in the Duluth growth center. This population concentration and the diversified economy that supports it plays a unique role in the economic structure of the entire region. Because of its size and diversity, the growth center provides many services to the region that could not be provided efficiently in smaller population areas. At the same time, the growth center is dependent upon the remaining portion of the region for services and resources that are not available in a dense human settlement. In this context the growth center and the remaining portions of the region exist in a symbiotic relationship where both benefit because they are able to capitalize on economic advantages that are inherent to their structures.

Issue- Growth Center Vitality

The one issue that is analyzed in this section is the economic health of the designated growth center area and an identification of the segments

of the growth center economy that have potential for development. This assessment has three components:

1. The economic vitality of the growth center between 1959 and 1974 will be analyzed.
2. Analysis will be made to compare the relationship of the Duluth growth center to the Arrowhead Region to the relationship of the Minneapolis-St. Paul area to the state.
3. An analysis is made to identify which sectors of the growth center economy have indicated potential for expansion.

Growth Center Vitality

A barometer of growth center vitality is available in the Duluth Business Indicator information that is published monthly and summarized annually by the Bureau of Business and Economic Research at the University of Minnesota, Duluth. Information is provided on 15 different aspects of economic activity, both in separate and aggregated formats. These indicator data have two limitations with respect to growth center analysis. First, they are computed for the City of Duluth only and thus do not include information for Cloquet, Two Harbors and the remaining portion of the growth center. Second, the overall index is weighted by the individual indexes and this is dependent upon the summation of unlike variables. Nevertheless, the overall index is the best indicator available for the measurement of growth center vitality on a regular basis.

Data for the overall index and two of the most significant components, Duluth Retail Sales and Duluth Non-Agricultural Employment, are presented for the period between 1959 and 1974 in Table IV-A-1 and for the period between January 1974 and August 1975 on a bi-monthly basis in Table IV-A-2. All indicator information is relative and is equated to 100 in the year 1967.

Table IV-A-1

Duluth Business Index Overall and Selected Components
1959 through 1974**

	1959	1960	61	62	63	64	65	66	67	68	69	1970	71	72	73	74
Duluth Retail Sales*							96	102	100	96	95	98	105	103	112	117
Duluth Non Ag. Empl.	97	96	91	90	90	92	97	99	100	103	107	105	102	100	103	100
Overall Index	80	80	74	81	87	91	96	102	100	104	111	111	107	114	122	116

*Comparable data not available before 1965

**Meyers, Cecil H., Gronseth, Glenn O., Duluth Business Indicators - Selected and Area Economic Data Through 1974, Bureau of Business and Economic Research, Duluth, MN 55812

Table IV-A-2

DULUTH BUSINESS INDEX OVERALL AND SELECTED COMPONENTS BI-MONTHLY
1974 through 1975*

	1974						1975					
	Jan.	Mar.	May	Jul.	Aug.	Sep.	Oct.	Jun.	Mar.	May	July	Aug.
Duluth Retail Sales	83	101	114	112	132	117	138	77	93	118	106	145
Duluth Non Ag. Empl.	97	99	103	104	105	103	101	96	94	103	105	104
Overall Index	97	100	125	130	124	115	139	86	97	124	119	142

* Duluth Business Indicators
Bureau of Business and Economic Research
University of Minnesota, Duluth

From the overall index, it appears that Duluth has undergone substantial growth - from 80 in 1959 to 116 in 1974. These figures, however, are somewhat misleading as indicated by the Duluth Non-Agricultural Employment index which held almost constant from 97 in 1959 to 100 in 1974. The gains in the overall index were thus primarily productivity increases resulting from increased energy and capital intensifications in the industries of the Duluth area. Investigation of the individual components which is not shown suggests that most of the increase resulted from dramatic growths in shipping, postal receipts, electrical power consumption, building permits, and retail sales. A recent surge in retail sales as shown in Table 1 occurred between 1972 and 1974 which corresponds to the opening of the Miller Hill shopping center in Duluth. Retail sales however, have not shown any significant increase since 1974.

From the data it can thus be concluded that although the growth center economy has shown some structural improvement, the economy for the last 15 years has been relatively stagnant. Duluth has had a number of developments such as the shopping mall in 1973 and the soon to be opened American Hoist Co. These improvements, however, have apparently been balanced by curtailments in other industries such as the closing of the Steel Plant in 1973 and the announced closing of the U.S. Steel Cement Plant. To advance the growth center economy will require more net improvement than were experienced between 1959 and 1974. The analysis below is aimed at isolating the industrial sectors that indicate potential for economic improvement.

Growth Center Status

An economic analysis employing the location quotient (L.Q.) methodology was undertaken to compare the nature of the relationship of the Duluth growth center to the region and how this compares to the relationship of the Minneapolis-St. Paul area to the State. The general hypothesis followed is that if the Duluth area is the regional growth center, its relationship to the region should be comparable to the relationship of the Minneapolis-St. Paul area

and the state. Results of this analysis are given in detail in an ARDC report entitled Growth Center Analysis, May 9, 1975. Below is presented selected summary tables and a brief explanation of the results obtained.

The location quotient methodology provides a number that is a measure of the concentration of employment by sector in one area to the concentration in another area. The L.Q.'s calculated herein are for industrial concentration of employment in Minneapolis and St. Paul as compared to the entire state. A hypothetical example will illustrate this analysis technique. Suppose Duluth has 10% of its employment concentrated in retail sales. Suppose that the region has 5% of its employment in the same activity. The location quotient would be 2, which would indicate that retail sales is one sectorial activity in which Duluth employment is concentrated. It is assumed herein that location quotients of greater than 1.15 are indicative of area concentrations in a given type of activity. Location quotients of Duluth to the region can be compared to those of Minneapolis-St. Paul to the State by subtracting one from the other. This result, which is labeled D, is considered to be significant if larger than + or -.15.

As shown in Table IV-A-3, Duluth-Superior's relationship to the region and Minneapolis-St. Paul's relationship to the State have similarities. Of the 33 industries analyzed, 22 showed concentration patterns similar in each area, 11 of which indicated domination by Duluth-Superior over the region and by Minneapolis-St. Paul over the State, with the remaining 11 showing no domination in either growth center over their respective areas. In three cases, two relating to manufacturing and one business services, Minneapolis-St. Paul showed more dominance than the Duluth-Superior area. In 9 industries, Duluth-Superior concentrations exceeded those of the Minneapolis-St. Paul center.

Table IV-A-3

Sub Area:
Location Quotient Summary

In which industries neither
Mpls.-St. Paul dominate the
State nor Duluth-Superior
dominate the Region.
L.Q. less than 1.15

Agriculture, forestry
fisheries:

Mining construction

Furniture, lumber
& wood products

Textile mills &
fabricated tex.

Trucking &
warehousing

Food & dairy stores

Other retail trade

Repair services

Other personal services

Private households

Education

In which industries both
Mpls.-St. Paul dominates the
State & Duluth-Superior
dominates the Region.
L.Q. greater than 1.15

Fabricated metal

Machinery, except elec.

Printing, publishing
allied

Wholesale trade

Finance, insurance &
real estate

Entertainment

Professional

Elec. machinery,
equipment & supplies

Other transportation

Business services

Non profit & religion

Table IV-A-4

Sub Area:
Location Quotient Summary (2)

Industries in which Mpls/St. Paul
dominates the State relatively
more than Duluth/Superior
dominates the Region
D is less than -.15

Manufacturing (-.237)

Chemical & allied (-.988)

Other manufacturing (-.766)

Business services (-.154)

Industries in which Duluth/
Superior dominates the Region
more than Mpls/St. Paul dominates
the State
D is greater than .15

Primary metal (.965)

Food & kindred (1.032)

Railroad & railroad express (.222)

Other transportation (.241)

Communications (.265)

Utilities

Sanitary Service .223

Eating & drinking
establishments .255

Hospitals & medical .307

Non profit & religion
government .160

In conclusion, it appears that to some extent Duluth-Superior is a more dominant growth center than the Minneapolis-St. Paul area to the extent that it specializes in more industrial activities. Overall, however, there seems to be a great degree of similarity.

A weakness in this analysis is that it does not describe how conditions are changing over time. The next section attempts to provide information on this important aspect.

Growth Center Strengths and Weaknesses

For this analysis, employment shifts between 1960 and 1970 were investigated. The shifts asked the question, "How many employees effectively moved out of the area because the area did not grow at the same rate as the larger area, or conversely, how many people effectively moved in if the area grew at a faster rate than the overall area?" Table IV-A-5 provides employment shifts and percentages in various industries for the region as compared to the state. It can be seen that growing industries for the region were government, education, food and kindred, communications, and a few others. At the same time, the region lost in chemical and allied, fabricated metal, furniture and wood products, mining, and primary metal.

Table IV-A-6 shows how the growth center fared in relationship to the region. The growth center had relative gains in educations, communications, food and kindred, government, and two others. The growth center lost in terms of chemical and allied, textile mills, fabricated metal, furniture, and wholesale trade.

Table IV-A-5

Summary of Employment Shifts
for the Region versus the State

Industries with Positive Shifts

Electrical machinery, equipment & supplies	+ 6.7%
Food & kindred	+ 14 %
Communications	11.2%
Utilities, sanitary service	1.8%
Eating & drinking establishments	7.8
Education	18.9
Government	9.1

Industries with Negative Shifts (Top 5)

Chemical and allied	- 135%
Fabricated metal	- 25.2%
Furniture, lumber and wood products	- 21.8%
Mining	- 75.5
Primary metal	- 15.3

Table IV-A-6

Summary of Employment Shifts for the
Duluth-Superior Urbanizing Area
Versus the Region

Industries with Positive Shifts:

Electrical machinery, equipment & supplies	6.7%
Food & kindred	14.2%
Communications	11.2%
Utility, sanitary services	1.8%
Eating & drinking establishments	7.8%
Education	18.9%
Government	9.1%

Industries with Negative Shifts (Top 5 by %)

Chemical & allied	-135%
Textile mills & fabricated tex.	- 60%
Fabricated metal	- 25.2
Furniture, lumber & wood products	- 21.8
Wholesale trade	- 18%

From this analysis it appears that the Duluth growth center is evolving into a service center for the rest of the region. Communications, education, and government are among the fastest growing industries. Some relative growth is being experienced in the food and kindred industry and in electrical machinery, equipment and supplies. Wholesale trade is a service that seems to be dispersing to the region. Most dispersal, however, is occurring in the various types of manufacturing.

If the results of the location quotient analysis in the previous section are combined with the shift analysis in this section, some general conclusions can be offered. The potential for the growth center as evidenced in these numbers is in expanding its service sectors, primarily education, government, and communications. Since the L.Q. analysis has indicated Duluth weak in the business service category, this is one industrial sector that deserves investigation. Manufacturing activities in recent years have not shown much promise. Possibly this may change as taconite expansion on the Iron Range permit the development of support industries such as foundries that could be conveniently located in the growth center area.

ASSESSMENT B INDUSTRIAL DEVELOPMENT

Chapter IV
Assessment B

INDUSTRIAL DEVELOPMENT

The two topics covered in this section are Industrial Parks and New and Expanding Industries.

Industrial Park Assessment

Information on the industrial parks in the Arrowhead Region is available from a variety of sources. The Northeastern Minnesota Small Business Development Center published report in 1972* summarized information on the industrial parks in 29 northern counties.

Information provided in this report includes: only 5.6% of the employment in the 38 counties is industrial related but 54% of industrial related employment is located in the industrial parks. The average age of these parks in 1972 was 12.5 years; the average size was 37 acres and the average land value was \$3,500 per acre. Employment generated by these parks averaged three persons per acre. Most of these parks were established and are managed by Industrial Development Corporations (IDC's) which are private organizations comprised primarily of local business people. Private contributions and state and local funds but not local tax revenues have been used to develop the parks. A significant deficiency related to industrial park development is the lack of long-range development plans for the communities in which the parks are located. As of 1972, 2,876 acres of industrial park land out of 3,766 total acres were still available for development.

A second source of industrial park information is provided in the Industrial Park Profile, published by the Minnesota Department of Economic

*Northern Minnesota Industrial Park Survey by N.E. Small Business Development Center, Providence Building, Duluth, MN., Donald C. Boyd, Director.

Development. These profiles contain physical specifications for industrial parks in the area including data on acres available, surface characteristics, water supply characteristics, sanitary sewer availability, energy availability, roads, and airports.

A third source of information is a report summarizing the results of a survey conducted by ARDC for the Economic Development Administration in December 1974. Results of this survey are summarized in Tables IV-B-1 and IV-B-2.

Issues Relating to Industrial Parks

Two issues relating to industrial parks can be identified: 1) an evaluation of the effectiveness of industrial park development in stimulating economic growth. 2) The availability of information relating to industrial park status.

Effectiveness of Industrial Park Development in Stimulating Economic Growth

As evident from Table IV-B-2, industrial parks have experienced various degrees of success. Of the total of 1,632 acres identified in the region, it was found in 1974 that only 555 acres were developed. This leaves nearly 1,077 acres available for additional expansions. As shown in the table, some parks have little or no development, while others are substantially developed, such as the Two Harbors Industrial Park, which has over 160 acres out of 180 acres developed. Thus it would appear that more than the availability of industrial parks is required to insure that economic development occurs in any given area.

The above referenced report, The Northern Minnesota Industrial Park Survey, outlines conditions that must be present if an industrial park development is to be successful. Of utmost importance is the leadership exhibited by the Industrial Development Corporation in directing the development of a park. It is believed that if leadership is not present, the industrial park has little chance of success. In addition, the community in which the park is

located should meet a number of other criteria. An adequate labor force should be available. A community should be able to provide the necessary fire and police protection. All the necessary utilities should be available. The cost of land in the park should be competitive. Cases have been recorded where industry moves into the area after the park is built but locates outside the park because the land outside the park is much cheaper than the land within it.

A final recommendation in the referenced report is for long-range economic development planning by the community. Most parks have been developed without any explicit goals and without the necessary planning undertaken to insure the long range success of the park.

A strategy for the development of existing industrial parks in the area is called for before any additional parks are publicly financed within the region.

Inadequate Information on Industrial Park Status

Although various agencies collect information on the status of industrial parks in the region, this information is not being collected in a coordinated manner. Thus, none of the agencies have up-to-date and complete information on the status of parks in the region. An effort should be made to coordinate the involved agencies to insure development of an adequate data base that is updated on a regular basis.

Table IV-B-1

INDUSTRIAL PARK DATA IN ARROWHEAD REGION

Location	Acres in Ind. Park	Acres		Tenants
		Occupied	Unoccupied	
Aitkin - City*	75	0	75	None
McGregor - City*	55	10	45	Star Machine & Tool Co., Regal Industries
Carlton - City	12	3	9	Stearns Manufacturing
Grand Rapids*	40	6	34	CWDC, UPS, G.R. Transfer, Chief Products
Two Harbors - City*	180	160	20	Husky Hydraulics, Hahn MFG, State Garage, No. Shore Steel
Hibbing - City*	55	9	46	Hibbing Garment, Barco Bearing, IRA, Salo- Degnan, Range Ind. Supply
Hermantown* (Maple Grove Industrial Center)	100	6	94	Montgomery Ward Whse.
Virginia*	24	1	23	Community Work Dev. Center (CWDC)
Airpark - Duluth*	280	2	278	Gardner-Denver, Medi Assn.
Oneota - Duluth	6	5	1	Bombardier
Harbor Park - Duluth	80	63	17	Midcontinent Whse, SPAD Container Facilities, Am. Hoist & Derrick
American Dock & Whse.	13	13	0	Amer. Dock & Whse.
Berwin Dock	30	30	0	MP&L
Duluth Dock & Transp.	65	30	35	Dul. Dock & Transport
Grassy Point	50	0	50	- 0 -
Reiss Dock	17	17	0	Inland Dock
Morgan Park	<u>550</u>	<u>150</u>	<u>400</u>	U.S. Steel Co., Hallet Wire Products, Duluth Filter Co., Zalk-Josephs Co.
TOTALS	1,632	555	1,077	

*EDA funded parks.

SOURCE: LOCAL INDUSTRIAL PARK REPRESENTATIVES 10/28/74

Table IV-B-2

INDUSTRIAL PARK DATA BY COUNTY

List All Counties in District	Total No. of Developed Industrial Acres	No. of Separate Locations	Total No. Acres Occupied	Total No. Acres Unoccupied
Aitkin	130	2	10	120
Carlton	12	1	3	9
Cook	0	0	0	0
Itasca	40	1	6	34
Koochiching	0	0	0	0
Lake	180	1	160	20
St. Louis	1,270	12	326	944
Total for Region	1,632	17	505	1,127

New and Expanded Industry

Information on the current state of industrial development in the Arrowhead Region is available in new and expanded industry data developed primarily by the Department of Economic Development.* This data contains information on the expected employment and levels of investment that will result from announced industrial developments in the region. Individual items contain the S.I.C. code and the minor civil division (MCD) in which the new development will be located. Thus, the new and expanded industry data provides a means through which the planned patterns of future development can be analyzed.

Although the data are the best available, many deficiencies exist. First, the data are for announced maximum job generation that will result from the announced investment if the plans proceed as expected. If the plans do not progress as expected, which has occurred in a number of instances, the data are overly optimistic. Second, the data are not indicative of economic health. Areas may be experiencing a high rate of new development and still experiencing net employment decline because of plant closures. Finally, the data are based on estimates by company officials that may not be reliable.

The data are analyzed below to provide answers to the following questions:

1. Is the industrial base in the Arrowhead Region dispersing to smaller population centers?
2. Is economic development becoming diversified away from resource based industries?

*Minnesota New and Expanded Industries, Annual Reports, Minnesota Department of Economic Development.

3. Is the growth center receiving its share of new industrial development?

This assessment section overlaps with other assessment sections in this document. Limitations in the new and expanded industry data are covered in the Income and Employment Assessment in this chapter. The results of this assessment for the growth center overlap with the Growth Center Assessment section of this chapter.

New and Expanded Industry Issue

The one issue treated in this section is the desirability of the direction of industrial development in the Arrowhead Region. Although the desirability will not be assessed herein, the characteristics that decision makers could use in assessing desirability are presented.

Data for announced employment and investment for new and expanded industries are broken down by year, type of industry, and place characteristic in Tables IV-B-3, IV-B-4, and IV-B-5. The place breakdown is for cities less than 2,500 population, and cities with greater than 2,500 population excluding Duluth. Industrial breakdown is provided for mining, wood products, other resource related industries, support industries, and non-resource related industries. Data are provided both for employment and investment.

The industrial breakdown into the five groupings has deficiencies. The attempt was made to separate industries into those that depend upon the natural resources of the region and those that are independent of the region's natural resources. Some of the developments such as those in mining and the forest products industry can be readily classified. Those, however, in the support and non-resource industries are difficult to separate. Development such as expansions in Jeno's Foods were considered non-resource oriented since they are not based on the natural resources of the region. All warehousing was considered non-resource oriented even though in some cases the warehousing may be supporting resource oriented industries. Manufacturing

firms, such as those that supply the taconite industry, were treated as support industries. Although some of the designated support industries may be independent of the natural resource industries in the region, it is believed that more of the employment in non-resource oriented industries actually depends on the resource base and thus any error is in the direction of under-estimating the significance of resource-dominated employment in the region.

Table IV-B-3, which shows employment and investment for places less than 2,500 population, indicate that most all of the development in these areas is dependent upon the natural resources available. 99.6% of the employment resulted from developments in natural resources of the area, with over 89.3% being generated by mining and wood products industries. Also apparent is the unevenness of the industrial development of these smaller places. During 1972, only 47 new jobs were created. In 1973, 123 new jobs were generated, and in 1974, 400 jobs were generated, all by an expansion in the mining industry. Virtually all of the wood products investment took place in 1973, all the mining in 1974, and all the other resource, support, and non-resource development in 1972.

Table IV-B-4 shows similar resource domination in places greater than 2,500 outside Duluth. 90.6% of employment generated between 1972 and 1974 was developed in these industries. One difference however is that more support employment relating primarily to industries supplying the mining industry was generated in the larger urban places in the region. Table IV-B-5 shows that the City of Duluth is the only area in the region that exhibits some lack of dependence on the natural resources of the area. 43.7% of the jobs generated in Duluth were apparently not related to the regional natural resources.

Table IV-B-6 summarizes the employment generation for three different areas in the region and compares the job generation to the population of these areas. Places less than 2,500, or 43.2% of the population, received only 12.6% of the jobs. Places greater than 2,500 outside of Duluth, only 26.3% of the population, generated 60.8% of the jobs. The City of Duluth, which has 30.5% of the population, produced only 26.4% of the jobs.

It seems apparent that small areas are not benefitting from the advances in resource base industries but are serving primarily as bedroom communities to the urbanized areas outside of Duluth that are experiencing the significant increases in employment. For an urban area, the City of Duluth is not holding its own. An urban area normally provides more jobs than it has residents and thus hires people who commute from smaller places into the area. The fact that the number of jobs being generated percentage-wise is less than the population percentage, is indicative that Duluth is not gaining relatively. In an absolute sense, however, the figures are more optimistic. Between 1972 and 1974 the number of jobs generated increased from 207 to 512. The fact that the percentage of new jobs remained almost constant during a time when the region as a whole has experienced a boom is indicative that the boom is also having affects on the region's growth center.

The resource-and non-resource-related employment generated by new developments is summarized in Table IV-B-7. Overall, it is estimated that 82.6% of new industry is dependent on the region's natural resources. Only 17.4% seems to be independent of the natural assets existing in the region. The economy thus does not appear to be benefitting from a national trend towards dispersion of industry areas outside of major metropolitan areas and is not establishing a diversified industrial base.

Table IV-B-3

New and Expanded Industry for Places
With Less Than 2500 Population
from 1972 through 1974

Year	Mining		Wood Products		Other Resource		Support		Non-Resource	
	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.
1972			0 *	60	6	20	8	56	0	150,000
					15	25			0	11.2
							16	25		
									2	10
Sub-Total										
	0	0	0	60	21	45	24	81	2	150,022
1973			50	925	13	25			0	2,300
			20	998						
			80	135						
			5	2						
Sub-Total										
	0	0	110	2060	13	25	0	0	0	2,300
1974	400	200,000								
Sub-Total										
	400	200,000	0	0	0	0	0	0	0	0
<u>TOTAL</u>										
	400	200,000	110	2120	34	70	24	81	2	152,322
					<u>Emp.</u>	<u>Inv.</u>		<u>% Emp.</u>		
Totals:										
Mining	400	200,000						70.1		
Wood Products	110	2,120						19.2		
Other Resource	34	70						5.9		
Support	24	81						4.2		
Sub-Total	568	202,271						99.6		
Non Resource			2						.35	
	570	354,593						100 %		

* In thousands of dollars.

Table IV-B-4

New and Expanded Industry Announced
Employment and Investment for Places Greater
than Duluth from 1972 through 1974

Year	Mining		Wood Products		Other Resources		Support		Non-Resource	
	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.
1972			0 *	1000			150	500	20	500
			25	1800			150	500	10	100
			0	1500			1	75	25	25
			5	3000					0	110
			40	215					50	75
									0	4750
Sub Total	0	0	70	6615	0	0	301	1075	105	5560
1973	333	50,000	12	75			90	250	2	60
			0	12,000			75	490	1	78
			40	180			20	270	30	440
			125	32,000			15	300	5	-
			0	975			50	-	100	150
							15	317	3	70
							50	2300	0	3500
							115	300	0	546
Sub Total	333	50,000	302	45,230	0	0	430	4227	141	4844
1974	480	150,000	10	40			10	460	0	55
	500	90,000	0	60					8	15
			0	24,000					0	12
									0	175
Sub Total	980	240,000	10	24,100	0	0	10	460	8	257
Sub Total	980	240,000	10	24,100	0	0	10	460	8	257
TOTAL	1313	340,000	382	75,945	0	0	741	5762	254	10,661

Totals	Emp.	Inv.	% Emp.
Mining	1313	340,000	48.8
Wood Products	382	75,945	14.2
Other Resource	0	0	0
Support	741	5,762	27.5
Sub Total	2436	421,707	90.6
Non Resource	254	10,661	9.4
	2690	432,368	100

* In thousands of dollars.

Table IV-B-5

New and Expanded Industry Announced
Employment and Investment for Duluth
from 1972 through 1975

Year	Mining		Wood Products		Other Resource		Support		Non-Resource	
	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.	Emp.	Inv.
1972	00		70 *	5500	0	0	50	400	0	1300
									0	2500
									10	150
									10	400
									0	218
									7	134
									60	150
									0	205
Sub Total	00		70	5500	0	0	50	400	87	5057
1973			22	500	85	150,000	50	400	100	140
					175	90,000			3	140
									6	450
									0	216
									1	-
Sub Total			22	500	260	240,000	50	400	110	946
1974	00		0	50	0	0	10	-	0	40
			75	-	0	0	55	-	10	-
			12	-			50	69	300	5500
Sub Total	00		87	50	0	0	115	69	310	5540
TOTAL	00		179	50	260	2400	215	869	507	11,544

Totals	Emp.	Inv.	% Emp.
Mining	0	0	0
Wood Products	179	6050	15.4
Other Resource	260	2400	22.4
Support	215	869	18.5
Sub Total	654	9319	56.3
Non-Resource	507	11544	43.7
TOTAL	1161	20863	100.0

* In thousands of dollars.

Table IV-B-6
 Announced Employment for Resource Related and Non-Resource
 New and Expanded Industries for Places from 1972 through 1974
 and Population by Place 1970

Year	Less than 2500		Total	%	Greater than 2500		Total	%	Duluth		Total	%	Year	
	Resource	Non-Resource			Resource	Non-Resource			Resource	Non-Res.			Total	%
1972	45	2	47	6.4	376	105	481	65.4	120	87	207	28.2	735	16.6
1973	110	0	110	6.2	1065	141	1206	68.6	332	110	442	25.1	1758	39.9
1974	<u>400</u>	<u>0</u>	<u>400</u>	<u>20.9</u>	<u>990</u>	<u>10</u>	<u>1000</u>	<u>52.3</u>	<u>202</u>	<u>310</u>	<u>512</u>	<u>26.7</u>	<u>1912</u>	<u>43.4</u>
Totals	555	2	557	12.6	2431	256	2687	60.8	654	507	1161	26.4	4405	
% of 1970 population			142,243	43.2			86,782	26.3			100,578	30.5	329,603	

Table IV-B-7

Employment for Resource and Non-Resource Related Industries
in New and Expanded Industries
from 1972 through 1974

Year	Resource Related		Non-Resource Related		Total
	Empl.	%	Empl.	%	
1972	541	73.6	194	26.4	735
1973	1,507	85.7	251	14.3	1,758
1974	1,592	83.3	320	16.7	1,912
TOTAL	3,640	82.6	765	17.4	4,405

ASSESSMENT C MINING INDUSTRY

Chapter IV
Assessment C
MINING INDUSTRY

This assessment has two principal sections, Section I, Growth in the Mining Industry and Section II, Copper-Nickel Industry.

I. Growth in the Mining Industry

As a result of expansions in the taconite industry, Northeastern Minnesota is undergoing the most significant expansion in economic activity that has occurred during the last 50 years. Direct employment in the mining industry is expected to increase by over 3,000 between 1973 and 1984 (see Table IV-C-1). If a conservative multiplier of 1.25 is used to estimate total employment, a net increase of over 3,700 new jobs in Northeastern Minnesota can be expected. In addition to the permanent jobs, a large boom in the construction industry is expected during the construction years which will last from 1975 through 1979. At the peak of this boom which will occur in 1976, (see Table IV-C-2) more than 6,000 construction laborers will be required.

In one sense, the taconite expansion is compensating for reductions in economic activity resulting from an exhaustion of natural ores. In 1984, the taconite industry is expected to produce more than 62 million tons of taconite pellets (see Table IV-C-1). At the peak of the natural ore production which occurred in 1953, 80.9 million tons of natural ore were produced (see Table IV-C-3). In 1953 more than 99% of iron ore production was natural ore. By 1984 more than 90% of iron ore production will be taconite. As shown in Table IV-C-4, as natural ores were exhausted mining activity became concentrated in the Mesabi Range. In 1958, 93.5% of all mining activity was in the Mesabi Range and by 1973 the percentage had increased to more than 99%. Mining in the Vermillion Range was terminated by 1970 and mining in other places, principally southern Minnesota, was also terminated by 1970. Iron ore shipments from the Cuyuna Range have decreased

Table IV-C-1

Projected Growth in Iron Mining Industry²

	<u>TONNAGE (millions)</u>			<u>EMPLOYMENT</u>			<u>CAPITAL INVESTMENT \$ MILLIONS</u>		
	<u>1973</u>	<u>1984</u>	<u>Change</u>	<u>1973</u>	<u>1984</u>	<u>Change</u>	<u>By 1973</u>	<u>By 1984</u>	<u>Change</u>
1. Minntac (U.S. Steel)	12.50	18.5	6	3250	4100	850	325	525	200
2. Erie Mining (Bethl. & PM)	10.50	10.7	.2	2850	3000	150	650	655	
3. Reserve (Armco & Republic)	10.80	10.8	-	3000	3000	-	560	630	70
4. National Steel (Hanna)	2.80	6.0	3.2	580	1000	420	90	240	150
5. Eveleth Tac. (Oglebay-Norton)	2.40	6.0	3.6	475	900	425	45	155	110
6. Hibbing Tac. (Bethl. & PM)	-	6.0	6	-	1250	1250	-	200	200
7. Minorca (Inland Steel)	-	2.6	2.6	-	500	500	-	90	90
8. Empire (Detroit Steel)	-	1.5 ¹	1.5	-	300 ¹	300	-	NA	-
Taconite	41.40	62.1	23.1	10,155	14,050	3,895	1,670	2,495	820
9. Natural Ore - All Companies	<u>15.30</u>	<u>7.3</u>	<u>-8</u>	<u>1,885</u>	<u>1,100</u>	<u>- 785</u>	<u>NA³</u>	<u>NA</u>	<u> </u>
Totals	56.70	69.4	15.1	12,040	15,150	3,110			

¹ARDC staff estimates²All other figures verified by Lake Superior Industrial Bureau during November, 1975³NA - Not Available.

Table IV-C-2

Projected Increases in Iron Range Employment for Taconite and Construction Industries

Constr.	Projects	1975				1976				1977				1978				1979
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
United	-Hibbing Tac.	812	1250	1800	1300	1300	1400	1300	1900	1400	1450	1500	1900	1400	1300	1300	50	-
Bechtel	-Nat. Stl. Plt.	921	989	1242	940	800	950	1200	900	-	-	-	-	-	-	-	-	-
	-Inland/Minorca	50	300	340	320	260	600	780	800	650	800	700	-	-	-	-	-	
	-(Butler-Cooley)	-	-	-	-	-	-	50	400	500	900	1200	1100	800	1000	1200	1300	900
U.S. Steel	-Minntac Phase III	40	40	500	880	800	1500	2000	1800	1800	1100	1300	700	50	-	-	-	-
A.B.I.	-Fairlane (Ev.Tac.)	344	450	600	750	800	800	200	40	-	-	-	-	-	-	-	-	-
	-Thunderbird (Ev.Tac.)	75	75	100	150	250	250	300	20	-	-	-	-	-	-	-	-	-
	Sub-Totals	2242	3104	4582	4340	4210	5500	5830	5860	4550	4250	4700	3700	2250	2300	2500	1350	900
	Hsg. Constr. Areawide	40	260	400	280	120	220	320	240	60	180	240	240	30	100	120	130	40
	Other Misc. Constr.	35	96	125	120	35	95	125	120	30	200	300	400	120	200	260	320	100
	Sub-Totals	70	356	525	400	155	315	445	360	90	380	540	640	150	300	380	450	140
	Total Constr. Labor	2317	3460	5107	4740	4365	5815	6275	6220	4640	4630	5240	4340	2400	2600	2880	1800	1040
	Permanent Tac. Labor	-	-	-	100	250	300	1100	1500	1800	2100	2200	2400	2900	3150	3200	3450	3450
	Grand Totals	2317	3460	5107	4840	4615	6115	7375	7720	6440	6730	7440	6740	5300	5750	6080	5250	4490

*Construction labor force consists of prime contractors employees, plus supervisory personnel, plus sub-contractors. Quarterly summaries are based on peak employment during that period. Construction data obtained from primary contractors during April 1975. Taconite labor verified by Lake Superior Industrial Bureau during April, 1975.

Table IV-C-3

Iron Ore Shipments From Minnesota¹
in millions of tons and % of total

	<u>Natural Ore</u>	<u>%</u>	<u>Taconite</u>	<u>%</u>	<u>Total</u>
1953	80.9	99.3%	.6	.7%	81.5
1958	34.4	80.4%	8.4	20.6%	42.8
1961	30.3	61.8%	14.5	38.2%	44.9
1964	30.4	61 %	19.4	39 %	49.8
1967	25.6	51.5%	24.1	48.5%	49.7
1970	21.2	38.5%	34.0	61.5%	55.1
1973	19.0	30.4%	43.9	69.6%	62.9

Iron Ore Shipments from Range
in millions of tons and % of total

	<u>Mesabi</u>	<u>%</u>	<u>Vermillion</u>	<u>%</u>	<u>Cuyuna</u>	<u>%</u>	<u>Other</u>	<u>%</u>	<u>Total</u>
1958	40.04	93.5%	1.08	2.5%	1.48	3.4%	.24	.56%	42.84
1961	42.20	94.0%	.87	1.9%	1.32	2.9%	.5	1.1 %	44.88
1964	47.66	95.8%	1.02	2 %	.69	1.3%	.41	.8%	49.78
1967	48.11	96.6%	.29	.58%	1.08	2.2%	.31	.6%	49.79
1970	54.68	99.1%	-	-	.52	.9%	-	-	55.20
1973	62.59	99.5%	-	-	.31	.49%	-	-	62.9

Note: One source estimates that by 1980 taconite shipments will be over 90.7% of total and by 1990 100% of all iron ore shipments from Minnesota will be taconite concentrate. Pfleider, Eugene Q., et al. "Economic Importance of the Iron Ore Industry to Minnesota", a study sponsored in part by the Iron Range Resources and Rehabilitation Commission, June, 1971.

¹Trethewey, William P. University of Minnesota Bulletin, Mining Directory Issue, Minnesota, 1974, page 217.

²Trethewey, op cit, pages 215 and 217.

substantially in recent years. Expansions in the iron mining industry on the Mesabi Range will affect primarily St. Louis County and the eastern sections of Itasca County.

As shown in Table IV-C-4, the changeover from natural ore to taconite has been accompanied by an improvement in the earning status of mining employees. For St. Louis County, in 1967 mining employment was 12.3% of total employment, but mining payroll was 16.9% of total payroll. The payroll per person in mining thus was 37.7% higher than the average. By 1973 the average payroll per employee in the mining industry had increased to a point where it was 51.5% greater than the average. This improvement in average payroll per employee can be attributed in part to the nature of the taconite industry. The taconite industry as a result of being a capital intensive industry has a higher wage schedule than most industries that are more labor intensive.

The current expansion in the taconite industry began in 1974. As shown in Table IV-C-5, employment in the mining industry for the Virginia-Hibbing administrative areas (defined in Table IV-C-5) increased from 9,736 to 10,648 between 1973 and 1975. This increase reflects a more intensive use of existing capacity rather than the impact of new construction. As shown in Table IV-C-5, construction activity for the Hibbing and Virginia administrative areas increased substantially between January 1975 and July 1975. In Table IV-C-2, it was illustrated that new construction will begin impacting permanent taconite labor in the last quarter of 1975.

The issues related to the growth in the taconite industry that are treated below are:

1. Insufficient supply of housing on the Iron Range
2. Industrial expansions related to mining industry
3. Iron ore taxes
4. Energy shortage impact on taconite
5. Labor force adequacy
6. Mine land reclamation: To be developed

Table IV-C-4

St. Louis County total and Iron Ore mining number of employees and payroll information for 1967, 1970 and 1973*

	<u>1967</u>	<u>1970</u>	<u>1973</u>
Mining Employment			
Iron Ores:	6,519	7,502	7,995
Iron Ore Payroll			
Yearly in \$1,000	48,480	67,276	87,664
Payroll per Employee	7,437	8,968	10,965
Total Employment in County	53,119	55,599	56,576
Total Yearly Payroll in			
County in \$1,000	286,932	335,692	409,444
Total Payroll/Employee	5,402	6,038	7,237
Mining Employment as a %			
of total payroll	12.3%	13.5%	14.19%
Mining Payroll as a %			
of total payroll	16.90%	20.04%	21.4%
Mining Payroll per			
employee as a % of total			
payroll per employee	137.7%	148.5%	151.5%

*Source: County Business Patterns, United States Department of Commerce, Table 2, for 1967, 1970 and 1973.
Information provided for the January through March periods, calculated by multiplying the amount given by 4.

Table IV-C-5

Mining Area Employment Information¹

	1973 ²	1975 ³
Mining Employment		
Virginia Administration Area ⁴	7,002	7,559
Hibbing Administration Area ⁵	2,052	2,339
Grand Rapids Area ⁶	682	750
Total	9,736	10,648

Taconite Construction Employ

	<u>1975</u>						
	Jan.	Feb.	Mar.	April	May	June	July
Virginia Admin. Area	531	561	531	617	777	952	1095
Hibbing Admin. Area	1037	1276	1481	1755	1842	1930	2131
Total	1568	1836	2032	2306	2459	2882	3226

¹Data from "Area Employment Trends in Minnesota" Minnesota Department of Employment Services for Hibbing, Virginia and Grand Rapids (monthly reports)

²Average of the months January 1973 thru December 1973

³Average of the months July 1974 thru June 1975.

⁴Area 40 miles north, 40 miles south, 30 miles east, 10 miles west of Virginia.

⁵Area 30 miles north, 33 miles south, 17 miles west, 18 miles west of Hibbing.

⁶Area within 1 mile of Grand Rapids.

Issues Related to Expansions in the Iron Mining Industry

Insufficient Supply of Housing on the Iron Range

It has been estimated in an ARDC report (Iron Range Housing Plan Proposal, December 30, 1974, p.5) that by 1980 nearly 4,000 new housing units will be required on the Iron Range to accommodate additional permanent employment (see Table IV-C-6). A calculation of the required housing with the assumption that each new job in the mining industry will generate .25 jobs in other industries indicates that as many as 5,000 new homes are needed. In addition to the housing requirements for permanent employees, housing is also required for the construction employees who will reside in the area for a period from two to four years. As shown in Table IV-C-2, construction employment will hit a peak of over 6,000 in 1976. Informal reports indicate that most of the available housing including motel units is currently being occupied by workers who have immigrated to the area. Other reports indicate that many summer homes are being rented to construction laborers for high rental rates.

Today, numerous conditions exist that hamper the ability of the private market to meet the housing needs that have developed on the Iron Range. As the result of high interest rates and increased construction costs, the yearly cost of new housing stock that meets minimum requirements exceeds the financial capability of most people employed in the construction and mining industries. Even if workers can afford housing, there is no assurance that adequate financing will be available. Also, due to the expansions in the iron ore industry, the construction industry on the Iron Range is already being utilized to near full capacity.

If the housing situation is not resolved, a number of serious situations could arise. Mining companies may have a difficult time hiring needed labor. People moving to the area may be forced to live outside of established communities where public services can be provided at the lowest cost. A substantial increase of people living in undeveloped areas could

PROPOSED DISTRIBUTION OF NEW HOUSING CONSTRUCTION THROUGHOUT IRON RANGE

Community	TOTALS	Single Family	Duplex Z.L.L.	Town-house	Apart-ments	Condo miniums	Mob.Hm. Parks	Elderly & L.I.	Tempor. Constr.
Area A - 1670									
Virginia	1080	145	25	220	435	30	225	100	-
Gilbert	160	20	-	50	-	-	90	-	-
Eveleth	96	20	-	-	76	-	-	-	-
Mt. Iron	294	104	-	100	90	-	-	70	300
Adj. Twps.	40	40	-	-	-	-	-	-	-
Area B - 1308									
Hibbing	410	54	-	90	178	-	88	70	-
Stuntz Twp.	670	132	20	100	138	20	260	-	400
Chisholm	168	94	-	28	46	-	-	50	-
Buhl	20	20	-	-	-	-	-	-	-
Keewatin	40	40	-	-	-	-	-	-	100
Area C - 1122									
Ely	442	190	20	132	90	10	-	-	100
Babbit	270	120	-	40	30	-	80	-	200
Hoyt Lakes	160	80	-	80	-	-	-	-	-
Aurora	220	40	-	30	70	-	80	40	-
Biwabik	30	30	-	-	-	-	-	-	-
Area D - 200									
Grd. Rapids	50	50	-	-	-	-	-	100	-
Coleraine	20	20	-	-	-	-	-	-	-
Floodwood	70	70	-	-	-	-	-	-	100
Forbes	60	-	-	-	-	-	60	-	-
Tower-Soudan	-	-	-	-	-	-	-	20	-
TOTALS	4300	1269	65	870	1153	60	883	460	1200

Estimate of occupied housing units as of June 1974 with zero vacancy rate.----- 29,301
 Projected new housing demand 3,802
 Sub-total 33,103 x 1½% addtl. units needed to maintain vacancy rate.
 = 498 units + 3802 = 4300

These totals not included in grand totals.

significantly increase the financial burden on county and other units of government. If housing is not available, workers may be forced to commute considerable distances, which places an unrealistic burden on the workers and results in a waste of scarce energy resources. Although ARDC has one full time staff person assigned to the housing situation on the Iron Range, additional efforts may be required to resolve the many difficulties involved in this situation.

Industrial Expansions Related to the Expansions in the Iron Mining Industry

Expansions in the mining industry will generate additional economic activity in Northeastern Minnesota in two ways. First, the mining industry will impact other industries directly by purchasing supplies from firms in the area. Second, the income supplied to employees and firms will give rise to a general increase in economic activity in the region. Although a complete description of the effects of mining expansions is unavailable, indicators exist which provide insights into the extent that increases in mining activity will bring about increases in other activities.

The extent that mining company purchases impact the regional economy depends on the nature of the supplying company. If the firm produces the goods that are sold to the mining company, then the impact can be substantial. However, if the firm is a retailer who purchases goods from outside the region, the regional impact could be minimal. Figures exist on the total number of purchases made by Reserve Mining in 1973 (see Table IV-C-7). If the assumption is made that other companies follow the same pattern in purchases and that this pattern will continue up through 1984, then the impact of the mining industry on the Iron Range and the City of Duluth is potentially significant. In 1984, goods can be expected to be supplied to the mining industry totalling over \$59 million dollars from the Iron Range cities and over \$66 million dollars from Duluth. Although there is no information

available as to the extent of these purchases that will be filled with goods manufactured in the Arrowhead Region, the potential for a reasonably high secondary impact from expansions in the mining industry is substantial.

Additional information on secondary impacts in the mining expansion is provided in the multiplier analysis summarized in Table IV-C-8. The employment multiplier is an estimate of the number of total jobs that will be generated by increases in employment in the industry. The value of the multiplier is dependent upon the methodology used in this determination. In three separate studies, the Minnesota multiplier for the mining industry was calculated to be 2.015, 1.95, and 1.390. Of these three multipliers, the lowest one, 1.390, was developed in the input-output study which is the most accurate of the methodologies employed. Even if the multiplier is this low, the overall effect of increases in mining employment on the economy in Minnesota could be significant. The addition of the 4,000 permanent jobs in mining could give rise to an additional 1,600 jobs, most of which would be developed in the Arrowhead Region.

Two sub-issues related to the secondary expansion can be identified:

1. The Arrowhead Region may not benefit from secondary expansion if firms supplying the taconite industry do not elect to locate in the area.
2. Expansions of these secondary industries may tend to exacerbate the problems in areas that are already growing at a high rate and, conversely, other areas capable of supporting such industries may not have the opportunity to do so.

Iron Ore State Taxes

No aspect of taconite development is more controversial than the taxing arrangements. Taconite expansion in Minnesota was encouraged through a 1964 amendment to the constitution that tied increases of the occupation, royalty and excise taxes on taconite production to the level of increases imposed on manufacturing corporations in the state. As a result of the

taconite amendment, the state taxes paid per ton for taconite ore are approximately one-third the amount paid on natural ores. The Taconite Amendment and its supporting statute, however, did not cover the 1941 taconite production tax which is paid to local government and school districts. Before 1969, this tax was set at 5¢ per ton. In May, 1969, a statute was passed raising the production tax from 5 to 11½¢ per ton. An escalation provision was also added which increased the tax by 1/10 of 1¢ for each 1 point increase in the wholesale commodity index. In 1971, the tax was again increased on a scheduled basis through 1979, amounting to .14/ton plus escalation. In 1975, the production tax was again increased by .39/ton. Minnesota, however, must remain competitive with other iron ore producers. It has been estimated that taxes in excess of 30¢ per ton¹ could result in a cessation of taconite expansion. According to the source,² Minnesota had a slight economic advantage with respect to the majority of areas that produced iron ore. Increases in production tax will make Minnesota less competitive with other places in the United States, Canada, and other continents.

Conditions in industry cost structure can change for reasons other than taxes. Taconite, as explained in the next section, is an energy and capital intensive industry. At present we are undergoing significant increases in energy and capital costs. These changes are no doubt reducing Minnesota's competitive position with respect to natural iron ore production. With regard to taxes, two concerns can be identified:

¹NEMO, Inc. The Effect of Higher Production Taxes on the Minnesota Taconite Industry, May 1970, page 18.

²NEMO, Inc. op cit, page 10.

Table IV-C-7

Reserve Mining Purchases 1973
in millions of dollars

In Minnesota ¹	<u>Total Value</u>	<u>% of Total</u>
Duluth	12.2	29.1
Iron Range	11.0	26.2
Twin Cities	4.2	10
Other Minn.	<u>2.6</u>	<u>6.2</u>
Total Minn.	30.0	
Out Minn.	<u>11.9</u>	<u>28.4</u>
Total	41.9	100

¹ Arthur D. Little Inc., "Environmental Report Concerning On-Land Tailings Disposal and Air Quality Plan for the E. W. Davis Works, Reserve Mining Company of Silver Bay, MN", Volume II, April 30, 1975, pages 2-419.

Table IV-C-8

Multiplier Estimates:

Arthur D. Little Estimates for Reserve Mining¹

Employment Multiplier -

$$\text{For U.S. - } \frac{6685}{2810} = 2.37$$

$$\text{For Minn. - } \frac{5470}{2810} = 1.95$$

Jesswin & Lichty Estimates for Mining Industry

Employment Multiplier: for Arrowhead Region of
Minnesota plus Douglas
County Wisconsin = 2.015²

Minnesota Energy Agency Iron, Ferro Mining Multiplier for Minnesota³

For Employment - 1.390
For Income - 1.752

Minnesota Energy Agency High and Low Employment & Income
Multipliers for Minnesota

	<u>Employment</u>	<u>Income</u>
High		
Other Utilities	7.329	2.784
Food & Kindred	5.042	2.678
Livestock	4,990	6.234
Petrol. Refin.	3.663	2.331
Elec. Utilities	2.701	1.938
Low		
Retail	1.074	1.220
Trucking	1.141	1.221
State Local Ent.	1.159	1.603
Medical - Education	1.164	1.173
Other Services	1.185	1.215

¹ Arthur D. Little, Op Cit: page 2-425

² Jesswin, Wayne A. and Lichty, Richard W. "The Employment Impact of Reserve Mining Company on the Arrowhead Region of Northeast Minnesota plus Douglas County, Wisconsin" Sponsored by ARDC, 1975, page 16.

³ Minnesota Energy Agency "An Input-Output Model of the Minnesota Economy - A Policy Making Tool", April 1975, page 106.

1. If production taxes are increased to a point where they deter expansion of the taconite industry, the welfare of many of Northeastern Minnesota's residents could be affected.

2. Although the distribution of the taconite tax revenues is set by state law, this distribution has a profound influence on the taxing situation in the region. The distribution of these revenues should be closely monitored so that the welfare of Northeastern Minnesota's residents is safeguarded.

Energy Shortage Impact in Taconite

In a June presentation to the Arrowhead Regional Development Commission, Dr. James Carter of the Minnesota Energy Agency provided the following information:

1. The taconite industry uses ten times the energy per employee as the average industry in Minnesota.

2. The taconite industry is highly dependent upon natural gas that will be in short supply in coming years.

3. Within 4 or 5 years, all taconite companies will be on interruptible status with respect to natural gas.

4. The technology for the use of coal in the taconite process has been developed. The feasibility of the taconite companies using coal, however, was not discussed.

5. The Minnesota Energy Agency is undertaking research that will enable them to allocate energy resources if the need arises and the legislature grants the necessary powers.

6. The Minnesota Energy Agency is investigating ways that energy resources can be allocated to best benefit the people of Minnesota.

From the above and other readily available information it seems apparent that employment in the taconite industry in the future could be severely jeopardized because of energy shortages. It also seems possible that an

allocation program based on maximizing the amount of employment for the available energy reserves could work against the taconite industry. Since this industry is a principal basic industry of Northeastern Minnesota, any curtailments of this operation could reduce the vitality of the Northeastern Minnesota economy and jeopardize the principal domestic source of iron ore for our national steel industry. For this reason, a primary economic concern of the people of Northeastern Minnesota should be the assurance that the taconite industry will have available the energy resources that it needs to sustain its current and planned levels of production.

Labor Force Adequacy

With more than 4,000 new jobs in the taconite industry and 1,000 or more jobs in other industries that will develop because of increased economic activity, the labor market in Northeastern Minnesota is healthier now than it has been since World War II. Many people from outside of the region will immigrate to Northeastern Minnesota to take advantage of these jobs. Construction companies and mining companies rely on a certain amount of immigration to provide workers with specialized skills. It can be expected that people who have previously left the area in search of work elsewhere will return to take advantage of the new jobs. There are, however, undoubtedly many jobs in the mining and other growing industries that could be filled by people living in the region. Since this area has been chronically depressed for many years, there are many people who are either unemployed or underemployed. It would be to the benefit of the region if qualified people living here were able to take advantage of the new job opportunities.

A number of steps could be taken that would help accomplish this objective. Proper information about job opportunities in construction and permanent jobs in the mining industry could be made available to employment offices throughout the region. If in time particular skills will be required,

information could be provided to individuals so that they could obtain the training required for these jobs. Local vocational schools or private training schools may wish to coordinate with industry and area leaders to provide the type of training that is required. Transportation arrangements could be developed so that people from outside of the localized mining areas could commute to these areas on a daily or weekly basis.

The issue, thus, is that there is no assurance now that the opportunities that are emerging in the Arrowhead Region will be taken advantage of by Arrowhead Region residents. Information is required to define the limits of the situation. If a problem does exist, then necessary policies and programs should be instituted.

Mine Land Reclamation: TBD

II. Copper-Nickel Industry

It has been estimated that somewhere between 100 billion and 200 billion dollars worth of copper-nickel reserves exist in the Arrowhead Region of Minnesota. Most of these resources lie on the gabbro complex which extends from just north of Duluth up through the Babbitt-Hoyt Lakes area northeast through the northwestern portion of Lake County, up through the Boundary Waters Canoe Area (BWCA) and through the Gunflint area of Cook County. Sufficient drilling has been done to establish that the majority of the readily available reserves exist in the 20 mile slot that extends from just south of the BWCA near the north Kawishiwi River southwest to Hoyt Lakes. Additional potential may exist on the gabbro from Hoyt Lakes, 50 or 60 miles south toward Duluth. The area extending through the BWCA and up on the Gunflint is thought not to have any mineable deposits. Geologists know that the formation is far below the earth in the BWCA and exploratory drilling in the Gunflint area has not produced any favorable results.

Although a number of companies hold leases or own land in the copper-nickel area, only two companies, American Metal Climax (AMAX) and International Nickel Company (INCO) are progressing towards a

mining stage. Of these two companies, INCO is the furthest advanced. It has completed an exploratory shaft, taken an extensive bulk sample, and notified the Forest Service that it intends to mine the copper-nickel ores using open pit technology. AMAX has just received approval from the Pollution Control Agency to sink a test shaft on the land that it controls.

Many environmental interests, if not in opposition, are highly skeptical that this development is a positive step for Minnesota. The copper-nickel deposits are close to the BWCA; the proposed INCO mine is less than 1 mile from the Boundary Area. Copper-nickel differs from taconite in that its wastes contain a high percentage of heavy metal (copper-nickel, mercury), compounds that could be a threat to the pure waters of Northeastern Minnesota. Northeastern Minnesota differs from other mining areas because of high rainfall levels which could result in a substantial amount of water filtering through the waste heaps and potentially contaminating surface or ground water supplies. There are other aspects of concern to the development of copper-nickel. Technology regarding the beneficiation and refinement technologies have been developed in Finland and Japan, but it is not certain at this time that these advances would be adaptable to the Minnesota reserves. Another concern of copper-nickel development is the extent of waste that is created in the process. Although taconite produces considerable waste (only 20 to 30% of the mined substance is usable ore) copper-nickel produces substantially more (99.5% of the mined substance will end in waste heaps). One additional concern of copper-nickel opponents is that the economy of Northeastern Minnesota is being extended because of growth in the taconite industry, and additional large employment developments in the region would put an unnecessary high stress on housing and public services in the area.

Many in Northeastern Minnesota believe that copper-nickel can be developed without unnecessary destruction to the natural environment and with the provision of adequate services to the people who would work in the industry. Because the copper-nickel deposits are further east than the taconite ores, this development would affect the City of Ely, which has lost considerable amount of tax base and a large number of jobs over the years due to the closing of natural iron ore mines close to Ely, and which is not experiencing the same boom being felt elsewhere on the Iron Range. Many residents view copper-nickel development as a means of restoring the economic vitality present when natural ore mines were operating in their area.

Late in 1974, INCO requested that the U.S. Forest Service undertake an Environmental Impact Statement for their proposed mining operation. Simultaneously, the State of Minnesota initiated a regional EIS effort that would investigate the environmental, economic, and social impact of the principal portion of the copper-nickel deposits. Difficulties developed, however, because the U.S. Forest Service was unable to finance a full scale EIS effort. Consequently, they requested that INCO assist them financially in this work. Also they requested that INCO provide them an operational plan early in the program so that the Forest Service could properly approach the environmental impact effort. INCO, however, did not provide the Forest Service with the requested operational plan and no arrangement was worked out on company financing of Environmental Impact Statement efforts. The Forest Service then terminated their EIS efforts providing compliance with their requests. As of August 1, 1975, the Forest Service EIS effort was still non-operational. The State Legislature has appropriated over \$900,000 for the State to undertake the regional EIS effort. Some of this money has been made available for the hiring of a permanent staff to guide this undertaking.

The issue in copper-nickel development is related to the completion of the Environmental Impact Statement. It can be argued that needless delays in completion of the EIS efforts, both at the state and federal levels, work to the disadvantage of all interests in Minnesota. Without this EIS, the true environmental and economic impacts of copper-nickel development cannot be assessed. Should a national emergency or de-stabilizing foreign situation develop, national interests may order copper-nickel development and may allow only a limited period to undertake an investigation, that if done properly, could take years. The EIS will provide information as to whether or not these copper-nickel reserves can be developed in a way that would safeguard the best interests of the people of Northeastern Minnesota.

ASSESSMENT D FOREST PRODUCTS INDUSTRY

Chapter IV

Assessment D

FOREST PRODUCTS INDUSTRY

Forest products have long been singled out as one industry in the Arrowhead Region that has many desirable and few undesirable characteristics. One of the principal advantages for this industry is that it is based on a renewable resource. If forest lands are managed properly, they can be expected to produce products as long as man needs them. Furthermore, forest production can be compatible with other land uses. When properly managed, forest lands support wildlife, and if suitable, recreational activities. Another positive feature of forest product industries is that there is potential for expansion with new technology and improved markets. In the latest forest timber resources survey in 1961-62, it was estimated that only a third of the allowable cut was used. A recent estimate suggests that this figure may now be 66%, which means there still is significant room for expansion (see Table IV-D-1) for a summary of these figures).* Finally, the forest products industry allows for a variety of employment experiences. At one end of the spectrum there is the independent part-time farmer-logger who often receives a low hourly salary, but has the freedom to program his own work experience. His total investment in equipment may be a chain saw and the farm tractor that he uses for other purposes. At the other end of the spectrum are the employees in the modern pulp and fiberboard mills and the highly mechanized logging contractor. These mills, which have a high level of capital per employee, usually pay above average salaries in return for a 40-hour week.

*It should be noted that the term allowable-cut is based to a large degree on the growth that is taking place in the total forest. Such factors as economic operability, the fact that the forest landowner may be holding the land for other purposes and may not be interested in harvesting of his timber, land withdrawals, and public attitudes all may operate to reduce the timber volume available as a raw material. Because of these factors and because the volume estimates are based on an outdated inventory, caution must be used in the application of the data herein.

Table IV-D-1

Forest Industry Manufacturing and Total Employment for 1973¹

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
Total Manufacturing Employment	356	3,248	151	1,500	2,405	402	9,077	17,139	313,862
Lumber & Wood Products	217	-	130	397	675	138	827	2,384	9,329
Paper & Allied	-	1,962 ²	-	888 ²	874 ²	-	-	3,724	15,637
Total Forest Products	217	1,962	130 ³	1,285	1,549 ³	138	827	6,108	24,966
% Forest Products of Total Manufacturing	61.0%	60.4%	86%	85.6%	64.4%	34%	9.1%	35.6%	7.9%
Total Employment	1,562	6,119	835	6,745	3,982	2,868	56,576	86,651	1,107,220
% Manufacturing of Total	22.8%	53.08%	18.0%	22.2%	60.4%	14.0%	16.0%	19.8%	28.3%
% Forest Products of Total	13.9%	32.06%	10.2%	19.0%	39.3%	4.8%	1.5%	7.0%	2.3%

¹Data for firms with more than 500 taken from Minnesota Directory of Manufacturers 1975-1976. Remaining data taken from County Business Patterns 1973, Minnesota, U.S. Department of Commerce.

²Data average of range provided either 750-999 or 1000 to 1999.

³Data average of range provided either 1 to 3, 4 to 7, 8 to 19, 20 to 49, 50 to 99, 100 to 249, 250 to 499.

The forest products industry is not without its conflicts. Some believe that harvesting trees conflicts with other land uses. It has been estimated that since 1962, nearly a million acres or 11% of the commercial forest land has been lost.¹ Much of this land is in the Boundary Waters Canoe Area and the new Voyageurs National Park. Other land, however, is being lost to forest production because of urbanization trends. Other conflicts relate to the environmental aspects of forest production. The use of pesticides necessary to forest protection continues to be a controversial issue. Also, certain types of forest product production can cause water and air pollution problems. Steps to control these conditions are being taken.

The data on Table IV-D-1 shows the importance of the forest products industry to the Arrowhead Region. Over 35% of all manufacturing employment is in the forest products industries. In 1973 the region had more than 6,000 people working in this industry. It is believed that this figure underestimates the true value. Conservative estimates were made for the paper and allied workers because available data sources supply only broad ranges of data for disclosure reasons. Another factor is that single man operations and the part-time workers are not counted in this figure. This component alone may raise the number to more than 7,000.

As shown in Table IV-D-3, the employment in the lumber and wood products portion of the forest industries has been steady between 1966 and 1972. Total regional employment change between those years for the region was 3.1%, while overall employment declined by 2%. At the same time, the average payroll per employee increased 68.1% while the average payroll for employee for all industries increased only 40.6%.

¹Figure is for 18 counties in N.E. Minnesota, "1962 Allowable Cut Revision, Minnesota Forest Resource Task Force Report", Jan. 1, 1973.

Table IV-D-2

Estimates of Forest Potential

For seven
Counties of Northeastern Minnesota¹ (1961-1962)

	<u>Annual Desirable Cut</u>	<u>Actual Cut</u>	<u>Surplus</u>	<u>%</u>
Softwoods	1,162,700	564,000	598,700	51.4%
Hardwoods	<u>1,481,200</u>	<u>327,300</u>	<u>1,153,900</u>	<u>77.88%</u>
Total	2,643,900	891,300	1,752,600	66%

For 18 County Area 1975

	<u>Allowable Cut</u>	<u>Actual Cut</u>	<u>Residual</u>	<u>%²</u>
Total	3,418,000	2,266,000	1,152,000	33.7%

¹Peura, Robert, Schuelt, Allen, N.E. Minnesota Timber Resources, page 28 Northern Minnesota Development Association (about 1967).

²Estimate provided by Mr. Phil Budd, Vice President - Potlatch Corporation in a report to the ARDC Economic Policy Committee, February, 1975.

*An inventory of forest resources is now in progress. Until the results of this inventory are available, caution should be used in the data presented here.

Tables IV-D-3 and IV-D-4 provide additional information on employment & payroll per employee for 1972. Although payroll to employee in the lumber and wood products industry had increased substantially between 1966 and 1972, the figure of \$1,400 for a three month period is substantially lower than the average payroll per employee for all industries of \$1,742 for the region. The average payroll per employee in lumber and wood products industry varied significantly from county to county with Itasca County having a low of \$1,008 for a three month period, and St. Louis County having a high of \$1,590 for the same three month period. Although regional figures were not available for payroll employees in the paper and allied industry for the same period, the state average in this industry is \$2,347 which is higher than the regional average of \$1,742. The variability in the lumber and wood products industries from county to county and the differences in the amount paid in the paper and allied industry as compared to the wood products industry is in part due to differences in the amount of capital per employee used in different places and by different industries.

A review of production figures indicate that the forest product industry is growing faster than the employment figures seem to indicate. As shown in Table IV-D-5, pulpwood production increased 27% between 1965 and 1972. At the same time, relative regional production declined slightly. Nevertheless, in 1972 the Arrowhead Region was still producing over 68% of the pulpwood produced in the state.

A review of the price profile would seem to indicate that a situation of more supply than demand for timber products still exists in the region as implied above in a discussion on usable cut (see Table IV-D-6). Between 1965 and 1974 prices for aspen increased from \$45 up to \$68.75. When deflated by the wholesale price index, however, the prices of both of these commodities declined slightly between 1965 and 1974. Although the price of forest products depends on the overall condition of the economy, the analysis of

Table IV-D-3

Forest Industries Employment and Payroll Data 1966, 1969, 1972²

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch¹</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
<u>1972</u>									
Lumber & Wood Products Employees ²	207	-	131	346	392	121	752	1949	8101
Lumber & Wood Products Payroll ³	288	-	169	395	578	130	1196	2756	16360
Lumber and Wood Products Payroll/Employee	1391	-	1290	1008	1474	1074	1590	1414	2020
Paper & Allied Minimum Employees	-	1054	-	500	500	-	58	2112	8446
Total Empl.(all industries)	1625	5718	708	6275	3000	2727	54659	72012	1044200
<u>1969</u>									
Lumber & Wood Products Employees	227	-	123	264	405 ³	88	800	1907	7492
Lumber & Wood Products Payroll (000)	281	-	112	265	471 ⁵	96	1010	2235	11992
Lumber & Wood Products Payroll/Employee	1237	-	910	1003	1163	979	1263	1172	1600
Paper & Allied Minimum ⁴ Employees	-	1054	-	500	1000	-	-	2554	9169
Total Empl. (all industries)	1236	5774	611	6224	3587	2960	55437	73469	1016812
<u>1966</u>									
Lumber & Wood Products Employees	114	-	153 ⁵	327	389 ⁵	95	926	1890	7073
Lumber & Wood Products Payroll (000)	148	-	129 ⁵	261	245 ⁵	106	849	1590	8712
Lumber & Wood Products Payroll/Employee	1298	-	843	798	629	1116	916	841	1232
Paper & Allied Minimum Employees	-	1054	-	500	500	-	-	2054	8124
Total Empl. (all industries)	1036	5574	635	6264	3865	3089	53023	73486	865970

Forest Industries Employment and Payroll Data 1966, 1969, 1972 - continued

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
Lumber & Wood Products % Change 1966 to 1972	+82	-	-14.4	+5.8	+8	+27	-18.8	3.1	-11.6
Lumber & Wood Products Payroll/Employee % Change 1966 to 1972	+7.2	-	+53.	+26.3	+134	-3.7	+74	68.1	64
Total Employment % Change 1966 to 1972	+56	+2.5	11.4	.2	-22.3	-11.7	3.1	-2	20.5
Total Payroll per Total Empl. % Change 1966-1972	+44	+34	- 4.6	+22.5	+35	39.3	44.9	40.6	+42.2

*Other Statistics: State Payroll/Employee 1966 Paper & Allied 1583
 State Payroll/Employee 1972 Paper & Allied 2347
 State Payroll/Employee % Change 1966 to 1972 (Paper & Allied) +48.3

¹Data from County Business Patterns 1966, 1969, 1972

²Employees are for mid-March pay period

³Taxable payroll January through March in (1000)

⁴Limited data available, See Table fn. 3. for explanation

⁵Limited data provided for these items, figures presented were developed from the information provided

Table IV-D-4

1972 Forest Industries Employment and Payroll Data ⁵

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
Lumber & Wood Products Employees ¹	207	-	131	346	392	121	752	1949	8101
Lumber & Wood Products Payrolls	288	-	169	395	578	130	1196	2729	16360
Total Employment	1625	5718	708	6275	3000	2727	54659	74712	1044200
Total Payrolls	1990	10295	704	11309	5165	5760	94981	130204	1909510
Lumber & Wood Products % of total	12.7		18.5	5.5	13.0	4.4	1.4	2.7	.77
Lumber & Wood Products Payroll/Employee	1391		1290	1008	1474	1074	1590	1400	2020
Total Payroll/Employee	1225	1800	994	1802	1721	2112	1738	1742	1829
Lumber & Wood Products Payroll to Employee by total payroll to employee (in %) ³	107.7		129.	55.9	85.6	50.8	91.5	80.4	110.4

Paper and Allied Minimum No. of Employees in Paper and Allied		1054	-	500	500	-	58	2112	8446
Paper & Allied Estimated No. of Employees Estimated Actual:		1736		823	823		95	3478	13910

State payroll/employee in paper and allied = 2347

¹Employees are for mid-March pay period²Taxable payroll January - March in (1000)³Data for paper and allied is limited to protect confidentiality of firms. Number of firms in 7 employment ranges is provided. The minimum number totals are given in this row.⁴Calculated by multiplication of the minimum number for each unit by a ratio of the actual # to the minimum number in state⁵Data taken from county business patterns U.S. Department of Census

Pulpwood Production 1965 through 1972

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Reg.</u>	<u>State</u>	<u>Reg. as % of State</u>
65 Production	31	27	43	80	205	60	277	723	1,018	71%
70 Production	49	26	37	130	227	66	299	834	1,224	68.1%
71 Production	42	27	36	126	237	65	279	812	1,196	67.9%
72 Production	36	37	37	139	295	71	305	920	1,354	68%
Change 1965 to 1972	5	10	- 6	59	90	11	28	197	336	
% Change 1965 to 1972	16.1%	37%	73.8%	43.9%	18.3%	10.1%	10.1%	27.2%	33.0%	

IV-D-9

Production units are 1000 standard cords of all species taken from Blyth, James E. Pulpwood Production and Consumption in the North Central Region by County, 1965, 1971 and 1972.

Table IV-D-6

Pulpwood and Saw Log Price Profile¹

Period:	Aspen Average Price ²	1967 ³ Prices A ³	1967 ⁴ Prices B ⁴	Norway Pine Saw Logs	1967 ³ Prices A	1967 ⁴ Prices B
7-12, 1974	16.75			62.75		
1-6, 1974	<u>16.25</u>			<u>74.75</u>		
Average	16.50	10.31	8.99	68.75	42.96	37.46
7-12, 1970	12.50			44.50		
7-6, 1970	<u>13.00</u>			<u>45.5</u>		
Average	12.75	11.54	10.15	44.75	40.25	39.4
7-12, 1965	10.50			41.00		
1-6, 1965	<u>9.50</u>			<u>48.00</u>		
Average	10.00	10.35	9.98	45.00	46.58	46.48

1

Average of Northern Minnesota products as reported in "Minnesota Forest Products Marketing and Pricing Review", reports published semi annually by the IRRRC.

2

FOB Cars - Local shipping point rough basis

3

Deflated by wholesale price index for all commodities.

4

Deflated by wholesale price index for lumber and wood products.

the three chosen years, 1965, 1970, and 1974 shows no evidence of a trend either upward or downward.

Another aspect of the forest products industry is shown in the multiplier summary given in Table IV-D-7. A multiplier is a measure of the impact changes in one type of economic activity will have on changes in overall economic activity. There are many types of multipliers, each with its own meaning. Some multipliers give the ratio of total jobs that will result when employment increases in the industry under analysis. Others show how many dollars of household income will be generated for each dollar of sales that occurs. With respect to the forest products industry, two recent studies provide valuable insights into the importance of the forest products industry. One of these studies is the input-output study that was done for Itasca County and the other is the state input-output table developed for energy allocation purposes. The total multipliers in Table IV-D-7 for Itasca County show how many dollars of economic activity will be generated for selected portions of the forest products industry and for other well-known activities. It is apparent that the forest products industry generates more than \$3.00 of economic activity for each dollar of sales that occur. At the same time, households gain considerably from income produced in the forest products industry. For every dollar of sales that occur in timber production, more than one dollar is returned to households. When a dollar of activity occurs in a grocery or drug store, only 12.7¢ is returned to households. The greater than one dollar figure occurs for the first case because of a general increase in economic activity that takes place in the area.

The employment and income multipliers show again that portions of the forest products industry produce relatively favorable results. For example, every job in the pulp and paper industry generates more than two jobs in total, one in the forest industry and one plus in other industries. At the

Table IV-D-7

Multiplier Summary

Itasca County Data:

Economic activity multipliers:¹

Industry	Total Multipliers	Household Multipliers
Timber Production	3.44	1.006
Timber Operators	2.99	.715
Sawmills	3.108	.677
Gas & Service Stations ²	2.44	.296
Grocery Drug & Secondary	1,328	.127
Resorts	2,812	.449

State of Minnesota Data:³

Employment & Income Multipliers:

Lumber and Furniture	1.720	1.655
Pulp and Paper	2.181	2.040
Wholesale Trade ²	1.192	1.232
Retail	1.074	1.220
Primary Metal	1.417	1.377

¹ Hughes, Jay M. "Forestry in Itasca County's Economy, an Input-Output Analysis", Agriculture Experiment Station, University of Minnesota, Appendix Table 1.

² The following III items for comparison purposes only.

³ Minnesota Energy Agency, An Input-Output Model of the Minnesota Economy, A Policy Making Tool, Appendix Table 5.

same time, every dollar of income earned by the pulp and paper industry generates another dollar of income in other industries. What this means is that the overall impact of the forest products industry on the health of the regional economy is much greater than industry figures of sales, employment and income indicate.

The major issues relating to the forest products industry in Northeastern Minnesota are treated below. These issues are: loss of forest potential, the need for improvement in reporting statistics of the forest products industry, the situation of county managed lands, and the potential for increased regional employment in the industry.

1. Loss of Forest Potential

The situation whereby land is being removed from forest production during a time when there obviously exists a surplus of these lands seems to indicate no economic threat to the region, but this may be a short-sighted observation. If the trend towards greater capital utilization per worker continues, each worker will be able to handle a greater volume of products. Thus, even though the increase in capital per worker will usually lead to improvement of average salary per worker, more average resources are required to sustain each worker. Although no projections are available on this trend, it is entirely possible that within the next ten to fifteen years, all available forest product resources will be required to support the same labor force currently employed in forest products.

Even if the total acreage in commercial forests declines, the other possibility exists to increase productivity per acre. In a recent report to the ARDC Economic Policy Committee, it was suggested that management practices could increase average wood production on commercial forests from the current level of one-third cord per acre per year to the average of three-fourths to one cord per acre per year on the more productive lands. Two aspects to this issue thus can be identified. First, a major concern is that the loss of commercial forest lands will continue to erode this important economic base. Second, if better forest management techniques can be instituted on public

and private lands, it would help offset the losses that have been realized. In addition to increasing productivity of forest land, opportunities exist to expand the wood supply by means of whole tree utilization and recovery of logging residues.

There is another aspect to this issue that deserves treatment. In the last few years, the price of commercial forest land has skyrocketed far above the economic value the land can generate. As shown in Table IV-D-8, the average price of county land in St. Louis County has gone from \$27.00 an acre in 1972 up to \$61.00 an acre in 1975. This amounts to an average increase at a compound rate of over 27% a year. Should the tax assessors begin taxing this land at full market value which is required by law, much of this land may be transformed from forest producing to private recreation and other uses.

2. Statistical reporting practices for the forest products industry.

Numerous deficiencies in the statistics that define forest products industries can be cited. Some of these are attributed to the nature of the industry. There are many small operators, loggers, and sawmill operators, presently not surveyed for statistical sources. Other deficiencies relate to information delays, and the types of statistics presented.

Numerous agencies are involved in supplying statistics on the forest products industry. Some of the statistics cited herein are from County Business Patterns, which is a Department of Census publication, publications from the North Central Forest Experiment Station of the Forest Service of the U.S. Department of Agriculture, publications by the Iron Range Resources and Rehabilitation Commission, and reports by the Arrowhead Regional Development Commission. One serious deficiency has been the long span between the forest inventory now in progress and the

Table IV-D-8

Summary of Land Price Data
for St. Louis County Managed Land Sold From
1972 through 1975:¹

<u>Year</u>	<u>Acres Sold</u>	<u>Total Sales</u>	<u>Average Price/Acre</u>
June 1975	981.83	\$ 57,596	\$ 58.66
March 1975	<u>2,066.</u>	<u>130,399</u>	<u>63.11</u>
1975 Average	3,047.83	\$ 187,955	\$ 61.68
December 1974	1,352.3	\$ 103,197	\$ 76.31
September 1974	1,350.5	133,359	91.098
March 1974	<u>652.25</u>	<u>32,562</u>	<u>22.24</u>
1974 Average	3,355.05	\$ 269,118	\$ 80.21 *
June 1973	3,430.2	\$ 104,701	\$ 30.52
March 1973	<u>1,631.42</u>	<u>84,647</u>	<u>51.89</u>
1973 Average	5,061.6	\$ 189,348	\$ 37.40
December 1972	3,300.51	\$ 109,079	\$ 33.048
June 1972	2,892.13	79,481	27.48
March 1972	<u>2,538.71</u>	<u>40,817</u>	<u>19.23</u>
1972 Average	8,731.92	\$ 237,377	\$ 27.18

Average compared increase/year = 27.32% from 1972 to 1975

* May be unusually high as a result of sales to federal government for Voyageurs National Park.

¹ Data taken from County Auditor Reports.

previous inventory that took place in 1961-62. Without data available on a more regular basis, no solid projection of forest potential can be ventured.

One subject that deserves more investigation is the land management information system, a computerized inventory system being developed by the State of Minnesota in conjunction with the Arrowhead Regional Development Commission. This system summarizes forestry and other data down to the 40 acre parcel. It is possible that once this information is updated to reflect the findings of the forest inventory, a process could be instituted to update this data base on a yearly basis for the intervals between inventories.

From an overall standpoint, a case could be made for a coordinated effort that would attempt to standardize the data being produced and to insure that the right data are being developed. A statewide conference on this subject may be in order.²

3. Management of County Lands.

As shown in Table IV-D-9, of the total of over 9 million acres of commercial forest land, over 20% of this land is controlled by the county. The county derives income from this land in two ways. It sells timber off the land and it sells the land parcels that it does not plan to keep. A summary of the timber income per acre for the different counties as provided in Table IV-D-10 shows a significant variation in the amount of timber income produced by the different counties. Koochiching County produces more than 60¢ per acre and Lake County produces only 7¢ per acre. Although some of these differences may be attributable to differences in the land's ability to produce timber, the wide range suggests different management approaches. The North Central Forest Experimental Station is gathering detailed information to serve as a basis

²Dr. Cecil Meyers of the University of Minnesota, Duluth, in cooperation with the North Central Forest Experimental Station, has instituted a program to obtain "value added" information for the forest industry. This effort could improve the data base for the forest industry.

Table IV- 3

Land Summary for Arrowhead Region
(acres of land 1961-1962)

	All Land	Forest Land	Comm. For. Land	Federal	State	County	Total Gov.	Forest Ind.	Private
Aitkin	1,167,400	900,400	850,600	8,500	295,500	272,500	576,500	3,000	271,100
Carlton	530,400	383,400	367,000	8,500	51,600	103,500	163,600	10,900	192,500
Cook	897,900	868,900	710,000	490,400	123,500	140,000	627,900	48,500	33,600
Itasca	1,704,300	1,480,900	1,411,900	273,700	260,100	403,500	937,300	55,300	415,100
Koochiching	2,002,600	1,868,700	1,594,700	92,200	792,200	292,600	1,177,000	204,000	194,000
Lake	1,364,500	1,306,800	1,104,000	513,600	157,000	154,000	824,600	126,000	153,400
St. Louis	<u>4,019,800</u>	<u>3,464,600</u>	<u>3,204,300</u>	<u>627,600</u>	<u>430,800</u>	<u>953,300</u>	<u>2,011,700</u>	<u>160,100</u>	<u>1,032,500</u>
Region	11,706,900	10,273,730	9,222,800	2,014,500	2,110,700	2,193,400	6,318,600	607,800	2,296,400

Percent of total in forests - 87.7%

Percent of total in commercial forests - 78.8%

Percent of commercial forest in government ownership - 64.8%

Percent of commercial forest in county ownership - 23.3%

Percent of commercial forest in private ownership - 24.8%

Percent of commercial forest in forest industry ownership - 5.1%

¹ Stone, Robert N., "A Third Look at Minnesota's Timber", North Central Forest Experiment Station, May, 1966.

² "ARDC Timber Resource Review" July 8, 1974.

Table IV-D-10

Timber Income County Managed Lands 1973

<u>County</u>	<u>Acres</u>	<u>Timber Income</u>	<u>Income Per Acre</u>
Koochiching	287,211	173,948	60¢
Itasca	290,471	109,542	38¢
Aitkin	224,655	27,587	12¢
St. Louis	943,917	109,596	12¢
Carlton	82,047	8,839	11¢
Lake	157,371	10,975	7¢

Department of Iron Range Resources and Rehabilitation Biennial Report 1972-74, page 7.

for an analysis and decision making on future alternative roles county lands could play in meeting the demands on Minnesota's forested lands.

A special situation exists in St. Louis County which contains nearly 50% of all county managed lands within the region. Since 1950, the total amount of tax forfeited land managed by the county has declined from 1.7 million acres down to 940,000 acres, nearly a 50% drop. Because of this and because of the low return being generated by St. Louis County lands, the county commissioners appointed a citizens committee to investigate the situation. The recommendations of this committee are contained in the report referenced below. The committee unanimously agreed that an improvement of the management of county lands would substantially increase the potential of the forest products industry in Northeastern Minnesota.³

4. Potential for increased employment.

An interesting inference that can be obtained from the statistics in Table IV-D-1 and Table IV-D-5 is that the region is producing nearly two-thirds of the pulpwood in the state and yet has only one-fourth of the total employment in the forest products industry. It has long been realized that more jobs are generated by the processing and manufacture of products from raw materials than from their extraction or harvesting. This region has, for a long time, been a supplier of resources rather than a manufacturer of finished products. Potential exists in the region for attracting new industry or expanding existing industry that can take advantage of the surplus resources. This has been occurring, for example, in the expansion of Blandin in Grand Rapids and Superwood in Duluth. Nevertheless, the indication that surplus forest products exist in this region suggests that total employment potential may be significant if the surplus is used by manufacturing plants in the region.

³Report of Citizen's Advisory Committee, Review of Tax Forfeited Land Department, St. Louis County, Minnesota, July 15, 1975.

ASSESSMENT E AGRICULTURE

Chapter IV
Assessment E
AGRICULTURE

Declines in the Agricultural Industry

Between 1950 and 1970 agricultural activity in Northeastern Minnesota decreased significantly. As shown in Table IV-E-1, the number of farms in the Arrowhead Region decreased from 12,428 in 1949 to 6,638 in 1959 and then to 3,342 in 1969 which corresponds to a 46% decrease between 1949 and 1959 and a 51% decrease between 1959 and 1969. Although there were decreases in total number of farms in the state, the state as a whole was not affected as drastically. Between 1949 and 1959 the number of farms in the state decreased 19% and between 1959 and 1969 24%. Thus, during these periods the rate of decrease of farms in the Arrowhead Region was twice the rate of the state as a whole. When evaluated in terms of acreage in farming the decreases were not as severe. Between 1959 and 1969 the total acreage in farming in the Arrowhead Region decreased 32.8% (Table IV-E-2). At the same time the average size of the farm increased 31.3% which explains why the decrease in acreage was not as severe as the decrease in the total number of farms.

Even though the number of farms and the acreage in the farms declined between 1959 and 1969, the value of farm output increased significantly during the same period (Table IV-E-3). In 1949 the value of farm output was \$7.5 million and by 1969 it had increased to \$19.7 million. The increases in value produced per farm were even more substantial. In 1949 the Arrowhead Region produced \$604 of output per farm and by 1969 value per farm had increased to over \$6,000. This was equivalent to a 422% gain between 1949 and 1959 and a 138% gain between 1959 and 1969. Even though the value of output in the Arrowhead Region increased substantially, the value of the per/farm output in the region remained at less than 40% of the value produced in the state as a whole.

The most dramatic changes in agricultural activity in the Arrowhead Region, however, occurred in the number of people employed in the industry (Table IV-E). Between 1950 and 1960 employment declined from 11.6 thousand to 4.5 thousand. In 1970 the total agricultural employment in the region declined to 1,945 persons. These declines, which amount to 61.5% in the first period and 56.6% in the second period compared to state declines of 31.9% and 41.2% for the two periods respectively.

If one looked only at the changes between 1950 and 1970 it would be tempting to conclude that agricultural industry was headed for extinction in the Arrowhead Region. Numerous developments, however, have occurred between 1970 and the present which indicate that the agriculture industry in the Arrowhead Region is going to have a brighter future than was believed possible during the earlier periods. First, and most important, is the change in the nation's and world's food situation. The era between 1950 and 1970 was characterized by large food surpluses at the national level. Exchange rates were such that U.S. farms had a difficult time competing in the world market. Since 1970, increases and demand for food throughout the world have outstripped supply. At the same time, foreign exchange rates have been readjusted to make the U.S. highly competitive in the world market. As a result of these changes, prices for many of the U.S. agricultural output, especially in the feed grains, have increased substantially and annual surpluses of these commodities have been reduced to insignificant levels. Even though the Arrowhead Region does not produce a significant amount of feed grains it does produce forage and hay that is an essential element in providing feed for dairy cows and other livestock. The change in the world and national situation thus is impacting the Arrowhead Region as evidenced by the statistics given in Table 5. Changes in the number of milk cows in the Arrowhead Region declined 29% between 1969 and 1973, whereas changes in dairy cattle at the state level declined nearly 54%. At the same time, hay production in the

region increased 6.4%. This would seem to indicate that the overall decline in agricultural activity that occurred during the 1950-1970 era might be reversed in the coming decades.

Another significant change is the increase in beef cows and heifers. This is somewhat of a tradeoff. Many dairy farmers whose operations were too small to make an economically feasible dairy unit are now in the beef business on a part-time basis. This is documented in Table IV-E-5 which indicates a 29% drop in dairy cow numbers between 1969 and 1973 with a concurrent 21.4% increase in beef numbers.

The part-time dairy farm is obsolete. The cost of tooling up for Grade A production is just too great to be considered on anything but a full-time basis.

Although there are few full-time beef operations in the Arrowhead Region, beef farming on a part-time basis is very compatible with off-farm employment in the woods, mines, public services, etc. Beef farming has a relatively low per unit profit potential, but it does offer opportunity to utilize available feed and family labor, buildings and equipment.

Other potential subjects for expansion in agriculture have been suggested by Dr. Matalamaki of the North Central Experimental Station and Arnold Heikkila of the Agriculture Extension Service in their report, "Preliminary Agriculture Report", Economic Policy Committee, ARDC, February 28, 1975. Three crops appearing to have potential for future development are: potatoes, wild rice, and horticultural crops. In the past 15 years, the production of paddy rice has been increased from 14 acres to over 20,000 acres. Although there are numerous difficulties in raising wild rice commercially, such as disease and bird problems, for which controls have not been developed, once these barriers are surmounted the production of wild rice may be expanded considerably. Potato production in the Arrowhead Region, although minimal at this time, could be expanded in selected areas that have the right characteristics for this crop. Research may assist development of this potential. Finally, much of the Arrowhead Region is suited for raising horticulture crops. Investigation should be undertaken as to the possibility of

expanding greenhouse operation that could produce vegetables and flowers for sale on a year-round basis. Also, recent development in the raising of berries, for example the new variety of commercial low-bush blueberry will offer potential for farmers in the region for developing these crops. An overall conclusion that can be drawn in the state of production of these specialty crops at this point is a future development to be closely tied to the research work that is undertaken by the University of Minnesota.

Land Availability and Land Prices

A number of changes have taken place in the last five years which have a negative effect on the expansion of the agricultural industry in Northeastern Minnesota. One of the most notable is the significant increases in land prices that have resulted in part because of the desire by people living in the city and to acquire land for recreational or investment purposes. Table IV-E-5 shows that between 1970 and 1974 land prices in the region increased more than 244% as compared to a state increase of 85.2%. Throughout the state increases in land values used for dairy and forestry purposes were greater than land price increases in total. Dairy lands between 1970 and 1974 increased 109% and forest lands increased 204% which explains some of the reason that Arrowhead regional land prices increased at more than the state average.

Land that is bought for speculative or other purposes is not used for agricultural production but has potential for such, tends to reduce the long-term potential output that a region produces. Since in time the world is going to need more and more food, a high social cost may be involved in this type of activity. Other states have taken steps to maintain their farm land for farm purposes. Agricultural zoning, which prevents scatterized development, is one of the actions that has been taken to preserve farm lands. This action also tends to reduce land values in that the value to the land will be its farm value rather than its speculative or investment value. This type of action can help insure that good farm land will be available for farming.

Improvement in Information Available to Farmers

Recent developments by the Minnesota State Planning Agency in the perfection of the Minnesota Land Management Information System could be of considerable importance in assisting private parties to enter or expand agricultural activity in a profitable manner. The Minnesota Land Management Information System (MLMIS) is a computerized inventory system that contains information on land down to the 40-acre parcel size. Of considerable significance to farming activity is the information on soils that is available through the MLMIS system. Thirty-eight different soil qualities have been compiled for every 40-acre parcel in the Arrowhead Region. These variables can be related to potential for crop development. Individuals interested in developing their land properly can obtain technical information on which crops might most be suitable for their land. Also people interested in developing certain crops can locate areas in which these crops can be profitably raised. The system also contains information on ownership, land values, and zoning that would be of value to anyone in expanding in agriculture. Although this system is in the early stages of development and no doubt contains deficiencies at this time, potential over time of improving information that is available and for making this information usable by people who are interested in expanding in agriculture, are significant.

Table IV-E-1

No. of Farms, % Part Time, 1949, 1959, 1969, Arrowhead Region, State

	<u>Aitkin</u>	<u>Carlton</u>	<u>Itasca</u>	<u>Koochoching</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
No. of Farms* 1949	2,207	1,962	2,210	1,061	242	4,686	12,428	174,100
No. of Farms 1959	1,367	1,232	1,208	561	92	2,153	6,638	145,660
No. of Farms 1969	791	705	519	267	45	915	3,242	110,747
% Change 1949 to 1959	-38	-37	-45	-47	-62	-54	-46	-19
% Change 1959 to 1969	-42	-43	-43	-52	-31	-58	-51	-24
% Part Time Farm 1949	24	38	46	33	53	47	40	N.A.
% Part Time Farm 1969	24	34	38	32	69	44	36	12

* Less than 10 acres selling \$250 in products or more than 10 acres selling \$50 in products.

* Selling more than \$50 products and worked off farm at least 100 days a year.

Source: U.S. Census of Agriculture

Table 1 E-2

Acreege in Farming, 1959, 1969, Arrowhead Region

	<u>Aitkin</u>	<u>Carlton</u>	<u>Itasca</u>	<u>Koochiching</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>
Acreege 1959	232,000	196,300	175,900	116,600	18,500	306,600	1,045,900
Acreege 1969	180,660	139,100	120,100	75,300	6,700	181,100	702,960
% Acreege Change 1959 to 1969	-22	-29.1	-31.7	-35.4	-64	-40.9	-32.8
Acres/Farm 1959	215	159	146	177	125	142	163
Acres/Farm 1969	228	197	231	282	147	198	214
% Change Acres/Farm 1959 to 1969	+6	+23.9	+58.2	+59.3	+17.6	+39.4	+ 31.3
% Land in Farming 1969	15.4	25	7.1	3.8	.5	4.6	6.1

Note: State of Minnesota had 56.3% of land in farming in 1969

Source: U.S. Census of Agriculture

Table IV-E-3

Value of Output Total and Value of Output/Farm for Arrowhead Region and State

	<u>Region</u>	<u>State</u>	
1949 Total Value	7,508,000	301,000,000	
1959 Total Value	16,932,000	1,212,000,000	
1969 Total Value	19,741,000	1,751,000,000	
% Change 1949 to 1959	25	+303	
% Change 1959 to 1969	+16.5	+ 44.5	
1949 Value/Farm	604	1,680	(35)
1959 Value/Farm	2550.7	8,320	(30.6)
1969 Value/Farm	6089	15,811	(38.5)
% Change 1949 to 1959	+322	395	
% Change 1959 to 1969	+138	+ 90	

IV-E-8

 Source: U.S. Census of Agriculture

Table IV-E-4

Total Agricultural Employment Arrowhead Region and State
1950, 1960, 1970

	<u>Region</u>	<u>State</u>
Employment 1950	11,640	260,000
Employment 1960	4,480	177,000
Employment 1970	1,945	104,000
% Change 1950 to 1960	- 61.5	- 31.9
% Change 1960 to 1970	- 56.6	- 41.2

Source: U.S. Census of Agriculture

Table IV-E-5

Miscellaneous Agriculture Indicators 1969 and 1973

	<u>Aitkin</u>	<u>Carlton</u>	<u>Itasca</u>	<u>Koochiching</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
1969 milk cows and heifers	8,300	8,700	3,100	1,200	100	5,600	27,000	114,600
1969 beef cows and heifers	5,300	2,500	5,200	3,900	200	4,400	21,500	39,900
1973 milk cows and heifers	7,400	4,200	2,300	700	-	4,600	19,200	52,400
1973 beef cows and heifers	6,400	6,300	5,600	3,200	-	4,600	26,100	88,200
% Change milk cows	-10.8	-51.7	+67.7	166.7		-17.9	-29	-54.3
% Change beef cows	+20.8	+152	-55.8	-82.1		+4.5	+21.4	+121
1968 Hay	106,300	80,400	40,500	18,100	2,400	67,100	314,800	739,900
1972 Hay	87,800	78,900	55,200	28,900	3,400	80,700	334,900	843,400
% Change hay	-10.8	-1.9	+36.3	59.7	41.7	+20	+6.4	+13.9

IV-E-10

Source: "Minnesota Agriculture Statistics", Minnesota Department of Agriculture

Table IV-E-6

Land Price Changes for Region and State 1970, 1974

	<u>Region</u>	<u>State</u>
1970 Land Prices	43	243
1974 Land Prices	148	450
% Change 1970 to 1974	+244%	+85.2
Dairy Areas 1970	-	272
Dairy Areas 1974	-	510
% Change 1970 to 1974	-	+109
Forest Areas 1970	-	47
Forest Areas 1974	-	143
% Change 1970 to 1974	-	204.20

Source: "The Minnesota Rural Real Estate Market 1974", Red Christianson and Philip Raup, Department of Agricultural and Applied Economics, University of Minnesota, St. Paul, January 1975.

ASSESSMENT F TRANSPORTATION

Chapter IV
Assessment F
TRANSPORTATION

The Arrowhead Region of Northeastern Minnesota has always been burdened with an image of "remoteness". The image has been consistently applied both internally and externally to the region. Internally applied, the rural nature of the area meant that points within the region were substantially remote from each other so as to severely inhibit interaction and communication. Externally, the area as a whole has been viewed by the rest of the country as much too remote to be logically considered for trade or industrial development.

In the original OEDP, this unfavorable image was recognized as a real and formidable obstacle to the formation of a development district and subsequent economic development. The solutions proposed to dispel the image were many and varied, but all related directly or indirectly to the improvement of some form of transportation. The upgrading of highways, the expansion of air and rail facilities, and the full development of the Port of Duluth were at that time considered essential elements to the struggle toward economic stability in the Arrowhead Region. Although significant improvements have been made in all areas, the goals, policies, and programs of Chapter 3 reflect the continued axiom that transportation improvement and economic development must parallel one another.

PORT DEVELOPMENT

In the original OEDP, greater use of the port facilities was at the top of the list of major potentials for accelerated economic development in the Arrowhead District. Its maximum utilization was, according to the goals of that document, an "A" priority or "critical" goal.

However, the prospects in 1967 for the future of port development were not entirely optimistic. "While there has been a considerable improvement in ocean traffic into the Port of Duluth, it has not been as great as had once been hoped. It is quite likely that the hopes were rather exaggerated and unrealistic."

The major problems which seemed to imminently hinder the Port from being utilized to its full potential were listed:

1. Insufficient promotion.

- This problem was two-fold; shortcomings in marketing the advantages of the Port, and apathy of our own manufacturers in failing to realize the potential of using the Port as a method of distributing their product.

2. Insufficient storage.

- The storage space available at the time could be completely taken up by only one salt water ship fully loaded. There was a special need for cold and dry storage of package freight.

3. Climatic conditions.

- The Port of Duluth was navigable only eight months a year, which naturally had a detrimental effect on potential use.

Interim Development

Unfortunately, these are the types of problems which can never be solved completely. Nevertheless, the Port has made great strides to minimize the effects of these drawbacks. Extensive overseas trade missions have

highlighted promotional programs of the Port. Mr. C. Thomas Burke recently completed his fifth overseas trade mission since becoming Executive Director of the Seaway Port Authority of Duluth in 1969. During a three-week period in the spring of 1974, the Duluth port director made visits to nine cities in seven European countries ranging from Scandinavia to the Mediterranean, where Duluth's role in international trade was discussed in more than 50 offices of shipping executives and governmental leaders.

In terms of increased storage facilities, the Mid-Continent Warehouse, built in 1970 as part of the Clure Public Marine Terminal Complex has enhanced Duluth-Superior's reputation as a full-service port. This facility offers exporters, importers, and domestic firms refrigerated storage, general storage, cargo consolidation, and cargo distribution services.

As far as the length of the season is concerned, it is obvious that the Northeastern Minnesota winters cannot be controlled. Efforts have been made, however, to investigate ways of counteracting the certainty of the paralyzing harbor ice. Operation of a bubbler system was begun in late 1973 by the Army Corps of Engineers in Howard's Pocket on the Superior side of St. Louis Bay. Efforts were made in 1974 to re-install an improved version of the system, if funding could be made available. Although only experiments, projects such as these are supplying valuable information toward methods of extending the shipping season.

Although the development of the Port has been, and will continue to be an uphill struggle, the expectations are no longer thought of as unrealistic. Prior to 1970, the Port Authority predicted that the next decade would be known as the "Seaway Seventies". Since then, import-export cargo movements have stayed above the four-million-ton mark (a figure attained only once

prior to the seventies): 4.6 million tons in 1970, 4.1 million tons in 1971, and 5.7 million tons in 1972. 1973 became a season of records for the port, when international cargoes reached 8.9 million tons for the year. 1973 also saw the Port of Duluth/Superior (long time a tonnage leader in interlake cargo) become the number one international tonnage port on the Great Lakes. Measured in tonnage, Duluth stands as the eighth largest port in the United States, 18th largest in the world.

Following is a tonnage summary of the Port of Duluth/Superior since the writing of the original OEDP.

	<u>Export/Import</u>	<u>Interlake</u>
1967	2604661	34897338
1968	2848398	34864314
1969	2789560	40345600
1970	4684971	37838393
1971	4121360	32815627
1972	5254288	32014849
1973	8855681	38005382
1974	4254412	35889119

The 1974 shipping season experienced a series of events that severely hampered the trend in tonnage increases. Early in that year, two problems surfaced that set the water transportation activities at the Head of the Lakes off to a slow start. Concern of shippers over energy shortages, and an early season pilots' strike on the Great Lakes resulted in a late opening of the lake navigation season. The movement of grain in 1974 decreased significantly from the previous record year, but was nonetheless above the level of grain shipments for four of the past seven years. The 1974 decline in

grain volume was caused in part by labor disputes and a blocked channel due to a ship-bridge collision. Those factors which affected the downturn in grain activity also were influential in the decline of foreign cargo other than grain. This category averaged 44% below the comparable period of 1973. Yet, total export-import tonnage in 1974 was 15% above the average import-export tonnage figure of 3,701,091 for the sixteen-year history of the Port of Duluth/Superior.

Other interesting observations of available statistics reveal that a) the total import-export tonnage during the period from 1967 through 1974 was about 60% of the tonnage moved in the history of the Port; and b) the total accumulated tonnage of interlake traffic during the same period was about 50% of the tonnage ever shipped from the Port.

Further Development

The success of the Port has not been without constant effort to expand and improve harbor facilities. Investments of over \$25 million in harbor improvements since 1959 have been money well-spent toward the development of the Port. However, this \$25 million expenditure looks meager in the light of harbor development projects totalling more than \$110 million which were announced in 1973 and early 1974. These projects, as they are completed over the next two years, will without question boost all phases of water-borne commerce moving through Duluth-Superior and keep the port among the nation's leaders on a tonnage basis. In various stages of design or construction are:

- A \$53 million taconite-handling facility by Burlington Northern.
- A \$40 million coal-handling terminal to be operated by ORBA, Inc.
- A \$33 million grain and grain specialty products facility by Cargill, Inc.
- A \$12 million investment by Lakehead Pipeline Co., Superior in construction of storage tanks handling petroleum products and renovation of its main terminal for modern Great Lakes tankers.

- A \$5.5 million hydraulic backhoe manufacturing plant by American Hoist and Derrick Co.
- A \$6 million program by Incan Marine, Ltd., which will introduce roll-on, roll-off traffic to the Port.
- A \$2.5 million container-handling facility at the Clure Public Marina Terminal, including a \$1,000,000 container crane, a large hand-surfaced container storage and marshalling yard and rail and roadway access.
- A \$2.2 million expansion of the grain elevator complex in Superior operated by M&O elevators.

Additionally, other waterfront facilities, especially grain elevator firms, have invested considerable sums of money in dock improvements, installation of systems to arrest grain dust emissions, and construction of new truck and rail dumps for grain cargoes. In total, these commitments are an affirmation by numerous firms of their faith in the future of the Port and underline the fact that more port development projects will be underway during the next few years than any other period in the ports' hundred-year history.

Economic Impact

As for the value of the port to the economy of the community, figures compiled by the Port Authority show that 8.9 million tons of import/export cargo handled in 1973 channeled \$63 million directly into the economy of Duluth and Superior (\$7.08/ton). This includes man-hours worked and services provided by longshoremen, line-handlers, pilots, tug crews, vessel agencies and stevedoring firms, ship chandlery purchases, etc. Furthermore, economic factors show that the 8.9 million tons of cargo channeled another \$162 million (\$18.20/ton) indirectly into the area economy for a total direct and indirect economic impact of \$225 million (\$25.28/ton).

The value of the Port to the community becomes even more staggering when considering that these figures do not reflect more than 35 million tons of domestic bulk cargoes handled in 1973, cargoes which include iron ore, grain, coal, stone, cement, and petroleum products. Expansions in the taconite industry now taking place will account for marked increases in these figures over the next few years, with taconite alone comprising over 65 million tons of bulk cargo by 1980.

Although it is obvious that great strides have been taken since the writing of the 1967 OEDP in reaching the full potential of the Port and its facilities, it is also apparent that as the Port develops, so proportionally does its potential for development increase. Accomplishing original goals has the simultaneous effect of establishing new goals. Some specific targets on which the Port Authority has set its sights are reflected in the goals and policies section of the OEDG.

HIGHWAYS

The fact that this economic development potential was given a relatively high priority in the OEDP was not without reason. In these initial steps toward district development, it was recognized that in order for the district concept to attain a working credibility, all areas of the district must be readily accessible. This accessibility was necessary for two basic reasons. First, a modern highway system would make possible the local participation prescribed in the development district concept. Secondly, without good transportation routes, the economic viability of such a large area would be difficult to imagine. It was clear that the development of an efficient highway network between participating counties and communities was a prerequisite for the areawide economic development intended by the creation of the district.

Interim Development

As the Arrowhead District has progressed over the years, it has been paralleled by the upgrading and building of a better road system. In the OEDP, the then proposed cross-range expressway was called a "vital necessity in developing the economically faltering Iron Range."

65 mile expressway from Grand Rapids to Virginia is now approximately 75% completed; and with the present and projected taconite expansions, the Iron Range is far from faltering economically. There may be no valid parallels to be drawn between the development of the expressway and the taconite boom, but it can be stated that the transformation from natural ore to taconite production has required an increased mobility of mining employees, a mobility which the cross-range expressway has, at least partially, supplied.

In much the same way, the freeway system has immeasurably aided in the development of the Cloquet-Proctor-Duluth-Two Harbors Growth Center. The history and development of the Growth Center are detailed in other sections of this document, but it suffices to say in this section that without the accompanying freeway development, the designation of this area as an economic development unit would be difficult to justify.

Moreover, a modernized Highway 53 from Duluth to the Iron Range and the completion of I-35 from the Twin Cities to the heart of Downtown Duluth have had an obvious effect. Linking these areas with adequate highway systems has promoted a high degree of regional mobility as well as a better link between the region's resources and distant markets.

In addition to this, and equally important, is the effect of highway improvements on the Arrowhead's tourist industry. Such ventures as the Hockey Hall of Fame, Spirit Mountain, and the Iron Range Interpretative Program would be ill-conceived had the highway network in the Arrowhead Region not developed as it has in recent years.

The recent establishment of the Voyageurs National Park in northern Koochiching and St. Louis Counties has spurred a flurry of planning efforts by both counties, the Arrowhead Regional Development Commission and the State of Minnesota, as well as citizens and other interested organizations. As approach highways and access roads to

Voyageurs National Park are limited in number, difficult traffic problems may exist at certain times of the year. At the same time, a limited number of routes can be helpful in shaping development patterns and minimizing sprawl if adequate development controls are adopted. The highways and roads represent substantial capital investments and recurring operating expenses to the various units of government. The primary function of facilitating safe travel to and from the area must be protected.

In a summary report prepared jointly by the agencies mentioned above, "Impacts and Opportunities, Voyageur Planning Area", the specific development goal was stated, "To provide for the safe and efficient movement of people and goods, coordinated with existing and proposed development patterns and other local and regional goals". In order to achieve this goal, several policies were determined, indicating the nature of activities necessary by the local units of government and the citizens of the region.

These policies include:

- * Coordinate transportation plans with land use and recreational plans for the Voyageur Planning Area to achieve an economical and desirable development pattern.
- * Provide needed improvements to existing approach highways and access routes to facilitate the safe and efficient movement of people and goods.
- * Stage improvements to existing routes to minimize disruptions to normal traffic flow.
- * Purchase access rights along any new routes and adopt land use controls along existing routes to protect traffic carrying capacity and to limit development to suitable locations.
- * Prepare and adopt county and community official map ordinances to designate and reserve any road right-of-way needed in the future.
- * Encourage the use of public transportation to the Park and between the various access points.
- * Adopt land use regulations to protect airport and seaplane base approach zones and to encourage sound marina developments.
- * Work closely with public agencies, industry, and private land owners in the development and maintenance of a coordinated transportation system designed to meet the public needs.

AIR TRANSPORTATION

Air transportation facilities have greatly improved and increased in recent years. However, real economic benefits from this improvement have not accompanied this development because air services, commercial and passenger, have not increased significantly.

When the original OEDP was written, the inventory of air services mentioned only the scheduled air carrier segment with North Central Airlines information. This airline is still the only regularly scheduled service within the region and only two additional routes have been added - Thunder Bay, Ontario, and Winnipeg, Manitoba.

In the interim period since the original OEDP, the State of Minnesota has engaged a consultant to prepare a statewide aviation system plan. Through the Minnesota Department of Aeronautics (MDA) the need for long-range guidelines was recognized to insure a systematic and orderly development of aviation facilities. The plan defines its system planning process as a means of directing and influencing many diverse airport development projects in a manner in which the composite State airport system yields the maximum benefit to all state citizens.

The major goal of the System Plan is to establish the optimum system of public airports necessary to provide for the social, economic, recreational, and aeronautical needs of the State of Minnesota. The System Plan specifically provides the guidance necessary to all the air travelling public at adequate airport facilities conveniently located and at a minimum cost consistent with safety and utility.

According to the plan, Minnesota's privately owned airports are subject to closing due to changing land uses and owner's desires. Minnesota Statutes limits the use of state funds for airport construction and development to publicly-owned airports. Similarly, public ownership

of facilities is necessary for the airport to qualify under the federal funding assistance program which is a most important element in proper development of the system. State assistance can be provided on a limited basis for visual navigational aids at privately owned public-use airports.

The Minnesota Aviation System Plan has depicted Minnesota's existing Publicly-Owned Airport System with each airport's role within the system identified. The three criteria which defines the role of the airport within each system generally reflects:

- * Key System - Airports having a paved and lighted runway over 5,000 feet in length, capable of accommodating heavy, multi-engine aircraft as well as most of the corporate jet fleet.
- * Intermediate System - Airports having a paved and lighted runway less than 5,000 feet in length, capable of accommodating all single-engine and most twin-engine aircraft as well as some light jet aircraft.
- * Landing Strip System - Airports with turf runways capable of accommodating single-engine and light twin-engine aircraft.

Within the Arrowhead Region, the airports are classified in the following manner:

- * Key System Airports - Duluth International; Chisholm/Hibbing; International Falls; and Ely.
- * Intermediate System Airports - Duluth Skyharbor; Cloquet, Silver Bay; Grand Marais; Eveleth/Virginia; Grand Rapids; Aitkin; and Orr.
- * Landing Strip System - McGregor; Hill City; Deer River; Bowstring; Bigfork; Northome; Big Falls; Littlefork; Cook; Tower and Two Harbors.

A new airport is recommended for Aurora to satisfy the needs of communities within 30 minutes of ground travel time. With reference to forecasts of general aviation activity and operations to 1977 and 2000, the Arrowhead Region is projected to reach a level of 434 in its aircraft fleet in 1977 and 755 by the year 2000. In terms of aircraft operations, the region is anticipated to have 326 in 1977 and 591 in 2000.

Enplaned passengers forecast from 1977 to 2000 indicate an increase of nearly four-fold for the three certificated air carrier service points within the Arrowhead Region. A forecast of the Grand Rapids commuter air carrier passengers enplaned annually from 1977 to 1980 indicates a two-fold increase.

RAIL TRANSPORTATION

Rail transportation has played an important role in the economy of the region since the late 1860's. Presently, the region is serviced by seven major rail lines, each with connections linking the region to the entire United States. Primary commodities moved in the region are taconite pellets, iron ore, pulpwood, and grain. Passenger service has just recently been revived through the AMTRAK program providing service between Superior, Wisconsin and Minneapolis, Minnesota.

The rail industry is facing a challenge in building new equipment and facilities to handle the new concept of unit trains. In order that a unit train may operate efficiently and advantage be taken of lower rates by the user, it is necessary that adequate trackage is available within the industry area to efficiently move these trains.

The movement of grain into the Port area would be greatly facilitated if the unit train concept was utilized. To accomplish this, it would be necessary to build marshalling facilities in the grain producing areas which would be fed by trucks from the farmer and transferred to unit trains.

Another use being considered is the movement of unit trains for Western fuel and iron ore. In the iron ore industry, there may be a need to provide for movement of additional tonnages of pellets within the mine area as well as to the Port. The copper-nickel industry deserves mention regarding long-range needs for rail transportation services.

The marginal nature of passenger service is another area for concern. While the AMTRAK service connecting Duluth with the Twin Cities is now operational, it may be necessary in the near future to justify its continuation, its termination, or extension into other areas of the Arrowhead Region.

Transportation planning for rail has been initiated by the Minnesota State Planning Agency (SPA) through the Minnesota Rail Planning Advisory Committee. The representation on this committee consists of persons from the following: State Planning Agency, Minnesota Highway Department, Department of Public Safety, Department of Agriculture, Department of Economic Development, Minnesota Energy Agency, Countryside Council (Southwest Minnesota State College, Marshall), and Region 9 Regional Development Commission. Suggested memberships are indicated from the following sources: Railroads, Labor, Shippers, Academic community, Truckers, Public Agencies, Waterways, and State Legislators.

The initial activities of this advisory committee were three-fold:

- 1) Look at the 23 railroad lines that are slated for abandonment,
- 2) Development of longer term plans relating to future abandonment possibilities, and
- 3) Identify issues and to review staff research.

The goals of the committee are, 1) to provide an environment conducive to quality commodity and passenger transportation to all of Minnesota through the encouragement of a healthy railroad industry, and 2) to implement a railroad planning and programming process incorporating state economics, social, land use and environmental policies.

The objectives are, 1) to initiate a forum that affected groups can use to discuss railroad problems and develop agreeable solutions, 2) to formulate a process of railroad planning with an inter-modal emphasis, 3) to develop a data base and analysis capability sufficient to enable

recommendations of railroad system improvements, 4) to identify a standard of transportation service for all portions of Minnesota which is both adequate and attainable, and 5) to encourage and coordinate local initiative in railroad service problem solving.

This committee has also attempted to identify some of the issues which include:

- * State's involvement in railroad transportation
- * Balancing of the profit motive versus public need
- * State's timeliness in responding to rail problems
- * State's tax policy toward railroads
- * Rail abandonment
- * Inappropriate and imbalanced regulation of all modes
- * Rail system bankruptcies
- * Minnesotan's right to levels of railroad service
- * Criteria for keeping a rail line
- * Environmental and energy implications of rail line service
- * Additional passenger service
- * Spending of funds for highways and railroad facilities.

Future development of rail transportation in the Arrowhead Region is dependent on the degree of future economic development. Recent expansion of the taconite industry and the growth in grain shipments and grain facilities at the Seaway Port Authority of Duluth indicate a growing need for continued rail development.

ASSESSMENT G EMPLOYMENT AND INCOME

Chapter IV
Assessment G
EMPLOYMENT AND INCOME

This section will discuss the two components of employment and income as they relate to the economy of the Arrowhead Region. The first component will be discussed using several methods of analysis including trend analysis of work force and labor force data for the region, with comparisons to the state and national trends; crude activity rates; general activity rates; and age-sex-specific participation rates.

Data to be used in this analysis will come from the U. S. Census Bureau, and the Minnesota Department of Employment Services.

The basic issue that will be discussed will be the problem of chronically depressed employment from the period of 1966 through 1974, the nature of the work force trends, and some of the reasons behind the problems as well as what direction can be taken for solving the problem.

The second component, income, will be handled in similar fashion by observing income trends from several data sources, identifying the various types of income generated, and comparing the regional trends with state and national trends.

The basic issue regarding income will be to identify some of the reasons why the income levels in the region are lagging behind the state and national levels and point out what directions are necessary to close the gap.

I. EMPLOYMENT ASSESSMENT

A. TOTAL EMPLOYMENT TRENDS

The employment situation is usually analyzed by utilizing two basic sources of information: the U. S. Census of Population and the Minnesota Department of Employment Services. The former enables us to observe in

detail what happened over a 10-year period from 1960 to 1970, while the latter source provides a yearly estimate of changes within the major components of the employment picture.

1. Census Data

Regional Labor Force

The Census indicates only what happened between two points in time, April 1, 1960, and April 1, 1970. As can be observed in Table II-7 in the Socio-Economic Inventory Chapter, the Region's total labor force could be considered quite stable, in terms of degree of change. Compared to the state's 20% increase, and the U. S. 19% increase, the region's labor force change of -0.2% did not keep pace with the growth experienced throughout the nation during the 1960's. Further evidence of this general slow growth situation is found in the breakdown of the labor force by sex. The male labor force actually declined by about 9% while the female sector increased by nearly 22%.

Regional Crude Activity/Participation Rate

A measure used frequently which relates to the economically active population is the "activity rate". This takes several forms depending upon the level of data available. The "crude activity rate" compares the total number of people in the labor force with the total population in terms of a percentage. The Arrowhead Region was again behind the state and national experience. Reference to Table II-8 shows the region's crude activity or "participation" rate to have increased only 1.6 percentage points while the state and national rates increased 2.9 and 1.8 percentage points respectively from 1960 to 1970.

Regional General Participation Rate

A slight refinement of the activity rate can be made by comparing the

total labor force to the population of working age, those over 14 years of age. This resulting refinement is referred to as the "general" participation rate. Here again, the Region has lagged behind the state and national trend. The rates have actually declined in the Region during the 1960's.

Regional Sex - Specific Participation Rate

A noticeable shift has occurred within the labor force, both locally and on the national level. The female participation rates have increased while the male rates have declined. This is indicative of increased job opportunities for the female labor sector. This also indicates a relative slackening in the male job opportunity picture. In the Arrowhead Region this has meant not only a relative slow-down but an actual decline in absolute numbers of males in the labor force during the 1960's.

Regional Age-Sex - Specific Participation Rate

One more measure will be used here that is a widely used measure of economic activity in demographic analysis - the age-sex-specific activity rate. This narrows the analysis of the labor force participation rate to broad age levels by sex. The fastest growing segment of the male labor force was in the young age groups of 14 to 17 and 18 to 24. The Region had positive rates of growth in these groups, yet they were below the state and national trends. The remaining age groups actually declined in number from 1960 to 1970. The female sector grew in all age sectors except in the 65 and over category within the Region. In fact, in the 25 to 34 age group, the Region's rate surpassed the national rate. However, an overall economic ramification from the Region's seemingly positive female labor force trends, may be a negative or dampening effect on the income growth in the Region. This is because females generally have lower incomes than males. Further research must be made on whether or not the female labor force is actually

supplementing family incomes or merely replacing the major breadwinners. There is some evidence, by observing the decline in male labor force participation, that the females are indeed replacing the former male breadwinners.

2. State Employment Services Data

Another source of data on employment is the Minnesota Department of Employment Services (MDES). With this source we are able to analyze such information as total work force trends, employment, unemployment and rate of unemployment trends by year from 1966 through 1974 by county in the Arrowhead Region. This period covers that time expired since the last Overall Economic Development Program (OEDP) prepared in 1967. All references in the following will be to Table II-8c found in the Socio-Economic Inventory chapter.

The trend in work force development is slightly more positive for the Region than the previous discussion of labor force trends shown in the Census data. The regional work force grew by nearly 10,000 persons throughout the eight-year period. This growth occurred at a rate of 8% compared to the statewide growth rate of over 25%. There were some counties within the Region that grew substantially faster than either the state or regional rate. These included Aitkin (31%), Carlton (16%), Cook (18%), and Itasca (12%). Koochiching County (10%) was only slightly higher than the regional rate. Lake County actually decreased in size of the work force by over 2% while St. Louis County had a growth rate of only 5%. The major employment center, the City of Duluth, grew at only 3% compared to the remainder of St. Louis County which had a rate of over 9%.

An analysis of the total employment trends from 1966 to 1974 shows an overall regional gain of nearly 5% compared to almost 23% for the state.

Although Aitkin County gained over 1,000, which was 33% above the 1966 level, no other county exhibited a growth higher than 15% during this period. Lake County and the City of Duluth actually reflected net declines in their employment levels. In Lake County, the City of Two Harbors has suffered a series of setbacks in its economic life including closing down of two major industrial operations: the Universal Fiberglass Company in 1967 and the Abex Corporation in the early 1970's. Although there has been an overall gain in Lake County employment of some 300 since 1970, it has not reached the peak level of 1966 when it had 4,500 persons employed. The City of Duluth has also suffered a series of shut-downs of major employers including U. S. Steel Company's steel plant in 1972 and a curtailment of the U. S. Air Force Base employment shortly after the steel plant closedown. Peak employment in Duluth in recent years occurred in 1969 when the level was at 46,800. The 1974 level is currently 2,600 below the 1969 employment total.

The unemployment trend in the Region over the eight-year period has increased by nearly two-thirds, involving an increase of 4,300 persons. More than one-third of this increase occurred in the City of Duluth. The rate of increase in Duluth was more than 83%. The other major unemployment increases were in the remainder of St. Louis County, with 1,200 or 55% of the regional total; Carlton County, with 630 or 15%; and Itasca County, with 440 or 10% of the regional increase. Together, these four areas account for nearly 88% of the 4,300 increase in unemployment in the region. This trend is also proportionate to the 1974 level of actual unemployment among the same four areas which comprised over 85% of the total regional unemployment.

3. Minority Labor Force

Returning to Census materials, Table II-8b summarizes the labor force situation for the minority population within the Region. To gain a perspective of the extent of the minority labor force in the Region, a few percentage comparisons of the Region and the state are presented. The Region's minority labor force of 1,147, although relatively minor in terms of the total labor force (0.9%), comprises 5.0% of the entire minority labor force of the state. Even more important, the number of minority unemployed is 9.5% of the statewide minority total as compared to only 1.7% of the Region's total unemployed. The regional minority unemployment rate is nearly twice that of the statewide minority rate.

Within the region, the largest minority labor force is located within the City of Duluth, which comprises 39% of the total, 41% of the number of minority employed, and 24% of the unemployed. The highest rates of unemployment occur in Cook County (43.5%), Carlton County (26.2%), Aitkin County (21.1%), Koochiching County (18.4%), and Itasca County (16.1%).

Another source of information, the U. S. Department of the Interior's Bureau of Indian Affairs, Minnesota Agency, at Bemidji, reports annually on the labor force of each of the three Indian reservations in the region. According to the 1973 report, the rates of unemployment were very substantial:

	<u>Labor Force</u>	<u>Employed</u>	<u>Unemployed</u>	<u>Rate of Unemployment</u>
Fond du Lac	136	50	86	63.2%
Nett Lake	122	66	56	45.9%
Grand Portage	61	32	29	47.5%

Source: Bureau of Indian Affairs, Minnesota Agency, Bemidji.

Employment opportunities for the Indian are limited to part time seasonal work in the tourist industry, sawmills, commercial fishing, seasonal road construction, home manufacture of Indian arts and crafts, wild rice harvesting, and some government jobs based on community action type programs. Many of these job sources are not capable of supporting and maintaining a stable economy on the reservations.

Some efforts are now being made to improve the self-sufficiency of the Indians by creating job opportunities on the reservations. Foremost among these efforts is the Grand Portage Radisson Hotel which is owned and run by Indians. The multi-million dollar facility had its grand opening in the spring of 1975. The Fond du Lac Reservation will be constructing a commercial recreational complex. Nett Lake is developing a saw mill operation in an effort to develop the long range potential of their timber resources.

B. PROBLEMS

1. Data Reliability

As of January 1, 1975, the Minnesota Department of Employment Services (MDES) changed its methodology of reporting data. As a result, considerable confusion has amounted as to the meaning and use of labor force, as opposed to work force, estimates of employment and unemployment. This confusion has been traced to the introduction of labor force estimates for state and area allocations of Comprehensive Employment and Training Act (CETA) funds in 1974.

Previously, the data were reported on the work force basis, which represented a total count of employment in terms of jobs by place of work and unemployment by place of residence. This methodology was developed in the early 1950's and finally adopted nationwide in 1961. Work force data

can be used very practically in analyzing the impact of changing economic conditions, on both the nation and the individual state levels. The work force data are used also to measure the surpluses and shortages in manpower. They are used for measuring the economic health of a region or area.

Work Force Data

There are certain disadvantages inherent in the work force data. They take longer to generate, and do not provide occupational and characteristics detail. There is also a severe drop in reliability when used in analyzing small areas, especially when trying to allocate dollar amounts to areas based on the percentage point differences in the unemployment rate. Due to the inherent nature of data collection, there is also a tendency to report duplicate totals since questions are asked on a job basis rather than on individual workers. In Minnesota, however, this problem has actually proved inconsequential for practical purposes.

Labor Force Data

The labor force concept represents data generated from an unduplicated count of individuals employed and unemployed by place of residence. The labor force estimates are based on the Current Population Survey (CPS) of 47,000 occupied household units in the nation conducted by the Bureau of Census for the Bureau of Labor Statistics. In Minnesota, the sample size numbers slightly over 900 surveyed households. The majority, over 50%, of the sample is conducted within the Twin Cities Metropolitan area. The remainder are conducted throughout the state.

Consequently, in the smaller areas, the difference between the labor force estimate of the unemployment rate and that produced using the work force concept has been a matter of great concern, especially for those local units of government (counties) which depend upon the higher work

The force method unemployment rates for eligibility in federal economic development and manpower programs. The economic development programs have often asked for unemployment rates within single communities. The MDES has not provided information for many minor civil divisions below the county level. Only the City of Duluth is included with regular reporting of monthly unemployment rates.

Labor force data in Minnesota is generated by applying conversion factors and adjustment procedures to the work force data for the purpose of shifting employment from a place of work to place of residence basis. On the statewide level, the difference between the two concepts is relatively small, but for the county level, the results are mixed. For example, the Region III CETA Consortium office analyzed the unemployment rates produced by the two methodologies and discovered that in July of 1974, the rates varied in terms of percentage points from 3.8 to 6.8 lower for the labor force method compared to the work force method.

2. Lack of Adequate Data

Information on the labor force is a key element in the planning process. It enables the planner to observe trends in economic activity among the population of the region and also to determine the nature of the characteristics of those who are economically active. The ARDC staff has been hampered by inadequate data. First of all, the information does not have the geographic detail necessary to even begin to analyze the nature of inter-community economic dependence. This becomes important when decisions have to be made regarding such matters as location of new housing, relocation of communities due to mining expansion, provision of new community facilities, determining best locations for future economic development, planning for the most efficient expenditure of public funds for capital

improvement programs, and other matters relating to the economic well-being of the citizens of the region. Efforts are now being pursued which could provide this type of information on a sub-regional planning area basis.

The planning function could be improved considerably if employment data could be supplied on a more timely basis. Up until now, this information has been provided with a time lag of from three to six months. A system of timely reporting on a regular basis is needed.

Legal restraints on dissemination of employment data on Minnesota firms by the Minnesota Department of Employment Services has also been a problem with planners trying to apply modern, sophisticated techniques to develop information for the decision makers. Continued effort must be made toward developing a closer working relationship with the State Department of Employment Services to insure that the needs of the officials and planners are brought to the attention of the MDES and other state agencies.

At stake is the eligibility of various counties and communities for federal program funding, i.e. Economic Development Administration (EDA), and the U. S. Department of Labor's Comprehensive Employment Training Act (CETA). Generally, these programs require a certain level of unemployment, expressed as a percentage of the total civilian labor force. Each federal program has a different set of criteria which further defines the nature and severity of unemployment in the area of the project or program to be funded, such as whether or not the rate is above 6% or 6.5%, and the duration or time period this rate has existed. This necessitates obtaining labor force information on a timely and regular basis to be able to make the determination of the applicants potential eligibility for funding of projects and programs. Once this cooperation is improved, efficiencies in economic development planning will be enhanced.

II. INCOME ASSESSMENT

"Income statistics are of direct value to economists and others interested in wealth, the distribution and sources of consumer income, wage and salary rates, and the effective employment of manpower. It is one of the best measures of economic well-being, and it vies with educational attainment and occupation as a measure of socio-economic status."¹ Unfortunately, very little information exists in much detail. The standard sources include the U.S. Census of Population, the County Business Patterns, and several publications of the Census Bureau's Bureau of Economic Analysis.

Definitions are not standard, although the United Nations has attempted to establish certain principles that are common in analyzing the subject of income. In principle, income from all sources should be counted, both cash income and income in kind. Specifications for reporting income are given by the United Nations as follows: "The main source of household cash income, comprising the personal incomes of all the members, are: salaries, wages, net earnings from self-employment, business profits, investment income (rent, interest, dividends), royalties and commissions. Periodic payments received regularly from an inheritance or trust fund are also regarded as income, as are the following: alimony, pensions, annuities, social security cash benefits, sick pay, scholarships and various other periodic receipts. The following items should not be regarded as income: receipts from sale of possessions, withdrawals from savings, loans obtained,

¹U.S. Department of Commerce, "The Methods and Materials of Demography, Volume I" p. 360-361.

loan repayments received, windfall gains, inheritances (lump sum), tax refunds, maturity payments on insurance policies, lump-sum compensation for injury, legal damages received, etc., even though the proceeds may sometime be spent on consumption. To cash income must be added income in kind."²

1970 Census of Population Income Definition

According to a Census appendix for definitions and explanations of subject characteristics, information on money income received in the calendar year 1969 was requested from all persons 14 years old and over in the 20 percent sample. "Total income" is the sum of the amounts reported for 1) wage and salary income, 2) non-farm net self-employment income, 3) farm net self-employment income, 4) social security or railroad retirement income, 5) public assistance or welfare income, and 6) all other income. The figures shown in the Census tables for "Earnings" represent the sum of the amounts reported as 1) wage and salary income, and 2) non-farm and farm net self-employment income. In both cases, the figures represent the amount of income received before deductions for personal income taxes, Social Security, bond purchases, union dues, medicare deductions, etc.

Although there are many other definitions enumerated in the Census publications, the income definitions shown above, plus the common principles listed in the United Nations list previously mentioned, contain a workable framework for understanding the income concepts discussed in this income assessment section.

Bureau of Economic Analysis (BEA) Income Definition

This U.S. Department of Commerce office, in its annual publication of

²United Nations, Handbook of Household Surveys, Series F., No. 10, 1964, p. 90.

personal income by local areas, defines personal income as: ". . .current income received by residents of an area from all sources . . . measured before the deduction of income and other personal taxes, but after deduction of personal contribution to social security, government retirement, and other social insurance programs."

County Business Pattern Payroll Data

Data on income is reported in terms of "taxable payrolls" in the County Business Patterns series. Taxable payrolls are defined as the amount of taxable wages paid for covered employment during the January-March quarter. Under the law in effect on January 1, 1973, taxable wages for covered employment include all payments up to the first \$10,800 paid to anyone employed by any one employer during the year, including the cash value of payments in kind. Generally, first quarter taxable wages closely approximate total wages as all payments in the first quarter would be taxable unless the employee is paid at the rate of more than \$43,200 per year.

The following assessment will discuss the income figures in terms of trends, and their effect on the overall economic well-being of the residents of this region.

Trends

Median family income for the region lagged behind the state and national levels in terms of percentage growth from 1959 to 1969. In current dollars, median family incomes increased at a rate of 64.5% for the regional average. Aitkin (92.6%), Itasca (75.6%), and St. Louis (64.9%) Counties had rates above the regional average. Only Aitkin County surpassed the state (78.2%) and national (69.4%) rates, thus indicating a significant set of growth conditions existing within the county. Aitkin County also had the lowest median family income in 1959 and therefore had the greatest amount of growth to develop. What is significant is the fact that Aitkin County was able to reflect a substantial positive growth record in spite of its seemingly scarce economic base.

An analysis of the 1959-1969 change in the actual dollar amounts of the median family incomes reveals some interesting trends in economic well-being. In terms of current dollars, St. Louis County had the greatest change - \$3,542 increase, and Itasca County ranked second with a change of \$3,439. However, looking at the constant dollar changes, the opposite is true. Itasca County showed an increase of \$2,065 between 1959 and 1969, while St. Louis County's median family income increased by \$1,945. Thus, it might be concluded that Itasca County had the best growth in economic well-being among the counties in the region, at least when the effect of inflation is discounted.

At the other extreme, Cook County and Koochiching County experienced the lowest dollar changes in median family income between 1959 and 1969. In current dollars, Cook County increased by \$2,812 and Koochiching County grew by \$2,825. , ranking seventh and sixth, respectively. When the inflation factor is discounted, the previous phenomenon re-occurs with Koochiching gaining \$1,239 and Cook growing by \$1,343. Again, the conclusion must be made that the families in Koochiching County experienced the lowest level of economic well-being among the counties in the Region.

A comparison of each county with change in median family income to the regional average tends to indicate that the greatest economic growth was concentrated in Itasca, St. Louis and Carlton Counties. In terms of constant dollar growth, Itasca County's growth was only 77% of the state's growth and 91% of the national growth experience.

Table IV-G-1

Change in Dollar Amounts of Median Family Income
in Current and Constant Dollars, 1959-1969

	<u>Current 1969 Dollars</u>	<u>Constant 1967 Dollars</u>
Arrowhead Region	\$3,340	\$1,881
Minnesota	4,358	2,561
U. S. A.	3,930	2,251
Aitkin County	2,836	1,863
Carlton County	3,353	1,729
Cook County	2,812	1,343
Itasca County	3,439	2,065
Koochiching County	2,825	1,239
Lake County	3,219	1,621
St. Louis County	3,542	1,945
City of Duluth	3,436	1,750

Source:

Table II-9 of Socio-Economic Inventory chapter and ARDC staff calculations.

Per Capita Personal Income

Per capita personal income is an indicator of the quality of a consumer market and of the economic well-being of the residents of an area. Caution should be exercised when comparing the per capita income figures among counties, especially in the small populated counties, the reason being that in many cases, an unusually high or low level of per capita income is temporary and results from unusual conditions, such as a bumper crop, a major construction project, or a catastrophe.

Generally, it can be stated that the per capita personal incomes of the Region as a whole have not kept pace with either the state or national levels. As can be seen from the following list, several indicators seem to support this statement.

- 1) The gap between the region and state increased from \$573 in 1969 to \$1,008 in 1973.
- 2) The gap between the region and the USA increased from \$735 in 1969 to \$905 in 1973.
- 3) The region's per capita personal income slipped from 84% to only 80% of the state-PCPI from 1969 to 1973.
- 4) The region's increase in actual dollars of PCPI (\$1,138) was less than the state (\$1,573) or national (\$1,308).

Per Capita Personal Income by County, Region, Minnesota and USA
1969 and 1973

	<u>1969</u>	<u>1973</u>	<u>Dollar Change</u>	<u>Percent Change</u>	<u>Rank in State 1973</u>
Arrowhead Region	\$2,998	\$4,136	\$1,138	38.0	
Minnesota	3,571	5,144	1,573	44.0	
USA	3,733	5,041	1,308	35.0	
Aitkin County	1,999	3,022	1,023	51.2	85
Carlton County	2,685	3,827	1,142	42.5	67
Cook County	2,655	3,434	779	29.3	80
Itasca County	2,613	3,504	891	34.1	76
Koochiching County	2,602	3,582	980	37.7	71
Lake County	2,685	3,551	866	32.3	74
St. Louis County	3,207	4,447	1,240	38.7	54

Note: Rank is based on total of 87 counties in State of Minnesota.

Source: Survey of Current Business, April 1975, U. S. Department of Commerce, BEA

The region as a whole improved its position slightly by increasing its percentage share of the USA per capita income figure, gaining from 80.3% in 1969 to 82.0% in 1973. St. Louis County led the way with the highest proportion, 88.2% in 1973. Aitkin and Carlton Counties were the leading gainers, increasing their shares from 53.5% and 71.9% respectively in 1969 to 59.9% and 75.9% respectively in 1973. The differences amounted to 6.4 and 4.0 percentage point gains for these counties. Not all counties in the region shared in this positive trend - Cook, Itasca, and Lake Counties all decreased percentage-wise in this area.

When an inflation rate of 21.2% from 1969 to 1973 is taken into account, the real growth in per capita income amounted to only 13.8% for the region. Growth among the counties ranged from 24.7% in Aitkin to a low of only 6.7% in Cook. There were four out of the seven counties that gained at a faster rate than the USA rate - Aitkin, Carlton, Koochiching and St. Louis.

In terms of annual growth per year, the region's PCI grew at a rate of 8.4% (current dollars). Discounting inflation, that rate would be 3.3%. Compared to the national rates of 7.8% (current dollars) and 2.7% (constant dollars), the region's rate of growth has been a little above normal, but not sufficient to bring the per capita incomes very close to the national level. Annual growth ranged from 10.9% in Aitkin County to 6.6% in Cook County in current dollars, and from 5.7% to 1.6% for the same counties in constant dollars.

Table IV-G-2

Per Capita Personal Income, 1969 and 1973

Area	Current Dollars			Constant 1967 Dollars		
	1969	1973	% Chg.	1969	1973	% Chg.
Region	\$2,998	\$4,136	38.0	\$2,730	\$3,107	13.8
% of USA	80.3	82.0		80.3	82.0	
Minnesota	3,571	5,144	44.0	3,252	3,865	18.8
% of USA	95.7	102.0		95.6		
U. S. A.	3,733	5,041	35.0	3,400	3,787	11.4
% of USA	100.0	100.0		100.0		
Aitkin	1,999	3,022	51.2	1,821	2,270	24.7
% of USA	53.5	59.9		53.6		
Carlton	2,685	3,827	42.5	2,445	2,875	17.6
% of USA	71.9	75.9		71.9		
Cook	2,655	3,434	29.3	2,418	2,580	6.7
% of USA	71.1	68.1		71.1		
Itasca	2,613	3,504	34.1	2,380	2,633	10.6
% of USA	70.0	69.5		70.0		
Koochiching	2,602	3,582	37.7	2,370	2,691	13.5
% of USA	69.7	71.1		69.7		
Lake	2,685	3,551	32.3	2,445	2,668	9.1
% of USA	71.9	70.4		71.9		
St. Louis	3,207	4,447	38.7	2,921	3,341	14.4
% of USA	85.9	88.2		85.9		

Note: CPI for 1969 = 109.8
 CPI for 1973 = 133.1
 % change in CPI = 21.2

Source: Survey of Current Business, April 1975.

ASSESSMENT H RECREATION AND TOURISM

Chapter IV
Assessment H
RECREATION AND TOURISM

The tourism and recreation activity in the Arrowhead Region is generally considered to be an important part of the Region's economy. Practically everyone familiar with the Arrowhead Region is aware of the wide variety of recreation potentials and tourist attractions available. Definitions describing the recreation and tourism business vary according to the different sources. Defined generally, the industry is made up of a series of inter-related enterprises, each of which provides a service or a product that tourists are willing to pay for, such as transportation, food, lodging, entertainment, information, special clothes and equipment, and many other items.

Recreation resources and hospitality services serve the needs of people in two generalized ways. 1) provide significant opportunity for the resident population to enjoy leisure time pursuits at affordable time and dollar costs which contribute to their quality of life; 2) forms the basis of a visitor industry serving away-from-home needs of people which creates economic activity directly or indirectly affecting most segments of local economies and contributing to the total product of communities, regions, and the state. Furthermore, the dollars generated by visitors are "new dollars" and to a great extent are re-spent within the local area and, depending on the nature of the expenditure, generally have multiplier effect.

The demand for leisure time activity and hospitality services to accommodate this demand has grown over time in our society as changes have occurred. Increased population has contributed sheer numbers of recreation seekers while shortening the work week (or more appropriately the "work year") has given people more disposable time. Expanded family incomes have more discretionary income left over, increasing portions of which have entered

the spending stream for leisure time pursuits. Higher educational levels have given people more capacity to observe and absorb the world about them and rapidly increasing mobility has been evident from expansion of highway systems, air travel, and other mass transportation means. Mobility has affected travel methods significantly and, not uncommonly, a family might even take its "motel" along in the form of mobile homes and camping equipment.

Change in society has not occurred uniformly for all nor has it persisted in an unbroken upward sweep. Inflation, recession, and energy concerns of late have halted or reversed patterns of recreation activity expansion, but rather than eliminating demand have more often changed the pattern of use. Both dollar and energy restrictions tend to focus travel into amenity areas near at hand. Positive effects, rather than strangulation, appear to be the result in Northern Minnesota including the Arrowhead.

The economic impact of recreation and tourism is difficult to measure. There is a need to develop quantification measures to enable decision makers to recognize what emphasis to put on this sector of the economy. The sources of identifiable economic impact appear to include:

1. Taxes. Statistics on state and local finances can reveal a significant contribution in terms of tax receipts from fish and game licenses, motor boat and snowmobile registrations, liquor profits, gasoline taxes, hotel and motel room taxes, etc.

2. Jobs. The various census materials indicate the number of jobs and payrolls by industry, enabling one to single out some of the key industries known to thrive on the tourist and traveler. Some of these business types include hotels and motels, eating and drinking places, amusements and movies, museums, etc.

3. Investments. Observations of public and private investments in recreation and tourist related facilities are evident without a great deal of research.

The following assessment will provide an examination of the scope of the recreation and tourist industry as it exists in the Arrowhead Region today. Discussions will cover: 1) the supply of attractions and services within the Arrowhead, both natural resource and publicly provided attractions as well as the hospitality services and accommodations; 2) the present and emerging problems of tourist development in the Arrowhead Region, including the private sector, the public sector, and also consideration of development of the tourist-recreation economy on a regional entity basis.

I. THE SUPPLY OF ATTRACTIONS AND SERVICES OF THE ARROWHEAD.

In order for an area to be considered a significant tourism destination area, at least three generalized attributes must be present. 1) The area must have an attraction base with significant appeal to visitors. This may be either natural resource based or man-made or a combination of these. 2) The area must have a service industry to accommodate, house, feed, and provide other services for visitors as they enjoy the attractions. 3) An information-direction-transportation system that provides linkage to the market and permits visitor flow within the area. This relationship is shown in schematic form in Figure 1.

In short, tourism should be considered as a system that links the market to the attraction base and as such, requires effective organization at several levels to develop market and promote the interests of tourism. It also requires sources of dollar support and information which usually must be generated by studies or surveys - not in laboratories or test tubes. Tourism development requires cooperation between many interests: government-transportation,

education, organization - and the private, for profit, enterprises as well as the recreation resource base.

Figure 1

advertising and promotion

attractions		market
natural		local
man-made		in-state
Service base	transportation	interstate
shelter		international
food	feedback-market research	
services		

A. Natural Resource and Publicly Provided Attractions.

Much of the attraction base of Minnesota, and the Arrowhead Region in particular, is based on the natural amenities of the area. The woods, waters, wildlife - with attendant scenery and activities - have provided much of the magnetism of the area. The Minnesota market for tourism seems to be gradually changing from near total dependence on natural resources recreation to the provision of more family-oriented recreation activities such as golf, tennis, recreation halls and the like. Significant man-made attractions enhance natural resources in many parts of the region already, such as the Duluth Arena-Auditorium and the Iron Range Interpretative Center. Man has often altered the natural scene to make the attraction accessible; a winter ski area is of little value until man intervenes to make it accessible and usable. For example, Sugar Hills, Quadna Mountain and Spirit Mountain have been here since the last glaciers; but it took the intervention of man and his ingenuity to develop them.

Publicly provided amenities of the Arrowhead in part include the following:¹

- lakes classed as fishing lakes - 576,165 acres

¹Minnesota Outdoor Recreation Plan - 1974, Bureau of Environmental Planning and Protection, Minnesota Department of Natural Resources, St. Paul, Minnesota.

- National forestland (Superior + one-half of Chippewa, approximately 2,400,000 acres, of which BWCA consists of about 1,000,000 acres)
- Grand Portage National Monument - 315 acres
- 25 state administered parks, recreation areas, etc. - 46,527 acres
- state administered forests - 1,913,684 acres
- 12 National Historic Landmarks
- 30 golf courses with 324 holes
- 5,139 campsites (not including BWCA)
- 1,742 miles of trails (exclusive of canoe trails)
- 1,800 miles of canoe trails (river and lake)

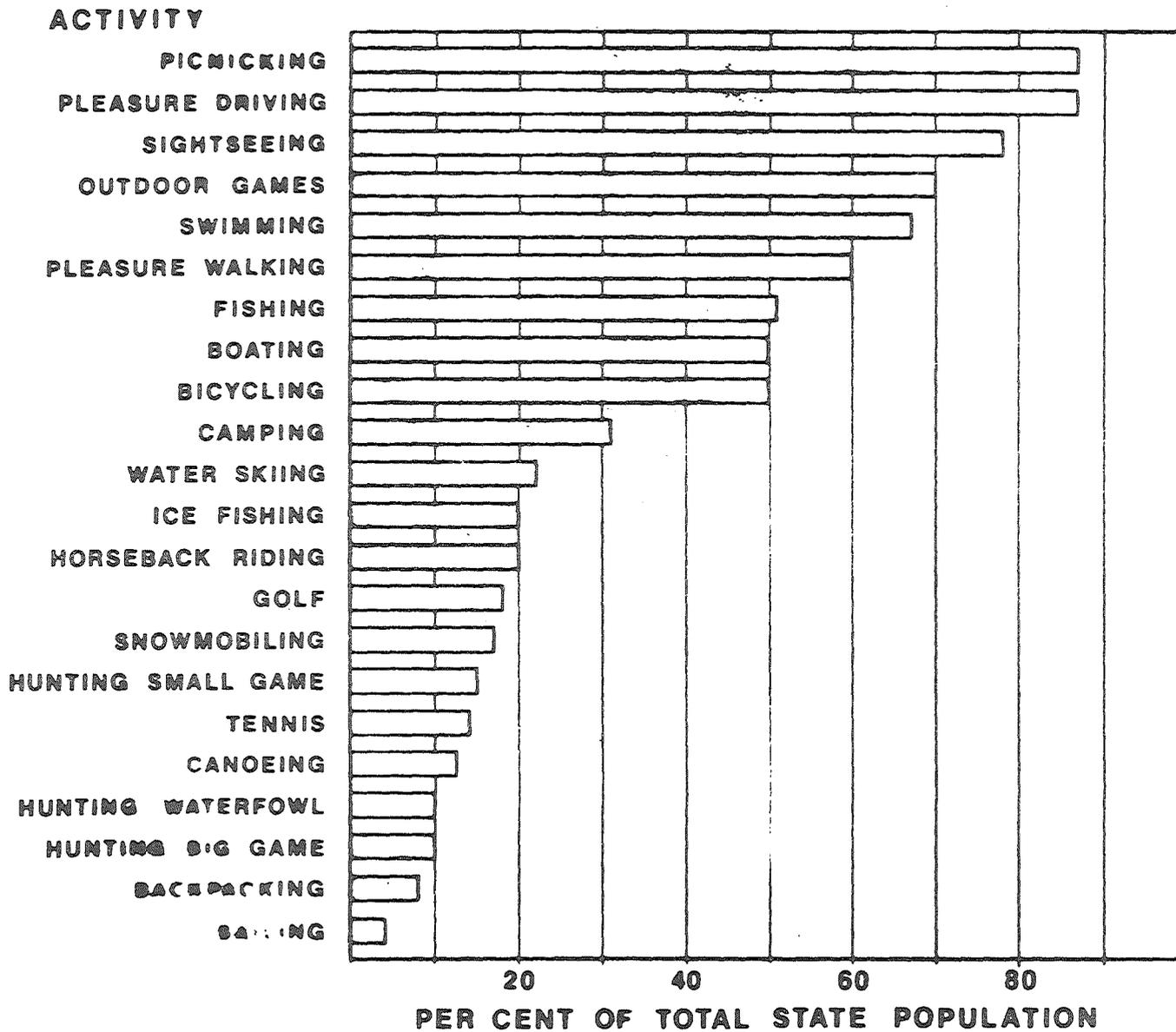
Special significance must be attached to the emerging Voyageurs National Park because of the newness of the park and the certainty of attracting increased visitors in the future. This is a historic and beautiful recreation area of 219,000 acres of woods, waters, and wildlife that fittingly commemorates the memory of the historic voyager.

"The park is expected to generate more than \$22 million in new sales from in excess of 1,000,000 visitors or nearly double the present volume of business in the area."² This will create opportunity for new and expanded private investment near the park as well as public investments and decisions in highways, land use control, and the like. The park and the surrounding area of influence (known commonly as the "periphery") are completely intertwined. As the park develops, so should the periphery. While the park proper is the magnet and will be developed and managed by the Park Service, the surrounding area will be a part of the visitors' experience as well. Here is where most of the sales of hospitality services to visitors will occur, and here is where the region should give leadership to planned expansion that maintains the image and quality of the park itself. It is a rare moment when a major park emerges and an opportunity for the skill of planner and politician alike to help guide that development.

² Voyageurs National Park - Toward a Plan for the Perimeter, Minnesota State Planning Agency, St. Paul, Minnesota, 1974, p. 33.

Figure 2

OUTDOOR RECREATION ACTIVITY PARTICIPATION (PER CENT OF POPULATION PARTICIPATING IN EACH ACTIVITY)



IV-H-6

SOURCE 1967 MINNESOTA DEMAND SURVEY

The wealth of resources available has spawned a myriad of activities in the out-of-doors. A 1967 demand survey of the state listed the activities and proportion for each as shown in Figure 2.

B. Hospitality Services and Accommodations in the Arrowhead

It is not enough to have resources for recreation (attractions). Needed also is a complex of accommodations and services for the use of people while coming to enjoy the amenities of an area. The provision of hospitality services is generally a function of the private, for profit, sector. Hence, a tourism industry becomes in reality a public-private partnership. Furthermore, much of the necessary transportation network must be furnished with public resources while the actual transport vehicle usually remains private.

A sizable hospitality industry has emerged in Minnesota, and the Arrowhead, to serve the away-from-home needs of visitors. This offering is characterized in Table IV-H-1.³

The size and complexity of the private sector is illustrated by this table. Note that more than 34,000 visitors can be accommodated at a given seasonal time excluding campground capacity. Nearly two-thirds of this capacity is found in Arrowhead resorts with an average size of seven units per resort - a figure little changed from the findings of Sielaff in 1958.⁴ The average number of units per resort has actually declined from 7.6 to 7.0 during this period - an indicator of the lack of profitability of many resorts as well as an increasing tendency to break up resorts into individual lots - a trend fostered by rapidly increasing waterfront values. Sielaff found 653 resorts in the Arrowhead Region counties while Blank reported 652.

³Blank, O. Uel, The 1970 Minnesota Lodging Industry, Department of Agricultural Economics, University of Minnesota, St. Paul, Minnesota.

⁴Sielaff, Richard O., The Economics of Outdoor Recreation in the Upper Midwest, University of Minnesota, Duluth, Minnesota, 1963.

Table IV-H-1

The 1970 lodging industry in region 3 - Northeast	All Establishments				
	Hotels	Motels	Resorts	Other*	Establishments
I. Estimated number of lodges	52	197	652	6	907
II. Distribution of rental units					
a. Cabins only	n.a.	13%	87%	100%	66%
b. Bedrooms only	100%	71%	3%		23%
c. Both cabins and bedrooms	n.a.	16%	10%		10%
III. Estimated capacity*					
a. Bedroom unit capacity	3345	7930	1984		13269
b. Cabin capacity	n.a.	1453	19254	320	21007
c. Total capacity	3345	7383	21238	320	34276
IV. Average number of rental units/establishments	41.7	17.7	7.0	7.5	n.a.
V. Distribution of operation size					
a. 5-24 units (hotels and motels)	59%	89%	n.a.	100%	n.a.
b. 25-99 units (hotels and motels)	31%	10%	n.a.		n.a.
c. 100+ units (hotels and motels)	10%	1%	n.a.		n.a.
d. 1-10 units (resorts)	n.a.	n.a.	96%	n.a.	n.a.
e. 11-29 units (resorts)	n.a.	n.a.	3%	n.a.	n.a.
f. 30-99 units (resorts)	n.a.	n.a.	1%	n.a.	n.a.
g. 100+ units (resorts)	n.a.	n.a.		n.a.	n.a.
VI. Seasonal operation					
Percent operating seasonally	n.a.	35%	86%	100%	70%
VII. Distribution of ownership					
a. Individual	75%	78%	92%	83%	87%
b. Partnership	4%	5%	6%	17%	6%
c. Corporation	21%	17%	2%		7%
VIII. Distribution of owner turnover*					
a. 1 owner since 1960	61%	54%	55%	67%	55%
b. 2 owners since 1960	29%	33%	29%		30%
c. 3 owners since 1960	6%	6%	5%	33%	5%
d. 4 owners since 1960	4%	7%	11%		10%
IX. Distribution of establishments' age					
a. Built before 1930	85%	1%	8%		11%
b. Built 1930-44	11%	10%	43%		33%
c. Built 1945-59		63%	42%	17%	44%
d. Built 1960+	4%	26%	7%	83%	12%
X. Modernization					
Percent with recent improvements	54%	58%	49%	33%	51%
XI. Distribution of water orientation					
a. Located on lake	4%	27%	93%	100%	74%
b. Located on river		3%	3%		3%
c. No water frontage	96%	70%	4%		23%
XII. Estimated water frontage (in feet)	520	34028	813388	4764	852600 = 161.5 miles
XIII. Estimated land controlled (in acres)	58	2400	27777	26	30261
XIV. Camping facilities					
a. Number with trailer sites	n.a.	10	139		149
b. Number with 21+ sites	n.a.		24		24
c. Average number hookups	n.a.	8.2	5.8		6.0
d. Number with tentsites	n.a.	4	75		79

*Tourist (guest) homes, vacation farms, hunting and canoe outfitter's cabins, houseboat rentals, other miscellaneous facilities.

Another indicator of the frugal nature of resort business is that statewide, an attrition rate of about 4 percent a year was recently observed by Blank in the number of Minnesota resorts - a trend not readily apparent in the Arrowhead Region where the number has remained relatively constant. Eighty-six percent of these resorts operate on a limited seasonal basis although increasing numbers are now open to accommodate winter visitors.

Another form of overnight accommodation also bridges the gap between resources and people (market). The average second home contributes about \$1,800 to the economy of the area. Arrowhead counties had (in 1970) second homes in the numbers that follow:

Cook	390
Lake	260
St. Louis	5,540
Koochiching	N/A
Itasca	1,970
Aitkin	2,350
Carlton	320
	<u>10,830</u>

In addition, a significant number of children's camps - both profit and non-profit, public and private - provide access to resources for specific clientele groups. Canoe outfitters, 149 private campgrounds and many other kinds of facilities and services are found in the Region.

But tourism economically benefits more than accommodation purveyors. 1152 food and beverage service, 10.7 percent of the state total, also serve away from home business in the Arrowhead. Significant portions of annual total sales of service stations, gift shops, bait and tackle shops, recreation equipment suppliers, retail stores and, literally the "butcher, baker, and candlestick maker" can also be attributed to sales to visitors. Blank found a wide distribution of dollar sales to tourists by service firms in the Lakes of the Woods-Rainy Lake study in 1970 as reported in Table IV-H-2.⁵

⁵Blank, O. Uel, "Tourism in the Lake of the Woods-Rainy Lake Area", Minnesota Agricultural Economist, University of Minnesota, November 1971.

Table IV-H-2

Dollar Sales to Tourists by Service Firms
Lake of the Woods, Rainy Lake Area, 1970

<u>Firm</u>	<u>Sales to Tourists</u>
Gasoline services	\$ 3,100,000
Resorts	2,728,000
Restaurants and food services	2,025,000
Hotels and motels	701,000
Grocery stores	550,000
Other (taxes on second homes; expenditures for entertainment, sporting goods, medicine, fares, etc.)	<u>1,330,000</u>
TOTAL	10,434,000

Clear-cut definition of the economic impact of tourism across the Arrowhead Region has not yet been measured. It is, however, estimated by the Department of Economic Development that tourism in 1973 was a \$976 million industry in Minnesota. The Arrowhead Region received a proportionate share of this impact. A recent study by Blank on tourism in Duluth⁶ found that approximately 237,000 visitors a week during summer months go to or through Duluth and spend in that city more than \$2 million a week. About one-half of this amount and, likewise, one-half of the visitors are traveling for pleasure purposes. The reported retail sales approximated 18 times the dollar volume of overnight accommodations sales in Duluth for the same period. Visitor expenditures accounted for about 28% of average summer weekly sales by retail establishments and selected services. The effect of visitor dollars on the economy go beyond the "first spending". Many of these expenditures give rise to a multiple effect which may be great or small depending on how soon that "dollar" leaves the spending stream of a community. For example, it has been estimated that eating establishments generate about \$2.63 for each dollar

⁶Blank, O. Uel, "Duluth-Superior's Travel/Tourism Economy", Department of Agricultural Economics, University of Minnesota, St. Paul, Minnesota, (1975), unpublished.

spent while resorts generate about \$3.47. This activity for the most part exports only minimal natural resources to satisfy the demand. Much more definitive economic impact data is needed for the entire Arrowhead Region. Economic impact studies should consider in total both the economic advantages and associated costs of tourism in communities and the region. Expenditures for overnight accommodations, food (both prepared and unprepared), beverages, recreation and entertainment, retail sales, transportation, access, and governmentally provided services, costs of promoting and marketing and loss of recreation opportunity due to competition for scarce resources between visitor and localite.

Transportation needs for tourism in the Arrowhead Region are best considered in a special section on transportation. Planning for transportation needs should be sensitive to the needs and consider both positive and negative impacts on tourism when proposed. The coming of Amtrak, if passenger projections are realistic, will require satellite development to move visitors who wish to visit hinterland areas. This may usher in new opportunity for package tour plans which could employ rail, bus or air as the prime long distance mover, and local enterprise as the dispersion method within the Arrowhead. Highway developments to serve and link new interpretive efforts on the Iron Range and other points as well as expanded travel to and from other major attractions such as the Voyageur National Park will be necessary. The priority needs for highways to serve Arrowhead tourism must be kept before those developing statewide highway plans as limited resources for construction and maintenance appear likely in the foreseeable future.

Attention to the market place for tourism, particularly out of state, must continue and expand. The primary promotion organization of the region is the Minnesota Arrowhead Association which is beginning its second half

century of service. Bolstered with limited matching state funds, and actively supported by much of the region, it now operates with a budget of \$109,166. Close liason with and active technical assistance to the MAA in marketing should be a goal of the Commission through its citizen committees in future tourism development. The committee structure now emerging can generate useful market information through surveys, interpret existing information and provide access to information sources. There is danger in these times of recession, inflation, and energy crisis to forego potential markets in favor of "safe" in-state or already established tourism markets to the detriment of long range tourism building. An increasing flow of market information will be essential to attract future markets.

Tourism marketing interests should continually be alert for new concepts and emerging data. A recent study in Northeast Minnesota by Blank⁷ found that resort guests apply far different names to destination areas in the Arrowhead than residents or promotion interests generally subscribe. Ten distinct destination focal areas, generally lake, town, or highway centered, were clearly delineated by guests in contrast to the customary use of the name "Arrowhead". This same study looked at promotion of the area by "activities" and found that where suppliers of recreation accommodations generally emphasized fishing as the dominant activity in promotion/advertising, resort guests often emphasized other activities (such as "wilderness experience" or "sightseeing") in several of the focal areas delieated. This raises the question as to how these destination areas within the Arrowhead can most appropriately promote their image to the tourism market place within the framework of the MAA umbrella.

⁷Blank, O. Uel, "Recreation Focal Areas", Department of Agricultural Economics, University of Minnesota, St. Paul, Minnesota, 1972.

A recent publication, Upper Great Lakes Regional Planning Study,⁸ gave clues to other significant market information in a Recreation Demand survey and forecast. Following is a brief summary of the findings:

1. 58% of households in the nine-state area including and surrounding the Upper Great Lakes Region, take outdoor recreation trips. The average number of trips per household was 1.4 long trips (lasting 5 days or more) and 1.6 short trips (lasting 2 to 4 days) per year.
2. Wisconsin, Michigan, and Minnesota residents were much more likely to take in-state trips than were residents of the other six states. Illinois residents ranked highest in trips taken to out-of-state areas.
3. 11% of the households in the nine-state area took one or more short trips to the Upper Great Lakes Region and 13% of the households took one or more long trips. Trips to the Upper Great Lakes Region constituted 26% of total trips. Households from the nine-state area accounted for approximately 85% of the recreationists visiting the Upper Great Lakes Region during the May-September period.
4. A comparison of yearly activities with activities while on a summer trip to the Upper Great Lakes Region indicated the importance of six outdoor recreation activities among Upper Great Lakes travelers - fishing, boating, hiking, camping, sightseeing, and swimming.
5. The projections for 1980 indicate a 17% increase of families who will take recreational trips, from 58% to about 68% of

⁸Cooper, Rolin B., Upper Great Lakes Regional Recreation Planning Study, Recreation Resources Center, University of Wisconsin, 1974.

families in the nine-state area. The percent of families visiting the Upper Great Lakes Region while on a trip indicated an increase of 16% over 1972, from about 29% to about 34% of traveling families. These increases in the propensity to take a recreational trip, coupled with the increase in the number of families in the nine-state area, result in 3,129,553 families projected to take 4,193,601 summer trips to the Upper Great Lakes Region in 1980. This represents a 45% increase over 1972.

Podolsky - Minneapolis Star-Tribune⁹ reported from a 1974 survey of Minneapolis-St. Paul Metro area residents that 73% of those who had vacationed in Minnesota last year planned to take at least one vacation trip in Minnesota during 1975. This indicates that Minnesotans are good customers for Minnesota.

II. PRESENT AND EMERGING PROBLEMS OF TOURISM DEVELOPMENT IN THE ARROWHEAD

A. Private Sector

Paramount among the problems of the private, for profit, sector, are the following:

- Need for dependable, long term capital at affordable rates for expansion, rejuvenation, or new development. The slow progress of the Arrowhead Regional Credit Corporation and the inability of local lending agencies to adequately back most long term ventures underscores this problem.
- Improved management skills are needed by many family-owned recreation facilities. Physical plant maintenance, marketing techniques and business accounting, and analysis practices demonstrate the scope of some of these problems. Employee training is also a serious problem for some enterprises. There is also need to stimulate an increased "Art of Hospitality" among those who meet or serve the visitor in the Arrowhead

⁹Podolsky, Vic, "Minnesota Tourism" Minneapolis Star & Minneapolis Tribune, Minneapolis, Minnesota, 1974.

- communities - they are the "front line" of area salesmanship.
- Competition of escalating waterfront values that reach heights where continuation of waterfront properties as recreation businesses is most difficult. Real estate taxes based on inflated land values rather than productive capacity often results in dire consequences for many small businessmen. Approximately 4% of Minnesota resorts are dissolved as a business annually.
 - Subsidized public or quasi-public facilities such as public campgrounds, non-profit camps or winter recreation areas should work toward reducing competition with the profit enterprises in the Arrowhead.
 - Problems of identification and direction directly resulting from enforcement of the highway beautification act. Removal of information/direction signs without substitution of new systems creates hardship for many who lack both market and physical facility visibility.
 - The need for systematic information generation through research to document the scope of some of the problems above and provide information to prospective developers or owners of existing operations that seek to expand and improve.

B. Public Sector

- Support for implementation of the wide-reaching approach of the state in implementing the state-wide outdoor recreation plan.
- Implementation of plans for Voyageur National Park - both within the park boundaries and in the periphery zone.
- Adequate budget support for state and regional promotion of tourism.

- Generation of travel-tourism data such as economic impact studies which can lead to more competent planning across the area and enhance opportunity for new public as well as private development.
- In a regional design concept, work toward the development of a network of "star attractions" as recommended by Checchi and Co., 1968.¹⁰ Regional design should stimulate major interpretive efforts in natural areas, historic sites, and economic base components as major attractions.¹¹ The unique features and varied industries of the Arrowhead give opportunities to explain and give credibility to developments that reduce adverse impact on the environment. Environmental concern can also serve as a stimulant to the delightful communities of the Arrowhead Region in increased efforts toward beautification, functionality, and quality of life for localite and visitor alike.

C. Toward a Concept of "Tourism Region".

- Both public and private interests in tourism-recreation have much to gain from application of a regional design process for the Arrowhead. By considering the region as a total entity and conceptualizing what it might be in the future, costly mistakes might be avoided and appropriate developments stimulated. In a regional design sense both the integrity of the private, for profit, industry and the preservation, reservation propensity of the public, tax-supported, sector can be teamed as partners with each having distinct but complimentary roles.

¹⁰ Checchi and Company, "The Potentials of Commercial Tourism in the Upper Great Lakes Region", Washington, D.C., June 1968.

¹¹ Simonson, Lawrence R., A Study of Industrial Plant Tours as Important Tourism Attractions, unpublished doctoral dissertation, Texas A & M University, College Station, Texas, 1974.

- The process in brief outline form should include at least the following:¹²

1. Research and analysis of users
2. Research and analysis of developers
3. Environmental research
 - a. external factors
 - b. internal factors
4. Regional analysis
5. Synthesis and conclusions
6. Environmental program and concept development
 - a. regional
 - b. community-attraction complexes
7. Implementation

- This approach recognizes both public and private interests as part of a whole rather than separate segments. It can be accomplished regionwide, given time, or it can be done in pieces as resources permit. The end product, however, should lead to a total regional design with which to approach the future.

¹²Gunn, Clare A., Vacationscape - Designing Tourism Regions, Bureau of Business Research, The University of Texas at Austin, 1972, p. 161.

ASSESSMENT I MANPOWER

Chapter 4
Assessment I
MANPOWER

This assessment of manpower activities is based upon two major components: manpower needs and manpower activities and services. First, it will be established that due to a prevailing lack of job opportunities and a high unemployment rate, there is a recognized need to continue a regional manpower planning program. Using data from the Region III CETA Consortium manpower plan, the City of Duluth CETA Manpower Plan, and the Upper Great Lakes Regional Commission's Regional Economic Development Plan, analysis will be made of the unemployment trends of the regional, state, and national experiences. Secondly, it will be established that the activities and services to implement manpower programs in the region are adequate based upon the availability of funds to develop the necessary programs. Using the same data sources as above, comparisons of available information on the economy with the types of manpower programs and activities and services will be made to determine the nature of the adequacy toward meeting the acknowledged manpower needs.

I. NEEDS

A. Needs Components

Manpower needs are analyzed in terms of the magnitude of the lack of job opportunities within the region. This is measured by unemployment and unemployment rates as reported by the Minnesota Department of Employment Services. The latest annual figures are the work force data compiled by the MDES for the period from 1966 through 1974 which show the regional unemployment levels to be currently 10,790 compared to 6,490 in 1966. The unemployment rate in 1974 was 8.1% compared to 5.3% in 1966.

In spite of the success of some of the region's industries to achieve a stabilization of seasonal fluctuations in business operations, there remains a sizable and increasing level of unemployment. The current economic conditions prevalent throughout the nation have not helped matters recently. On a long range needs basis, it is hoped that new industrial development and further expansion of existing industry will provide the necessary impetus to absorb the large number of unemployed.

The immediate needs are more of the nature of obtaining income maintenance to enable the unemployed to purchase essential needs and to prevent further outmigration of the region's work force. Subsidized employment and work experience activities, coupled with supportive services, must be continued to assist those who, for a variety of reasons, are unable to compete for and obtain unsubsidized employment.

A summary of the general areas of manpower needs for the region are represented here as stated in the manpower plans of the region:

- Increase the income growth rate;
- Lower the percentage of poverty level families;
- Reduce the high rate of unemployment;
- Increase the median family income level;
- Reduce the high rate of outmigration;
- Reduce the high school dropout rate;
- Emphasize training and work experience among manpower programs.

There is an immediate and primary need for public service and work experience programs to sustain the unemployed through the present low economic cycle until industrial development occurs.

INCOME

Within the region there were an estimated 7,302 families with incomes below the poverty level. The median family income for the region was \$8,774 compared to \$9,931 for the state. This information is based on the 1970 Census of

Population. There is a definite need to expand employment opportunities within the region, particularly for those with incomes below income poverty levels.

UNDEREMPLOYMENT

Underemployment is a problem within the region. St. Louis County had the greatest number of underemployed with a total of 6,374, followed by Itasca with 1,392, Aitkin 1,031, Carlton 713, Koochiching 511, Lake 172, and Cook County 90, as reported by the Minnesota Department of Employment Services in 1974.

OUTMIGRATION

Outmigration was 12.6% for the total population from 1960 to 1970. However, within the young age groups of 15-29 years, there have been some substantial outmigration rates. Within the 15-19 year olds, six out of the seven Region 3 counties experienced rates between 10 and 24%; only St. Louis County had a rate less than 10%, which is about normal for a county of its size. The age group from 20-24 years experienced the highest outmigration rates. Carlton, Lake, and St. Louis County rates were from 25-49%, while Aitkin, Cook, Itasca, and Koochiching counties were above 50%. The magnitude of outmigration rates for the 25-29 year olds was mixed. Lake County with less than 10% and Cook County with a rate between 10 and 24% were on the lower end of the scale with the least outmigration. In the middle range of 25-49%, Carlton, Itasca, Koochiching, and St. Louis Counties were locations of rather substantial outmigration. Aitkin County was one of the eleven counties in the state with outmigration rates of over 50%. There is a definite need to generate employment opportunities for this group as well as for those who immigrate to this region in search of employment.

B. UPPER GREAT LAKES REGIONAL COMMISSION PLAN

The Upper Great Lakes Regional Commission in its Five-Year Regional Economic Development Plan, prepared in 1970 and currently being revised, has treated the subject of manpower development as a separate emphasis. In that plan, several areas of need were also identified, such as: related effects of general economic decline; certain characteristics of the region's (119 county region in Michigan, Wisconsin, and Minnesota) employment profile; high unemployment trends; hidden unemployment; labor force replacements; seasonal variations in employment; difficulties in implementing manpower training programs; and labor mobility.

Related Effects of Economic Decline

As has been covered in this previous discussion, such related effects as lagging population growth, heavy emigration of workers, high unemployment, and low family and per capita income have been generated as a result of the general economic decline in the region. This emphasizes a need for a comprehensive economic development program to reverse the economic decline.

Unemployment Trends

Unemployment trends have remained significantly above the national rate. This has been documented many times in the past and is a chronic and persistent problem among the counties of the Arrowhead Region. A complication of this problem that has surfaced recently is the change in the statistical procedures in determining the composition of the unemployment rate. A new methodology has been producing statistics on unemployment rates substantially below the former rates, and in some cases is less than one-half what the old methodology reported. This has serious effects on the ability of local areas to administer the services and social programs at the same levels as before.

Hidden Unemployment

An interesting fact and a long recognized problem is that of hidden unemployment. The UGLRC states that real unemployment is undoubtedly higher than the

official unemployment rate indicates. This is true especially in those areas of the Upper Great Lakes region that are sparsely populated and remote from adequate job opportunities. The UGLRC estimates are based on comparisons of the labor force participation rate of the UGL region with that of the nation as a whole.

Employment Profile

Analysis of the employment profile of the Upper Great Lakes Region has identified a long-term decline in agricultural-forestry-fisheries employment, thus raising concerns about related effects. According to a recent report by the Economic Research Service of the U.S. Department of Agriculture, (Aug. 1975), entitled "Socio-Economic Characteristics of Growing and Declining Non-Metropolitan Counties, 1970", it was suggested that many factors identified in those non-metropolitan counties with population decline during the 1960's may be transitory in nature. The ERS indicates that population decline may actually reflect a period of adjustment in the manpower needs of agriculture, forestry, mining, and other extra-active industries. Recent population growth in such areas is indicative of growth in manufacturing, service, and other types of non-extractive employment. Hence, one cannot conclude that population decline is an irreversible process, and that all declining areas are being bypassed by the process of national economic growth.

In contrast, however, there were some indications that the vast majority of counties that lost population between 1970 and 1973, in fact, also lost during the 1960's. Thus, in many instances population decline does tend to perpetuate itself. This tends to be the case in such areas as the Great Plains where decades of decline have created an age structure which is not conducive to natural increase, and in parts of the southern coastal plain and old cotton belt where the outmigration of racial minorities continues at a relatively high rate.

Labor Force Replacements

Another manpower problem that is seldom publicized and consequently not very well known is the situation dealing with labor force replacements. Analysis of the number of men leaving the labor force (retirement) and those entering, assuming no net migration in or out, and also assuming that the number of job opportunities remained at the 1960 level, reveals that 65% of the young men would find jobs by replacing older men. The remaining young men entering the labor force who are not able to replace the older men, must be added to the hidden unemployed count, thus exacerbating the overall unemployment problem.

Labor Mobility

Labor mobility factors are also a topic of concern in manpower development. The UGLRC has identified labor immobility as a barrier for further development. Low population density and the high proportion of older persons are factors that operate against mobility, as do the relatively low levels of per capita income. Directly related to low mobility are two very important factors of 1) inadequate information network and 2) the lack of supporting services for those persons considering moving within the region. An update to the original report has indicated that through UGLRC initiation and funding, an Instant Information System has been instituted among vocational-technical facilities and the State Department of Education that provides such information as entrance requirements, tuition, financial aids, and application procedures to counselors and students just by dialing a toll-free number (800-652-9021). There has been little activity on the supportive services aspect.

UGLRC Investments

The UGLRC has actively provided financial support for 42 projects in the Arrowhead Region from 1963-1974. Total investment by UGLRC has amounted to \$3.8 million or 9.6% of the total project costs of \$39.6 million

dollars. Vocational-Technical education projects numbered 12 out of the 42. These projects cost nearly \$3 million with UGLRC contributing over \$500,000 or 16.9% of the financing burden.

Additional Efforts Needed

Other topics that have not been documented, as well as the above expressed needs, but perhaps should be developed in future manpower planning considerations, may include the following:

- * Most manpower programs are for the benefit of the "disadvantaged" rather than for people who need advanced skills development. A more definitive coordinative effort must be developed to fulfill this need.
- * More sophisticated planning and implementation procedures should be developed to address the problem of securing trained workers for new and expanding industries within this region. The recent upsurge in the mining industry activity has brought this realization to the forefront among regional planners.
- * More information is needed on high school students regarding their intentions to pursue vocational-technical education and also their access to those facilities.

II. ACTIVITIES AND SERVICES

A. Background

Manpower programs have been active in one form or another in the region for more than 30 years. It was not until the Manpower Development and Training Act of 1962 that the federal involvement became wide-spread. By 1968, the federal government began coordinating action by implementing manpower planning on a national basis. The most current manpower legislation is the Comprehensive Employment and Training Act of 1973 (CETA) which provided a new up-to-date charter for manpower programs. The major impact of this act was to decentralize and decategorize numerous programs of several federal agencies and give responsibility to local areas to determine and plan the best utilization of human resources and training facilities. The agencies that are organized to accomplish this task in the Arrowhead Region are: The Region III CETA Consortium, headquartered in Virginia, which serves the seven-county Arrowhead Region excluding the City of Duluth; and the Manpower Services office of the City of Duluth. Both the Consortium and the Mayor's Manpower Planning Council are comprised of representation from agencies providing manpower services, those persons receiving these services, and from business, labor, and the general public. These manpower planning functions are supplemented by six local offices of the Minnesota Department of Employment Services in Duluth, Hibbing, Virginia, Grand Rapids, International Falls, and Ely.

B. Status of Manpower Programs

Data on the programs that operated in the past are scarce. Records in the state MDES office are destroyed after four years. Unless annual reports are kept, it is difficult to trace the development of manpower efforts over long time spans. A summary of the types of programs and

available statistics on the results of some of the program efforts follows.

Programs:

The list of manpower programs that have operated within the region is prolific. The exact number is not known but a cursory recollection suggests that a very minimum number would be measured by the dozens.

Some of the more notable programs are:

Work Preparation and Training:

- *MDTA - institutional training - workers go to school.
- *MDTA-OJT - on-the-job training, hired first, trained by employers.
- Apprenticeship Training - for skilled occupation, combines classroom and on the job.
- *Work Experience - for poor adults and youth, prepares for job or formal training.
- *Neighborhood Youth Corps - after school and summertime jobs, those still in school. Full-time work and training programs, those who have left school.
- *Operation Mainstream - for older workers in rural areas to improve their communities.
- *New Careers - new types of jobs to the poor and unemployed.
- Work Incentive Program (WIN)- helps people move off welfare rolls into self-supporting jobs through help in training and employment.

*Now replaced by CETA.

Job Placement:

- State Employment Service Offices - helps worker in finding jobs or providing counseling or training.
- Job Opportunities in the Business Sector (JOBS) - government and business partnership, hire hard-core unemployed immediately for work and get paid while being trained.
- National Alliance of Businessmen (NAB) - Businessmen working with government to make new jobs for the hard-core unemployed and to train workers in the JOBS program.
- Summer Jobs for Youth - employers open up new jobs and special jobs for young people of school age who want to work in the summer.
- Youth Opportunity Centers (YOC) - refer youth directly to jobs or to manpower services aimed at preparing them for jobs, Job Corps, NYC, or MDTA. Program now discontinued.

Special Help for Problem Areas:

Concentrated Employment Program (CEP) - provides, in one program all manpower and related services to the areas and people most in need. At one stop, the worker can receive counseling, education, training, and other services needed to get and hold a job. Program now replaced by CETA I.

Model Cities Program - broad scale attack upon all the problems of a slum neighborhood, designed to improve the working and living conditions of its residents.

Comprehensive Area Manpower Planning System (CAMPS) - system by which minor federal agencies administering manpower programs can combine their efforts and services to give recipients best possible services with a minimum of confusion and duplication. Now, referred to as manpower planning councils, they determine the level of federal funding for programs operating in local areas.

The most recent manpower legislation, the Comprehensive Employment and Training Act of 1973, now combines various federal categorized manpower programs under a single federal grant which gives designated prime sponsors (Governors, mayors, and county officials) the opportunity to plan and implement training programs to serve local manpower needs. The CETA act contains six titles which provide the following programs:

Title I Comprehensive Employment and Training Program

This section provides a program of financial assistance to state and local government for a wide variety of services, such as: recruitment, orientation, counseling, testing, placement, institutional skill training, subsidized on-the-job training, payment of allowances to persons in training, supportive services, and public employment programs.

Title II Public Service Employment

Locally administered, provides for transitional public employment programs in areas with an unemployment rate of 6.5% or higher for three consecutive months.

Title III Federally supervised, provides manpower programs for migrants, Indians, and for special target groups such as youth offenders, older workers, persons with limited English-speaking ability, and others with particular employment problems.

Titles IV and V Continues the Job Corps program and establishes a National Commission for Manpower Policy.

Title VI An amendment which was passed in December, 1974 for Emergency Jobs and Unemployment Assistance. Similar to Title II, it is locally administered and provides for emergency public employment programs in areas of high unemployment.

Title VII Contains general provision for implementation of the Act.

Statistical Summary:

Programs operating during FY 1974 and FY 1975 under the control of the two manpower planning agencies will be serving approximately 2,000 persons under the Region III CETA Consortium and about 1,300 under the City of Duluth Manpower Planning office. The budgets of these programs total \$4.6 million for Region III CETA and \$3 million for Duluth.

The breakdown of program segments includes:

<u>ACTIVITY</u>	<u>REGION III</u>	<u>DULUTH</u>	<u>TOTAL</u>
<u>Title I</u>			
Classroom Training	90	340	430
OJT	140	43	183
Work Experience	1102	719	1821
<u>Title II</u>			
Public Service Employment	395	111	506
Work Experience	120	-	120
<u>Title III</u>			
Summer Youth	-	450	450
<u>Title VI</u>			
Work Experience/PSE	138	133	271

NOTE: Some persons are enrolled in more than one activity, thus accounting for more persons being served than shown in the narrative above.

Past records are sketchy on the number of persons served by manpower programs. The City of Duluth has summarized its data on manpower programs during the period from July 1, 1968 to December 31, 1974. Some of the characteristics of the applicants served by such programs as Operation Mainstream, Youth Mobility, NYC, work supplement, skill training (at the Duluth Area Vocational Technical Institute, and the Duluth Skill Center), and individual slotting are listed here.

Total Number of Applicants Accepted 3,215

Males 1806
Females 1409

Minorities Served

Blacks 193
American Indians 375
Orientals 3
Others 29
Whites 2,615

Educational Characteristics

Fourth grade or less 20
Fifth through seventh grade 110
Eighth grade 349
Ninth through eleventh 1,487
Twelfth grade 1,116
Twelfth and more 133

Those receiving public assistance 857

Those who were heads of families 2,393

Age Groups Served

Under 18 441
19-21 841
22-44 1,423
45-54 323
55-64 184
65 and older 3

Number of Veterans Served 666

General Completion Status

Positive terminations (those continuing studies as a student, getting married, going on to other training, etc.) 1,348

Job Placements 1,181

Drop outs 686
3,215

The benefits derived from these programs are far reaching. For example, the general education program did make it possible for some to have an opportunity for an apprenticeship program. The manpower coordinators actually sat down with employers and determined the necessary skills needed. A survey of these needs was then taken and programs were developed to provide specific training. The overall objective was to assist these people to obtain unsubsidized jobs.

C. Evaluation of Selected Manpower Development and Training Programs in Duluth

It became evident that few of the governmental agencies that administered the MDTA programs had saved all the records of the persons participating. Access to these records was limited due to the time elapsed since the MDTA programs were completed.

Fortunately, research was conducted on the MDTA institutional training aspect of the programs administered in Duluth. Dr. John W. Boyer, Jr. authored a doctoral dissertation entitled, "Evaluation of the Effectiveness of Selected Manpower Training Programs" which covered the period from 1963 to 1967. The purpose of the study was to answer two questions:

1. Can personal characteristics which differentiate trainees who were successful and non-successful in both the in-training and post-training aspects of MDTA Institutional training in Duluth, Minnesota, be identified?
2. What is the feasibility of developing specific trainee personal characteristic profiles that would predict a potential trainee's attainment of selected in-training and post-training success criteria?

The study looked at 18 programs conducted in institutional training facilities in Duluth from 1963 to 1967. Over 1,300 individual records were examined. There were 825 trainees who completed training and 548 who did not. Post-training follow-up was conducted at 3, 6, and 12 month intervals to determine a degree of success of the trainees completing training. Of the 825 completing training, 507 attained post-training success. This meant that the trainee was placed in a job directly related to training received, providing 35 hours or more per week, and with prospects of job tenure of 30 days or more for each of the follow-up periods.

The conclusion of the author was that personal characteristics could be identified, thus providing a positive answer to his first question. Although clear-cut differentiation of those personal characteristics between those that attained success or non-success was limited on a general basis, it was found that such differentiation became more evident when trainees were more selectively categorized by occupational classification for which training was preparatory, and by training course in which enrolled.

In answer to his second question regarding feasibility of profiles of trainee personal characteristics for predicting success or non-success attainment, the conclusion was that it could be done, but at a relatively modest level of prediction. Here again, categorization by certain areas as population, occupational classification, or selected training course, increased the prospects for better prediction of success or non-success.

Some of the general overall findings developed from the study include:

1. 60.1% of the 1,373 trainees enrolled over the five-year period (1963 through 1967) successfully completed training;
2. 39.9% failed to complete training;
3. 61.4% of those successfully completing training attained post-training success for each of the 3, 6, and 12 month follow-up periods;
4. Comparison of trainees success by occupational classification indicated trainees within the technical classification were most successful, and trainees within the sales and clerical classification were least successful in completing training, and completing training and attaining post-training success;
5. Electronic assembler, highway technician, and occupational therapy assistant trainees were most successful in completing training;
6. Electronic assembler and occupational therapy assistant trainees also experienced greatest post-training non-success;
7. Welder-combination, clerk-general office, and machine operator trainees most often failed to complete training.

The results of this study reinforced the belief that manpower training programs were successful in Duluth. Dr. Boyer compared the results of the Duluth study with other similar studies in Norfolk (Virginia), Massachusetts, and Newark, N.J. Data from these studies "indicate the Duluth trainees compared quite favorably with trainees in other training centers by most criteria, but especially in the post-training aspects of such training".

**FINANCIAL ANALYSIS OF
LOCAL UNITS OF GOVERNMENT IN
THE ARROWHEAD REGION**

ASSESSMENT J

ASSESSMENT J:
FINANCIAL ANALYSIS OF LOCAL UNITS OF GOVERNMENT IN THE ARROWHEAD REGION

INTRODUCTION

This analysis of the financial condition of local units of government is limited to data available from the Report of the State Auditor of Minnesota on the Revenues, Expenditures, and Debt of State and Local Governments in Minnesota. Also included are similar reports on the cities, and of the towns. The scope of analysis is primarily concerned with revenues and expenditures and outstanding indebtedness trends, 1966 to 1972.

The sources of these data are annual city financial statements, reports of audits by public accountants, and the State Auditor, and also county auditors' tax abstracts and reports of indebtedness.

The majority of municipalities operate under a fiscal year ending on December 31. Statutory cities operate under the laws of the state. Effective July 1, 1975, cities operating under general special incorporation acts will become statutory cities. The remaining cities are governed by home rule charter.

REVENUES AND EXPENDITURES, 1966-1972

This section will provide a limited discussion of the revenue receipts and the current expenses of four levels of local units of government - counties, cities, townships and school districts. The purpose of this exercise is to show first the relative amounts in absolute dollars of revenues and expenses among each level of government and then to observe the varying degrees of change from 1966 to 1972, the latest available year in which comparable data are available for all of the four levels.

The data contained in the State Auditor's reports are to be used with caution. Their accuracy is subject to the degree of uniform reporting of each local unit of government. Some accuracy is lost in the interpretation of some classification categories. Many local units of government differ in

their classification and reporting of expenses. For example, in the category of public safety, it is believed there is some inconsistency that exists in the reporting of pension costs as a public safety classification. Thus, the data should be interpreted as providing only a general idea of how funds are received and spent. Any further assumptions should be verified by consultation with the individual units of government of interest.

To begin this discussion, there are certain basic underlying facts that should be mentioned to put the financial condition of the region's governmental entities in perspective. One important fact is that local government receives all its powers, its responsibilities, and authority from state government. The U.S. Constitution says nothing about local government. Thus, state law determines the systems of local government which exist in the Arrowhead Region.

Another important fact is that the Arrowhead Region has a large number of local units of government, 310 in all according to the 1972 Census of Governments. They include 7 county level units, 72 municipal units, 173 townships, 37 school districts, and 21 special districts. The number of school districts dropped by 11 and the number of special districts increased by five during this period. Overall, there was a drop of 15 in those units with taxing power. Compared to the trends statewide, the Arrowhead Region has followed the general direction of the state trends in the school districts, special districts, total of all government units, and all government units with taxing power. However, the region's trends are not as severe as those of the statewide changes.

<u>Level of Government</u>	<u>Arrowhead Region</u>				<u>Minnesota Statewide</u>			
	<u>1967</u>	<u>1972</u>	<u>Dif.</u>	<u>% Chg.</u>	<u>1967</u>	<u>1972</u>	<u>Dif.</u>	<u>% Chg.</u>
County	7	7	0	0	87	87	0	0
Municipalities	72	72	0	0	850	854	4	.5
Townships	173	173	0	0	1817	1798	-19	-1.0
School Districts	48	37	-11	-22.9	1244	445	-799	-64.2
Special Districts	16	21	5	31.3	148	211	63	42.6
All Gov't Units	316	310	-6	-1.9	4184	3395	-789	-18.9
All with tax power	307	292	-15	-4.9	4084	3262	-822	-20.1

Source: U.S. Census of Governments, Minnesota, 1967 and 1972

In trying to understand the complexity of the governmental systems existing within the region, and the raising and spending of funds, we will be observing the interrelationships among the various levels of local governments. A trend analysis approach will be followed to show the magnitude of the growth of revenues and expenditures in comparison with the state trends.

TOTAL REVENUE RECEIPTS, 1966-1972

Revenue receipts for the four major levels of government within the Arrowhead Region amounted to \$234,491,000 in fiscal year 1972. This was a 76.5% increase over 1966. Revenue receipts more than doubled statewide for these four levels of government. Thus, the regional governments have not followed the upward trend of raising funds at the same accelerated rate as other governmental units throughout the state. (Table IV-J-1)

Four counties had lower rates of increase than the regional average: Lake - 58.6%, Koochiching - 63.4%, Itasca - 73.7%, St. Louis - 76.0%, Aitkin - 90.4%, Carlton - 95.6%, and Cook - 97.0%, all surpassed the regional rate, but yet did not exceed the growth experienced by the statewide average of all counties, cities, school districts, and townships. (Table IV-J-1)

Revenue receipts by separate level indicate that the township governments in the region increased significantly more than that of all townships in the state combined. The Arrowhead Regions average increase was 130.1%, compared to 96.0% for the townships statewide. Within the region, the growth in

revenue receipts was the highest in Lake County (245.9%), more than a three-fold increase. Aitkin County's townships also had a three-fold increase in their receipts (200%). Only Itasca County's townships grew at a rate lower than the statewide township average - 63.7%. (See Table IV-J-2)

The growth of revenue receipts among the school districts in the region averaged 65% compared to 108.4% for all school districts in the state. Although the regional average was below the state average, three of the counties in the region reflected near or above the state average. Aitkin (125%), Carlton (108.4%), and Cook (108.1%) were areas where school district revenue receipts were soaring. Aitkin and Cook Counties are the two least populated in the region. (See Table IV-J-2)

Revenue receipts among the cities in the region averaged 83.6% in growth, well below the state average for all cities (112.5%). There was a wide variation among the cities by county, ranging from a low of 29.9% growth in Carlton County to a high of 92.6% in St. Louis County. The dominance of St. Louis County's cities was evident in the high regional average. Excluding St. Louis County's cities, the regional average increase would be 54.9%. (Table IV-J-2)

The county revenue receipts had the second highest growth among the four levels of government in the region, increasing at a rate of 89.8% as a regional average. This rate was lower than the statewide growth of all counties which averaged 112.5%. The rate variation among the counties was less than the cities. The range in growth rates was 57.9% in Koochiching County and 104% in Itasca County.

TOTAL CURRENT EXPENSE TRENDS, 1966-1972

Generally, the current expense trends of the local units of government in the region are not increasing as fast as their revenue receipts. However, there are two counties where this overall financial condition exists, Itasca (88.4%) and Lake (61.3%). Although the trends are increasing faster than the

regional rate, they are still well below the 106.6% current expense increases of the same local governmental units on a statewide basis. (Table IV-J-1)

The fastest spending trends are found at the township level governments in the region. This is contrary to the statewide experience where it is the county level units that have experienced the highest rates of increase. Within the Arrowhead Region, two counties have townships that have increased over three-fold their current expenses since 1966, Aitkin (200%) and Lake (245.9%). The regional rate of increase for all townships was 130.1%, compared to the 95.9% hike for all townships in the state. (Table IV-J-2)

Overall, the next highest rate of increase in current expenses has been at the county level in the region. The seven county units averaged an increase of 85.8% compared to a 114.0% increase statewide. Within the Arrowhead Region, Itasca County had the highest increase, 138.4% and Cook County the lowest, 52.9%. (Table IV-J-2)

Current expenses of cities averaged a 68.2% gain in the region and 109.4% statewide. Cook County's Grand Marais led the way with a doubling of its expenses (122.7%) while Lake County's cities showed the least gain with only a 42.0% gain. (Table IV-J-2)

School district expense trends in the region were considerably below the statewide experience, averaging only a 66.6% gain compared to the statewide gain of 101.8%. The largest hike occurred in the Carlton County school districts, 98.9% and the lowest in Lake County with only a 50% increase. (Table IV-J-2)

CLASSIFICATION OF COUNTY REVENUES, 1966-1974

More recent data are available for counties that make it possible to analyze the trends from 1966 to 1974. The two main sources of county income in 1974 were property taxes and intergovernmental revenue which together accounted for 92.5% of total revenue in the Arrowhead Region. Statewide, these two sources accounted for 90.3% of total revenue for all counties. During

the past nine years, the percent of revenue from the property tax has dropped from 47.2% to 28.2% for the region and from 46.6% to 29.9% for all counties in the state (Tables IV-J-5 and 6). Regionally, the counties income from the property tax increased 34% or \$6.4 million. Statewide, the counties income from the property tax increased 48.8% or \$77 million (Tables IV-J-2 and 4).

It is in the intergovernmental sector that the most significant changes have occurred. Regionally, the counties level of intergovernmental revenue increased an astounding 199%, almost three-fold. In terms of dollars, the increase amounted to \$38.2 million. Most of this increase came from state grants for welfare which rose by \$12.9 million, or 101.6%. Statewide, revenues from the same sources increased as follows: state grants for highways - 75.9%, and state grants for welfare - 129.7% (Tables IV-J-3 and 4).

Revenue sharing receipts were just beginning as a revenue source in 1972. Although data were not in for St. Louis County for 1972, the six county total, excluding St. Louis, amounted to \$921,000. By 1974, the same counties received a total of \$2,036,000 reflecting a \$1,115,000 gain or 121.1%. The greatest growth, percentage wise, was recorded in Koochiching County (157.7%) and in Aitkin County (141.2%). Lake County's receipts only increased by 30.4% from 1972 to 1974. The statewide average for all counties was a 116.3% increase (Table IV-J-9).

Revenue sharing is not a significant portion of total revenue receipts, however it is fast rising in relative share. In 1972, the statewide percent was 2.8% for all counties. In the Arrowhead Region, the percentage of revenue sharing receipts ranged from 1.6% in Cook County of total revenue receipts to a high of 4.0% in Lake County. By 1974, the percentage share had increased to 5.5% statewide, and within the region, the average for the seven counties was up to 6.4%. This time, Lake County had the lowest percentage (3.8%) and Carlton County relied the most on revenue sharing funds with 7.5% of its revenue receipts coming from this source.

CLASSIFICATION OF COUNTY CURRENT EXPENSES, 1966-1974

Current expenses of the county governmental units in the Arrowhead Region now comprise 36.3% of all disbursements (in 1974) compared to only 27.7% in 1966. The region's county governments current expense pattern seems to be drifting apart from statewide trends among all county units in the portion of total current expenses. In 1974, the region's percentage rose to 36.3%, while the statewide percentage dropped to 21.5%. Trust and Agency payments in the region's counties dropped from 67.1% to 53.7% of total disbursements, while the statewide county total slid even further from 67.3% in 1966 to only 37% in 1974. The statewide total for all counties is affected by another type of disbursement classification not shown in these tables, that of purchase of investments. This investment figure was up considerably in 1974 over 1966. (Tables IV-J-7 and 8)

If we concentrate next on the current expense classification only, we see that welfare expenses, by far, comprise the largest portion. This portion has declined since 1966 from 56.8% to 49.3% in the region's counties and from 54.8% to 53.3% statewide. (Tables IV-J-5 & 6) However, the total dollar amount has risen substantially. For the counties in the Arrowhead Region, it has risen from \$19 million to over \$40 million, more than doubling in the eight-year period. The statewide scene shows all counties increasing their welfare current expenses by 133%. Another angle at viewing the relative position of the region versus the state is examining the percentage the region is of the statewide county total for welfare expenses. Here we see that the region's counties accounted for 12.6% of the total. This seems to be in line with the total current expenses, which comprised 12.1% of the total of all county spending for welfare in the state. (Tables IV-J-3 and 4)

The second largest category of current expenses in the region as well as for all counties in the state, is for highways. The percentage of total current expenses in 1974 for this category was 16.9% regionally compared to 14.4% statewide. (Tables IV-J-5 & 6) Highway spending has declined in its relative share of regional current expenses since 1966, but has increased for all counties statewide. The actual current dollar amounts have increased substantially in this category by \$7.7 million in the region and by \$58 million for all counties statewide. In terms of percentage change, this growth was 126.4% regionally and 146.7% statewide. (Tables IV-J- 3 and 4)

Regionally, the other spending categories are of lesser significance. In terms of the relative percentage share of total current expenses, General Government, Public Safety, Health, Hospitals, Recreation, and Miscellaneous categories all recorded a gain from 1966 to 1974. The same held true for the statewide picture, except for hospital expenses. Those declining in relative terms included: Natural Resources and Libraries. The county school system has been disbanded and reorganized into the existing independent school systems. Sanitation has been added as a new separate expense category by the State Auditor in the new reports.

RELATIVE SHARE OF DEBT OF ARROWHEAD REGION AND STATE TRENDS

The most important bonded debt sources in the Arrowhead Region are in the school district and city government sectors. In 1966 the portion of bonded debt among the four levels of government (county, city, township, and school district) revealed the school districts comprising 56.8% of all outstanding debt in the region. Statewide, all school districts comprised 54% in 1966. In 1972, the most current year for which data is available, the percentage of debt by school districts declined to only 44.2% and 44.7% respectively. The cities in the region replaced school districts as the heaviest bonder by capturing the largest percent share with 49.5% regionally and 50.1% statewide. These shares are up from 36.5% and 41.6% respectively since 1966. Thus, the city and school district sectors in the region followed the state trends.

The counties' share of total bonded debt in the region dropped from 5% in 1966 to 4% in 1972, compared to an opposite trend statewide. County government bonded debt rose from 4% to 4.9% from 1966 to 1972.

The regional trend in township bonded debt is also in opposite contrast with the statewide experience. Regionally, the township bonded debt level has increased in its share while all townships in the state have recorded a stable relative share or a slight decline.

Another interesting perspective can be observed which reveals that the Arrowhead Region's township bonded indebtedness in 1972 comprised 22.5% of all township indebtedness in the state. This trend has risen since 1966 when this proportion was 19.6%. Of the total \$2 million net increase in statewide township bonded debt since 1966, the Arrowhead Region's debt made up 31.5% of the increase.

OUTSTANDING INDEBTEDNESS OF SCHOOL DISTRICTS

School districts in the region combined had a balance of outstanding indebtedness of \$37.4 million at the end of Fiscal Year 1972, the latest year in which data were published. This figure represents a reduction from the 1966 level of \$42.2 million or a decline of 11.4% during this six-year period. This trend is just the opposite of the experience of school districts statewide, which actually recorded a 50% increase in the debt outstanding.

The majority of school districts by county area had a net reduction in debt, the largest percent reduction occurring in Lake County (82%) and the lowest in Carlton County with 1.6%. Dollar-wise, the largest reduction was in St. Louis County with a \$5 million decline. Itasca and Lake Counties both recorded more than \$2 million reductions in their school district debt.

OUTSTANDING INDEBTEDNESS OF CITIES, 1966-1974

The trend in total outstanding indebtedness among the cities of the Arrowhead Region varies quite widely. Overall, the increase from 1966 to 1974 was nearly \$15 million on a region-wide basis or a 54.5% gain. This was less than half of the statewide rate of 118.3% gain for all cities within the state in the same period.

Another analysis reveals that the regional share of indebtedness is dwindling compared to the statewide total indebtedness of the cities. In 1966, the share of indebtedness was 4.7% of the total statewide figure for all cities. This shift in share had dropped to 3.3% in 1974. The dollar amount of increase from 1966 to 1974 regionally for all cities was only 2.2% of the total increase in indebtedness for all cities in the state.

Among the individual county areas in the region, the cities in Lake County (Two Harbors, Silver Bay and Beaver Bay) actually recorded a decline in their combined outstanding indebtedness amounting to \$773,000 or a decline of over 25% from 1966 to 1974. St. Louis County's cities had the lowest gain in outstanding indebtedness, percentage-wise, increasing only 30.1%, from \$19.3 million in 1966 to \$25.1 million in 1974. Koochiching County's cities had an increase of just over \$1 million or 67.1%, which was still below the rate of increase statewide.

The fastest gaining cities were located in Carlton (285%), Itasca (268%), and Aitkin (207%) counties. All of these counties averaged above a three-fold increase in outstanding indebtedness for their cities. Cook County and its only city, Grand Marais, experienced a 150% gain in its outstanding indebtedness.

OUTSTANDING INDEBTEDNESS OF COUNTY GOVERNMENT, 1966-1974

A wide variance in trends between the region and state county indebtedness is apparent. Overall, the total debt of the counties declined by 7.4% from 1966 to 1974, yet the total debt of all counties in the state increased on the whole by nearly 125%. Even within the region, a wide variance is observed in the trends. St. Louis and Aitkin Counties had a reduction in their debt by 66.7% and 78.0% respectively. Carlton County did not record any debt in 1966 nor in 1974. Itasca had no debt in 1966, but had a total of \$1.2 million in 1974. Koochiching County increased its debt by almost 60%. Lake County nearly tripled (191.7%) its debt, and Cook County's debt soared by over four times its 1966 level.

OUTSTANDING INDEBTEDNESS OF TOWNSHIP GOVERNMENT, 1966-1974

Debt for township governments rose faster than the statewide average, 52.1% versus 32.4% statewide. Only 9 out of the 173 townships in the region had bonded indebtedness in 1974, thus indicating a very low base on which to make any analysis. This situation is also evident statewide, where only 66

of the 1,794 towns had bonded indebtedness.

Lake County did not record bonded debt in either 1966 or 1974. Neither Cook nor Koochiching Counties have organized townships. Of the townships having debt, Aitkin County's township debt was reduced by two-thirds, the only instance of reduced debt level on a net county basis. All others reflected significant growth in township debt.

TABLE IV-J-1

Revenue and Current Expense Trends by Level of Government, 1966-1972.
(in thousands of dollars)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch.</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
<u>Rev. Receipts</u> 66									
County	\$2,387	3,119	746	4,773	2,657	1,281	24,918	59,681	338,892
Cities	213	1,287	130	1,699	1,008	930	16,211	22,078	259,700
* Towns	93	198	0	383	0	37	1,204	1,915	17,022
Sch. Dist.	1,766	5,331	923	9,542	3,656	3,361	44,406	68,985	581,279
Summary	4,459	9,935	1,799	16,397	7,321	5,609	87,339	132,859	1,196,693
<u>Current Expenses</u> 66									
County	1,892	2,788	648	3,796	2,109	817	22,155	34,205	282,638
Cities	150	946	75	1,166	817	648	12,337	16,139	195,475
* Towns	93	198	0	383	0	37	1,204	1,915	17,025
Sch. Dist.	1,730	4,691	837	7,516	3,317	2,703	37,604	58,398	522,101
Summary	3,865	8,623	1,560	12,891	6,243	4,205	73,300	110,657	1,017,439
<u>Rev. Receipts</u> 72									
County	3,887	6,209	1,404	9,739	4,196	2,296	47,983	75,714	720,130
Cities	349	1,672	219	2,780	1,771	1,365	32,374	40,530	554,665
* Towns	279	443	0	627	0	128	2,930	4,407	33,359
Sch. Dist.	3,974	11,109	1,921	15,334	5,998	5,106	70,398	113,840	1,211,510
Summary	8,489	19,433	3,544	28,480	11,965	8,895	153,685	234,491	2,519,664
& chg. 66-72	90.4	95.6	97.0	73.7	63.4	58.6	76.0	76.5	110.5
<u>Current Expenses</u> 72									
County	3,227	4,687	991	9,048	3,573	1,678	40,354	63,558	605,344
Cities	251	1,463	167	1,871	1,177	920	21,301	27,150	409,411
* Towns	279	443	0	627	0	128	2,930	4,407	33,359
Sch. Dist.	2,905	9,332	1,375	12,735	5,047	4,055	61,820	97,269	1,053,764
Summary	6,662	15,925	2,533	24,281	9,797	6,781	126,405	192,384	2,101,878
% chg. 66-72	72.4	84.7	62.4	88.4	56.9	61.3	72.4	73.9	106.6

* Estimated data by Public Examiner. Reflects total estimated receipts and total estimated disbursements.

Source: Report of the State Auditor of Minnesota on the Revenues, Expenditures, and Debt.

TABLE IV-J-2

Revenue and Current Expense Trends by Selected Level of Government, 1966-1972
(% change from 1966 to 1972)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch.</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>State</u>
<u>Rev. Receipts</u>									
County	62.8	99.1	88.2	104.0	57.9	79.2	92.6	89.8	112.5
Cities	63.8	29.9	68.5	63.6	75.7	46.8	92.6	83.6	113.6
Town	200.0	123.7	xx	63.7	xx	245.9	143.4	130.1	96.0
School Dist.	125.0	108.4	108.1	60.7	64.1	51.9	58.5	65.0	108.4
<u>Current Expense</u>									
County	70.6	68.1	52.9	138.4	69.4	105.4	82.1	85.8	114.0
Cities	67.3	54.7	122.7	60.5	44.1	42.0	72.7	68.2	109.4
Towns	200.0	123.7	xx	63.7	xx	245.9	143.4	130.1	95.9
School Dist.	67.9	98.9	64.3	69.4	52.2	50.0	64.4	66.6	101.8

Source: State Auditor, Minnesota *ibid.*

TABLE IV-J-3

CLASSIFICATION OF COUNTY RECEIPTS AND DISBURSEMENTS,
 Calendar year ending December 31, 1966
 (Dollar amounts in thousands)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch.</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>Total all 87 Counties</u>	<u>Region as % of 87 Counties</u>
Total Revenue Receipts	\$2,387	3,119	746	4,773	2,657	1,281	24,918	39,831	338,892	11.8
Revenue from Taxes	562	1,453	178	2,528	1,033	558	12,505	18,817	157,881	11.9
Int'gov'l Rev.	1,791	1,629	529	2,147	1,564	673	10,894	19,227	167,583	11.5
St. Grants fo Hwy's	482	337	222	705	603	421	2,006	4,776	38,157	12.5
St. Grants for Welf.	960	1,060	155	1,280	906	134	8,171	12,666	106,031	11.9
Fed. Grants-all purposes	262	-	30	87	-	75	50	504	1,680	30.0
Fed. Grants-Rev. Shar.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fed. Grants-other	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Non-Rev. Receipts	2,903	7,421	1,360	14,260	5,527	3,360	67,574	102,405	937,918	10.9
Borrowing	500	-	-	-	-	-	-	500	6,020	8.3
Trust & Agency Rec.	2,346	7,300	1,288	14,118	5,460	3,234	66,541	100,287	905,782	11.1
Total All Receipts	5,290	10,540	2,106	19,033	8,183	4,642	92,492	142,286	1,276,810	11.1
Current Expense	1,892	2,788	648	3,796	2,109	817	22,155	34,205	282,838	12.1
General Gov't	167	227	115	426	178	158	1,663	2,934	26,666	11.0
Public Safety	37	41	17	109	57	43	537	841	6,449	13.0
Natural Resources	16	28	7	89	13	7	80	240	4,197	5.7
Highways	397	445	198	819	424	335	3,461	6,079	39,545	15.4
Sanitation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health	12	33	7	37	15	5	397	506	2,142	23.6
Hospitals	-	-	28	129	5	-	700	862	9,253	9.3
Welfare	1,124	1,566	245	2,011	1,300	209	12,984	19,439	154,886	12.6
Schools	84	339	-	-	18	-	1,303	1,744	23,645	7.4
Libraries	8	-	1	11	21	22	49	112	2,662	4.2
Recreation	7	(< 1)	3	1	(< 1)	1	(< 1)	12	676	1.8
Miscellaneous	33	73	25	141	68	30	474	844	6,363	13.3
Capital Outlay	713	366	182	827	502	367	1,022	3,979	48,120	8.3
Other Disbursements										
Trust & Agency Pyts.	1,745	5,524	1,076	11,671	4,517	2,685	55,567	82,785	746,038	11.1
Total All Disbursements	4,907	8,799	1,953	16,436	7,198	4,027	80,002	123,322	1,109,161	11.1

Source: Report of State Auditor of Minnesota, ibid.

TABLE IV-J-4

CLASSIFICATION OF SELECTED COUNTY RECEIPTS AND DISBURSEMENTS
 Calendar year ending December 31, 1974
 (Dollar amounts in thousands)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch.</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>Total All 87 Counties</u>
Total Revenue Receipts	4,315	7,306	1,312	12,117	4,533	3,128	56,589	89,300	785,735
Revenue from Taxes	849	1,981	225	4,166	940	559	16,466	25,186	234,904
Int'gov'l Rev.	3,165	4,671	987	6,627	3,253	2,446	36,263	57,412	474,476
St. Grants for Hwy's	1,444	1,339	302	1,842	748	671	4,198	10,544	67,151
St. Grants for Welf.	962	1,716	200	2,790	1,288	565	18,087	25,608	243,491
Fed. Grants-all purposes	366	546	67	723	317	120	4,030	6,169	46,072
Fed. Grants-Rev. Shar.	275	546	55	723	317	120	3,714	5,750	43,193
Fed. Grants-Other	91	0	12	0	0	--	316	419	2,879
Total Non-Rev. Receipts	4,610	6,032	1,798	13,627	464	4,126	110,946	141,603	2,515,961
Borrowing	0	0	0	0	0	343	0	343	5,644
Trust & Agency Rec.	4,610	5,919	1,753	13,580	463	3,587	99,719	129,631	1,302,564
Total All Receipts	8,925	13,338	3,110	25,744	4,997	7,254	167,535	230,903	3,301,696
Current Expense	3,491	5,044	1,115	9,617	4,216	3,264	54,902	81,649	678,226
General Gov't	337	967	235	998	452	469	3,973	7,431	69,815
Public Safety	120	256	66	427	182	224	2,663	3,938	43,695
Natural Resources	2	16	15	127	0	17	296	473	7,542
Highways	1,496	513	291	1,800	1,163	1,285	7,212	13,760	97,576
Sanitation	--	73	61	92	51	1	574	852	1,844
Health	7	168	10	112	24	57	1,173	1,551	20,363
Hospitals/PSE	0	0	67	433	0	0	1,985	2,485	19,503
Welfare	1,309	2,707	324	4,931	2,130	869	27,989	40,259	361,297
Schools	0	0	0	0	0	0	0	0	7
Libraries	11	18	0	21	0	27	120	197	8,037
Recreation	21	20	2	0	29	34	0	106	5,270
Misc.	184	308	42	667	172	279	8,805	10,457	38,240
Capital Outlay	143	1,636	127	2,733	155	388	5,534	10,716	105,376
Other Disbursements									
Trust & Agency Pyts.	4,625	5,789	958	8,961	311	1,307	98,846	120,797	1,169,874
Total All Disburs'ts	8,374	12,498	2,208	21,311	4,807	5,388	170,155	224,741	3,160,676

Source: Report of State Auditor, *ibid.*

TABLE IV-J-5

CLASSIFICATION OF COUNTY REVENUE RECEIPTS AND CURRENT EXPENSES

Calendar year ending December 31, 1966

(in percent)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch.</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>Total All 87 Counties</u>
Total Revenue Receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Revenue From Taxes	23.5	46.6	23.9	53.0	38.9	43.6	50.2	47.2	46.6
Int'gov'l Rev.	75.0	52.2	70.9	45.0	58.9	52.5	43.7	48.2	49.5
St. Grants for Hwy's	20.2	10.8	29.8	14.8	22.7	32.9	8.1	12.0	11.3
St. Grants for Welf.	40.2	34.0	20.8	26.8	34.1	10.5	32.8	31.8	31.3
Fed. Grants-all Puposos	11.0	--	4.0	1.8	--	5.9	0.2	1.3	0.5
Fed. Grants-Rev. Shar.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fed. Grants-other	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Non-Rev. Receipts									
Borrowing									
Trust & Agency Rec.									
Total all Receipts									
Current Expense	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General Gov't	8.8	8.1	17.7	11.2	8.4	19.3	7.5	8.6	9.4
Public Safety	2.0	1.5	2.6	2.9	2.7	5.3	2.4	2.5	2.3
Natural Resources	0.8	1.0	1.1	2.3	0.6	0.9	0.4	0.7	1.5
Highways	21.0	16.0	30.6	21.6	20.1	41.0	15.6	17.8	14.0
Sanitation	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health	0.6	1.2	1.1	1.0	0.7	0.6	1.8	1.5	0.8
Hospitals	--	--	4.3	3.4	0.3	--	3.2	2.5	3.3
Welfare	59.4	56.2	37.8	53.0	61.6	25.6	58.6	56.8	54.8
Schools	4.4	12.2	--	--	0.9	--	5.9	5.1	8.4
Libraries	0.4	--	0.2	0.3	1.0	2.7	0.2	0.3	0.9
Recreation	0.4	--	0.5	--	--	0.1	--	--	0.2
Misc.	1.7	2.6	3.9	3.7	3.2	3.7	2.1	2.5	2.2
Capital Outlay									
Other Disbursements									
Trust & Agency Pyts.									
Total									
Total All Disburs'ts									

Source: State Auditor, Minnesota, *ibid.*

TABLE IV-J-6

CLASSIFICATION OF COUNTY REVENUE RECEIPTS AND CURRENT EXPENSES
 Calendar year ending December 31, 1974
 (in percent)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	Total All 87 Counties
Total Revenue Receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Revenue from Taxes	19.7	27.1	17.1	34.4	20.7	17.9	29.1	28.2	29.9
Int'gov'l Rev.	73.3	63.9	75.2	54.7	71.8	78.2	64.1	64.3	60.4
St. Grants for Hwy's	33.5	18.3	23.0	15.2	16.5	21.5	7.4	11.8	8.5
St. Grants for Welf.	22.3	23.5	15.2	23.0	28.4	18.1	32.0	28.7	31.0
Fed. Grants-all Purpses	3.5	7.5	5.1	6.0	7.0	3.8	7.2	6.9	5.9
Fed. Grants-Shar.	6.4	7.5	4.2	6.0	7.0	3.8	6.6	6.4	5.5
Fed. Grants-Other	2.1	0	0.9	0	0	--	0.6	0.5	0.4
Total Non-Rev. Receipts									
Borrowing									
Trust & Agency Rec.									
Total All Receipts									
Current Expense	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General Gov't	9.7	19.2	21.1	10.4	10.7	14.4	7.2	9.1	10.3
Public Safety	3.4	5.1	5.9	4.4	4.3	6.9	4.9	4.8	6.4
Natural Resources	0.1	0.3	1.3	1.3	0	0.5	0.5	0.6	1.1
Highways	42.9	10.2	26.1	18.7	27.6	39.4	13.1	16.9	14.4
Sanitation	--	1.4	5.5	1.0	1.2	--	1.0	1.0	0.3
Health	0.2	3.3	0.9	1.2	0.6	1.7	2.1	1.9	3.0
Hospitals	0	0	6.0	4.5	0	0	3.6	3.0	2.9
Welfare	37.5	53.7	29.1	51.3	50.5	26.6	51.0	49.3	53.3
Schools	0	0	0	0	0	0	0	0	--
Libraries	0.3	0.4	0	0.2	0	0.8	0.2	0.2	1.2
Recreation	0.6	0.4	0.2	0	0.7	1.0	0	0.1	0.8
Misc.	5.3	6.1	3.8	6.9	4.1	8.5	16.0	12.8	5.6
Capital Outlay									
Other Disbursements									
Trust & Agency Pyts.									
Total									
Total All Disbursements									

Source: State Auditor, Minnesota, ibid.

TABLE IV-J-7

CLASSIFICATION OF COUNTY RECEIPTS AND DISBURSEMENTS

Calendar year ending December 31, 1966

	(in percent)								Total
	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	<u>All 87 Counties</u>
Total Revenue Receipts	45.1	29.6	35.4	25.1	32.5	27.6	26.9	28.0	26.5
Revenue from Taxes	10.6	13.8	8.5	13.3	12.6	12.0	13.5	13.2	12.4
Int'gov'l Rev.	33.9	15.5	25.1	11.3	19.1	14.5	11.8	13.5	13.1
St. Grants for Hwy's	9.1	3.2	10.5	3.7	7.4	9.1	2.2	3.4	3.0
St. Grants for Welf.	18.1	10.1	7.4	6.7	11.1	2.9	8.8	8.9	8.3
Fed. Grants-all purposes	5.0	--	1.4	0.5	--	1.6	0.1	0.4	0.1
Fed. Grants-Shar.	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fed. Grants-Other	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Non-Rev. Receipts	54.9	70.4	64.6	74.9	67.5	72.4	73.1	72.0	73.5
Borrowing	9.5	--	--	--	--	--	--	0.4	0.5
Trust & Agency Rec.	44.3	69.3	61.2	74.2	66.7	69.7	71.9	70.5	70.9
Total All Receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current Expense	35.8	31.7	33.2	23.1	29.3	20.3	27.7	27.7	25.5
General Gov't.	3.2	2.6	5.9	2.6	2.5	3.9	2.1	2.4	2.4
Public Safety	0.7	0.5	0.9	0.7	0.8	1.1	0.7	0.7	0.6
Natural Resources	0.3	0.3	0.4	0.5	0.2	0.2	0.1	0.2	0.4
Highways	8.1	5.1	10.1	5.0	5.9	8.3	4.3	4.9	3.6
Sanitation	NA	NA	NA	NA	NA	NA	NA	NA	NA
Health	0.2	0.4	0.4	0.2	0.2	0.1	0.5	0.4	0.2
Hospitals	--	--	1.4	0.8	0.1	--	0.9	0.7	0.8
Welfare	22.9	17.8	12.5	12.2	18.1	5.2	16.2	15.8	14.0
Schools	1.7	3.9	--	--	0.3	--	1.6	1.4	2.1
Libraries	0.2	--	0.1	0.1	0.3	0.5	0.1	0.1	0.2
Recreation	0.1	--	0.2	0.05	0.05	0.05	0.05	0.05	0.1
Misc.	0.7	0.8	1.3	0.9	0.9	0.7	0.6	0.7	0.6
Capital Outlay	14.5	4.2	9.3	5.0	7.0	9.1	1.3	3.2	4.3
Other Disbursements									
Trust & Agency Pyts.	35.6	62.8	55.1	71.0	62.8	66.7	69.5	67.1	67.3
Total all Disbursements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: State Auditor, Minnesota, *ibid.*

TABLE IV-J-8

CLASSIFICATION OF COUNTY RECEIPTS AND DISBURSEMENTS

Calendar year ending December 31, 1974

(in percent)

	<u>Aitkin</u>	<u>Carlton</u>	<u>Cook</u>	<u>Itasca</u>	<u>Kooch</u>	<u>Lake</u>	<u>St. Louis</u>	<u>Region</u>	Total all 87 Counties
Total Revenue Receipts	48.3	54.8	42.2	47.1	90.7	43.1	33.8	38.7	23.8
Revenue from Taxes	9.5	14.9	7.2	16.2	18.8	7.7	9.8	10.9	7.1
Int'gov'l Rev.	35.5	35.0	31.7	25.7	65.1	33.7	21.6	24.9	14.4
St. Grants for Hwy's	16.2	10.0	9.7	7.2	15.0	9.3	2.5	4.6	2.0
St. Grants for Welf.	10.8	12.9	6.4	10.8	25.8	7.8	10.8	11.1	7.4
Fed. Grants-all purposes	4.1	4.1	2.2	2.8	6.3	1.7	2.4	2.7	1.4
Fed. Grants-Rev. Shar.	3.1	4.1	1.8	2.8	6.3	1.7	2.2	2.5	1.5
Fed. Grants-Other	1.0	0	0.4	0	0	--	0.2	0.2	0.1
Total Non-Rev. Receipts	51.7	45.2	57.8	52.9	9.3	56.9	66.2	61.3	76.2
Borrowing	0	0	0	0	0	4.7	0	0.1	0.2
Trust & Agency Rec.	51.7	44.4	56.4	52.8	9.3	49.4	59.5	56.1	39.5
Total All Receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current Expense	41.7	40.4	50.5	45.1	87.7	60.6	32.3	36.3	21.5
General Gov't.	4.0	7.7	10.6	4.7	9.4	8.7	2.3	3.3	2.2
Public Safety	1.4	2.0	3.0	2.0	3.8	4.2	1.6	1.8	1.4
Natural Resources	--	0.1	0.7	0.6	0	0.3	0.2	0.2	0.2
Highways	17.9	4.1	13.2	8.4	24.2	23.8	4.2	6.1	3.1
Sanitation	--	0.6	2.8	0.4	1.1	--	0.3	0.4	0.1
Health	0.1	1.3	0.5	0.5	0.5	1.1	0.7	0.7	0.6
Hospitals	0	0	3.0	2.0	0	0	1.2	1.1	0.6
Welfare	15.6	21.7	14.7	23.1	44.3	16.1	16.4	17.9	11.4
Schools	0	0	0	0	0	0	0	0	--
Libraries	0.1	0.1	0	0.1	0	0.5	0.1	0.1	0.3
Recreation	0.3	0.2	0.1	0	0.6	0.6	0	--	0.2
Misc.	2.2	2.5	1.9	3.1	3.6	5.2	5.2	4.7	1.2
Capital Outlay	1.7	13.1	5.8	12.8	3.2	7.2	3.3	4.8	3.3
Other Disbursements									
Trust & Agency Pyts.	55.2	46.3	43.4	42.0	6.5	24.3	58.1	53.7	37.0
Total									
Total All Disbursements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: State Auditor, Minnesota, *ibid.*

TABLE IV-J-9

County Revenue Sharing Receipts, 1972-1974

(dollar amounts in thousands)

<u>County</u>	<u>1974</u>	<u>1972</u>	<u>change 1972-1974</u>	
			<u>\$</u>	<u>%</u>
Aitkin	\$275	\$114	161	141.2
Carlton	546	239	307	128.5
Cook	55	23	32	139.1
Itasca	723	330	393	119.1
Kooch	317	123	194	157.7
Lake	<u>120</u>	<u>92</u>	<u>28</u>	<u>30.4</u>
Sub-total	2036	921	1115	121.1
St. Louis	3714	NA	NA	NA
Region	5750	NA	NA	NA
State	\$43,193	\$19,966	\$23,227	116.3

Source: State Auditor, Minnesota, *ibid.*

TABLE IV-J-10

OUTSTANDING INDEBTEDNESS FOR COUNTIES, CITIES, TOWNSHIPS AND SCHOOL DISTRICTS
1966, 1972, and 1974

(dollar amounts in thousands)

Level of Government	Aitkin	Carlton	Cook	Itasca	Kooch.	Lake	St. Louis	Region	State	% Regio of State
COUNTIES '66	\$500	0	100	0	305	120	2,670	3,695	\$55,294	6.7
'74	110	0	420	1,165	485	350	890	3,420	124,243	2.8
Absolute chg.	-390	-	320	1,165	180	230	-1,780	-275	68,949	xxx
% chg.	-78.0	-	320.0	xx	59.0	191.7	-66.7	-7.4	124.7	xxx
CITIES '66	402	1,368	48	1,449	1,579	2,997	19,300	27,143	580,962	4.7
'74	1,234	5,261	120	5,338	2,639	2,224	25,108	41,924	1,268,097	3.3
Absolute chg.	832	3,893	72	3,889	1,060	-773	5,808	14,781	687,135	2.2
% chg.	207.0	284.6	150.0	268.4	67.1	-25.8	30.1	54.5	118.3	xxx
TOWNS '66	18	52	0	6	0	0	1,149	1,225	6,247	19.6
'74	6	218	0	80	0	0	1,559	1,863	8,274	22.5
Absolute chg.	-12	166	-	74	-	-	410	638	2,027	31.5
% chg.	-66.7	319.2	-	1,233.3	-	-	35.7	52.1	32.4	xxx
SCH. DIST. '66	1,366	8,110	550	3,867	3,442	2,835	22,050	42,220	755,052	5.6
'72	1,896	7,982	935	5,955	3,110	510	17,017	37,405	1,132,195	3.3
Absolute chg.	530	-128	385	2,088	-332	-2,325	-5,033	-4,815	377,143	xxx
% chg.	38.8	-1.6	70.0	54.0	-9.6	-82.0	-22.8	-11.4	49.9	xxx
SUMMARY '66	2,286	9,530	698	5,322	5,326	5,952	45,169	74,283	1,397,555	5.3
'72 + '74	3,246	13,461	1,475	12,538	6,234	3,084	44,574	84,612	2,532,809	3.3
Absolute chg.	\$960	3,931	777	7,216	908	-2,868	-559	10,329	\$1,135,254	0.9
% chg.	42.0	41.2	111.3	135.6	17.0	-48.2	-1.3	13.9	81.2	XXX

SOURCE: STATE AUDITOR, MINNESOTA,
CALCULATIONS BY ARDC STAFF.

CHAPTER V

PROJECT PRIORITY SYSTEM

Chapter V

PROJECT PRIORITY SYSTEM

Background

One aspect of the planning process is the setting of priorities for projects whose sponsors have requested government funding. The process herein is designed to support programs of the Economic Development Administration (EDA) in which ARDC has been requested to participate. Since ARDC also participates in similar programs supported by the Upper Great Lakes Regional Commission and other governmental agencies, potential exists for the extension of this system to these other programs.

For Economic Development Administration programs, ARDC is requested to rank submitted projects to assist EDA in allocating the limited funds which are available. The ranking provided by ARDC and an assessment by EDA as to the projects conformance to the program guidelines are the two criteria used in the funding determination. Thus by setting priorities of major public investments, ARDC is guiding the economic development of the Arrowhead Region.

The methodology developed herein is intended to replace the previous approach outlined in the 1967 OEDP whereby all known projects within the region were rated at the time the 1967 OEDP was published. The previous system provided no flexibility in adjusting the evaluation method to reflect the requirements of a specific program or the changing needs of the region. This new approach is a process rather than an exact specification and thus can be adapted for any adjustments the decision makers feel necessary.

This priority system takes as given the planning process outlined

in Chapter 2. The primary purposes of the system are to assist the Economic Policy Committee members in making their recommendations to the ARDC Board and in explaining the rationale used in arriving at those recommendations.

The priority system is based on the general goals outlined in Chapter 3. Quantitative and qualitative judgments are made in the context of the specified goals.

Priority System Implementation

Programs can be of two types - ongoing or special. For the first type, money is allocated to the program on a yearly basis and for special programs, money is provided for projects to be funded during a specified time period. For ongoing programs, ARDC is expected to maintain at all times a priority listing of suitable projects to EDA within a given time period after the program is announced. The system proposed herein is applicable for both types of programs. Implementation of the priority system involves the following steps:

1. As explained below, the project sponsors will supply information relative to the project on a standardized fact sheet.

2. The Economic Policy Committee will review the project and make quantitative and qualitative assessments of the projects as explained below. The Economic Policy Committee will not rank the projects, but will provide an A, B or C rating along with additional information to assist the Board in ranking the projects. The Economic Policy Committee may request information in addition to the data provided on the fact sheet, and may interview the project sponsors.

3. The ARDC Board will rank the submitted projects. Information provided by the Economic Policy Committee on summary sheets described below will be used in the ranking process. The Economic Planning staff or representatives from the Policy Committee may be called upon by the Board to assist in interpreting the information provided. For special programs, the projects generally will be ranked once. For ongoing programs, the projects can either be ranked each time information on a new project is submitted or at pre-set intervals.

Fact Sheet and Files

To assist the Economic Policy Committee in making their evaluations, the project sponsors will provide information about the proposed project on a fact sheet. A standardized fact sheet has been developed which can be used for all potential EDA projects. The nature of the answers will determine the specific funding program most appropriate for the project. A sample fact sheet is given in Appendix III.

Information on programs is provided to potential sponsors through the ARDC news service. When a suitable project is identified, a file is developed for the project which is retained whether or not the project is considered for a specific funding program. From these files, projects are selected that meet the basic requirements of the program.

Economic Policy Committee Assessment

The Economic Policy Committee assessment will have four (4) parts:

1. Quantitative Assessment. For this assessment, projects are given a numerical rating that corresponds to the degree the proposed project conforms to the general goals. The steps of the quantitative assessment are outlined below.

2. Qualitative Assessment. The qualitative assessment consists of statements that describe the salient positive and negative aspects of the project in the context of the general goals.

3. Program Conformance Assessment. This part contains statements related to how well the proposed project meets the stated program objectives.

4. Overall Rating. Each project will receive an overall rating of A, B or C as explained below.

1. Quantitative Assessment

The quantitative assessment will be implemented as follows. Economic Policy Committee members, after they have reviewed all available information on a particular project will assign weights on an individual bases. Each policy committee member will be given a sheet for each project that contains the five general goals, questions related to each goal that will assist the policy member in his or her evaluation and a space provided opposite to each goal in which the member places the rating that he feels is appropriate. After the policy members have completed their evaluation of all the projects under consideration, the total scores for each of the five statements will be computed.

The sum of the five totals will be the score assigned to

the project on the summary sheet provided to the ARDC Board of Directors.

In the example provided in Appendix IV, a range from 0 to 5 is assigned to each criterion. The maximum amount a project can receive is thus 25 points. Economic Policy Committee members could change the emphasis of the goal structure by assigning higher maximum numbers to selected goals. For example, if minority employment was considered as having major importance, the third criterion could be given a ranking of 10 whereas the others would have a ranking of 5. By adjusting these maximum amounts, thus, policy

committee members with the approval of the Board can assign any emphasis to the goal structure they desire. The sample format for the quantitative assessment is given in Appendix IV.

2. Qualitative Evaluation

Statements will be developed summarizing the salient positive and negative aspects of the proposed project within the context of the stated general goals; also statements covering other considerations such as community needs will be prepared. The policy committee as a group will assess these statements and modify them to express the intent of the group. The final statements will be voted on by the group and thus will represent group concerns. Aside from their primary use as recommendations to the Board of Directors, these evaluations will greatly expand the regional perspective in the preparation of A-95 Reviews.

3. Program Conformance Evaluation

For this item, brief statements will summarize the degree to which the proposed project conforms to the program requirements for those programs that have specific requirements. These statements will be evaluated by the policy committee as a group and will be changed if necessary to meet the assessment of the group. As with the qualitative evaluation statements, the final form of the program conformance statements will be voted on by the group.

4. Final Evaluation

From the above evaluations, an A, B or C rating will be recommended for each project. The Economic Policy Committee as a group will assess this evaluation, and through consensus, either approve or modify it.

5. Evaluation Summary Sheet

The results of the four evaluations discussed above will be transmitted to the ARDC Board on an Evaluation Summary Sheet, a sample of which is provided in Appendix V. A summary sheet will be developed for each project evaluated.

APPENDIX

Appendix I

ARROWHEAD REGIONAL DEVELOPMENT COMMISSION

<u>CHAIRMAN:</u>	Comm. Innis Nesbitt 109 Park Avenue Int'l Falls 56649	<u>EXECUTIVE DIRECTOR:</u>	Rudy R. Esala 200 Arrowhead Place Duluth 55802
<u>PUBLIC INTERESTS:</u>		LABOR	Roy Marino 3025 E. 7th Ave. Hibbing 55746
AGING	Harriet Headley Twig 55791	METRO WASTE MANAGEMENT	Harry Newby, Sr. 807 9th St. Cloquet 55720
AGRICULTURE	William Matalamaki No. Central School & Experiment Station Grand Rapids 55744	MINING	D. Kelly Campbell Oglebay-Norton Co. P.O. Box 1064 Virginia 55792
COMMERCE AND INDUSTRY	Vladimir Shipka Northern State Bank Virginia 55792	MINORITIES	John Lyght Sheriff's Department Grand Marais 55604
COMMUNICATION	Duke Skorich 425 W. Superior St. Duluth 55802	RESOURCE CON- SERVATION AND DEVELOPMENT	Clarence Gustafson Mahtowa 55762
COMMUNITY ACTION BOARDS	Vincent Gentilini Arrowhead EOA 3rd Ave. & 6th St. So. Virginia 55792	TRANSPORTATION	Marvin Marklund 313 2nd St. Two Harbors 55616
	Ramona Jensen Lutsen 55771	TOURISM AND RECREATION	Jon Waters Canadian Water Outfitters Ely 55731
CRIME PREVENTION	John Vukelich Arrowhead EOA 3rd Ave. & 6th St. So. Virginia 55792	<u>INDIAN RESERVATIONS:</u>	
ENVIRONMENTAL QUALITY	Loren S. Rutter Box 83 Kinney 55758	FOND DU LAC	Peter DuFault 709 Larch St. Cloquet 55720
FORESTRY	Darrell H. Lauber 601 LaPlant Rd. Grand Rapids 55744	GRAND PORTAGE	Ronal Sherer Grand Portage 55605
HEALTH	Ruth Schuder Itasca Memorial Hos. Grand Rapids 55744	NETT LAKE	Gary Donald Nett Lake 55772
HUMAN WELFARE	Betty Larson 190 Stenman Road Esko 55733		

COMMUNITIES OVER 10,000 POPULATION:

CLOQUET David M. Johnson
City Hall
Cloquet 55720

DULUTH Elnora Johnson
5717 Olney St.
Duluth 55807

HIBBING Greg Caucci
Box 367
Hibbing 55746

VIRGINIA Mayor Jalmer Johnson
619 No. 14th St.
Virginia 55792

COMMUNITIES UNDER 10,000 POPULATION:

AITKIN COUNTY Mayor Michael Hill
Aitkin 56431

CARLTON COUNTY Mayor Robert Johnson
Barnum 55707

COOK COUNTY Mayor Richard Humphrey
Grand Marais 55604

ITASCA COUNTY Mayor Robert Horn
601 E. 4th St.
Grand Rapids 55744

KOOCHICHING CO. Mayor Frank Neary
Norhtome 56661

LAKE COUNTY Mayor Melvin Koepke
Municipal Building
Silver Bay 55614

ST. LOUIS CO. Mayor Ken Miller
Tower 55790

SCHOOL BOARDS:

ISD # 696 Jorma Kangas
P.O. Box 637
Ely 55731

ISD # 706 Elder Metsa
P.O. Box 5
Virginia 55792

TOWNSHIP OFFICIALS:

AITKIN COUNTY Melvin Johnson
Tamarack 55787

CARLTON COUNTY Gustav B. Seboe
Wrenshall 55797

COOK COUNTY Robert Silver
Schroeder 55613

ITASCA COUNTY Warren Youngdahl
Marcell 56657

KOOCHICHING CO. Comm. Walter Holt
121 12th St. W.
Int'l Falls 56649

LAKE COUNTY John Rushenberg
Star Route Box 28
Silver Bay 55614

ST. LOUIS CO. Henry Koistinen
Zim 55799

METROPOLITAN Leonard Golen
INTERSTATE 3981 Miller Trunk
REPRESENTATIVE Duluth 55811

COUNTY COMMISSIONERS:

AITKIN COUNTY Michael Zilverberg
Aitkin 56431

CARLTON COUNTY Rita Blaisus
317 Avenue D
Cloquet 55720

COOK COUNTY Kenneth Olson
Tofte 55615

ITASCA COUNTY Walter Brink
Cohasset 55721

KOOCHICHING CO. Innis Nesbitt
109 Park Avenue
Int'l Falls 56649

LAKE COUNTY Lloyd Houle
19 Hays Circle
Silver Bay 55614

ST. LOUIS CO. Floyd R. Anderson
County Courthouse
Duluth 55802

Fred C. Barrett
County Courthouse
Hibbing 55746

Appendix II

ECONOMIC POLICY COMMITTEE

D. Kelly Campbell, Chairman
Oglebay Norton Co.
P.O. Box 1064
Virginia, MN 55792

Cliff Grindy, Manager
Hallett Dock Company
37 Ave. W. & St. Louis Bay
Duluth, MN 55807

Dr. Wm. Matalamaki, Dean
North Central School and
Experimental Station
Grand Rapids, MN 55744

Vladimir Shipka, President
Northern State Bank
600 Chestnut St.
Virginia, MN 55792

Arend Sandbulte, MP&L
Vice-Pres., Corporate Planning
30 West Superior St.
Duluth, MN 55802

Dr. Tom Bacig
511 Woodland Avenue
Duluth, MN 55812

Al France, President
Lake Superior Industrial Bureau
828 1st American Nat'l Bank Bldg.
Duluth, MN 55802

Councilperson Maureen Bye
609 West 2nd Street
Duluth, MN 55806

Mike Latimer
Blandin Paper Company
Grand Rapids, MN 55744

Erling Aronson
Business Agent
Carpenters Local #361
2002 London Road
Duluth, MN 55812

Marvin Marklund
313 2nd Ave.
Two Harbors, MN 55616

Jon Carlson, Vice-President
First National Bank
Cloquet, MN 55720

Mayor John Giorgi
Mt. Iron, MN 55768

ALTERNATES:

Arnold Heikkila
Area Extension Agent
Room 215
2215 East 5th St.
Duluth, MN 55812

Keith Yetter, Vice-President
Zenith Dredge Company
200 Central Avenue
Duluth, MN 55807

David Gartzke, MP&L
30 West Superior St.
Duluth, MN 55802

BOARD OF DIRECTORS

ARROWHEAD REGIONAL DEVELOPMENT COMMISSION

Comm. Innis Nesbitt, Chairman
109 Park Avenue
International Falls, MN 56649

Comm. Floyd Anderson
County Courthouse
Duluth, MN 55802

Comm. Rita Blaisus
317 Avenue D
Cloquet, MN 55720

Comm. Walter Brink
Cohasset, MN 55721

Vincent Gentilini
Arrowhead EOA
3rd Ave. & 6th St. So.
Virginia, MN 55792

Comm. Lloyd Houle
19 Hays Circle
Silver Bay, MN 55614

Comm. Bev Johnson
Grand Marais, MN 55604

Clarence Maddy
City Hall
Duluth, MN 55802

Marvin Marklund
313 Second Street
Two Harbors, MN 55616

Ronald Sherer
Grand Portage, MN 55605

Warren Youngdahl
Marcell, MN 56657

Comm. Michael Zilverberg
Aitkin, MN 56431

Fred C. Barrett
County Courthouse
Hibbing, MN 55746

ARROWHEAD REGIONAL DEVELOPMENT COMMISSION
OFFICERS

<u>Chairman:</u>	Comm. Innis Nesbitt	<u>Secretary:</u>	Betty Larson
<u>Vice-Chairman:</u>	Marvin Marklund	<u>Treasurer:</u>	Floyd Anderson

ARROWHEAD REGIONAL DEVELOPMENT COMMISSION

ECONOMIC POLICY COMMITTEE

BY-LAWS

ARTICLE I

The Economic Policy Committee of the Arrowhead Regional Development Commission was established under the authority of the Minnesota Regional Development Act and is authorized by the Arrowhead Regional Development Commission to establish its own by-laws and operating procedures. Pursuant to these authorizations it is established that the purpose of the Economic Policy Committee of the Arrowhead Regional Development Commission, hereinafter referred to as the "Committee", is to provide recommendations to ARDC on economic research and economic analysis for the seven county northeastern Minnesota area presently known as Development Region 3. In performing this function, the Committee is to carry out its activities in conjunction and cooperation with local, regional and state governmental units and public and private agencies and business organizations acting within the Arrowhead Region.

ARTICLE II

The goals and objectives of this Committee shall include, but not be limited, to the following:

1. Guide the update of the Overall Economic Development Plan for the Region.
2. Determine a format for an economic information system that contains the socio-economic data of the Region.
3. Direct the staff in undertaking economic analysis of pertinent topics (i.e. copper-nickel development, energy shortage, etc.) within the Region.

4. Solicit information from and provide findings to economic planning agencies in the counties.
5. Evaluate the suitability of proposed programs for federal and state loans and grants related to economic development.

ARTICLE III

The officers, members and staff of the Committee shall be guided and bound in the performance of their functions by the By-Laws of the Arrowhead Regional Development Commission; by the provisions of pertinent federal and state law and regulations (where applicable) and by the provisions of the Minnesota Regional Development Act (as amended).

ARTICLE IV

The membership of this Committee shall be determined by the criteria established by the Arrowhead Regional Development Commission. Current membership shall continue until reorganization as provided herein. Membership shall be representative of identical elements of private industry, with no more than two members from each interest. In addition, a minimum of one member shall represent the environmental interests of the region. Total membership of the Committee may vary from time to time (depending on representation as established herein) but shall not be less than seven (7) nor more than eighteen (18) members.

The Chairman of the Committee shall be appointed by the Chairman of the Arrowhead Regional Development Commission from among members of the Commission. The Chairman's term shall be for two years.

The December meeting of this Committee shall be designated as the annual meeting of the Committee. At said annual meeting, one-third (1/3) of the membership shall be elected for a one year term, one-third (1/3) of the membership shall be elected for a two year term and the remaining

one-third (1/3) of the membership shall be elected for a three year term. Thereafter, all terms shall be for a period of three (3) years with a maximum of two (2) consecutive terms available for each member. The nominating and election process for membership, however, must be such that in each year the balance among representatives from private industry and environmental concerns is maintained.

ARTICLE V

Beginning with the August 1975 meeting and at each August meeting thereafter, the Chairman of the Committee shall designate a Nominating Committee of three (3) persons who are members of the Committee. The members so appointed by the Chairman shall be confirmed in their appointments to the Nominating Committee by the Board of Directors of the Arrowhead Regional Development Commission acting at their next meeting subsequent to the appointment of the Nominating Committee by the Chairman.

The Nominating Committee shall nominate individuals to serve on the Committee and shall observe the representation requirements set forth herein. A report of the Nominating Committee indicating the names, addresses and interest represented by the individuals so nominated shall be sent to the members of the Committee not up for election not less than five (5) days prior to the date of the meeting at which elections are to take place. Nominations for election to the Committee can be received from the floor.

Election shall take place at the annual meeting. Those members who are not up for election shall vote upon those nominated for Committee membership.

A vacancy on the Committee may be filled by the Committee itself until the next annual meeting and election at which time such vacancy shall be filled for the balance of its unexpired term.

Members elected to the Committee shall be submitted by its Secretary promptly to the Directors of the Arrowhead Regional Development Commission for confirmation.

ARTICLE VI

Proxies shall be permitted for any member of the Committee and any member may designate another person to act as his alternate or to have any authority to vote on any matter before the Committee.

In the event a member of the Committee is absent for three consecutive meetings, the Secretary of the Committee shall report such absences to the Chairman of the Committee who shall cause the matter of such absences to be placed upon the agenda for the next meeting of the Committee for such action as the Committee deems advisable. Three consecutive absences without good cause (as determined by the Committee) shall be sufficient reason for the Committee to find a vacancy exists in the term and membership held by the member involved.

ARTICLE VII

This Committee shall meet at least four (4) times each year at regular or special meetings upon due notice given by the Chairman of this Committee or in the event of the failure of said Chairman to call a meeting at least once in each calendar quarter, by due notice of meeting signed by one-third (1/3) of the membership of this Committee; due notice of meeting shall consist of written or telephone notice of said meeting to each member of this Committee or by designation of said meeting contained in the minutes of the prior meeting of this Committee and distributed to the members of this Committee and said due notice shall contain the address of the place of such meeting, and shall be given at least seven (7) days prior to the date of the meeting.

ARTICLE VIII

Complete and accurate minutes of each meeting of this Committee shall be maintained under the authority of the Secretary of this Committee and copies of said minutes shall be transmitted not later than seven (7) days prior to the next regular meeting to each member of this Committee by mailing a copy of such minutes to each of said members.

ARTICLE IX

One-half (1/2) of the membership of this Committee shall constitute a quorum for the purpose of carrying on any of the business of this Committee at a duly called meeting thereof.

ARTICLE X

Any act or other business of this Committee may be enacted, constituted or approved by a majority of the members of this Committee present at any duly called meeting thereof, except as otherwise specifically designated in these by-laws.

ARTICLE XI

In the event a minority report is made by at least one-third (1/3) of the total membership of the Committee on any action, recommendation or proposal of the Committee, such minority report shall be transmitted to the Board of Directors of the Arrowhead Regional Development Commission together with the official record of the action, recommendation or proposal adopted by the Committee.

ARTICLE XII

A report of the actions, recommendations and proposals of the Committee with regard to economic related projects or proposals requiring action by the Arrowhead Regional Development Commission shall be submitted to the Board of Directors of the Arrowhead Regional Development Commission for confirmation or rejection by said Board at its next regularly scheduled meeting. In the

event of confirmation, such actions may be communicated to appropriate individuals, governmental units, agencies or business interests. In the event of rejection, such action, together with the action taken by the Committee, may be submitted to the Arrowhead Regional Development Commission at its next meeting with a factual report of the record indicating the procedures and reasons involved in the respective decisions, together with a request for appropriate Commission action.

ARTICLE XIII

This Committee shall elect as its officers, in addition to the duly appointed Chairman of this Committee, a Vice-Chairman to serve for a term of one (1) year unless otherwise designated by this Committee.

ARTICLE XIV

The office of Secretary may be filled by ARDC staff or by election from among Committee members at the discretion of the Committee.

ARTICLE XV

The officers of this Committee must be selected from the duly appointed members hereof, but the non-discretionary functions of said officers may be performed by members of the staff of this Committee according to the instructions of said officers.

The Committee may establish special and technical advisory committees to deal with general or specific problems and areas of concern. Members of such task forces shall be appointed by the Chairman. A technical advisory committee shall consist of professional staff personnel of affected, or involved units of government, agencies, businesses or individuals.

ARTICLE XVI

These By-Laws may be amended by a two-thirds (2/3) majority of those members present at a duly called meeting of this Committee provided that notice be given of any proposed amendment in the notice of meeting at which said amendment is to be considered.

ARTICLE XVII

No action by this Committee shall attempt to bind or alter the power and authority of the Arrowhead Regional Development Commission, the State of Minnesota, the federal government or any agency thereof. Further, no such action shall attempt to bind any individual, private industry or company, or any unit or agency of local government participating on or in any Committee function.

ARTICLE XVIII

Robert's Rule of Order (revised) shall govern the procedures of meetings of this Committee and in all matters not otherwise governed by these By-Laws.

ARDC Economic Development

PROJECT FACT SHEET

1. Project Title

2. Applicant Agency Name

3. Project Description

4. Project Financing

Federal Share

Non-Federal Share

Total

5. Guarantees of Applicant Ability to Secure Non-Federal Share

6. Amount and Type of Jobs Expected to be Created or Affected by Project

7. Direct or Indirect Economic Benefits of Project Other Than Anticipated Employment

8. What will be the Affect, if any, of the Project on the Minority Population Within the Project Area?

9. Environmental Status of Project (steps to be taken to avoid environmental problems, permits required, etc.)

10. Preliminary Project Status (status of architectural/engineering, anticipated date project could be initiated)

11. Other Pertinent Information

Appendix IV

Quantitative Assessment Sample Form

Date evaluated _____

Project _____

Program _____

Please provide a rating from 0 to 5 for each of the 5 items (one corresponding to each general goal provided below). The questions below each item are for assisting you in your determination and do not carry any specific weight.

Item I

Goal 1: To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.

- a. Will a project generate long term employment opportunities?
- b. Will the ratio of opportunities resulting to the investment made be high?
- c. Will the project generate long term employment in supportive industries?
- d. Is the investment based on the indigenous attributes of the region?
- e. Does the proposed project have a high chance of success?
- f. Will the project increase employment opportunities in areas that have excess labor supply?

Score 0 to 5

Item II

Goal 2: To increase average per capita income of people living in the region through development and expansion of high paying industries and the preparation of citizens of the region for employment in new and existing industries.

- a. Will the project provide high paying jobs?

- b. Will the project benefit people living in the region?
- c. Will the project be located in areas where people need jobs?
- d. Will the project offer year-round employment or will it be seasonal?
- e. Are there programs for educating people so that they can gain employment through the project?

Score 0 to 5

Item III

Goal 3: To raise the standard of living of minority groups within the region.

- a. Will the project be accessible to minority groups?
- b. Will there be programs developed in relation to the project for training minority groups?
- c. Have the projects sponsors committed themselves to minority employment?
- d. If the project is accessible to minority groups, will the wages that result raise the income level of these groups?
- e. Is the project proposed by a minority group?

Score 0 to 5

Item IV

Goal 4: To secure developments that are compatible with accepted environmental standards, and where possible, can be located in existing population centers.

- a. Will the project degrade the natural environment?
- b. If the project is environmentally sensitive, have the sponsors taken the necessary precautions?
- c. If practical, is the proposed location in an existing population center?
- d. Will the project place stress on existing sewer and water facilities?
- e. Is there a better location for the project than the one proposed?

Score 0 to 5

Item V

Goal 5: To stimulate public investments in existing population centers that have potential for growth.

a. Will the project improve the infrastructure of an existing population center?

b. If so, does the population center have potential to capitalize on the investment?

c. Is this a top priority public investment for the region?

d. Is there evidence that public investment will lead directly to economic expansions?

e. Is the project supported by the majority of people within the proposed area?

Score 0 to 5

Appendix V

Evaluation Summary Sheet Sample Form

Date Evaluation Completed _____

Project Location _____

Program _____

Project _____

<u>Quantitative Assessment</u>	<u>Total Score</u>	<u>No. of Evaluators</u>	<u>Average Score</u>
Goal 1: To increase long term employment opportunities in the region through economic development and expansions that capitalize on the indigenous attributes of the region.	_____	_____	_____
Goal 2: To increase average per capita income of people living in the region through development and expansion of high paying industries and the preparation of citizens of the region for employment in new and existing industries.	_____	_____	_____
Goal 3: To raise the standard of living of minority groups within the region.	_____	_____	_____
Goal 4: To secure developments that are compatible with accepted environmental standards, and where possible, can be located in existing population centers.	_____	_____	_____
Goal 5: To stimulate public investments in existing population centers.	_____	_____	_____

Grand Total Score _____

Grand Total: No. of Evaluators _____

Average Total Score _____