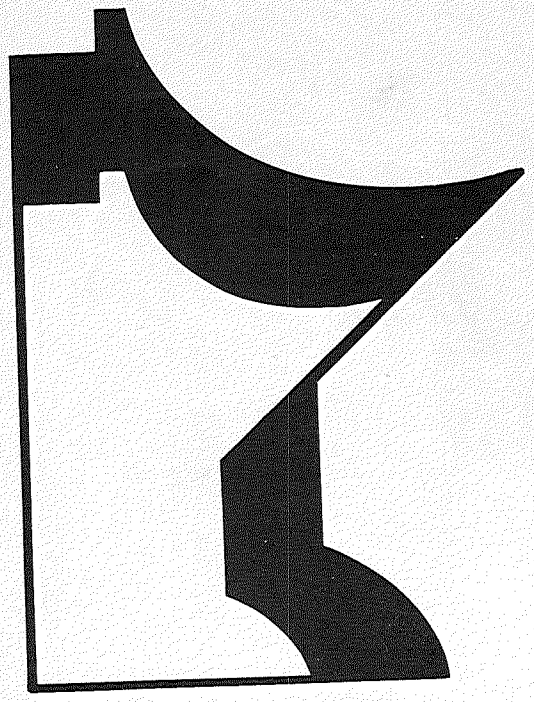
REPORT OF THE COMMISSION ON MINNESOTA'S FUTURE



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Report of

THE COMMISSION ON MINNESOTA'S FUTURE. --

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Commission on Minnesota's Future **101 Capitol Square Building** 1a **St. Paul, Minnesota 55101**

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OVERVIEW

The future of Minnesota will be influenced greatly by the legacy of the past, by the conditions of the present, and by national and international factors beyond the state's control. But Minnesotans can take some significant actions to help shape the future of their state community. Among these are the decisions made every day by individuals, by organizations, and by government that will influence the lifestyles of Minnesotans for many years to come.

The future holds great promise for Minnesota, but it will require:

1. Greater dependence on renewable resources and less dependence on nonrenewable resources;
2. Decision-making that deals with the interdependence of issues and places increased emphasis on the state as a community;
3. An examination of the values that promote material measures of progress and consider personal freedoms as rights without responsibilities; and
4. A stronger emphasis on the development of human resources — an important strength of Minnesota in the past, but even more important in the future.

There are both short and long term needs that require attention. Over the next ten to twenty years there will be shortages of vital materials, particularly petroleum and natural gas, which are likely to cause hardships for many Minnesotans. Costs of almost all consumer goods and services will increase, and many, including health care, housing, transportation, and government, are likely to exceed increases in personal income. If this occurs, present expectations that standards of living will continue to rise will not be fulfilled. People and organizations will be forced to reevaluate their priorities.

Conflicts will intensify between the desires of individuals and the needs of society (such as in the ownership and use of land). The state of Minnesota will need to become more of a community that shares its resources and its responsibilities among all its members.

While it is increasingly apparent that all elements of life are interdependent, many human organizations, including government, remain fragmented and approach issues from narrowly defined perspectives. Institutions must strive for greater flexibility in order to adapt to changing situations, with built-in procedures for reevaluating their purposes and organizational structures. It will be important for the public and private sectors to work toward greater cooperation.

The Commission on Minnesota's Future does not, in this report, prescribe the future, nor does it make specific recommendations for population and employment distribution across the state. But this report does include recommendations that would influence these distributions. The Commission believes that a growth and development strategy for the state can never be a fixed product, but rather an on-going process.

Such a process calls for a clarification of state goals and objectives to guide change in an orderly way and support consistency in state policy. And that, in turn, requires widespread discussion of what kind of community the state wishes to become, with broad understanding and support of its citizens.

INTRODUCTION

Legislation establishing the Commission on Minnesota's Future specifies that a primary responsibility of the Commission is to prepare a "state growth and development strategy" for consideration by the governor and the legislature and to put recommendations and proposals as fully as possible "in the form of alternatives."

Although interest across the United States in growth and development is great, the concept of growth and development has not been adequately defined. From an individual perspective, growth and development suggests self-fulfillment through a diversity of experiences and opportunities. From a national perspective, growth and development suggests maximizing economic production through, for example, increased employment, income, and productivity. From a global perspective, growth and development suggests managing the world's population and economic growth within resource and environmental limits.

From a state perspective, establishing a growth and development strategy suggests three possible approaches:

1. **Resource management.** This approach places great importance on creating effective public programs and policies, but it does not necessarily deal with their interrelationships or provide information to establish priorities among them. It holds that the density and distribution of population can and should be managed by the state. The resource management approach depends on how accurately trends are predicted, but it does not take adequate account of, nor is it adaptable to, external factors such as adjustments in national policy, worldwide population trends, or climatic changes.

2. **Quality of life.** This approach emphasizes living conditions and requires information to monitor those conditions. However, there is no generally accepted definition or perception of the quality of life, nor are there generally accepted indicators to measure it. Indicators that do exist are based on perceptions of past conditions; they might not be adaptable to changing conditions or useful in estimating future needs.

3. **Adaptation to change.** Under this approach state government's role is to gather and provide objective information to public and private officials for open discussion and analysis of public and private policies. This approach, which could be combined with elements of the previous two approaches, stresses the ability of the institution to evaluate its own performance and adapt to changing conditions. Under this approach, government serves as a facilitator.

The Commission on Minnesota's Future believes the adaptation to change approach to be the most useful for Minnesota of these three strategies for growth and development. In this report, the Commission sets forth goals, objectives and strategies for action drawn from its study of issues confronting the state; they form the foundation of the Commission's growth and development strategy for Minnesota.

This report attempts to reach its conclusions and make its recommendations based on an overall, or holistic, perspective of the state. A holistic perspective requires an understanding of the parts which make up the whole, but considers the whole as more important than any of the individual parts. The need to understand the whole is based upon the growing realization that the basic elements of life are interdependent, including all human activities and the physical environment upon which human existence depends.

The structure of Minnesota's lifestyle is described from the perspectives of settlement, population, economy, and values. Past and present conditions and the changes occurring in the state are discussed from those vantage points. The attempt in this section is to paint a broad picture of the state and to establish a framework within which the question of a state growth and development strategy can be considered.

The Commission has selected eight areas for study emphasis: energy, transportation, land use, agriculture, housing, health, education, and environment. Specific recommendations were adopted by the Commission in subject areas where the Commission's background work warranted it. Those recommendations are listed with each subject. Time limitation meant that some areas important to the future of Minnesota are not included in this report; among them are crime, welfare, culture and the arts, recreation, and small business. The Commission believes, however, that the areas investigated provide sufficient evidence to support its broad findings and recommendations.

The Conclusions section is a condensation of issues that transcend the eight selected areas. Major conclusions point toward resource shortages, increasing costs, modification of expectations, a need for information, a need to clarify and coordinate decision-making responsibilities, and a continual need to stress human development.

Goals and Objectives for Minnesota are suggested as guidelines for state decision making. Following each objective are selected policy approaches that potentially can play a part in achieving each objective.

Strategies for State Government comments on the present system of governance in Minnesota, focusing particularly on the role and capability of state government to deal with emerging issues affecting the future of the state.

A comprehensive design for the future cannot be found in this report. Rather, this is an effort to describe and to suggest changes in the processes that now operate in order to develop a decision-making system capable of anticipating and responding to the possibilities and problems that lie ahead.

The Changing Minnesota Community

THE CHANGING MINNESOTA COMMUNITY

The current structure of the state is described and analyzed from four selected, interrelated perspectives — settlement, population, the economy, and values — in this section. *Settlement* concerns the general distribution of human activity on the landscape (including population and economic activity) — why it is where it is, how it is changing, and the forces that affect it. *Population* analyzes more specifically the major elements of population change with emphasis on migration and natural increase. *The Economy* examines more specifically the structure and location of economic activity in Minnesota, including the economic changes taking place and the reasons for the changes. *Values* looks at how human values influence state growth and development.

SETTLEMENT

Any effort to deal effectively with the future must begin with an understanding of where Minnesotans live and work — the cities, towns and farms. Inherent in the location of these places are conditions that influence people's lives and determine the course of their future.

The first white men came to Minnesota to trap fur-bearing animals and establish military posts; they travelled by water, and the locations of the first white settlements — Grand Portage, Fort Snelling, Mendota — were determined by those activities. The first permanent settlers on the land likewise came by water to places that provided access to the interior of the state. As a result, the first towns emerged along the major water routes: the Mississippi, St. Croix, Minnesota and Red rivers and Lake Superior. A substantial number of early settlers came up the Mississippi, disembarked at the site of St. Paul and then travelled overland to a point just above the Falls of St. Anthony, where they could conveniently cross the river on their trek westward. At that site, the village of St. Anthony grew on the east bank and Minneapolis grew on the west bank.

Minnesota was rich in resources. Forty percent of the state was covered by coniferous trees which were cut and shipped down-river. The grasslands of southwestern and western Minnesota were plowed under and the rich prairie soil cultivated and planted. Towns emerged along the routes of transportation to serve the expanding population of the 1860s and 1870s. The advent of the railroads in the 1860s extended the inland influence of the river communities and contributed to their growth and dominance as centers of trade and commerce. New centers in the farmlands and forests and on the Iron Range sprang up with the development of rail transportation.

Towns bypassed by the railroad usually did not survive, while those with good transportation access grew rapidly. Commercial and public investments also contributed to the development of towns that were favorably situated. For example, St. Paul, the transportation center, was designated as the seat of state government. Minneapolis was the major river crossing point (the location in 1855 of the first bridge across the Mississippi River) and later became a lumber and flour milling center because of the water power at St. Anthony Falls. Almost all major urban areas in Minnesota were established on water and later became centers of rail transportation and government. Exceptions are the Mesabi, Vermillion and Cuyuna ranges, where the discovery of iron ore resulted in the founding of many urban settlements adjacent to the mineral deposits. The location of resources and the systems of transportation that provided access to Minnesota's resources determined where people lived and worked — and most of these patterns were set during the latter half of the nineteenth century.

Settlement Change

In the first half of the twentieth century, highways began tying cities together and contributing to their growth. New technologies influencing labor efficiency brought shifts in occupations. The tractor, particularly, allowed a farmer to improve significantly his ability to manage his farm. As a result of mechanization, farms grew in size, farm income and farm production greatly increased, the number of farms declined and hundreds of thousands of persons left rural areas to seek work in the cities.

Most towns changed too. Improved highways allowed farmers to drive in minutes distances that once took a full day to travel. Small towns often were bypassed by consumers and suffered in competition with larger urban centers. This has occurred particularly in the three decades after World War II, when most agricultural service centers of about 1,000 or fewer persons remained static or declined in population, and the larger

towns — those over 5,000, especially — grew, attracting retail businesses and service functions from smaller centers. In this way, highways contributed to the concentration of trade and services in larger centers. As these changes accelerated during the 1950s, there were calls for a return to rural areas; and there was great concern for the survival of the family farm and the small town.

The 1960s brought attention to another phenomenon. Commuting distances extended farther into the countryside from urban centers, while the older areas of almost all towns and cities experienced population losses. Families with children had purchased homes with government-guaranteed loans, usually on the urban fringe. The result was a thinning of population in the older urban core areas and a dispersal of population into the countryside, in and near not only the large urban areas such as the Twin Cities, but most other urban communities in the state as well. These trends stimulated the growth of many small towns within commuting distance of major urban centers. Many small towns (former agricultural service centers) near cities have thus become "bedroom" towns, where people live but do not work — and might not shop. Another effect has been spiraling rural land costs as farmers compete for land with non-farmers (or part-time farmers). Consequently, the desire for "balanced growth" has diminished. Nevertheless, resettlement of the state continues, with little understanding of the factors that cause it. Now, often for different and conflicting reasons, new calls are emerging for changing or managing settlement patterns. But before settlement patterns can be managed (if they should be), the factors influencing them must be understood.

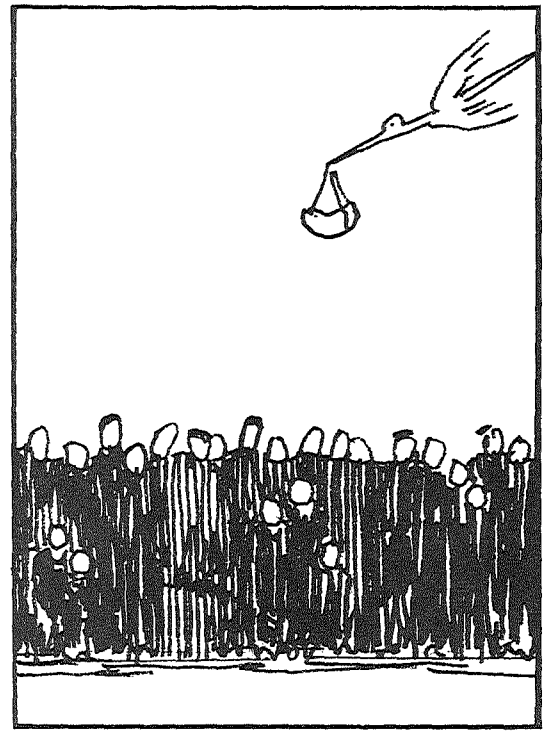
Factors Influencing Change

Recent state and national polls indicate that more people prefer to live in small towns and rural areas than in large cities — but these desires are not new. People have been attracted to cities to earn more money and improve their standards of living. Nineteenth century urban problems brought public proposals for new towns and agricultural greenbelts to integrate urban and rural environments; private initiatives resulted in the establishment of "streetcar suburbs," such as those existing in the Twin Cities area at the turn of the century. After World War II, rising incomes and greater mobility made it possible for many people for the first time to realize their desires to live in the country and have access to employment opportunities. This led to a growing number of "non-farm" residences in rural areas and the spread of population within commuting distances of cities during the 1960s and 1970s. This automobile-oriented pattern of settlement is analogous to the pre-automobile new town conceived at the turn of the century.

The current distribution of population in Minnesota is the result of a composite of personal preferences and a variety of policies implemented by government and private businesses. Among the more significant government policies that have influenced settlement over the past three decades are FHA home mortgage insurance, the Federal Highway Act, and certain provisions of state and federal income taxes, including capital gains, depreciation schedules, and agricultural benefits. Partly to counteract the resulting urban sprawl and center city deterioration, a variety of state and national policies have been enacted, including urban redevelopment programs and environmental legislation (See pages 24-26). The present patterns of population and economic activity are a composite result of the availability of employment opportunities, access to transportation, personal desires, and public policies.

With prospects for increasing shortages of petroleum, natural gas and other resources and increasing costs of consumer goods and services, people want to know if present settlement trends are desirable for the future of Minnesota. If not, they ask, what is a better arrangement? What kinds of public policies are required? The following sections of this report deal with factors that must be considered to help answer these questions.

POPULATION



Recent Trends

Overall population growth in Minnesota has been steady but slightly below the national average in recent decades. The more significant population changes in the state involve shifts in place of residence and employment. Great differences have existed between areas of population increase and areas of population decrease. Decreases in population have taken place in areas dominated by agriculture — in the southwest, west, and northwest. As farms increased in size and efficiency and decreased in numbers, nearly half a million persons left Minnesota farms between 1950 and 1975 to seek employment elsewhere. Mining areas likewise lost population because of increased labor efficiency. And without enough new jobs available within the state, many Minnesotans left to seek jobs elsewhere. From 1910 until only recently, more people have left than moved into Minnesota, with overall state growth during that period attributable to the excess of births over deaths.

For at least the past decade, urban populations have thinned out, as exemplified by the Twin Cities especially. The cores of Minneapolis and St. Paul have declined in population mainly because many families with children have moved to suburban areas, leaving single persons, the elderly and the socially and economically distressed in cities. The elderly, comprising a substantial proportion of the core city population, are much less mobile than other age groups and tend to retain their larger, older homes, resulting in an underutilization of the housing stock.

In conjunction with the thinning out of population in older established urban areas, population has spread to areas within convenient commuting distance of urban centers. Over the past decade, this has resulted in an area of rapid growth (twice the national population growth rate) extending 40 to 60 miles or more outward from the Twin Cities. Areas of most rapid growth are along the major four-lane highways, such as Highways 10 and 52 between the Twin Cities and St. Cloud, Highway 169 to Princeton, Highway 65 to Cambridge, 35 to Pine City, 94 to Monticello and eastward into Wisconsin. These spokes of rapid growth from the Twin Cities have extended farther toward the north and northwest because of lower land costs associated with less productive agricultural land and more lakes and woodlands.

Though this thinning and spreading of population has been most evident in and around the Twin Cities area, it has also occurred around all other major urban areas of the state. In these and many smaller communities, the older areas near the center of town have experienced population declines, and many new homes (including mobile homes) have appeared on the edge of and within ten to twenty miles distance. Recent observation indicates that, in certain areas, older housing stock is being used more and the thinning process has slowed, primarily because of increased housing costs and the probability of increased energy costs and shortages.

While population of agricultural and mining areas has been declining and population of urban areas has been thinning and spreading, scenic amenity areas of the state — areas with lakes, trees and hills — have experienced a rapid growth in permanent year-round residents. The amenity area of most prominent growth in Minnesota lies between Brainerd and Bemidji and includes parts of Crow Wing, Aitkin, Cass, Hubbard, and Beltrami counties. This is part of a glacial moraine belt shaped like a large "C" that extends westward from the Twin Cities toward Willmar and swings northward through Glenwood and Alexandria, Fergus Falls, Detroit Lakes, and eastward to Park Rapids. While the area from Willmar to Fergus Falls has not grown as rapidly as that between Brainerd and Bemidji, it has a similar potential which may be realized with improved access to the Twin Cities. Completion of the St. Cloud bypass on the Interstate Highway 94, for example, will likely affect land values and population growth throughout the west central sector of the state if recent settlement trends continue. Where urban areas combine with amenity areas, such as in southern Beltrami County, Crow Wing County, or Douglas County, particularly rapid rates of growth have occurred in recent years.

Trends of population growth between 1970 and 1975 (based on estimates by the state demographer) show a continuation of recent patterns: losses in agricultural and mining areas, thinning and spreading of urban population, and growth in scenic amenity areas. Metropolitan core counties, Hennepin and Ramsey, lost an estimated 53,000 persons during that five-year period while the three adjoining counties in the urbanized area, Anoka, Washington, and Dakota, increased by about 85,000 persons; and the next ten counties within 35 miles driving distance of the core cities (including three in western Wisconsin) gained another 50,000. This compared to a net state growth of 119,000 persons in that five-year period. Most of the remaining population growth occurred near other urban areas and in scenic amenity areas of the state.

Factors Affecting Population Change

Two major factors affect population change: the movement of people, or *migration,* and births less deaths, or *natural increase.* Of these, migration is both the more dynamic and the more difficult to estimate. Migration is defined as a change of residence that severs most established social and economic ties, i.e., a move beyond normal commuting distance. For example, intracounty moves are not considered migration, whereas most intercounty moves are. It is helpful to make the distinction between migration and local residential moves because factors influencing the two are different. Employment is the major reason for population movement from one community to another, but recent evidence suggests that physical and cultural amenities are influencing an increasing number of migratory decisions.

Once a migrant has chosen a community, the primary factors that influence the specific place of residence within that community include housing, education, personal security, and physical amenities. Among these, the size, condition, and value of housing are usually the most important — and in Minnesota there are strong preferences for single family homes. Personal security is becoming more important in local residential choice. Those who seek to avoid areas considered to be high security risks often choose to locate on the urban fringe or in small towns and rural areas, rather than in inner city areas, which in turn contributes to the dispersal of population.

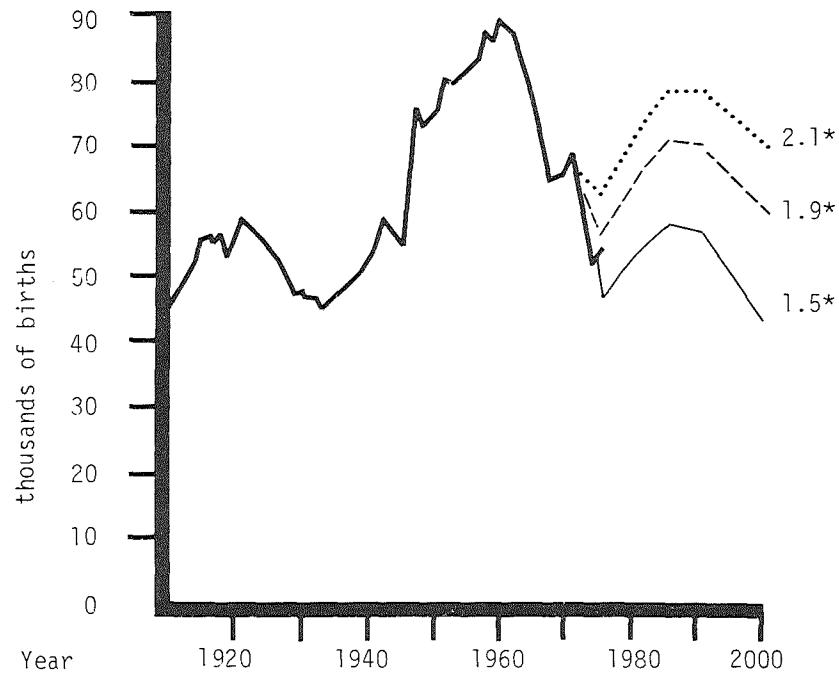
The quality of education is an important factor for families with children to consider when choosing a place to live. Since little reliable information is available to compare the quality of education among schools, proxies of socio-economic status are used, including observed housing stock, population composition, and age and condition of school facilities. These indicators do not favor inner city locations and thus also contribute to the dispersal trends.

When scenic rural amenity areas are conveniently accessible to the economic and cultural attractions of urban areas, a dispersion of urban development across the countryside has been encouraged. The many scenic lake areas within commuting distance of the Twin Cities, for example, contribute significantly to the extension of the commuting zone and urban growth in nearby countryside areas. This kind of population dispersal occurs not only near the Twin Cities, but around most of the urban centers in Minnesota. Partly as a result of access to amenity areas, the relative degree of population dispersal in Minnesota appears to be one of the highest in the nation in terms of average population density and commuting distances.

There are significant differences in the ages of people who migrate. The largest group of migrants are single young adults who leave home soon after completing high school for places where jobs and educational opportunities are available. Often, however, young people move just to get away from home, meet other people, and seek new experiences. Young people tend to go to urban centers where there are both economic opportunities and other persons of the same age and interests. Thus, there is a general movement of single young adults toward the Twin Cities area and to a lesser extent other urban areas of the state. As these young people make social contacts, establish households, and have children, their preferred residence changes. When deciding where to bring their children up, young parents often settle on a compromise between the economic attraction of urban areas and the perceived desirability of small towns or rural environments. Consequently, families tend to move outward from urban areas. Families with children, for example, have been the major contributor to population growth within commuting distance of the Twin Cities area over the past decade.

MINNESOTA BIRTHS, 1910 - 1974 WITH PROJECTIONS TO 2000

Figure 1

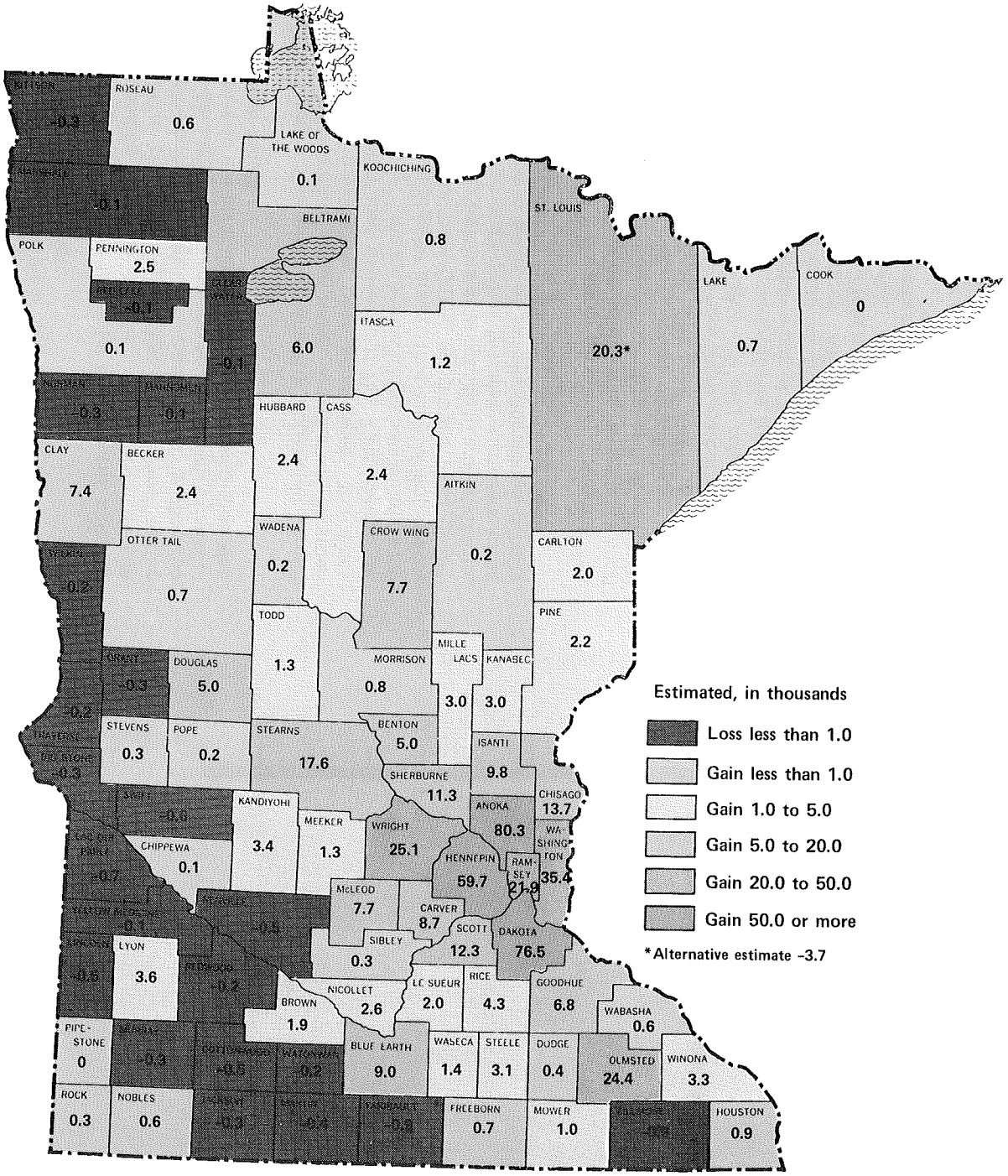


* Assumed number of births per woman

Source: Minnesota State Demographer

POPULATION CHANGE, 1975—90

Figure 2



SOURCE: MINNESOTA STATE DEMOGRAPHER
NOVEMBER, 1975

The other factor influencing population change is that of natural increase — births less deaths. The number of deaths that will occur over a given period of time is predictable with a high degree of certainty; the living population is known, and death rates have been fairly constant. Birth rates, however, are much more variable. The number of births fluctuates over time for reasons that are not entirely understood. For example, the number of births in Minnesota ranged from 44,540 in 1933 to 88,333 in 1959. Those born at the peak birth period are now in high school. Persons in this age group will soon be competing for jobs, establishing families, and seeking housing. Declines in births since 1960 will likewise affect housing needs, competition for jobs, school enrollments, and public service needs in the years ahead. For example, many schools constructed for peak enrollments now face rapid enrollment declines, which raises questions about alternate use of school facilities and sharing of facilities, teachers, and materials among school districts.

Future Population Changes

By 1990, Minnesota is expected to add half a million people to its population, mostly as a result of natural increase. This assumes an average of 1.9 children per woman, (as compared to the 1976 level of approximately 1.8). This is shown as the center line on Figure 1; the upper and lower projections represent alternative assumptions of 2.1 (replacement level*) and 1.5 children per woman. Even at the present below-replacement-level rates, the population of Minnesota will continue to increase for many years.

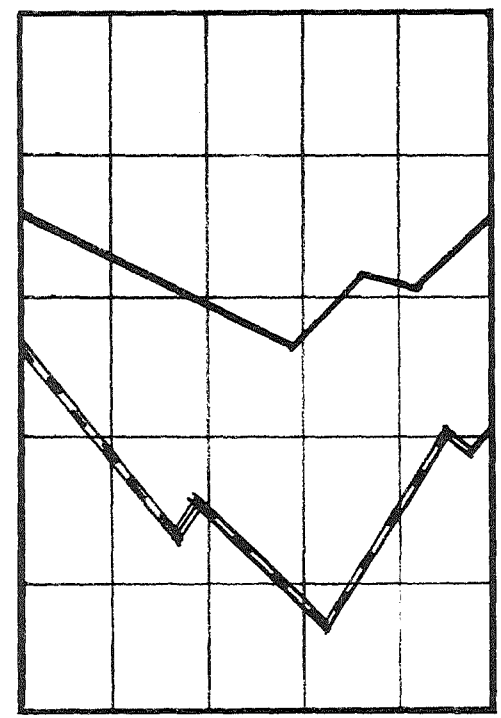
A below-replacement-level birth rate is not the same as "zero population growth." Zero population growth occurs when the number of deaths is equal to the number of births — a balance that is not reached until about the same number of persons exist in all age groups. Because of the large number of persons in their teens and twenties at the present time, the number of births will exceed the number of deaths for many years, even at a below - replacement - level birth rate. It takes about two generations of maintaining replacement - level birth rates to achieve zero population growth. If the 1.9 level is maintained, Minnesota will reach zero population growth in a little less than two generations — perhaps 40 to 45 years.

As a result, an assumed 1.9 children per woman on the average will add about half a million people to Minnesota's population over the next fifteen years. A very small part of state growth will result from an expected net in-migration; most growth will be due to natural increase. Where will these additional half-million people live? What factors will influence where they choose to live?

Population changes that might occur between 1975 and 1990 are shown on Figure 2, based on projections by the state demographer. This projected population change assumes a continuing decline in those counties that are dominated by agricultural employment. Population increases are assumed to continue near major urban areas.

Changes from recent trends are expected in northeastern Minnesota as a result of new taconite development now under way; thus an increase of about 20,000 persons is estimated for St. Louis County between 1975 and 1990. A continuation of amenity-related growth is also assumed in these population projections. Hennepin and Ramsey counties are expected to grow in contrast to the 1970-1975 period. This assumes a slowing of the urban thinning and spreading process in response to increasing energy and housing costs and possible new land management policies; and already there is evidence that this is beginning to happen.

ECONOMY



The development of Minnesota's economy has been closely related to the use of its natural resources. From the fur trade and lumbering to agriculture and mining, all have been important in Minnesota's economic development. But that specialization and dependence is changing as the state's economy is becoming more diversified and based less and less on

* If each woman has on the average, 2.1 children, the population will, in effect, replace itself.

natural resources. Most of the commercial forests of the state were cut before 1900, though with reforestation the wood products industry remains important to Minnesota and has much potential. Most of Minnesota's need for paper and wood products are now met by other states and Canada. As late as 1951 Minnesota provided 82% of the nation's iron ore needs, but the natural ores have been rapidly depleted, and the nation has become more and more dependent upon foreign sources. Recent investments in facilities for the conversion of low grade ores have meant and will mean a revitalization of mining in Minnesota, and it will provide a major portion of the nation's needs. Changes in agriculture have resulted in hundreds of thousands of persons leaving Minnesota farms and rural areas seeking alternative employment elsewhere. That migration has been slowing as non-agricultural employment opportunities expand in rural Minnesota.

Economic activities based on natural resources have been affected by technology, which in turn has affected Minnesota's employment structure and lifestyle. Long-term employment declines in agriculture, mining and wood products have occurred. At the same time, Minnesota has become a major contributor to new technology. For example, 3M and Honeywell, the two largest corporate employers in Minnesota, are not directly related to Minnesota's natural resources, but to technology.

Employment Changes

According to estimates of the Minnesota State Planning Agency, employment in Minnesota is expected to increase between 1970 and 1990 by about 39%, from 1.60 million to 2.23 million (Figure 3), a rate considerably faster than the state's expected population growth (16%) during that period. This difference is accounted for by a greater proportion of the state's population in the working ages in 1990 than in 1970 (75% as compared to 68%) and a higher rate of female labor force participation (51% as compared to 44%).

The largest employment increases in Minnesota are expected in the service industries, which include professional services (such as law, medicine, and education), business and repair services, personal services, recreation, and amusement. Between 1970 and 1990 nearly one-third of all new jobs in Minnesota are expected to be in the service sector. Above average employment growth is expected to occur in state and local government, wholesale and retail trade, and finance, insurance, and real estate. Below average growth is expected to occur in manufacturing (though accounting for about 14% of all new jobs in Minnesota between 1970 and 1990); mining; construction; transportation, communication and utilities; and federal government employment.

Employment in agriculture is expected to decline from 131,400 to 97,800 during this two-decade period. Changes in agricultural employment will be in part a response to market uncertainties, influenced by (1) U.S. policy on agricultural production and exports, (2) imports by foreign countries, and (3) the availability of water. The large farmer with more capital will be better able to deal with these market uncertainties than will the small farmer. A competitive advantage will probably remain with the large farm and result in continued farm consolidation and declines in farm employment. (See Pages 26-29).

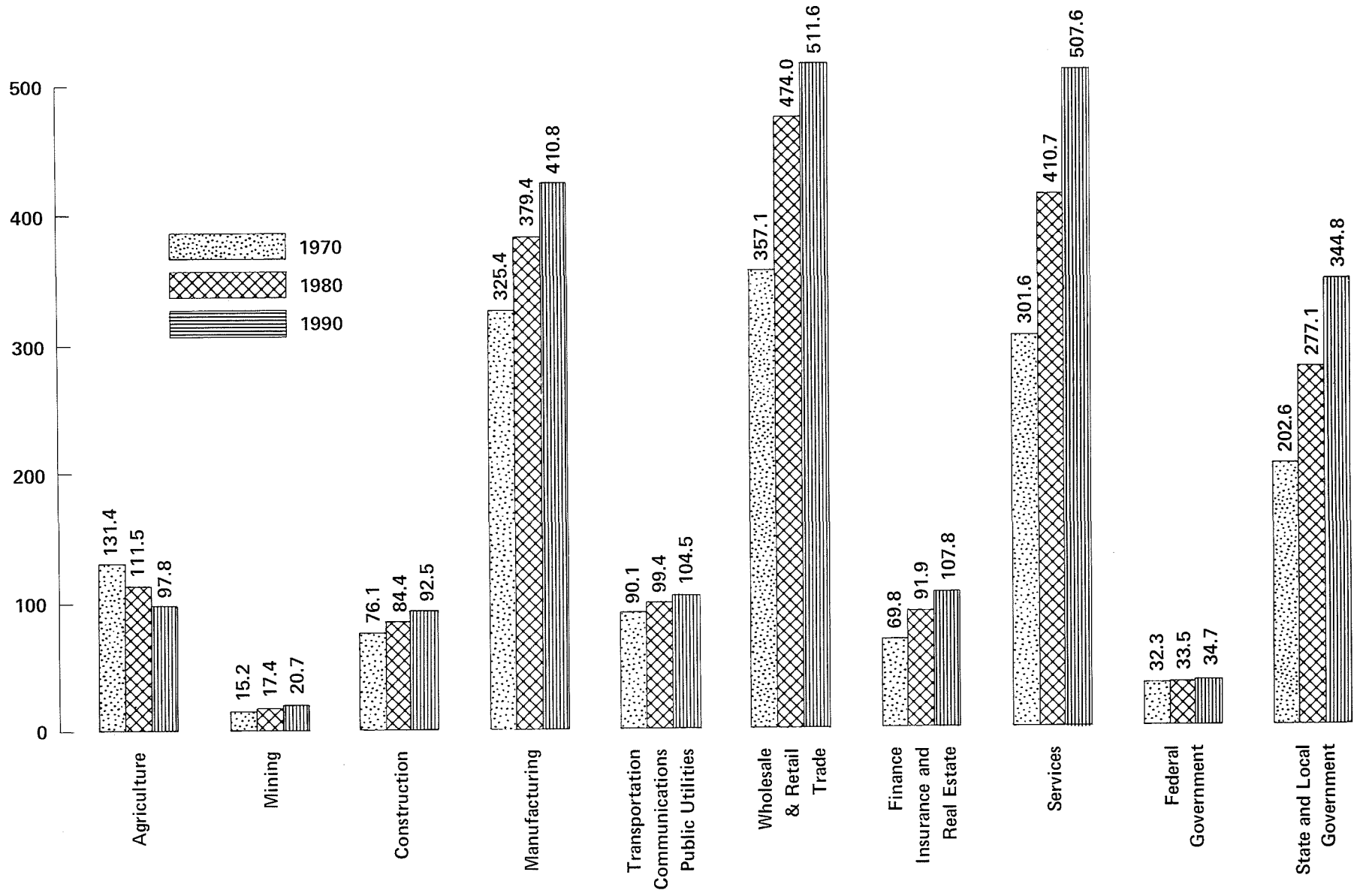
Iron mining, like agriculture, is vulnerable to international markets. The decisions of major steel companies to expand taconite operations in Minnesota have been based in part on judgments of future availability of iron ore from foreign sources. Factors outside Minnesota and beyond the control of the state have direct impacts on land use, resource utilization, housing, public services, utilities, and education. Despite this, the costs must be borne at the local or state level. During the summer of 1976, for example, construction employment for new taconite facilities reached a peak, resulting in acute pressure on the local housing stock in northeastern Minnesota.

Structural Comparisons

Major differences between Minnesota's employment structure and the national employment structure exist in the areas of manufacturing and agriculture. The proportion of Minnesota's labor force employed in manufacturing is slightly below national averages, while that in agriculture is above. Projections of the U.S. Department of Commerce, Bureau of Economic Analysis indicate that these differences between Minnesota's economic structure and the national economic structure are expected to narrow by 1990. Manufacturing employment in Minnesota has been growing at a greater rate than has national manufacturing employment; even so, the proportion of Minnesota's labor force engaged in manufacturing is expected to remain somewhat less than the national proportion. Agriculture, on the other hand, is expected to decline in number of employees in Minnesota but not as rapidly as in the nation overall. Expected employment changes reflect the fact that Minnesota's economic structure is becoming more diversified and more similar to the national economic structure. The development of a more diversified economic base means that Minnesota will be less susceptible to fluctuations in narrow segments of the national economy. A more diversified Minnesota economy also means that the state will be more directly affected by national and international economic conditions.

EMPLOYMENT IN MINNESOTA BY SECTOR, 1970 WITH PROJECTIONS TO 1980 AND 1990 (in thousands)

Figure 3



SOURCE: MINNESOTA STATE PLANNING AGENCY

Taxes

Minnesota income taxes are among the highest in the nation, a fact that is thought by some to inhibit business and industrial development in the state. There is little evidence from overall employment growth in Minnesota that this is the case. Taxes have not been a major item in the total operating costs of business and industry, falling well below other considerations such as labor, raw materials, and access to markets. The Minnesota Tax Study Commission concluded in 1973 that "generally speaking, state and local taxes are not a significant proportion of geographically variable costs and should not have much impact on location decisions between states."[1] In some areas, however, evidence suggests that taxes may be a factor in influencing a choice of sites among nearby alternatives, such as along the Minnesota-North Dakota border. The Minnesota Tax Study Committee report also states, however, that "unless very large tax concessions are made to an industry, it is unlikely that such incentives will have any impact on location decisions."

Distribution of Economic Activity

The geographic distribution of economic activity within Minnesota is changing. Those areas of the state — the southwest, west, and northwest — which are more dependent on agriculture, have had the greatest loss in population. Areas of the state where there has been a concentration of jobs in services and manufacturing, such as in and near the urban areas of eastern southeastern Minnesota, have experienced the greatest growth. In recent years, manufacturing has spread from the urban areas of eastern and southeastern Minnesota to other parts of the state. Many of these industries are labor intensive and, to hold down production expenses, tend to move away from the areas of high labor cost to areas where labor is in surplus, is equally productive, and less expensive.

Over the last decade, the rate of manufacturing expansion outside the Minneapolis-St. Paul area has been greater than that within; and this trend is expected to continue. (This is similar to the world-wide trend of labor intensive industry expanding in the nations with productive and low-cost labor.) The spread of manufacturing employment provides an opportunity for farm families to supplement their incomes with nonagricultural employment, thus stabilizing year-round earnings, increasing the number of wage earners in a family, and reducing the pressure to consolidate small and medium-sized farms. Much of the manufacturing expansion in Minnesota is occurring in the already dominant trade centers (over about 5,000 population) and contributes to their growth and influence.

Most small businesses expand where established, but as factors change, they may be required to move in order to survive. The principal considerations in the location of a business or industry are the supply of its raw materials, the location of its market, the access to those materials and market, and the availability of productive and skilled labor at a competitive price. The availability and cost of energy will become increasingly important considerations in the location of business and industry. What these effects will be on Minnesota in relation to other states are not known at this time (See Pages 18-21).

Income

The Bureau of Economic Analysis projects Minnesota's real per capita income to increase, from $3,426 in 1971 to an estimated $6,200 by 1990, which will then be higher than the national average. The largest growth in total income in Minnesota is expected in professional services, accounting for about 18% of all earnings growth in Minnesota between 1971 and 1990. This is followed by wholesale and retail trade (15%), state and local government (14%), and machinery manufacturing, including electrical (10%).

Twin Cities metropolitan area income has been about 20% above the state average and nonmetropolitan income about 20% below. Grain exports and high agricultural prices in 1973 temporarily closed this gap, but whether or not this suggests a long-term trend toward urban-rural income equity is uncertain. Moreover, these income differences may not be an accurate reflection of the comparative standards of living or quality of life.

The 1970 census indicates that in 1969 about one in every ten Minnesotans lived on incomes below the poverty level as defined by the Social Security Administration. Indications are that this situation is not improving; attempts to provide a minimum living standard over the last two decades have had marginal effects. For example, Minnesota income tax returns for 1973 indicate that the lowest fifth of the income scale received only 2% of Minnesota's gross income, essentially the same proportion as ten years earlier. Correspondingly, the share of income going to the top fifth of the income scale decreased only slightly from 52% to 46% in the same period. Average income, however, increased by about 75% during this period. Poverty, in effect, has been reduced primarily through economic expansion, and not fundamental changes in the distribution of income. Furthermore, public policies tend to balance each other out: outright grants to the poor, taken by themselves, have eased hardships, but tax laws, public policies, or administrative rules may have reinforced inequality. Thus, income redistribution efforts in Minnesota, as well as in the nation, have not had much real effect in reducing poverty.

Unemployment

The level of unemployment in Minnesota has been consistently below national unemployment levels, an indication of a relatively healthy, diversified and expanding state economy. Unemployment in the Twin Cities metropolitan area is somewhat lower than the unemployment levels in outstate Minnesota. It should be kept in mind, however, that measures of unemployment are based on the demand for jobs; that is, a person is not considered to be unemployed unless he is recorded as seeking employment. The figures disguise the fact that a lower proportion of people in rural Minnesota are seeking jobs, because the number of opportunities is less. Furthermore, the data do not take into account differences in underemployment throughout the state, particularly in part-time employment or where job demands may not require full-time attention (as in the case in agriculture). Data do not take into account a marginally efficient agricultural operation, where labor inputs in relation to income may be extremely high and the operator "underpaid" for this time spent. Better measurements are clearly needed to measure the productivity of Minnesota's labor force.

Labor Force

The labor force consists of those persons who are working or desire to work; that is, both the employed population and the registered unemployed population. Changes in the labor force are primarily a function of population structure, but labor force participation rates are changing as well.

Rates of female labor force participation have increased rapidly over the past three decades. Among the factors contributing to this trend are:

1. The egalitarian movement, with women seeking careers outside the home more frequently than in the past;
2. The increasing cost of living, which more and more requires a second wage earner in the family;
3. The greater availability and use of labor-saving home appliances such as dishwashers and microwave ovens;
4. Reduced family size as a result of low birth rates;
5. The trend toward postponement of marriage; and
6. An increasing number of single-parent households.

The result is that women are a larger part of the labor force than ever before, both before and after having children. While female participation in the labor force is going up rapidly, male participation rates are declining slightly, particularly in the youngest and oldest age groups, where there is less economic responsibility. Overall the proportion of the population seeking jobs has been increasing and probably will continue to increase.

The major population characteristic now affecting the labor force is the baby boom that took place in the fifties, reaching its peak in Minnesota in 1959. People born during that period presently are entering the labor market and competing for jobs. After 1980 the labor force will grow less rapidly as the fewer people born in the 1960s reach labor market age. As this bulge in the labor force becomes older, it will result in an increasingly experienced labor force. Relatively fewer younger persons entering the labor force will reduce problems of youth unemployment. Greater adaptability of an older labor force will be needed to meet changes in the employment structure, whereas past labor force adaptability has depended on entry of the young. Adaptability in the future may require a retraining of older workers and likewise will require better information and anticipation of future labor market changes.

Role of Entrepreneurship

Much of Minnesota's lifestyle in the future, as in the past, will be related to its economic growth and to the ability of individuals to foresee and take advantage of economic opportunities. New means of production, new methods of organization, new products replacing the old, and new ideas, all of which require creative entrepreneurship, are the basis for economic development.

Jobs do not just happen; they are created by individuals who employ themselves and others. There are at present about 55,000 job-creating organizations (not including farms) in Minnesota. In each case someone started it, built it, and fashioned its management. An initial concept was required, as well as a number of difficult and risky decisions, followed by actions concerning finance, personnel, production, sales, and research. This is true not only for all of the private firms, but also in varying degrees for Minnesota's public services, including education, transportation, utilities, and health.

In Minnesota, there may be a greater dependence on entrepreneurship to create local jobs than in other parts of the United States. This region lacks important resources of energy. Geographically, it is on the outer edge of the national market, and it does not have a concentration of low-priced labor. The vast majority of jobs in Minnesota has been organized by Minnesotans. In fact Minnesota enterprise is not only responsible for creating virtually all jobs within the state, but it also contributes more to creating jobs for the nation as a whole than might be expected on the basis of its population.

Minnesota's entrepreneurship explains much of the state's economic growth. The importance of initiatives by individuals has been a continuous phenomenon since the mid-nineteenth century. Seven of the nation's 500 largest corporations were Minnesota-based in 1960, and all of them were homegrown. By 1974 this number had grown to thirteen; all but one were

originally established in Minnesota by Minnesotans. The Twin Cities area is fifteenth in population but eighth among the nation's metropolitan areas in the number of $10 million corporations and second only to Boston in the number of such corporations per capita (among metropolitan areas of a million population or more). Minnesota entrepreneurship has also been very important in the growth of small and medium-sized firms throughout the state.

The conditions in Minnesota that gave rise to the development of entrepreneurial talent seem to be a unique blend of the physical, cultural, and political environments, resulting from and influenced by the pattern of settlement, community values, open society, an orientation toward problem solving, and a willingness to experiment and change. Whatever the combination of characteristics, it provides a basic resource for dealing with future issues. It should be a major goal of the state to monitor, understand, and enhance the environment that supports this development of human creativity and has contributed so remarkably to the quality of life in Minnesota.

Capital Requirements

Future lifestyle adjustments in Minnesota will require substantial capital investments. For example, it is estimated that by the year 2000 at least $10 billion might be needed in Minnesota to plan and develop alternative energy systems, replacing those based on petroleum and natural gas. Accelerating rates of change and overall growth in population and economic development will require more substantial capital investments. The rate of change also requires greater lead time to anticipate and provide for future needs.

At the same time, capital shortages have become more severe. The reason for this, according to some economists, has been an overemphasis on current consumption and not enough emphasis on investment in economic expansion and new technology.

Potential capital investment needs in the near future may include:

1. Developing nonfossil fuel energy systems;
2. Converting water-borne sewage disposal systems to dry sewage systems;
3. Converting personal transportation systems to public transportation systems;
4. Developing home communications systems that substitute for personal travel; and
5. Replacing and/or rehabilitating the present housing stock.

Such needs would require massive capital investments, some of which may not be attractive to or feasible for the private sector. State government affects the capacity of the private sector to raise capital and to make investments, directly through tax policies and indirectly through regulatory policies. The need for large scale capital accumulation and investment in the future may require greater cooperation between public and private sectors through investment incentives and joint financing.

VALUES

Values are implicit in all aspects of life; they are woven into thought, behavior, and language and play a decisive role in human motivation. In spite of the fundamental importance of values in our lives, we are uncertain about the conditions that influence them. Throughout most of history, values changed so slowly that the changes were hardly perceived. Today, in contrast, values are being tested severly and frequently; major value changes are taking place within the span of a single lifetime. These changes raise serious questions for today's decision-makers. In politics, education, science, and technology, decisions are being made that will influence lives for the remainder of this century and beyond. Which values should be served by these decisions?

Values range from individual to global in orientation. Examples of self-oriented values include the right to life, liberty and the pursuit of happiness, the right to physical and mental well-being, the right of self-determination, the right of privacy, and the rights of property ownership. Community and society-oriented values include good citizenship, personal responsibility, equality of opportunity, justice and order, peace, human dignity, and concern for the environment.

Rights and Responsibilities

With growing interdependence, the actions of individuals could impinge increasingly on the well-being of others. Consequently, government's responsibility to protect community values increases, which might bring limits on certain personal choices. Some are troubled by this prospect, seeing growth in government as an encroachment on personal freedom and the right of self-determination.

Some personal activities could be limited in the future, but the possibilities for personal growth and development can outweigh the limitations that may be imposed. For example, there might be a greater range of opportunities for individuals to realize better health, expand their knowledge, and have new experiences. But there also need to be limitations on individual behavior where the well-being of others is threatened or endangered. The freedom of individuals must be defined within the context of the community and the structure and regulations of the community should aim to benefit the individuals within it. Freedom thereby carries with it the responsibility to contribute to community order and development.

Values of Minnesotans

Minnesota is a state community that has believed strongly in individual enterprise, self-determination, and land ownership and in institutions that support those values, including the family, neighborhood, and community. Personal decisions reflect the value placed on water, forest, and low-density urban and rural settlements. At the same time, Minnesota has been a vigorous national leader in social values and human resource development, including health, education and welfare, egalitarian and environmental movements.

The origin of Minnesota's strong individual, social, and ecological values can be found in the attitudes of the state's early settlers. The high regard for citizen participation in government and the attitude that government is a legitimate means for public decision-making came largely from the first settlers from New England who brought with them their town meeting traditions. This foundation was reinforced by immigrant groups who brought with them personal ambition, a high regard for education, and cooperative endeavors.

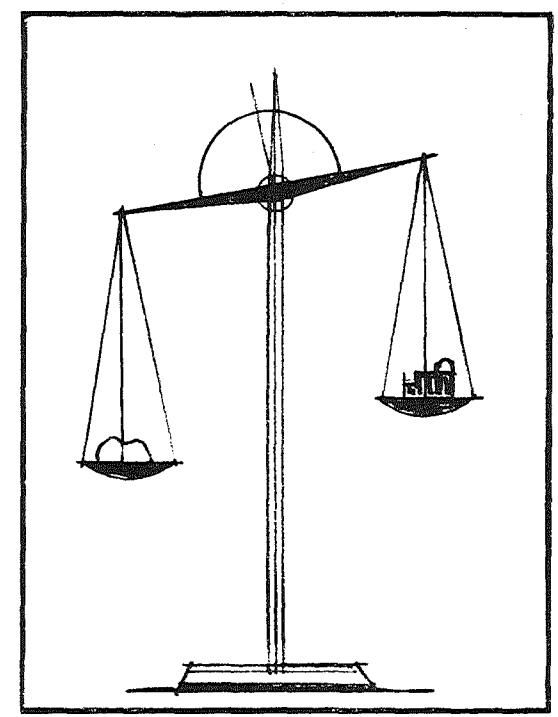
The tradition of citizen involvement emerges in many neighborhood and community organizations and ad hoc, issue-related groups that engage in open discussion of public issues. In this way the inherent tensions between individual values, social values, and ecological values seem to be held in balance in Minnesota.

Values in Decision Making

If values and value changes in society are not understood and taken into account, decisions intended to influence behavior, such as those made by government, may have little or no effect. For example, effectively influencing the distribution of population in Minnesota requires an understanding of the factors that motivate individuals to live where and how they do. Furthermore, it may be that the limited effectiveness of current planning methods results from a failure to take into account the reasons for individual motivations and preferences. Plans tend to impose values of the past or the values of particular individuals, rather than beginning with the values of persons affected. Most planning has focused on physically attainable achievements — such as highways — without explicitly articulating the values upon which such proposals are based and the values that may be affected. Recent debates over freeway locations and design in the Twin Cities, and the means of highway financing, are examples.

What appears to be public apathy or antagonism may be a response to the failure of public policy makers to understand and adequately take account of community-held values. Resolution of public issues in the future will increasingly require sensitivity to value conflicts, which in turn requires objective and credible information and open, nonthreatening discussion.

No satisfactory process for dealing with value conflicts exists. Individuals are neither accustomed nor prepared to discuss values openly. In public schools, for example, the discussion of values has usually been avoided, and students have not been encouraged to examine their personal goals, to discuss these matters candidly with others, and to search out the contradictions in their own beliefs. It is not surprising that society has difficulty articulating and discussing its long-term goals.



The importance Minnesotans place on environmental amenities, low density living, family and community loyalties, an open society, public education, and civic involvement will be important strengths for dealing with conflicts among individual, societal, and environmental values. Processes of citizen involvement in decision-making should consciously build on those strengths.

Dealing with Value Conflicts

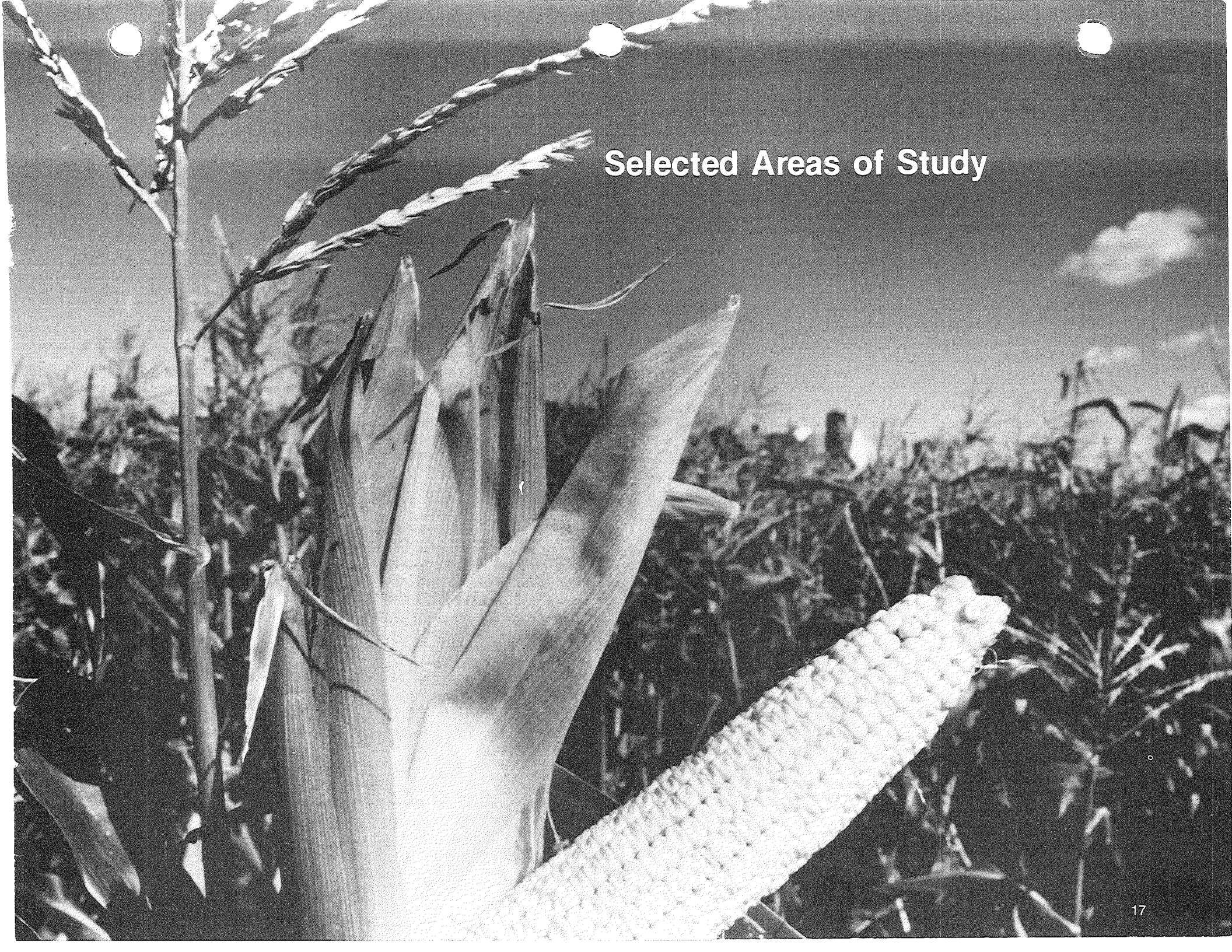
Over the next ten to 15 years, the most critical issues facing Minnesota will be related to energy. Beyond this is the more difficult issue of land use. Both are, in effect, subsets of the larger issue of who should have access to resources. The question of how land should be used and who

decides this will place the individual values of self-determination, land ownership, and privacy in conflict with the societal values of equality of opportunity, equality in the distribution of physical and material resources, human resource development, and the environment. These conflicts could produce serious disruptions; recent power line disputes in west central Minnesota might be a hint of what is to come.

Minnesota's tradition of relatively open discussion of public issues is, by itself, no guarantee that objective and productive discussion of values will take place or that problems will be solved. Any worthwhile discussion of public values must include the following:

1. Accurate, objective, and credible information that is widely available;
2. Individuals who are willing to risk putting their values to test;
3. Improved government methods for engaging the public in meaningful discussion; and
4. Establishing the role of government as *facilitator,* rather than as *advocate*. (See Pages 58-62)

In the years ahead, Minnesota will see more conflicts over values. The state community has much to gain if it can retain and build on its traditions of citizen awareness and involvement and if the values that underlie individual, corporate, and public decisions are clearly and openly stated. Without open discussion of value conflicts, resolving current issues will be difficult, slow, and costly; and the chance of anticipating emerging issues will be lessened.



Selected Areas of Study

SELECTED AREAS OF STUDY

Minnesota's lifestyle depends (as does the nation's) on cheap, abundant energy. But inexpensive, plentiful energy supplies are coming to an end as reserves of natural gas and petroleum dwindle and the cost of all forms of energy rises. As the American economy attempts to adjust from fossil fuel dependency over the next two decades, rapid increases in fuel costs will be reflected in transportation and heating costs and indirectly in many other areas, including food, clothing, shelter, health services, education, and government. The use of land, water, and minerals to sustain material standards of living will be increasingly questioned. These conditions will force adjustments in Minnesota lifestyles and could produce hardships for many individuals and organizations.

Eight areas that reflect these changing conditions in the state are reviewed in this section of the report. The Commission's investigation of these areas includes the publication of individual reports on post-secondary education, health, and housing; a separately prepared report on energy; an unpublished report on elementary-secondary education; extensive committee work on agriculture; and the assembly of a variety of sources of information on transportation, land use, and the environment. Recommendations, when they have been adopted by the Commission, follow each subject. These recommendations, which range from general to specific, are presented as policy suggestions for consideration by the governor and the legislature. No attempt has been made to set priorities among them.

Many subjects important to Minnesota's future are not included in this report. Among them: crime, welfare, culture and the arts, recreation, and small business. The eight subjects selected were not intended to deal with every aspect of Minnesota's future, but to establish a foundation upon which broad and holistic findings and recommendations could be developed.

ENERGY

Prices of gasoline, heating oil, natural gas and electricity have increased markedly over the last three years. Sources for these products are being depleted, giving rise to shortages and increasing costs, signalling the end of the fossil fuel age. Minnesota depends heavily on petroleum products and natural gas; they account for about 44% and 30% respectively of Minnesota's total energy use. Based on current levels of consumption, the United States has about an 11 year supply of natural gas and a six-year supply of petroleum, which causes increasing dependence on foreign sources. Foreign supplies, too, are limited, and their future availability is questionable. Reserves may be extended by new discoveries, but new reserves are not likely to make a significant difference in the general trend. The availability of other domestic fossil fuels, such as oil shale, peat, and particularly coal, will help to extend the supply of fossil fuel and may ease the transition to other forms of energy.

Petroleum

Petroleum imports to the United States are increasing and now account for more than 40% of all domestic consumption. Minnesota secures more than half its petroleum from the Canadian province of Alberta. Canada's petroleum supplies are limited, however, and exports to the United States mean earlier depletion of Canadian supplies and dependence on uncertain foreign sources. Therefore, Canada will phase out its deliveries of crude oil to the United States by the early 1980s. Minnesota's petroleum refineries, almost entirely dependent on Canadian sources, are attempting to secure alternate supplies. The development of a Pacific port with connecting pipelines to bring Alaska and/or foreign oil to Minnesota and eastern states is being considered. One proposal calls for the development of port facilities at Kitimat, British Columbia, with a pipeline to connect with the present pipeline near Edmonton, Alberta, which presently serves Minnesota. An alternate proposal calls for the development of port facilities on Puget Sound with a pipeline constructed across the northern states. The extension of a pipeline to bring crude petroleum or petroleum products to Minnesota from the Gulf Coast is another possibility.

Natural Gas

More than 90% of Minnesota's natural gas is supplied by a single company from fields in Texas, New Mexico, Oklahoma, Kansas, and Montana. The state's largest natural gas supplier expects supplies to be reduced by about 5% per year for the foreseeable future. Natural gas already is nearly phased out as a fuel for electric power plants in Minnesota. Supplies of natural gas for large-volume industrial customers will be increasingly curtailed. In addition, the supply of natural gas to Minnesota's taconite industry, which uses about 10% of the state total, is now being curtailed. The possibility of emergency shortages during a period of prolonged cold makes a mandatory natural gas allocation plan necessary. It is likely that prices of natural gas from new wells will be deregulated by the federal government. The resulting price incentive for producers is expected to result in some increase in natural gas reserves.

Coal

Coal is expected to be the most rapidly growing source of fuel for Minnesota in the near future. Increasing demand for electricity will be met largely by burning coal, at least over the next ten to fifteen years. A problem in producing electricity, however, is that about two-thirds of the energy in the coal (or any other fuel) is wasted in lost heat. In addition to

normal growth, electricity demands will be accelerated as electricity replaces natural gas and oil. Coal may also be used directly as a replacement for natural gas in the taconite industry. Most of the coal will be delivered to Minnesota by train from mines in Montana, North Dakota, and Wyoming. The Minnesota Energy Agency estimates that the amount of coal used in Minnesota will triple by 1985, increasing from about 9 million to 29 million tons annually.

Nuclear Energy

The two nuclear fuel generating plants in Minnesota produced about 37% of the state's total electricity in 1975. Today's nuclear fission power plants use uranium fuel whose known supplies are estimated to be ample to support existing nuclear fission plants, and those planned nationally for construction in the next 30 years, for their operating lifetimes (30 to 40 years).

Breeder reactor plants also use nuclear fuels to generate electricity but in the process produce more fissionable materials than they consume, thus extending the nuclear fuel supply. The development of the breeder reactor in the U.S. and greater use of nuclear fission plants have been slowed for a variety of reasons, including concerns about health and safety, environmental protection, security of nuclear materials, and high capital costs. These matters must be resolved before the future of nuclear power in the U.S. can be forecast with any reasonable accuracy.

Solar Energy

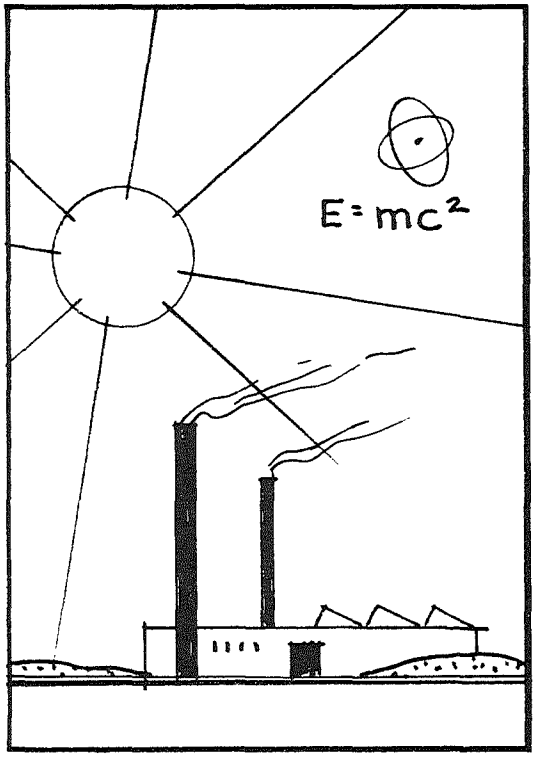
Solar energy may hold the greatest promise for Minnesota to meet future energy needs. Some solar energy equipment is now available for heating and cooling homes and buildings and for heating water, but initial equipment costs are at present, relatively high. Research and development is currently under way, but full-scale development of solar energy is not likely to be realized in the near future. Accelerated development of solar heating and cooling technology is needed at the federal level, coupled with a program in Minnesota to encourage experimental solar installations.

Peat

Peat, an immature form of coal with a high moisture content, is Minnesota's only native fossil fuel and may well be an energy source of the future. Peat may be burned as a fuel to produce electricity in conventional power plants, as is done in European countries, or it may be converted into synthetic gas to replace natural gas. An investigation into the latter possibility is now underway in the state. The potential impacts of peat development on surface and subsurface drainage patterns may be substantial but are not yet clearly known. Minnesota has about seven million acres of peat land, about half the total in the contiguous United States.

Other Alternatives

Hydroelectric power now meets about 3% of Minnesota's total energy needs. The expansion of hydroelectric capacity is limited by the number of sites available in Minnesota and the U.S. Canadian hydroelectric sources, however, may be able to meet up to 5% of Minnesota's electricity needs during the summer months.



New technological developments may enhance *oil and gas recovery* techniques and extend the supply of those fuels. Such new recovery techniques are expensive, however. Efficient extraction of hydrocarbon products from *oil shale* depends on several factors, among them economics, adequate water supplies, and environmental considerations. *Coal gasification and liquefaction* may make major contributions to energy supplies by the year 2000.

The Minnesota Energy Agency estimates that nearly 3% of the state's annual energy requirements could be met if energy from *refuse* from all communities in the state could be harnessed. *Warm water* from electric power plant condensers could be piped to nearby consumers for heating,

as is done in some European countries. *Animal wastes* are a potential source of energy. The commercial feasibility of producing methane gas from cattle manure has been demonstrated, but a major hurdle is developing a system for collecting the waste. Converting *wind energy* to electric power can supplement existing power supplies. *Agricultural field residues,* forest litter, and wood waste, which can be burned directly or used to produce alcohol, methane, or other fuels, are possible energy sources. Extracting heat from geological formations and converting it to electric power and other uses is another source of energy, but it is limited to those areas of the United States where *geothermal sources* are relatively close to the surface. The process of *nuclear fusion,* in which the nuclei of hydrogen are fused to form helium and the resulting liberated energy is harnessed to produce electric power, is a possible "inexhaustible" source of energy. However, tremendously high temperatures are necessary to sustain a fusion reaction that will produce large amounts of energy. Still a question, though, is whether nuclear fusion is technically feasible on a large scale; its commercial application, if possible at all, is at least 40 to 60 years away.

Prospects — Short Term

Between now and 1985 is an extremely critical time for Minnesota because of natural gas curtailment and the phasing out of Canadian crude oil. Prices of oil products may double every seven years, while natural gas prices may increase even faster. This will put particular strain on low- and middle-income consumers. However, such strain could be offset by legislative actions that support home insulation programs or provide tax rebates for various energy conserving measures.

The long lead time required to design and construct new energy facilities makes it difficult to increase supplies significantly in the next ten years. As a result, people will be required to make some major adjustments in their patterns of consumption.

A major and sustained conservation effort beginning immediately is required by all residences, businesses, and industries in the state. Building codes and standards should be amended to encourage conservation and the use of energy alternatives. Development of a state "energy budget" may also be required. Public lack of awareness or disbelief that an energy problem exists could impede conservation efforts and other steps necessary to avert a crisis. Minnesotans must be provided with accurate and credible energy information in order to have a clear understanding of the problems and options available to them.

The federal government will greatly infuence energy policy and energy supplies by determining: how oil and natural gas prices are set, fuel allocations to states and refineries, foreign policy that may affect petroleum imports, legislation affecting strip mining, and use of nuclear fuels. Funds for solar, breeder reactor, fusion, and other forms of energy research will come for the most part from federal sources.

Prospects — Long Term

Based on present knowledge, the two leading prospects to replace fossil fuels are solar energy and some form of nuclear energy. The use of solar energy to heat and cool homes and commercial buildings will increase as solar equipment becomes more available and less expensive. Central solar stations for large scale generation of electricity may play a role, but much technical work remains to be done to overcome economic and environmental obstacles to such facilities.

Breeder reactors are being built in Europe today for large scale production of electricity and may make some contribution to U.S. electricity production before the year 2000 if development questions can be resolved. Beyond the year 2000, fusion may offer a limitless supply of energy, but the question of whether man can harness fusion to produce large amounts of electricity over a long period of time remains unanswered.

Recommendations

Minnesota should develop a state energy policy consisting of actions that individuals, local governments, and state government can take unilaterally, independent of the federal government or others outside Minnesota. Coupled with these actions should be efforts by state government, Minnesota congressmen, senators, business people, and voters to influence federal policy and action.

The state of Minnesota should:

1. Implement a strong energy conservation program;
2. Establish an energy allocation program for emergency use;
3. Establish a state financed or state subsidized building insulation program;
4. Study the effects of energy cost and availability on patterns of settlement;
5. Study the possible effects of energy price changes on customer use and the Minnesota economy;
6. Develop a state water use policy that takes account of energy production requirements;
7. Encourage both large and small scale solar energy installations in the state;
8. Encourage use of energy alternatives by Minnesotans, as through revision of building codes;
9. Develop a state position on future nuclear power plants in Minnesota;
10. Encourage a peat gasification demonstration project in the state;

11. Investigate the concept of district heating — the use of power plants in cities — to supply both electricity and warm water for heating;
12. Encourage construction of new pipeline capacity to supply petroleum products and/or crude oil to Minnesota;
13. Improve the siting and licensing processes for new energy facilities;
14. Encourage separation of train and vehicle crossings at critical points along western rail routes to minimize traffic tie-ups caused by coal trains;
15. Expand energy data for the state and coordinate energy forecasting assumptions and techniques among the state's energy suppliers; and
16. Expand programs to educate and inform the public about energy.

Minnesota should attempt to influence federal energy policy by:

1. Encouraging the procurement of Alaskan natural gas for Minnesota;
2. Evaluating and encouraging adoption of the best oil pipeline route to bring Alaskan and foreign oil from the Pacific Coast to Minnesota and the Upper Midwest;
3. Encouraging adequate funding for an accelerated, major solar energy research and development program; and
4. Encouraging more Energy Research and Development Administration research into other energy alternatives.

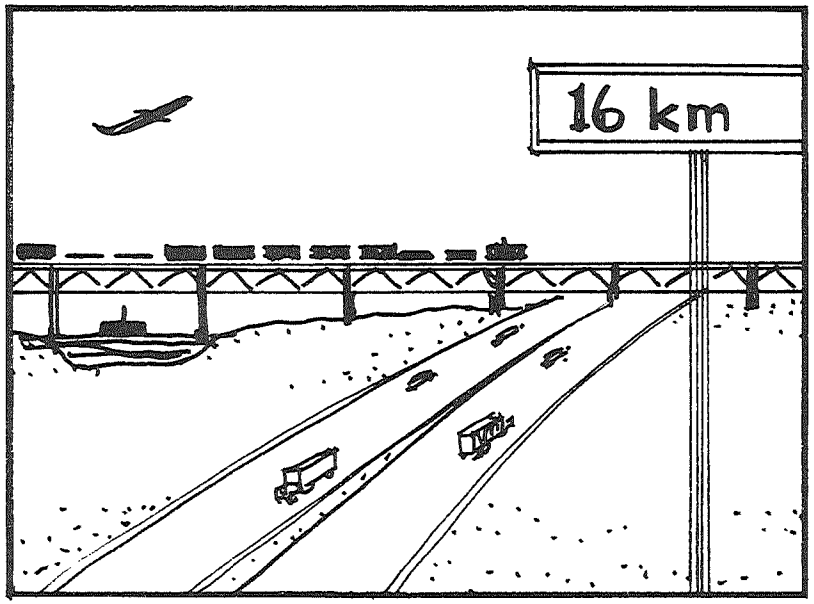
TRANSPORTATION

Transportation fulfills the essential function of moving people and goods from one location to another. Transportation contributes to the quality of life by facilitating interaction among people and improving access to employment opportunities. At the same time, transportation affects the environment: it is a major determinant of land use, contributes to noise, air, and water contamination, and is a cause of physical injury and premature death. Transportation policies have contributed greatly toward changes in settlement patterns in Minnesota over the past three decades. Extensive highway construction has reduced travel time, which, along with the availability of cheap energy and greater personal income, has contributed to the dispersal of population and housing across Minnesota's rural landscape.

Situation

The location of population and employment in Minnesota has been determined, in large measure, by the places that are well-suited for economic development. The growth potential of a location is greatly influenced by its access to markets, raw materials, and labor, and that access is provided by transportation and communication systems. Major urban areas are situated at important points where water, rail, and highway systems come together. These transportation systems, which also include airways, pipelines, public transit, bicycles, and pedestrians, are part of local, national, and international networks that move goods and people. All of these modes make up an interdependent, though not necessarily well-coordinated, system.

Historically, the size, shape, and density of human settlement have been determined by access as measured by travel time. For example, when getting around was done mostly by foot, the convenient distance from where one lived to where one worked or shopped was a mile or two; thus, urban development was restricted to an area of a few square miles. The occurrence of small towns in rural Minnesota in the nineteenth century was based on the distance that could be traveled in one day, and that pattern of small town distribution remains. In the past one could travel only a few miles by horse and buggy in a day, but now one can drive the



entire length of the state. The automobile, available to nearly everyone, has brought about the concentration of trade and services in regional centers across the state (which has threatened the viability of many small towns); it has allowed development to spread acorss the countryside; and it has brought a greater interdependence between urban and rural areas.

Improved transportation and greater affluence have enabled an increasing number of Minnesota residents to live in an environment of their choice. Recent settlement shifts in Minnesota may be seen partly as aggregate expressions of individual desires and partly as the results of public policy. Transportation policy has been a major factor in shaping Minnesota's landscape.

The construction of highways and a variety of other public policies have promoted automobile use. Costs of the present Minnesota highway system, paid for by the automobile users through state gasoline taxes, are increasing at a rate of about 10% each year. By 1978, operation and maintenance costs are expected to absorb all monies collected by the present nine cent per gallon state gasoline tax, leaving nothing available for new highway construction. Sustaining current levels of maintenance and operation will require an additional one cent per gallon gasoline tax each year after 1978. Any expenditures on new highway construction must be in addition to that amount.

A variety of other public policies have supported and subsidized automobile use:

1. Automobiles are generally able to park on residential streets without charge. Yet most of those streets, which are maintained by local property taxes, were intended for vehicle movement and access to private property, rather than storage;
2. Most urban road services and maintenance are paid out of local property taxes, thus exempting from tax many of the people who use them; and
3. Automobile users do not pay the full costs of air pollution, accidents, and other environmental damage for which they are responsible.

Railroads

Highway improvements over the past two decades have attracted freight and passenger movements from the railroads. Where railroads in the early years of Minnesota nearly monopolized intercity transportation and extensively determined the way the land was settled, they are now in direct competition with highway and air transportation. Reasons for the decline of the railroad industry include problems of management, governmental regulations, and competition with trucks for commodity movements. As a result of financial pressures in recent years, many railroad companies have discontinued routine maintenance of many unprofitable lines and subsequently proposed to the Interstate Commerce Commission that little-used branch lines be abandoned.

When a rail line is abandoned (*defacto* or officially), traffic that was carried on that line either switches to highway transportation or stops altogether. However, portions of the highway system affected by such abandonments may not be able to handle heavy truck traffic. Present highway funds are not adequate to increase the carrying capacity of all such roads to the minimum of nine tons per axle needed to handle heavy trucks. The cost of upgrading the highway system to meet all deficiencies was estimated at $4.1 billion in 1975, about 20% of which could be provided through revenues from gasoline and vehicle registration taxes at current levels.

Generally commodity movements by rail are more energy efficient than by truck, except when the volume of freight traffic is low or when the distance is less than about 150 miles. This underscores the need for an integrated rail/highway transportation system. It is likely that increasing costs of energy will result in increased long-haul commodity shipments by rail, which will increase profits on main line routes. Abandonment of some selected branch lines is not likely to have a detrimental effect on overall movements of commodities in the state. However, as rail branch line use is discontinued, it would be desirable to retain the rights of way for alternative uses (such as trails) and potential alternative modes of transportation. Reassembling such linear land parcels in the future, if needed, would be difficult and costly.

Other Modes

Water transportation provides an important and efficient means of shipping bulk commodities, including taconite, wheat, corn and soybeans from Minnesota; and coal, fertilizers and petroleum products to Minnesota. While highways, railways and waterways have been particularly influential in determining where growth occurs, the location of airports also influences the growth of communities and will continue to do so as commercial and private aviation increase. Pipelines are important as elements of an integrated transportation system, but are secondary in their impacts on overall state growth and development.

Prospects

It is of great importance that transportation decisions, such as highway construction or railroad abandonment which can have very long term effects, take into account the effects of such decisions on other modes of transportation, on the use of energy, on patterns of land use, and on the environment. Transportation should be treated as a means to achieve broader objectives, not as an end in itself.

The increasing costs of personal transportation may exceed increases in personal income. But the automobile, as a means of personal mobility and an expression of lifestyle, will not likely be given up easily. Individuals will probably be willing to make sacrifices to retain personal mobility. Because of these desires, technology will focus its attention on developing alternatives to the internal combustion engine, and personal transportation in some form will likely continue to be important throughout the foreseeable future.

The U.S. transportation system is energy intensive (approximately 90% dependent upon petroleum products) and accounts for more than half the nation's petroleum consumption. In the next fifteen years, there will be rapid increases in the cost and a marked reduction in the availability of petroleum and natural gas, and economic activities dependent upon them

will require adjustments. Many current land use and transportation-dependent decisions are being made on the assumption of continued cheap energy and dominance of personal transportation. Assuming a normal lifespan for investments in highways, homes, businesses, and public buildings to be 50 to 100 years or more, a costly and energy-inefficient settlement pattern has been established that will influence personal, corporate, and public decisions for years to come.

Alternatives

Some transportation problems may be resolved with nontransportation solutions, as for example through the development of convenient communities that meet the full range of daily human needs. Much can be learned from the growing number of planned cities in the world as to how existing cities might be redesigned to create more satisfactory living environments and greater transportation efficiency. This could include a rearrangement of housing and services in neighborhoods to make them free of traffic and to make housing accessible to jobs, services, and recreation (as attempted in Minneapolis' Cedar-Riverside Development). Mobility is one way of making things accessible, but accessibility can also be achieved by relocating and rearranging things. Clustered shopping, recreation, and employment opportunities easily accessible to pedestrians and public transit provide a more future-responsive arrangement than "a planless settlement system that uses transportation to compensate for disorder."[2] This option would not discriminate against automobiles as such but provide greater convenience and would be less costly and less energy intensive.

Another option lies in increased use of public transportation. Twenty urban areas in Minnesota now have transit systems, each of which receives some public subsidy. For the most part, public transit routes serving Minnesota's cities do not serve densities high enough to support high usage levels. Points of origin and destination are widely dispersed, rather than concentrated as high-volume transit systems require. Even to major areas of concentration in downtown Minneapolis and downtown St. Paul, the proportion of transit trips to all trips is one in five and one in ten respectively.

Improvements in public transportation tend to displace automobile passengers, with little or no effect on drivers and the number of automobile trips. Subsidies to public transportation, thus, do not replace other transportation costs. In reality, subsidies for transit may compete with other public investment needs, such as health, education, housing, or general maintenance and improvement of the street and road system.

Assessing the value of public transit requires extending the analysis beyond transportation to the settlement system as a whole. Public investment in transportation should be weighed against the comparative costs and benefits of alternative settlement arrangements for the state. In other words, public transportation must be related to the state's overall management goals, not just those interests served by transit.

A third alternative is to develop home communications systems (including videophones and computer terminals) that give people accessibility to many of the services that now require personal transportation. These may include business, certain retail purchases, education, health care, entertainment, and many personal communications. The net result of greater emphasis on communications technology as a transportation substitute may be an acceleration of settlement dispersal, allowing people living in remote locations to have a range of choices in culture and services.

One observer has commented that the coming revolution in communications may have a greater impact on the settlement system over the next two decades than FHA loans and highway development have had over the last two decades.[3] This may result in a kind of regional city envisioned by Lewis Mumford: a continuously spreading, low density urban development broken into units of manageable size, convenient to daily necessities and with intervening open space for recreation and agriculture. With improved communication to any location in the state, both rural dispersal and urban thinning may accelerate, resulting in more open space in the densely settled areas. Improved communications may make it possible to bring rural benefits to urban living and urban benefits to rural living. In this way, improved communications can help bring about the development of a closer statewide community.

Recommendations

Following are recommendations adopted by the Commission:

The state of Minnesota should:

1. Require zoning authorities to consider the transportation implications of zoning proposals so that the future placement of housing, businesses, shopping centers and industry will not complicate development of public transit systems or induce costly patterns of personal transportation;
2. Encourage more intensive use of existing public transportation and multiple automobile ridership;
3. Require the state Department of Transportation to continue monitoring decisions of other agencies that have transportation implications and to provide those agencies with an evaluation of the transportation implications of their actions;
4. Establish a system of incentives, including taxes, to encourage the use of energy efficient vehicles;
5. Encourage further development of bicycle pathways and modification of traffic patterns and regulations so as to increase safety for users of such pathways;

6. Evaluate the potential for home communications systems to reduce transportation needs;
7. Consider public ownership and maintenance of rail rights-of-way and trackage, with leasing for use to private carriers;
8. Encourage grade separation of train and vehicle crossings at critical points where rail traffic is heavy and causes vehicular traffic delays;
9. Re-evaluate rate structure for all freight carriers, so as to strike a balance among energy, costs, and convenience;
10. Preserve abandoned railroad rights-of-way; and
11. Investigate possibilities for development of demonstration rail, pipeline and other transportation systems with federal authorities.

LAND USE

Land has been assumed to be an abundant commodity whose use is best determined by its owner. The value and use of land, however, have been increasingly affected by the decisions of others, and the market place has not always performed satisfactorily in determining the best use of land in the long-term public interest. Land use decisions are made primarily by private land owners and influenced by government. When land use effects are largely local, responsibility rests with local government, but as a result of greater complexity and a broader range of effects of land use decisions, increasing responsibility has been assumed at the state and federal levels. Questions about responsibility for land use decisions promise fundamental and difficult conflicts for the people of Minnesota in the future.

Situation

When the American republic was established 200 years ago, concepts of land ownership and private property rights were believed to be cornerstones of personal freedom and human development in a democratic society. Furthermore, the natural environment was viewed as a primitive and abundant commodity to be subdued and civilized for man's use. These perceptions of land resources led directly to the adoption of the concepts expressed in the Northwest Ordinance, the Indian treaties, railroad land grants, and the Homestead Act. National policies were intended to promote the rapid settlement of the land and the development of natural resources. The first land use controls were adopted in the twentieth century and focused on conflicts between individual property owners in urban areas. Land use management over the last twenty years has focused more and more on preserving third-party interests rather than just protecting the rights of individuals directly involved. This has required redefining the role of the public sector, placing more emphasis on the long-term overall public interests, rather than on the short-term needs and benefits to individuals.

Trends

According to a statewide survey of land use in Minnesota in 1969, of Minnesota's 84,000 square miles, 43.5% was used for cropland, 33.7% for woodland, 11.0% for pasture land, 3.4% for wetlands, 2.2% for urban and transportation uses, and 0.2% for mining purposes, with 6.0% of the state area covered by water. The most important changes in patterns of land use since that time have been in the extension of cultivated land into the pasture, wetlands, and woodland areas. Competition for land among farmers and with non-agricultural uses has pushed the cropland frontier toward marginal production areas, which require greater energy and/or water inputs than the naturally more productive agricultural lands. Draining water-holding areas has contributed to increased spring runoff and reduced flow during low rainfall periods.

Increasing competition for land among urban, transportation, industrial, recreational, wildlife, forestry, and agricultural uses — and among different types of agricultural uses — has resulted in rapid escalation of land costs. Rural land prices in Minnesota doubled between 1972 and 1975, primarily as a result of competition among farmers. (See pages 26-29 for more detailed discussion.)

Recent preliminary estimates by the State Planning Agency indicate that urban land in Minnesota may increase from 1.2 million to 1.4 million acres between 1970 and 1990, assuming a continuation of low density urban dispersal. This would bring urban and transportation uses in the state to about 2.6% of the total state area. While urban expansion does not consume great quantities of agricultural land, it eliminates land permanently from agricultural uses. In most cases agricultural uses cannot outbid urban uses for high-cost land.

As world population expands and food needs increase, the demand for U.S. agricultural products will likely increase. Agricultural commodity exports offer one of the best potentials for balancing U.S. trade with other countries and paying for increased importation of petroleum and other minerals used in the U.S. economy. Thus, the preservation of Minnesota's productive agricultural land is an important consideration for the state and national economy.

Policy Considerations

If land is to be used in the best way and conflicting land use interests resolved, sound public land use policies based on sufficient and accurate information are required. The trends in land use in Minnesota need to be monitored regularly and Minnesota's lands need to be adequately classified to help consider urban, agricultural, recreational, and other use potentials. Information should include the chemical composition of the soil, soil structure, land slope, rainfall, and location, expressed in quantitative terms.

The concept of "prime land" remains relative. What may be prime today may not be prime five or ten years from now, as food requirements, dietary preferences, energy costs, and water availability change. The concept of prime land varies both from place to place and from time to time; land that is prime in one area of the state and at one point in history may not be prime in another area and another time. The purpose of a land classification system is not to determine optimum land use but to provide a tool for judging uses that vary in time and space.

A variety of public policies are implemented through the management of land in Minnesota. At the local level, land use tools include zoning ordinances, subdivision regulations, and building codes. These local regulations have substantial though not always well coordinated impacts on land use throughout the state. When land use is a matter of more than local interest, the state has enacted specific legislation, including the Wild and Scenic Rivers Act, the Shoreland Management Act, the Coastal Zone Management Act, the Critical Areas Act, the Power Plant Siting Act, and the Environmental Policy Act. These acts that focus on specific statewide land use issues do not always take adequate account of the real causes of the problems being treated or the potential side effects of the policies enacted.

Many of the most important factors affecting the use of land in Minnesota are the unintended effects of public policies:

1. The Federal Highway Act of 1956 and various state highway development policies have created the current highway system which allows people to travel farther in less time, thus encouraging longer commuting and the spreading of development into the countryside. This highway system is paid for by the user through gasoline sales and automobile license fees. Minnesota voters recently (November, 1976) declined the opportunity to rededicate some of these funds for other transportation uses. Gasoline taxes from sales are generated in direct relationship to the number of miles driven, and further stimulate highway construction, which facilitates population dispersal (and extravagant land use), increased automobile dependency, and in turn greater gasoline sales.

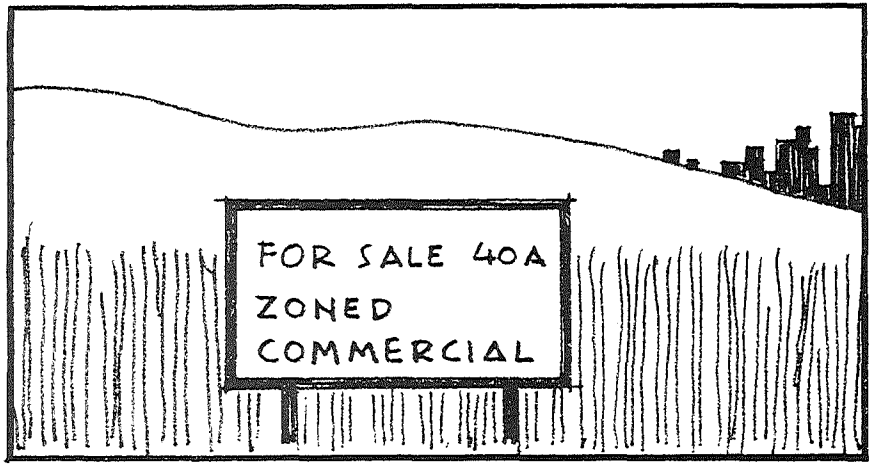
2. Environmental controls have been important factors influencing land use in Minnesota. The Pollution Control Agency, for example, exercises influence over land use through air and water quality standards, in effect "zoning" areas of the state where industrial development can and cannot occur.

3. State and federal income taxes:
   a. Give preference to ownership of single-family detached housing by allowing mortgage interest and property tax deductions on land as well as buildings, thus encouraging large lots and urban dispersal; and
   b. Allow land to be held as a capital asset and taxed at half the applicable income tax rate, which encourages land speculation and drives up the price of land.

4. Local property taxes are based upon the assessed value of the land and its improvements. Property improvements are discouraged by increased assessments and higher taxes. On the urban fringe local property tax policies tend to encourage extravagant land uses, push agriculture uses out, and encourage "leap frog" development.

5. Agricultural tax policies permit counting capital investments as production expenses, capital gains treatment on certain income items and lenient accounting procedures that serve as tax shelters for "hobby" and part-time farmers and land speculators, as well as bonafide farmers.

6. Land speculators often benefit from public investments. For example, land value may be enhanced significantly by the location of a highway interchange. The owner of such property may thus reap "windfall" profits as a result of the public investment.



7. Through GI and FHA housing loan guarantees, the federal government has picked up much of the risk in private family housing loans, subsidizing interest rates and providing for lower down payments. And these benefits have been used primarily for the construction of new single family detached houses on the urban fringe.

8. Municipal tax exempt bonds have been one of the most important federal-local revenue sharing devices, benefiting primarily those urban fringe areas that have had schools, roads, and sewer systems to build.

9. Costs of public utilities, such as electric service, sewers, water lines, streets, and telephones, have been equalized throughout their service areas with the result that more densely settled areas have subsidized dispersal on the fringe. Better cost accounting methods are

needed to evaluate the extent to which services are provided to low density areas at the expense of developed higher density areas.

The foregoing public policies often have distorted market prices of land, encouraged low density development on the urban fringe and contributed to deterioration of the urban core. Attempts to treat urban problems through housing programs, urban renewal, and social rehabilitation programs, including health, education, and welfare, have been less than successful in many cases because they have not fully addressed the real causes of problems, but treated the by-products of prior policy. The result has often been conflicting, overlapping, and generally ineffective land use policy.

Prospects

Effective land use management requires consistency in the development of public policy, including an evaluation of land use implications of existing and prospective legislation. Land use controls serve as the means for implementing a variety of other public policies and thus require careful coordination among levels and branches of government, and between government, individuals, and corporations. As land use questions become more complex, land use decision-making will continue to shift from private to public responsibility.

Over the next few decades, land use will become an increasingly critical and difficult issue for the state and for the nation. It will bring into conflict the individual values of self-determination and property ownership with public and environmental interests. The questions of how land use decisions should be made and who should have the responsibility for making them will not be resolved soon or easily.

AGRICULTURE

Agriculture is Minnesota's single most important economic activity. The State Department of Economic Development estimates that agriculture directly or indirectly accounts for 40% of Minnesota's employment. Agriculture now faces the prospect of competition for and increasing costs of the essential resources on which it depends: land, water and energy. Competition among farmers, with land speculators and with residential and industrial uses has reduced the availability of land and increased its cost. Water availability is not dependable; it ranges from scarcity to abundance. Competition for water is increasing, yet no comprehensive approach to the management of this resource exists. Agriculture depends heavily on petroleum and natural gas, which will be increasingly costly and in short supply. As a result of these factors, there will be significant increases in agricultural production costs. Foreign market opportunities have brought shifts in Minnesota agriculture from livestock production to crop production as well as uncertainties that require greater risks for farmers. These conditions point to the continued growth of large-scale family operated farms in Minnesota.

Situation

The American style of agriculture places small family businesses in direct competition with one another. The more efficient, more productive, larger, more fortunate farms, or those with a head start, tend to have a competitive advantage over others.

In terms of production, the results of this competitive system are spectacular. The incentive in agriculture is to increase production, whether there are surpluses or shortages. When there are strong market demands and shortages of agricultural commodities, farmers produce more in order to take advantage of the increased prices. When there are commodity surpluses, individual farmers are compelled to produce more in order to secure a share of the limited number of dollars available. The American farmer is thus caught in a production race requiring increasing efficiencies and expanding operations. The producer, the processor, and the researcher work as a team to continually expand production capability.

Trends of gross farm income, farm production expenses, and net farm income over the last two-and-a-half decades demonstrate the competitive nature of agriculture. Gross farm income in Minnesota increased from about $1.3 billion in 1950 to $1.9 billion in 1965. Farm production expenses increased during that period from $0.8 billion to $1.4 billion; the difference between these two, the net agricultural income, remained approximately the same at $0.5 billion per year. While most other Minnesotans were enjoying increasing income from an expanding economy during that period, farmers had to live on the same income, which was difficult during a time of continous inflation. Many farmers chose not to compete under those conditions but to take advantage of rising land values and sell their properties. The Crop and Livestock Reporting Service indicates that net income for the average Minnesota farmer increased gradually between 1965 and 1972, more than doubled from about $7,800 in 1972 to $19,200 in 1973, and then declined to $14,300 in 1974 and $11,800 in 1975.

Increased income in 1973 was a result of grain sales to the Soviet Union, which in turn had some effect on domestic prices from which the farmer likewise benefited. As a result of this increase in farm income, Minnesota had one of the largest increases in total family income of any state. International conditions thereby directly affect the economy and lifestyle of the entire state.

A good share of the greater farm income was used to acquire more land and machinery. As a result of bidding for additional amounts of

productive land, rural land prices doubled in Minnesota between 1972 and 1975. Rural land prices in the northern Red River Valley, the area of the state best suited for producing small grains, tripled in value in the three-year period. Farmers that expanded land holdings and machinery during that period of higher income must now pay for these investments with continued high earnings. Poor production years will place particular stress on the middle-sized and/or new-owner farms whose investment risks are highest.

Trends

Agriculture responses to world market conditions have resulted in a conversion from livestock to crops in Minnesota. In 1964 about 30% of gross farm income in Minnesota came from crops, the balance from livestock; in 1974 about 57% of Minnesota gross farm income was from crops. The latest figures available from the Crop and Livestock Reporting Service indicate that crop income dropped from the 1974 peak to 47% in 1975. Cattle, hog, poultry, and dairy production have declined in many areas of the state, and pasture lands and wetlands have been converted to crop production. The elimination of wetlands or water storage areas has, in turn, contributed to increased spring run-off and reduced stream flowage in low rainfall periods.

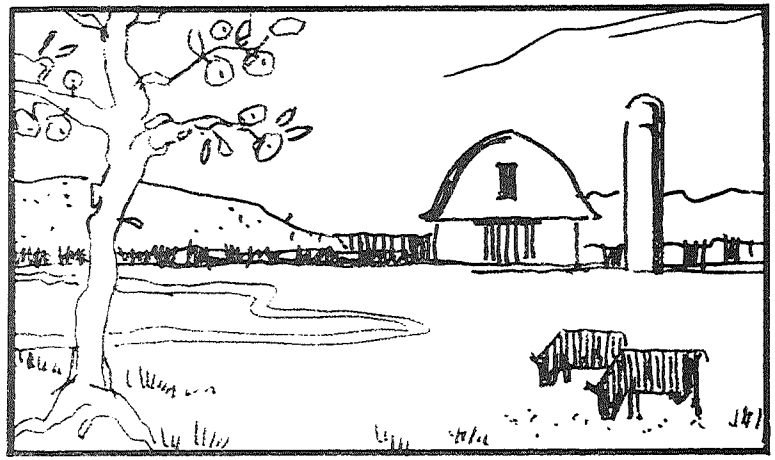
Exposure to international market uncertainties increases the risk and the scale of farming for Minnesota farmers. The largest farms with more capital assets and good credit are those most capable of expanding and taking risks, including investment in land and machinery. This competitive advantage of larger operators will contribute to continued farm consolidation.

Trends in Minnesota agriculture over the last half century have been toward increasing farm size and decreasing farm numbers. Between 1950 and 1975 for example, average farm size in Minnesota increased by about 50%, while the number of farms declined from about 180,000 to 118,000, according to the Crop and Livestock Reporting Service.[4]

A decrease in the number of farms in itself does not adequately describe changes occurring in agriculture. Larger farms are increasing in number, acreage, and production, and they are increasingly dominating agriculture. Small farms are increasing in number as well, but in reality most are not farms at all, but hobby farms, retirement farms, or residential farms whose main source of income is outside agriculture. Many such farms meet the minimum definition of a farm and take advantage of benefits that protect small farmers. Most of these sub-commercial farms are scattered across the landscape within commuting distance of the expanding employment centers in the state, particularly in eastern and southeastern Minnesota.

The greatest economic pressure is on the middle-sized farm, which is often not large enough to secure sufficient capital or take the risks of expanding land holdings or investing in new machinery. Middle-sized farms are the most common, but their numbers have declined and will continue to decline — some selling out to large operators and others subdividing into sub-commercial farms.

Many other agricultural operations will remain productive as part-time farms, supplementing agricultural income from non-agricultural sources. Large as well as small or medium-sized farms will become part-time operations as agricultural specialization increases, and larger blocks of time become available for other use. The spread of manufacturing throughout the state will provide some of these supplemental employment opportunities.



Corporation Farms

While the family farm is the basic agricultural unit in the state, corporate agriculture is increasing. Farms may incorporate to ease the ownership transition from generation to generation. According to the 1975 annual survey of the Minnesota Department of Agriculture, 3.6% of all farm land in Minnesota was in corporation farms.[5] Of these corporation farms, about 59% were family corporations, 10% authorized farms, 28% general business, and 3% other farms.*

*Authorized farms, as defined in the Minnesota Corporate Farming Act of 1974, are those farms whose shareholders do not exceed five in number, a majority of whom reside on the farm and are engaged in farming. The balance of corporate farms are general business and other farms that do not meet the criteria for family or authorized farms; these are primarily nonresident-owned or have more than five shareholders.

Expansion of general business corporate farms was restricted by the Minnesota Corporate Farming Act of 1974, but family corporate farms continue to grow in number and size.

There is a gradual trend toward the family farm in Minnesota becoming a multi-generational partnership, with father/son/grandfather sharing responsibility and incorporating in order to avoid inheritance taxes. In comparison, a one-generation family farm suffers disadvantages in management training and transfer. For example, if the farm is not large enough to support more than one generation, the son of a farmer may leave home and learn an alternative skill; and when the father wishes to retire, the son is often engaged in another successful occupation. Thus, protection of family interests may lead toward an increase in large-scale, multi-generational family corporate agriculture.

Prospects

With continued population growth, the world will continue to look to the United States as an agricultural supplier — and many of the needed agricultural products are or can be produced in Minnesota. As a result, emphasis on crop production in Minnesota will likely continue.

Energy shortages and increasing costs will influence the type and location of agriculture in Minnesota. In general, the costs of producing meat are likely to increase faster than the costs of producing crops, which, in turn, may result in some shift from consumption of animal to vegetable proteins. In terms of land use, this suggests that soybean acreage for human consumption may expand, while corn acreage for animal consumption may decrease. Furthermore, soybean production has lower energy requirements than corn, since less fertilizer is needed and crop drying is not necessary. An uncertain variable lies in foreign markets. Approximately half the U.S. soybean production is now exported; adiustments in that demand can significantly affect production.

A forthcoming study from the Upper Midwest Council[6] suggests that Minnesota's dairy industry will be severely affected by energy shortages and increasing costs. All aspects of the dairy industry, including feed, milking, refrigeration, transportation, processing, and marketing, are energy intensive. As a result, the costs of dairy products will increase significantly, adding to an already decreasing rate of consumption. Minnesota's dry milk industry — the nation's largest — will be severely affected by the availability of natural gas used in the drying process. Changes in age structure as a result of declining birth rates will reduce the child market for whole milk. Many small creameries are likely to go out of business, while dairying becomes more concentrated around a few large-scale creameries and near market locations.

Beef production will generally be affected by increasing costs of feed. More marginal lands will likely be utilized for forage, while there may be an increasing shift toward feedlots in the more productive land areas. Pork production, heavily dependent on feed grains rather than forage, will likely decrease. Consequently, pork prices will likely be more affected than beef prices, resulting in reduced pork consumption.

Animal proteins can be produced more efficiently with poultry than with either beef or pork. However, poultry production could be affected adversely by feed costs and by shortages and increasing costs of propane and natural gas used in heating. In the past, poultry consumption has shown a correlation to an older population and smaller families — both of which are growing trends. On balance, it is likely that the consumption of poultry will increase relative to that of beef and pork.

Shortages and increasing costs of energy may arrest or even reverse the trends toward residential noncommercial farms and their consumption of productive agriculture land. (For a more complete discussion of these questions, see the energy, transportation and land use sections).

Climatic factors may have major influences on agriculture in Minnesota, specifically the prospects of drought and the trends of world-wide cooling. The problem of drought is one of adequate distribution of moisture during the growing season, not just total annual precipitation. Thus, irrigation in agriculture will likely increase in order to meet water needs during the growing season. In periods of drought, agricultural uses will compete directly with urban and industrial uses for water. Past droughts have occurred when capital requirements were much lower; future droughts, however, could cause severe hardship on new operators or operators with substantial investments in land and machinery and large mortgages. Such conditions would again give the advantage to larger operators.

Continued cooling temperatures throughout the world, which some climatologists foresee, may result in a shortened growing season, thus preventing certain crops such as corn from maturing fully. Corn that matures early could be developed, but such hybrids generally have lower yields and less return per cost of input.

An expansion of nonagricultural employment opportunities in rural Minnesota will result in more part-time jobs for farmers, thus increasing the proportion of part-time farms and slowing the process of consolidation. The small and noncommercial farms in Minnesota will likely increase in number and compete directly with commercial agriculture for the use of land unless changes are made in tax and land use policies and energy availability. (See land use and energy sections).

Recommendations

Following are recommendations the Commission has adopted in the area of agriculture.

Concerning land resources for agriculture, the state of Minnesota should:

1. Classify all land in the state to help determine use priorities;
2. Clarify responsibilities between state and local units of government in implementing land policy, with emphasis on local administration of state policy, where appropriate; and
3. Develop incentives that encourage practices to prevent soil erosion.

Concerning water resources for agriculture the state of Minnesota should:

1. Secure statewide surface and underground water data to help determine use priorities;
2. Clarify reponsibilities between state and local units of government in implementing water policy, with emphasis on local administration of state policy, where appropriate;
3. Protect and restore water generating areas and natural storage basins, both surface and underground; and
4. Develop a way of pricing consumptive uses of water (such as irrigation) that acknowledges it to be a vital and limited resource and reflects its relative value for various uses.

Concerning capital resources for agriculture, the state of Minnesota should:

1. Further encourage the ownership transfer of family-type farms (such as by providing start-up capital, and inheritance tax changes);
2. Establish secondary mortgaging devices to help increase the availability of capital for agricultural production;
3. Alter tax policy in order to discourage tax shelter investments in agricultural land, separating farm and non-farm income; and
4. Evaluate the need for processing and marketing facilities near areas of production.

Concerning information resources for agriculture, the state of Minnesota should:

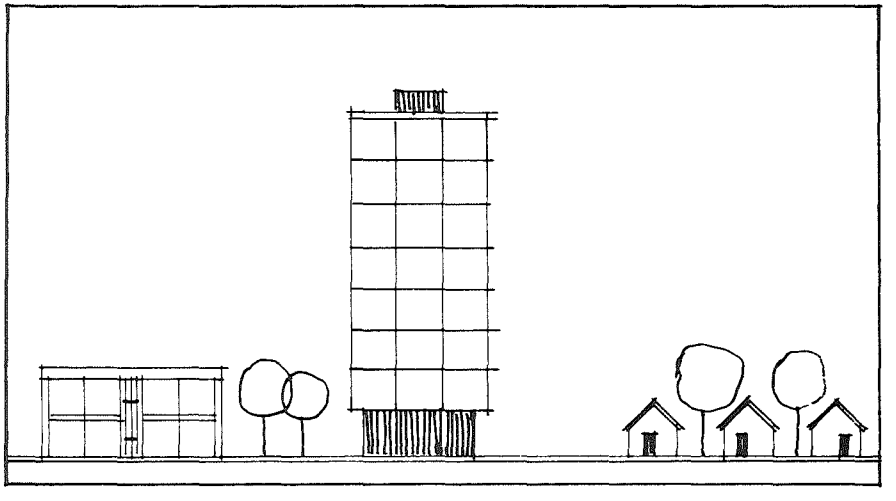
1. Expand the scope and dissemination of agricultural extension work to include social issues, alternative technologies, and marketing education, in addition to the present focus on productivity;
2. Encourage agricultural research to investigate the problems of and opportunities for the small farmer, as well as the large farmer;
3. Maintain levels of agricultural research even during periods of rising costs;
4. Conduct a biennial state survey to obtain comprehensive agricultural information; and
5. Seek to establish Minnesota as a national and world center in agricultural research, technological development and food production.

Concerning human resources for agriculture, the state of Minnesota should:

1. Establish policies that encourage the maintenance of efficiently managed family-operated farms.

HOUSING

Housing costs are escalating rapidly beyond the means of many prospective homeowners. At the same time, demands for housing are reaching new highs as people born during the peak birth years of the late fifties and early sixties are seeking housing. The result will be a demand that exceeds supply, with those at the low end of the income scale being most severely affected. Important questions are: How short will housing supplies be? What options are available? What are the responsibilities of government and private enterprise to meet housing needs?



Situation

A place to live is accepted as a necessity of life and a right to which Americans are entitled. Over the past three decades, increasing personal income and low interest government insured loans have encouraged home ownership, and the number of owner-occupied homes has increased significantly. In 1970 about 70% of all housing units in Minnesota were owner-occupied. During this period consumer expectations have

increased to include a variety of appliances, conveniences, and a garage as basic housing components.

Housing in no longer just shelter. It has become a symbol of lifestyle. Housing provides a microenvironment over which the owner occupant has control — a place to live as one wishes with a minimum of constraints from the outside. As personal income has increased, mobility and home ownership have become important means of self-expression for many people.

Almost universal automobile ownership, cheap energy, and extensive highway construction over the past 30 years have significantly reduced the time and relative costs of travel, thus opening a greater range of places to live with convenient access to employment. As a result, the dispersal of housing has accelerated, taking advantage of slightly lower cost housing and services in outlying areas. Low interest housing loans and highway policies have been the major contributors to the spread of housing across the landscape over the past three decades. While this has been a national phenomenon, additional incentives have affected the dispersal in Minnesota. These include:

1. Amenity areas, with lakes, trees, and hills that provide a scenic outdoor environment within commuting access of expanding urban areas;
2. Low cost land, encouraging urban residential uses to outbid agricultural uses for the land; and
3. Relatively lower housing costs in the small towns and rural areas within commuting distance of Minnesota's urban areas, in part the result of continued outmigration from those rural areas over several decades and a subsequent lower housing demand.

Trends

Important new factors are emerging that may influence the patterns of dispersal in Minnesota. The state is now entering a period in which there will be an unprecedented need for housing. Persons born in the peak birth period of the late 1950s are just beginning to establish their own households and enter the housing market. In 1985 there will be about one-third more residents aged 20 to 45, a gain over 1975 of more than 400,000 persons. The state's proportion of elderly persons (who have special housing needs) will increase sharply. The State Planning Agency estimates that between 1975 and 1985 about 24,000 additional households will be formed each year in Minnesota. Altogether, about 350,000 new housing units (including replacements) must be added to the state's housing stock. (See Figure 4). Based on past construction trends, it is unlikely that those minimum housing needs will be met. As a result, acute shortages will occur that will affect most severely the poor and the near-poor.

The need for housing occurs at the same time that housing costs are escalating at rates greater than increases in consumer buying power. These cost increases are principally the result of escalating capital, land, and construction costs, combined with higher consumer expectations. At present housing cost levels, only about 15% of Minnesota families have sufficient income to purchase new single-family housing. Accordingly, relatively few families in Minnesota will likely find new housing (whether to buy or rent) that meets expectations and carries an affordable price tag.

Past trends and recent surveys indicate that the expectations of Minnesotans are for spacious, single-family homes on large lots. Recent trends toward more multiple units (apartments, condominiums, and town houses) and mobile homes do not necessarily indicate a change from traditional public preferences. Rather, they represent consumer responses to increasing market costs. The preference for single-family homes is likely to remain high, but the goal probably will be postponed or never realized.

Greater competition for and increasing prices of housing will likely mean that the present passing down of older homes to lower income groups will slow or stop entirely. This could exacerbate housing problems for the poor and the near-poor as very little older low-cost decent housing will be available.

Alternatives

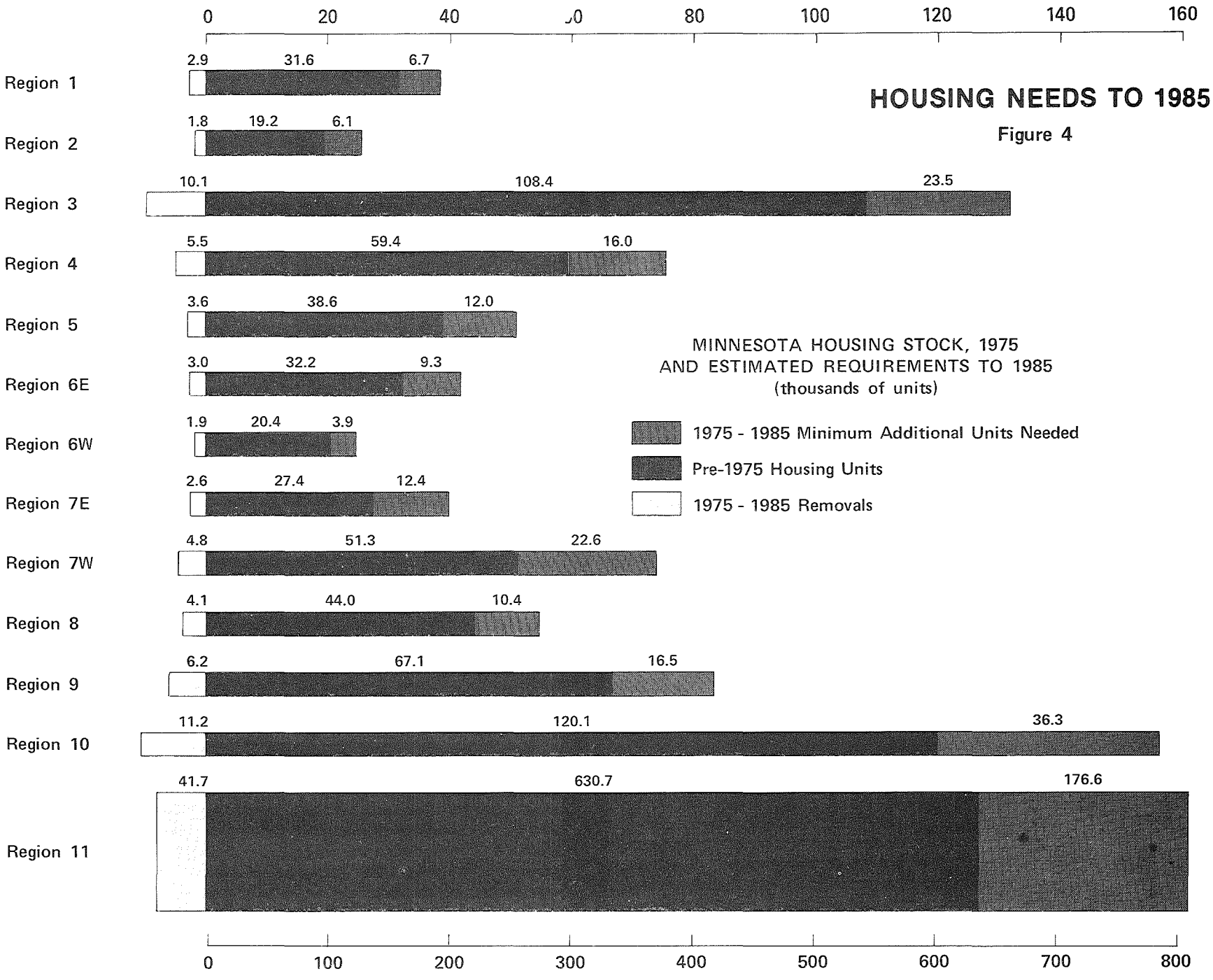
In response to increasing housing costs, Minnesotans will likely alter their housing expectations and accept older housing and multiple-family forms of housing. This trend is already apparent in the Twin Cities area with sharply increasing real estate values in older preferred neighborhoods and with increases in the construction of town houses, condominiums, and apartments.

A second alternative to increased housing costs is the factory-built or mobile home. The number of factory-built homes has nearly doubled in Minnesota over the past four years, but still accounts for only about 3% of all housing units in the state. Restrictive building codes in the larger urban areas of the state discriminate against mobile homes because of their image. In locations where zoning ordinaces do not discriminate against mobile homes, such as in small towns and in rural areas, mobile homes have increased in number, being found within mobile home parks and individually on scattered parcels. Unless there are changes in local zoning ordinances, subdivision regulations and building codes, factory-built homes will not likely play a major role in meeting future housing needs in the state.

A third alternative to meeting future housing needs is by providing housing through the public sector. The cost of a public housing program that will have a significant effect on housing problems is so immense,

HOUSING NEEDS TO 1985

Figure 4



SOURCE: MINNESOTA STATE PLANNING AGENCY

however, that it is probably beyond the capacity of government resources. Over the last three decades, significant government efforts have been made to house the low income families and elderly persons. The quality of housing provided by these programs has been roughly equivalent to that of families not directly subsidized. Future public housing programs, however, will probably not be able to provide subsidized housing comparable either to the past or to that expected by the general public.

A fourth alternative in dealing with housing shortages is preservation of the existing housing stock. This requires an increased emphasis on maintenance and restoration. The alternative is to lose more existing housing stock than necessary, requiring replacement with new units. Older homes tend to be occupied by people with the least ability to maintain them — the poor and the elderly. Furthermore, many existing housing-related policies (such as property tax assessment practices) tend to discourage rehabilitation.

A fifth alternative is to encourage owner construction or self-help programs that assist prospective home owners through loans, grants, and training to build or rehabilitate all or part of their residences, thus substituting resident labor for costly professional labor. This may be combined with somewhat relaxed (but uniformly enforced) building standards. Such policies will require broad political support, however.

A sixth alternative is to use the existing housing stock more efficiently, including subdividing large older structures into several units, encouraging the transfer of single or two-person households to apartments and encouraging young adults to postpone forming households and maintain residence with their families.

Policy Considerations

Existing policies that subsidize or give preferences to single-family housing need to be re-evaluated. These include state and federal tax policies that reinforce the public's preference by providing subsidies to single-family detached dwellings. Housing policies have been consistently biased in favor of the owner-occupied, single-family, free-standing house with land around it. Local, state and federal housing policies have been designed to facilitate the building of such a home, to protect its environment, and to make it available to more people. Owner occupants of single-family homes are given a double property tax break through homestead credit and a lower tax rate. In Minnesota the claimed homestead credit for the 1973-1975 biennium was over $300 million.

Conversely, while government efforts have encouraged owner-occupied residences, they have discouraged the owning or renting of multi-unit structures. Higher property taxes on rental property are presumably included in rent paid by tenants. Combined with increasing costs of operation and maintenance of rental properties, this results in higher rents which many residents are unable or unwilling to pay. A recent study of rental housing in Minneapolis [7] indicated that these conditions tend to discourage rental property ownership and maintenance, ultimately shifting the responsibility for providing housing to the public sector.

To help reduce the cost of home ownership, property tax relief for the elderly in Minnesota will amount to about $40 million for the 1973-1975 biennium. Such relief for home-owning senior citizens is inconsistent with state housing policy that encourages relocating the "overhoused" elderly in less spacious quarters.

Owner occupants of single-family homes are entitled to deduct from their income taxes the cost of both mortgage interest and property taxes. The amount of this subsidy in 1972 was about two-and-one-half times greater than the total cost of direct federal housing subsidy programs. The benefits of this policy flow unevenly among the population. In 1972 only about 5% of all families with income less than $5,000 claimed the deduction, as compared to almost 79% of all families with incomes above $20,000.

Accounting systems for municipal expenditures tend to charge most utility and social costs of neighborhoods and single-family homes to the general tax rolls. Such costs for multiple dwelling structures, however, are included in the rent paid by the residents.

Parking, as a factor that contributes to the cost of housing, is often overlooked. For every housing unit, local ordinances may require one-and-one-half-to two parking spaces. In the case of a one bedroom apartment, the square footage required for automobile storage may exceed the living space. Thus, local zoning ordinances impose housing costs on owners and renters in the form of off-street parking requirements. In cases where off-street parking is not required, the costs of automobile storage (on the street) is in effect transferred to the public.

Single-family residences usually do not provide enough property tax revenue to cover the costs of all the services (streets, fire, police, education, health, welfare, etc.) their residents receive. Without the local taxes generated from commercial property, the cost of single-family home ownership for most Minnesotans would be much greater. The real question is not whether housing subsidies should be provided by state government but rather in what form, in what amount, and for whose benefits.

The state of Minnesota needs to improve its data-collecting methods, augmenting the decennial federal housing census. With important changes in the housing picture, ten years is too long to wait between censuses. Housing data needs include the age, value, and condition of the structure for both owner occupied and renter occupied units, trends in

construction and demolition and effectiveness of public housing programs, all of which should be available for geographic subunits of the state, such as counties and regions. Data analysis should consider the impacts of housing on land use, energy consumption, and service costs. Anticipation of future problems requires information and analysis attainable only by careful monitoring of the housing situation; this should be the responsibility of state government.

Meaningful and effective housing policy must take into account personal values and preferences, but should not support housing patterns that impose long-term and excessive costs on both individuals and the public. The public interest calls for understanding the realities of resource shortages and increasing costs and the development of policies that assume a responsible long-range perspective.

Recommendations

The following recommendations are based on the report, "Housing in Minnesota," published by the Commission on Minnesota's Future in February 1976. The state of Minnesota should:

1. Formulate a precise housing policy defining clearly the scope of housing needs and target population to be addressed;

2. Eliminate restrictive local zoning ordinances and construction codes. The state should:
   a. Review restrictive housing codes that may add unnecessarily to housing costs;
   b. Establish uniform statewide standards for municipal subdivision regulation that municipalities may not exceed (such as street widths, curb and gutter requirements, street composition, setback requirements, boulevards, land dedications, minimum lot sizes, minimum home sizes, and garages);
   c. Develop incentives to encourage municipalities to provide for multiple dwellings, low-cost housing, and factory-built homes; and
   d. Allocate state and federal grant-in-aid programs (such as criminal justice, parks and recreation, and water and sewer programs) to those municipalities that provide for multiple dwellings, low-cost housing, and factory-built homes in their land use plans and/or zoning ordinances.

3. Make it easier for middle-aged and elderly homeowners who wish to do so to leave large, older homes, freeing them for younger, larger families. The state should:
   a. Institute a state grant-in-aid program to local, county, or regional housing agencies to build and manage multiple dwellings and condominiums for the elderly;
   b. Develop incentives to encourage municipalities to provide well-designed, attractive multiple housing units for the elderly in single-family residential neighborhoods; and
   c. Eliminate the tax penalty that low income senior citizens pay when they profit from the sale of their homes.

4. Exert significantly greater efforts to maintain and restore the present housing stock. The state should:
   a. Increase grants to the poor for rehabilitation/remodeling of their homes;
   b. Increase appropriations for low-cost, subsidized loans for the rehabilitation/remodeling of homes of the near-poor.
   c. Institute a loan program at below-market rates for rehabilitation /remodeling of homes of lower-middle and middle-income home owners;
   d. Provide mortgage subsidies to middle and upper-middle income families willing to purchase for occupancy housing in areas designated for rehabilitation in central cities;
   e. Adjust property tax assessment practices so they do not inhibit rehabilitation and remodeling;
   f. Not allow owners of rental property to depreciate that property for income tax purposes if the property is in violation of housing maintenance codes; and
   g. Provide rehabilitation loans only to those rental property owners who provide evidence that rental rates are based on actual operating costs.

5. Promote modest experiments and demonstrations aimed at displaying the physical and economic feasibility of new concepts in low-cost private housing, including:
   a. Extending the basic home demonstration project to both urban and rural areas;
   b. Testing various ways of providing elderly housing, including use of basic home models;
   c. Testing various design and site alternatives for multiple units to increase attractiveness and/or decrease cost;
   d. Providing information and encouraging self-help housing, both in new construction and rehabilitation; and
   e. Purchasing, rehabilitating, and selling older homes.

HEALTH

The costs of health services have been escalating at the rate of 10% to 15% per year over the past decade, rates well above those of inflation and income. Health care now consumes nearly 10% of the gross national product. Access to health services, meanwhile, has deteriorated for many of the poor, the elderly, and those in rural areas and urban neighborhoods.

Situation

Rising costs are the result of a combination of factors, including greater personnel requirements, higher wages, and more sophisticated technology. Equally important, however, is that about 95% of Minnesotans carry health insurance (often supplied in part by the employer) and therefore do not pay directly for the care received. Consequently, patients expect and physicians tend to prescribe maximum (and sometimes unnecessary) treatment, which increasingly means the application of sophisticated and costly medical technology. Advances in technology require more knowledge of medical practice and place much greater responsibility on the physician in the treatment of a patient, which in turn contributes to specialization in medicine. Greater decision-making responsibility on the part of physicians has made them more susceptible to accusations of inadequate or incompetent treatment. As a result, malpractice suits have increased along with the cost of malpractice insurance, which in turn affects the cost of health services.

Access to health services has deteriorated for some, as medicine has become more specialized. Medical schools have produced fewer primary care physicians (general practice, family practice, obstetrics-gynecology, and pediatrics) and more specialists. Medical students prefer to specialize in order to earn more money and have better working conditions. Specialists usually form group practices in locations where there is sufficient clientele to support several doctors. As a result, medical practice, like retailing, education, and many other services, tends to cluster in larger communities. As the proportion of specialsts increases and the proportion of general practioners declines, communities that are not large enough to support a clinic may lose their medical services to larger centers. Recent state and federal efforts to reverse these trends appear to be having some effects. For example, of the University of Minnesota Medical School class of 1975, more graduates (31%) entered family practice than any speciality field. In the future the trend toward specialization may reach a balance with general practice.

Nearly all residents of Minnesota are within twenty-five miles of a primary care physician and of a hospital. However, this does not reflect the quality of health services available at various locations in the state, including the work load of the physician, the adequacy of emergency care, or the availability of specialty services. According to the State Planning Agency, there were 175 physicians per 100,000 persons in the state as of December 31, 1974, which compared to a national average of 179 per 100,000. Ratios among state regions varied, however, from 65 per 100,000 in northwestern Minnesota to 367 per 100,000 in southeastern Minnesota. Medical specialists, are highly concentrated in the Twin Cities area, Rochester, and, to a lesser extent, Duluth. There are also concentrations of medical specialists in Grand Forks, Fargo, Sioux Falls, and La Crosse, which serve parts of Minnesota.

With the availability of Medicare, Medicaid, Veterans' Hospitals, and public health services, low and moderate income families have better access to medical services than previously, but these services are often available on an episodic basis only. Many of the health problems of low income families are not simply a matter of neglect but arise from living conditions, poor nutrition, lack of sanitation, and substandard housing, which are often combined with emotional or psychological impairments. The relationship between socioeconomic status and health is a circular one: poverty contributes to poor health and poor health to poverty. Living near a health services facility does not necessarily assure adequate access to appropriate care. Providers of health services, for example, may not necessarily be appropriate for or receptive to the problems of Indians, blacks, migrant workers, the elderly, or adolescents.

Individual responsibility for good health must be encouraged. Health is not simply the absence of disease or disability. The World Health Organization has defined health as a "state of complete physical, mental and social well being and not merely the absence of disease and infirmity."[8] This suggests that personal health means the ability to function in a way that maximizes individual capabilities, and places the individual on a continuum of physical, mental, and social well being. There is no absolute or universal definition of health and no measurable optimum levels to be attained.

Major influences on health are found increasingly in lifestyle. The four leading causes of death in Minnesota (heart disease, cancer, cerebrovascular disease, and accidents) can be attributed at least partially to lifestyle and environment. Consequently, nonmedical systems that affect health are becoming more important, including the reduction of automobile accidents, better nutrition, increased exercise, and less smoking and consumption of alcohol, all of which depend on the individual assuming greater responsibility for his/her own health.

The problem of individual responsibility is one not only of information (few smokers are unaware of the health consequences of smoking) but of motivation. Health education programs are needed to encourage health-promoting behavior, early recognition of disorders, and understanding diseases and treatments. The consumer must better understand how to use the health care system. But these will not be effective unless new methods of financing health care, which provide built-in incentives for individual responsibility, are developed. While some feel that health services financed from government sources may encourage overuse and abuse of the system, research has not provided any good evidence that paying for one's own needs makes one more careful about his/her own health.

Preventive health care should be emphasized. The present health services system is essentially curative, with emphasis on serving the sick or injured with drugs and surgery. As a result, the more illness there is or can be found, the more the curative system thrives and grows. A need for curative services will always exist because human beings will always be subject to disease and disability. But an emphasis on curative care neglects those factors which cause poor health. Trying to achieve good health through curative measures alone does not reduce the incidence of disease, but only the discomfort/dysfunction and inconvenience for the individual. This suggests that emphasis on curative care alone will not substantially improve the health of the population, though it will increase the costs.

Preventive medicine, in contrast, focuses on measures which can prevent or detect disease in its early stages. Immunization, as one example of preventive medicine, has virtually wiped out many of the major communicable diseases. Preventive medicine, however, when delivered by the same medical professionals at the same facilities is theoretically in competition with curative medicine.

Health maintenance organizations (HMOs) emphasize preventive care, offering prepaid health service and often maintaining their own health care facilities. When a member is ill, the HMO must pay to make the member well; when members remain well, the HMO profits. Incentives therefore encourage prevention of illness. As a result, HMOs are generally able to offer health care at lower costs than ordinary health insurance.

Other Issues

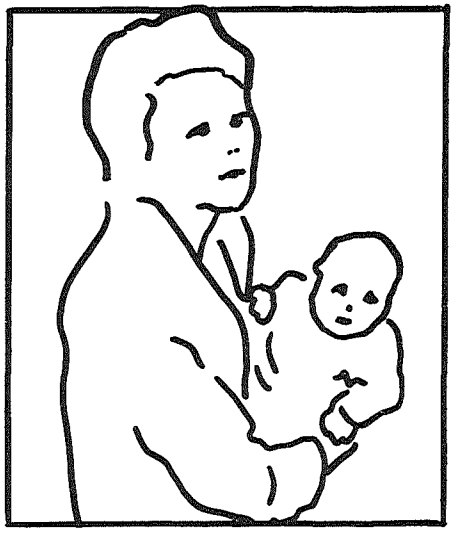
Though the costs of health services are increasing, there is no way of telling whether the health status of the population is improving. In the past five years, for example, the amount of money spent on health in Minnesota has increased by about half, while life expectancy has increased by about one year. The traditional measures of health service effectiveness, such as life expectancy, infant mortality rates, and causes of death do not provide an adequate picture of the overall health situation. New indicators of health status are needed that measure the differences that exist within the population.

Concern has grown over the increasing number of ethical issues that surround medical technological innovations, including organ transplants and life extension methods. As "test tube" babies and newer scientific achievements are added to the list, this concern will increase even more. Future policies might not resolve these ethical questions, but they must provide guidelines about who has the right to decide in life and death situations: the professional, the community, the family, or the individual. The role of state government in helping to resolve these ethical issues should be clarified.

Prospects

The cost of health services will continue to increase in Minnesota. The rate of increase may be modified by:

1. Encouraging individuals to assume a greater responsibility for their own health (e.g., by providing more and better information to individuals);
2. Developing financial incentives that encourage preventive care (such as health maintenance organizations) and insurance coverage for less expensive modes of treatment;
3. Improving record keeping and communications technology for more rapid and accurate diagnosis of symptoms;
4. Encouraging noninstitutional care (such as helping a family to care for its members who would otherwise require nursing home or institutional mental health care); and
5. Encouraging present trends in the use of paraprofessionals and allied health personnel (including resolution of related legal questions).



Every small town in Minnesota will not have its own doctor in the future, but access to health services may be improved by:

1. Expanding telecommunications systems (as has been done in northwestern and southwestern Minnesota) as a means to facilitate diagnosis, treatment, and patient/doctor communications;
2. Establishing regional centers from which specialized medical personnel and expensive medical equipment may support nearby medical offices and clinics; and
3. Expanding the use of mobile health vans to provide routine and preventive services (which may reduce the need to build permanent facilities).

Recommendations

The following recommendation are based on the report "Health Services in Minnesota," published by the Commission on Minnesota's Future in December 1975.

The state of Minnesota should:

1. Encourage each citizen to participate actively in the care of his/her own health. This may be accomplished by:
   a. Providing financial support for health education programs which encourage health-promoting behavior, early recognition of disorders, and understanding of disease and treatment; and
   b. Experimenting with new methods of financing health care which build in incentives for patient responsibility.
2. Establish a single coordinating authority for the planning of health resources, personnel and facilities in the state.
3. Require that all health policy-forming bodies, which receive a majority of their funding from public sources, include consumer representatives.
4. Continue to encourage a better distribution of doctors and delivery of health services to rural and urban areas of deficiency.
5. Provide all local and state health care agencies with access to common social and economic data.
6. Establish policies that encourage a shift in emphasis from curative to preventive health care practices. This may be accomplished by:
   a. Establishing policies that encourage the reimbursement system to place greater emphasis on prevention (such as nutritional counseling, home health care, and environmental evaluation); and
   b. Evaluating the relative cost-effectiveness of allocating public resources to curative and preventive health care approaches.
7. Consider the containment of health care costs to be a matter of concern in the development of all public policy. This may be accomplished by:
   a. Redirecting government finances to emphasize preventive health services, rather than curative;
   b. Considering alternative health service delivery systems, such as mobile units versus permanent facilities, home health care versus long-term institutional care, and prepaid health maintenance organizations versus fee-for-service; and
   c. Investigating alternative ways of dealing with patient compensation and professional responsibility in malpractice cases.
8. Develop experimental programs to improve health care delivery to areas of need. This may include the use of paraprofessionals, incentives for professionals to practice in rural areas, education materials for isolated programs, mobile facilities, and telecommunications.

EDUCATION

The state of Minnesota has greatly expanded its financial support for education during the past two decades. This has included appropriations to elementary and secondary (which amounted to more than half the operating budget for the typical Minnesota school district in fiscal year 1975-76). This has also included the virtual reconstruction of all 24 public post-secondary educational campuses existing before 1960, the addition of 42 entirely new public campuses between 1960 and 1971, and the creation of student financial aid programs to improve accessibility to the University of Minnesota, state universities, state community colleges, and area vocational-technical institutes. Largely as a result of demographic changes since 1970, the state experienced elementary and secondary enrollment declines, and will soon face declines in traditional students seeking post-secondary education. These changes raise questions concerning underutilization of facilities, excess teachers, narrowed choices for students, and escalating costs per student — which call for a re-examination of Minnesota's public education policy.

Post-Secondary Education

State post-secondary education policy appears to have two main dimensions:

1. The provision of educational opportunities for those who seek them; and
2. The assurance of access to institutions and programs of individual choice.

Enrollments. Throughout the 1960s public policy makers and administrators were busy with the enormous tasks of accommodating increased numbers of students. Between 1960 and 1970 enrollments in public post-secondary institutions nearly tripled. The execution of public policy took the forms of virtually reconstructing all existing campuses and absorbing the junior colleges and vocational-technical institutions into state systems, nearly tripling of locations at which post-secondary educational opportunities were provided; interstate reciprocity and other student financial aid programs; and curriculum expansion.

Forces countering growth, largely unrecognized, were also operating. Live births peaked in Minnesota in 1959 and declined almost steadily throughout the 1960s. The proportion of high school graduates going to college peaked in 1968 and declined for five years afterward. The proportion of those in colleges who completed their studies declined at about the same time. Problems unforeseen in the 1960s became more apparent in the first half of the 1970s.

College enrollment, which for the time being seems to have bottomed out in 1973, has alerted many public policy makers and administrators to the

problems that exist. Among the most pressing are:

1. Minnesota has overbuilt its physical plant. Facilities exist that may never be used to capacity;
2. Beginning in the early to mid-1980s a period of substantial enrollment decline lasting fifteen years or more will begin;
3. The costs of instruction will escalate sharply;
4. Widespread geographic distribution of facilities seems to have had little positive affect on student access, but has resulted in higher cost;
5. The traditional job market for college graduates has deteriorated; and
6. Educational opportunities for individuals will be curtailed as enrollments decline.

Costs. The costs of higher education in Minnesota have been heavily subsidized by the state. Student financial support in the form of subsidized tuition ranges from no cost at vocational technical institutes to an average of about one-fourth of the cost of instruction at the University of Minnesota. Below capacity enrollments and increasing costs have raised the issue of revising tuition policy. Those who favor higher tuition see higher education as a commodity to be purchased with benefits accruing mainly to the individual in the form of earning capacity and other personal benefits. Those who favor low tuition feel that access to post-secondary education should not depend on an individual's ability to pay and that society is the principal benefactor from an educated public.

Needs. Unless public policy changes, taxpayers will pay more per student for education and students will have fewer choices. The following issues need to be considered:

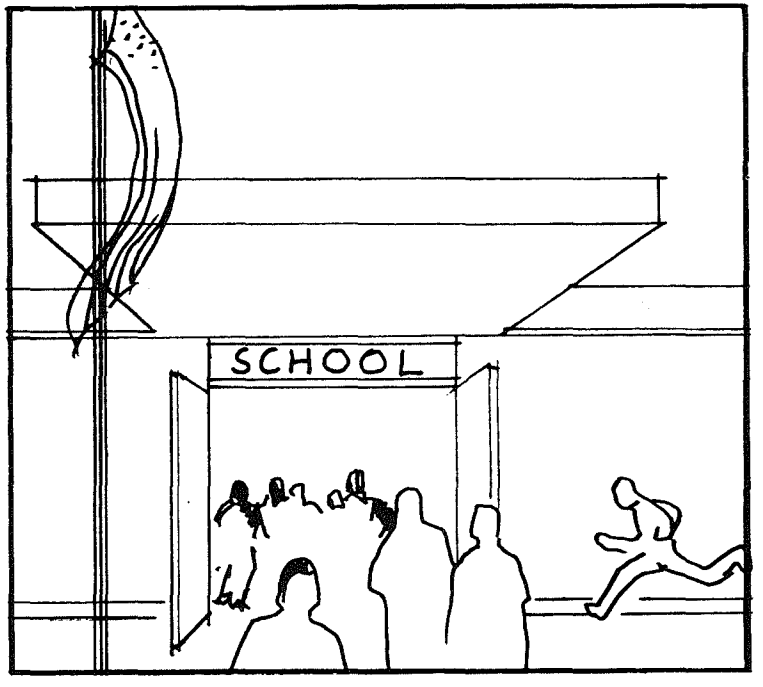
1. Consolidation of post-secondary educational institutions;
2. Development of alternative delivery systems;
3. Dissemination of career information for college graduates; and
4. Re-evaluation of financing policies, including tuition subsidies.

Elementary/Secondary Education

Shifts in population and changes in age structure are bringing about changes in elementary and secondary enrollment and the distribution of that enrollment throughout the state. At the same time, the rising costs of providing education may affect public willingness to support education.

Enrollments. Elementary/secondary enrollments are expected to decline in Minnesota from about 1 million at present to about 800,000 in 1985, increasing again to an estimated 880,000 by 2000. The only enrollment increase in the state before 1985 will result from shifts in population to amenity and exurban (within commuting distance) growth areas where new facilities will be needed. The largest declines in enrollment are expected to occur in school districts near the western edge of the state. (See Figure 5.)

More than 40 school districts now exist in Minnesota that have high schools with less than twenty-five students in their senior class. The concentration of these small school districts are in those same areas of the state that will experience the largest declines in secondary school age population. Without further school district mergers, many school districts in the state will have no more than a dozen students in their senior class by 1990. Small school districts can usually offer only a minimum number of curriculum choices, while the cost per pupil is usually much higher than in larger districts.



Costs. Unless present trends are altered, operating costs in elementary/secondary education may triple by the year 2000, to as much as $3 billion per year for the state. Increasing costs will come mostly from teachers' salaries, the cost of transportation, and the cost of maintaining school facilities.

Cost increases will bring efforts to avoid duplication of services among school districts and promote the sharing of resources, such as through educational service areas. A statewide system of educational service areas could promote the sharing of administrative services, teachers, health services, library services, transportation, and the purchase of supplies. The location and design of new facilities should take into account community and nonschool uses, thus promoting the efficient use of tax dollars.

Needs. Demographic changes and cost increases affecting education will instigate more intensive discussion about the purposes of education, along with demands for greater accountability in terms of student achievement and the performance of teachers and administrators.

The principal client of the education system is the student or learner, and the goal should be to help the learner acquire fundamental skills, attitudes, and values required for a responsible and rewarding life. Learning is not confined to the classroom, but is part of life itself, taking place in many ways throughout life. Consequently, the teacher may be more appropriately considered as a "learning facilitator," or one who provides opportunities for and motivates learners. Because students learn at different rates and in different ways, there should be a variety of options appropriate for meeting individual student needs, including opportunities for learning both inside and outside the classroom and noncredit opportunities for learners to leave and reenter the school system.

There is a need for explicit and measurable objectives for elementary and secondary education, such as standards of student proficiency (which may be required for grade advancement). The measurable products of education should be the acquisition of essential self-sufficiency skills, with particular emphasis on the communication skills (reading, writing, speaking, mathematics), and students, teachers, and administrators should all be responsible for learning progress. These skills should be considered not as ends in themselves, but as means to meet the more fundamental educational goals of establishing priorities, making judgments, improving knowledge, and developing values. Evaluation of performance requires more complete and publicly available information on enrollments, sources of revenue, operating costs, student achievements, dropouts, and physical facilities.

These needs and prospective changes in education suggest that technology will play an increasingly important part in the educational process. This includes the use of computers as instructional tools for the development and testing of individualized curriculum. It also includes the increased use of the little developed potential for telecommunications, with its far-reaching implications for educational facilities and for extended lifelong, home-oriented learning opportunities.

Recommendations

The following recommendations are based on the reports:

A. "Tertiary Education," published by the Commission on Minnesota's Future, April 1975;
B. "Elementary and Secondary Education," an unpublished backround paper prepared for and presented to the Commission on Minnesota's Future, October 1975;
C. "Economic Growth in Minnesota," an unpublished backround paper prepared for and presented to the Commission on Minnesota's Future, August 1975;
D. "Post Secondary Education in Minnesota: Who Should Pay and How Much," prepared for and presented to the Commission on Minnesota's Future, August 1975.

Concerning post-secondary education, the state of Minnesota should:

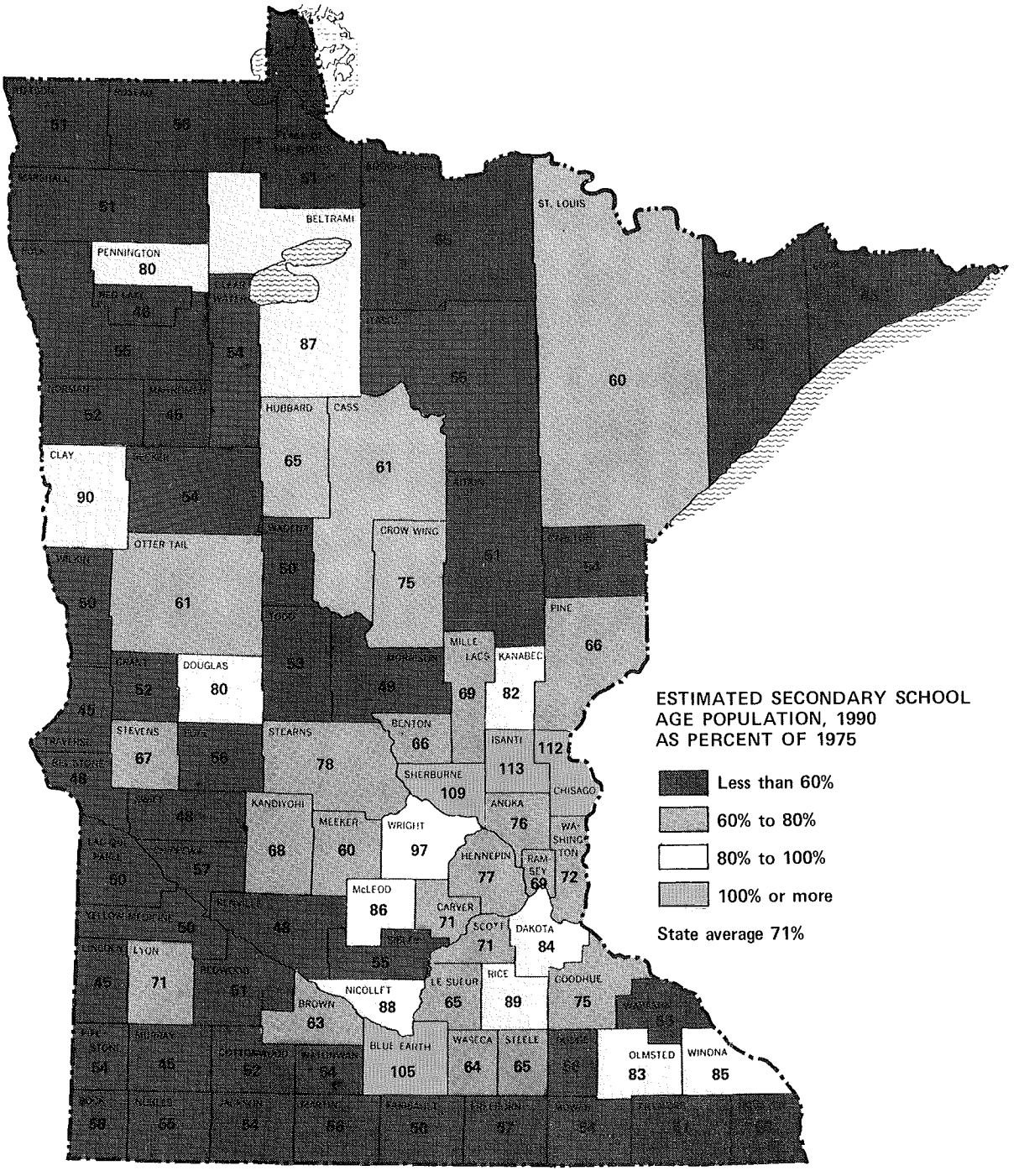
1. Study the prospects for consolidation of post-secondary institutions.
2. Develop a consumer's guide to post-secondary education, including information on the number of people being trained and potential employment opportunities in specific categories.
3. Adopt a state post-secondary tuition policy that reflects the cost of instruction.
4. Evaluate the present and proposed federal involvement in manpower programs and consider the appropriate role of state government.
5. Develop and disseminate comprehensive demographic information on employment.
6. Evaluate the quality and effectiveness of occupational training, including adaptation to potential changes in occupational requirements.

Concerning elementary/secondary education, the state of Minnesota should:

1. Continue to provide twelve years of tuition-free education to all.
2. Compile, analyze, and disseminate educational data for individual schools and school districts (such as enrollments, professional staffing, paraprofessional staffing, mill rates, where graduates go, capital budget plans, physical facilities, and curriculum offerings).
3. Articulate explicit measurable objectives for public primary and secondary education.
4. Analyze the long-range implications of collective bargaining on elementary and secondary education.
5. Evaluate benefits and costs of alternative elementary and secondary technologies (such as cable television, computers, student-teacher ratios, and mixes of paraprofessionals, certified teachers, and community resources).
6. Implement a statewide system of Educational Service Areas that offer such services as administrative capability, teachers, health-related services, library services, purchase of supplies, and transportation.
7. Consider replacing the present school age attendance requirement with a competency of minimum skills requirement. (This should include an evaluation of the effects on present public education.)

SCHOOL AGE POPULATION, 1990

Figure 5



SOURCE: MINNESOTA STATE DEMOGRAPHER

8. Encourage the availability of schools and facilities for public use on a year-round basis.
9. Define the clientele of the Minnesota elementary and secondary educational systems as all persons with less than twelve years of schooling, regardless of age.

ENVIRONMENT

All preceding sections of this report are related to the environment. Economic development, population changes, housing, health services, transportation, the location of these activities on the landscape and the materials they use are all parts of the environment. When the characteristics of these phenomena are examined side by side, their interdependence becomes even more apparent.

Situation

The questions of environment are concerned with the future of mankind in a world that has physical limitations and its implications for current lifestyles. It is not clear at this point what those limitations might be or what man's capacity is to extend or adjust those limitations. It is clear that at present rates of growth the world's population will double in 35 to 40 years, that the consumption of nonrenewable resources is accelerating, that an energy dependent economy faces the end of fossil fuel use within a generation, and that the gap in living standards between the have and have-not nations is widening.

While environmental issues focus on worldwide questions, there are some important things about which a single state, a single business or local governmental unit, or an individual should be conscious. Any human decision, to be effective, requires an understanding of how issues relate to one another. No decision or action affects only those things that it was intended to affect. We are thereby forced from our usually simplistic, narrow perspectives and single-purpose solutions to approaches that require an understanding of the multiple effects of all decisions.

The American economy and lifestyle have flourished because of a wealth of natural resources — land, water, timber, iron ore, coal, petroleum, natural gas, and a long list of additional critical materials — combined with a political system that encourages individuals to produce and then to acquire the benefits of material goods. For most of the first 200 years of this nation's history, the resources on which the national economy has depended have been viewed as abundant and consumed in unrestrained quantities. As the rates of consumption have accelerated and the once abundant domestic supplies of some minerals approach depletion, more of the strategic materials upon which this nation depends must be imported from other countries. Many important national policies have been based on assumptions of long-term resource availability, yet those policies now seem to be in conflict with reality. The world's finite resources cannot possibly satisfy the rising aspirations of the world's growing population.

Wide differences of opinion exist regarding the future use of the world's resources and future political and economic structures. The first report of the Club of Rome, *The Limits to Growth,*[9] projects that if current policies continue, a disastrous future, resulting from either exponential increases in population or from failure of resources and food supply to keep pace with population and economic growth, is inevitable. However, technology, according to this scenario, has the potential to expand food production, reduce pollution, and refine recycling processes; but if population growth is not checked, the most technological innovations can do is merely postpone the collapse.

A much more optimistic outlook is presented in the second report of the Club of Rome, *Mankind at the Turning Point.*[10] Taking more account of man's capabilities, this report observes that there have already been reductions in the rate of population growth and shifts in values that have the potential to change patterns of material consumption. Co-author of *Mankind at the Turning Point,* Mihajlo Mesarovic, believes that changing the present course is still possible, but this requires that "as individuals and as developed societies we have to adopt a new value system and new ways of doing things which will meet the requirement of the new realities. First, we have to develop a sense of identity with future generations; to learn to live with a profound awareness of their time as well as our own; to learn how to refrain from doing something we can do today in order to protect the interests, of those who will live tomorrow. Second, we have to develop a sense of global identity which reaches beyond our own borders and our own regions and societies. Third, we have to change our attitude from the idea of conquering nature to that of finding harmony with nature."[11]

The greatest resource available in dealing with present conditions and future uncertainties is man's own creativity. Largely because of this greatest unknown about the future, Herman Kahn is optimistic about the chances of continued human progress. Technology, properly focused, will be an important means of developing new resources to replace present limited resources. Limiting or subduing technological advancement will not aid the resolution of environmental issues, as some suggest.

Trends

Stabilization of population growth would contribute significantly to relieving pressures on the environment. However, real crises will have to be faced in the next few decades, long before world population stability could be realized, even if there were agreement on how to achieve it. Declining birth rates in the U.S. over the past fifteen years have been

closely correlated with an increasing number of women entering the labor force, postponement of marriage, reduction in desired family size, a wider variety of living situations (single, one-parent families, childless couples, and moderately large families), all presumably the result of a greater range of choice and acceptability of different ways of living.

In Minnesota the current birth rate (1976) which results in an average of 1.8 children per woman, is below replacement level. Assuming an average of 1.9 children per woman over the next fifteen years, half a million people will be added to the state's population, as the baby boom children reach child-bearing age. The hard questions are: Where will these people live? Where will they work? How will the quality of life at that time compare with the present?

Minnesotans have developed a lifestyle that depends greatly on the quantity and quality of the environment. The economy, transportation, housing, recreation — all require land, water, air, and minerals. Answers to the foregoing questions are concerned with how these resources will be used in the future and who will have access to them. In a series of public meetings sponsored by the Commission on Minnesota's Future and held throughout Minnesota in April and May 1976, environmental issues were rated as the top priority. (See pages 69-77). This suggests that most Minnesotans are probably more aware of environmental issues and ready to accept changes in lifestyle than many public leaders assume.

Environmental issues such as water and air quality have often been expressed in "soft," subjective, even emotional terms, without adequate documentation of trends. This is so partly because no precedents exist for the environmental pressures expected in the future. It is also because information about and analysis of environmental trends have been inadequate. Environmental data must be much more specific and precise in order to offset the "hard" economic data that have persuaded us to continue to consume resources and alter the environment at escalating rates.

Prospects

The most immediate environmental crisis involves the use of energy. This nation depends heavily on cheap and abundant fossil fuels — oil, natural gas, and coal. The production of most of the basic needs — food, clothing, housing and transportation — is energy intensive. American agriculture produces food at the lowest cost in relation to consumer income of any nation in the world. This efficient production system has been built on cheap energy, from fertilization, cultivation, harvesting, and transportation to processing, packaging, and distribution. Single-family detached housing on large lots depends on cheap energy for heating and access by automobile. Transportation is more than 90% dependent on petroleum. The production of synthetic materials used for clothing is heavily dependent on cheap and abundant energy. Virtually every aspect of lifestyle will be affected by reduced availability and rising costs of energy over the next two decades.

A longer-term, and potentially more difficult, environmental problem concerns land resources, resulting from the competition for its use. Much of the coming land use debate is likely to focus on the difficult questions of the rights of individuals versus the needs of society. To facilitate land use decision-making, adequate data are required on changes in land use and on characteristics of the soil and location.

The likelihood of future serious droughts requires the establishment of policies for water allocation. The quality and quantity of surface and underground water should be monitored, aiming toward both standards of quality and priorities for use during periods of water shortage, including

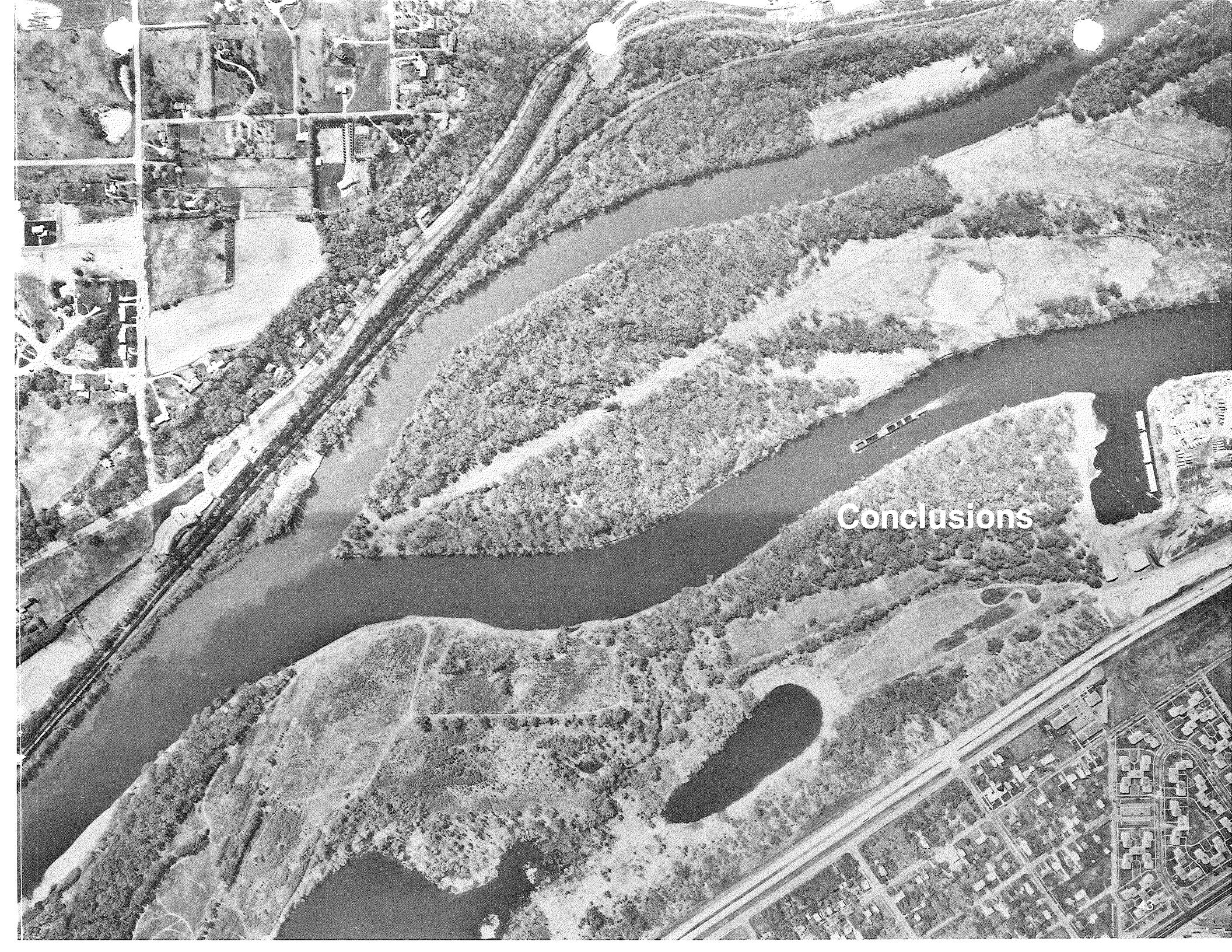
allocation for domestic, industrial, and agricultural uses. Information should include the sources and recharge rates of underground water supplies and the demands for its use. More information is needed on seasonable stream flow and its relation to precipitation variability.

A great variety of public policies in Minnesota are directed at environmental issues, including the Wild and Scenic Rivers Act, the Shorelands Management Act, the Coastal Zone Management Act, the Critical Areas Act, the Power Plant Siting Act, the Environmental Policy Act, and the Environmental Rights Act. In addition a variety of public policies affect the environment, though not by specific intent. These include taxes, transportation, agriculture, economic development, and land, water, and air use policies, the environmental impacts of which have not been systematically considered. The net effect is a confusing

array of often conflicting, overlapping, and uncoordinated public policies that influence the environment. Before adopting additional environmental legislation, the state should determine the effectiveness of existing environmental policies and evaluate the environmental impacts of nonenvironmental legislation.

A major problem with existing state environmental legislation is its fragmented approach. Most environmental legislation has been conceived and implemented separately, with responsibility scattered among many state agencies that have overlapping and conflicting interests. A specific development proposal may have to pass multiple check points that duplicate one another in order to be approved. For example, an environmental impact statement may be called for in any situation judged to have "significant environmental impact," even though the specific case may be covered under separate legislation intended to provide the same environmental protection, such as in the case of the Power Plant Siting Act or the Critical Areas Act. The result is a wasteful and inefficient process that delays approval and contributes to bureaucratic "red tape" and the growth and costs of government. An integrated approach to environmental legislation with decision-making responsibility clearly vested at one place in state government is needed.

The physical environment is not, nor can it be, kept in a "natural" state; all of man's activities interact with, depend upon and influence the environment. The task facing Minnesota is not to preserve, but to manage the environment in ways that consider the long-term interests of the state community. Goals of public policy should be to maintain an equilibrium between elements of the natural environment and human lifestyle. This requires better information on the quantity, quality, and use of air, land, water, and minerals. It requires consistency in public policy and broad public awareness and support. It requires considering the multiple implications of public policy and monitoring and analyzing policy effectiveness. It requires an integrated or systemic approach to all decision-making. And most fundamentally, it requires citizens to question the values that underlie their behavior.



Conclusions

CONCLUSIONS

The foregoing sections of this report focus on current and prospective changes in Minnesota. In an effort to develop a holistic perspective, this section draws together the major interrelated issues from the preceding sections. This leads, in turn, to the subsequent section on Goals and Objectives for Minnesota.

Future Issues

Interdependence

The interdependence of Minnesota's natural and man-made environments is becoming increasingly apparent. Awareness of interdependence increases with lifestyle complexities, technological development, and more rapid change. Job specialization has contributed to improved standards of living, but it also has reduced individual and family self-sufficiency. Increasingly, the actions of individuals, special interest groups, and corporations affect others.

A shift from self-sufficiency places greater responsibility for decision-making on the community. This is one reason for the increasing number of laws, regulations, and policies that have been enacted to protect the rights of individuals.

Public decisions have often been made from special interest perspectives, and they have not always reflected their interconnection with other decisions. Single decisions can have multiple, unforeseen effects that conflict with one another, or even be contrary to the intent of the decision. Since such potential side effects are difficult to anticipate, they are seldom taken into account in a systematic way before decisions are made. Better decision-making requires more comprehensive information that reflects the interrelationship of issues.

Depletion of Vital Resources

The economy and lifestyle of Minnesota have been fundamentally related to the availability and use of natural resources. In the future, the supply of certain critical resources might not satisfy the demand (especially if policies of foreign suppliers become more restrictive). The result is likely to be shortages and increasing costs of vital materials, which will be reflected in increasing costs of most consumer goods and services.

Diminishing supplies of petroleum and natural gas over the next generation will impose difficult adjustments. Petroleum and natural gas accounted for about three-fourths of Minnesota's total energy use in 1976. During the adjustment period alternate energy sources and long-range solutions will need to be developed. In the short term, coal offers the best prospect to meet an expanding need for electricity; coal could also be used to produce synthetic gas and liquid fuels. The long-term solution lies in the development of new energy sources. Technological development of alternatives and substitutes, however, cannot be counted on to satisfy energy needs over the next two decades. Shortages can be expected and should be planned for through conservation measures and allocation procedures.

Beyond the short-term energy crisis lie the broader and more difficult questions of who is entitled to use the earth's scarce resources and for what purposes. It is not clear what those resource limitations are or what man's capacity is to extend those limitations through conservation and technological development. It is clear that: At present rates of growth the world's population will double in 35 to 40 years; consumption of nonrenewable resources is increasing; an energy-dependent lifestyle faces the exhaustion of known oil and gas reserves within a generation; and the gap in living standards between the have and have-not nations is widening. Minnesota will be directly affected by these worldwide conditions and resource shortages but will have little control over them. The state must prepare for these shortages by developing contingency plans, including alternatives, substitutes, and priorities for use.

The need to accommodate resource demands will raise pressure for environmental and social compromises (such as in the case of power plants, transmission lines, coal trains, peat development, copper-nickel development, etc.). Short-term expedient decisions that have undesirable or costly long-term environmental and social effects are not acceptable. Adequate information is required in order to weigh potential costs and benefits.

Questions of resource allocation likely will focus on issues at hand, such as water rights during a drought or the best use of land in the long-range interests of Minnesota. These questions place the individual values of self-determination, land ownership, privacy, and "the work ethic" in conflict with social values such as equality of opportunity, equity in the distribution of physical and material resources, human resource development, and the environment. Resolution of resource allocation questions thus requires consideration of both personal and social values.

Rising Costs of Consumer Goods and Services

Fundamentally related to resource shortages and accessibility are the development of resource alternatives, substitutes, and replacements, which likely will be complicated and expensive. These additional costs will, in turn, be reflected in the general cost of living. The costs of health services, housing, home heating, transportation, and public services (taxes) already are increasing rapidly, affecting most seriously the fixed and lower-income groups.

Personal income in the years ahead is expected to increase in Minnesota at rates slightly greater than the national averages. However, the costs of many goods and services could increase even faster. If this occurs, individuals and families will be forced to make difficult choices about how to spend their personal incomes. Organizations, corporations, and government will face the same difficult questions. Dealing with these choices will require better information and the careful weighing of costs and benefits by all consumers.

Distribution of Wealth

Federal and state efforts to reduce poverty have not been fully effective. Even without the pressure of escalating living costs, disparities between upper-income and lower-income groups have not changed significantly. Minnesota tax data for 1973 indicated that the lower two-fifths of the income scale received less than one-sixth of the income — and that proportion was about the same as ten years earlier.

In the past, poverty has been reduced primarily through economic expansion, without a fundamental change in the distribution of incomes and property. In the future, as nonrenewable resources shrink and the use of renewable resources becomes more important, economic growth is likely to slow. Material standards of living are likely to rise less rapidly than in the past, with a consequently greater emphasis on the distribution of income. If the economic "pie" grows more slowly in the future than in the past, the question of how it should be divided will take on greater importance. A state that has depended on the development of its human resources can ill afford in the future an increasing disparity of opportunity among its people.

Modification of Living Standards

Rising human expectations can result in consumer demands that exceed the capacity of the system to satisfy them. In the case of health care, for example, rising costs are partly caused by consumer expectations that are not tied directly to price. Patients expect and receive maximum treatment, which involves the use of expensive medical technology, both to protect the physician and to "cure" the patient. Treatment is available on a fixed-cost basis through health insurance.

Increasing costs of housing are also in part the result of rising consumer expectations. Many Minnesotans want a single-family home on a large lot with a garage, built-in appliances, carpeting, and many conveniences. These standards have been encouraged by government policy and private lending practices. Lesser standards are discouraged by local building codes, zoning ordinances, and restrictive covenants. Housing is no longer merely "shelter" but an important symbol of lifestyle and as such has nearly infinite quality and cost implications. Higher costs will force many Minnesotans to reduce their housing expectations and to accept smaller and/or older homes that are closer to work and have fewer luxuries.

The cost of many public services, particularly for education, have escalated rapidly, but without correspondingly higher user costs. In areas of human service, whether public or private, citizens expect both more quality and more quantity, especially when they do not directly bear the costs. With resource shortages and rising costs, Minnesotans might need to modify their life style expectations.

Human Development

Even more than in the past, we ourselves, individually and collectively bear the ultimate responsibility for the quality of life in Minnesota. Minimum standards of living can be defined and realized; unrealistic expectations cannot. For example, good health and bad health are directly related to the way one lives, including the role of nutrition, drugs, and exercise. These personal choices can be affected by individual responsibility, economic or social conditions, or a combination of these factors. Thus, public policy and individual motivation must interact in the provision of opportunities and acquisition of the fundamental skills, attitudes, and values required for a healthy and productive life.

In this sense, education throughout life assumes a critical importance in the continued development of human resources. Education does not end with formal schooling. The measurable minimum product of schooling should be the essential skills for living, or "basic competencies." But these skills are only a way to reach the more fundamental, life-long educational goals of improving knowledge, establishing priorities, making judgments, and developing values.

Encouraging the development of human responsiveness to future opportunities should be consciously and deliberately pursued as a matter of state policy. Attention should be directed to expanding human capabilities by providing opportunities and stimulating the desire for continuous learning, encouraging individual experimentation and risk-taking, offering opportunities for personal responsibility and encouraging meaningful participation in public decision-making.

Value conflicts are likely to become more acute as more people seek access to diminishing resources. For example, the state might determine that it is in the interest of the state community to protect agricultural land from nonagricultural development, which would deny the "right" of the owner to gain a profit from selling his land for other uses. To avoid disruption when a crisis arises, decision making processes must take into account conflicts in underlying values, both personal and social, in settling public policy questions.

Technology based on nonrenewable resources has contributed significantly to increasing standards of living in the past. Resource consumption has continued on the assumption that technology could develop new or alternative resources to replace those being depleted. But there is no assurance that this is the case. Furthermore, this assumption brings with it some risk for the stability of the economic system and standard of living. Technology will be extremely important in influencing future lifestyles. But widespread concern exists that technological change may be out of control. There is a need to assess technological innovations in advance and to monitor their social, economic, and environmental impacts. The attention of technology should be redirected toward the development of renewable resources and a lifestyle that is more in harmony with the environment and less based upon the consumption of nonrenewable resources.

Population changes will influence the type of public services needed and the costs of providing them. As the present age structure matures, persons born during the peak birth years from the mid-fifties to mid-sixties will be seeking higher education, competing for jobs, and looking for housing. Likewise, the birth rates of the past decade will result in a relatively lower demand for housing and jobs by 1990. Shifts in the location of population will influence the costs of providing services to citizens of the state. If population dispersal patterns continue, they will add to the increasing costs of housing, transportation, land and public services.

External factors are those beyond the ability of the state of Minnesota to control. These include various national policies, such as those concerned with the allocation of petroleum and natural gas, as well as foreign trade policies that might restrict the export of vital materials. Weather, natural or man-made disasters, world population growth and food needs, and major national/international political/military/economic developments could also constitute significant external factors. The potential effects of these external factors need to be anticipated and contingency plans developed. Preparing for unknown possibilities calls for awareness and adaptability of individuals and organizations.

Future Tasks

The changing conditions in Minnesota, indicate a need to:

1. Meet future state energy needs;
2. Coordinate the management of the state's land and water resources;
3. Conserve and determine priorities for the use of nonrenewable resources;
4. Encourage the focus of technology on the development of renewable resources and recycling of nonrenewable resources;
5. Encourage the development and marketing of more durable consumer products;
6. Develop public incentives that encourage individuals, special interest groups and corporations to make socially and environmentally beneficial decisions;
7. Encourage and facilitate increased individual responsibility for personal well-being;
8. Provide better mechanisms for resolving conflicts between personal freedom and social needs and environmental constraints;
9. Take into account in public involvement efforts factors and conditions that impose threats to traditional values;
10. Evaluate and make available for public discussion the trade-offs in policy proposals, such as between individual, social, economic, and environmental interests;
11. Consider public preferences, expectations, and values in public policy development;
12. Establish over-all state guidelines (goals and objectives) for the development of state policy;
13. Organize, evaluate, and make widely available comprehensive information;
14. Assess perceived public needs and set priorities for state involvement;
15. Measure present and potential costs and benefits of state policies;
16. Analyze state policies for both intended and unintended impacts;
17. Foresee and evaluate emerging state issues;
18. Develop a decision-making structure that has the flexibility and capacity to deal promptly with emerging issues;
19. Improve the quality, scope, and credibility of citizen participation in decision-making;
20. Set realistic standards for government's responsibility for providing human services;
21. Develop creative public-private relationships in meeting public service needs.
22. Generate and plan for sufficient capital resources to invest in large scale public-private development;
23. Consider ways to shift from quantitative, material measures of human progress to qualitative measures;
24. Establish contingency plans to deal with conditions that affect the state, but cannot be managed by the state; and
25. Find more effective ways of influencing external policy development.

The primary responsibility for determining how these future needs should be met rests with the policy-making body of state government — the state legislature. The potential assignment of responsibilities among state agencies is not always clear, however. There appear to be no state agencies that have explicit responsibility for 10 of the 25 tasks identified, while at least two and up to fifteen agencies are responsible for each of ten other tasks. (See Appendix F.) While this is a very imprecise assessment, it does point out the fact that state government is not

structured to address future needs. State government is now organized according to special and often competing interests, making it difficult for the state to deal with the increasing number of broad and interdependent issues and to assume an over-all perspective of state needs and priorities.

Growth and Development

A major charge to the Commission on Minnesota's Future is to consider alternative growth and development strategies for the state. At various times during the past two decades, there have been calls for "balanced" growth, rural renewal, or growth and development strategies, all fundamentally concerned about shifts in the location of population and employment in the state of Minnesota.

Logical reasons exist for present patterns of urban and rural growth, which are described in this report's section on Settlement. An attempt to direct such growth and development by legislation without an understanding of these reasons might inhibit economic processes, add to public costs, and unnecessarily restrict personal choices.

The factors that influence settlement changes in Minnesota, including personal preferences, economic costs, environmental constraints, and public policy, are in constant flux. It is neither possible nor desirable to establish an "optimal" distribution of population and economic development for a system that is constantly changing — and that must continue to change. Growth and development is a process, and the responsibility for guiding that process falls on the people of Minnesota through their state government. Minnesota does have an unstated growth and development strategy, implicit in a wide range of public and private policies that are not always consistent with one another. The need is to develop an explicit growth and development strategy.

A growth and development strategy for Minnesota requires that state government facilitate the process of orderly change through consistent public policies. This calls for the adoption of state goals and objectives by which all existing and prospective policies are evaluated. The state should facilitate real lifestyle choices that are limited only by the public good and not determined by special interests. The range of lifestyles should offer urban/suburban/small town/rural/farm options, without one subsidizing another (as at present), unless it can be justified in terms of statewide interest. Better information on the individual and social costs of alternative lifestyles should be available so that citizens and public bodies can make the best possible personal, social, and environmental decisions. The cost-benefit inconsistencies of existing policies should be eliminated. Better information is needed to determine who actually pays for and who actually benefits from state programs and whether or not those realities are in accord with state goals and objectives.

Given current trends, it is likely that increasing costs of government and inequities of opportunity will bring pressure for the removal of inconsistencies in public policy. Both increasing costs and policy adjustments will combine to modify personal choices (such as single-family homes on large rural tracts and two or more cars). The result is likely to be a more compact settlement system, with most growth occurring in or near existing cities and towns and with less conversion of agricultural land to urban uses. To the greatest possible extent, changes in settlement patterns should be the result of personal choices in response to energy costs, land costs, transportation costs, and the costs of public services. Where necessary, however, public policy should provide incentives or establish constraints to encourage decisions that are in the public interest.

A counteracting factor that might allow those who so desire to live in rural, scenic, or remote areas is the development of home communication systems. These may include videophones and computer terminals, linking persons in remote areas with most services at a reaonable cost. Encouraging the development of home communications systems as a replacement in part for personal transportation should be seriously considered by the state of Minnesota.

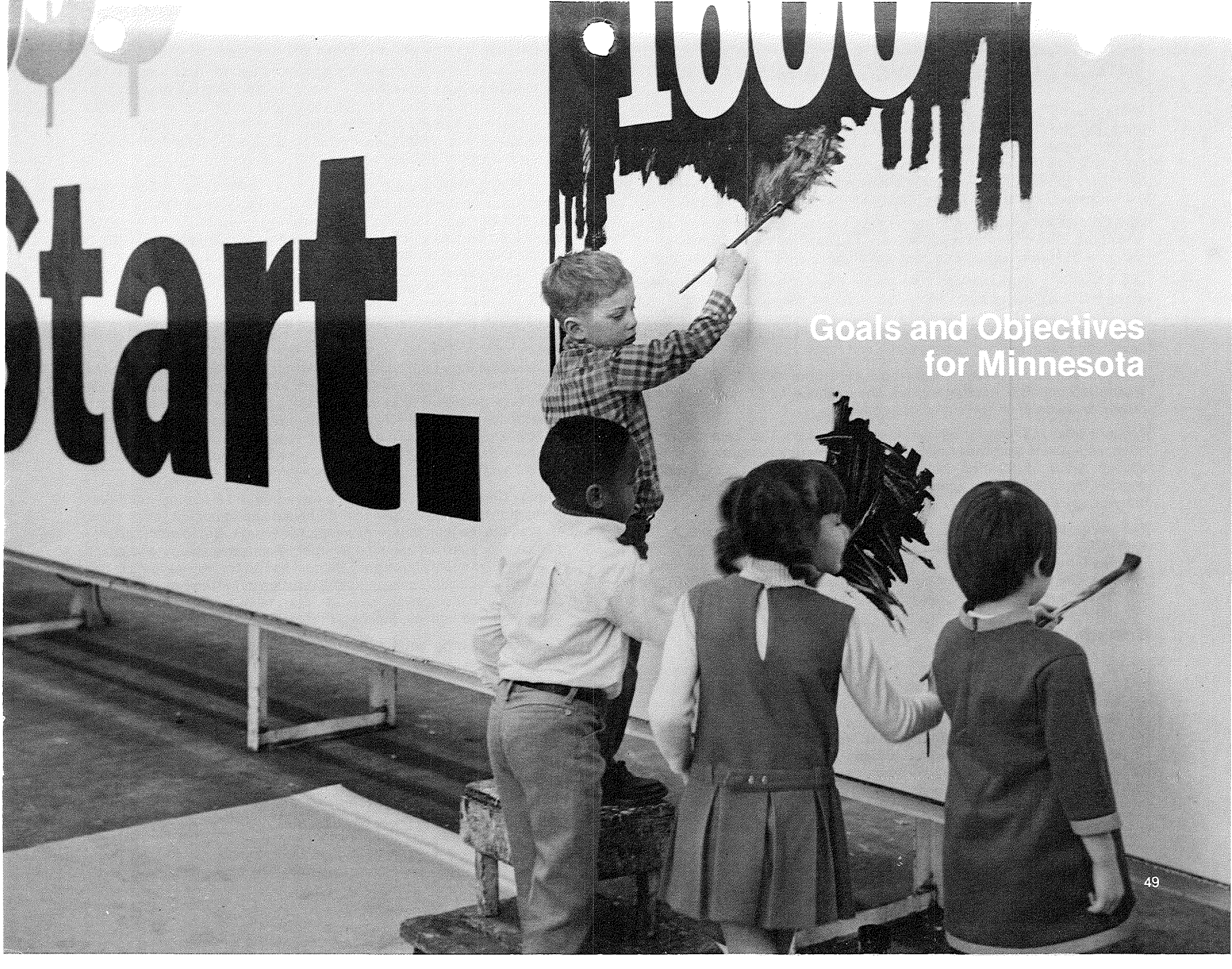
In the future, some areas of the state will increase in population while others decline. Variable growth is not only normal but desirable — in terms of economic efficiency, personal choice, and environmental limits. Variable growth should be understood, accepted, and supported by citizens. Not every small town, suburb, or core city neighborhood can increase in population. Treating the state as an interdependent community necessitates enhancing the strengths and correcting the weaknesses of its various parts. All areas of the state are not identical in their resources; they cannot be identical in their responsibilities and in their growth and development.

Minnesota's long-term growth and development strategy should aim to guide the on-going processes of change. This suggests that government be an enabler of change, monitoring the state's condition and eliminating the obstacles that allow the natural creativity to flow from the state's most important resource — its people. A growth and development strategy should emphasize qualitative growth over quantitative growth, harmony with the natural environment rather than exploitation, equity and community rather than disparity and exclusion, and the responsibilities as well as the rights of individuals. A growth and development strategy for Minnesota should begin with these premises and include the following basic elements:

1. Clarification of the responsibilities of state and local government, vis-a-vis the private sector, in guiding change.
2. Establishment of the organization and resources needed by government to fulfill those responsibilities, including adequate information

to monitor and understand the on-going processes of change.

3. Adoption of goals and measurable objectives for the state community — the guidelines for growth and development and the standards against which all public decisions should be weighed.
4. Evaluation of consistency in all public policy based upon the goals and objectives. Inconsistency in public policy impedes orderly change. Emphasis should be on removing cost-benefit inequities (See goal No. 2, p. 50) and encouraging personal choices that are environmentally and socially sound.
5. Development of improved procedures for the meaningful participation of citizens in public decisions that affect them. The realization of each of the above requires the broad understanding, support, and involvement of the citizens of the state.



Goals and Objectives for Minnesota

GOALS AND OBJECTIVES FOR MINNESOTA

The following goals and objectives are based on the wide range of work done by the Commission on Minnesota's Future, including public opinions expressed at the 12 regional futures meetings held across the state in April and May of 1976. The Commission proposes that these serve as a basis for discussion in the subsequent development and adoption of explicit goals and objectives for the state.

Goals represent statements of long-range purpose that serve as guiding principles. Goals in themselves are not intended to be fully attainable; they give direction to all levels of decision-making now and in the future.

Objectives are achievable and measurable steps toward goals. They are described in a general way without specific formulae for achievement. All are interdependent; they cannot be treated separately. The Commission has not attempted to set priorities among objectives but urges that they be dealt with pragmatically, concurrently, and holistically.

Approaches that follow each of the objectives offer selected examples of supporting policies. Approaches are not intended to be comprehensive means to accomplish the stated objectives.

These goals and objectives are directed toward the community of Minnesota and toward the body of government responsible for the state's upkeep. Some of these objectives are now being carried out in various degrees by specific state agencies. Others are not clearly the responsibility of any existing agency.

Following the adoption of state goals and objectives comes the assessment of needs, setting of priorities among issues, designation of responsibility, reorganization of the decision-making systems (including state government), the flow of the useful information, and the evaluation of existing and prospective policy.

Goals for Minnesota

The following goals are drawn from an evaluation of future trends, issues and needs as identified in this report. They are intended to help guide decisions in the future that require different perspectives and different guidelines from situations in the past. The overlaps, interrelationships, and conflicts between the goal statements are intentional, and suggest the tradeoffs that should be considered in future policy choices. None of the goals is overriding; none is subordinate; all are interdependent. These goals should be taken into account as general guidelines in evaluating the future effectiveness of any public policy.

1. **Human Development.** State policy should consciously provide an environment that builds on Minnesota's basic strengths of human productivity and creativity. This should include expanding the range of individual choice, providing opportunities for participation in decision-making, encouraging personal responsiveness to changing conditions, and removing barriers that might inhibit personal growth. This goal has many policy implications in the areas of education, lifelong learning, health, incentives to produce, equality of opportunity and family stability.

2. **Cost Equity**. Where there are quantifiable benefits to society as a whole derived from public actions, the costs should be shared by all. Where there are quantifiable benefits to individuals, the costs should be borne by these individuals as much as possible. Most policy decisions benefit both society and individuals; and costs should be apportioned accordingly. This goal has policy implications in areas such as combining user fees and general revenue financing for transportation, housing, education and utilities; income and property tax policies; and settlement incentives.

3. **Resource Use.** The use of scarce and finite natural resources should be based on long-term costs and benefits to the public and not based strictly on short-term market demands. An important consideration should be the extent to which the use of a resource contributes to the development of substitutes or alternative resources. This goal has policy implications in the areas of energy use and development, copper-nickel development, recylcing waste, measures of "public good," and water and land use management.

4. **Energy Conservation**. Guiding the transition of an economy and lifestyle that have been dependent on cheap and abundant fossil fuels will require the judicious conservation of energy. Broad public awareness and support are required in order to conserve energy and adapt to alternative energy sources. This goal has policy implications in the areas of monitoring energy use; allocation priorities; research and development alternatives, such as solar, nuclear, peat, wind, waste materials; and public education processes.

5. **Economic growth.** Future economic development must be consistent with resource availability, in harmony with environmental constraints, and based increasingly on renewable resources and recycled materials. Technological developments should support economic growth within these parameters. This goal has policy implications in the areas of water and land management, new crops, fish farms, forestry, reuse of nonrenewable resources, and research development grants.

6. **Individual Responsibility**. Individuals will need to be more aware of and assume greater responsibility for the consequences of their actions. A complex, interdependent, resource-sharing society requires persons who are able to make informed future-conscious and socially-aware decisions. This goal has policy implications in

the areas of public education, mass media use, school curricula, citizen participation processes, and incentives to influence personal decisions.

7. **Community Responsibility**. Community decision making processes must be strengthened to deal with broader and aggregate consequences of individual decisions. While the range of personal choices and responsibilities increases, the range of personal actions should be more clearly defined in accordance with community interests. This goal has policy implications in the areas of clarification of responsibility among individuals, families, corporations, and government, including the various levels and branches of government.

8. **Information Availability**. Our democratic system will need more than ever an organized research and information effort that includes regular monitoring of social, economic, and environmental conditions in the state and providing accurate, appropriate and understandable information for individuals, public and corporate use in making decisions. This goal has policy implications in the areas of clarification of responsibilities and development of incentives for data gathering and analysis; and systematic dissemination of information.

9. **Organizational Adaptability**. In a world of constant change, the responsiveness and viability of all human organizations require built-in adaptability and ongoing self-renewal. Public policy should encourage flexibility in the organization of business, government, education and labor, experimentation with alternative approaches, and response to changing conditions. This goal has policy implications in the areas of built-in incentives for self-evaluation, broader base of participation in decision-making, pre-set termination or "sunset laws," and procedures for public policy evaluation.

10. **Holistic Perspectives**. As society becomes increasingly interdependent, with many decisions having multiple and unforeseen impacts, broader perspectives are needed which consider the whole more important than the individual parts. Effective management and decision-making from this perspective require better information in order to anticipate the potential multiple effects of prospective personal, corporate, and public decisions. This goal has policy implications in the areas of increased public awareness; coordinated information gathering, analysis, and dissemination; methods of evaluation that incorporate a holistic view; goals and objectives that override narrow policy considerations.

11. **Advance Preparations**. Accelerating rates of change, greater interdependency, and multiple and widespread impacts of decisions require greater knowledge and increased lead time in making decisions. Contingency plans are required that anticipate potential changes in external factors, such as world markets, trade embargoes, drought, or major disasters. This goal has policy implications in the areas of agricultural production, storage, and marketing policies that protect individual farmers; water appropriation; coal gasification/liquefaction; emergency self-sufficiency.

Objectives for Minnesota

1. **Develop Resource Allocation Methods**. The state of Minnesota should develop procedures for the allocation of its physical resources which take into account the benefits to individuals and the benefits to society. Among these resources are land, water, and energy. Specifically, a state water use policy is needed, which requires the gathering of essential information on water (including quantity and quality, both surface and subsurface) and policies that establish (even more clearly than present law) priorities among potential uses, including agricultural, energy production, processing industries, recreation, and residences. The state of Minnesota needs to clarify the land use responsibilities of local and state governments and develop information to help determine the best use of the state's land resources.

   Following are examples of potentially useful approaches:
   - Develop priorities for water and land use with consideration of regional variations.
   - Consider a means to allocate natural resources among competing uses, taking account of economic, environmental, and social trade-offs and regional variations.
   - Enact a standby energy allocation program.

2. **Enforce Resource Conservation**. The conservation of natural resources should become a way of life. In the short term, public policy should focus attention on conserving all forms of energy with special attention to petroleum and natural gas, where greater efficiency — such as in space heating and transportation — is possible. In the longer term, public policy should focus on conserving other critical or unique resources, such as land, minerals, forests, and recreation areas, and on consumer goods and services such as housing, appliances, and automobiles. Resource conservation programs need to be developed at the state level, using voluntary cooperation, economic incentives, and restrictions on use when necessary.

   Following are examples of potentially useful approaches:
   - Encourage the efficient use of limited land resources.
   - Establish and implement a strong energy conservation program.
   - Assist in the purchase, rehabilitation, and sale of older homes.

3. **Establish Energy Policy**. In order to attain the maximum flexibility in energy, particularly over the next two decades, the state should keep all its energy options open. That is, Minnesota should not emphasize one energy source (such as coal), but neglect short-range solutions (petroleum and natural gas supplies) and long-range solutions (such as solar and nuclear). Although the federal government will have major influence over energy policy and supplies, including control of oil and natural gas prices, fuel allocations, regulation of imports, strip mining, use of nuclear fuel, and research into alternative energy sources, the state can engage in other significant energy programs.

   A state energy policy should consist of:
   a. Actions that individuals, local governments and state governments can take unilaterally, independent of the federal government or others outside the state (such as conservation).
   b. Ways in which the state can influence federal policy and action (such as the encouragement of new pipeline construction to deliver natural gas and petroleum products to Minnesota).

   Following are examples of potentially useful approaches:
   - Encourage pilot solar installation systems in the state.
   - Encourage a peat gasification demonstration project in the state.
   - Develop a state position regarding future nuclear power plants in Minnesota.

4. **Promote Economic Development**. The quality of life in Minnesota will require continued economic vitality and the creation of new job opportunities. Future economic development must depend less on the use of nonrenewable resources and more on renewable resources. Likewise, technology should focus on developing renewable resources and recycling nonrenewable resources. Public policy should specifically encourage economic development in Minnesota that is service-oriented, consumes a minimum of resources, and is based on renewable resources. The ingenuity and entrepreneurship of Minnesota's population can continue to contribute significantly to the state's economic development and should be especially encouraged.

   Following are examples of potentially useful approaches:
   - Encourage agricultural research to investigate the problems of and opportunities for the small farmer, as well as the larger farmer.
   - Establish policies that encourage the transfer of farm ownership to farm families.
   - Actively recruit selected industries based on state opportunities, needs, and standards.

5. **Emphasize Human Resource Development**. Minnesota should emphasize the development of its human resources in ways that enhance individual creativity and responsiveness toward the future. Opportunities and encouragement should exist for each citizen to reach his/her full productive capacity. All existing and prospective public policies (from education, welfare, and health policies to taxes, land use, and housing policies) should be evaluated for their effects on human resource development. State policies should seek to assure the individual an adequate level of sustenance, while at the same time economic incentives should encourage individuals to assume greater responsibility for their own well-being.

   Following are examples of potentially useful approaches:
   - Increase appropriations for low-cost subsidized loans for rehabilitation/remodeling of homes of the near-poor.
   - Evaluate effects of Minnesota's tax structure and expenditures on income distribution.
   - Replace the present school age attendance requirement with a competency or minimum skills requirement.

6. **Encourage Life-Long Learning**. The state of Minnesota should increase its emphasis on providing opportunities and incentives that encourage individuals to develop their interests and potentials throughout life. Continuing life-long development of interests and potentials should be a goal for all persons. Specific opportunities might include:
   a. Pension plans that permit individuals to carry benefits from job to job, allowing for the development of new skills and interests and application of prior knowledge to new situations;
   b. A greater interchange of personnel among business, labor, government, and education;
   c. Educational leaves of absence from employment;
   d. Flexible or early retirement;
   e. Variability in working hours and conditions;
   f. Use of higher education facilities for older adults who wish to continue their education;
   g. Participation in the arts and cultural activities by citizens of all ages;
   h. Flexibility of school arrangements that meet individual needs and motivate students;
   i. Greater availability of out-of-school and independent learning opportunities; and
   j. Increased use of public schools and libraries for continuing education of all citizens.

   Following are examples of potentially useful approaches:
   - Encourage the availability of school facilities for public use on a year-round basis.
   - Consider the benefits of personnel mobility between business, education, and government.
   - Evaluate the effectiveness of occupational training, including adaptation to potential changes in occupational requirements.

7. **Emphasize Individual Responsibility**. Continued human progress requires individuals who are both responsible and capable, yet many public and corporate policies tend to inhibit individual responsibility. Qualitative lifestyle goals, such as knowledge and good health, cannot be bestowed by the state; they require personal motivation. Furthermore, the public sector does not have the physical or financial resources to care for all the needs of the citizens of Minnesota. More accurate cost pricing of public services and a variety of economic incentives should be used to encourage greater individual responsibility for personal well-being.

   Following are examples of potentially usefull approaches:
   - Provide information and encouragement for self-help housing both in new construction and rehabilitation.
   - Experiment with new methods of financing health care that build in incentives for patient responsibility.
   - Encourage citizens to participate actively in the care of their own health.

8. **Promote Greater Public Awareness**. Efforts to increase public awareness are needed to provide accurate, timely and objective information on both the immediate issues that concern individual citizens and the longer range issues that affect all citizens. Such efforts will require the deliberate and effective use of public media, organization of public meetings, expanding library information centers, and wide use of opinion polls. State government should provide accurate and objective information on major issues and receive and consider public expression of preferences. A goal of information dissemination and improving the processes of public decision-making should be to restore public confidence in government. Information should be made available on the following subjects:
   a. Consumer goods and services (such as pricing, quality, and consumer protection);
   b. Government services (such as continuing education, housing rehabilitation, and old-age assistance); and
   c. General forces and trends that affect the public (such as energy shortages and increasing living costs).

   Following are examples of potentially useful approaches.
   - Expand the scope and dissemination of agricultural extension work to include social issues, alternative technologies, and marketing education, in addition to the present focus on productivity.
   - Support health education programs that provide information on availability and use of health services, encourage health-promoting behavior, early recognition of disorders, and understanding of disease and treatment.
   - Develop a consumer's guide to post-secondary educational opportunities in Minnesota. Information may include programs available, costs, occupational status of graduates by type, location and salary; career profile of graduates; and projected job market opportunities.

9. **Assure Accountability to Public**. Individuals, corporations, and government will be held more accountable for the results of their decisions. State government should assume the responsibility for establishing methods to evaluate the effects of decisions made by individuals, corporations, and government. Procedures and information for evaluating the unforeseen and unintended impacts of public policy are needed. Evaluation of public policy effectiveness needs to be more available to public scrutiny.

   Following are examples of potentially useful approaches:
   - Require all health care policy-setting bodies that recieve a majority of their funding from public sources to include consumer representatives.
   - Report on a regular basis to the citizens of the state on the state budget, state expenditures, and state program effectiveness.
   - Actively engage the citizens of Minnesota in developing goals and objectives for the state.

10. **Measure Costs and Benefits of Public Investment**. State expenditures are in reality investments in the quality of life, but the comparative costs and benefits of those investments are not well known. The state of Minnesota should develop the means to evaluate specifically the relative costs and benefits of all public services; and to compare the effectiveness of one public service program or expenditure to another, or to services provided by the private sector. In this way, the state will be better able to establish priorities for the investment of state resources.

    Following are examples of potentially useful approaches:
    - Evaluate the efficiency of existing and potential service delivery systems, including physical facilities, geographic distribution, and alternative means of delivery.
    - Evaluate the relative cost-effectivenss of allocating public resources to curative and preventive health care approaches.
    - Consider the benefits/costs of alternative elementary and secondary education delivery methods (such as cable television, computers, student-teacher ratios; and mixes of paraprofessionals, certified teachers, and community resources).

11. **Establish an Information and Data Management System**. State goals and measurable objectives require sufficient and appropriate information. The state of Minnesota needs a comprehensive data management system including the collection, interpretation, and

extensive dissemination of data. As many private and public sources as possible should be involved in the process, but one agency should bear the primary coordinating responsibility. Information must be objective and comparable, accurate, usable, and credible. Full confidentiality of personal information must be guaranteed, with information provided to users in aggregate form only. State policy should assure access to information for all potential data users in the state, including business, education, labor, state and local governments, and individuals.

Information needs include, but are not limited to:

a. *Land,* including the use of the land, chemical composition of the soil, soil structure, land slope, rainfall, and location;
b. *Population,* including growth, structure, and migration;
c. *Economic,* including employment by industry, sex, age and location; income, sales, and measures of "productivity";
d. *Energy,* including sources, costs, rates of use, and projected needs;
e. *Agriculture,* including farm size, ownership, income, crops, livestock production costs, machinery — and a more accurate and timely Census of Agriculture.
f. *Education,* including enrollments, facilities, curriculum offerings, costs; and student, teacher and administrator performance by school district;
g. *Housing,* including accurate information between the decennial censuses regarding rates of construction and demolition, types of housing, condition of housing, costs, occupancy rates, and age of housing; and
h. *Environment,* including objective information and interpretation of data regarding environmental impacts, land use (as suggested above), water quantity and quality and air quality, with evaluation of the causes and effects of environmental changes.

Following are examples of potentially useful approaches:

- Compile, analyze, and disseminate educational data for individual schools and school districts.
- Develop and disseminate comprehensive demographic information on employment and unemployment.
- Expand energy data for the state and coordinate energy forecasting assumptions and techniques among the state's energy suppliers.

12. **Define Governmental Responsibilities.** Government must become more of a facilitator than a provider. That is, government should be responsible for evaluating the needs of the state and seeing that they are met, though not necessarily providing them. It is becoming physically impossible for government to provide all the services that meet the full range of human needs. The focus of government attention must be on monitoring and evaluating the forces of change, anticipating needs, and guiding the decision-making system. State government should assume the leadership in clarifying its own decision-making responsibilities relative to the responsibilities of local government, corporations, and individuals.

Following are examples of potentially useful approaches:

- Clarify governmental responsibility between the state and local units of government in implementing land and water policy with emphasis on local administration of state policy, where appropriate.
- Establish, in order to minimize housing costs and avoid exclusionary standards, uniform, statewide standards for municipal subdivisions that may not be exceeded (such as street widths, curb and gutter requirements, street composition, setback requirements, boulevards, land dedications, minimum lot sizes, minimum home sizes and garages).
- Evaluate the role of government as trend setter in employment/personnel practices.

13. **Develop Public/Private Cooperation.** An interdependent society, where decisions have multiple impacts, requires a new cooperative effort between the public and private sectors. The perception of common future goals can lead to the development of a creative relationship with great potential to meet public service needs and deal effectively with emerging issues. A great variety of projects may be undertaken cooperatively using the legal tools of the public sector and the financial capabilities of the private sector. These may include:

a. Exploration of the purchase-of-services concept;
b. Development of health care standards and delivery systems;
c. Energy research and development (solar, nuclear, peat, etc.);
d. Construction and joint use of buildings (schools and factories, for example);
e. Development of housing alternatives;
f. Development of nonwater sewage disposal systems;
h. Improving marketing procedures and information for farmers;
i. Development of public transportation systems;
j. Development of incentives that encourage individual responsibility.

Following are examples of potentially useful approaches:

- Consider public ownership and maintenance of rail rights-of-way and trackage, with leasing for use to private carriers.
- Provide direct public subsidies (vouchers) to students rather than to educational institutions, allowing students to choose among post-secondary education alternatives.
- Develop coordinated experimental programs to improve health care delivery to needy areas. This may include the use of paraprofessionals, incentives for professionals to practice in rural areas,

education materials for isolated programs, mobile facilities, and telecommunications.

14. **Reorganize Government**. Current broad and interdependent issues, such as diminishing resources, increasing costs, and rising expectations, cannot be adequately dealt with by present governmental organization and processes. At present there is no department or agency within state government that makes a broad appraisal of state needs. The responsibility of this falls on the legislature and the governor who often lack adequate resources and information to carry out the task. Furthermore, disagreements between legislative and administrative branches often impair decision-making processes, diffuse responsibility, and obscure accountability to the public. These conditions suggest the need for changes in the structure and organization of state government that clearly set responsibility and assure accountability by informing state citizens and by providing opportunities for meaningful involvement in public decision-making.

    Following are examples of potentially useful approaches:
    - Establish a statewide system of Educational Services Areas that offers such services as administrative capability, teachers, health-related services, library services, purchase of supplies, and transportation.
    - Consider applying the concept of the Metropolitan Fiscal Disparities Act to other areas of the state;
    - Provide support to local government units commensurate with their needs and responsibilities.

    (See also pages 58 to 62, Strategies for State Government).

15. **Evaluate Impacts of Existing State Policy**. State government should assume the responsibility for impacts of existing state policy. A variety of state policies have multiple and unforeseen effects that may be contrary to the public interest and in some cases may even conflict with the intent of the policy. A systematic way to evaluate policy effectiveness is needed. This requires the gathering of appropriate information and the continuous monitoring of all state policies for effectiveness and consistency. Evaluating the impacts and side effect of income taxes, property taxes, and sales taxes are particularly important.

    Following are examples of potentially useful approaches:
    - Analyze the present effects of Minnesota's tax structure on economic development before making alterations in those taxes.
    - Alter tax policy in order to discourage tax shelter investments in agriculture. The separation of farm and nonfarm income should be considered.
    - Require zoning authorities to consider the transportation implications of zoning proposals so that future placement of housing, businesses, shopping centers, and industry will not complicate development of public transit systems or induce costly patterns of personal transportation.

16. **Evaluate Prospective State Policy**. State government should establish the capability for evaluating the potential effects of prospective policy. This requires the development of appropriate information for evaluating alternative means of achieving state objectives and procedures for estimating the potential impacts of policy proposals. This may require explicit testing procedures or short-term pilot projects before committing public resources in cases where the effects cannot clearly be seen in advance, such as in new sewage disposal methods or home communications systems.

    Following are examples of potentially useful approaches:
    - Consider how future demographic trends may affect the state's tax structure and vice versa.
    - Study the effects of energy costs and availability on settlement.
    - Study the possible effects of energy price manipulation on customer use and the Minnesota economy.

17. **Anticipate Federal and Private Policy Effects.** The state of Minnesota must anticipate probable impacts of public and private decisons that are beyond its control and establish contingency plans in the event of emergency (as in the case of severe fuel shortages).

    Following are examples of potentially useful approaches:
    - Evaluate and encourage adoption of the best oil pipeline route from the Pacific Coast to supply Alaskan and foreign oil to Minnesota and the Upper Midwest.
    - Encourage more Energy Research and Development Administration research into nonfossil fuel energy alternatives.
    - Evaluate the present and proposed federal involvement in manpower programs and consider the appropriate role of state government.

18. **Assess State Needs**. The state of Minnesota needs to engage in a continuing and orderly process of determining and setting priorities among state needs. This requires accurate and current information on conditions in the state, preferences of the public, and evaluation of major forces that will influence the state's future. Rapidly changing conditions require more than ever a future perspective that anticipates crises *before* they occur and suggests priorities for action to avoid or resolve potential crises. Increasing rates of change require greater lead time, often greater capital investments, and more substantial risks, all of which place greater responsibility on state government to asses the relative importance of state needs.

    Following are examples of potentially useful approaches:
    - Reconsider the role and purpose of state and local government in Minnesota and its relationship to individuals and corporations.

- Help to generate and plan for sufficient capital resources to invest in large scale public/private developments.
- Establish clear policies concerning the uses of land and water.

19. **Develop New Measures of Progress**. Quantitative measures of growth and development alone are no longer appropriate in a finite world. New measures that express qualitative considerations are needed. It will not likely be possible to retain a rewards system based primarily on material acquisition. It will be necessary to develop new indicators of human progress that take into account the full range of considerations that contribute to the quality of life, and reconsider current values that support a material rewards system and concepts of quantitative growth.

    Following are examples of potentially useful approaches:
    - Encourage continued efforts in the research and development of quality of life indicators that expand on economic measures of human progress to the full range of human concerns.
    - Expand efforts and continue to improve on the means of involving citizens of the state in the development of public policy, encouraging broad input to the evolving definition of the quality of life in Minnesota.
    - Encourage support of the arts by public and private institutions.

Strategies for State Government

STRATEGIES FOR STATE GOVERNMENT

The Commission in this report attempts to identify the forces of change and some of the major issues that will need to be taken into account in the future. It sets forth goals (or principles) to help guide issue resolution, and objectives the Commission believes support those goals. Finally, in this section, the Commission looks at state government and recommends some specific strategies to help deal with the emerging issues.

The Commission's effort to define forces, issues, goals and strategies assumes that citizens can help shape the future. Indeed, the basic rationale for a Commission on the Future presumes that today's decisions, for better or worse, will help determine future conditions. The more these decisions can be made with better information, by better informed citizens, with a conscious understanding of the implications for the future, the more likely the results will stand the test of time.

Governance

Governance refers to the full decision-making system of which government is just one part. Private sector decisions of individuals, corporations, labor, and special interest groups affect our lives more fundamentally than do governmental actions. These include the decisions we make for ourselves — where we live and work, how we move about, and the ways in which we expend our personal resources of time and money. Expressions of consumer preferences and the production and marketing decisions of corporations are the major forces that drive the economic system. All of these private sector decisions have more influence on our lives than state legislatures, city councils, or county boards. The question of governance is concerned with how we organize ourselves as a society for making decisions that affect our future.

This report focuses attention on state government and its role in the decision-making sytem. In a governance system dominated by the private sector, the important issues for state government are:

a. The role of state government in the total decision-making system;
b. The relationship between state government and the private sector; and
c. The responsibility of state government for the organization and structure of sub-state governmental units.

Uncoordinated Public Policies

An interdependent society needs to look at major issues comprehensively and to anticipate potential side effects of public policy, but public decision-making systems are not coordinated or organized to do so. Within state government, for example, most administrative agencies and legislative committees have specified areas of jurisdiction and develop policy that is designed to resolve narrowly defined or specialized issues. Present governmental processes are not concerned with the unintended and wide-ranging consequences of policy decisions. The result is an uncoordinated array of public policies that may be inconsistent, over-lapping and costly.

For example, a variety of local, state and federal policies in taxation, housing, land use, the environment, transportation, welfare, and education have contributed, often without intent, to the present and future patterns of growth and development in Minnesota.

a. Zoning ordinances and building codes have favored the development of new single-family residences on large lots.
b. Income taxes which favor home ownership have inadvertently encouraged both low density, costly sprawl and urban deterioration by (1) allowing interest and property-tax deductions on single-family, owner-occupied homes; and (2) considering land as a capital asset with transfers taxed at less than the income tax rate, thus encouraging land speculation on the urban fringe.
c. Local property tax assessment procedures have discouraged maintenance and improvement of older properties.
d. Highway construction policies and financing methods have established an extensive road network that encourages longer-distance commuting and dependence on the automobile.
e. Incorporation and annexation practices have made jurisdictional boundaries inflexible, resulting in misalignment of socio-economic communities from governmental jurisdictions, leading to growing resource and service disparities among local governments.
f. Agricultural tax benefits have been available to urban residents who wish to live in the countryside and/or engage in profitable land speculation. The result often is to remove land from production, add to service requirements (such as schools) and increase property taxes.

The combined effects of these uncoordinated policies contribute to the sprawl of low density urban development. The spread-out settlement patterns that result require higher costs for roads, school transportation, postal service, utilities, public safety, waste disposal, and most other services.

At the same time, government has sought to counteract these conditions through a variety of public policies including:

a. Redistribution of public dollars, in effect transferring resources from advantaged areas to those areas affected adversely, to help support the costs of certain public services (such as schools);
b. Urban renewal programs, including housing rehabilitation

programs and a broad range of public services, which have been costly and which often fail to achieve their objectives;

c. Attempts at equalization of property tax revenue among local governments, such as through the Twin Cities Metropolitan Fiscal Disparities Law; and

d. Cooperative efforts by local governments in planning for the provision of public services, such as through Minnesota's Regional Development Commissions.

Are such "compensating policies" treating the *causes* of problems, or only the *effects* of previous policies? Often it is the latter; the result being conflicts in policy and overlapping of jurisdictional responsibilities, leading to unnecessary bureaucratic growth and in turn rising costs of government. The need is to understand as fully as possible the range of effects of existing policy and the potential effects of proposed policy.

An indication that state government has not anticipated changing conditions adequately is in the apparent incapacity of state government to deal with emerging issues (See pages 44-46). There is a need for better coordination among state agencies. At present, the State Planning Agency is the only agency that takes a broad perspective of state needs. This agency tends to assume new responsibilities as new crises emerge, when there is not an obvious agency "home" or when issues are very broad and have multiple elements so as to cut across existing agency lines. The means of dealing with new and interdependent issues thus appears to be more by default than design.

Agencies of state government, no matter what their responsibilities, should primarily administer programs and not determine policy priorities through administrative action. The responsibility for policy decisions should rest with elected officials and bodies that are structured to insure consideration of the broad implications of specific policies.

Role of Government

A wide spectrum of "actors" — individuals, corporations, governments, public interest groups and non-profit organizations — make decisions and take action in our society. Among these, government serves as the institutional embodiment of the people to provide the laws within which all decisions are made. It is natural, therefore, that we turn to government — in this case, state and local government — for better ways to deal with change.

Government seems unequal to the challenge in many instances. In part this reflects the changing nature of the challenge itself. For one thing, changes in society have altered the relative rights and responsibilities of the individual and the family vis-a-vis the community. The basic structure of state and local governments was designed in an era when survival depended on self-reliance, and the role of government was largely confined to protecting the personal and property rights of the individual. Technological developments and job specialization are producing an increasingly interdependent society. Individuals now grow, make or provide by themselves very few of the goods and services they use. At the same time, increasing population has made this interdependence both more visible and potentially more abrasive. As a result, conflicts are increasing among urban areas, rural areas, individuals, special interest groups, the private sector and the community at large — and government is expected to balance the competing claims and, at the same time, be fair to all.

Not only are the competing claims of an interdependent society in themselves more complex, but government has also assumed responsibilities that (1) it is not equipped to perform effectively, and (2) are controversial by their very nature. Beyond providing a framework of laws and guaranteeing personal freedoms, government has assumed the responsibility for establishing minimum levels of health, housing, education, and food for all citizens. Government is thereby cast in the role of providing an increasing number of human services, most of which are insufficiently attractive to the private sector to provide on a profit-making basis. In the future, government resources will be increasingly hard-pressed to provide the range of services that have come to be expected as a matter of public right. More recently, government has become the arbiter of environmental concerns.

Given the nature of the demands placed on government and the urgency with which those demands have arisen, it is hardly surprising that citizens are frustrated and disillusioned with the results. In part, the frustration springs from excessive expectations; and, in part, it stems from inadequate responses by government institutions. One clear impression of the Commission is that in a world of increasing interdependence and rapid change, government decision-making remains:

1. Fragmented with limited perspective approaches,
2. Without clear responsibility among levels and branches of government,
3. Without explicit goals and objectives,
4. Without good means of accountability beyond the elective process,
5. Without adequate and meaningful citizen involvement, and
6. Basically not concerned with the unintended and wide-ranging consequences and side-effects of policy decisions.

Despite apparent deficiencies of government in Minnesota, the state has been as well served by its public representatives and institutions as any state in the country. Thus, the suggestions that are offered below in no way indicate despair with these institutions. On the contrary, Minnesota is fortunate to have been able to preserve and enhance its quality of life in ways that make it an example for others to follow. The Commission hopes that these suggestions will help build on present accomplishments.

Underlying the specific suggestions is a belief that government's role should be primarily that of *facilitator*, providing a framework within which orderly change can take place, and in which individuals are encouraged to develop their own potential. Encompassed within the concept of "facilitator" is the fundamental belief that the future of society depends on the values of, and opportunities available to, its citizens. Public policy should therefore be directed especially toward providing equal opportunities in areas that directly affect human potential, particularly education, health and employment.

Though Minnesota has been a leader in providing opportunities for its citizens, full access to participation is still not available to a significant number of women, elderly persons, youth, physically handicapped, and racial minorities. This deficiency cannot be ignored. The full participation of these persons will be needed to realize Minnesota's future potential. From an economic standpoint alone the costs and benefits of recognizing inequities early and taking action to alleviate them usually outweigh the social and economic costs of treating the symptoms through the correctional system, welfare, remedial health or remedial education.

Emphasis on the role of government as facilitator is consistent with the Commission's belief that the private sector should continue to provide most of the entrepreneurial innovation that will be necessary to generate employment and technological change in the future. Minnesota has been fortunate in the creativity and productiveness of its entrepreneurial talent in the past. Although it is difficult, if not impossible, to pinpoint those factors that caused such talent to appear and prosper, it is obvious that an economic climate in which risk-taking is encouraged and rewarded is essential. At a minimum, government must strive to maintain the delicate balance between a productive and efficient economic system and providing opportunity for all individuals to share in its rewards and responsibilities.

Beyond this, government should seek to harness individual self-interest and productivity to support public policy objectives. This implies using market incentives (i.e., subsidies and taxes) rather than regulation whenever feasible. It offers the option of turning to the private sector for delivery of those services that can be provided more efficiently or effectively in that way. The public sector should be responsible for establishment and monitoring of standards on the types and amounts of services to be provided. Clarification of responsibility implies the development of a more cooperative relationship between the public and private sectors, particularly in areas of massive investment where risks and uncertainties (sometimes associated with undetermined public policies, as in the case of energy) inhibit private development.

When government steps out of the role of facilitator and into that of provider or guarantor, a clear definition of the target population and the standard of service to be guaranteed is needed. Health services are a case in point. Health is no longer defined as just the absence of disease or disability, but as a state of physical and mental well-being which allows the individual to realize his/her full potential. The four leading causes of death in Minnesota are cancer, heart disease, cerebrovascular disease, and accidents. Prevention involves reduction of automobile accidents, better nutrition, increased exercise, less smoking and less alcohol — all related to the responsibility of individuals. When individuals fail to assume responsibility, what is the obligation of society? In principle, government does not have the capability to assure the good health of every person; that responsibility ultimately rests with the individual. Similar questions also arise in other areas of government services, including housing and education.

In a world, or state, of limited resources (and limited tax revenues), only limited benefits can be provided as a "right of citizenship." Given limited public resources, it seems desirable to concentrate public expenditures on assuring a minimum standard of living, rather than assisting a broader range of the public to improve its position as some policies (such as housing) now do.

Approaches for Improved Government

The suggestions outlined below are intended to:

1. Enhance the likelihood that in an increasingly interdependent society, public policy decisions will take into account the side effects and future effects of those decisions;
2. Establish a better balance between the need for flexible adaptation of government institutions to the changing needs of society, on the one hand, and the need to preserve continuity and stability of these institutions as a basis for confidence and decision-making, on the other; and
3. Clarify the responsibility and improve the accountability of public officials and public agencies.

Recommendations for Here and Now

1. **Establish Public Policy Institute.** The Commission believes that the pressures on government to deal almost exclusively with current needs, rather than with the longer-term considerations, reduce government's ability to cope with change. The Commission also observes that government, or perhaps more accurately, the administration, whatever its political complexion, is forced to make single recommendations on any given policy issue, rather than a range of alternatives. For both these reasons, it would be desirable to establish a public policy institute. Its functions:
   a. Identify on a continuing basis longer-range trends in society, building on what the Commission has started and spelling out the public policy implications of those trends;

b. Evaluate trends in public expenditure and revenue over time, emphasizing the implicit changes in priorities and the income redistribution effects of those financial flows;
c. Suggest alternative policies and programs to the administration and legislature;
d. Evaluate and make recommendations on the respective roles of state and local government in Minnesota in light of state goals and objectives;
e. Evaluate the intended and unintended impacts of existing and prospective state policies;
f. Develop experimental models, and recommend procedures for improving public involvement in governmental decision-making;
g. Review the more promising changes in governmental structures and organization suggested below and present an evaluation to the public.

The task of a public policy institute would be both formidable and politically sensitive. The Commission believes that such an institute must be apolitical to be effective and that its structure should include a full-time advisory group of knowledgeable citizens supported by a highly competent, though not necessarily large, professional staff. Broad public understanding and acceptance of the institute process would be crucial to the credibility of the institute's findings and recommendations. Funding should be considered by the legislature, despite the risk that this might diminish the independence of the institute. Supplemental funding or total funding from private sources should not be ruled out.

Despite the absence of a detailed proposal, the Commission feels strongly that an institute along the lines suggested would benefit the legislature and the people of the state, and it recommends the early establishment of such a public policy institute with an initial five-year life.

2. **Adopt Goals and Objectives for Minnesota.** Minnesota needs guidelines by which to judge the relative significance of policy alternatives and to integrate decision-making within the state. The legislature should develop and adopt explicit, though broadly defined, goals and objectives for the state. The Commission has made a start in this direction (pages 50-56). The goals should be thought of as ultimate targets or as principles for guiding change. Objectives represent measurable steps toward the goals. Goals and objectives constitute a set of norms against which to measure individual decisions, in the hope that conflict and waste will be reduced and the likelihood of establishing more integrated policy will be enhanced.

3. **Reorganize State Government to Deal with Future Tasks.** The departments and agencies of the state seem inappropriately structured to deal with the complex, interrelated issues that have become the responsibility of state government. Reorganization should include adjustments in the legislative committee process, restructuring or integration of state departments, and expanded research and legislative support. The Commission is aware that some reorganization has already taken place, but it recommends that the legislature and governor review the future tasks as identified in this report (see page 46) with a view to making organizational changes in the existing state government as an alternative to, or evolutionary step toward, more fundamental changes in structure.

4. **Develop Long-Range Plans for State Agencies.** Few state agencies and departments have long-range plans for the future. The Commission recommends that a reorganized state government establish long-range plans according to state needs and circumstances, with guidelines established by the state to assure overall policy coordination.

Recommendations for Further Study

The Commission received many suggestions for changes in government structure that it felt were worth consideration. The following suggestions listed for further study range from what might be described as tinkering to a major overhaul.

1. **Coordination of Information.** An information clearinghouse is needed at the state level that would:
   a. Provide a base of information to help evaluate the effects of existing and prospective public policy;
   b. Provide the basic tools for measuring the achievement of state objectives and specific agency and department program proposals;
   c. Identify the changing requirements for data collection as a basis for decision-making; and
   d. Impose standards of uniformity, quality, and scope for data.

   Because of public sensitivity to the potential threat of disclosing personal information, the collection and availability of information must be approached with great caution. The Commission also recognizes that acquiring, recording and evaluating data and developing useful and issue-relevant information is expensive, and that information needs vary from one issue to the next and change over time. Certain information needs are indicated on page 54.

2. **State Planning and Budgeting Procedures.** The Commission suggests for consideration:
   a. The concept of zero-based planning and budgeting, which has received considerable attention lately, seems worth exploring. Requiring state departments and agencies to justify their budgets (i.e., their functional roles) from "ground zero" periodically may be desirable. If applied indiscriminately or too frequently,

however, it would be wasteful and counterproductive. As with requirements for longer-range planning, guidelines should be established for the application of zero-based budgets where potential payoff seems greatest.

b. When the administration presents its budget for the next biennium, the presentation of pro forma budgets for two succeeding bienniums should be presented as well. This would lay out for the legislature and the public the trends implicit in expenditure and revenue changes over time.

c. In the same vein, the longer term financial implications of any new expenditure program or changes in revenue code should be spelled out at the time of the proposed change.

d. The state should explore additional areas in which it could contract with private suppliers to provide public services (as in the purchase-of-service concept).

3. **Sunset Laws.** The sunset law idea assumes that inertia and vested interests often keep laws, regulations and bureaucracies on the books after the needs of society have changed. The remedy proposed is to shift the burden of proof: rather than requiring those who want change to carry the argument, the burden is placed on those who want the laws — or institutional structures — to remain unchanged. This is accomplished by establishing automatic expiration dates in enabling legislation.

   a. As with zero-based budgeting (which is analogous to a sunset approach), there is risk in pushing the idea too far:
      1) The framework of stable and necessary institutions might erode; and
      2) Reconfirmation of laws and institutions might result in a wasteful, time-consuming exercise with little real benefit, and no more public participation than now.

   b. Despite these possible drawbacks, it is instructive to consider some of the possible ways in which the sunset concept might be applied:
      1) Require reauthorization of all deductions and credits on state income taxes on a periodic basis;
      2) Require reauthorization of specified state agencies and regulatory bodies on a periodic basis.

   c. Some areas of the state's governmental process might benefit from the application of the sunset concept, but no wholesale adoption seems warranted without much further study.

4. **Unicameral Legislature**. Of the fifty states, only Nebraska has a single-house legislature.

   a. Based upon that experience, a unicameral legislature can:
      1) Eliminate problems of inter-house coordination, including the management of joint committees and the need for joint rules, and
      2) Provide greater accountability than a bicameral system, with decision-making responsibility more clearly visible to those affected by legislation.

   b. Possible drawbacks of a unicameral system include:
      1) The difficulty of agreeing on an appropriate geographic distribution of representation; and
      2) A potential for short-circuiting of deliberative processes.

   c. A unicameral legislature should be considered along with other alternatives as a possible organizational structure for Minnesota.

5. **Parliamentary Form of Government.** The most far-reaching proposal that came before the Commission was the suggestion that the state constitution be revised to substitute a parliamentary form of government for the present structure of divided powers.

   a. The arguments in favor of such a change may be summarized as follows:
      1) With its first minister and heads of departments selected from the legislature, responsibility for failure cannot be blamed on a stalemate between the executive and legislative branches or to bureaucrats who don't carry out the legislature's intentions;
      2) Narrow sectional interests are likely to be limited in favor of decisions that are best for citizens as a whole.

   b. On the other side of the ledger must be weighed the fact that:
      1) The parliamentary form of government does not necessarily assure greater responsiveness to the needs of an interdependent society;
      2) By emphasizing party discipline, individual points of view may be lost in a homogenized whole; and
      3) It is a radical change, for which the evidence of its advantage, or at least the prospects of its advantage, must be shown.

   c. On balance, the Commission believes the idea of a parliamentary form of government is sufficiently interesting to warrant further consideration.

This report has attempted to identify some of the major issues that Minnesota will face in the coming years and to make recommendations to state government for dealing with those issues. While the Commission has not resolved all the issues it has raised, it has suggested a process that it feels can be helpful to the state of Minnesota for dealing with the changing conditions that lie ahead.

The Commission believes that state government must make its growth and development strategy explicit rather than implicit. It further believes that the state must be a facilitator or enabler of the ongoing processes of change with appropriate information, organization, and consistency in policy development and implementation.

Appendices

APPENDIX A
CMF LEGISLATION

CHAPTER NO. 841

State of Minnesota

HOUSE OF REPRESENTATIVES

SIXTY-EIGHTH SESSION

H. F. No. 1000

A bill for an act creating a commission on Minnesota's future; describing its duties and functions; and appropriating funds for its operation; repealing Minnesota Statutes 1971, Section 4.14.

Be it enacted by the Legislature of the State of Minnesota:

Section 1. [COMMISSION ON MINNESOTA'S FUTURE; ESTABLISHMENT.] There is established the commission on Minnesota's future, hereinafter referred to as the "commission."

Sec. 2. [MEMBERSHIP.] Subdivision 1. The commission shall be composed of 40 members appointed by the governor. The membership of the commission shall be apportioned among the development regions, established by executive order, according to relative population shares, except that no region shall have less than two nor more than eight representatives.

Subd. 2. The members of the commission shall serve a term ending June 30, 1977.

Subd. 3. The chairman shall be appointed by the governor and serve at his pleasure. The governor shall fill vacancies by appointing members similarly qualified to the members being replaced.

Subd. 4. Each chairman of a regional development commission established pursuant to Minnesota Statutes, Chapter 462, the chairman of the metropolitan council, and the director of the state planning agency shall serve as ex officio members of the commission.

Sec. 3. [COMPENSATION.] The members of the commission, except for ex officio members, shall be paid $35 for each day the commission shall meet. In addition, each member shall be allowed actual and necessary expenses incurred in the discharge of his duty, in the manner and amount of state employees.

Sec. 4. [DUTIES.] The duties of the commission shall be: to prepare, for consideration by the governor and the legislature, a proposed state growth and development strategy; to prepare reports assembling relevant information regarding the state's future; to examine the long range plans of state departments and agencies, including the university of Minnesota, state colleges and junior colleges, and to assess their possible impact on state growth and development; and to report to the governor and the legislature at regular intervals on the development implications of major state decisions. A report of the commission shall be submitted to the governor not later than November 30 of each even numbered year. This requirement in no way affects the freedom of the commission to submit recommendations and legislative proposals whenever it considers it appropriate to do so. Recommendations and proposals shall be, to the fullest extent possible, in the form of alternatives from which the governor and the legislature can select a preferred course of action, policy, plan, strategy or legislative program. In the performance of these duties, the commission shall, whenever possible, consult with citizen groups, farm, business and labor organizations, and other agencies and organizations, including agencies of the federal government concerned with Minnesota's future.

Sec. 5. [ACCESS TO INFORMATION; STATE AGENCIES.] The commission shall be provided information, reports, or other assistance from any agency, department, legislative committee or other instrumentality of the state, with the consent of the head thereof. All state agencies and other official state organizations and all persons shall provide to the commission all relevant information and reasonable assistance on any matter of research requiring recourse to them or to data within their knowledge or control. The joint legislative committee shall have equal access to all the resources mentioned above. A common data base shall be employed by the commission and the joint committee.

Sec. 6. [RELATIONSHIP TO STATE PLANNING AGENCY.] The state planning agency shall provide all necessary administrative and professional support to the commission. Any staff employed by the commission shall be employees of the state planning agency and shall be appointed by the state planning director after consultation with the chairman of the commission.

Sec. 7. [JOINT LEGISLATIVE REVIEW.] A joint legislative committee shall be established by the legislature to review the commission reports, evaluate the alternatives, identify legislative priorities and develop a planning capability consistent with the task of this commission. The legislative representatives shall consist of three senators appointed by the majority leader; three senators appointed by the minority leader; three representatives appointed by the speaker of the house; and three by the house minority leader. All shall serve at the will and pleasure of the appointing authority as long as they are members of the legislature and vacancies shall be filled within 60 days. All shall be ex-officio members of the commission.

Sec. 8. [EXPIRATION.] This act shall be effective until June 30, 1977.

Sec. 9. [APPROPRIATION.] There is appropriated to the state planning agency from the general fund of the state treasury the sum of $140,000 for the biennium 1973-75 to carry out the purposes of this act.

Sec. 10. Minnesota Statutes 171, Section 4.14, is repealed.

APPENDIX B
CMF MEMBERSHIP

Co-chairpersons

Bruce MacLaury	Region 11	Edina	9/73 -
Frances Naftalin	Region 11	Minneapolis	9/73 -

Members

Eugenie Anderson	Region 10	Red Wing	9/73 -
Nancy Anderson	Region 11	Minneapolis	9/73 - 12/75
Harriet Ball	Region 7W	St. Cloud	9/73 - 12/75
A. T. Banen	Region 3	International Falls	5/76 -
Jane Belau	Region 10	Rochester	9/73 -
Ed Bieber	Region 8	Redwood Falls	9/73 -
Michael Blecker	Region 7W	Collegeville	9/73 -
Alla Brascugli	Region 3	International Falls	8/74 - 7/75
Marvin Campbell	Region 5	Brainerd	9/73 - 8/74
Elizabeth Close	Region 11	Minneapolis	9/73 -
Roland Comstock	Region 11	Minneapolis	9/73 -
Charmagne Cox	Region 2	Bemidji	9/73 - 12/75
Earl Craig	Region 11	Minneapolis	9/73 -
Roland Dille	Region 4	Moorhead	7/74 -
Barbara Donoho	Region 4	Fergus Falls	9/73 - 2/76
Roger Erfourth	Region 7E	Pine City	9/73 -
Al France	Region 3	Duluth	9/73
Geri Germann	Region 7E	Sandstone	9/73 -
Lawrence Gervais	Region 11	Cottage Grove	9/73 -
Linda Graber	Region 11	Minneapolis	9/73 - 4/75
John Haase	Region 3	International Falls	10/75 - 11/75
David Haugo	Region 2	Waubun	9/73 -
Florence Hedeen	Region 2	Park Rapids	5/76 -
Rita Hoffmann	Region 6E	Spicer	9/73 -
Stanley Holmquist	Region 6E	Grove City	9/73 - 9/74
James Johnson	Region 11	Minneapolis	5/76 -
Ray Lappegaard	Region 11	St. Paul	7/75 -
Wally Lutz	Region 6W	Montevideo	8/74 -
Bruce Maus	Region 6W	Montevideo	9/73 - 7/74
Marie Meschke	Region 5	Little Falls	9/73 - 9/74
John Milton	Region 11	White Bear Lake	9/73 -
Phyllis Moen	Region 1	Crookston	9/73 -
Carol Morphew	Region 11	St. Paul	9/73 - 11/73
Jan Nelson	Region 8	Redwood Falls	9/73 -
Norma Nelson	Region 5	Randall	4/75 -
Walter Nelson	Region 6E	Willmar	1/75 -
Donald Ogaard	Region 1	Ada	9/73 -
Dianne Olson	Region 6W	Granite Falls	9/73 - 12/75
Lawrence Perlman	Region 11	Minneapolis	9/73 -
Wayne Popham	Region 11	Minneapolis	7/75 -
Harvey Post	Region 11	Minneapolis	9/73 - 6/74
F. A. Rodriguez	Region 9	Elmore	9/73 -
Ulric Scott	Region 10	Winona	9/73 -
Vladimir Shipka	Region 3	Grand Rapids	9/73 -
John Sontorovich	Region 3	International Falls	9/73 - 1/74
Joseph Summers	Region 11	St. Paul	6/74 - 9/75
Grace Thompson	Region 5	Browerville	8/74 - 2/76
Warren Thomsen	Region 10	Austin	9/73 -
Phil Tideman	Region 7W	St. Cloud	5/76 -
Thomas Tipton	Region 11	Minneapolis	5/76 -
Marcia Townley	Region 11	Minneapolis	9/73 -
Peter Vanderpoel	Region 11	St. Paul	9/73 - 7/75
Ben Walz	Region 5	Sebeka	5/76 -
Jack Weyrens	Region 6W	Madison	5/76 -
Carl Wyczawski	Region 9	New Ulm	9/73 -

Ex-Officio Members

Chairpersons or Representatives* of Regional Development Commissions

Robert Anderson	Region 7E	Mora	1/74 - 7/75
Leslie Aukes	Region 4	Norcross	12/75 -
Robert Bixby*	Region 5	Bemidji	1/76 - 3/76
John Boland	Region 11	North St. Paul	9/73 -
Ernie Bullert	Region 6E	Glencoe	4/74 - 1/75
Robert Grabenbauer*	Region 7E	Cambridge	7/76 -
William Jokela	Region 7E	Sandstone	7/75 - 7/76
Jerry Jubie	Region 3	Duluth	9/73 - 5/76
Daniel Keasling	Region 9	Fairmount	9/73 - 7/75
Mary Koep	Region 5	Brainerd	3/76 -
Earl Larson*	Region 6E	Glencoe	1/75 -
John Linbo	Region 10	Sargeant	9/74 -
Jean Maltais*	Region 2	Bemidji	12/75 -
John Mauer*	Region 8	Wabasso	7/74 -
Jim Miller	Region 8	Windom	11/73 - 7/74
Al Monico	Region 2	Park Rapids	9/73 - 12/75
Ervin Strandquist	Region 1	Newfolden	9/73 -
Terence Stone	Region 9	Madelia	7/75 - 10/76
John Thompson	Region 6W	Benson	12/73 -
Ralph Thompson	Region 7W	Belgrade	11/74 -
Ben Walz	Region 5	Sebeka	10/73 - 1/76
Keith Zarling*	Region 4	Breckenridge	9/73 - 12/75

State Planning Agency Directors

Gerald Christenson	Region 11	New Brighton	9/73 - 7/75
Peter Vanderpoel	Region 11	St. Paul	7/75 -

Legislators

David Cummiskey	Region 9	Mankato	9/73 - 12/74
Robert Ferderer	Region 11	St. Paul	9/73 - 12/74
Mary Forsythe	Region 11	Edina	9/73 -
J. A. Josefson	Region 8	Minneota	9/73 -
Stephen Keefe	Region 11	Minneapolis	9/73 -
William Kelly	Region 1	East Grand Forks	9/73 -
Jack Kleinbaum	Region 7W	St. Cloud	6/76 -
Roger Moe	Region 1	Ada	9/73 - 6/76
Howard Olson	Region 9	St. James	6/76 -
George Pillsbury	Region 11	Minnetonka	9/73 -
Henry Savelkoul	Region 10	Albert Lea	9/73 - 6/74
William Schreiber	Region 11	Minneapolis	4/75 -
Russ Stanton	Region 8	Marshall	4/75 -
J. Robert Stassen	Region 11	South St. Paul	9/73 -
Robert Tennessen	Region 11	Minneapolis	9/73 - 6/76
Bruce Vento	Region 11	St. Paul	9/73 -
Richard Wigley	Region 9	Lake Crystal	4/75 -

Staff Members

Executive Directors

Victor Arnold	9/73 - 9/75
Neil Gustafson	9/75 -

Secretaries

Terri Erickson	9/73 - 10/74
Bernie Estenson	5/74 - 6/75
Sharon Emery	6/75 - 10/75
Nancy Adams	10/75 -

Consultants

John Borchert	8/75 -
Thomas Mortenson	2/75 - 5/75
Philip Raup	2/76 - 6/76
Gene Sylvestre	11/75 -

Other Contributors/Advisors

John Adams	John Dye	Mel Johnson	Bob Picullel
William Angell	Paul Ellwood	Richard Jordan	Bob Poppe
David Baker	Daniel Elazar	Sandy Killmer	Harry Reed
Carol Berenger	Gene Felton	Larry Kitto	Hazel Reinhardt
Steve Berthene	Dan Ferber	Dan Klassen	Tom Rulland
Harvey Bjerke	La Vern Freeh	Hal Leppink	Dudley Russell
John Brandl	Larry Fredrickson	Alex Lewis	Craig Scherfenberg
Dick Braun	Red Geisenhoff	Kathy Ludewig	Clarence Shallbetter
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John Davis	John Haaland	John Mohr	Jim Solem
Fred Deming	Arthur Harkins	Steve Mosow	Don Spigner
Jim Dlugosch	Robert Hoffman	Mike Murphy	Jim Stengle
Gary Dodge	Dean Honetschlager	Arthur Naftalin	James Summer
George Donohue	Ed Hunter	Judy Novak	Ed Thiesen
Ed Dirkswager	James Jernberg	Ellis Ohnstad	Erlan Weness
Bob Duckstad	Paul Jensen	Roy Peterson	Kate Wulf

APPENDIX C
CMF PUBLICATIONS AND BACKGROUND PAPERS

Arnold, Victor. *"Primary and Secondary Education in Minnesota."* Paper prepared for the Commission on Minnesota's Future, April 1975. Mimeographed.

Borchert, John R. *"Entrepreneurship and Future Employment in Minnesota."* Paper prepared for the Commission on Minnesota's Future, October 1975. Mimeographed.

Brandl, John E. *"Post Secondary Education in Minnesota: Who Should Pay and How Much?"* Paper prepared for the Commission on Minnesota's Future, March 1975. Mimeographed.

Commission on Minnesota's Future. *"A Progress Report, 1974."* St. Paul, Minnesota: Minnesota State Planning Agency, 1974.

———. *Minnesota's Future.* Proceedings of a seminar on Minnesota's Future. St. Paul, Minnesota: Minnesota State Planning Agency, 1973.

———. *Minnesota Horizons.* Proceedings of a legislative symposium. St. Paul, Minnesota: Minnesota State Planning Agency, 1975.

———. *Minnesota Horizons,* abridged. Edited by Rita Hoffmann. St. Paul, Minnesota: Minnesota State Planning Agency, 1975.

Comstock, Roland. *Housing in Minnesota.* St. Paul, Minnesota: Minnesota State Planning Agency, February 1976.

Dahl, David; Ohnstad, Ellis; Gustafson, Kathryn; and Berthene, Steven. *"Employment and Income."* Paper prepared for the Commission on Minnesota's Future, August 1975. Mimeographed.

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George, Barbara. *"Elementary and Secondary Education in Minnesota."* Paper prepared for the Commission on Minnesota's Future, October 1975. Mimeographed.

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Honetschlager, Dean. *"A Future Forecast for Minnesota Education."* Paper prepared for the Commission on Minnesota's Future, October 1975. Mimeographed.

MacLaury, B. K. *"Governance: The Issues and Some Proposals."* Speech presented to the Commission on Minnesota's Future, March 1976. Mimeographed.

———. *"Growth and Development in Minnesota: Where Do We Go From Here?"* Speech presented to the seminar on Minnesota's Future, February 1973. Mimeographed.

Mortenson, Thomas. *Tertiary Education.* St. Paul, Minnesota: Minnesota State Planning Agency, April 1975.

Naftalin, Arthur. *"Governance."* Speech presented to the Commission on Minnesota's Future, March 1976. Mimeographed.

Raup, Philip. *"Provisional Summary of Priority Issues Facing Minnesota Agriculture in the Next Three Decades."* Paper prepared for the Commission on Minnesota's Future, December 1975. Mimeographed.

Reed, Harry. *"Transportation."* Speech presented to the Commission on Minnesota's Future, December 1975. Mimeographed.

APPENDIX D
CMF ORGANIZATION AND PROCESS

The Commission on Minnesota's Future attempts to set forth, in this report, its aspirations for the state community and some of the means by which they can be realized. The Commission, composed of citizens from across the state, was established in 1973 as a result of growing concern for the future during the 1960s and early 1970s.

Many of the factors affecting Minnesota's economy and lifestyle were identified and discussed in a seminar on Minnesota's future sponsored by Governor Anderson and the State Planning Agency on February 10, 1973. Largely as a result of that seminar, a bill establishing the Commission on Minnesota's Future was passed by the legislature and signed into law by the Governor on May 24, 1973. The specific provisions of that law are included in this report as Appendix A.

The principal charge of the legislation establishing the Commission was directed toward recommending a state growth and development strategy. This was interpreted as a broad charge that encompassed all issues affecting the future quality of life for the state. At the Commission's first meeting in October 1973, the following general operating guidelines were adopted:

1. To work closely with the citizens of the state in deliberating growth and development strategies;
2. To focus on the long-range planning *process,* rather than trying to create "the plan" for the future of the state of Minnesota.
3. To place primary emphasis on the growth and development of the individual citizen of the state of Minnesota;
4. To develop information that would allow citizens of Minnesota to assess past and probable future trends in the state;
5. To examine the growth and development consequences of probable future trends;
6. To suggest alternative growth and development strategies, identify a preferred choice, and suggest how that preferred choice might be achieved.

At this first meeting, the Commission on Minnesota's Future adopted a pragmatic, policy-oriented approach to the future in preference to a visionary or "imaging" approach. In its first year of operation, the primary objective of the Commission was to develop information that would help to assess past and probable future trends in the state. To accomplish this task, the Commission organized itself into four committees: a natural environment committee, a man-made environment committee, a human environment committee, and a government environment committee. Each of the committees met at least once a month during the first year with technical experts, interest groups, and state officials.

Minnesota Horizons

The Commission, in conjunction with the State Planning Agency and the Minnesota State Legislature, in January of 1975 held a symposium for the Minnesota State Legislature to provide a comprehensive review of where the state had been, where it was, and where it might be going. The symposium, known as "Minnesota Horizons", consisted of seventeen papers on such topics as population changes, economic conditions, agriculture, land use, housing, transportation, energy, health, human services, education, finance, and governmental decision-making.

In addition to the houses of the legislature, selected representatives of state departments, public interest groups, and local government bodies were invited to attend. The sessions were broadcast to a wider audience by public radio and educational television. This briefing session for the legislature with broad public exposure was the first of its kind nationally.

The success of Minnesota Horizons had a significant effect on the work of the Commission on Minnesota's Future. The Commission decided to expand the number of subjects presented in Horizons, extending trends into the future, and publishing reports where appropriate. As a result, reports were prepared for the Commission on post-secondary education, elementary-secondary education, employment and income, housing, and health. In the case of the report on housing, two of the Commission members themselves did much of the investigation and writing.

This subject by subject approach was not fully satisfactory because progress was slow, the quality of the reports varied, and all subjects could not be dealt with adequately within the time available. More importantly, recommendations did not adequately take into account the inter-relationships among them. The Commission felt strongly that the charge from the legislature to devise a growth and development strategy required an understanding of these interrelationships.

Holistic Approach

The Commission did not seek to become expert in each area but did need to identify and understand the common themes or driving forces linking them together. The reports were, therefore, viewed as background material; and all of the Commission's selected subject area work, including the unpublished papers and discussion records, was viewed as supportive of the Commission's larger task.

That larger task — and the basic challenge to the Commission on Minnesota's Future — was to take a holistic approach to the future. This approach involved the development of goals, objectives, and strategies to deal with the future, based on understanding of the underlying forces that influence population, employment, housing, health, transportation, energy, and each of the other subjects evaluated by the Commission.

This entire report represents an exercise in inductive reasoning. It is an effort to draw broad meanings from selected separate special interest perspectives that are important to the future and that overlap with one another, providing a limited but holistic view of the state community. It was not intended that the Commission deal with all issues. Several important areas, in fact, were not investigated, including crime, welfare, culture and the arts, recreation and small business. Omission of these subjects is significant only to the extent that additional common themes or driving forces might have been identified. It is the Commission's belief that the areas selected for investigation provide a sufficiently broad and balanced factual base to support the development of valid overall goals, objectives, and strategies for the state.

Regional Public Meetings

To carry out its responsibility to the legislature and its decision to work closely with citizens of the state, the Commission conducted a series of public meetings in April and May of 1976. One meeting was held in each of twelve of the state's thirteen development regions, in cooperation with regional development commissions and other interested local organizations. The major purpose of these meetings was to stimulate public discussion on major issues affecting the state. A secondary purpose was to gather useful ideas to aid the Commission's work. The meetings included a narrated slide presentation of issues based on the Commission's work over the preceding two-and-one-half years.

Participants discussed these issues in small groups of their choice arranged according to environmental, economic and social perspectives. Specific questions were given to each discussion group. Each discussion group selected a "recorder" who kept a written record of the discussion and gave a report to all participants. Participants were asked to complete a questionnaire concerning potential goals for the state; questionnaire results were tabulated by computer and the results returned to participants. These results (See Appendix E) were taken into account by the Commission in its findings and recommendations.

APPENDIX E
REGIONAL MEETING RESULTS AND ANALYSIS

Background

During April and May 1976, a series of public meetings was held throughout Minnesota, one each in 12 of the 13 Regional Development Commission areas. The purpose of the meetings was to discuss with the general public major issues affecting the future of the state, including housing, employment, education, health, transportation, energy, environment, agriculture, population and governance.

Meetings were held as follows:

Region	Location	Date	Estimated Attendance	Questionnaires Returned and Tabulated
1	Crookston	May 1	45	19
2	Bemidji	April 28	40	29
3	Eveleth	April 23	35	23
4	Fergus Falls	April 29	35	18
5	Brainerd	April 19	40	26
6E	Litchfield	April 13	50	18
6W	Montevideo	April 14	65	49
7W	St. John's	April 15	45	27
8	Slayton	April 9	70	44
9	North Mankato	April 6	35	17
10	Rochester	April 7	60	41
11	Twin Cities	May 13	180	92
TOTAL			700	403

Each meeting was co-sponsored by the area Regional Development Commission, and in some cases additional regional groups such as chambers of commerce, universities, colleges and civic groups concerned with the future. Personal invitations were sent to selected leaders representing a variety of different interest groups, including business, agriculture, minorities, consumers, environmentalists, educators and local and regional governmental officials. The general public was also invited through news releases in local newspapers and radio and television broadcasts. In addition, several "open mike" and discussion programs over radio and television provided information and stimulated interest in the meetings.

The agenda for each regional meeting was scheduled as follows:

9:30 - 10:00 A.M.	Registration and coffee
10:00 - 10:30	Welcome from meeting chairman; introductions; CMF background; plans for the day
10:30 - 11:30	Minnesota Trends — a graphics presentation of the trends affecting Minnesota's future
11:30 - 12:00	Discussion of trend implications in groups
12:00 - 1:00 P.M.	Lunch
1:00 - 2:30	Continue discussion groups
2:30 - 3:00	Report back — reports from each discussion group in plenary session
3:00 - 3:30	"Which direction do you prefer?" — a survey of forum participants
3:30 - 3:45	Conclusions; participants' reactions; where do we go from here?

Principal agenda items included a slide presentation of trends affecting Minnesota's future, a summary of the Commission's work; a choice of three types of discussion groups — economic perspectives, environmental perspectives and social perspectives; and a questionnaire survey of goal preferences among participants.

Questionnaire Method

The questionnaire listed 62 goal statements covering the range of issues covered in the presentation and discussions. Respondents were asked to rank the importance to them personally of each statement. Numerical values were assigned to the four possible choices, with a 1 given to "Very Important", 2 to "Important", 3 to "Of Little or No Importance", and 4 to "Undesirable". The responses were keypunched and tabulated by computer. "Mean Scores" were used to compare preferences: the lower the mean score, the greater the importance.

Characteristics of Respondents

The respondents were those who had heard about and chose to attend the meetings. The responses, therefore, are not representative of all state residents.

Overall, the respondents can be characterized by:

Age		Sex		Residence	
Under 17	1%				
18 - 24 years old	6%	Male	68%	Twin Cities Area	23%
25 - 34	27%	Female	32%	Outside	
35 - 44	22%			Twin Cities Area	77%
45 - 54	17%				
55 - 64	19%				
65 and older	8%				

Overall Results

Mean scores and rankings for each goal by age, sex, discussion group and region are shown on Charts A and B.

Environmental and energy goals were strongly supported by respondents, accounting for 7 of the top 8 ranked goals (all with mean scores less than 1.6).

Lowest ranked goals included increases in social services and job and income guarantees (though the latter were controversial). Also low ranked were public expenditures for culture and the arts, increased emphasis on college education, and innovations in education (such as computer use). Highway development was clearly preferred over development of public transportation systems, including the metropolitan area.

Variations Among Respondents

Responses varied slightly by place of residence, age, sex, and discussion group participation; similarities of responses were more pronounced than were differences, however. With increasing age, respondents were inclined to be more concerned with crime, more opposed to educational innovation, more opposed to income equity and job guarantees, were less interested in outdoor recreational opportunities, more supportive of highway construction, more opposed to energy and environmental controls, more opposed to governmental provision of social services (including public transportation), more supportive of economic development (even with environmental sacrifices if necessary), and consider consumer information less important.

Women were slightly more inclined than men to favor the conservation of land and energy, support income equity, support culture and the arts, favor consumer information, and place less importance on new road and highway construction.

Participants were about equally distributed in number among the types of discussion groups. Responses of discussion group participants indicate only slight differences, contrary to expectations. Participants in economic discussion groups indicated a slightly greater emphasis on economic development and population growth, opposed highway construction curtailment, and gave less support for controls on energy use. Participants in environmental discussion groups placed less emphasis on population and employment shifts from urban to rural areas, more emphasis on the conservation of energy and land, and tended to support restricting urban sprawl. Participants in the social discussion groups tended to be more supportive of income equity, health and education opportunities, job guarantees, legal counsel, and public transportation.

Regional Variations

The following represent variations from overall state responses.

Region 1 — Northwest. Strong support for rural population and employment growth, energy conservation, environmental protection and agricultural development, but less concerned about land preservation. More desire for public services, including health, education, and recreation than other areas.

Region 2 — Headwaters. Tends to be more concerned with residential sprawl, supports peat development and school aid; but opposes income guarantees more than other areas of the state.

Region 3 — Arrowhead. Strong support for all kinds of economic growth, with environmental sacrifices if necessary. Strong support for public-private cooperation and for new highway construction; low support for agricultural issues. Tends to be more supportive of public service expansion, including culture and the arts, day care, guaranteed income, and particularly education, than other areas.

Region 4 — West Central. Strong opposition to guaranteed income and income redistribution. Supportive of programs that encourage maximum agricultural production.

Region 5 — (Cass, Crow Wing, Morrison, Todd and Wadena counties). Supportive of economic development and highways, with environmental sacrifices if necessary. Strongly opposes more public services, including education, recreation, legal services, day care, culture and the arts. Opposes increased governmental regulation of land, water and energy.

Region 6E — (Kandiyohi, McLeod, Meeker and Renville counties). Strongly supportive of better highways. Tends to favor restricting urban sprawl; less opposition to income equity than other areas.

Region 6W — (Big Stone, Chippewa, Lac Qui Parle, Swift, and Yellow Medicine counties). Strong support for economic growth, with environmental sacrifices if necessary. Emphasizes protection of the family farm. More inclined to support job and income guarantees than other parts of the state.

Region 7W — Central Minnesota. Strong opposition to all types of governmental controls over energy, land use, housing and health. Favors minimal public services of all kinds including health, education, transportation, day care. Least support in state for energy research and development. Among all areas of the state, the least support for economic expansion.

Region 8 — Southwest. Strong support of agricultural issues, including control of rural land prices, support of family farms, and highway construction.

Region 9 — (Blue Earth, Brown, Faribault, LeSueur, Martin, Nicollet, Sibley, Waseca, and Watonwan counties). Tends to support protection of agricultural land, more than other parts of the state.

Region 10 — Southeast. Strongly opposes income equity and job guarantees. Does not support agricultural issues as strongly as most other "outstate" areas.

Region 11 — Twin Cities Metropolitan Area. Very strong support for environmental and energy control measures. Less support for an urban to rural shift of population and employment than other areas. Tends to support the curtailment of new highway construction.

There is strong support in all areas of the state for the number 1 ranked goal — "encourage the recycling of nonrenewable resources". The number 2 overall ranked goal — "accelerate solar energy research" — is least supported in region 7-W. The number 3 ranked goal — "protect areas of unique or fragile environment" — is least supported in regions 3, 5 and 7-W. The number 4 ranked goal — "develop fuel conservation policies" — gained least support in regions 5 and 7-W. The number 5 ranked goal — "establish priorities for water use" — was likewise least supported in regions 5 and 7-W.

Areas of the state most supportive of shifts in population and employment from urban to rural areas, include regions 1, 3, 6-W and 9; least supportive was region 11.

Environmental protection was most supported by the meeting participants in region 11, and least supported by meeting participants from regions 3, 5, and 7-W.

Agriculture issues were supported most by participants from regions 1, 6-W, and 8 — the western one-third of the state and the most rural area. Agriculture issues were least supported by the eastern one-third of the state — or regions 3, 10 and 11.

Regions 2 and 6-E tended to support restrictions on urban sprawl, while regions 1 and 5 were most opposed.

Economic expansion was supported most strongly in regions 1, 3 and 5 and least supported in region 7-W.

Guaranteed income was most strongly opposed in regions 5 and 10 and least opposed in region 6-W.

Public/private cooperation was supported in regions 1 and 3, while opposed in regions 5 and 7-W.

There was general support for energy controls in the state, except in regions 5 and 7-W.

Moderate support for day care centers was indicated in regions 3 and 11, but strongly opposed in regions 5 and 7-W.

The Commission on Minnesota's Future will take into account the results of these meetings in its report to the Governor and the legislature. The information and opinions will be evaluated and considered as background information — along with a wide range of research materials — in reaching its conclusions and making its recommendations. While the information from the questionnaires, summarized here, cannot be considered representative of broad public opinion, it does represent the valid opinions of a variety of representatives of business, agriculture, government, labor, education and civic organizations who have one common interest — Minnesota's future.

Goal Statements Ranked by Mean

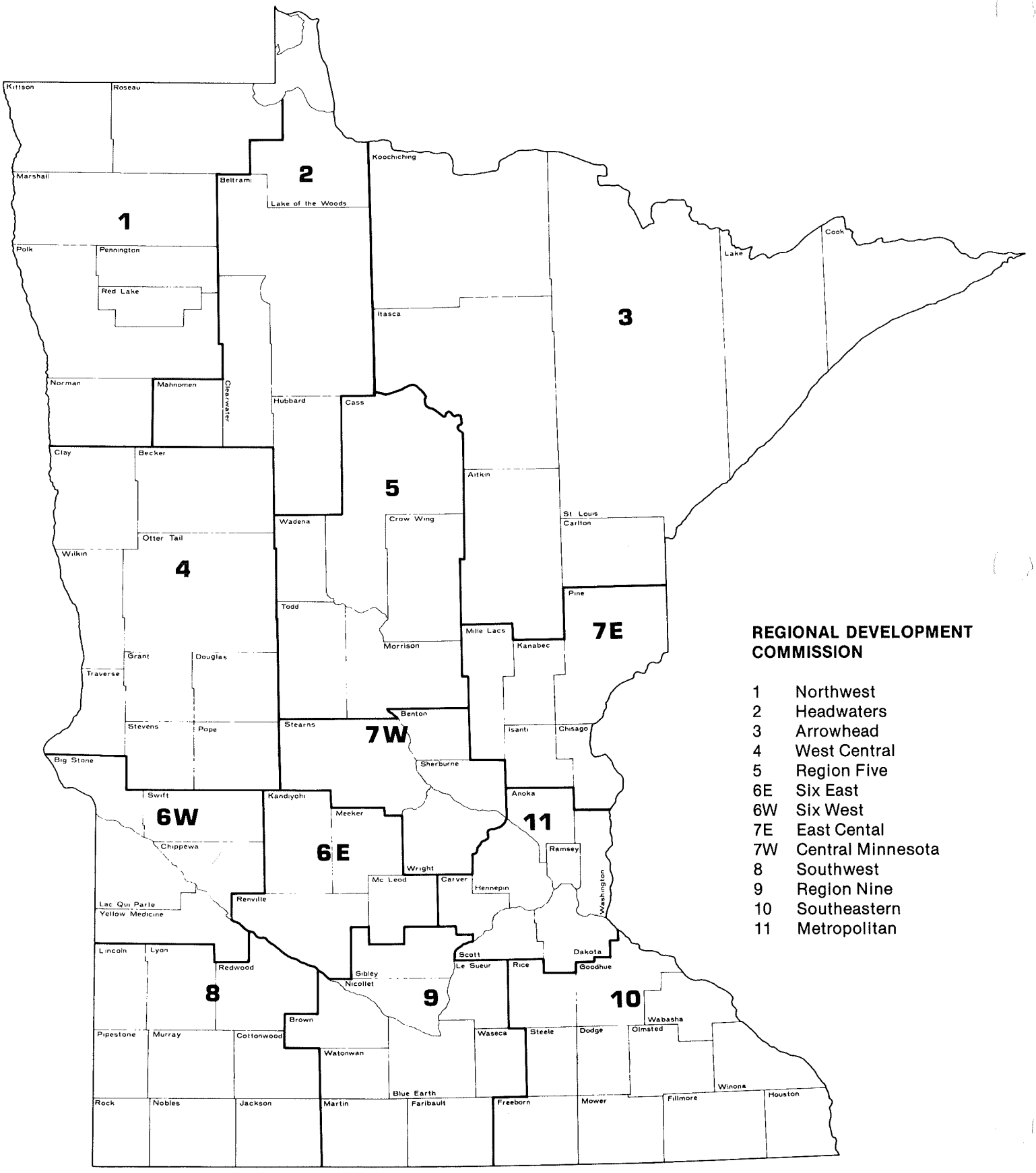
Highest 15

1. #39 Adopt policies to encourage the recycling of nonrenewable resources (such as glass, aluminum, steel, and chrome used in cars) along with the creation of a market for these materials in the state.
2. #21 Accelerate solar energy research.
3. #10 Protect areas of unique or fragile environment (rivers, shorelines, wilderness and scenic areas) from development that might cause damage.
4. #43 Develop fuel conservation policies that reduce present consumption and assure long range supplies.
5. # 2 Establish priorities for water use before water shortages occur.
6. #32 Require the use of energy-saving construction methods and materials for new homes.
7. # 6 Reduce crime in the state.
8. #36 Establish and enforce strong control measures to protect the state's lakes and streams from pollution.
9. # 1 Make it easier to get financing for buying and remodeling older homes.
10. #38 Emphasize more individual responsibility for health care (such as through good nutrition and exercise).
11. #20 Adopt and enforce strict energy conserving policies in transportation, land use, and building construction.
12. #49 Protect land with high agricultural productivity from losses to non-agricultural activities, such as urban development.
13. #37 Encourage the expansion of employment opportunities throughout Minnesota.
14. #55 Encourage energy conservation through financial incentives (such as car pools, car licensing costs based on fuel efficiency).
15. #50 Establish priorities for allocating energy resources, such as oil and gas.

Goal Statements Ranked by Mean

Lowest 15

48. #40 Develop Minnesota's peat resources to help meet the state's energy needs.
49. # 3 Encourage a shift in population and employment growth from urban and metropolitan areas to small towns and and rural areas.
50. # 5 Achieve greater equality of income among state residents.
51. #59 Provide day care centers for children of working parents.
52. #30 Guarantee a job for everyone in the state who wants one.
53. #61 Provide public financial support for culture and the arts.
54. #58 Develop a rapid transportation network to connect all major cities of the state.
55. #15 Curtail the construction of new roads and highways.
56. #51 Guarantee all adult residents of incomes large enough to meet basic needs.
57. #22 Increase the use of the computer as an educational instructional aid.
58. #57 Increase emphasis on education beyond college (graduate school training).
59. #13 Reduce the amount of energy available for residential use.
60. #34 Increase the number and kinds of social services that government provides for people of Minnesota.
61. # 7 Discourage persons from moving to Minnesota.
62. # 8 Promote the growth of employment opportunities across the state even if it means a sacrifice of air and water quality.



REGIONAL DEVELOPMENT COMMISSION

1	Northwest
2	Headwaters
3	Arrowhead
4	West Central
5	Region Five
6E	Six East
6W	Six West
7E	East Cental
7W	Central Minnesota
8	Southwest
9	Region Nine
10	Southeastern
11	Metropolitan

CHART A — Goals for Minnesota Questionnaire Responses by Region

KEY: ○ below 1.6 mean □ 3.0 mean or above △ Bi-modal

	Crookston Region 1		Bemidji Region 2		Eveleth Region 3		Fergus Falls Region 4		Brainerd Region 5		Willmar Region 6E		Montevideo Region 6W		St. John's Region 7W		Slayton Region 8		Mankato Region 9		Rochester Region 10		Non-Metro Total		TC Metro (Region 11)		State Total	
Total Responses	19		29		23		18		26		18		49		27		44		17		41		311		92		403	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
1. Make it easier to get financing for buying and remodeling older homes.	1.53	15	1.65	12	1.35	3	1.55	4	1.42	3	1.50	9	1.43	5	1.96	12	1.59	7	1.82	17	1.80	12	1.60	7	1.59	11	1.60	9
2. Establish priorities for water use before water shortages occur.	1.37	5	1.34	2	1.56	7	1.47	3	1.88	15	1.39	5	1.37	3	1.85	6	1.59	7	1.37	5	1.61	7	1.54	4	1.57	10	1.54	5
3. Encourage a shift in population and employment growth from urban and metropolitan areas to small towns and rural areas.	1.94	30	2.64	53	2.04	30	2.50	44	2.36	32	2.33	40	1.98	25	2.85	51	2.37	42	2.00	25	2.77	53	2.36	42	2.91	60	2.49	49
4. Arrange for school facilities to be open for general community use.	1.63	19	1.62	10	1.61	9	1.78	12	1.62	7	1.72	16	1.79	21	1.92	10	2.09	28	2.00	25	2.19	29	1.85	18	1.83	19	1.85	17
5. Achieve greater equality of income among state residents.	2.35	48	2.28	41	2.26	44	2.83	55	2.58	43	2.12	33	2.24	38	2.78	48	2.67	53	2.33	38	2.92	56	2.51	49	2.43	49	2.49	50
6. Reduce crime in the state.	1.50	14	1.57	7	1.61	9	1.61	8	1.38	2	1.59	15	1.51	8	1.55	1	1.54	4	1.87	19	1.57	6	1.56	5	1.64	13	1.58	7
7. Discourage persons from moving to Minnesota.	3.59	62	3.18	61	3.45	62	3.55	52	3.50	62	3.12	61	3.27	62	3.09	59	3.60	62	3.35	61	3.32	60	3.36	62	3.23	61	3.33	61
8. Promote the growth of employment opportunities across the state even if it means a sacrifice of air and water quality.	3.37	61	3.44	62	3.20	60	3.21	61	2.56	42	3.26	62	3.04	60	3.81	62	3.22	60	3.52	62	3.58	62	3.29	61	3.49	62	3.34	62
9. Make options or alternatives (such as open or continuous progress classes) available to all students.	1.74	24	1.88	24	2.04	32	2.39	39	2.36	32	1.94	26	2.32	44	2.29	28	2.10	29	2.35	39	2.36	40	2.19	33	2.03	30	2.15	34
10. Protect areas of unique or fragile environment (rivers, shorelines, wilderness and scenic areas) from development that might cause damage.	1.37	5	1.45	4	1.83	20	1.55	4	1.84	14	1.33	3	1.49	7	1.92	10	1.54	4	1.23	1	1.26	1	1.53	3	1.29	1	1.47	3
11. Reduce inflation in rural land prices.	2.53	51	2.43	46	2.45	54	2.55	47	2.37	35	2.80	56	2.33	47	2.35	30	1.90	20	2.18	35	2.76	52	2.39	44	2.31	42	2.38	42
12. Expand public transit in Minnesota's cities over 10,000 population.	2.00	32	2.11	35	2.09	34	2.05	24	2.43	37	1.94	27	2.13	35	2.55	39	2.28	37	1.94	22	2.15	25	2.18	32	2.03	30	2.14	33
13. Reduce the amount of energy available for residential use.	2.72	58	2.90	58	3.32	61	3.28	60	3.28	60	2.94	58	3.07	61	3.07	60	3.19	58	2.82	56	3.39	61	3.11	59	2.90	59	3.07	59
14. Provide more public outdoor recreational opportunities.	1.95	31	2.56	50	2.27	47	2.61	49	2.81	51	2.35	43	2.33	46	2.59	41	2.64	51	2.35	39	2.29	33	2.44	45	2.23	38	2.39	44
15. Curtail the construction of new roads and highways.	2.74	59	2.27	40	3.09	59	2.78	54	3.00	54	3.00	59	2.80	58	2.44	34	3.19	59	2.65	50	2.49	45	2.78	57	2.33	45	2.68	55
16. Expand the availability of health care services, especially in rural areas.	1.68	22	1.76	18	1.74	16	2.05	24	1.79	11	1.83	20	1.54	10	2.22	23	1.83	16	1.94	22	1.95	17	1.83	17	1.94	27	1.85	18
17. Limit the utilization of the state's unrenewable resources (such as minerals) so that future supplies are available.	1.67	21	2.03	30	2.35	50	1.94	17	2.32	29	1.83	20	1.66	15	2.07	16	1.90	19	1.50	9	1.72	11	1.90	20	1.84	21	1.89	19
18. Support continuance of family farms as efficient management organizations.	1.41	11	1.75	16	2.26	44	1.94	20	1.69	9	1.55	12	1.37	4	1.85	4	1.36	1	1.58	11	2.22	30	1.71	13	2.12	35	1.81	16
19. Provide public work projects for those on public assistance until they find work.	1.84	27	1.76	18	1.91	26	2.28	34	2.17	26	1.94	27	1.77	19	2.07	16	1.88	18	1.70	14	2.17	27	1.95	22	2.05	32	1.97	24
20. Adopt and enforce strict energy conserving policies in transportation, land use, and building construction.	1.37	5	1.64	11	1.61	9	1.61	8	2.12	23	1.47	8	1.70	16	2.15	20	1.77	15	1.53	10	1.63	9	1.71	14	1.51	8	1.67	11
21. Accelerate solar energy research.	1.21	3	1.31	1	1.22	1	1.22	1	1.56	5	1.33	3	1.36	2	1.85	4	1.49	3	1.47	7	1.61	7	1.43	1	1.46	6	1.44	2
22. Increase the use of the computer as an educational instructional aid.	2.05	35	2.67	54	2.30	48	2.59	48	3.08	56	2.75	53	2.87	57	3.00	56	2.62	50	2.94	57	2.89	54	2.73	55	2.59	54	2.70	57
23. Encourage a decrease in the use of automobiles to save energy.	1.89	29	1.93	26	2.26	44	2.22	32	2.35	31	1.83	20	1.80	22	2.33	29	2.31	39	2.00	25	2.10	24	2.09	28	1.77	16	2.01	26
24. Encourage business to provide more of the needed public services and facilities.	2.21	40	2.07	31	2.13	37	2.47	42	2.42	36	2.17	34	2.25	39	2.88	53	2.13	31	2.41	43	2.30	34	2.29	37	2.25	40	2.28	37
25. Provide equal financial support (the same amount per student) for public schools in all school districts in the state.	2.67	56	2.00	29	2.35	50	2.53	46	2.00	18	2.35	43	2.27	40	2.27	27	2.36	41	2.47	45	2.54	47	2.33	39	2.53	52	2.38	43
26. Restrict the sprawl of residential and commercial development in rural areas.	2.61	53	1.75	16	2.13	37	2.17	29	2.50	39	1.50	9	2.02	29	2.26	26	2.05	27	2.00	25	2.24	31	2.11	29	1.83	20	2.05	29
27. Encourage maximum production of cash grain products (wheat, soybeans, corn) for export.	2.00	32	2.14	37	2.13	37	1.87	14	2.36	32	2.29	38	2.30	41	2.58	40	2.19	33	2.94	57	2.92	55	2.36	41	2.33	44	2.35	39
28. Include more career-oriented education in elementary and secondary schools.	2.16	39	2.32	43	2.17	40	2.19	31	1.96	17	2.53	47	2.17	37	2.48	36	2.24	38	2.53	48	2.30	34	2.26	35	2.36	48	2.28	36
29. Increase consumer representation in health-care decisions (such as rate setting).	1.39	8	1.78	21	1.87	22	2.11	26	2.04	19	2.29	38	1.98	25	2.38	31	2.03	26	2.47	45	2.30	34	2.06	25	1.84	22	2.01	25
30. Guarantee a job for everyone in the state who wants one.	2.65	55	2.61	52	2.43	52	2.72	52	3.00	54	2.76	54	2.13	35	2.73	45	2.42	44	2.75	53	3.02	57	2.62	53	2.34	46	2.56	52
31. Develop more year-round school programs.	2.26	42	2.37	45	1.90	24	2.11	26	2.81	51	2.35	43	2.70	55	3.00	56	2.52	46	2.41	43	2.49	46	2.49	48	2.35	47	2.46	46
32. Require the use of energy-saving construction methods and materials for new homes.	1.16	1	1.59	8	1.65	14	1.44	2	1.68	8	1.53	12	1.65	13	2.15	19	1.68	10	1.35	2	1.54	5	1.61	8	1.41	3	1.57	6

Chart A - Page Two

KEY: ◯ Below 1.6 mean □ 3.0 Mean or above △ Bi-modal

	Crookston Region 1 (Total Responses 19)		Bemidji Region 2 (29)		Eveleth Region 3 (23)		Fergus Falls Region 4 (18)		Brainerd Region 5 (26)		Willmar Region 6E (18)		Montevideo Region 6W (49)		St. Johns Region 7W (27)		Slayton Region 8 (44)		Mankato Region 9 (17)		Rochester Region 10 (41)		Non-Metro Total (311)		TC Metro (Region 11) (92)		State Total (403)	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank
33. Establish policies which assure water supplies for agricultural irrigation.	2.31	45	2.35	44	2.09	36	2.33	37	2.15	25	2.28	37	2.31	42	2.44 △	34	2.56	48	2.50 △	47	2.33	38	2.34	40	2.20	36	2.31	38
34. Increase the number and kinds of social services that government provides for people of Minnesota.	2.94	60	3.17 □	60	2.91	58	3.06 □	58	3.46 □	61	3.11 △	60	2.85	56	3.23 □	61	3.36 □	61	3.31 □	60	3.17 □	59	3.14 □	60	2.87	58	3.08 □	60
35. Make a variety of educational opportunities available to persons of all ages in schools or their homes through advanced communications (two-way television, video tape, etc.)	1.68	22	2.10	34	2.04	30	2.22	32	2.80 △	50	2.33	40	2.32	44	2.67 △	44	2.21	36	2.37	42	2.30	34	2.29	36	2.05	32	2.24	35
36. Establish and enforce strong control measures to protect the state's lakes and streams from pollution.	1.53 ◯	15	1.69	13	1.56 ◯	7	1.55 ◯	4	2.32	29	1.44 ◯	6	1.53 ◯	9	2.03 △	14	1.71	13	1.47 ◯	7	1.46 ◯	3	1.66	9	1.31 ◯	2	1.58 ◯	8
37. Encourage the expansion of employment opportunities throughout Minnesota.	1.39 ◯	8	1.61	9	1.30 ◯	2	1.94	20	1.27 ◯	1	1.89 △	25	1.55 ◯	11	2.22	23	1.68	11	2.12	31	1.88	16	1.70	12	1.89	24	1.74	13
38. Emphasize more individual responsibility for health care (such as through good nutrition and exercise).	1.32 ◯	4	1.48 ◯	5	1.74	16	1.78	12	1.52 ◯	4	1.55 ◯	12	1.71	17	1.74	3	1.73	14	1.70	14	1.83	13	1.67	10	1.48 ◯	7	1.62	10
39. Adopt policies to encourage the recycling of non-renewable resources (such as glass, aluminum, steel and chrome used in cars) along with the creation of a market for these materials in the state.	1.16 ◯	1	1.52	6	1.65	14	1.55 ◯	4	1.56 ◯	5	1.22 ◯	1	1.31 ◯	1	1.55 ◯	1	1.44 ◯	2	1.35 ◯	2	1.51 ◯	4	1.44 ◯	2	1.41 ◯	3	1.44 ◯	1
40. Develop Minnesota's peat resources to help meet the state's energy needs.	2.44	50	2.18	38	2.09	34	2.47	42	2.69	47	2.67	51	2.33	47	2.52	37	2.44	45	2.56	49	2.65	50	2.45	46	2.58	53	2.48	48
41. Develop senior citizens service centers throughout the state.	2.12	38	2.44	47	2.00	28	2.33	37	2.64	45	2.33	40	2.38	50	2.56 △	38	2.66	52	2.18	35	2.35	39	2.39	43	2.25	41	2.36	40
42. Increase opportunities for citizens to be involved in decision making in the schools.	2.00	32	1.71	14	1.91	26	2.50	44	1.71	10	1.82	17	1.85	24	2.07	16	1.90	21	2.12	31	2.02	19	1.94	21	1.95	28	1.95	23
43. Develop fuel conservation policies that reduce present consumption and assure long range supplies.	1.42 ◯	12	1.41 ◯	3	1.52 ◯	6	1.72	11	1.83	13	1.28 ◯	2	1.47 ◯	6	2.00	13	1.67	9	1.41 ◯	6	1.42 ◯	2	1.56 ◯	6	1.42 ◯	5	1.53 ◯	4
44. Protect the farmer from direct exposure to international market uncertainties and variability.	2.60	52	2.31	42	2.48	55	2.73	53	2.50 △	39	1.94	27	2.00	27	2.17	21	2.20	35	2.12 △	33	2.55	49	2.30	38	2.63	55	2.37	41
45. Assure adequate legal counsel to all people in civil court cases (such as marriage dissolution and contract disputes).	2.28 △	42	2.50	48	2.43	52	2.61	49	2.79	48	2.72	52	2.31	43	2.73 △	45	2.55	47	2.35	39	2.55	48	2.52	50	2.31	43	2.47	47
46. Develop greater cooperation between private industry and government.	1.63	19	1.96	27	1.41 ◯	4	1.88	15	2.48 △	38	2.22	36	2.06	31	2.75 △	47	1.92	24	2.07	30	2.15	25	2.06	26	1.86	23	2.01	27
47. Encourage the construction of housing which conserves land (such as town houses and condominiums).	1.53 ◯	15	1.78	20	1.86	21	2.23	35	2.50	39	2.00	31	2.00	27	2.83	50	2.20	34	1.76	16	2.02	19	2.08	27	1.90	25	2.04	28
48. Make health care services in rural areas easier to get to.	1.53 ◯	15	1.89	25	1.80	18	2.00	23	1.96	16	1.82	17	1.71	17	1.92	9	1.90	21	1.94	22	2.03	22	1.86	19	2.08	34	1.91	20
49. Protect land with high agricultural productivity from losses to non-agricultural activities, such as urban development.	2.05 △	35	1.79	22	1.48 ◯	5	1.94	17	1.80	12	1.44 ◯	6	1.62	12	2.04 △	14	1.55 ◯	6	1.35 ◯	2	1.70	10	1.70	11	1.60	12	1.68	12
50. Establish priorities for allocating energy resources, such as oil and gas.	1.39 ◯	8	1.71	14	1.62	12	1.67	10	2.20 △	27	1.83	20	1.77	19	2.20	22	1.70	12	1.65	13	1.87	14	1.80	15	1.65	14	1.76	15
51. Guarantee all adult residents of incomes large enough to meet their basic needs.	2.61 △	53	3.07 □	59	2.33	49	3.00 △	57	3.23 □	59	2.78 △	55	2.35	49	2.88 △	54	2.90	57	2.69 △	51	2.70 △	51	2.70 △	56	2.45 △	51	2.69 △	56
52. Expand and improve programs to help alcoholics and other chemically-dependent people.	1.88	28	2.07	32	1.91	24	2.12	28	2.23	28	2.44	46	2.04	30	2.40	32	2.12	30	2.12	33	2.25	32	2.14	31	1.99	29	2.11	31
53. Develop new public transportation systems.	2.11 △	37	2.08	33	2.00	28	1.88	15	2.14	24	1.94	27	2.11	34	2.60 △	42	2.38	43	1.82	17	2.02	19	2.13	30	1.94	26	2.08	30
54. Assure adequate health care for residents who cannot afford to pay for it.	1.76	25	2.14	36	1.64	13	2.17	29	2.09	21	1.83	20	1.80	23	2.23	25	2.02	25	1.88	20	1.95	18	1.96	23	1.81	17	1.92	22
55. Encourage energy conservation through financial incentives (such as car pools, car licensing costs based on fuel efficiency).	1.42 ◯	12	1.96	28	1.90	23	1.94	20	2.11	22	1.50 ◯	9	1.65	13	1.88 △	7	1.85	17	1.59 ◯	11	1.87	15	1.80	16	1.55 ◯	9	1.74	14
56. Offer citizens a wide choice of housing types and locations.	2.33	47	2.51	49	2.23	43	2.83	55	2.65	46	2.18	35	2.45	51	2.60	42	2.31	40	2.75 △	53	2.42	42	2.46	47	2.23	37	2.41	45
57. Increase emphasis on education beyond college (graduate school training).	2.67	56	2.81	56	2.50	56	3.12 □	59	2.79	48	2.83	57	2.91	59	2.87	52	2.90	56	3.18 □	59	3.13 □	58	2.90	58	2.63	56	2.84	58
58. Develop a rapid transportation network to connect all major cities of the state.	2.31	45	2.55	50	2.19	41	2.44	41	2.84	53	2.62	50	2.64	54	2.92	55	2.57	49	2.69	51	2.46	43	2.58	51	2.70	57	2.60	54
59. Provide day care centers for children of working parents.	2.28	43	2.69	55	2.05	33	2.41	40	3.19 △	58	2.61	49	2.64	53	3.04 □	58	2.71	54	2.29	37	2.47	44	2.62	52	2.24	39	2.53	51
60. Limit mining expansion in order to protect wilderness areas.	2.36 △	48	2.24	39	2.71	57	2.23	35	2.62	44	2.05	32	2.07	33	2.42	33	1.92	23	1.88	20	2.18	28	2.22	34	1.82	18	2.13	32
61. Provide public financial support for culture and the arts.	2.33 △	41	2.86	57	2.23	42	2.67	51	3.11 △	57	2.53	47	2.61	52	2.80	49	2.78	55	2.81	55	2.38	41	2.65	54	2.43	49	2.60	53
62. Provide better consumer information so that individuals can make better decisions on personal expenditures, such as for housing, food, clothing.	1.78	26	1.85	23	1.81	19	1.94	17	2.04	20	1.82	17	2.06	32	1.92	8	2.15	32	2.06	29	2.05	23	1.98	24	1.71	15	1.92	21

CHART B — Goals for Minnesota Questionnaire Responses by Age, Sex, and Discussion Group

KEY: ◯ Below 1.6 mean □ 3.0 mean or above △ Bi-modal

	Total Responses	Age 18-24		Age 25-34		Age 35-44		Age 45-54		Age 55-64		Age 65/+		Male		Female		Discussion Group: Economic		Discussion Group: Environmental		Discussion Group: Social		No Group
		21		92		76		60		64		29		249		116		110		106		127		60
		Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	
1. Make it easier to get financing for buying and remodeling older homes.		1.62	17	◯ 1.49	10	1.62	7	◯ 1.56	8	1.62	9	1.72	8	◯ 1.59	9	◯ 1.55	10	1.65	11	◯ 1.55	10	◯ 1.53	7	
2. Establish priorities for water use before water shortages occur.		◯ 1.35	3	◯ 1.53	11	◯ 1.55	4	◯ 1.43	1	◯ 1.59	6	◯ 1.62	5	◯ 1.55	6	◯ 1.47	6	1.62	9	◯ 1.47	6	◯ 1.46	4	
3. Encourage a shift in population and employment growth from urban and metropolitan areas to small towns and rural areas.		□ 3.05	60	2.49	53	2.39	43	2.52	51	2.37	37	2.59	41	2.45	46	2.60	55	2.36	38	2.81	58	2.36	49	
4. Arrange for school facilities to be open for general community use.		◯ 1.52	10	1.70	17	1.85	15	1.87	19	2.00	21	1.79	11	1.86	17	1.74	16	1.96	21	1.79	15	1.73	19	
5. Achieve greater equality of income among state residents.		2.21	49	2.37	45	2.59	53	2.54	52	2.53	48	2.67	45	2.45	47	2.52	52	2.70	55	2.48	44	2.31	44	
6. Reduce crime in the state.		◯ 1.52	10	1.74	19	1.75	12	◯ 1.55	7	◯ 1.37	1	◯ 1.32	1	◯ 1.56	8	1.63	13	1.66	12	◯ 1.54	9	◯ 1.59	10	
7. Discourage persons from moving to Minnesota.		2.95	59	□ 3.31	61	□ 3.20	61	□ 3.32	62	□ 3.51	62	□ 3.53	62	□ 3.37	62	□ 3.24	61	□ 3.54	62	□ 3.16	61	□ 3.36	62	
8. Promote the growth of employment opportunities across the state even if it means a sacrifice of air and water quality.		□ 3.45	62	□ 3.57	62	△ 3.38	62	□ 3.21	61	□ 3.35	61	△ 2.89	53	△ 3.28	61	□ 3.42	62	△ 3.29	61	□ 3.40	62	□ 3.31	61	
9. Make options or alternatives (such as open or continuous progress classes) available to all students.		1.76	24	2.05	34	2.15	34	2.13	33	2.34	36	2.38	33	2.17	34	2.08	33	2.30	37	2.16	33	2.02	30	
10. Protect areas of unique or fragile environment (rivers, shorelines, wilderness and scenic areas) from development that might cause damage.		◯ 1.38	4	◯ 1.26	1	◯ 1.48	2	◯ 1.51	6	◯ 1.50	4	◯ 1.48	2	◯ 1.47	3	◯ 1.37	1	◯ 1.44	2	◯ 1.42	3	◯ 1.45	3	
11. Reduce inflation in rural land prices.		2.00	33	2.23	40	2.46	46	2.38	45	2.47	45	2.22	27	2.36	42	2.32	40	2.55	47	2.28	37	2.25	41	
12. Expand public transit in Minnesota's cities over 10,000 population.		1.71	20	1.99	32	2.16	35	2.13	33	2.24	33	2.48	39	2.15	33	2.01	28	2.25	34	2.07	31	2.06	33	
13. Reduce the amount of energy available for residential use.		2.84	58	2.78	58	□ 3.17	60	□ 3.15	60	□ 3.17	59	□ 3.44	60	□ 3.05	60	△ 3.19	60	□ 3.26	60	2.89	59	□ 3.08	60	
14. Provide more public outdoor recreational opportunities.		2.14	40	2.25	42	2.38	41	2.45	50	2.41	40	2.50	40	2.34	40	2.41	47	2.55	46	2.28	36	2.31	45	
15. Curtail the construction of new roads and highways.		2.05	37	2.42	49	△ 2.77	57	△ 2.78	57	△ 2.81	55	△ 3.16	57	△ 2.78	57	2.41	48	△ 2.87	56	△ 2.52	49	2.56	56	
16. Expand the availability of health care services, especially in rural areas.		1.76	24	1.79	21	1.90	18	1.91	22	1.84	15	1.89	13	1.88	18	1.78	18	1.92	17	2.01	24	1.67	16	
17. Limit the utilization of the state's unrenewable resources (such as minerals) so that future supplies are available.		1.66	18	1.67	14	1.88	16	1.99	27	2.05	22	2.00	19	1.92	20	1.71	14	2.00	24	1.92	19	1.72	17	
18. Support continuance of family farms as efficient management organizations.		1.71	20	1.83	25	1.91	18	1.81	15	1.83	14	1.74	9	1.84	16	1.79	19	1.93	20	1.77	14	1.79	22	
19. Provide public work projects for those on public assistance until they find work.		2.00	33	1.87	26	2.08	25	2.01	29	1.90	17	△ 2.43	37	1.95	22	2.06	30	1.97	22	1.98	21	1.98	29	
20. Adopt and enforce strict energy conserving policies in transportation, land use, and building construction.		◯ 1.48	8	◯ 1.35	5	1.81	14	◯ 1.59	9	1.76	13	1.96	18	1.63	10	1.62	11	1.63	10	1.63	12	1.64	14	
21. Accelerate solar energy research.		◯ 1.48	8	◯ 1.34	2	◯ 1.39	1	◯ 1.44	3	◯ 1.49	3	◯ 1.61	4	◯ 1.40	1	◯ 1.46	4	◯ 1.42	1	◯ 1.45	4	◯ 1.38	1	
22. Increase the use of the computer as an educational instructional aid.		2.67	56	2.61	57	2.53	22	2.72	56	2.89	57	2.96	55	2.65	55	2.76	57	2.65	52	2.76	55	2.66	57	
23. Encourage a decrease in the use of automobiles to save energy.		△ 1.71	20	1.81	23	2.13	30	1.92	23	2.07	24	2.38	33	1.97	23	2.00	26	1.93	19	1.89	18	2.06	33	
24. Encourage business to provide more of the needed public services and facilities.		2.19	43	2.14	36	2.29	38	2.36	44	2.26	34	2.69	46	2.30	24	2.20	37	2.37	40	2.39	42	2.11	35	
25. Provide equal financial support (the same amount per student) for public schools in all school districts in the state.		1.95	32	2.34	44	△ 2.38	41	2.33	39	△ 2.44	42	2.89	52	2.36	43	2.40	46	△ 2.37	39	2.43	43	△ 2.32	46	
26. Restrict the sprawl of residential and commercial development in rural areas.		1.70	19	1.76	20	2.11	27	2.00	28	2.38	39	2.00	19	1.99	27	2.07	31	1.98	23	1.84	17	2.17	36	
27. Encourage maximum production of cash grain products (wheat, soybeans, corn) for export.		2.62	55	2.43	50	2.15	32	2.33	40	2.52	46	2.15	26	2.32	39	2.39	44	2.27	35	△ 2.51	48	2.24	40	
28. Include more career-oriented education in elementary and secondary schools.		2.40	51	2.37	46	2.40	44	2.25	37	2.20	30	1.89	14	2.26	36	2.25	38	2.29	36	2.19	35	2.28	43	
29. Increase consumer representation in health-care decisions (such as rate setting).		1.75	23	1.98	31	2.00	22	1.89	21	2.20	30	2.22	27	2.07	29	1.81	20	2.12	30	2.02	25	1.76	21	
30. Guarantee a job for everyone in the state who wants one.		2.28	49	△ 2.39	47	2.59	52	△ 2.46	49	△ 2.55	52	△ 2.86	51	△ 2.52	50	△ 2.57	54	2.65	52	△ 2.57	52	2.34	47	
31. Develop more year-round school programs.		2.70	57	2.49	52	2.37	40	2.36	43	2.44	42	△ 2.41	36	2.45	48	2.44	50	2.42	43	2.48	45	2.37	51	
32. Require the use of energy-saving construction methods and materials for new homes.		◯ 1.40	7	◯ 1.42	7	1.62	8	◯ 1.46	5	◯ 1.54	7	1.93	17	◯ 1.52	5	◯ 1.54	9	◯ 1.54	5	◯ 1.47	5	◯ 1.54	8	

CHART B -- Page Two

KEY: ◯ Below 1.6 mean □ 3.0 Mean or above △ Bi-modal

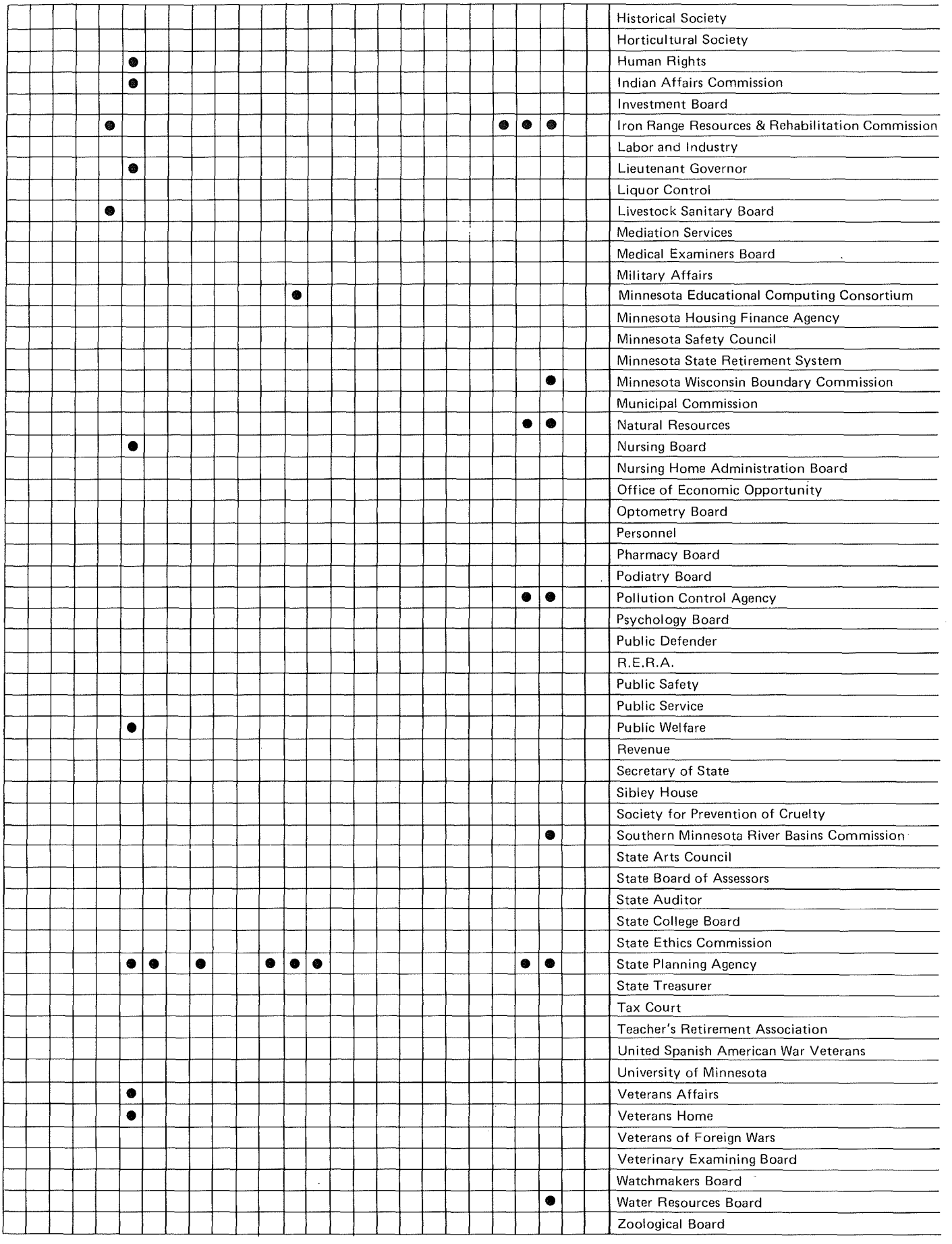
	Age												Male		Female		Discussion Group							
	Age 18-24		Age 25-34		Age 35-44		Age 45-54		Age 55-64		Age 65+						Economic		Environmental		Social		No Group	
TOTAL RESPONSES	21		92		76		60		64		29		249		116		110		106		127		60	
	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank	Mean Score	Rank		
33. Establish policies which assure water supplies for agricultural irrigation.	2.26	57	2.19	37	2.22	37	2.19	36	2.53	47	2.41	35	2.30	38	2.20	36	2.23	32	2.34	40	2.24	39		
34. Increase the number and kinds of social services that government provides for people of Minnesota.	2.52	53	2.91	60	3.08	59	3.05	59	3.26	60	3.44	61	3.05	59	3.07	59	3.19	59	3.06	60	2.93	59		
35. Make a variety of educational opportunities available to persons of all ages in schools or their homes through advanced communications (two-way television, video tape, etc.)	2.14	40	2.02	33	2.15	31	2.19	35	2.37	37	2.71	47	2.22	35	2.17	35	2.38	41	2.29	39	2.02	31		
36. Establish and enforce strong control measures to protect the state's lakes and streams from pollution.	1.24	2	1.35	3	1.58	5	1.61	10	1.63	10	1.86	12	1.56	7	1.49	7	1.59	7	1.49	7	1.53	6		
37. Encourage the expansion of employment opportunities throughout Minnesota.	2.00	33	1.62	12	1.88	16	1.66	14	1.64	11	1.65	7	1.65	11	1.83	22	1.56	6	1.96	20	1.65	11		
38. Emphasize more individual responsibility for health care (such as through good nutrition and exercise).	1.52	10	1.66	13	1.62	9	1.61	10	1.59	7	1.62	5	1.67	12	1.49	7	1.60	8	1.58	11	1.65	12		
39. Adopt policies to encourage the recycling of non-renewable resources (such as glass, aluminum, steel and chrome used in cars) along with the creation of a market for these materials in the state.	1.19	1	1.37	6	1.53	3	1.44	3	1.44	2	1.52	3	1.45	2	1.39	2	1.49	3	1.36	1	1.45	2		
40. Develop Minnesota's peat resources to help meet the state's energy needs.	3.05	60	2.53	55	2.53	50	2.42	47	2.17	29	2.69	44	2.47	49	2.51	51	2.42	42	2.59	53	2.47	54		
41. Develop senior citizens service centers throughout the state.	2.05	38	2.22	39	2.48	47	2.27	38	2.43	41	2.63	43	2.35	41	2.33	41	2.48	44	2.38	41	2.19	38		
42. Increase opportunities for citizens to be involved in decision making in the schools.	1.76	24	1.97	30	2.12	29	1.83	17	1.97	20	2.11	25	1.98	26	1.93	24	2.07	27	2.03	27	1.83	24		
43. Develop fuel conservation policies that reduce present consumption and assure long range supplies.	1.38	4	1.35	3	1.61	6	1.43	1	1.58	5	1.75	10	1.52	4	1.45	3	1.50	4	1.41	2	1.52	5		
44. Protect the farmer from direct exposure to international market uncertainties and variability.	2.10	39	2.48	51	2.66	55	2.34	42	2.22	32	2.23	29	2.44	45	2.28	39	2.52	45	2.29	38	2.36	48		
45. Assure adequate legal counsel to all people in civil court cases (such as marriage dissolution and contract disputes).	2.24	46	2.32	43	2.60	54	2.38	46	2.55	49	2.89	53	2.52	51	2.34	42	2.66	54	2.50	47	2.26	42		
46. Develop greater cooperation between private industry and government.	2.26	47	1.93	29	2.00	23	1.88	20	2.06	23	2.28	30	1.95	21	2.08	34	1.88	16	2.15	32	1.97	28		
47. Encourage the construction of housing which conserves land (such as town houses and condominiums).	1.94	31	1.68	16	2.15	32	2.05	30	2.07	24	2.59	42	1.99	28	2.04	29	2.08	28	2.03	28	1.92	25		
48. Make health care services in rural areas easier to get to.	1.76	24	1.82	24	2.04	24	1.93	24	1.97	19	2.00	19	1.97	24	1.81	21	2.00	24	2.02	26	1.80	23		
49. Protect land with high agricultural productivity from losses to non-agricultural activities, such as urban development.	1.38	4	1.47	9	1.73	10	1.62	13	1.75	12	2.00	19	1.71	13	1.47	5	1.83	15	1.53	8	1.58	9		
50. Establish priorities for allocating energy resources, such as oil and gas.	1.52	10	1.67	14	1.74	11	1.61	10	1.94	18	1.89	14	1.79	15	1.62	12	1.77	14	1.73	13	1.65	13		
51. Guarantee all adult residents of incomes large enough to meet their basic needs.	2.28	49	2.40	53	2.72	51	2.69	55	2.82	56	3.18	58	2.74	56	2.55	53	2.90	57	2.79	57	2.41	52		
52. Expand and improve programs to help alcoholics and other chemically-dependent people.	1.90	30	2.07	35	2.21	36	2.06	31	2.13	28	2.07	24	2.10	31	2.08	32	2.18	31	2.16	33	1.96	27		
53. Develop new public transportation systems.	1.60	16	1.91	27	2.12	28	2.07	32	2.26	34	2.29	31	2.07	30	2.00	26	2.10	29	2.00	23	2.04	32		
54. Assure adequate health care for residents who cannot afford to pay for it.	1.81	28	1.74	18	1.97	21	1.93	25	2.07	26	2.04	23	1.89	19	1.90	23	1.92	18	2.03	28	1.73	18		
55. Encourage energy conservation through financial incentives (such as car pools, car licensing costs based on fuel efficiency).	1.86	29	1.47	8	1.80	13	1.82	16	1.84	15	1.89	14	1.73	14	1.72	15	1.73	13	1.78	16	1.66	15		
56. Offer citizens a wide choice of housing types and locations.	2.57	54	2.22	38	2.36	39	2.34	41	2.67	50	2.81	49	2.43	44	2.39	45	2.56	48	2.57	50	2.18	37		
57. Increase emphasis on education beyond college (graduate school training).	2.50	52	2.84	59	2.81	58	2.81	58	3.03	58	2.81	49	2.81	58	2.83	58	3.05	58	2.76	56	2.66	58		
58. Develop a rapid transportation network to connect all major cities of the state.	2.15	42	2.58	56	2.55	51	2.45	48	2.79	54	3.12	56	2.54	53	2.66	56	2.65	50	2.59	50	2.52	55		
59. Provide day care centers for children of working parents.	2.21	44	2.29	41	2.44	45	2.63	54	2.75	51	2.71	47	2.54	52	2.34	42	2.62	49	2.48	45	2.36	49		
60. Limit mining expansion in order to protect wilderness areas.	1.55	15	1.93	28	2.11	26	1.97	26	2.46	44	2.46	38	2.14	32	1.95	25	2.24	33	2.03	30	1.96	26		
61. Provide public financial support for culture and the arts.	2.00	33	3.39	48	2.49	48	2.58	53	2.78	53	3.26	59	2.62	54	2.44	49	2.65	51	2.68	54	2.47	53		
62. Provide better consumer information so that individuals can make better decisions on personal expenditures, such as for housing, food, clothing.	1.55	14	1.80	22	1.92	20	1.84	18	2.10	27	2.36	32	1.98	25	1.75	17	2.00	24	1.98	22	1.75	20		

APPENDIX F

STATE GOVERNMENT RESPONSIBILITY FOR FUTURE TASKS

This matrix attempts to assign responsibilities for future tasks (identified on Page 46) to state government agencies, based upon general descriptions of responsibility in the State Functional Analysis Report No. 3, prepared by the Bureau of Program, Management and Budget Coordination of the State Department of Administration in April 1975. This should not be considered as a precise determination of who should or who should not have responsibility for the tasks identified. The intent here is to compare, in a general way, the present structural capability of state government with some of the tasks that lie ahead.

FUTURE TASKS	DEPARTMENT OF STATE GOVERNMENT	Abstractors Board	Academy of Science	Accountancy Board	Administration	Aeronautics	Agriculture	Architects, Engineers & Land Surveyors Board	Attorney General	Barber Board	Boxing Commission	C.A.A.P.C.	Chiropractic Examining Board	Civil Air Patrol	Commerce	Commission for the Handicapped	Commission on Minnesota's Future	Community College Board	Corrections	Corrections Ombudsman	Cosmetology Board	Dentistry Board	Disabled American Veterans	Economic Development	Education	Electricity Board	Energy Agency	Environmental Quality Council	Employment Services	Finance	Governor's Commission on Crime	Governor's Manpower Office	Health	Higher Education Coordinating Commission	Higher Education Facilities Authority	Highway
1. Meet future energy needs																											●								
2. Manage land and water resources					●		●																					●							●
3. Conserve non-renewable resources																										●									
4. Develop renewable resources							●																●												
5. Encourage durability of consumer products															●																				
6. Promote socially/environmentally beneficial decisions																																			
7. Encourage individual responsibility																																			
8. Take account of personal freedom																																			
9. Take account of value conflicts																																			
10. Evaluate individual/social/economic/environmental trade-offs																																			
11. Consider preferences, expectations, values					●										●																				
12. Establish overall state guidelines					●																														
13. Make comprehensive information available					●																														
14. Assess needs, set action priorities					●																														
15. Measure policy costs and benefits					●																														
16. Anticipate unintended policy impacts																																			
17. Foresee/evaluate emerging needs					●												●																		
18. Develop flexible decision making																																			
19. Improve citizen participation																																			
20. Set standards for human services																●		●	●					●					●				●	●		
21. Develop public/private relationships							●																●												
22. Generate capital resources							●																●												
23. Determine qualitative measures of human progress																																			
24. Establish contingency plans																																			
25. Influence external policy																																			


Historical Society
Horticultural Society
Human Rights
Indian Affairs Commission
Investment Board
Iron Range Resources & Rehabilitation Commission
Labor and Industry
Lieutenant Governor
Liquor Control
Livestock Sanitary Board
Mediation Services
Medical Examiners Board
Military Affairs
Minnesota Educational Computing Consortium
Minnesota Housing Finance Agency
Minnesota Safety Council
Minnesota State Retirement System
Minnesota Wisconsin Boundary Commission
Municipal Commission
Natural Resources
Nursing Board
Nursing Home Administration Board
Office of Economic Opportunity
Optometry Board
Personnel
Pharmacy Board
Podiatry Board
Pollution Control Agency
Psychology Board
Public Defender
R.E.R.A.
Public Safety
Public Service
Public Welfare
Revenue
Secretary of State
Sibley House
Society for Prevention of Cruelty
Southern Minnesota River Basins Commission
State Arts Council
State Board of Assessors
State Auditor
State College Board
State Ethics Commission
State Planning Agency
State Treasurer
Tax Court
Teacher's Retirement Association
United Spanish American War Veterans
University of Minnesota
Veterans Affairs
Veterans Home
Veterans of Foreign Wars
Veterinary Examining Board
Watchmakers Board
Water Resources Board
Zoological Board

APPENDIX G
SELECTED OPINION POLLS

Minneapolis Star
November 27, 1975
Page 3H

List of greatness causes suggests changing values

Harris Survey

NEW YORK — The American public seems to feel that economic, material and military power contributed most to American's greatness in the past, the Harris Survey reports. In looking to the future, however, the public is concerned about social justice and the quality of life.

In the survey, the public was asked if it thought each of 23 national attributes had been a "major" or "minor" contributor to past greatness or hardly a contributor at all. The questions about the future were phrased in a similar way.

"The results suggest the change in values that is taking place in the mid-1970s:

In the past, the public believes, rich natural resources and a hard-working people were two main reasons for national greatness. Ninety-one percent consider natural resources a vital contributor in the past. But only 79 percent see them as the key to America's future, causing this attribute to slip from first to fifth place in importance. "Hard-working people" is seen by 87 percent as a major cause of past greatness, but only 78 percent see it as a key to the future. "Hard work" has fallen from the third most important contributor to sixth place as a key national trait.

The military strength is viewed as a key element in the past greatness by 80 percent. Looking to the future, however, only 73 percent see it as a key. This means that military defense has fallen from sixth to 11th place in importance.

In contrast to the declining importance of military power is the growing value the public attributes to the United States' ability "to get along with other countries," which jumps from 12th place to seventh place for the future.

Two attributes that the public feels were highly important to the nation's past greatness are also considered crucial for the future, however. At the top of the list is "industrial know-how and scientific progress." A second key item is "allowing people to own private property."

These national attributes also are becoming increasingly important in determining future greatness:

"**Living under** a system of guaranteed individual freedom" is viewed as the fourth most important contributor from the past. It jumps to second place for the days ahead.

The right to mobility is thought to be fifth most important in the past but moves up to fourth place for the future.

"**People of different** ideas respecting the rights of others" ranks eighth among elements of the past. For the future, the commitment to pluralism moves to seventh.

Equality of opportunity moves from a ranking of 11th as a past contributor to greatness to eighth for the future.

"**A free, unlimited education** to all qualified" moves from 10th place to ninth.

LOUIS HARRIS has been engaged in public opinion research for more than 25 years, specializing in political and market research.

Minneapolis Star
December 4, 1976
Page 6G

Change favored over shortages

Harris Survey

NEW YORK—Americans would rather change their lifestyle than face the prospect of continued inflation, shortages and repeated recessions.

A majority of a cross-section of 1,497 adults surveyed recently gave these reasons for their choice:

"It is better to change the way we live than to risk economic trouble."

"Such a change is the only way to cut down inflationary pressures."

"We don't need all we now buy to still live well."

"We're too materialistic and spoiled and we waste too much."

Sixty-one percent think it is "morally wrong" for the people of the United States, who comprise 6 percent of the world's population, to consume an estimated 40 percent of the world's output of energy and raw materials. Twenty-three percent disagree. Plus, the public reports that it is ready to cut back consumption to correct what 68 percent feel are "wasteful" buying habits.

To reduce grain and meat consumption, 91 percent are willing to have one meatless day a week (7 percent are not), 91 percent would agree to eat more vegetables and less meat for protein (7 percent are not) and 78 percent would agree to stop feeding "all-beef products" to pets (15 percent would not).

Ninety percent would be willing to "do away with changing clothing fashions every year" (7 percent would not) and 73 percent would agree to "wear old clothes, even if they shine, until they wear out" (22 percent would not).

In housing, people appear to be ready for quite radical changes: Seventy-three percent would favor "prohibiting the building of large houses with extra rooms that are seldom used"; 66 percent would support "doing away with second houses where people go weekends and vacations"; a 57 percent majority would like to see it "made much cheaper to live in multiple-unit apartments than in single houses."

THE PAPER and packaging area is also one that the public views as being wasteful. Ninety-two percent say they would be willing to "reduce the amount of paper towels, bags, tissues, napkins, cups and other disposables to save energy and to cut pollution." A 90 percent majority would support "cutting down sharply on the plastic bags and packaging that most products are sold in," and 83 percent would opt for "using wood and natural fibers for packaging products."

In the automotive area, 92 percent would be willing to "eliminate annual model changes in automobiles," and 79 percent would agree to "drive cars to 100,000 miles before junking them."

When faced with the argument that "if people buy less, then less will be produced, and that could mean fewer jobs," 68 percent said they would be willing to work shorter hours to share the work that would remain (21 percent disagreed).

But 48 percent balk at the notion of taking a cut in pay for their shorter work week, though 40 percent say they would.

LOUIS HARRIS has been engaged in public opinion research for more than 25 years, specializing in political and market research.

Minneapolis Tribune
June 15, 1976
Page 9B

Few are enthusiastic on Legislature's work

Minnesota Poll

For every Minnesotan who thinks the 1976 session of the Legislature was excellent or good, there are three others who rate it poor or only fair, the Minneapolis Tribune's Minnesota Poll finds.

The session was adjourned April 7 amid bitter controversy between the House and Senate over legislation for a new sports stadium and for a tax rebate. Many legislators themselves were openly critical of the way business before the Legislature was conducted.

To gauge the public's reaction, poll interviewers phoned a sampling of 606 men and women last month and asked:

"The Minnesota Legislature recently finished its 1976 session. Considering the session as a whole, would you rate the performance of the Legislature this year as excellent, good, only fair, or poor?"

The replies:

Excellent performance by Legislature	**1%**
Good	**20**
Only fair	**46**
Poor	**16**
Not sure	**17**
	100%

All types of state residents analyzed in the survey were more critical than they were favorable about the session. Those who were more favorable than average included Minnesotans under 26 years of age, Democratic-Farmer-Laborites, liberals and residents of northern Minnesota.

Independent voters were the most critical of the Legislature. Fifty percent of them rated this year's session only fair and an additional 23 percent said it was poor, a total of 73 percent unfavorable. That compares with 62 percent unfavorable for all Minnesotans.

Others who were more critical than average included people from households where the yearly income exceeds $15,000 and people living in outstate cities.

When a balanced sampling of Minnesotans was interviewed face-to-face a year ago about the 1975 session, which involved most of the same lawmakers, the ratings were almost identical to the current ones: excellent, 1%; good, 22%; only fair, 47%; poor, 14%; not sure, 16%.

Though critical of the entire Legislature, people in the 1975 study tended to feel they personally were well represented in St. Paul.

This Minnesota Poll is based on telephone interviews with 606 men and women over 18 throughout Minnesota. As a scientifically based opinion survey, it provides an approximation of the response that could be expected if all adult Minnesotans had been interviewed.

Results of such surveys are subject to sampling error. For a random sample of this size, it is possible to say that the error will not exceed about 4 percentage points either way. Since this sample is taken only from telephone owners, the error may be slightly larger than for a completely random sample. For subsamples of the entire survey—for example, the opinion of independent voters alone—the error could be larger.

Minneapolis Tribune
July 5, 1976
Page 1A

Minnesota Poll

70% distrust our political institutions, mass media

Nearly seven out of every 10 Minnesotans are distrustful to some degree of their political institutions and the mass media.

Despite the view of many older people that the young are most critical of today's society, young Minnesotans — by a wide margin — are the least distrustful of any age group in the state.

And the middle-aged and elderly, regarded by some young people as defenders of the status quo, are the most cynical about political and media institutions.

These findings emerge from a study of data collected by the Minneapolis Tribune's Minnesota Poll and reported in Sunday's Tribune. That report dealt with state residents' views on elections, elected officials, television news, newspapers and advertising claims, as well as social issues.

Using the replies to the six political and media questions in that survey, a "trust index" was constructed by Quayle, Plesser & Co., the Poll's consultants.

The six questions were in the form

Poll continued on page 6A

Continued from page 1A

of statements with which respondents were asked to agree or disagree:

"*You can generally trust what an elected official says.*"

"*Elections are less important than they used to be.*"

"*Elected officials don't pay attention to what their constituents think.*"

"*You can generally believe advertising claims.*"

"*You can generally believe what you read in the newspapers.*"

"*You can generally believe what you see and hear on TV news programs.*"

Here is how the "trust index" looks over-all and with men and women separated:

	All Adults	Men	Women
Very cynical	28	24	30
Somewhat cynical	41	40	42
Somewhat trusting	19	20	19
Very trusting	12	16	9
	100%	100%	100%

Each person questioned was scored on a scale of plus 1 for each statement he agreed with, minus 1 for each statement he disagreed with and 0 if he had no opinion or was unsure. The sum of the six replies placed each respondent somewhere on a 13-point scale running from plus 6 to minus 6, with zero counted as the midpoint.

(Four categories were then created: Very trusting, plus 6 to plus 3; somewhat trusting, plus 2 or plus 1; somewhat cynical, 0 to minus 2; very cynical, minus 3 to minus 6.)

The most marked variations in cynicism-trust ratings among the sample was found between different age groups. Forty-four percent of those 18-25 and 40 percent of those 26-34 fell into either the "somewhat trusting" or "very trusting" groups.

By contrast, only 26 percent of those between 50 and 64 are in that category.

The only other statistically significant variations from the over-all trust-cynicism figures were found when respondents were separated by political party affiliation and by ideological preferences.

Those who identified themselves as Republicans were markedly less cynical than either DFLers or independents. Sixty-one percent of Republicans fell into either the "somewhat cynical" or "very cynical" categories, while 70 percent of both DFLers and independents were classified that way.

APPENDIX H

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