PROBLEMS, PURPOSES, AND IMPLICIT POLICIES FOR A NATIONAL STRATEGY OF URBANIZATION

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The course of our national domestic history in the first twelve decades of our nation was largely the working out of the settling of the continent, and national policy was oriented to this purpose. But our efforts in this century have not had such sweep. Rather they have focused on solving the problems of distressed areas. Only in recent years has there been a new beginning at national policy for the overall distribution of population and economic activity. The problem-oriented approach has yielded at best mixed results in such cases as TVA, Appalachia, and the central ghettos of our large urban areas. Although to think of guiding the system as a whole is an advance over concentrating on putting out fires, we are clearly at the early stages of the formulation of overall policies. The need for a policy approach is strongly sensed, but there is only a beginning of an outline of its purposes and of the instruments at hand.

Many of the current policy proposals are naive either because they do not recognize the realities of the working of the system or because they propose geometries of population distribution without relating them to national purposes. Why should a policy of middle-sized alternate growth centers be better than a policy of steering growth towards very small centers or towards very big centers? Would one policy or another improve material well being, diminish inequality, conserve the environment, or provide more satisfactory ways of life? Clearly a choice among such policies, matters of feasibility aside, would depend on our understanding of their implications in terms of our national purposes. But if it is too ambitious to relate proposed policies fully to overarching purposes, policies should at least specify concretely the problems to which they are addressed.

Any policy of territorial distribution that amounts to more than window dressing will involve vast sums of money and affect all aspects of our national life at a scale which is not sufficiently realized. The programs involved would dwarf such current efforts as the space program, or such proposed ones as a national welfare system or a national health insurance. Further, population distribution is the result of a slow and viscous process, so that any effective program will have to be sustained for decades, if not forever. Thus, it is vital to determine how confident we are that one or another policy will meet a general purpose or solve a particular problem because it will be a heavy bet. It might be ineffective or, worse, counterproductive. Geographic radicalism seems misplaced when we are uncertain of the purposes, of the processes, and of the effectiveness of the instruments.

Our low level of understanding may be illustrated by some facts of geographic demography which run counter to popular stereotypes, which have our metropolitan areas awash with urbanizing migrants, and all population gravitating towards the largest metropoles. Metropolitan areas grow almost exclusively by natural increase. Urbanization of rural and small town populations is a very small part of metropolitan growth (about 6%), and international migration is three times as large a factor. Large metropolitan areas (over 2,000,000 population) are laggards in terms of net migration, with two migrants per thousand population per year. This is half of the metropolitan average. Far from being in decline, metropolitan areas between 200,000 and 250,000 population are among the fastest growing areas, as are those from 750,000 to 1,000,000. Indeed, one out of three metropolitan areas in the 50,000 to 200,000 class are attracting migrants at twice the overall metropolitan rate, compared to one in eight at the turn of the century. Least realized

perhaps, nearly half of the metropolitan areas were net losers through migration, and this proportion held for those above as for those below 250,000, and indeed for the twenty biggest.

Of course, natural increase has insured that 91 per cent of metropolitan areas have continued to grow. But it is quite likely that a continued decrease in the birth rate (brought about by changing life styles, public policy, and the climate of opinion) together with an expected further shrinkage of the rural to urban migration, may lead by 1980 to a situation which is today totally unanticipated: some one third of our metropolitan areas (not just their central cities) will be losing population without benefit of any national policy of de-concentration. Today, as the issue of population is discovered, attention focuses almost exclusively on the problems of urban growth. But, if nothing else, we have been living with such problems for three centuries. We know virtually nothing about the problems of population decline in large urban areas, except that it is clear that they are not symmetric to the problems of growth. One may speculate about the fiscal situation of local governments, about a shrinkage and increased instability of growth-oriented sectors such as construction, about the consequences for various income groups of the new circumstances in the filtering process of the housing market. Not all of the consequences would be bad, of course, but many would. Yet the neglect of such a visible and probable issue illustrates the primitive level of most discussion of territorial policy. It clearly shows that we do not yet have a full understanding of population distribution as a system, and consequently it is unlikely that we can devise policies which are effective and do not have major and probably unwanted unanticipated consequences.

The previous example meant to show our poor understanding of the spatial workings of the social system; the next is an illustration of how poorly we have thought through our definition of problems. Among those who suggest that our big urban areas have grown too big, it is often argued simultaneously that a) the big cities are so big and so costly that they are inefficient producers, and that b) the continued gravitation of population to these large centers increases the disparity in material welfare between them and the less developed areas. Although under very special circumstances both statements might be true, a moment's thought will show the near contradiction of the two propositions. If the big urban areas have grown beyond efficiency, their citizen's material welfare would be declining, and we would be headed towards reduced inter-regional inequalities, albeit a rather soreheaded reduction. If both cannot be true, which then is the circumstance and which the purpose of a deconcentration policy?

In brief, the point is that population distribution is the territorial aspect of a highly connected and interdependent social system, and that local variations in welfare and productivity are also aspects of this larger system reflected upon geographic space. To intervene in such a system we need first-rate policy analysis based on an understanding of the system, of the options, and of our purposes. But we lack such understanding and consequently the capacity to generate credible master plans. Rather, population distribution policies must be generated over time as the outcome of a social learning process. The felt need for such policies at present arises from a large but finite number of pressing problems which are believed interrelated. As these problems become better understood (and often redefined), as their interrelations become more traceable, and as our social goals are clarified, we then hopefully will

progress from problem-oriented programs to system-oriented policies, from cures for ills to the management of health, based on greater insight into the positive purposes that shape such policy rather than on the negative purposes of most of today's programs. At this time we have begun to recognize that the problems approach is not enough, but we are not yet able to go much further.

The list of problems which has triggered our search for national policy is long but not infinite, and one may begin the search for the agenda or table of contents of that policy through a listing of those problems. They are the problems of size, of growth, and of decline. At the upper end of the scale of size there are the problems of congestion, pollution, access to open land, fragmentation of jurisdictions, and social and psychological problems such as personal alienation and the lack of responsiveness of institutions to individuals. At the lower end of the scale of size there are the problems of lack of resources, lack of adaptability to change, a narrowed range of social and economic choices, and increasing dependency and loss of self-determination. The problems of growth, as distinct from those of excessive size, include governmental cash-flow crisis in paying for additions to the urban plant out of proportion to the existing population base; the disruption of traffic and land-use arising from the successive installation of major new urban elements; the strains of mutual adjustment of old and new social groups to each other, and of all to a larger urban scale; and the loss of such valued features as agricultural landscapes. There are also the problems of population decline, found in the central cities of metropolitan areas and in many smaller communities. They include the need for consolidation, the depreciation of existing capital stock, the loss of morale, the welfare problems of a population which is increasingly

composed of the old, the uneducated, and the very young. Some problems may have been overlooked in this list, and some of those included might be better labeled, but I believe that there would be no great difficulty in arriving at consensus on some comparable list.

Although all of these problems are associated with population distribution, some of these problems may be best attacked by programs other than territorial ones. For instance, it may be argued that the problems of poverty and race in cities are problems in cities, not problems of cities. These problems were created over three centuries in rural areas and in small towns. Migration has carried them to the cities, and it is there that they must be solved since the majority of those suffering poverty and discrimination are there now. There is evidence that, however slowly and painfully, progress is being made in the urban areas and that the movement to the cities are part of the solution. By way of illustration, the proportion of black families below the poverty level decreases steadily with increasing urban size.

Other problems may have their origin in population concentration, and yet territorial policies may not be indicated to solve them. Many forms of pollution, for instance, become matters of concern only in large concentrations of population. Yet if these problems are critical, territorial policies may be largely irrelevant, because, to judge by the experience of other countries which have had vigorous decentralization policies, the rate of population dispersal is so slow that it would be decades before its impact would be felt. The development and adoption of technological solutions and such institutional innovations as pollution taxes would be much quicker and certain. Thus, if this analysis is correct, such problems as poverty and pollution are best attacked

directly, without distractions of a territorial nature.[1]

Other situations are false territorial problems. An instance of this is outmigration in many cases. Although 2/3 of U.S. counties had net outmigration in the past decade, substantial outmigration is one of the federal criteria for defining an area as distressed and for putting into effect programs to try to staunch the flow. Yet, in many cases, the distressed conditions are the result of a surplus of population in relation to the district's resources and opportunities, and geographic mobility is evidence of the adaptive capacity of the people. In those cases outmigration may redress the balance of population and resources, and be witness of health, not of pathology. To be sure, problems may result from this, such as a high proportion of population in dependent ages or a need to consolidate schools. These are transitional costs which merit attention on the basis of equity and of facilitating the adaptation. In those cases programs to ease the transition may be justified, but not programs to maintain earlier population levels.

While in the short run we must address these syndromes of problems, in the longer run territorial policy should be oriented to system objectives. The definition of these will be a social learning process, in the sense that their definition will evolve over the years as we learn more about the system, are confronted with new problems, and become aware of unanticipated constraints and opportunities. But, however tentative, a first list of four principal objectives for

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[1] I am referring here to large-scale territorial policy in the case of poverty and discrimination. At the smaller scale of intra-metropolitan policy, school and residential integration for access to jobs are extremely important territorial issues.

United States policy may be read into current discussions.[2] These four objectives may be called efficiency, equity, environment, and life style. They are sometimes in conflict, and alternative policies will strike different balances among them; social science and policy analysis must clarify the tradeoffs among them and political processes make the choices.

At the national level, the objective of efficiency is most simply that of increasing the aggregate material well-being of the population. A precise definition involves technical complications concerning the discounting of the future as opposed to the present and many ticklish questions of measurement and definition, but it is basically a well understood objective and the one normally measured by conventional cost-benefit analysis. It enters into territorial policy because considerable evidence shows that alternative patterns of population distribution result in different levels of national product in the short and in the long run.

The objective of equity has to do with the distribution of material consumption. It deals with the equality or the fairness with which access to resources and consumption are available to various elements of the population. The issues here deal with who bears the costs and benefits of alternative territorial distributions and of changes of distribution. For instance, it is conceivable that a very high rate of national economic growth is associated with increasing inequality. Or, a policy of equalizing per capita income among regions by industrializing the less developed ones may result in the rapid rise of certain

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[2] For other nations in other circumstances other objectives are relevant. Among these are the occupation of territories near disputed borders (an objective that played an important part earlier in U.S. history from upstate New York to southern Texas), the reduction of economic colonialist dependence, the creation of national identity, the assimilation or preservation of sub-national ethnic groups, the territorial consistency-check on sectorally-specified national plans, and, in complex ways, the integration of implementation and planning in directed economies.

social classes and localities within the latter, so that increasing national interregional equity may result in greater intraregional inequity. At any rate, it is clear that while development of a distressed region is an efficiency objective from the point of view of the region itself, it is an equity objective from the national point of view.

The objectives of efficiency and equity have become well-known by now, much discussed in the economics literature if not perfectly understood. But the other two objectives are only now emerging and are much less clearly specified. The environment goal has been the subject of much recent enthusiasm, some of it excessive. It deals on the one hand with certain balances of land, air, and water and of the living things in them. These balances are at least important for the physical comfort and well-being of people, and at the extreme for their survival. On the other hand, the environmental objective also includes the preservation of certain physical or zoological elements which have value for their own sake rather than for the sake of people (economists might call them merit goods). The importance of the environmental objective has become clear as air and water, traditional examples of "free goods" to generations of freshmen in economics, have become scarce. Its tradeoffs with other goals arise because, by requiring greater amounts of capital and labor and by imposing delays and expensive pre-investment studies, the environmental goal conflicts with the efficiency objective narrowly defined. Similarly, it involves tradeoffs with the equity objective by affecting manufacturing and primary industries more than services, thereby costing the working class more than the middle class, since the working class depends much more on these sectors for jobs and spends a greater portion of its budget on food and manufactured goods, whose prices are more likely to be raised. Thus it is no surprise that there

are few if any black faces at ecology rallies. In geographic terms, pursuit of this objective will have important consequences. It might help distressed areas by steering economic activity in their direction through giving them a factor-price advantage over more crowded areas which are nearing their carrying capacity. But it may also hurt them, if the types of primary and manufacturing activities in which they specialize are sources of widely diffused pollution subject to national regulation. Similarly, their economic progress might conflict with preservation of landscape features.

The human well-being objective is perhaps the vaguest, but its vital importance is obvious to everyone but the narrowest of specialists. The way people are distributed affects their way of life and the way they feel about their lives. But our knowledge of how it does this is at best diffuse, wrapped in rhetoric and myth. Much of the present debate centers on the size of cities. According to one view, big cities impose role-segmented contacts on people and keep them from knowing each other as whole persons. The scale and impersonality of the city keep people from understanding the forces that affect their destinies so that they fall victim to alienation and anomie. Smaller places, by contrast, provide a single locus for home, school, job, shop, recreation, and civic activities, and thus afford deep and enduring relationships in a comprehensible environment in which the individual may participate and to some extent control. But this view is also opposed by millions of words by thousands of writers. Many of our most perceptive writers and sociologists present a picture that does not square with the equation of the big city and alienation, and which make smaller places appear stifling. It would appear that some people can lead full and rewarding lives in either kind of place, some in one but

not the other, and finally, it must be feared, some people's lives will be unsatisfactory in either.

Given the poor definition of this objective and the obvious fact that no single way of life will be the good life for everyone, or even for one person at all times, it is clear that this objective calls for the provision of choices and for freedom to choose. Yet the balance of these choices with the other objectives may be bitter and difficult: do those whose preferences lead them to remain in unproductive places have a claim, under the equity criterion, to draw on the resources of the more productive? If Americans love a way of life that consists of low density suburbs, lower density second homes, and multiple car ownership, how is this to be balanced against the environmental objective?

This list of general objectives is fragile in its ambitions. Its principal purpose is to stress that the objectives of territorial policy are aspects of the common set of national objectives on which all national policy, however imperfectly, is based. They cannot be a special set apart. The very tentativeness of this listing, together with the uncertainty of our policy instruments, must be matched against any proposed grand policy design. If the current population distribution patterns are to be changed by reversing the present trends of population flows, can such policy be clearly related to these or comparable objectives? Further, the various programs that would flesh out any given policy are slow, tangential, and uncertain: if we choose policy objectives, do we know how to reach them? The answer to both questions is negative. Although territorial policies should begin to be outlined now, this should be done with greater sobriety than is presently the fashion. Recognition of the length and uncertainty of the undertaking makes clear that what is needed is not a facile master plan but the

design of an evolutionary process of social learning, involving fundamental and applied research, citizen participation, and institutional approaches that favor experimentation without excessive commitment and learning from mistakes as well as successes. This point will be picked up again at the conclusion of this paper.

It is a curious paradox that most present explicitly territorial policies are thought to be ineffective, while it appears that many other policies and programs, whose intent was not originally territorial, powerfully affect the distribution of population and economic activity. This paradox may be understood by returning to the image of the national socio-economic system as a multidimensional one, where the territorial distribution is merely one perspective: a projection upon geographic space. Programs that try to rearrange the system's elements on the geographic projection directly will typically underestimate the forces and misjudge directions of effects along other dimensions of the system, and thus be ineffective. Sometimes, indeed, these connections along other dimensions bring about consequences quite different from those intended, as when programs aimed at improving conditions in an economically distressed area through the modernization of industry result in lowered employment by driving out marginal enterprises and substituting capital-intensive technologies.

Similarly, programs that are adopted for reasons that have nothing to do with population distribution may have strong consequences on that dimension. In the pages below several illustrations of this will be outlined. By analogy, it is as if engineers involved in the design of the production flow, or the elevation or cross-section of a plant paid no heed to the consequences of their decisions on the ground plan and circulation of personnel, while those engineers concerned with these

latter paid no particular attention to the former. While standard engineering practice makes for a fair amount of coordination of these aspects before a plant is built, the level of coordination in national policy is much lower, and the actual results are that the cross-section and elevation men are quite unmindful of the ground plan, while those in charge of the ground plan wonder ineffectively why their designs bear so little fruit.

The general ineffectiveness of direct federal efforts to affect the location of population and economic activity is documented by a recent study.[3] It conducted a detailed analysis of 42 principal federal assistance programs having potential impact, under the Departments of Agriculture, Commerce, Health, Education and Welfare, Housing and Urban Development, Interior, Labor, Transportation, the Office of Economic Opportunity and the Small Business Administration. These programs were ranked on an impact scale from "none" to "heavy." The evaluation of their interregional effects ranged from "none" to "slight," with the single exception of the Federal Aid Highway Construction Program, whose impact was judged "heavy." Similarly, in assessing the impact of these programs on growth center development, only two of the 42 scored as high as "moderate" (Highway Construction again, and Rural Electrification Loans).

The general conclusions of the study merit extended paraphrasing. It attributes the limited effectiveness of federal assistance programs as instruments for affecting geographic distribution to the fact that this distribution and its trends are the result of broad economic forces in the private sector, while the federal programs are not designed,

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[3] Federal Activities Affecting Location of Economic Development, prepared for the Economic Development Administration, U.S. Department of Commerce, by the Center for Political Research, Nov. 1970, 2 vols.

administered nor funded to achieve significant impact, and are further hampered by the unwieldiness of the structure and process of the federal system. It concludes that aid to business investment (principally loan guarantees, subsidized plant and equipment, and subsidized loans) have the greatest and most immediate effect; that aid to public facilities and infrastructure are important for removing barriers for development, but that they do not stimulate the process initially; and that investment in human resources has little direct and demonstrable economic impact. These aid programs have their greatest impact within metropolitan areas, but even here they affect business investment most strongly and population distribution least.

After a less detailed survey of other areas of federal activity, the study suggests that these are potentially more powerful factors than the assistance programs. It considers the credit system, the regulation of economic activity, the procurement of goods, services and R&D, and the provision of infrastructure (principally water resource projects). It concludes that their geographic outcomes, although significant, are largely unintentional and therefore unlikely to coincide with deliberate national territorial policy.

These conclusions are supported by an examination of the location of federal expenditures. Table 1 shows the distribution of these expenditures by functional categories in FY 1968.[4] The concentration ratios are in each case the percentage share of that type of expenditure over the percentage share of population in that type of area. They may be interpreted as the per capita share, where numbers greater than 1.00 indicate more than proportional expenditures.

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[4] Adapted from "Locational Analysis of Federal Expenditures in Fiscal Year 1969," Evaluation Division, Office of Management and Budget, September 1970, mimeo.

TABLE I

POPULATION SHARES OF DIVERSE TYPES OF AREAS AND FEDERAL EXPENDITURES CONCENTRATION RATIO BY FUNCTIONAL CATEGORIES, FY 1968

	% of total outlays[a]	Poorest counties	Richest counties	Slowest growing counties[b]	Fastest growing counties	Metropolitan Areas > 1,000,000	Metropolitan Areas < 1,000,000	Non-SMSA urban counties	Rural counties	Central cities	Surburbs	EDA counties
REGIONAL												
Agri. Programs REC	3.5	1.43	1.65	3.07	0.42	0.67	0.56	1.38	1.95	1.47	0.23	0.95
Natural Resources	2.5	n.a.										
Air Transportation	0.5	0.18	1.62	0.45	0.75	1.49	1.03	0.41	0.41	2.39	0.49	1.18
Water Trans.	0.5	0.11	4.28	3.54	1.04	1.86	0.52	0.95	0.22	4.33	1.04	1.32
Urban Mass Transit	*	0.00	4.37	3.37	0.13	2.19	0.60	0.03	0.01	3.22	0.54	1.36
Other Ground Trans.	2.4	1.37	0.64	1.25	0.87	0.73	1.04	0.94	1.43	0.77	0.62	1.07
Regional Dev.	0.2	4.05	0.23	2.92	0.82	0.38	0.40	1.23	2.74	0.89	0.05	2.07
Housing & Community Aids	1.2	0.70	1.42	1.44	0.59	1.27	1.07	0.77	0.57	2.21	0.55	1.20
Air Pollut. Control	*	n.a.										
Water Pollut. Control	0.1	n.a.										
Bus. & Farm. Econ. Opportunity Loans	2.1	1.86	0.24	3.23	0.38	0.13	0.39	1.94	2.82	0.22	0.17	0.87
Reg. Develop. Loans	0.4	3.71	0.13	2.85	0.45	0.11	0.30	1.60	3.14	0.18	0.19	1.32
MIXED REGIONAL												
Recreation	0.1	0.82	0.51	3.71	0.79	0.73	0.42	0.85	2.31	1.71	0.57	1.81
Business Programs	0.3	n.a.										
Houn. Mortgage Market	*	n.a.										
Elem. & Sec. Ed.	1.2	1.52	0.65	1.14	0.96	0.73	1.26	0.96	1.13	1.38	0.68	1.03
Vocational Ed. & Manpower Training	0.5	0.59	0.88	1.20	0.79	0.84	1.62	1.24	0.32	2.12	0.20	0.85
Other Ed. & Manpower Aids	0.4	n.a.										
General Govt.	1.6	n.a.										
Housing Loans	6.9	0.40	1.10	0.49	2.06	1.24	1.23	0.68	0.44	1.03	1.23	1.00
DEFENSE & SCIENCE												
Defense Payrolls	10.5	0.18	0.68	0.43	2.24	0.79	1.50	0.94	0.71	1.66	1.15	0.94
Defense Contracts	19.7	0.15	1.34	0.75	1.62	1.36	1.20	0.67	0.29	1.25	1.21	0.95
Defense-Related Act.	*	n.a.										
Atomic Energy	1.3	0.80	2.23	0.80	1.33	0.96	0.89	1.59	0.93	1.44	1.23	1.22
Space Res. & Tech.	2.0	0.04	1.27	0.12	2.80	1.86	0.55	1.18	0.06	1.50	2.32	0.38
Health Research	0.7	n.a.										
Higher & Science Ed.	0.7	0.67	0.85	0.96	1.10	1.00	1.16	1.35	0.62	1.66	0.65	1.14
OTHER												
Internatl. Relations	1.0	n.a.										
Postal Service	3.4	0.61	1.87	1.73	0.69	1.35	0.88	0.73	0.72	1.88	0.67	1.13
Health Fac. Constr.	0.3	0.60	1.15	1.33	0.76	0.94	1.17	1.09	0.83	1.34	0.73	1.04
Health Serv. & Care	1.7	0.60	1.62	1.69	0.89	1.26	0.96	0.85	0.69	2.00	0.79	1.16
Misc. Health Act.	3.6	n.a.										
Retirement Payments	16.4	0.83	1.14	1.19	0.88	1.03	1.01	1.01	0.92	1.30	0.83	1.07
Other Income Security Payments	3.2	1.50	1.73	2.19	0.78	1.14	0.78	0.88	1.13	1.60	0.61	1.40
Soc. & Ind. Services	1.3	n.a.										
Veterans Programs	3.3	n.a.										
Law Enforcement & Justice	0.2	n.a.										
Debt Service	6.8	n.a.										
Ed. Loans	0.1	0.71	0.53	0.65	0.54	1.22	0.92	1.14	0.67	2.99	0.42	1.38
Total Fed. Exp.	100	0.61	1.31	1.15	1.24	1.14	1.03	0.90	0.76	1.50	0.98	1.03

* Less than 0.1%

[a] FY 1969

[b] All of these counties were declining in population

n.a. = not available

Source: adapted from "Locational Analysis of Federal Expenditures in Fiscal Year 1969," Evaluation Division, Office of Management and Budget, September 1970, mimeo.

Concentration ratio = ratio of the share of expenditures to the population in that type of area. May be interpreted as a per capita relative share.

Overall, expenditures are concentrated in the central cities, the richest and fastest growing counties and the slowest growing counties. The poorest counties receive the smallest share. Defense contracts are concentrated in the richest and fastest growing counties, while defense payrolls are concentrated in the fastest growing counties. Defense, as the largest budget item, is clearly one of the principal determinants of the location of growth. Although a 1967 Independent Study Board recommended that regional development considerations be taken into account in procurement policies, Congress has insisted that contracts be awarded on the basis of least cost, requesting only that the purchases be dispersed only if costs are equally low. Space contracts are concentrated in rich, fast growing metropolitan suburbs. The 1968 figures do not show this, but it is these same, of course, that are today suffering the main consequences of cutbacks in this area. Atomic energy, on the other hand, is quite dispersed, concentrated in EDA counties but not in the poorest. Regional development expenditures as such are concentrated in the poorest and slowest growing (actually population-losing) counties, indicating that, at least at that time, aid was going to aid the neediest areas directly rather than indirectly through growth centers. This may have changed since 1968. Air transportation and mass transit are concentrated in large metropolitan areas, the latter in the central cities. Less predictably, perhaps, ground transportation (principally highways) is low in the richest and fast growing, and high in the poorest, rural, and slowest growing counties, while water transportation is concentrated in the central cities of large metropolitan areas. Health expenditures are generally dispersed, as are Retirement Income Security Payments. Other Income Security Payments, on the other hand, were concentrated in the poorest counties and central cities of

metropolitan areas (the concentration in richest counties is only apparent, arising from an overlap of definitions with central cities).

Turning now to federal loans, regional development loans, like the grants, are concentrated in the poorest and population-losing counties. Business and Economic Opportunity Loans are oriented to poor, rural, population-losing counties. This is in large measure because this category, although including SBA and OEO activities, is dominated (79%) by agricultural loans. Housing loans are heavily oriented to the suburbs of metropolitan areas, in contrast with housing grants, which are oriented to central cities.

None of these findings are particularly surprising to those familiar with various government programs. But what the table makes clear is that those programs which are to a greater or lesser degree regionally-defined are a small portion of federal expenditures. These somewhat regional programs differ to some degree from each other in the types of areas they favor, but this is not always out of inconsistency. Rather, in some cases they complement each other by tackling the different problems of different kinds of areas. But on the whole, those programs directly intended to affect geographic distribution are small by comparison to other programs, many of which have contradictory distributions. These other programs are predicated on purposes which are not territorial but their results prove not to be random across the national landscape. They concentrate in certain kinds of areas, and therefore the explicit non-territorial purpose carries hidden within it an implicit territorial policy. Further, it will be seen below that direct federal expenditures is only one type of federal action that carries implicit territorial policies, and not necessarily the most important.

In the American federal system the principal direct forms of local development assistance are viewed as facilitating or inducing development where there is at present too little, in depressed areas or central city ghettos. There is at present, in spite of widespread concern with possible excessive development in our urban areas, no set of programs aimed at discouraging excessive concentration other than some desultory relocation of federal facilities. Other nations, such as Britain and the Soviet Union, have employed a variety of direct controls on the location of economic activities and even of population usually with a purpose of checking the growth of their largest urban concentrations. These have continued to grow, however, although they might have grown more without these controls. The British experience is instructive. In the years after World War II, the objective of their policies was to "decant" the population from the London area. In recent years the objective has come to be redefined as the guidance of the mode of urbanization of Southeast England. The lesson of such experience is that it is extraordinarily difficult to check development where broad economic forces are directing it, even in socialized economies, and that it makes more sense to try to guide these forces than to try to block them.

Several current legislative proposals appear to portend a new emphasis on land-use planning at the level of the state. This would differ from present direct strategies, which seek to promote development by inducements, in that land-use planning (with the exception of the location of public investment) is primarily a negative control which prevents certain types of development in certain places. Although the form of this type of strategy and its consequences cannot be foretold with any accuracy, it is instructive to keep in mind the experience of the city planning activity, which has used land-use planning and controls

as its principal instrument for many decades. City planning sought to have comprehensive or master planning by covering the totality of the city's territory. But the experience of the past few years has amply demonstrated that this formal geographic comprehensiveness ignored at great cost those problems and interrelations which were not easily representable on a map, and that these have proved of overwhelming importance. Thus, although state-wide land-use planning may have a role to play, it will only be an aspect of comprehensive regional planning in this fuller sense. This is especially true with respect to urban activities in our urban society. Land-use planning is most useful for those activities which use land extensively. Such activities appear as areas on a land-use plan. But at that scale, urban activities, which take up only about 1% of the national territory, are so small as to be practically dots on the map, and their interrelations will be along dimensions of which adjacency is only one. Regional planning would need to take these other dimensions into account, and they would not appear in the land-use plan.

Half-way between direct programs and policies and implicit ones, there lie a number of others which might be called semi-direct, which have territorial issues of development among their objectives. These include the Federal Highway Program, which is generally recognized as having had a strong impact. Yet this program may now be essentially completed or mature: the system of metropolitan areas is by now so well linked by roads that, with few exceptions, road distance between any two areas is no more than 4% more or less than 1.18 times the air distance. Further, as with many programs except the most direct ones, the effects of highways have often run counter to expectations. In many depressed areas better connections have proved that roads lead out as

well as in, by opening their markets to competition from more efficient producers and by encouragement of shipment of their primary products without local elaboration. Similarly, within rural areas the program appears to have had the effect of thinning out the number of market towns in the areas served by extending the effective radius of movement.

Other semi-direct programs and policies include those dealing with the constellation of conservation, environment, and national recreational airports, which will be quite few; the location and mode of powerplants, which will be a great many; water-oriented developments, such as new sewage disposal technologies, the control of precipitation through cloud-seeding, the shifting of waters regionally and internationally through massive projects, as well as the more traditional navigation, irrigation, and flood-control projects. The territorial intent of such projects was in evidence when, at the opening ceremonies of the Arkansas River Navigation project in 1971, the President said of the newly maritime states of Oklahoma and Arkansas, "This region can become a new magnet for people seeking the good life, so that we begin to see a reversal of decades-long migration from rural America to urban America."

Semi-direct programs also include such proposed programs as revenue sharing, which will affect the level of public services, the tax-load, and the degree of local self-determination throughout the country; the federal procurement policies discussed above of which the 1971 Lockheed controversy is an extreme example; the welfare laws (as designed by Congress, the States, and interpreted by the courts). Of these last, the trends towards equalization are viewed as potentially powerful retardants of migration towards the cities and even as reversers

of these trends, while the striking of residency requirements by the courts are viewed as accelerators. Nor are these all of the effects anticipated from welfare reform: they are viewed as complements of the minimum wage laws, affecting marginal industries in marginal locations, and as providers of a degree of economic independence to the poor, with consequences as to their willingness to take political and economic risks.

Semi-direct policies also include agricultural policies, many of which have traditionally been based as much on life-style considerations to preserve the family farm, as on economic considerations. A recent analysis[5] argues that price supports and acreage limitations, together with agricultural loan policies, encouraged a substitution of capital for labor in cotton beginning in the late 1940's, the consolidation of holdings, and the shift from sharecroppers to wage-workers. This produced a surplus of agricultural laborers which increased dramatically the migration to urban centers. Thus the racial and poverty problems of urban centers today are the consequence of the exigencies on labor of World War II and of the modernization of agriculture in the South, abetted by agricultural policies in the post-war decades. If this analysis is correct, and the overt intent of the policies was the maintenance of an agricultural population, the conclusion must be that the policy had the result opposite (if race and class is neglected) from that intended.

In all of these instances of what we have called semi-direct policies, the regional effects are considered, even if they are not paramount, although complicated interrelations of the social system often produce regional consequences unforseen or markedly different from those intended. While the difference is one of degree, in the following

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[5] C. F. Hale, "Impact of Federal Policy and Technological Change on Regional and Urban Planning Problems," Land Economics, February 1971.

pages will be given instances of policies whose territorial consequences are less frequently taken into account but which have, at least potentially, strong territorial impacts. These territorial impacts are called implicit policies. The analysis of their effects in this paper is of necessity fairly speculative given our present level of understanding, and the instances presented below should be regarded as illustrative.

One of the central preoccupations of national domestic policy is the cyclical control of the economy. In recent years there have been shifts in emphases between the use of monetary policy and fiscal policy, and within fiscal policy between an empahsis on tax inducements to investment and direct employment in public works. Whatever the merits of these policies as counter-cyclical measures, their regional consequences may be quite different. Tax credits for business investment favor localities whose economy is based on capital-intensive activities with a capacity for rapid adoption of new capital. Since it appears that smaller cities specialize in well-established traditional industries, whose technology has developed capital-intensive forms along well-established lines, it might be expected that such localities would benefit especially. Similarly, fast growing areas, which need capital for new enterprises would be expected to benefit. On the other hand, an increase in the supply of money and a lowering of the discount rate (or the reverse) under monetary policy would affect most sharply fast growing regions, both for public and private investment, including consumer investment in the form of housing and durables. Swings in the interest rates of municipal bonds might affect local tax rates and borrowing capacity in such regions for several decades, thus affecting their attractiveness in terms of levels of public service, their ability to invest

in physical and social infra-structure, and so forth. Comparably, fiscal measures based on lowering taxes will have different effects from public works ones, since the ability to mount rapidly substantial programs will vary greatly from region to region, as will the usefulness (other than counter-cyclical) of the projects. General tax reduction, including income tax reduction, would presumably favor large, high income urban areas with stable rates of growth.

The general field of taxation is veined with regional implications. Such matters as depreciation allowances for oil are obviously regionally concentrated. Other provisions, such as the treatment of losses in farm operation affect sharply the economies of marginal farming regions near urban centers. Provisions for accelerated depreciation of capital encourage capital investment, and shift resources to regions whose economic activities specialize in capital-intensive activities, which are typically provincial centers. By contrast, the treatment of R and D expenses as ordinary expenses and of most of the gains resulting from these as ordinary income, sets regions which specialize in innovation at a comparative disadvantage, and at a national scale encourages the expansion of existing technologies rather than development of new ones, with consequent regional effects. On the whole, these provisions appear to advance interregional equity by favoring provincial regions, but to be overall regressive by favoring existing technologies over new ones.

Tax laws affect territorial development by their treatment of entertainment and the like as business expenses to a degree possibly not realized. This has given rise to the dual society of the expense account and the deductible evening out. Although no studies appear to exist on the subject, this practice clearly underlies much of the glamour and the economy of certain metropolitan centers. Manhattan would not be the same

without it, nor any other major metropolitan center. It may be presumed that, were these laws tightened, our socio-economic landscape would be grayer but more dispersed.

Although this discussion is aimed at large-scale regional effects, several intra-metropolitan effects must be mentioned. The tax break to homeowners, through the deductibility of mortgage interest and property taxes has been recently estimated by the Treasury Department as amounting to $5.7 billion annually, and undoubtedly influences the tendency toward single-family homes and low densities. The attribution of local school costs to local property taxes, and to some degree the costs of welfare, also shapes metropolitan areas by encouraging mercantilistic policies by local municipalities and other taxing districts to exclude the poor and the fertile young and to capture industrial and commercial activities. Within the central cities, the provisions of our tax laws, which permit indefinite multiple depreciations of old buildings and capital gains on their resale, undoubtedly affect the density of population, the maintenance of stock and its abandonment, and the rent levels which people must pay. The structure of our metropolitan areas reflects our tax laws much as English architecture reflected the window tax of the middle ages by having fewer and bigger windows.

It seems highly probable at this writing that we shall soon have some form of polluter's taxes, where an activity is taxed according to its contribution to the problem. It will make a great deal of difference to the distribution of regional development whether these taxes are at uniform rates at all locations, or whether they are graduated according to the severity of the local pollution problem. If uniform rates are applied, a firm has a choice of paying these taxes to compensate the public for the negative externalities it imposes, or of

incurring additional capital and operating costs to abate its emissions. But if the rates vary with the severity of the local problem, firms have a third option: to move to locations where the environment is less burdened and better able to regenerate itself. Many firms would relocate, especially manufacturing ones since they are heavier polluters than service sector enterprises and are less linked to metropolitan economies. The net result would undoubtedly be considerable dispersion of economic activity, much of it towards currently depressed areas. Earlier in this paper it was remarked that population dispersal policies are slow and inefficient instruments against pollution. But, conversely, it would appear that anti-pollution measures might be fairly effective population-dispersal instruments. Yet, although this result would increase interregional equity, its costs might be borne to a large degree by the working classes in the metropolitan areas, who would lose many jobs.

Local differentials in pollution taxes might be expected to have further consequences. Where population densities are low, automobile emissions are not a serious problem, so that using pollution taxes as disincentives against cars makes no great sense. Should taxes on automobile emissions be high in the large urban areas and low in less dense ones, it would confer a relative advantage to these latter. Within metropolitan areas heavy taxes would be a strong incentive to switch from the automobile to other forms of transportation, and this would modify the grain and structure of urban settlements.

Examples of implicit policies can go on and on, since the point being made is that virtually all federal policies have territorial consequences. Or, put another way, that the territorial distribution of our population and our economy is the projection on the geographic

plane of our socio-economic system. A few more instances will be given in the following pages, without trying to be comprehensive, and some suggestions will be offered in conclusion.

The United States has been engaged in major wars in Asia for the greater part of three decades. That this has had a major effect on the development of the West Coast is so obvious it is often overlooked. The point need not be labored, except to stress its magnitude: with the possible exception of the continuing agricultural revolution, it is probably the most significant factor that has affected the distribution of people and activities for the past one third of a century. Similarly, the decision to put a man on the moon has had profound consequences for Houston, for Florida, for Cambridge and Palo Alto, and for many other localities. The effect of this can be glimpsed in Table 1, where defense payrolls, defense contracts, and space research and technology are so large and so concentrated in the fastest growing counties that they alone account for the fact that federal expenditures are most concentrated in the fastest growing counties. Symmetrically, the winding down of the Asian war and the de-emphasis of aerospace account for the pockets of depression currently resulting in many of these areas.

Yet federal expenditures in certain localities do not always result in straightforward local benefits. It will be noted in Table 1 that water transportation federal expenditures are concentrated in the central cities of metropolitan areas to a degree unmatched by other expenditures in the table. A great deal of this has to do with the modernizations of ports for the new technology of containerization. Yet this is a mixed blessing for those central cities. To be sure, construction expenditures add temporarily to the income of the area. But in the long run the effects may be quite different. Since the goods

are boxed, a great deal less labor is needed per ton or per dollar. Thus, direct employment for port activities will fall. The opportunities for break of bulk and additional transformation at transshipment activities are greatly reduced at port cities. These activities tend to move inland, together with the preparation for shipment, closer to the sources or destinations of goods. On the whole, the modernization of shipping takes away from the importance of the ports and gives added importance to inland productive locations. As a further complication, the present economics of this technology result in the by-passing of secondary ports and the concentration of shipping through primary ones.

Comparable to this effect is that of the tendency toward larger and faster passenger aircraft. This tendency arises not only from the logic of the aircraft and airline industries in the private sector, but also from a complex interplay of governmental defense and procurement policies. The logic of faster and larger aircraft is heavier volumes, longer runs, and fewer stops. Consequently, the direction of this effect is concentration towards the principal urban areas, especially for those activities, such as management, marketing, and technology, that require interpersonal contact.

The effects of the developments in water and air transportation will be comparable in the magnitude, if not necessarily in the direction of their effects, to those of the massive highway developments of the last two decades, which are generally thought to have been of profound significance for the distribution of economic activity and the movement of population.

Transportation and communication are also strongly affected by regulatory commissions, which to a very large extent set up the rules of the game. Their decisions as to pricing and the conditions of supply

by the industries they supervise strongly influence regional development. An obvious instance of this is the matter of fuel oil for New England. These commissions seek to be even-handed and judicial, and are generally unmindful of the territorial or regional development effects of their decision.[6] Clearly decisions and practices of the commissions that deal with interstate commerce and transportation have been most important for the distribution of manufacturing. It may be expected that the decisions of the Federal Communications Commission will gain in importance for the distribution of economic activities. Manufacturing has become a relatively stable sector in terms of national employment, and most national and regional economic growth is based on the expansion of the service sector. The service sector, in such areas as insurance, inventory, management, government, is not only growing but becoming more like manufacturing. By standardizing information and routinizing its handling, it can ship data and ideas as if they were things, and employ semi-skilled labor to process them. The locations of such activities have come to resemble more closely those of manufacturing, leaving the large urban centers in search of other advantages. The extent to which they will do so will depend to a large extent on how the new technologies of data transmission are organized and on the pricing policies instituted, much as the distribution of physical production has depended on the structure of the transportation matrix. In some ways the almost exclusive concern of regional development policy with the location of manufacturing is fighting the last war. The distribution of the service sector looms as a larger factor.

The support of higher education and research has had dramatic effects for regional development in several occasions, of which Cambridge

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[6] See Federal Activities, Executive Summary, p. 5.

and Palo Alto are perhaps prototypical. The recognition of the catalytic effects of intellectual centers for regional development was one of the reasons for the adoption some years ago of policy of dispersing such support to many "centers of excellence." It would appear that this essentially regional policy has resulted in an "implicit policy" for the production of scientific personnel. The current glut of scientific manpower is being made harder to manage by the coming to maturity of Ph.D. programs in many second-rank universities, which had been supported under the "centers of excellence" policies. At the same time, the technology-oriented regional development in Cambridge and Palo Alto has resulted in localized depressions compounded from the national, general economic slowdown and the concentration of this slowdown within the technology sector. Yet in the long run it is obvious that the location of the knowledge-producing industry (which is largely supported from federal funds) is an important determinant of the location of some of the most dynamic sectors of the national economy.

One report mentioned earlier concluded that "investment in human resources...has little direct and demonstrable economic impact,"[7] and observed that "the Departments of Labor and Health, Education and Welfare are not greatly concerned about the economic development of localities in these programs. They are exclusively client-oriented. Hence, the funds go where client needs and demands are."[8] Yet education has a well known effect on the population of distressed areas: the higher the level of education of an individual, the higher are the chances that he will leave the area. Thus, education programs do not have a significant impact on the development of a distressed area if by this is meant the

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[7] Federal Activities, op. cit., Executive Summary, p. 4.

[8] Federal Activities, op. cit., Part I, P. I-17.

economic growth of the area. Yet they do have an effect by thinning the population, by providing those who leave with an opportunity for social mobility through geographic mobility, and possibly by reducing the competition for opportunities among the remaining population. These are strong territorial effects, although education is not a prime instrument for pinpoint development of poor areas.

Finally, national immigration policy strongly affects particular locations. Net civilian immigration accounts for one-fifth of national population growth. Miami will always bear the imprint of the Cuban inflow of the past decade. San Francisco has strongly felt, in its Oriental population, the consequences of the liberalization of the ethnic provisions of the law. Southwestern agriculture is strongly affected by the treatment of permanent and temporary Mexican migration. Although the rate and composition in migration has been as strong a force as any for molding the regional structure of this country, and continues to be a considerable one, it appears to be one of the least studied from the point of view of general national domestic policy.

CONCLUSIONS AND RECOMMENDATIONS

We have argued that our society and economy are a highly interconnected system, of which the geographic distribution of population and economic activities is only one aspect. Direct policies to modify this geographic distribution have been generally ineffective and sometimes counterproductive beacuse they have underestimated or misjudged the connections among elements of the system along dimensions other than the geographic. Conversely, many policies and public actions whose main thrust is not territorial turn out to have strong geographic consequences which are normally not considered. From the point of view of distribution, these are "implicit policies."

In the case of direct and semi-direct policies, it is possible to conceive of increasing coordination of programs and clarification of objectives. Substantial efforts in this direction are being made, including the formation of the President's Domestic Council, the formation of Regional Commissions, the redesign of federal administrative districts to increase the congruence among them, efforts to make federal agencies more cooperative with each other, with local agencies and with the public.

But in the case of implicit policies it is neither realistic nor desirable to force them into formal regional coordination. The geographic distribution of consequences are only one consideration for these, and usually not the main one. It would seem more appropriate for these to have a form of indicative planning that would stress information as to national geographic consequences of current or contemplated

national policies and programs for these issues. Geographic distribution cannot be the unifying theme of all national policies. What seems possible is to improve the level of awareness by the public and policy makers of the geographic consequences of actions which are not primarily geographic in intent.

In practice, this function has been carried on largely by Congress, which is organized on the basis of geographic representation. Many of the instances of implicit policies which served as illustrations in the pages above were in fact shaped by geographic interests in the process of their formulation. Yet this has been too often done on the basis of shifting political alliances, short-sighted perceptions of interest, and not uncommonly with an incorrect understanding of consequences.

Title VII of the National Housing Act directs the President, using the capacity of the Domestic Council to gather and analyze information, to present to Congress every other year beginning in 1972 a Report on Urban Growth. The language of the Act suggests that this report would focus primarily on direct policies. This seems appropriate in that the President, as Chief Executive, presides over the diverse direct programs and is responsible for their appropriateness, effectiveness, and coordination.

Yet we have noted the special relation of a territorially organized Congress to implicit territorial policies. It would appear useful to have an agency less directly linked with the executive branch which could report directly and frequently to the Executive, to Congress and to the public on territorial problems and on the implicit territorial consequences of diverse national policies. This would include analysis of proposed policy and pending legislation of regulatory commission

decisions, and of administrative practices in the implementation of existing legislation. It would also include longer-range studies of the consequences of long-standing policies and of emerging problems, and surveys of public preferences and perceptions of problems, including the canvassing of preferences and opinions of diverse citizen groups and public agencies. This agency would emphasize implicit policies, and thus complement the President's Report on Urban Growth.

Although the establishment of such an agency might take many forms, from a division of the Office of Management and Budget to an expansion of the role of the Urban Institute, it is worth noting that under Section 703(c) of the Housing Act, the President is empowered to establish an advisory board, composed of scholars and federal, state and local officials, to assist in the preparation of the Report on Urban Growth and any supplementary reports. Such an advisory board, if established on a permanent basis and supported by a permanent staff, might be able to perform the indicative functions of analysis of problems and of the consequences of policy. It is clearly important that the funding of this agency be general and long range, since its purposes are evaluative and its functions may at times be those of criticism. Obviously, such an agency could not maintain its integrity if dependent on grants and contracts which thrust it into a client relationship.

The beginning of this paper stressed that our present understanding is poor with respect to ongoing processes, to the definition of problems and of policy objectives, and to the consequences of diverse public actions and policies. Under these circumstances, mechanisms to facilitate the process of social learning are urgently needed rather than master plans. The proposed agency would aid this learning process, both directly and by stimulating a new awareness of territorial issues throughout government and society.