# **Staff Paper Series**

Staff Paper P69-10

June 1969

# THE EVOLVING REGIONAL COMMUNITY

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Because Bemidji is the focal area for a multi-county trade and service complex, it performs a key role in an evolving regional community. Bemidji serves as a communication and transportation hub for a part of Northern Minnesota lying between two major metropolitan centers to the north and south and two smaller metropolitan centers to the east and west. Geography and existing settlement patterns thus fashion the economic future of Bemidji and its multi-county regional community.

The declining role of agriculture and timber production in Northern Minnesota makes the Region's economic future dependent upon the growing importance of Bemidji as a communication and transportation center. As trade and service activities expand in Bemidji, employment opportunities are created that balance in part the decline in jobs in the commodity-producing sectors, namely, agriculture, forestry, fisheries, mining, and farm-related and timber-related manufacturing. Additional manufacturing jobs in Bemidji, also, compensate the decline in other commodityproducing employment, not only directly in new manufacturing jobs but also indirectly in trade and service activities dependent upon the expansion of manufacturing employ-

<sup>1/</sup> Prepared for the Faculty Symposium on the Bemidji State College Region, Bemidji State College, February 11, 1969.

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ment. Bemidji's role as a regional communication and information center depends, therefore, upon the strengthening of economic linkages between Bemidji and the smaller communities lying within 50 to 100 miles of Bemidji. Also important are the economic linkages between the major metropolitan centers whose trade and service areas are peripheral to the Bemidji Economic Region. Economic growth in the metropolitan centers adds to Bemidji potential as a future regional center that can serve as a focal area for households and businesses that heretofore had been dependent upon these distant centers.

# Geographic Setting

Bemidji's central location in relation to the four metropolitan centers cited earlier is illustrated in fig. 1. Highways and railroads connect Bemidji with the metropolitan centers while airline service is available to Twin Cities and Grand Forks and via Grand Forks to Winnipeg.

Among trade centers in northern and northwest Minnesota, Bemidji shares with Crookston and Thief River Falls a designation as a complete shopping center (fig. 2). Strengthening of economic ties with the metropolitan centers would increase Bemidji's trade center functions to those of a secondary wholesale-retail center, comparable to Grand Forks. In the future, therefore, Bemidji may share with Grand Forks the trade center functions that serve roughly an 11-county area in Northwestern Minnesota.

Small trade centers in Northern and Northwestern Minnesota will depend

- 2 -

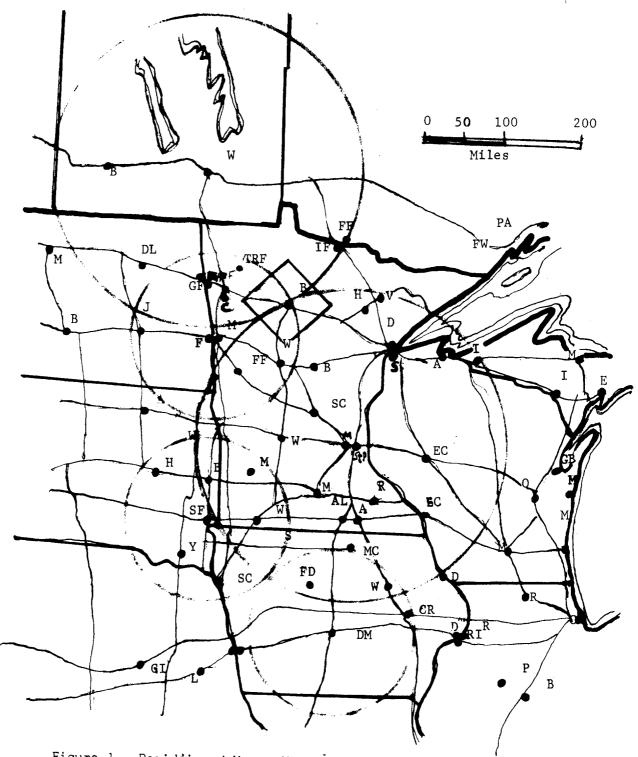


Figure 1. Bemidji and Upper Midwest Transportation Linkages

3

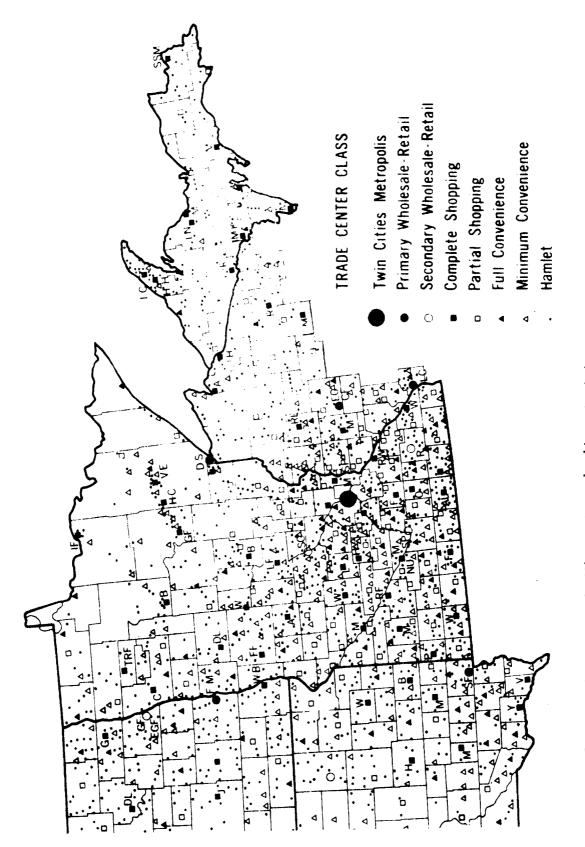


Figure 2. Trade centers in Minnesota and adjacent states.

upon Bemidji for high-order goods and services, such as higher education, specialized medical services, infrequently purchased manufactured products, specialized legal and business services, and other goods and services that require a large, multi-county area to support minimal-size business units. Among the small trade centers are partial shopping centers, full convenience centers, minimum convenience centers, and hamlets; each of these centers is distinguished by its range of goods and services and the size of its trade area. Thus, both small and large population centers, because of their economic interdependencies, are part of a regional settlement system characterized by a hierarchy of places, with the largest being the metropolitan centers that perform a primary function in the national economic system by integrating individual regions into the national economy.

With reference to the U.S. national economy, the Twin Cities focal area is peripheral to the nation's economic core, namely, the American Manufacturing Belt. Only in the past decade has the American Manufacturing Belt extended substantially into southeastern Minnesota, thus linking the Twin Cities with the major urban-industrial centers of the Midwest and the eastern seaboard. As the total industrial base of the Nation expands, many industrial establishments will seek more advantageous locations in the peripheral areas of the Manufacturing Belt as a means of improving access to markets avoiding high production costs in high-rent and high-congestion areas of the Manufacturing Belt.

- 5 -

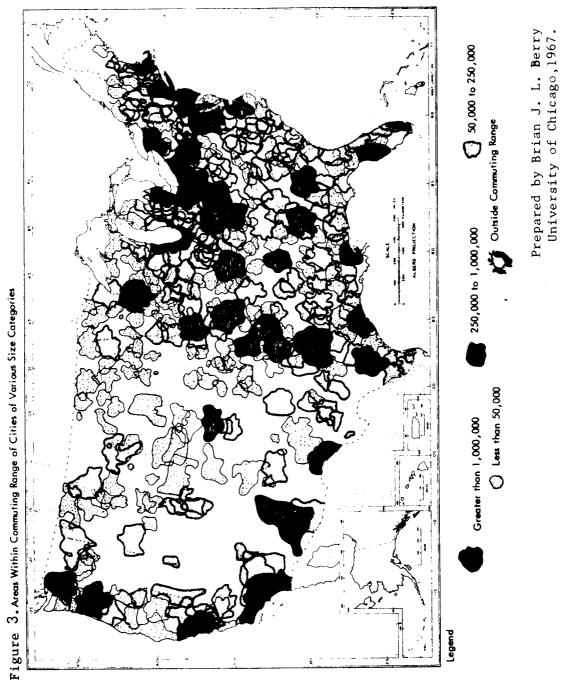
Basic economic development in the Canadian Provinces, particularly mineral resource development in Northern Manitoba, will enhance the position of Winnipeg as a major metropolitan center between Vancouver, British Columbia and the Canadian portion of the American Manufacturing Belt. Winnipeg, like the Twin Cities, is sustained by the primary industries located in the periphery of its economic region. Because Bemidji's spatial-economic functions relate to both Winnipeg and the Twin Cities, in one sense Bemidji is an international city and appropriately a center for bringing together students of regional development from both the Canadian Provinces and the Upper Midwest.

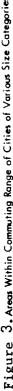
#### **Regional Delineation**

Given the geographic setting of Bemidji in the national settlement system, how is the regional community of which Bemidji is the focal area identified and delineated? Karl Fox, to whom I am indebted for much of what I have to say about the evolving regional community, has defined the regional community as a "functional economic area" or "FEA." An FEA is essentially the commuting area for a local labor market where the locality in question is an urban center typically of 25,000 population or more. Such a center would be the principal city for an area covering roughly 5,000 square miles or more, that is, an area delineated by a tilted square centered upon the focal area with every point on the perimeter of the square being 50 miles from the center (assuming a road system following section lines). The 50 mile limit is approximately equivalent to 60 minutes of driving time under typical driving conditions in low-population density areas of Minnesota. One-hour driving time is more or less a constant over time while the 50-mile driving distance is a variable in defining a functional economic area at different stages of a region's history. For example, 60 years ago, before the advent of the automobile and motor truck, a one-hour team haul was roughly 5 miles and the effective community area population center was 50 square miles rather than 5,000 square miles as it is today. Of course, where the local road system does not follow section lines, a different area would be covered by the onehour community zone than in the case of a road system following section lines. Also, when principal population centers are further apart than two hours traveling time, or roughly 100 miles, the commuting areas are likely to be larger than in densely populated areas.

Brian Berry, who used the FEA concept in the delineation of the commuting range of cities of various size categories (fig. 3), was able to identify roughly 350 urban centers that attracted significant numbers of workers from areas outside the census tracts in which the urban centers are located. Bemidji, for example, is a center of a commuting area that extends almost to the Minnesota-Manitoba border and touches commuting areas focusing on Grand Forks, Duluth, and Brainerd. The Bemidji commuting area lies outside the commuting areas of the four metropolitan centers; it thus shares with Grand Forks a mediating function in providing jobs and services for residents in the areas farthest away from major centers of employment, consumption and related opportunities.

- 7 -





- 8 -

In the extended Bemidji commuting area, Bemidji serves as the focal area and growth center; it is the largest city and it is experiencing the most rapid rate of population and economic growth among the urban places in the commuting area. Several of these smaller trade centers, however, are likely to grow, also, insofar as they become local service centers linked to the principal growth center through the economic and organizational ties that make both the growth center and the local service centers an integrated economic community.

Emergence of the growth center as a high-order service center for a multicounty commuting area is related to the changing pattern of trips from the farmstead, for example, to the service center for farm and household purchases and sales (fig. 4). Local service centers are needed for convenience goods and farm supplies for which proximity is an important consideration, as compared with the growth center which has the specialized goods and services that are purchased less frequently but where range of choice rather than convenience is a primary consideration.

Two additional approaches to area delineation are cited because of their relevance to the future role of Bemidji as a growth center, namely, the Resource Conservation and Development Project Areas and the Economic Development Districts. In addition, the Concerted Services Program Area, which includes three (Todd, Ottertail and Wadena) counties identified in fig. 5, are mentioned along with the seven counties that make up the West Central Recreation Region -- a multi-county resource-oriented area that corresponds with the historic Park Region extending from Park Rapids and Detroit Lakes to Bensen in Pope County.

-9-

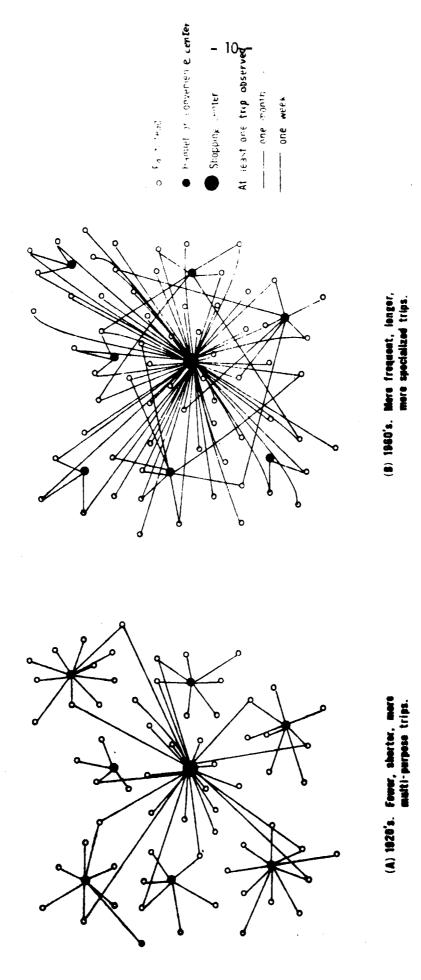


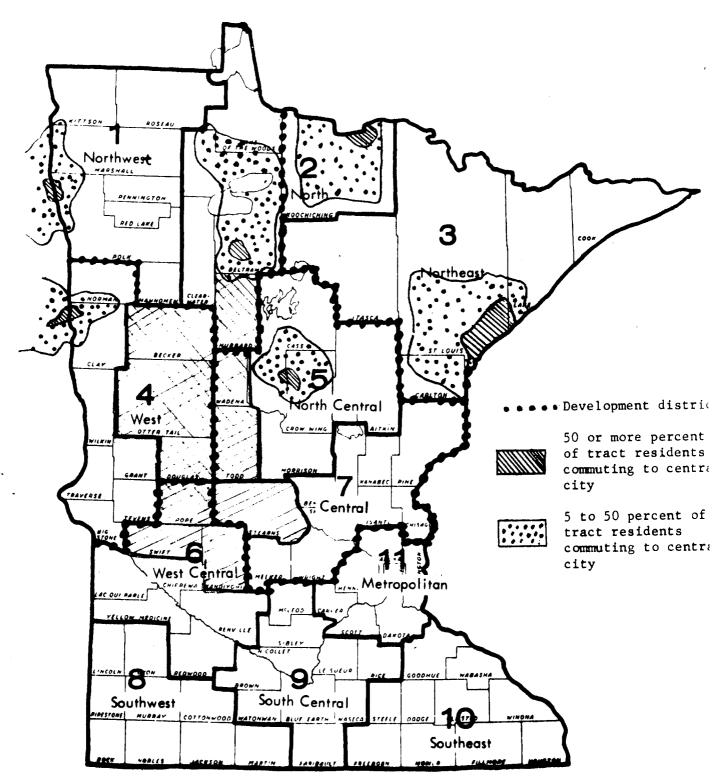
Figure 4. Changing pattern of shopping trips, 1920-1960.

Four Economic Development Districts have been proposed for Northern Minnesota that are made up of one or more growth center-oriented economic regions. Only the Northeast Minnesota Economic Development District (NEMDA) is organized presently. A Northwest Minnesota Economic Development district is in the process of being organized while the West Minnesota and the Northcentral Minnesota development districts are merely delineated without immediate plans for activation.

Bemidji could very well serve as an Economic Development Center because of its strategic location with reference to the Twin Cities metropolitan area and the peripheral counties to the north and west. Bemidji is the closest link in the development district to the Twin Cities area and, hence, its economic informational sources are likely to be more complete and up-to-date than for any other urban center -- except perhaps Grand Forks -- that might serve as an alternative development center. If the Northwest Minnesota Economic Development District were extended into northeast North Dakota, Grand Forks rather than Bemidji might serve as the development district center, although Bemidji's strategic position with reference to the four metropolitan centers cited earlier makes it a likely prospect as the economic development center for an extended development district.

The alternative regional delineations are presented simply to illustrate some differences between information-oriented and resource-oriented regions. As long as local leaders residing in peripheral counties are more aware of their present economic status and the economic differences between peripheral and growth center counties, it is likely that these leaders will turn to each other rather than to local leaders in the growth center counties. To bring together the peripheral counties and the growth center

-11-



# Figure 5.

Minnesota economic regions and Northern Minnesota development districts and commuting area.

-12-

counties the leadership structure in the growth center counties may need other social ties on a multi-county basis that would support the political and organizational integration of the communities, large and small, into a viable urban-regional settlement system.

#### Economic Base

To the extent that population migration is responsive to changing economic opportunity in Northern Minnesota, the rate of in-migration and out-migration becomes a useful measure of a rate of economic growth. As illustrated in fig. 6, the Northwest Minnesota Economic Development District, which is somewhat smaller than the Bemidji State College Region, experienced very heavy rates of population out-migration during the 1950–60 period. In comparison, the Northeastern Minnesota Economic Development District experienced lower rates of population outmigration and indeed, one county experienced population in-migration during the 1950–60 period. By 1966, however, the trends were reversed, with lower rates of out-migration in northwest Minnesota and higher rates of out-migration in northeast Minnesota. Beltrami County experienced not only total population gain, but population in-migration.

A series of regional projections were prepared as a means of assessing the economic implications of alternative futures for the Bemidji region. First, total regional employment for the three economic regions delineated in fig. 4 were prepared on the basis on broad industry categories namely commodity-producing and noncommunity-producing activities. Included in the commodity-producing activities are

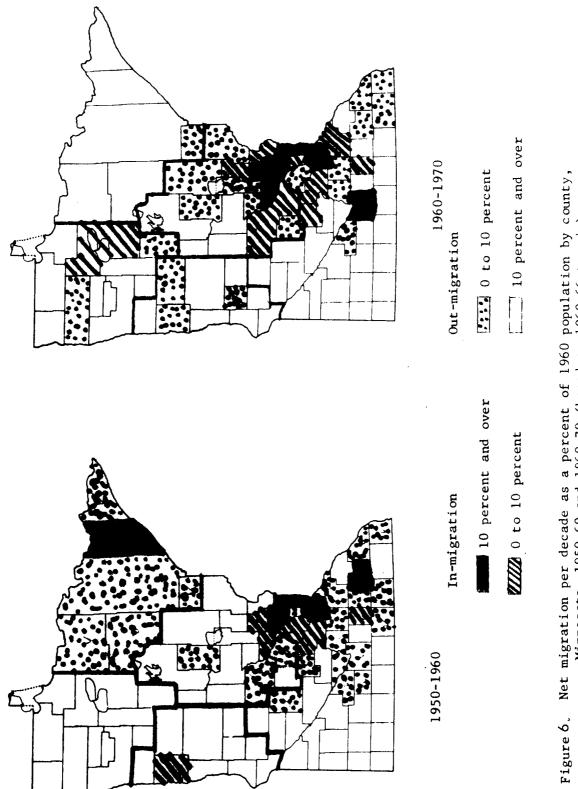


Figure 6. Net migration per decade as a percent of 1960 population by county, Minnesota, 1950-60 and 1960-70 (based on 1960-66 trends).

agriculture, forestry, fisheries, mining, construction and manufacturing, while noncommodity producing activities include transportation, communication utilities, wholesale and retail trade, finance, insurance, real estate, and business, personal and professional services, including public administration.

The regional projections showed generally that commodity-producing employment is likely to decline, not only in the Bemidji region, but also in the two adjacent regions. On the other hand, non-commodity-producing employment is likely to increase because of the expanding purchasing power of the work force employed in the commodityproducing industries which ranks possible high levels of per capita demands for locally-produced goods and services, particularly professional services. Thus, total employment is projected to remain stable for each of the three economic regions, with the non-commodity-producing employment increases conterbalacing the commodityproducing employment decreases.

What the commodity-producing employment trends point to are consistent increases in output per worker that exceed the rate of growth of market demands for the goods produced in the three economic regions of Northern Minnesota. Nationally, output per worker increases are in the order of five to six percent per year while market expansion occurs at a rate of slightly more than two percent per year, thus leaving a net of more than three percent in excess job holders in the agricultural sector. High employment and underemployment in agriculture is pushing young people off farms to look elsewhere than agriculture for future employment opportunities. Because of recent expansion in mining, specifically the taconite processing in Northeast Minnesota, and the increases in construction activity associated with urban and residential development -- primarily in the regional centers,

-15-

employment in mining and construction has expanded since 1940 and is projected to expand to 1980 in each of the three economic regions. However, the employment trends are based upon 1950-60 experience and expectations, and, consequently, they may overstate the potential mining development for the 1960-80 period (as indicated by the footnote in table 1).

Much of the commodity-producing employment is engaged in the production of goods for sale outside the region, as indicated in table 2. For example, in the five-county Bemidji economic region, 90 percent of the total export-producing employment is engaged in the commodity-producing sectors. By export-producing employment, we mean the employment that is reported in an area in excess of the employment that would be reported if the area employment distribution corresponded exactly with the national employment distribution per 1,000 employed labor force. If the national employment profile shows ten percent of the total employment in a given industry, while the Bemidji regional employment profile shows 30 percent, then 20 percent of the total employment in the Bemidji region would be excess or export-producing employment in the given industry. If a second industry showed the same percentages, and these two industries constituted the total excess-producing employment in the region, then each industry would account for 50 percent of the total excess employment in the region. In the Bemidji region, of course, four commodityproducing industries and three non-commodity-producing industries contributed to the total excess employment.

Excess employment in the Duluth Economic Region, i.e., Northeast Minnesota, is engaged primarily in mining, although a substantial transportation component

-16-

River Falls, 1950-1980.									
		Bemidii	111		Duluth	h	Thi	Thief River Falls	r Falls
Industry group	Estimated 1940 1960	lated 1960	Projected 1980	Esti 1940	Estimated 940 1960	Projected 1980	Estimated 1940 196	ated 1960	Projected 1980
					(1,000)	((			
Commodity-producing:									
Agriculture, forestry, fisheries	8.9	4.4	1.3	10.9	2,5	1.1	22.0	12.9	6.7
Mining and construction	0.6	1.2	1.4	10.2	21.0	31.6 1/	0.9	1.7	1.9
Manufacturing	3.0	4.1	4.4	10.4	17.7	10.7	6.9	1.8	2.4
Total	12.5	9.7	7.1	31.5	41.2	43.4	23.8	16.4	11.0
Non-commodity-producing	7.7	10.5	14.6	48.6	61.6	80.8	12.3	16.2	23.1
Total employment	20.2	20.2	21.7	80.1	102.8	124.2	36.1	32.6	34.1
1/ Based on 1950-60 data regarding potential employment supported by taconite development.	ta regar	ding po	tential emp]	ovment	supporte	d by taconit	te devel	opment.	If

Estimated and projected regional employment in specified industry groups, Bemidji, Duluth and Thief Table 1.

1/ Based on 1950-b0 data regarding potential employment supported by taconite development. It projection were reduced to 1960 level of employment, total projected employment would be reduced by 30,000. Manufacturing employment would increase slightly, however.

-17-

exists also that is associated with the Duluth port activities and with the transportation of ore from the mines to the port facilities. The Thief River Falls Economic Region, on the other hand, is dependent primarily upon agriculture and agriculturally-related trade and service activities.

When the excess-employment percentages in table 2 are translated into total employment export-producing and residentiary activities, the absolute importance of each of the industry groups in the region's economic base can be assessed and compared (table 3). For example, 4,800 of the total 20,200 employed labor force in the Bemidji economic region in 1960, was engaged in export-producing activities, using the approach cited earlier to obtain excess-employment. Of the 4,800 employed persons in export-producing activities, 90.2 percent was engaged in commodity-producing activities, with the remaining export-producing employment being engaged in the transportation, trade and service activities that are related to the region's recreation industry. The non-commodity-producing employment categories provide two-thirds of the total residentiary employment that is oriented to serving the local and regional population.

Without the export-producing employment, the local employment would lack an economic base for its support. Thus, even though the export-producing employment is a small share of total employment, it is an essential ingredient of regional economic growth and wellbeing. In some regions however, a given level of export-producing employment will support a higher level of local employment than in other regions, for example, compare the Duluth Economic Region with the Thief River Falls Economic Region. Much of the difference in the total employment effect of export-producing employment is related to the size of the region, that is,

-18-

Table 2. Percentage distribution of regional excess employment in specified industry groups, Bemidji, Duluth and Thief River Falls, 1960.	ibution of regional excess employment and Thief River Falls, 1960.	in specified industr	ry groups,
Industry group	Bemidji	Duluth	Thief River Falls
		(percent)	
Commodity-producing			
Agricelture	60.9	1	94.1
Forestry, fisheries	3.1	1.5	1
Mining	•	68.0	:
Manufacturing:			-
Food and kindred products	8 8	1	0.4
Lumber and wood products	18.1	0.3	1
Miscellaneous	8.1	1	
Total commodity-producing	90.2	69.8	94.5
Non-commodity-producing:			
Transportation	1.0	19.9	3.0
Trade	3.8	0.4	1.4
Services	5.0	6*6	1.1
Total non-commodity-producing	9.8	30.2	5.5
All excess employment	100.0	100.0	100.0

-19-

· Estimated net export-producing and residentiary employment in specified industry groups,	Bemidji, Duluth and Thief River Falls, 1960.
Table 3	

	н	Bemidji			Duluth		Thief	Thief River Falls	11s
Industry group	Export	Local	Total	Export Local	Local	Total	Export	Local	Total
					(1,000)				
Commodity-producing:									
Agriculture, forestry, fisheries	3.1	1.3	4.4	0.3	1.8	2.5	10.7	2.2	12.9
Mining and construction	1	1.2	1.2	14.8	6.2	21.0	ł	1.7	1.7
Manufacturing	1.3	2.8	4.1	0.1	17.6	17.7	a /	1.8	1.8
Total	4.4	5.3	9.7	15.2	26.0	41.2	10.7	5.7	16.4
Non-commodity-producing	0.4	10.1	10.5	6.6	55.0	61.6	0.7	15.5	16.2
Total	4.8	15.4	20.2	21.8	81.1	102.8	11.4	21.2	32.6

-**2**0-

the total population and purchasing power in the region and the opportunities for profitably establishing a wide range of manufacturing, trade and service activities.

The increasing local effects of a given change in the community economic base is illustrated by the trends in total employment multipliers for the period for 1940-60 and the projected trends from 1960 to 1980 (table 4). In 1940, for example, an increase of 1,000 basic workers, that is, workers engaged in export-producing activities, which, in the Bemidji region would be localized primarily in the commodityproducing sector, was associated with an increase of 1,600 in total employment -the 1,000 in export-producing employment and an additional 600 in local employment. By 1960, the multiplier effect had increased to 2.1 and by 1980 it is projected to increase to 3.1.

In the Duluth Economic Region, the total employment multiplier remained constant because of the decline in transportation employment and the existance of substantial unemployment and underemployment in the service sectors, as well as in agriculture. By 1980, however, the total employment multiplier in the Duluth region is projected to increase to 2.9, which compares with 3.1 for the Bemidji and Thief River Falls regions. The slower rate of growth in the total employment multiplier in the Duluth region is a function of the high rate of growth projected for the mining sector -- a projection that is no longer valid on the basis of more recent experience. Also, much of the non-commodity-producing employment is engaged in export-producing activities, which reduces the employment multiplier. The revised series of projections for the Duluth economic region would show somewhat higher total employment multiplier effect if the mining employment projections were revised downward. A higher projected multiplier for the Duluth Economic Region is supported, in part, by the higher ratio of total employment to excess employment

-21-

estimated for 1960, which takes into account the export-producing employment in the non-commodity producing sector in the Duluth Economic Region.

While the total employment multiplier, whether in terms of commodityproducing employment or export-producing employment, is increasing, agricultural and related primary-producing employment is decreasing in the three economic regions. In the Bemidji region, for example, agriculture made up 70 percent of the exportproducing employment in 1940; by 1960, the percentage had dropped to 40 and by 1980 it is projected to drop to 20. Similar patterns of decline in the relative importance of agriculture are illustrated for the Duluth and Thief River Falls regions, also.

#### Communication Systems and Regional Awareness

Because of the localization of communication and information functions in the focal area of a regional community, the development of an awareness of the region and its attributes is a prime function of the regional center such as Bemidji. Regional awareness must occur in at least four dimensions, that is, with reference to place, period, people and power.

# Awareness of place

In the context of a communication-oriented urban-regional settlement system Bemidji is a logical economic development center for an economic development district covering Northwest Minnesota. As a regional center, Bemidji's future role is primarily as a service and information center for the entire development district.

Much of the regional economic base in the district may be located in the peripheral counties rather than in the central county in which Bemidji is located.

-22-

Table 4. Estimated and projected regional employment multipliers, Bemidji, Duluth and Thief River Falls, 1950-1980.	nal employment	multipliers, Bem	idji, Duluth and
Industry Group	Bemidji	Duluth	Thief River Falls
		(1,000)	
Employment per 1,000 commodity- producing workers:			
Total, 1940	1.6	2.5	1.5
1960	2.1	2.5	2.0
1980	3.1	2.9	3.1
Agriculture, forestry, fisheries 1940	0.7	0.4	0.9
1960	0.4	0.1	0.8
1980	0.2	<u>a</u> /	0.6
Employment per 1,000 excess workers:			
Total, 1960	4.2	4.7	2.9

On the other hand, much of the trade and service activities sought by businesses and households in the region will be located in Bemidji. As a truly regional center, Bemidji inevitably would involve itself with the concerns of the entire regional population and of the communities and businesses that make up the region.

At least two specific region-wide responsibilities for Bemidji evolve from its role as regional center. First, information is needed to create an awareness of access to basic inputs and markets for the goods and services produced in the development district of which Bemidji is the regional center. As illustrated in table 5, access may be good to poor with reference to basic inputs and markets in the home district and in areas outside the home district. For different industries, access may vary from extremely poor (illustrated by cell number 4 in table 5) to extremely good (illustrated by cell number 13). Access for a given industry in different localities in the district also may vary from very poor to extremely good. Developing comparative measures of access for different industries and different localities in the district is one function, therefore, of the regional center and its information-producing capabilities.

A second function of the regional center is the development of an awareness of linkages between the center and the smaller places within the district, and between the district and the rest of the world. Without an awareness of the importance of its economic linkages, development of appropriate political and organizational structures to correspond with the economic linkages may be very difficult. Yet, without the emergence of district-wide cooperation between municipalities and counties, for example, a truly viable regional community may not emerge. As illustrated by the discussion of resource-oriented regions in which the cooperating counties and municipalities share a common concern and a common problem, the

-24-

peripheral counties in the development district may form coalitions in opposition to the central county because of differences in levels of per capita income and labor force composition.

Finally, an awareness of place and the importance of economic and political linkages between places are essential in understanding the regional development process that makes possible an improvement in the economic and social well being of the residents of the evolving regional community. As illustrated in fig. 7, the resource base of the development district, coupled with demand and technological influences upon this base, make possible productive human effort that results in rising levels of per capita income, an expanding range of individual choice, and increasing participation of people in community and district affairs. Per capita income, range of choice and popular participation are primary considerations in any measures of human welfare, which, after all, is the ultimate objective of regional development programs.

#### Awareness of period

Besides an awareness of place, a regional community needs an awareness of the period in its cycle of economic growth. Regional growth can be categorized roughly into four stages, namely, take-off, proliferation, stabilization, and depopulation. The take-off stage is a period of rapid resource exploitation made possible by inflows capital and in-migration of labor and the gradual build-up of exports and gross social product (fig.8). Because of rapid construction activity and the lack of locally-used goods and services for the residentiary population, imports increase sharply during the take-off stage. The excess of imports over the excess of commodity imports over commodity exports, of course, is balanced by capital imports and the accumulation of loans payable to financial sources outside the district or region.

-25-

		Good access to from external national	district and	Poor access to from external national	district and
		Good access to basic inputs in home district	Poor access to basic inputs in home district	Good access to basic inputs in home district	Poor access to basic inputs in home district
to external ct and markets	Poor access to markets in home district	#1 II -	<i>#</i> 2 I	#3 I	#4 0
Poor access to district national ma	Good access to markets in home district	#5 III	#6 II	#7 II	#8 I
to external ct and markets	Poor access to markets in home district	#9 III	#10 II	#11 II	#12 I
Good access to exter district and national markets	Good access to markets in home district	#13 IV	#14 III	#15 III	#16 II

\*Not only basic resources but important intermediate sources need to be considered.

Note: Roman numerals indicate number of "good" access diminesions, and suggest relative over-all locational advantages or disadvantages.

Table 5. A Schematic Presentation of Types of Districts that can Exhibit Different potentials with Respect to Growth.(from Perloff, <u>et al.</u>, Regions, Resources and Economic Growth).

In the proliferation stage, construction activities associated with the exploitation of the primary resource base are largely completed and the savings resulting from profitable local investments are used in the expansion of residentiary activities, including manufacturing for local consumption and a wide variety of trade and service activities. Because of import substitution, the level of commodity imports declines, while the level of commodity exports increases, thus making necessary lower levels of capital imports to balance the current accounts with the rest of the world. With the proliferation of residentiary activities, local investment opportunities are gradually exhausted and the rate of new job creation gradually slackens. Thus, the rate of in-migration of labor declines, not only because new jobs may be created less rapidly, but also because the existing population gradually provides its own labor force as new households are formed and as these households graduate from the child-bearing to the post-teenage period when the second generation becomes self-supporting.

During the period of stabilization, profitable local investment opportunities are reduced even further, although commodity exports continue to increase and commodity imports continue to decline (as new residentiary activities become possible with the expansion of local markets). Exhaustion of local investment opportunities deminishes the demand for capital and labor, thus resulting in outflows of both excess financial resources and excess labor resources. Population is relatively stable while the gross social product also levels off.

In the final stage of regional growth, total population declines, and even commodity exports decline. Commodity imports increase as the population base is reduced to support minimal size manufacturing activities. Continued depopulation is

- 27 -

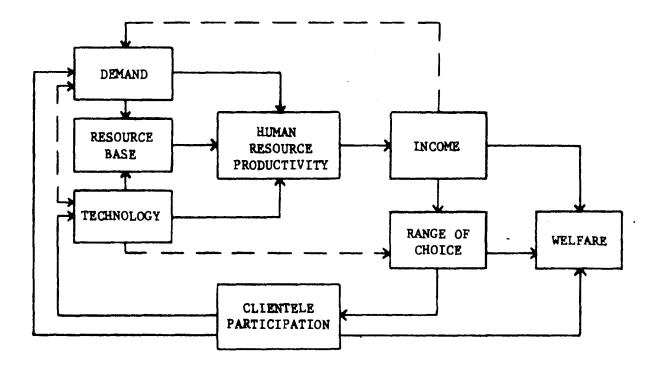
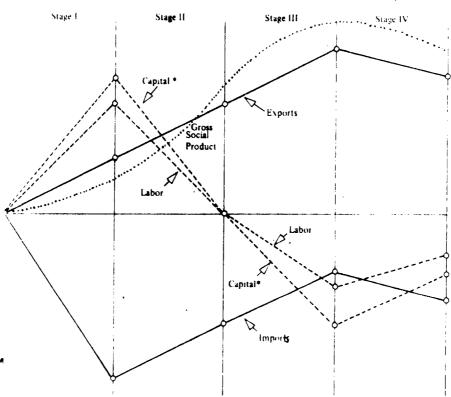


Figure 7. Regional development process.



\*Capital, not interest and dividend payments on earlier loans and borrowings.

Figure 8. Stages of regional growth.

accompanied by a slowing down of the rates of out-migration of people and outflow of surplus funds.

During the past decade, the economic development district of which Bemidji is the growth center, entered the stage of depopulation -- a stage that was abruptly terminated for the growth center by the expansion of Bemidji State College. At least in the focal area, a new stage of economic growth has been triggered by the construction activities and private capital formation associated with the expansion of the State College and related community facilities and private services. For the Development District, continued population decline is projected as long as export-producing activities fail to develop that can replace farm-related and timber-related activities as a source of basic economic support.

#### Awareness of people

An awareness of people is manifested in a concern with human welfare and with the use of community power to improve individual choices and to attain desirable community goals. Human welfare can be represented by quality of life indicators which include a variety of statical indicators, as illustrated in table 6. State-level indicators of quality of life must be extended, however, to the development district and the population groupings within the district if human welfare is to be measured in a way that will make possible comparisons between places and between time period.

While Minnesota may rank number 2 in human welfare as measured by the nine goal areas cited in table 6, the Northwest Minnesota Development District may rank much lower in relation to the state average, not only in final ranking but in one

-30-

Comparative ranking of states in quality of life indicators.

STATE	FINAL RANKING	STATUS OF THE INDIVIDUAL	EQUALITY	DEMOCRATIC PROCESS	EDUCA- TION	ECONOMIC GROWTH	TECH- NOLOGY CHANGE	AGRICUL- Ture	LIVING Conditions	HEALTH AND WELFARI
California	1	3	17	6	4	1	· 1	1	3	14
Vinnesota	, ,	10	1	4	9	3	11.5	19	10	1
Connecticut	3	2	6	2	6	13	14	16	1	9
Massachusetts	4	1	3	1	10	19	4	25.5	9	12
Washington	5	6	5	19	2	77	13	10	12	20
Colorado	6	14	14	10	3	15	19	7.5	24	6
New York	7	4	20	15	15	16	2	32	2	2
Oregon	8	7	8	12	1	8.5	32	29	11	11
Wisconsin	9	8	26	7	18	6	11.5	25.5	. 22	7
lowa Illinois	10 11	13 9	2 27	26.5 14	7 19	11 8.5	26	6	29	13
							10	17	14.	21
Delaware	12	20	30	31	16	4	29	7.5	8.	3
New Jersey Hawaii	13 14	11 21	9 18	8 3	35.5 22	33 10	9 40	24 15	4 7	24
										27
Rhode Island Michigan	15 16	5	4	13	24	34	37	39	6	4
Michigan Utah	16 17.5	12 25	13 [36]	20 5	27 5	2 27	8 <u>.</u> 22	46 22	1 <u>3</u> . 20	41 40
Ohio North Dakota	17.5 19	16 22	19 11	23 34	32 25	20 21	6 41	42 12	17 33	30 8
Nevada	20	23	37	9	30	24	44	4	5 5	35
Pennsylvania	21	18	23	17	37.5	37.5	5			
Maryland	21	31	23 39	33	37.5 40	37.5	5 15	48 36	16 21	16 5
Arizona	23	29.5	40	21	8	29	28	2	31	38
Nyoming	24	17	15	35	11	43	46	5	28	32
Indiana	25.5	27	25	28	17	43	40 17	30.5	28 34	32 47
Kansas	25.5	19	24	32	12	27	31	20	38.5	34
Vermont	27	32.5	28	16	23	30	45	30.5	25	10
Idaho	28	28	21	22	26	31.5	43	9	18	44.5
New Hampshire	29	15	7	30	34	35.5	42	49	19	22
Florida	30	39	44	26.5	37.5	18	7	3	37	42
Montana	31	24	31	24	28	47	47	13	23	19
Vebraska	32	29.5	22	38	29	31.5	39	14	40	29
)klahoma	33	32.5	38	39	13	45	23	23	43	17
Alaska	34	26	29	18	21	41.5	49	40	26	25
/irginia	35	43	42	11	41	14	16	41	42	26
Texas	36	41	45	37	20	22	3	11	50	49
South Dakota	37	34	10	42	35.5	48	48	18	35	18
Vew Mexico	38	37	35	29	14	46	36	21	32	43
Vaine	39	38	12	25	47	49	50	43	15	23
Vorth Carolina	40	45	41	40	33	28	18	33	44	33
Vissouri	41	38	32	41	39	37.5	20	44	36	28
ennessee	42	44	34	36	42	23	22	47	38.5	37
Vest Virginia	43	35	16	48	50	50	34	50	30	15
ieorgia	44	48	48	44	44	17	24	28	45	39
ouisiana	45	40	46	43	31	41.5	25	35	49	31
Centucky	46	42 •	33	50	48	26	30	45	27	46
Arkansas	47	46	43	47	43	44	35	27	41	36
Alabama	48	47	50	46	46	39.5	21	38	47	44.5
South Carolina	49	49	47	45	49	39.5	33	34	48	50
Mississippi	50	50	49	49	45	35.5	38	37	46	48

(Note: The final ranking reflects the average of the nine goal areas.)

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or more of the individual goal areas. Urgently needed as a means of evaluating the performance of local institutions and national, state and regional development programs are the statistical indicators for the individual districts and places within the district that provide valid measurements of changes in human welfare.

# Awareness of power

Another consideration in creating awareness of people is the role of community influentials in the decision making processes that affect the rate of economic development in the district and the individual counties and municipalities. Because the wielding of community power has both beneficial and restrictive influences upon regional economic growth, an examination of community power structures and how these structures can be changed to include a wider representation from the regional community is an essential part of the process of creating an awareness of people and the role that people have in achieving higher levels of social and economic well being in their respective communities.

Two bases for exercising influence within the community are property and expertise. Land owners and main street merchants are influential because of the opportunities they create and the constraints they impose as a consequence of the resources they own. On the other hand, public officials exercise influence because of their specialized resources and competences that are required in the effective management of public enterprise.

## Alternative Futures

The future of the Bemidji economic region and the development district of which

-32-

Bemidji is the principal growth center depends greatly upon the future of economic and population growth in Minnesota and the Upper Midwest, particularly in the metropolitan centers and the counties immediately surrounding these centers. Essentially two patterns of growth are visualized, namely, metropolitan concentration and focused decentralization.

# Metropolitan concentration

By metropolitan concentration, I mean a continuation of historic patterns of rural-tourban migration. For the seven-county Twin Cities metropolitan area, for example, total population would increase by one million people by 1985, thus resulting in an increase from one-half to two-thirds of the total state population residing in the sevencounty area. While the Twin Cities Metropolitan Area would increase by one million, outstate areas would experience a population decrease of 400 thousand. Much of the projected decrease in the outstate population would occur in communities of less than 10,000 people and in peripheral areas generally.

The projected increase of an additional million people in the Twin Cities Metropolitan Area is entirely feasible, given the capabilities for expanding the capacity of public and social facilities. For example, a metropolitan sewage system is being proposed as a means of systematically replacing private septic systems that heretofore have been a major impediment to suburban expansion. Internal transportation networks are being improved by the opening of new segments of the interstate highway and intra metropolitan expressway systems. Other public facilities are being expanded rapidly in the suburbs of the metropolitan area, while area-wide taxing and financing arrangements are being explored as a means of supporting future improvements in the inner city itself and in the central business districts of the Twin Cities.

-33-

Thus, the supply of public services is likely to keep pace with projected increases in the demand for these services -- admittedly with built-in lags because of the passive nature of public sector responses to service demands and with rising per capita costs.

What emerges from the assumption of the metropolitan concentration is a projection of a closely-knit settlement system made up of a central city of less than a million people and a surrounding area of more than 100 incorporated municipalities and nearly two million people by 1985. The projected poly-nucleated core-area settlement system corresponds closely with the present urban patterns in the American Manufacturing Belt outside Minnesota. Small communities within the commuting area of the central core will share much of the expansion effects of metropolitan growth, while outstate communities will share in the supply of migrants to the core area.

#### Focused decentralization

Focused decentralization of metropolitan population and industry to the ring of satellite cities approximately one hundred miles from the metropolitan core area is a second future alternative facing small communities and peripheral areas in Minnesota (fig. 9). If a tilted square with 100 miles diagonals were centered on the Twin Cities, the principal satellite cities of the core area would be located roughly on the outer boundary. Again, given the road system following section lines, any point on the boundary would be exactly 100 miles from the center of the square. With the construction of diagonal roads to the satellite cities, the theoretical hundred miles is reduced by as much as 30 miles. Nonetheless, the tilted square, not only the one centered on the Twin Cities, but also the ones centered on the two outlying focal areas -- Duluth Superior and Fargo-Moorhead -- help to identify potential future satellite cities

- 34 -

Because the outlying metropolitan focal areas are well below their optimal levels of population and economic activity (i.e., least-cost levels for providing an overall service package), further metropolitan concentration is not being viewed as an appropriate alternative for these areas. For the Twin Cities area, however, dispersion of industry and population to the satellite cities offers one means of coping with increases in private and social costs associated with rapid metropolitan growth. To illustrate: Suppose that the projected one-million population growth for the core area were reduced by one-half, leaving the remaining 500,000 people as potential residents of the satellite cities and their commuting areas. To achieve the alternative pattern of population and industrial decentralization requires that the location advantages of the satellite cities equal or exceed the location advantages of the Twin Cities.

Emergence of multiple urban centers as new focal areas for metropolitan growth is one form of focused decentralization of industry and population. However, two variations of the multiple urban center approach may occur -- the strip city and the new city. Each satellite city, for example, might serve as a terminus of a strip city that originates from the Twin Cities. In the strip city, residential and business development would occur adjacent to the major thoroughfares connecting the satellite cities to the core area.

Another variation of the focused decentralization alternative is the development of much-expanded service centers or entirely new cities in places that occupy critical potential links between the major production-distribution centers. For example, Bemidji might be the site of a much-expanded, essentially new city serving the Northwest Minnesota Economic Development District, because of its location on an

-35-

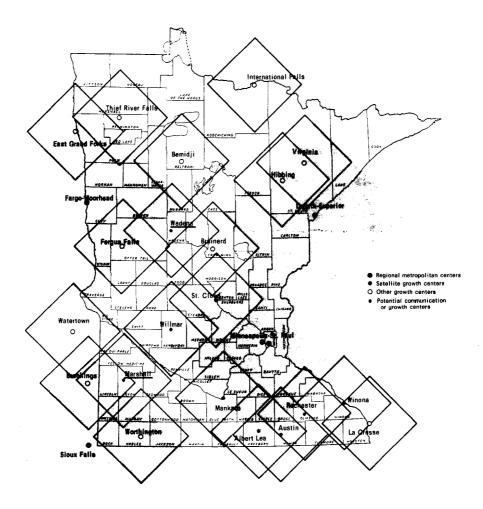


Figure 9. Minnesota growth centers and economic areas, 1960.

information divide between two metropolitan core areas. Bemidji thus may have the potential of becoming a subregional communication center, serving residents who would find presently divided loyalties converging on a common core area, namely, the future Bemidji. To the extent that the spatial position of Bemidji makes possible the forging of new linkages and the enlarging of existing communication networks, the social costs of distances, as they affect face-to-face interaction, are reduced. Again, the economic base for the metropolitan core area is strengthened in so far as the core area will specialize more in the high-order services sought by households and businesses located in the outstate areas rather than in activities that are equally well located in the satellite cities and their commuting areas.

#### Settlement Policy Alternatives

Metropolitan concentration, multiple urban centers, strip cities and new towns are settlement alternatives that might emerge as a consequence of the public investment decisions we make today that condition the economic and physical environment for private enterprise. Important, also is a quest for a settlement system that facilitates social involvement and individual participation. I refer now to three policy areas for influencing settlement patterns, namely, industrial location, public services and regional structure.

## Industrial location

A state-federal policy on industrial location is implied in the growth center concept and in the delineation of multi-county economic development districts on a national scale. In the growth center concept, we are saying in effect that we need

-37-

to relocate or expand industry outside the metropolitan core areas, but in pre-determined growth centers that are focal areas of multi-county planning and development activities. To implement the growth center concept, the Advisory Commission on Intergovernmental Relations (ACIR) in its report on <u>Urban and Rural America</u>: <u>Policies for Future Growth</u>, offers a series of proposals for helping communities attract industries. Included among the Commission's recommendations are,first, federal incentives for business and industrial location, specifically, preferential tax treatment in the form of an income tax credit, preferential financing arrangements in the form of low market-rate loans granted by the Secretary of Commerce, and location cost offsets in the form of direct payments by the Secretary of Commerce based on capital outlays for operating cost differentials (i.e., costs that would be incurred by a firm locating at the pre-determined site and at an economically advantageous site elsewhere). In addition, public contracts might be awarded to a development district, and federal buildings and facilities might be located in furtherance of a national policy on urbanization. Parallel state policies are recommended, also.

The recommendations of the national advisory commission on rural poverty (NACRP) in its report, on <u>The People Left Behind</u>, include the use of tax incentives, along with a portion of the federal government procurement expenses in investment expenditures as stimulants for private investment. Along the lines of these recommendations, Bemidji State College, in collaboration with the University of Minnesota, might participate in the preparation and implementation of research for testing the regional economic consequences of alternative policy approaches affecting industrial location in Northern Minnesota.

#### Public services

Another set of policy alternatives affecting economic development in Northern Minnesota concern the provision of social services. Dispersion of economic activity from metropolitan to surrounding growth centers, and consolidation of the public services now located in small communities and in a fewer number of places, would result in the potential availability of a wider range of services at lower costs for residents immediately outside the metropolitan focal area and within convenient commuting distances to growth center where the services are concentrated. Residential peripheral counties, however, are likely to be worse off over time with the migration of more and more of their local services to the area growth center.

Realizing the importance of proximity and convenience in making use of essential public service, the National Advisory Commission on Rural Poverty recommends the creation of neighborhood service centers located conveniently throughout the commuting area of a growth center. The Commission further recommends that these local service centers be linked to the specialized facilities in the growth center by publicly supported transportation systems. At this point in the policy recommendations of the two advisory commissions, the small community becomes the focus of attention. Because only a fraction of the total number of small communities would qualify as neighborhood or local service centers, criteria must be developed for selecting the most appropriate communities, either as specialized centers or as general purpose local service centers. Remember, increasingly higher service performan ce standards are being demanded of the small community by the emerging state and federal programs for improving the quality of life in all areas.

The Advisory Commission on Intergovernmental Relations views the provision of

-39-

public services as a means of influencing population movement. For specific examples, I refer to the ACIR recommendations on the establishment of a federalstate matching program of resettlement allowances for low-income persons migrating from labor surplus areas; provision of additional federal funds for on-the-job training allowances for employers in labor-surplus areas; expansion of the federal-state employment service program; establishemnt of nationwide computerized job information system providing data on job vacancies, skills, and availabilities; inactment of federal legislation to eliminate or reduce migrational influence of interstate variations in public and systems standards benefits; and expansion and adequate funding of voluntary programs and family planning for low income persons. Each of the IRAC recommendations would expand public services in specified areas as a means of redirecting population movement to growth centers and local service centers, either from low-income rural areas or low-income urban areas.

#### Regional structure

The National Advisory Committee on Rural Poverty went so far as to recommend that the federal government, with the cooperation of the states, should establish regions made up of area development districts encompassing the entire nation. Each area development district would have a present or potential growth center established by an appropriate agency of government. Thus, a national system of development districts is being advanced with each district having a present or potential growth center and additional set of local service centers to achieve a further decentralization of low-order services in which proximity and convenience are important considerations in the location of the service facilities. The Commission further recommends

-40-

that the area development districts be eligible for comprehensive planning grants from the federal government and that the supplementary grants, in addition to the usual federal grants, be awarded to any federally-aided project which is consistant with the comprehensive plans of area development districts. Furthermore the Public Works and Economic Development Act of 1965 should be amended to provide grants for developing adequate public services and facilities in area development districts afflicted with severe poverty.

What the new policy proposals point to is the restructuring of the countryside of America through the forging of new inter-community and inter-regional linkages. Within the emerging social-environmental system, the growth center in the peripheral areas has a prescribed role to play. A fundamental importance is the area and regional economic base, for declining areas and regions are likely to be full of declining communities, while growing regions will have some communities that are also growing.

Spatial proximity to metropolitan core areas becomes a critical factor in establishing a community's role in regional resource development. Important, also, are community attitudes and the supply-expanding capabilities of community resource managers. Finally, performance standards for social services, which are being pushed upward through Medicare and other programs, impose additional constraints for many communities in the peripheral area.

Altogether, the economic environment for the evolving regional community is not promising in the Upper Midwest. The social and political environment, however, may be less restrictive than the economic environment. Much depends

-41-

upon the specific weights assigned to the social goals of efficiency, diversity and participation -- each of which is a partial measure of human welfare.