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A CITY PLANNER LOOKS AT THE URBAN EXPLOSION

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I BELIEVE it was Mark Twain who observed that everyone complained about the weather, but no one did anything about it. The urban explosion is in much the same position as the weather: most everyone complains about it, but little effort is made to cope with it systematically. To be sure, there have been many umbrellas raised, and a few suburbs have gone so far as to install central heating and air conditioning. But, at least in Metropolitan Boston, no fundamental efforts have been made to control the explosion rather than just gain protection from its worst effects.

Despite this, it seems to me that the urban explosion is in one major respect quite unlike the weather: it can be controlled; we can do a great deal about it. Rather than resorting to protective devices we could, if we wished, guide the explosion so that it would be beneficial rather than harmful.

Let us look at the existing situation, and at the phenomenon which we call explosion.

Metropolitan Boston is defined in many different ways, including anywhere from 43 to more than 100 towns and cities. The area that has been "Tracted" and for which census data has been reported by Census Tracts includes 90 cities and towns, with a total of 471 Census Tracts, averaging about 6,000 persons each. It is that area to which I refer when I use the term Greater Boston.

Greater Boston had a population of two-and-a-half million in 1950; according to preliminary Census figures the 1960 population

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was 200,000 more, or about 2¾ million. If growth continues at the same rate—a not unlikely assumption—the population will reach 3¾ million by about the turn of the Century.

During this period at least half of the existing physical plant—houses, schools, factories, etc.—should have become recognized as obsolete and thus have been replaced: certainly a half-life of 40 years is not unreasonably short for a modern city. On this basis then, by the year 2000 nearly two-thirds of the physical plant will have been built since 1960: half of what is needed to accommodate the present number of 2¾ million people, plus all of that needed to provide for the additional one million of net increase.

If we think of redesigning Greater Boston, with 2/3 of it new, the possibilities become amazing. From the planning viewpoint, these possibilities are very real. We could get virtually any kind of environment, any basic urban pattern, any distribution of land uses and transportation facilities we wanted. Only two basic qualifications enter the picture: first, we would have to decide what we want; and second, we would have to demonstrate a willingness to work together to carry out these decisions. These are major qualifications. However, they should not be hard to meet, especially if we recognize that the omni-present stumbling block—money—is not an obstacle in this case. By and large the differences in costs would be negligible.

We are going to build all the major facilities anyway. Regardless of what kind of pattern we choose, it will cost only a few percent more, or less, than what we would normally spend. The distribution of costs might vary appreciably; more for apartment-type construction and transit in one scheme; more for land services and highways in another; but the grand total will be little affected, irrespective of what scheme we select. There is only one difference in cost which appears likely: if we work concertedly toward pre-conceived goals we will probably spend less than if we drift along an uncharted and probably wasteful course. So that, whether we spend more or less than would be "normal," we could logically expect to get more for what we do spend.

What are some of the patterns for Greater Boston which we might hope to achieve in the next three or four decades? The possibilities are almost limitless, but I will mention four basic, and widely divergent types.

1. *Suburban Sprawl.* This is the pattern toward which we are

now evolving, in an unsystematic way. We could continue: to disperse our employment and shopping centers along Route 128, the datials outside of 128, and even a new circumferential such as Interstate Route 495; to scatter single-family housing on ½-to-2-acre lots throughout the region; and replace the obsolete housing in the built-up areas with apartments for childless families, with about the same number of dwelling units, but appreciably fewer persons per net acre. There is plenty of land to do this within the 90-town area, and still leave reasonable reserves of "open space." Unless something spurs us into following some other course, I predict that this is what will have happened by the year 2000 (except that we may have failed to preserve a respectable amount of open space).

2. *Recentralization.* We might elect to plan for recentralization —for concentration of most major regional facilities in the central core, and for clustering most residences within a reasonable commuting distance of this core. Such a policy could easily allow a significant fraction of industrial employment to remain decentralized, but it would necessitate development of an expanded radial rapid transit system—say from six to eight points on 128 to the central core. The core and principal intown slum areas could all be redeveloped for central employment—office, trade, government and some manufacturing; and outside of this the residential areas would decrease in density with distance from core or transit station. Such a pattern could contain virtually all the assumed development within Route 128.

3. *Segregated Concentric Pattern.* This would be only a relatively minor modification of the present trend in the direction of: (a) a relatively strong central employment core, probably supported by somewhat improved rapid transit; (b) an inner band of relatively high-density housing, accommodating anywhere from half to 90% of the population, and from which the workers commuted either inward to the central core or outward to the middle band; (c) a middle band of employment and retail trade centers, roughly corresponding to Route 128, and accounting for something like half of the "activity" of the Metropolis; and (d) an outer band of low-density housing, averaging an acre or more per family, and oriented economically toward both the middle band and the central core. Such a pattern could eventually, be augmented by an outer circumferential of employment, activity centers, and higher-density residence, in some such location as Route 495; but there is adequate space to accommodate a

population of 4 million, in such a segregated concentric pattern, without necessitating development of the outer circumferential.

4. *Satellite Pattern,* The pattern for the year 2000 could be essentially a core of about the same size and density as the present central area, plus a constellation of satellite communities separated by generally low-density residence and open space. Such a polynucleated metropolitan area might well include: reduction of the population inside Route 128 by some half-million people, to give more open space and low-density residence and industry; development of ten or a dozen cities the size of Framingham, or Brockton, or Lynn, spaced half-a dozen miles apart, and from one to ten miles beyond Route 128. Each satellite could be clearly separated by greenbelt from its neighbors, and each could be relatively self-contained for most economic and social activities: but a system of expressways could inter-connect all so that frequent trips, and even daily commuting, would be quite feasible between any two points in the complex. Rapid transit from each satellite to the central core might be desirable, but the amount of inter-satellite travel would probably make it unnecessary. All residents living under strictly urban conditions could be within a couple of miles of rural-like surroundings. All families with children could, if they so desired, live in single houses on relatively large lots (½ Acre to 1 Acre).

There are many other, perhaps much more desirable, patterns which could be devised, and brought into being. Those above are all very real possibilities. We can have any one of them, or any other equally tangible pattern, if we wish to plan for it. As for me, I choose the satellite pattern; and I'll tell you why.

The Case for Satellites

The past century or more of urbanization has witnessed a continuing struggle to reconcile the advantages and disadvantages of the intensively urbanized area. Most of the arguments seem to fall into two categories: (1) the advantages of the big City stem from the variety of opportunities, facilities, and social and economic choices it can afford; (2) the disadvantages stem chiefly from the crowded, non-natural, anonymous environment of the large, amorphous urbanized area. The paradoxical question has recurred: how can we capture the advantages which can be supported only by really large numbers of people, without losing the intimacy, human scale,

easy access to light, air, and nature which characterize the small town? The flight to suburbia has been the answer for those who had the means to make that choice.

Since World War II the numbers who have elected to flee the centers of all our great metropolises have been phenomenal. The result adds up to one simple fact: we have become a nation of suburbanites. In order to get the variety and choice of jobs, shopping facilities, cultural and recreational opportunities that only a large population can support, we have—millions of us—elected to live in suburbia and commute many miles and many quarters-of-an-hour to enjoy virtually all these benefits.

Let me cite a few statistics about Greater Boston:

More than half of all Census Tracts lost population between 1950 and 1960.

Of those that lost population, 85% are tracts having dominantly multifamily housing; the remaining 15%, though not dominantly group housing, are old, inner suburban, transit-oriented areas.

Of the Census Tracts which gained population, nearly three fourths were dominantly single-family suburban in 1950, and still are.

All of the net growth of 200,000 persons between 1950 and 1960 can be accounted for by 40 rapidly growing Census Tracts which were, in 1950, relatively undeveloped, inexpensive land in the fringe areas.

Except for publicly subsidized housing, about 90% of all new units built in the area since the end of World War II were single-family units, intended for owner-occupancy.

There have been some relatively strong influences, such as tax policies, which have influenced this marked trend toward suburbia. But I believe that it reflects, to a very significant extent, consumer preference. If this is the case, why do I recommend satellites rather than "suburbia unlimited"?

It seems to me that the same social and economic processes which have made it possible for the wage-earner to own his own home in suburbia have also made it possible for him to gain the same advantages, and more, in well-planned satellite communities. He can live next door to small green space, and within a mile or two of green belt; he can have most of his daily and weekly needs,

including his work, within a couple of miles; and he can be in a situation where it is easy to get to the central core to satisfy the occasional needs which can be satisfied only in the central core: he can get all of these as well in the satellite community as in typical suburbia. And he can also get a variety of housing, easy pedestrian access to many daily activities, a wide variety of social contacts, and efficient provision of the whole list of urban services and facilities in the satellite to an extent that is virtually impossible in typical suburbia. Suburbia is fine when you live in a small, relatively compact community surrounded by much open space; or it is eminently satisfactory to some who enjoy the solitude of the 2- or 5-acre lot, with an auto trip for every outside contact. But suburbia loses its allure when the whole area is built up to 10,000 sq. ft., or even 30,000 sq. ft. lots. It is neither urban or rural—it is just a neutral gray.

One more advantage to the satellite pattern, implicit in what was said above, is worth special emphasis. The satellite pattern offers truly desirable living conditions to the entire cross-section of our society in a way that has not seemed possible under our present patterns. Increasingly we have tended to divide all society into two great groups: (1) families with children, who shall live in suburbia; (2) families without children, who shall live in central-city apartments. To accentuate this segregation is not only basically unkind to such significant minority groups as the aging and retired persons; it is also folly because of the way it breaks up natural social contacts and stratifies the social and economic burdens of our communities. To me this is a major, not an incidental, reason for redesigning our metropolitan areas to provide for a more intimate mixture of basically different housing types. I think the satellite pattern is the best way of doing this.

Thus far I have talked very freely about the satellite without defining it. I have not defined it because I believe the term can embrace a great variety of communities. They must all, however, satisfy at least two criteria: (1) they must comprise a variety of housing types and densities and a nearly complete set of community facilities and services: shopping, churches, libraries, entertainment and recreation facilities, some basic employment, and if at all possible a relatively autonomous governmental organization; and (2) they must be small and compact enough so that they incorporate green

areas within easy walking distance of all parts of the compact area, and so that large-scale open space is never more than a mile or two away. As long as these two criteria are satisfied, I think it unimportant whether the satellites contain only a few thousand families—though small ones tend to be economically inefficient—or whether they have populations of 100,000 or more. Once they exceed 100,000 by much, they tend to get too large to satisfy open space requirements readily, and perhaps get unwieldy socially and politically.

Bringing About the Satellite Era

Supposing we do want to guide our future development in the direction of such a satellite pattern—or in any other predetermined direction—how do we go about it? I shall make three specific suggestions, just by way of illustration, and one more basic general proposal.

First, we must integrate the various components of our transportation plan with each other and with the land use objectives we have established. Once our basic transit and highway systems are designed to serve and encourage the land use pattern we desire, much of the development will quite naturally and easily fall in line. Our transit system and our expressway will, especially if they are designed to complement each other, constitute a skeleton which will do much to determine the pattern of future land use and activities. If we recognize fundamental design objectives, rather than just current demands, we can utilize these systems to help obtain the future patterns we desire.

Secondly, we must sharpen up our old tools, and acquire some new tools to help us in guiding land use. Traditional zoning, applied uniformly to each individual lot, has tended to produce stultified patterns. Over-segregation of use, subdivisions of uniform lots and houses, "class zoning" have been all too common. "Cluster zoning," development districts, etc., seem to offer opportunities to apply zoning regulations at a larger and more fundamental scale, and thus allow good plans and variety in a way that is now inhibited by most zoning laws.

At present we have very little experience with preservation of open space, except through direct acquisition. Many communities seem to believe they can preserve open space through the device of

large-lot zoning; but this appears to be more an illusion than a reality. Further techniques must be developed, and widely applied, if our environments are to incorporate the amount and patterns of open space that generally recognized as both desirable and functionally feasible.

Thirdly, we must learn to integrate more closely our utilities planning with our land use planning. Obviously, there are varying optimum or minimum sizes for lots, depending upon the types of public facilities (water, sewerage, sidewalk) which serve those lots—however much "standards" may vary with either local taste or conditions of soil, topography, etc. Yet it is only the rare set of planning controls which currently recognizes these variations, and the fundamental inter-relationships between these two elements of the total planning picture. Greater recognition of these relationships would make possible more efficient planning for whatever types of settlement we desire, and would also afford an additional opportunity to guide development in the directions we want to take.

Metropolitan Planning

All these objectives and all these tools will be relatively useless, unless we have a metropolitan planning program to integrate planning policies and objectives for the region as a whole, and to express these policies in the form of meaningful land use, circulation, open space and utilities plans. It is impossible for the municipalities, independently, to plan their future development along lines that make maximum sense for the region as a whole. It is inconceivable that we could have an integrated effort to envolve the kind of metropolitan environment we want, unless there is an over-all program, a Metropolitan planning program, to articulate our objectives and outline the major steps toward their attainment.

Thus far Boston has experienced many serious attempts to get a bona fide Metropolitan Planning program on an operational basis—but without real success: The Boston Contest and the Greater Boston Development Committee of the mid-forties; the Boston College Seminars and associated research endeavors; the Greater Boston Economic Study Committee: these are all noble efforts to fill, through one or another type of private auspices, the gap which exists in our governmental planning structure. But not

until we have established on a functioning basis an official Metropolitan Planning Agency, responsive to the municipalities throughout Greater Boston, can we expect to concentrate our efforts systematically on building the kind of future environment we really want. Metropolitan Planning is a realistic way of "doing something" about the urban explosion.