The topic on which I have been asked to speak sounds disarmingly simple. Any administrator who takes responsibility for improving something would like to have a precise definition of what that something is. In today's context we would like to be able to draw a sharp line around the borders of "our area" that will distinguish it from all others. In effect, we would like to pick "our area" right up out of the map and run with it. And after ten years of hard running, we would like to be able to point with pride at two comparisons -- (1) how much better our area is than it was ten years ago, and (2) how much faster our area has improved than the areas on either side of it.

I wish I could present you with simple and self-evident truths that would enable you to do these things. But on digging into the subject, I find myself in the position of Stephen Crane's "Wayfarer":

The wayfarer,
Perceiving the pathway to truth,
Was struck with astonishment.
It was thickly grown with weeds.
"Ha," he said, "I see that no one has passed here
In a long time."
Later he saw that each weed
Was a singular knife.
"Well," he mumbled at last,
"Doubtless there are other roads."

But I do not mean to be pessimistic. Although we may not find what we set out to look for, we may find something even better. At the least I believe I can demonstrate that many of the boundaries currently being used to define the jurisdictions of area development committees are wholly inadequate. By far the most prevalent mistake is in choosing an area that is too small for success. In most cases the objectives of such narrowly based programs are "unattainable insofar as they are desirable and undesirable insofar as they are attainable." ²

I shall try to converge on my topic from two different directions. First, I shall start out with our national economic goals and see what implications they may have for the delineation of logical areas. Second, I shall start with the

¹ Head, Department of Economics and Sociology, Iowa State University.
² The statement in quotes was originally made by Joseph S. Davis in connection with a major program of the 1930's.
characteristics of individual economic units (consumers, workers, business firms, local government agencies, schools and the like) and see what implications these have for the delineation of an appropriate area. In this process, I believe the general size and shape of an appropriate economic area will become clear.

Economic Growth Without a Spatial or Area Dimension

Let us try to visualize an economy which has no significant area problems and, in fact, no significant geographical area. For example, suppose we draw a circle of 25 miles radius around the center of New York City and assume that the 20 million or so people living within this circle constitute a sovereign and independent nation.

Would such a nation still have problems of economic growth? Most assuredly. Each citizen would want to maximize his consumption of personal and public goods and services from any given amount of effort -- for example, from a 40-hour work week. If the GNP of this nation could be increased 10 percent by improving technology, by shifting labor and capital from one industry to another, or by improving the public school and vocational training systems it would certainly by wise to do so.

We assume the whole nation -- call it Urbania -- to constitute a single labor market with a single central business district and a rapid transit system such that without changing his address a worker could commute to any job in Urbania. Every citizen would have some interest in the quality of the national school district, the national school board, the national transportation system, the nation's cultural and recreational facilities and its master plan for urban renewal. Decisions with respect to allocating the nation's total resources between private goods and public services should become quite clear, as all citizens would have a chance to observe and make use of virtually all public programs and facilities.

Without laboring the analogy further we can see that most of the problems and opportunities of economic development would exist in a nation which constituted a single labor market and included a single central business district. What additional problems appear when the national boundaries are extended far beyond the range of the most zealous commuter -- to the size of the United States?

We start out, then, with an economy in which the geographical distribution of natural resources differs from the distribution of ultimate consumers. The cost of reconciling these two distributions is transportation. In the first instance there are the costs of transporting goods (farm products, forest products, minerals) to

3/Schools, fire engine houses, and police stations are not generally thought of as economic units. But they use resources; they are subject to economies of size; they can be operated efficiently or inefficiently; and (ideally) school principals and fire captains try to provide maximum service within the limits of the budgetary and other restrictions placed upon them.
consuming centers. There are the costs of transporting people (tourists) from consuming centers to such natural resources as scenery, beaches and places in which to hike or ski.

In addition, there are the costs of transporting people (workers) one way from their current area of residence to an area in which they expect to earn more money or obtain greater total satisfactions. Similarly, there are the costs of one way "movement" of plant, equipment, public utilities, post offices and housing when one area suffers economic decline and another experiences economic growth.

In the long-run sense of what economists call "general equilibrium" theory, wage differentials between areas in the United States should be no more than sufficient to compensate for the cost of one-way migration between them. For a young, single man this cost might amount to $100 or so, and for a married man with children and furniture to $500 or $1,000. In either case, this one-time expenditure could hardly amount to more than 1 percent of a worker's expected lifetime income. On this basis, the lowest "equilibrium" wage level in the United States should be no more than 2 or 3 percent below the highest. (I am making interarea comparisons here for workers of precisely the same basic intelligence, education and occupational skills.)

Transportation costs may be involved in interarea movements of capital. Machinery could be removed from a plant in one area and transported to another area. But for the most part capital can be transferred from one region to another without incurring transportation costs.

To see this let us assume that $100 billion worth of capital (plant, equipment, houses, streets and utilities) are concentrated in a 25-mile circle somewhere in the East. Suppose further that precisely $5 billion worth of this capital wears out and has to be replaced in each year. Over a 20-year period we could "move" the entire $100 billion worth of capital to another circle of a 25-mile radius in (say) the Nevada desert by the simple process of not replacing worn-out plant and equipment in the East but rather installing $5 billion worth of new plant and equipment in the West. At the end of 20 years there would be a worthless heap of junk in the original circle and $100 billion worth of capital in the new one. (I leave out the subtleties of accounting arithmetic to keep the illustration simple.) The cost of assembling building materials and machinery at the new site could be either greater or less than at the old one. The cost of construction labor could also be higher or lower. In this long-run equilibrium sense there is no need for large interarea differences in the prices of capital goods or in returns on investment generally.

We have now let geographic considerations into our scheme of things, albeit in an abstract manner, and the result is frustrating -- it appears that no sharp lines need to exist between economic areas so far as wage differentials and differential returns to capital are concerned. Instead, all this exercise leads
us to expect or to condone is the gentlest of income gradients, sloping almost imperceptibly from swales 1 to 2 percent below the national average to swells rising to 1 to 2 percent above it. No part of the country could then be singled out as a depressed area in need of special development efforts.

The case for economic growth would remain essentially the same as it was in our hypothetical nation of Urbania. There would be regional diversity in the types of products produced, arising from differences in resource endowment. These and other factors would also influence the distribution of population. But the movable factors of production, labor, capital and management should be as well off in one area as another.

In the real world of 1962 we do have large income differences between areas. These differences reflect a whole complex of factors, such as differences in birth rates or labor force replacement ratios, limitations on interarea mobility of labor, specialization of capital and labor to produce the wrong goods and services, differences in the average quality of labor (education, kinds and degrees of skill, average age, health, etc.), differences in average sizes of firms in industries characterized by economies of large scale and differences in the average level of managerial ability. (The last two elements may be important contributors to the higher average rates of interest on farm and business loans which prevail in lower-income areas.)

If several of these factors were all favorable to one area and unfavorable to another, a substantial difference in the average income levels of the two areas could exist even in a perfectly functioning free enterprise economy. Such an economy rewards factors according to the value of their contributions to production. Poor managers will get lower incomes than good managers; so will poorer qualities or less effectively used quantities of other factors.

In brief, our attempt to start out with a spaceless economy and then add space has given us no basis at all for drawing a line around a particular area and saying, "This one is ours to develop." And if we did draw an arbitrary line around some area and tried to raise the return to labor in it above returns in the surrounding areas, workers would flow in from these areas and limit the relative wage increase to a minuscule percentage. 5

A mathematician once pointed out that if you discovered a creature -- call him a Flatlander -- who existed only in two dimensions, you could imprison him forever by drawing a circle around him with a lead pencil! But flesh and blood people exist in three dimensions; they will step across the line.

We must try a different approach to delineating economic areas.

---

4 I short-circuit a technical statement of marginal productivity concepts.
5 The absolute wage increases in all the areas (assuming the adjustments lead to greater productivity) are, of course, well worth having.
Delineating the Area

Our second approach will start with the individual citizen-worker-consumer and proceed through successively larger units until we find what seems to be a reasonable stopping place. I have not read much of the professional literature in this field, so the experts here may find my terminology a bit homely and imprecise.

Here again I would like to start out on an abstract level. Suppose that, for the sake of an experiment we are provided with as much area as we need (up to 10,000 or 20,000 square miles) and can borrow as many people as we like (up to 100,000 or even 1,000,000). We assume that such people as we need will be drawn at random from the United States population. Therefore, we can assume that they will have gone through our public school systems, read newspapers and magazines, watched television, and shopped in supermarkets and will have pretty definite notions about how to spend their incomes. In fact, let us assume that the people we borrow will bring their incomes along with them.

Thus, each person brings with him a set of wants for private goods and public services and a predetermined amount of income to allocate among them. Our problem is to design an area economy of sufficient size and complexity to satisfy these wants efficiently. The next stage of the argument must be based upon (1) the economies of size of individual firms or public enterprises and (2) the "threshold values" or minimum sizes of population at which it becomes profitable for someone to supply a particular kind of good at all.

1. Economies of size. In every industry there are different ways of organizing work crews, physical equipment and supervisory personnel to run a plant and turn out a product. For example, I read a research manuscript a few months ago which presented cost curves for broiler processing plants of ten different sizes and layouts. For any one of these plants, the average cost per unit (out-of-pocket and overhead cost combined) would decrease as the volume of output expanded until the engineering capacity of the plant was approached. However, the low-cost point for the largest plant considered was considerably below that for the small and medium-sized plants. Given an unlimited supply of broilers available to each of the plants at the same delivered cost, the largest plant would clearly be more profitable than the smaller plants and would out-compete them. However, it would not have been possible (with known technology) to reduce costs much farther by building a still larger plant.

The food supermarket is one of the most important enterprises for satisfying consumer needs. Marketing experts in this field give me the impression that a supermarket needs at least $1,000,000 of gross sales a year and probably $2,000,000 to achieve most of the potential economies of size for this type of enterprise. As an average family of three spends about $1,000 a year for food, the larger figure would require a minimum of 2,000 customer-families or 6,000 people.
Werner Hirsch suggests that, since fire engines should be close to fires, there is no point in building a fire station larger than would be needed to protect 4,000 or 5,000 homes. In a large city, it is true that one can spread the costs of a fire chief and central office help among two or more engine houses. But after these overhead costs had been spread among four or five fire stations, the economies from further spreading would be quite small.

Another important institution is the public high school. The state of Iowa requires a high school to have at least 300 students enrolled if it is to become eligible for state financial aid. The ability of a high school to provide a variety of subjects and a high quality of instruction in each depends up to a point on the number of its faculty members. When one considers the degree of specialization required for competent teaching at the college level, it does not seem too much to expect that the high school chemistry teacher should specialize in chemistry rather than being spread out over chemistry, physics and mathematics. If you accept what I would regard as a minimum degree of specialization and recognize that some subjects such as English and mathematics will need two or more teachers, we pretty speedily run up to faculties of 30 or more and enrollments of 1,000 to 1,500 students in a three-year program. A community which provided 500 first-year high school students each year would likely have a population of 30,000 or more.

I know very little about the economics of department stores. However, in my limited experience I have not found satisfactory full-line department stores in towns of 25,000 and I have not seen more than two or three adequate ones together in cities of 100,000 or 200,000 population. Offhand, I suspect that my concept of a "minimum adequate department store" would need the level of patronage found in a city of 50,000 or more.

Representative American consumers would want to have within easy access all of the above institutions operating at relatively efficient and low-cost levels. We could name many other services which most of us would like to have within at most a one-hour drive -- a railroad station, an airport, a daily newspaper, a radio station, a television station, and so on.

The need for certain other services within easy driving distance may be more debatable. To lend some academic tone I would like to find in an area at least one four-year college with an enrollment of 1,000 or more students. On the average I suppose there are something like 1,000 full-time undergraduate college students per 50,000 people. I would like to be within easy driving distance of a town big enough to attract what I regard as good movies, to support a good amateur drama group and to attract one or two good concert artists each year. I can get along without a professional baseball or football team.

If "my area" is going to support the other institutions and enterprises that seem important to me, it will probably contain some specialized services to the businesses I would like to patronize -- firms selling office supplies and furniture and a few wholesale distributors. I would like to have a good hospital within 30 minutes if possible, and I have become partial to dealing with groups of doctors organized on a clinic basis.
In brief, I have convinced myself that I would prefer to identify with an economic area that contained 100,000 people at the very minimum -- preferably 250,000 or more. I would like "my area" to include a good daily newspaper with a staff large enough and paid enough to present some independent editorial opinion which would help me to identify important developments in the area and the impact of external forces upon the area. I do not require an editor I agree with but I would like to hold out for one I can respect.

To provide all these amenities I think my area must contain a central city of at least 25,000 people; the amenities would be more likely to exist in a central city of 50,000 to 100,000 or even more.\(^6\)

I don't know whether I am convincing you, but I am beginning to convince myself. As I look at a map of Iowa with its 2,800,000 people and 57,000 square miles of area, it seems to me that I can divide it into something like 12 areas. Three of these areas have metropolitan centers of 200,000 or more, three of about 100,000 and two of about 50,000; four have central cities of 25,000 to 35,000. There are five other cities in Iowa (not counted as part of the 12 metropolitan cores or central cities already mentioned) of 20,000 to 35,000, but it seems to me that they are economically tributary to various of the larger centers.

On the average each of these 12 areas contains a little less than 5,000 square miles, equivalent to a square measuring 70 miles along each edge. The average population per area is about 250,000; the average number of counties per area is 8 or 9, and in general the area boundaries (of which I shall say more later) do not coincide with county lines. The central cities of adjacent areas are rarely less than 50 miles or more than 100 miles apart; 70 miles would be a fair average.

So far we have looked at the area in terms of its ability to supply an "almost full line" of consumer and public goods and services. But consumers are also workers. The distances that people are willing to drive for shopping, recreation and routine medical and dental services are of the same order of magnitude as the distances they are willing to drive to work. Even with a convivial car pool most workers lose their enthusiasm for daily commuting when the time consumed exceeds an hour or so each way. To contemplate more than this puts me in mind of a penal sentence widely used in Great Britain during the early 1800's by means of which she populated Australia -- "transportation for life."

If most of the travel is through open country on good highways, a commuting allowance of one hour each way permits workers to drive to a plant as far as 40 or 50 miles; this is quite compatible with an economic area containing 5,000 square miles or so. It would be true even if the central city were the

---

\(^6\)It may be argued that I have forgotten about the original object of the experiment, which was to design an area economy that would satisfy a representative sample of citizens -- not just myself. To be sure we were pleasing the citizens; we could (conceptually) lay out area economies of several different sizes and patterns, let the citizens reside in each one for a month or so and then vote their preferences. Since we can't perform this experiment, we might watch how people are moving from one area to another and ask them why. Our mobile citizens are "voting with their feet" and a great deal of area promotion is directed toward influencing the vote.
only important center of nonfarm employment; if the area contains satellite towns of 10,000 to 20,000 population or more, a worker living near one corner of the major economic area will likely find a satisfactory job in one of them.

How do I know such an area exists as a meaningful economic entity? Time and space do not permit a long discussion of this. However, I would like to contrast this kind of area with an area which is very frequently used as a basis for rural development activities, namely the county. I shall be thinking primarily of the Corn Belt, specifically of Iowa.

The typical Iowa county is a square 24 miles on an edge, containing 576 square miles or 16 townships. If the founding fathers of Iowa knew what they were about, this size represented as large an area as they felt could be effectively administered from the county seat. One rationalization was that any resident of the county should be able to ride his horse or drive his buggy to the county seat, transact his legal business, and get home in the same day. Commuting to work was not too common in 1860; for pedestrians, a five mile walk morning and night would take as much time as a 50-mile drive does today. For "convenience goods" it would have been inconvenient to walk or ride more than two or three miles each way; today, I imagine most farm and village people would prefer not to drive more than 15 miles to a fair-sized supermarket or at least a superette.

Figure 1 reflects my hypothesis as to what has happened to the sizes of "nearly full-line" or "reasonably self-contained" economic areas during the past century. A permissive fact is that automobiles now drive ten times as far in an hour as was possible with horses and wagons; a propulsive force was supplied by the development of new merchandising techniques which achieved economies of large size and at the same time were able to accommodate rapidly widening product lines. One authority on supermarkets states that a good grocery store in 1928 handled about 800 items, but that by 1957 a good supermarket was handling more than 5,000 items. If we projected backward from 1928, the number of grocery items handled by a county seat store would have been much less than 800.

Figure 2 shows the results of a study published recently. A manufacturing firm located in Newton, Iowa (a town of 15,000 located 30 miles east of Des Moines) permitted researchers to tabulate the home addresses of some 2,300 employees. The rectangular area in Figure 2 is 120 miles wide from east to west and 160 miles from north to south. Some 400 workers commuted daily from more than 19 miles away; 70 commuted at least 50 miles each way. At least 10 workers commuted daily from each of 10 different counties; the areas of these counties would add to more than 5,000 square miles.

It appears that not more than one of the 600 commuters from outside Jasper County went to the trouble of driving past a larger town in order to get to Newton. The "sphere of influence" of Newton was circumscribed by these larger places. It is perfectly clear that no one county satisfies even the daily needs of the 600 commuters. It is clear from other evidence that the people of Jasper County go to Des Moines in Polk County (a city of more than 200,000) for a good deal of their shopping and recreation.
Figure 1. Hypothetical Pattern of Labor Market Areas and "Service Center" Areas, Corn Belt, 1860 and 1960.

MLMA=Major Labor Market Area
SCA="Service Center" Area

*Each of the 9 squares is a 16-township county, 24 miles square; county area is 576 square miles.
Figure 2. The Newton, Iowa Commuting Pattern, 1959*

*Based on C. A. Peterson, An Iowa Commuting Pattern and Labor Market Areas in General, State University of Iowa, June 1961, page 9.
Figure 3 is a more sophisticated and realistic expression of the hypothesis stated in Figure 1. The smallest circles in the Wisconsin sector of the map are the villages, mostly of less than 1,000 people. The next larger circles are typically county seat towns or towns of similar size. The geographer (Philbrick) who drew the basic map from which this one is adapted referred to the villages as "second-order central places" and the county seat towns as "third-order central places."

In the rest of the map I have deleted the smallest or second-order villages and retained only the third- and fourth-order central places. The fourth-order places as classified by Philbrick range all the way from 25,000 or so up to cities of the size of Indianapolis and Milwaukee.

My hypothesis is that a county seat town plus 9 or 10 villages, such as could be drawn in the Wisconsin section, was a relatively self-contained unit in 1860, but that most similarly self-contained areas in 1960 would center around a fourth-order place. The modern economic area would include the central city, a group of county seat towns (plus any others of significant size that have sprung up), and quite a number of villages -- as many as 50 or 100.

Indiana is about 160 miles across from east to west. A square 70 miles on an edge centered on each of the fourth-order cities would cover a large proportion of the Indiana map. A number of these areas would extend across state lines. Offhand, it appears that there may be an economic area north of Indianapolis centering on a city which Philbrick classifies as a third-order place. Philbrick's map does not include Iowa, but it may well be that he would classify as third-order central places certain of the towns of 25,000 to 35,000 population which appear to me to form the central cities of major economic areas.

Figure 4 is the map of a Corn Belt city of about 50,000 people which we shall call simply Center City. The smaller of the two circles has a radius of half a mile and the larger a radius of a mile. The black oblongs are supermarkets, and the cross-hatched areas are industrial sites. There is, of course, a central business district, and the lightly stippled area is residential.

On the average each supermarket in Center City as of 1957 was serving a population of 5,000 or 6,000 -- about 2,000 households. Many of the county seat towns in Iowa have only 2,500 to 5,000 residents; a few counties have no town as large as 2,500. Allowing for a farm and open country population equal to that of the towns, it would be difficult to find room in the smaller towns for more than two fully modern supermarkets.

Obviously the economic base of Center City consists of the industrial plants. If we dispersed the shopping centers and other consumer-oriented facilities in Center City to accommodate farms and farm families rather than factories as the economic base for a total population of 50,000, we would have to spread them over several counties. Now shown on the map of Center City are the neighborhood
CRITERIA FOR THIRD-ORDER CENTRAL PLACES:

1. Grocery Wholesaling
2. Daily Newspaper
3. County Seat
4. Industrial Supply
5. Paper Merchants
6. Merchant Wholesaling In 1950 Census And Population Over 5,000

A. Major Wholesale Grocery Center, 1935
B. Hardware Wholesaling
C. Drug Wholesaling
D. Services Allied to Transportation
E. Shoe and Leather Wholesaling
F. Major Steel Warehousing

Source: Adapted from A. K. Philbrick, in Economic Geography, Vol. 33 (October 1957)
FIGURE 4.
Map of Center City

Source: Bob R. Holdren. *The Structure of a Retail Market and the Market Behavior of Retail Units.*
© 1960 Prentice-Hall, Inc. Adapted by permission.
groceries, drug stores and beauty shops. In an economic area based on agriculture
these convenience enterprises would be found on the Main Streets of the villages
of less than a thousand people.

This analogy between an industrial city and a rural economic area may seem
as far-fetched as a statement by a zoology professor that a mouse is like a
whale because they are both mammals. Most people in Iowa on whom I have
tried this analogy seem to find it enlightening. One could, perhaps, reverse the
comparison by representing the business district of Center City with Philbrick's
symbol for a fourth-order central place, each shopping center or supermarket
location with his symbol for a third-order place and each intersection where two
or three convenience enterprises are located with his symbol for a second-order
place. (Incidentally, Philbrick's "first-order inhabited place" is simply a
house; so we may visualize every dot on the map of Center City as a "first-
order place.")

In this section I have argued (1) that most consumer-worker-citizens like to
be within an hour's commuting distance of a city of 25,000 or more and (2) that
workers are willing to commute not more than one hour each way. If two central
cities have the same populations and the same range of goods and services, my
hypothesis is that the individual will tend to identify with and patronize the
nearer of the two.

I am not an expert on the detailed methods of delineating area boundaries,
though I think I have said enough to suggest the general lines along which this
should be done. Clearly, we will find cases of workers who will commute 40
miles to one city rather than 30 miles to another. So, we might argue that the
"boundary" between two major economic areas is not a sharp line but rather a
zone several miles in width. Depending upon the strategy one uses in area
development, there may be some jurisdictional disputes about the "shaded
area."

In addition to establishing a workable boundary line for the present time,
we need to know something about the stability of this boundary line over time.
Let me assume here an extremely simple scheme in which there is only one major
source of nonfarm employment in each of areas A and B, namely the central
cities. We will also assume that the individual identifies with the area in
whose central city he works and that he will tend to shop and patronize the
other services in that city. It is, of course, possible to conceive of a worker
accepting a job in City A (because the wages there are higher) but shopping
in City B because it is nearer.

Let us assume that cities A and B initially have the same wage level and
the same array of other attractions. The cities are 70 miles apart, and a worker
living 35 miles from each would have to flip a coin to choose between them.
(See Figure 5.)
Figure 5. Hypothetical Pattern of Major Labor Market Areas, Corn Belt, 1960.

*Rough average of such areas in Iowa. May range from over 100 miles to 50 miles or less, depending on closeness of other cities.
Now suppose that the major employers in City A raise wages in order to expand not only their labor supply but the number of people identifying their consumer interests with City A. Let us suppose that the objective is to extend the area boundary by 10 percent (3 1/2 miles) toward City B. If this is accomplished, a worker living along line 2 will be as willing to drive 38 1/2 miles to City A as to drive 31 1/2 miles to City B. His two-way drive will be 14 miles (and at least 14 minutes) longer if he goes to City A.

Allowing for transportation costs at 7 cents a mile and wasted time at (say) 2 cents a minute, we find an increased cost of about $1.25 a day. As a very crude approximation it appears that wage rates in City A would have to be raised about 15 cents an hour to accomplish the desired extension of the area boundary. However, this wage policy should produce a similar expansion in each of the three other directions; so the high wage policy might have in total four times as much effect as would be involved in extension only toward Area B.7

In practice each area would contain in addition to its central city a number of towns of county seat or "shopping center" size. Typically the boundary between two areas would run through the open country between tiers of county seat towns rather than through the towns themselves. The open country is sparsely populated8 and most of the workers residing there are committed to full-time or part-time farming. Thus the high wage policy adopted by employers in City A in order to extend its labor market area by 3 1/2 miles into Area B might transfer a labor force of only 250 or so workers from Area B to Area A; furthermore, during the first year or two, the chances are that not more than 70 to 100 of these workers could be attracted away from farming into nonfarm jobs. (I am assuming Iowa conditions; there must be places in the South where the proportion of farm workers detachable would be higher.)

In contrast, if City A could "capture" one county seat town with a population of 5,000 and a total labor force of 2,000, City A might attract several hundred workers into its labor market and away from that of Area B. In general I believe that this would take considerably more than the 15 cents an hour increase in wage rates which we hypothesized as necessary to transfer a 3 1/2 mile strip of open country.

My belief is, then, that the boundaries of major economic areas will be relatively stable for periods of ten or more years at a time. However, they must be checked every year or two to see if some of the villages and smaller towns appear to be shifting allegiance.

7/To be precise, the policy would "notch the corners" of four other areas, so the total area gained would be 4 1/4 times as large as that gained from Area B.
8/In Iowa currently, only about four farm workers per square mile.
Area Delineation and the Goals of Area Development: 
Conflicting Views and Interests

So far I have concluded (1) that attainment of rapid economic growth for the nation as a whole will tend to erase area differentials in returns to labor and capital and (2) that areas as large as several Corn Belt counties focused around a sizeable town or city are the appropriate bases for area development efforts. My view is that both the national interest and the combined interest of the residents of a particular area will be best advanced if development programs are conceived and executed on a multi-county basis.

I know that a great deal of promotional activity is based on much smaller units -- frequently on individual towns or villages. The objectives of these activities, if achieved, would certainly be profitable to the groups which are most actively involved in them. But I believe these objectives reflect an implicit identification of the welfare of particular groups with that of the community as a whole.

I believe this identification is made in all sincerity by the majority of those who make it. As it is a sensitive area I shall call on a neutral observer, neither Southerner nor Iowan, to elaborate.

Professor Charles L. Leven, now of the University of Pennsylvania, has characterized the two schools of thought on economic adjustment of rural areas as advocating (1) "moving the people out" and (2) "industry for our town."

Leven contends that the advocates of "moving the people out" generally underestimate the consequences and costs in both the areas they leave and the areas to which they go. This is fairly obvious. However, Leven's comments concerning the "industry for our town" approach are quite penetrating and I should like to quote portions of them:9

"We find that this state like most others is filled from one end to the other with local boosters and development personnel working to bring industry to 'our town.' A good part of the rationale behind this movement is the prevention of the necessity for 'our best young people to have to move away to find opportunity.' Preserving the small town as part of the social fiber of the American way of life is another oft cited reason. I am afraid, however, that economic self-interest

has something to do with this feeling too. An analysis of the forces underlying regional economic development would suggest that operators of decreasing cost industries (those that depend heavily on volume to attain low-cost operation) would fill the roster of civic leaders -- people like bankers, publishers, merchants, undertakers and building contractors. Likely to be absent from the list are manufacturers, retired farmers, the mailman and school teacher, and strangely enough, the educated young people whose future is being protected . . .

"Perhaps the most disturbing part of this conception of a solution to the adjustment problem is the needless disillusion to which many conscientious, public-spirited people will almost certainly be subjected. While a sympathetic attitude is probably necessary for industrial expansion in a relatively underdeveloped region, it is hardly a sufficient condition . . ."

With respect to area promotion in a narrow sense, Leven remarks: "The promulgators of small town industrial development are not, of course, completely insensitive to the facts of economic reality. They are at least enough aware of them to be suspicious of the idea of attracting industry on the basis of special inducements. It is certainly possible that through direct subsidization a firm may be permitted to move from a less to a more efficient location. However, acceptors of subsidies are not hard to find and the problem of separating the sheep from the goats is a real one, with the attendant risk of importing a future employment security problem come the next business recession, or even before. In short, one must always realize that it is possible, through inducements to get the wrong industry in the wrong place. This does the firm, the area and our national economic interest little good. I am happy to say that I do not think that community advertising is likely to produce such aberrations. One of the fortunate things for the world is that area promotion (i. e., area advertising) is a largely unsuccessful process.

"Basically, the main shortcoming of rural industrial development as a single solution to the agricultural adjustment problem is its failure to come to grips with the role of resource mobility -- geographically and vocationally -- as one of the main forces behind the economic development of the Western World in general, and the United States in particular."

The earlier part of this chapter stressed resource mobility as a dominant factor in achieving national economic growth and in equalizing wage rates and returns to investment between areas. Hence, there is no need to repeat Leven's conclusions along these lines.

There may well be conflicts of interest between different groups in an economic area. Owners of real estate and locally-oriented businesses will likely be better off, for a while at least, if the local population is retained or increased even at the expense of retarding an increase in wage rates. Manufacturers producing goods for export to other states or nations might be better off, in the short run at least, if wage rates failed to rise. On the other hand, if wages rates in an area are considerably below the national average, one of the best barometers of successful area development as I view it would be the rate at which wage rates are moving upward toward those of the most prosperous areas.
It is harder to estimate returns to capital in an area than returns to labor -- at least it seems to me that the statistics are not so readily available or easily interpreted for capital as for labor. Perhaps a rough and ready compromise goal would be to maximize incomes per member of the area's labor force from all sources. If the area were approximately self-supporting (in the sense of not receiving large net transfer payments from other areas), this would come close to maximizing per capita consumption of private and public goods and services in the area.

Conclusions

1. The Sino-Soviet challenge makes it necessary for the United States and other nations of the Free World to shape themselves as nearly as possible into a "maximizing unit" -- a unit which tries to maximize its political and economic strength in order that an open society based on democratic freedoms may survive and flourish.

2. Recently the United States, together with 19 other nations, has publicly committed itself to an increased rate of economic growth. If national policies are oriented toward achieving this goal, they will provide a favorable context within which to raise incomes in currently lagging areas. The objective of area programs should be to contribute to national economic growth through area development.

3. A logical economic area for development activities, under Iowa conditions, may include as many as 8 or 10 counties; the boundaries of such areas will in general not coincide with county lines. However, as most county lines run through the open country almost equidistant between the county seat towns, it may be quite reasonable to draw part of the area boundary along county lines and to take advantage of the availability of data and of various organizations which adhere to county lines.

4. There is a need to specify the economic goals of any development program. Recently a Chicago alderman asked the mayor a question which has quite profound implications: "Toward what goals is the budget taking Chicago?" Every expenditure of funds and of persuasive energy takes us toward certain implicit goals and away from others; since this is so, it seems more sensible, even though more idealistic, to try to make our goals explicit and direct our funds and energies toward them in the clear light of day.

5. Above all, we should try to avoid the particularism of promotional activities that rest on too narrow a geographic or interest-group base. Leven takes some comfort in the observation that "area promotion is a largely unsuccessful process" and will not do much harm. However, any worker in area development wants his efforts to count and would be mortified indeed if, after directing his best energies
toward an unattainable goal, he were told that "after all he had done very little harm."

Another poem by Stephen Crane is very much to the point. It goes like this:

I saw a man pursuing the horizon;
Round and round they sped.
I was disturbed at this;
I accosted the man.
"It is futile," I said,
"You can never---"
"You lie," he cried,
And ran on.