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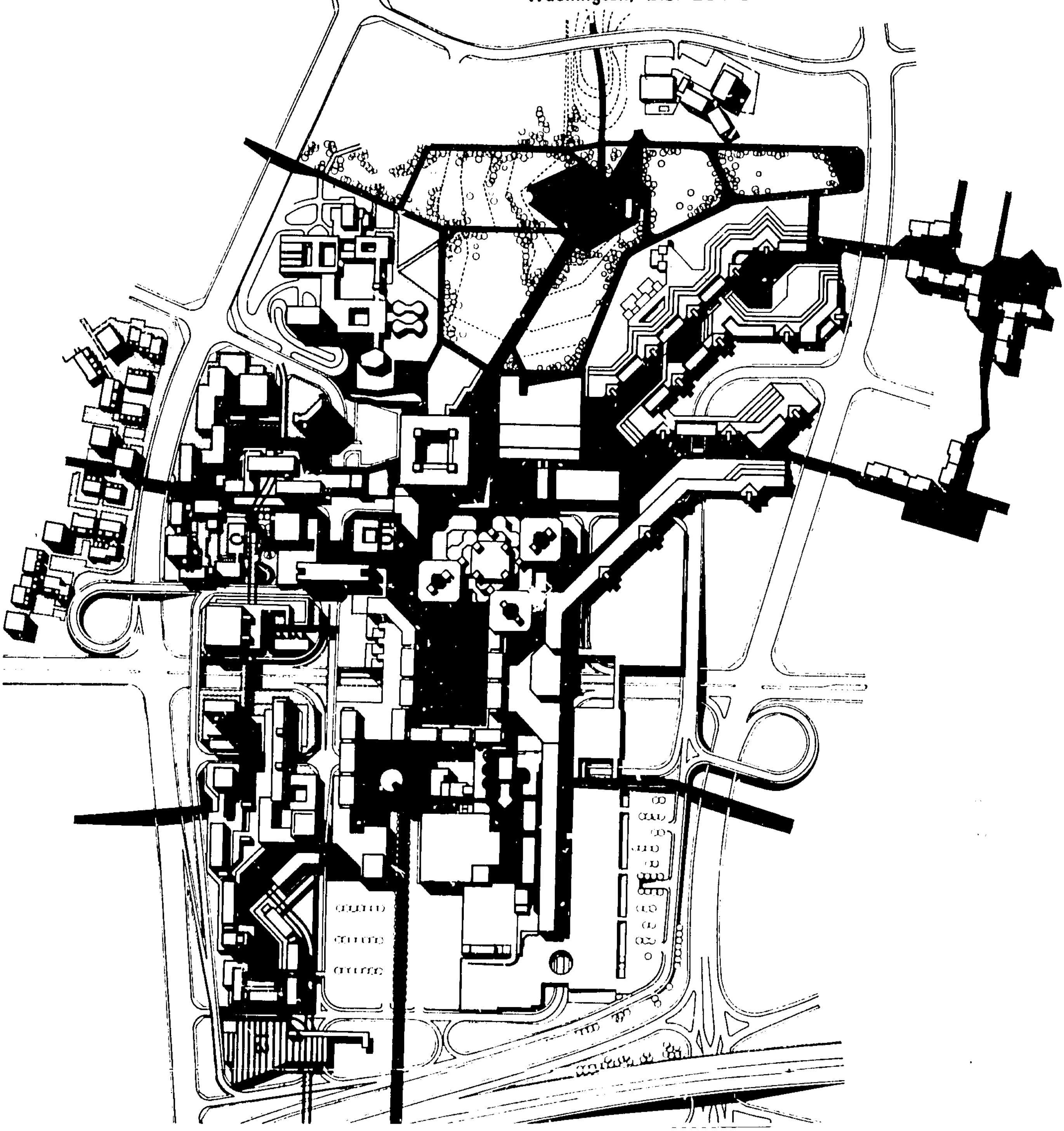

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F O R E W O R D

The information included in this report was abstracted from national papers prepared for the Sector Group on the Urban Environment, Organization for Economic Cooperation and Development (OECD), Paris, France.

The Office of International Affairs, Department of Housing and Urban Development, presents this summary of some European and U.S. experience in the financing of new communities in the interests of the dissemination of information on a subject of current interest throughout the world. The material presented does not necessarily represent the views of the Department, nor does it imply an endorsement of the policies of other nations.

The report was prepared with the assistance of C. Kenneth Orski, Head, Division of Urban Affairs, OECD.

CONCLUSIONS

1. Arrangements and procedures appropriate to the financing of planned communities will inevitably vary in different countries, depending on the legislative, administrative and financial background in each country. A number of factors can, however, be identified that are of general relevance and from which conclusions can be drawn.

2. Finance on an adequate scale for the whole project, whether from public or private sources, should be assured or firmly in prospect before a planned community is launched.

3. A number of different sources of finance - Departments of Central Government, public utility undertakings, local authorities and other public and private bodies - will normally be involved. The division of responsibilities between these various sources and arrangements for co-operation between them and for the timely availability of funds by all concerned, should be clarified to the maximum extent possible at the outset.

4. In order to insure that decisions to proceed with planned communities are taken in the knowledge of their financial prospects, economic appraisals should be undertaken to establish their economic viability, taking account, of course, of any concessions or other special financial conditions that may be applicable. Financial objectives and investment criteria should be defined and appropriate mechanisms developed to enable financial performance to be monitored, and investment controlled throughout the period of development of a planned community. In this context existing legal, administrative, financial and institutional arrangements may need to be reconsidered and modified. So too may existing management and accounting procedures and techniques.

5. Suitable investment and financial control machinery will also be of importance from the point of view of assessing comparative financial benefits between particular projects, and in relation to different phasings of development.

6. The importance of adequate arrangements for, and a coherent program of, acquiring, preparing and developing land should be recognized. To this end the adequacy of existing legal and administrative measures and practices should be considered so as to insure the supply of the land required at levels of compensation that are reasonable and on disposal terms that are appropriate in relation to the development envisaged. The need to retain long-term control so that land utilization does not run counter to the overall aims of the planned community should also be born in mind.

7. Close cooperation between the various sources of capital, whether public, semi-public or private, should be encouraged as the basis of developing planned communities. It should, however, be recognized that the most appropriate form of cooperation in a particular case will depend on numerous factors, in particular the legislative, administrative, financial and fiscal background and current Governmental policies in the country concerned and the geographical location and role of the planned community.

8. The substantial public sector investment in a planned community can generate increased values throughout the community. Special measures may therefore be required to insure that part of these increased values is drawn off for the benefit of the public sector.

9. In order to maximize the use of financial resources for planned communities, continued research is necessary. The interchange of research results between different countries is highly desirable.

10. This paper relates specifically to the development of planned communities. Many of the points made, however, are relevant also in relation to other urban development.

11. Whatever the legislative, administrative, and social background, and whatever the objectives in view, the satisfactory resolution of the special financial problems that arise in connection with the development of planned communities is crucial to their successful realization.

FINANCING PLANNED COMMUNITIES: AN OVERVIEW

Most towns and cities the world over were built where conditions augured a profitable future for both settlers and developers. Planned communities,[1/] by contrast, usually are sponsored for other objectives. Some, such as Brazilia, Canberra, and Washington, D.C., were constructed as national capitals outside the orbit of competing cities. Others, such as the first generation of new towns around London's periphery, were built primarily to absorb "overspill population" from congested metropolitan centers, or, as with Stockholm's new suburbs, to shape the area's urbanization patterns. The early farm settlements of The Netherlands were part of an agricultural development program, and some, such as the new towns of Germany's Ruhr district, to diversify the economic structure of a rapidly industrializing area. Moreover, essentially non-economic considerations -- such as the desire to escape environmental pollution and urban ugliness -- have provided the rationale for experimental planned communities such as the French new town of Le Vaudreuil.

Nevertheless, evidence from many OECD member countries indicates increasing concern over certain unromantic but crucial economic questions. Do planned communities require a public subsidy? If so, who will reap the benefits and who will bear the costs? And how can planned communities be created as economically as possible, within the constraints of the non-economic objectives which are their goals? This latter question points up immediate, practical issues of public policy. Given scarce public resources and the large investments that planned communities require, should governments seek ways of involving private enterprise and capital, and if so, how and to what degree? Under what conditions can government financing for planned communities be deemed desirable?

The Economics of Creating Planned Communities

The economics of planned communities are the same whether they are created by public authorities, private developers, or some mixture of the two. From an economic point of view, planned communities constitute a special form of land development where the approach is to buy land cheaply, enhance its market value, and sell it more expensively. The profit produced depends upon:

- Spread between buying and selling prices.
- The cost incurred to improve the land (including costs of servicing the site, providing amenities, and paying for carrying charges).
- Pace of the development process.

1/ "Planned Communities" are difficult to define with precision since the concept varies considerably from country to country and embraces developments with considerable variation as to purpose, population, area, and financing arrangements.

Financial projections for proposed planned communities -- and the record of some now in operation -- suggest their long term profitability. Over the short term, the creation of planned communities requires the assembly of large parcels of suitable land, a large initial investment (e.g., a peak investment of U.S. $50 million or more), and a gestation period of perhaps 10 to 15 years from initiation to achieving a positive cumulative cash flow. Moreover, the risks involved can be considerable and short run returns on equity capital are either non-existent or extremely low. Finally, the creation of planned communities is an extraordinarily complex management process, in many ways comparable to the assembly of separately produced components for a rocket to the moon.

In theory, the potential drain on the developer's profitability (land assembly problems, heavy financing costs, and complex management) may be overcome over the long run by several economic advantages enjoyed by planned communities which are absent from smaller scale developments. There is the possibility of capturing within a single site almost all the significant increases in land value which arise from public and/or private investments. For example, developers of planned communities can "internalize" significant economic "spillovers" by capturing the rising land values generated by a major regional shopping center or an arterial highway. Moreover, developers may have an incentive to design planned communities so that spillovers from all parts of new development reinforce each other and stimulate land values to rise even faster.

Another advantage is the possibility -- through comprehensive planning and improved land use -- of creating a superior urban environment as a place to live, work, and play. To the extent that consumers increasingly desire an entire urban environment along with their home, creation of socially and environmentally attractive planned communities may be a critical factor to the development's commercial success.

There is also the possibility of reducing the costs of planned communities, whether through economies of scale (a centralized sewage disposal system), technological innovation (aggregation of a housing market leading to industrialized building) or the more efficient provision of facilities and services.

It is generally believed that there is no such thing as a purely public or private planned community. Assuming that this assessment is correct, the issue is really the <u>mix</u> between public and private sector investment, and the extent to which private enterprise and capital can -- and should -- be encouraged.

In a recent study of six English new towns as of 1961, it was forecast that:

> ... on completion the element of private enterprise would be on the order of 20%. With some of the more recent new towns, the proportion of private enterprise ... could rise to, say, 30-40%, and there is a general target of 50/50, in housing at least. In Cramlington (a new town being developed in

Northumberland by a public and private sector partnership) the element of private enterprise is certainly moving beyond that, but it has not reached 100%.1/

The extent of private sector participation is even greater in the case of Columbia, Maryland, where planning, financing, and implementation are being carried out almost entirely by the private sector. Aside from a State highway passing through the area (which had been planned in any event) and some limited Federal Government subsidies for low and moderate-income housing, capital for creating Columbia came entirely from the private sector. As of late 1971, the private developer provided almost $40 million (at no cost to the locality or State) in new roads, street lights, sewer and water connections, and underground lines for gas and electricity. Another $7 million was provided -- through a non-profit corporation supported by Columbia property owners who paid a annual fee in addition to county and State property taxes -- for parks, plazas, pathways, lakes, and public buildings. Since 1967, Columbia also produced more money for its locale than it had paid out for local services. The 1971 net gain was estimated at almost one million dollars.2/

Public and Private Planned Communities

Comparison of experiences in the United Kingdom and the United States is useful to emphasize some of the possibilities and problems under two very different approaches -- at least initially -- to financing planned communities.

In Britain, the premise since World War II has been that planned communities should be initiated, guided, and financed by the public sector, although much of the actual construction can be carried out by private enterprise. The central government embarked upon a National New Towns Program, which attracted international attention. Some 27 planned communities were built as of 1972, with an estimated total population of 1.5 million.

In the United States, an underlying premise seems to be that planned communities can -- and should -- be developed profitably by the private sector. Several large-scale tests of this premise (the planned communities of Columbia and Reston in the Washington, D.C. area built by the private sector) are well under way. The Federal Government, however,

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1/ Nathaniel Lichfield, "Problems of Obtaining Private Capital for New Towns," Private Capital for New Towns (Occasional Paper No. 28 of the Institute of Economic Affairs: 1969), p. 48. Calculations are based on Nathaniel Lichfield and Paul F. Wendt, Six English New Towns: A Financial Appraisal [to be published].

2/ Howard Research and Development Corporation, "The New City of Columbia: Some Facts and Figures about a New City's Growth," (Columbia, Maryland: October, 1971).

has only recently set out to encourage planned community development, and on a much more limited basis than in most European countries. The U.S. program relies primarily on private capital and enterprise and almost entirely on private sector initiative.

United Kingdom

In the United Kingdom, as A. J. Fairclough of the Department of the Environment points out, the 1946 New Towns Committee under Lord Reith came down firmly against new towns built by private enterprise and recommended public development corporations appointed and controlled by the central government and financed by long-term, low interest Exchequer loans. The rationale for this recommendation can be found in the Committee's report, and is worth recalling here:

> "We have carefully considered the employment of private enterprise as a possible (new town development) agency. While it is desirable to provide every opportunity for private development, we have come to the conclusion that in an undertaking of so far reaching and special a character as the creation of a new town, ordinary commercial enterprise would be inappropriate. Apart from the risks involved, both in matters of finance and in execution, such a policy would of necessity result in the creation of a private monopoly. And even to the promoters themselves, when it came to the point, we believe that the controls which the public interest would demand would render such a project unattractive.1/"

The resulting National New Towns Program reflected the Reith Commission's recommendation, with the public development corporation being blessed with favored financing arrangements from the public sector: 60 year loans from the treasury at interest rates only marginally higher than those paid by the government itself. Financing on these terms constitutes a considerable subsidy and a substantial cushion for development corporations in assembling land (through compulsory purchase powers) and when exemptions from ordinary statutory controls are taken into account. In contrast, a private developer in the U.K. enjoys none of these advantages and private new towns have not been encouraged.

However appropriate these arrangements may have seemed in the immediate post-war years, they have come to be questioned recently for reasons summed up in a 1969 Symposium on the subject of private capital for new towns:

> "Ministerial and departmental controls -- particularly over financing in times of economic stringency -- have been blamed for hold-ups, imbalance between different sectors of town

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1/ United Kingdom, Ministry of Town and Country Planning, Interim Report of the New Towns Committee (H.M.S.O., March, 1946), p. 10.

development, and cheeseparing on general amenities. Inevitably, the necessity for Exchequer financing and government control of this kind has begun to be questioned: given the ultimate prospect of a commercial rate of return on the whole investment, could not private initiative, enterprise and finance produce better results than the present system?1/"

For some years now, public officials in the United Kingdom have looked increasingly to the private sector for help in creating planned communities. In the mid-1960's, the central government introduced the concept that 50% of all New Town houses should be built for sale. This was followed shortly thereafter by extending the principle of 50% private participation into the industrial and commercial fields.

The first new town planned with the intent of attracting half its total investment in building from the private sector was Milton Keynes (designated in January 1967). Fxtensive private sector investment for industry and commerce are expected as a result of the new city's strategic location (about 50 miles northwest of London towards Birmingham, and mid-way between Oxford and Cambridge) and its existing highway and rail transport connections. Nevertheless, Kenneth Wren, Chief Administrative and Finance Officer of the Milton Keynes Development Corporation, reports that early surveys suggest that attaining the target of at least 50% owner-occupation may be somewhat delayed. The Corporation, however, is endeavoring to achieve its goal of 50% private participation, and is employing a number of new ways to achieve this end.

There are crucial differences in principle between the U.K. approach to involving the private sector and that used in the United States. In the U.K., partnerships between the public and private sectors for the creation of planned communities are undertaken with an understanding that, if there are any private profits over and above a normal risk rate of return, the public sector will have a share. The argument for doing so seems to gain special force in the context of planned communities, where the public sector has taken on the responsibility for promoting a better urban environment and has spent substantial sums -- or, at a minimum, has exercised public powers and planning -- for this purpose.

United States

In the United States, Columbia constitutes perhaps the most famous example of a planned community which has been created as a profit-making venture by a private developer unaided by the public sector, and in the face of unfavorable zoning. Designed for a total population of 110,000, Columbia reached a population by early 1972 of over 21,000 residents since the first families moved in some five years ago.

1/ F. G. Pennance, "Preface," Private Capital for New Towns (Institute of Economic Affairs Occasional Paper 28: 1969)

In contrast to most European experience, Columbia's development has been premised on the philosophy that private enterprise can do the best job. As Columbia's developer, James W. Rouse argued that a market-oriented approach need be no barrier to, and can form a sound basis for "the production of the best possible environment for the people." Moreover, the market mechanism and the profit motive may be the best way to match development plans and individual desires.

Nevertheless, the many serious problems confronting planned community development may prove too much for even the vigorous U.S. private enterprise system.1/ For one thing, the Rouse Corporation was obliged to assemble land through separate cash purchases, in secret, of 153 small parcels; and even then it was necessary to plan around some 20% of the Columbia site which the corporation was unable or unwilling to buy. Moreover, there are indications that Columbia's developer would be unlikely to undertake a comparable development again without public support.

The nearby planned community of Reston, in suburban Virginia outside Washington, D.C. became financially troubled in its early stages and required a sizable infusion of emergency funding from one of its original investors (the Gulf Oil Company), which also took over management of the development. The Reston experience suggests the sensitivity of a planned community's financial liability to surrounding market forces. Tight money or low sales (both of which occurred in the Reston case) can drive developers into trouble with cash flow. Reston also suggests the desirability of periodically revised management policies in response to market forces. With the Gulf Oil take-over, substantial changes were made in Reston's original plan with heavier emphasis placed on traditional detached housing (and less on town houses which had not been selling as well as anticipated), and a broader range of prices (with more in the lower price ranges).

Both Columbia and Reston were financed with private capital at a time when no government assistance for planned communities was available. Both, however, helped launch a new movement in the United States which ultimately charted the course for New Community Development, Title IV of the Housing Act of 1968 and its expansion in 1970, under Title VII

1/ A 1970 report to the Governor of New York found that the private sector had built some 85% of the state's housing since 1950, but concluded that, "private enterprise is finding it increasingly difficult to provide housing for any except upper-middle and upper-income groups. It faces even more serious obstacles in new community development to accommodate urban growth. Among these are: (1) difficulty and cost of land assembly; (2) unwillingness or inability to make the heavy investment required for improvements in facilities such as roads and sewers; (3) high interest rates and shortage of mortgage funds; (4) restrictions of local zoning and land use controls, and building codes; and (5) inability to achieve market aggregation and thereby utilize new building technology. See, New Communities for New York (a report prepared by the New York State Urban Development Corporation in the New York State Office of Planning Coordination: December, 1970), p. 37.

of the Urban Growth New Community Development Act. As suggested by its title, this second piece of legislation attempted to set planned communities directly into the context of an emerging urban growth policy.

The earlier 1968 legislation authorized the Federal Government to issue loan guarantees to private developers of planned communities. Developers could then borrow long-term private capital, either through private debt placements or public offerings of debentures, at lower interest rates than would otherwise be available. Guarantees for a single project were limited to $25 million with a total of $250 million for all loan guarantees. By mid-1970, some three applications for a new community loan guarantee had been approved.

Title VII of the 1970 Act extended this approach by doubling the ceiling on total loan guarantees to 500 million dollars and making public agencies, such as New York State's Urban Development Corporation, eligible for the loan guarantee program. Title IV also authorized Federal Government loan guarantees to cover all land acquisition and development costs incurred by government authorities for projects they sponsor, and 85% of the costs in the case of private developers. As of mid-1972, 10 new communities were approved for Federal guarantee assistance exceeding $226 million, and more than 70 applications or pre-applications for new communities were under consideration.

Planned Community Efforts in OECD Countries

Planned community efforts in many OECD countries are characterized by a division of responsibility between public and private sectors which recognizes a special role that each can play (by combining public initiative, land assembly and ownership, and planning with private enterprise and capital). The role of each sector and the balance between public and private financing are diverse, but the general approach to planned communities in France, Sweden, and Australia (specifically Canberra) can be summed up as follows: initiative in creating large scale urban developments should belong to public authorities and not to the private sector.

France

Planned communities in France are developed within the framework of national economic planning which has recently been regionalized. Separation of planning from financing would be somewhat artificial in the French contexts since the synthesis of the two has been one of the country's major planning achievements. Also of particular interest are several French plans for financing planned communities with mixed public-private investment.

The French government, despite its highly centralized form, develops its urbanization policies by stimulating local authorities and the private sector, not assuming their roles. Principal activities of the national administration include those of providing financial assistance, increasing the legal powers for local land use control, and the implementation of local plans. The important techniques for this purpose have been ZUP (Zone a Urbaniser par Priorité), ZAD (Zone d'Amenagement Differée), and ZAC (Zone d'Amenagement Concentreé). The latter is the technique now used for almost all French planned communities.

The ZAC (Concerted Development Zone) is a land assembly and development tool which replaced the ZUP as the primary development mechanism for planned communities in France. The procedure is very flexible and permits public authorities to adapt a ZAC to any particular case, depending on the stage of development of the planned community, the most desirable mix between public and private sector financing, and other factors. Responsibility for creating ZAC's, however, rests squarely in the public sector, and is usually exercised by the public corporation in charge of developing a planned community.

The types of development covered by the French technique use not only ZUPs, industrial areas, and urban renewal zones, but also areas intended for commercial use. Thus, ZACs are defined broadly as any area where the public sector wishes to carry out or has carried out the "development and equipping of land" for the purpose of residential, commercial, or service use, and the implementation of public or private facilities. ZACs are especially suited for the assembly of land whose development is subsequently intrusted by the public sector purchaser to another entity -- frequently private -- for development. A primary purpose of the ZAC is to achieve planned urban development where public sector resources are in scarce supply.1/ ZACs incorporate two significant changes from the previously used ZUP technique:

- The definition of appropriate developers has been broadened to include private, profit-oriented individuals and corporations, as well as the public development corporations covered previously.

- The initiative for creating a ZAC may come from the national as well as a local government. In fact, in exceptional circumstances, the national government may create and finance a ZAC over local opposition.2/

A major policy change under the ZAC regime gave private developers access to condemnation powers where they needed to assemble large sites for planned communities. Land acquisition proceeds in much the same manner as for a ZUP, except that a private developer with a ZAC concession cannot directly condemn land which cannot be acquired in the open market. However, it is important to note that a locality or its

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1/ France, Journal Officiel, January 3, 1968, Law No. 67/1253, of December 30, 1967, and decrees of December 3, 1968; April 16, 1969 and May 30, 1969.

2/ A third change, of less immediate interest here, is that administrative red tape is to be reduced with the decentralization of decision-making from Paris to prefets*for all ZACs having less than 10,000 dwelling units.

*prefects

development authority may condemn the needed land and transfer title to a private developer as long as the transfer price is at least equal to the condemnation costs plus expenses. This modification amounts to a major change in the ground rules governing urban development in France, with the role of the private sector being made both large and more explicit in public purpose urban development projects.

The French approach also shows how land development techniques can be linked to national and regional planning to enable establishment of priorities for central government financing of urban infrastructure in chosen sites for new development throughout the country. A corollary, however, must be that central government be willing to commit itself to such financing over a period of more than one or two years. The techniques themselves may constitute a serviceable administrative formula for facilitating planned communities, but only in the context of a central government commitment and a national system of priorities.

Sweden

Stockholm, the capital of Sweden, has had considerable experience in building planned communities since World War II. A wide-spread housing shortage made it necessary to plan and provide urban infrastructure and housing on a large scale. Central government, by offering legal and financial support for public housing, enabled the City of Stockholm to plan and build -- on city-owned land -- an extensive system of new suburbs. By 1970, 20 such units were completed.

Stockholm's strong local planning powers, combined with advanced land acquisition and a leasehold system were the principal tools in insuring public sector control over the pace and character of the city's expansion, and in particular, the development of planned communities. Although national and regional planning are now beginning to advance, municipal planning has historically been the major force in shaping provision of planned communities for the capital city.

Stockholm has pursued a large-scale, advance land acquisition program since the turn of the century. The program's scope is suggested by the fact that the city now owns almost three-fourths of the land within its present boundaries and more than 500 square kilometers (or about 2.7 times the current city size) in outlying areas. These land purchases were designed to insure the future availability of space both for housing and for leisure activities and recreation.1/

1/ In this connection, Stockholm has concluded agreements with several neighboring communities on cooperation and residential building. When the city builds on its land in other municipalities, contracts with the local authority must be concluded. Stockholm has 10 such contracts with four neighboring communities. In most cases, the land was already owned by the city; in some, however, the land was sold to Stockholm by the other municipality.

Advance land acquisition has also been coupled in Stockholm with a leasehold system, whereby the city parcels out the land it has purchased on long term site leases for public or private sector development. There are several potential advantages to Stockholm's leasehold system. Thomas Atmer of the municipality's planning department argues that the system:

- Enables the city to capture rises in land value.
- Gives the city continuous control over urbanized areas, making easier the provision of public facilities.
- Makes possible the reclamation of land for other purposes.
- Helps to prevent land speculation.

By mutual agreement, however, an advance acquisition program such as Stockholm's entails both time and money to be used to advantage. The heyday of Stockholm's advance land acquisition lasted from about 1900 to 1930, and public funds for this purpose are now increasingly limited.1/ Typically, the time horizons are long. For example, the 1912 purchase of a 645 hectare farm at Farsta was not actually developed until some forty years later.

Neither the advance acquisition program nor the leasehold system appear to have been used extensively in Stockholm to involve private developers in planned communities. Since World War II, private entrepreneurs in Sweden have acted as developers for a steadily decreasing proportion of the housing built each year, although almost all construction is by private enterprise. Generally, the private developer competes for land with the municipalities and cooperatives without the use of either one's capital resources. Because large scale development requires extensive municipal, provincial, and (for very large projects) central government review and planning approval, private entrepreneurs in Sweden may find building planned communities an unattractive venture.

Nevertheless, advance acquisition and leasehold need not necessarily imply public land development.2/ Development of Farsta's town center by a private consortium of five building contractors provides an example of how private developers can be encouraged to play a role in developing planned communities in the Swedish context.

1/ Advanced land acquisition was reinstituted after World War II but on a much more limited scale, and most recent acquisitions have been for parks, hospitals and other community facilities.

2/ For example, private leasehold estates have been used for large-scale urban development in the U.K. (Britain and Ireland), the U.S. (Hawaii), and elsewhere. For a discussion of the experience and possibilities, see, R. W. Archer "The Leasehold System of Urban Development," Town Planning Discussion Paper No. 17 (School of Environmental Studies: 1971).

Australia

The Australian capital of Canberra, provides perhaps the most extensive experience with a large-scale leasehold system. The city is typical in several ways:

- Canberra is being developed by the central government as the national capital and seat of government.
- The complete site is owned by the central government, and all private building is carried out on leasehold sites.
- The public sector has played a predominant role in all building since the beginning.
- The central government, as well as controlling the government of the city, is also the dominant force in the Canberra economy as the major employer (employing or funding 63% of the work force), as the major developer and as the major land-user.

Nevertheless, the Canberra leasehold system does offer lessons for other cities.

Planning and development for Canberra are based upon a public land and leasehold system whereby the central government[1] owns the land, carries out land-use planning, provides infra-structure, and then allocates fully-serviced sites for public and private building. Initially established in 1910 to assure central government control over development of Canberra, the public land and leasehold system has been used since the late 1950's for the special purpose of expanding the role of private enterprise in building the city. The accomplishments of this policy suggest that extensive building, investment, and loan financing can be encouraged from the private sector under a leasehold system.

Another advantage cited in Canberra's public land leasehold system is that it provides effective planning control over urban development and land use. Thus, the Canberra Planning and Development Authority:

> ... has direct control over the design and timing of land development because it carries out the road, water, sewer, drainage and land subdivision and servicing works. It is able to control and coordinate private building development, partly through its subdivision, design of building sites and its programming of site releases, and partly through

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1/ Acting through the National Capital Development Commission, which was established as the comprehensive urban-planning and development authority for Canberra. Control of the public land and leasehold system is shared between the Commission and the Department of the Interior, both under the Minister of the Interior.

designating the purpose clause and the building covenant for each lease. The purpose clause specifies the permitted construction time and the minimum building value.1/

Whether public authorities would wish to exercise such complete control, of course, is another question.

Another important lesson to emerge from the Canberra experience is the feasibility of a public land and leasehold system for financing urban development. Although provision of infrastructure was carried out at a loss in Canberra, revenues from the leasehold system did provide a major source of cash flow for financing these expenditures.

The three major advantages suggested by Canberra's public land and leasehold system are:

1. It provides the means for effectively planning and coordinating private (and government) building development while allowing the property market to work effectively.

2. It provides a framework for encouraging extensive private building development and private investment and loan financing. Thus, private housing can be encouraged by releasing sites at a cost of production price, with payment by an annual land grant or a single cash premium.

3. It allows the increase in land values generated by urban development (particularly for business sites) to be recovered and used to finance the land development and improvement works.2/

The above, however, are potential advantages -- not automatic features of any public land and leasehold system. The degree to which they are realized depends heavily on management of the system, particularly in basic matters such as leasehold tenure policies, land pricing, and "end-of-the-lease" procedures.

Some Policy Considerations

If public policy calls for planned communities, what financing arrangements are most appropriate in view of the large initial investments involved and the public interest inherent in their development? A careful answer requires comparison of public and private sector financing and leads to some suggested criteria for governments considering a public investment in planned communities.

1/ R. W. Archer, "Financing the Development of Canberra," p. 6. Archer adds, "the Commission also carries out most of the government building (including government housing, schools and offices) so that it has direct control of the design and siting and the programming of its building development."

2/ Ibid., pp. 13-14.

The Public/Private Sector Mix

Perhaps the most fascinating issue concerns the mix of public and private sector participation in the complex process of creating planned communities. For most countries, the present division of labor has grown out of historical conditions. In some areas characterized by an acute post-war housing problem and a scarcity of private capital, the combination of public need and anticipated risks for the private sector provided a strong argument for public sector financing and development. In other countries, where strong ideologies have historically favored private enterprise and a decentralized responsibility for development -- and where the potential profitability of planned communities seemed high -- private enterprise has been enlisted. However appropriate these arrangements were at the time, they appear in retrospect as more the product of historical accident than the result of a reasoned approach to the problem of financing. Accordingly, it may be appropriate to consider here some of the arguments for public and/or private sector participation.

Public Resources Required. Certainly the most common argument for encouraging private sector participation has been to save scarce public resources in the creation of planned communities. The realization that, "we have, temporarily at least, reached certain limits on what public investment can do ..."1/ stimulated the U.K. central government to encourage private enterprise to play a greater role. In the U.S., a main motive for the Urban Development Corporation financing mechanism -- whereby tax exempt bonds are tapped so as to afford maximum security for the investor at least cost to the State -- was the knowledge that New York State operates closer to the limits of taxpayer tolerance than is generally the case elsewhere.2/

A related reason for seeking private sector participation has been the desire to concentrate government attention on critical problems that only public intervention can solve.

Still another variant of this argument for greater private sector involvement may be to allow local authorities a more positive role in the comprehensive development of land within their boundaries. This appears to have been a major objective of French techniques such as the ZAC, for example. Cooperation with the private sector may be a means of realizing the goals of "local autonomy" interests for more resources and greater initiative on matters of immediate significance (e.g., housing and community facilities) than would otherwise be possible.

1/ William Deedes, M.P., in Town and Country Planning (January, 1970), p. 65.

2/ William K. Reilly and S. J. Schulman, "The State Urban Development Corporation: New York's Innovation," Urban Lawyer (Volume I, Number 2: Summer 1969), pp. 134-136.

Such an approach, of course, arises from the realization that local autonomy without financial resources may be a meaningless concept.

Nevertheless, saving public resources makes little sense unless the public interest in planned communities can be served. For private capital to be employed, the profit-making purpose of developers needs to be reconciled with the broader public policy objectives which planned communities should serve. The degree to which this can be done will depend in large measure upon the nature and extent of government participation. Experience from several countries suggests that extensive public finance need not be a condition for combining private capital and business objectives with broader government goals. There are several sources of potential conflict between public and private sectors, but imaginative and effectively administered partnership arrangements appear possible which would realize the public interest in planned community development <u>without</u> government commitment of substantial public funds.

<u>Comparative Efficiency</u>. Private developers, under certain conditions[1/] may also enjoy a comparative advantage over public authorities in terms of their ability to create planned communities rapidly, economically, and in response to consumer needs. These conditions, which could be required for planning permission, might well vary depending upon the public policy objectives which are deemed desirable to serve. Public developers, by contrast, may lack the motivation of a profit motive and thus suffer from inefficiency and sluggishness in an activity which should be dominated by imagination, vision, and aggressiveness. Public developers may also be hamstrung by government red tape, the need to seek annual appropriations, civil service regulations, and so forth.

There are arguments on the other side (large modern corporations with thousands of unorganized stock-holders and a management responsible only to itself may hardly have a strong profit motive), and there is probably

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1/ As R. W. Archer has suggested elsewhere, conditions could include that the private developer (1) owns the whole of a planned community site so that (a) he has a strong incentive to provide public amenities in order to capture the significant "spillovers" in terms of increased land values and/or sales, and (b) is in a favorable position to do so; (2) is required to meet the costs of additional public facilities which a planned community requires because of its location (so that he does not develop at the public sector's expense); (3) is required to ensure that every worker in the planned community has access to housing at a price he can afford (so as to discourage commuting to other employment centers); and (4) is subject to competing in an existing metropolitan market (so that to attract people and jobs away from other settlements he will have to offer inducements such as lower prices, higher amenity standards of additional attractions). See, R. W. Archer, "Private Enterprise New Towns in Britain: Experience, Potential and Policy," School of Environmental Studies, Town Planning Paper No. 14: March, 1970).

no clear-cut answer at present. However, the prospect that private developers can create planned communities more rapidly and efficiently than public authorities -- and that private sector participation is advantageous for its feel of what the market will respond to and can afford -- may itself be sufficient reason to encourage private enterprise to demonstrate the possibilities. Conversely, in countries where planned communities are predominantly private ventures, there may be strong arguments for experimentation with public sector developers. An answer to the question of comparative efficiency would require careful research to compare the results of different developers under various conditions.

Public Investment Criteria

Scarce public resources and the potential advantages of private sector participation are themselves strong arguments to encourage private developers in the creation of planned communities. Moreover, there are a number of new ways which might be explored to involve the private sector. In view of the variety of national administrative and financial structures among OECD member countries, there is probably no generally applicable formula for financing planned communities which can be identified at this time. But it does seem possible to suggest several broad criteria for guiding governments which are considering an investment in planned communities.

In drawing conclusions about the appropriateness of alternative financing arrangements for planned communities, it is useful to select the objectives they are designed to serve. Most government enterprises are undertaken as a means of performing a public service with certain broad economic or social gains to be made, not as a means of selling goods or services at a profit, or even at cost. In such activities one cannot be too concerned with whether public enterprise is proper, since probably private enterprise could not be persuaded to manage and operate the business on the same basis.

Priority Areas for Further Research

Financial and Fiscal Feasibility

The increasing importance attached to financial feasibility analysis for planned communities has been documented. Plans for Milton Keynes, for example, were influenced by financial analysis, including cash flow, in several significant ways.[1/] On a nationwide basis, the United Kingdom Department of the Environment intends to introduce a new system of management accounting to provide information on a proposed planned community's

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1/ The cost advantage of a smaller size road grid, for instance, was an important reason for adopting that system. Detailed financial appraisals were also undertaken for each of seven possible phasing strategies covering the first ten years of development and comparisons in both economic and planning terms were made.

financial feasibility, and the scale and timing of cash resources (both public and private) which would have to be deployed. This system would also permit a tighter monitoring of the performance of planned communities, and stress to developers the financial implications of changes in their plans.1/

In other countries, careful financial planning is considered a prerequisite to government support of privately developed planned communities. In France, for example, concession contracts permitting private development of a ZAC must be preceded by government approval of the potential developers cash flow projections and analysis. The U.S. Department of Housing and Urban Development requires the financial feasibility of a planned community to be documented before it decides to provide Federal assistance.

The fundamental purpose of financial analysis is to determine whether a planned community proposal (and the enterprise behind it) is financially sound and, if it is not, whether and how it could be done. An important step in the analysis should be to identify the sources which will meet the financial requirements during the development period.

At the present time, a number of financial models of planned communities are available to evaluate investment risk and return, and for subsequent use in measuring cost, revenue, and profit on a periodic basis. More needs to be known, however, about some critical "inputs" to these models (e.g., land acquisition prices, construction costs, and carrying charges) which in turn depend upon the relationship between a proposed planned community and the large regional economy which supports it.2/ As the Reston experience in the U.S. suggests, the financial viability of a planned community can be very susceptible to slight changes in these larger forces. An advance in the present state-of-the-art would permit better answers to questions such as, "Can a planned community be created at estimated costs and pace of development?" and "Will the market hold at the prices planned for sale and rental?" Answers are necessary

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1/ As a leading professional journal in the United Kingdom recently editorialized:

> "Performance criteria for new towns have been singularly lacking in the past, and this new form of accounts would enable the Department of the Environment to interpret the financial significance of characteristics of different new towns without invidious comparisons between individual results."

"The New Town Investment," Official Architecture and Planning (July, 1971), p. 511.

2/ A number of specific suggestions for research along these lines are contained in Real Estate Research Corporation, Economic and Financial Feasibility Models for New Community Development, A Report Prepared for the Office of New Communities, U.S. Department of Housing and Urban Development (Washington, D.C.: August, 1971).

for an accurate government appraisal of the overall feasibility of a proposed planned community, the possibilities for private sector finance (its potential profitability), and the degree of risk if public funds are to be committed.

A second area of analysis concerns the fiscal feasibility of planned communities. Can the additional costs to local government, which are caused by planned communities, be covered from the increasing tax revenues which would be generated? Given this question and the political problems attendant, the feasibility of a planned community may need to be evaluated from a fiscal point of view as well as from the financial. To date, however, such fiscal feasibility studies do not appear to be required prior to government subsidy in any OECD member country.

Private Capital for Public Purposes

There are a number of novel techniques for public-private sector participation in the financing and development of planned communities. More needs to be known about the comparative advantages of these arrangements both for involving private capital and enterprise and for realizing public purposes. In considering advance land acquisition, for instance, consideration should be given to the advantages (government income from land appreciation, a more efficient production of public services, and improved urban design and planning) accruing from land acquisition as a tool of public policy. Moreover, use of this tool may not be without its costs (the cost of borrowing, loss of tax revenues when land is taken out of private ownership, possible problems in attracting private developers), not to mention uncertainty as to future urban needs. A careful study of this tool should be designed to help governments evaluate these costs and benefits in making decisions about land investments for future needs.

Another example is the leasehold system. There appears to be merit in the system as a means of encouraging private sector participation, while maintaining control over land use and sharing in rising rents. Public ownership of land, however, may not be a necessary condition for land-use control, and there may be more equitable ways of raising local revenues.

A final case in point concerns the suggestion that wider borrowing powers be granted to public corporations which develop planned communities. An alternate approach may be to extend some of the statutory and financial advantages enjoyed by public corporations to private developers who are willing to create planned communities under conditions which would satisfy the public interest.

The Public Interest in Planned Communities

Implicit is the assumption that planned communities are in the public interest. This assumption begs for analysis. One of the most salient issues -- that of comparative costs -- may be suggested here.

Data from the most mature national new towns program among OECD member countries -- that of the United Kingdom -- do not support the conclusion that planned communities are cheaper (either in total resource costs or public expenditure terms) than the creation of corresponding facilities by other means, either within or on the periphery of existing towns. Nevertheless, there would seem several prima facie reasons for expecting that public facilities could be provided more efficiently for planned communities than for unplanned and smaller-scale developments. Some possibilities (economies of scale and the encouragement of cost-reducing innovations) have been already mentioned. Planned communities may also make possible an improvement in standard governmental services -- such as sewage disposal, water and transport -- by exploiting the ability to locate services and the people to be served in an efficient way. Stockholm's planned communities provide an illustration of services being provided of a quality not otherwise possible such as, transportation and utility systems related efficiently to residents, and wooded areas for recreation surrounding each community. Finally, planned communities may make possible some services which otherwise would not be feasible -- low income housing, for example.

There are, of course, additional "costs" which may be associated with planned communities (among which are the added costs of assembling a large site; comprehensive planning and management for many land uses, financing the high initial investments; and meeting broader objectives such as low income housing and location away from existing metropolitan centers). Admittedly, there would be numerous theoretical and practical difficulties in carrying out such research. Still, if there are reasons for thinking that planned communities are less expensive to build and maintain than other forms of urban growth, then the enormity of research which needs to be done should not be used as an excuse for abdication of responsibility.

THE NEW YORK STATE URBAN DEVELOPMENT CORPORATION

. . . A Para-Public Corporation for Financing New Communities

by Edward Logue

Urban Development Corporation, New York, U.S.A.

Statutory Powers

On 9 April, 1968, the New York State legislature completed passage of the Urban Development Corporation Act. On the following day, Governor Nelson Rockefeller signed the Act into law, and the Urban Development Corporation (UDC) became a reality.

When UDC opened for business on 1 July 1969, it had a mandate to combine public and private energies to help renew New York State's cities and towns and assist in the orderly growth of new urban areas. In so doing the State was to help increase its stock of low and moderate-income housing, help alleviate unemployment, revitalize industry, and expand community facilities, all in cooperation with local communities.

New York State had a statute, the foundation for a unique development system. Specifically, it provided for:

- Statewide Jurisdiction. Too often public urban development programs in the U.S. stop at the city or town line. It is believed that this has been a major reason for their relative ineffectiveness, especially on the sensitive matter of relocation. Clearly, effective urban programs require a broad geographical base.

- Power to Acquire Land by Condemnation. While the State has thus far kept this power in reserve, it is an essential tool for an agency such as UDC.

- Power to Override Local Ordinances. This power has caused, and continues to cause, the most controversy and comment. While UDC has used this provision several times to override local zoning or building codes (it is required to abide by the New York State Code), local objections have not been overwhelming. Local governments, impatient for progress on long-stalled projects, support these overrides because they find them useful in skirting their own time-consuming and complicated procedures.

- The Full Range of Development Powers. The ability to plan a project, build it and carry it through to management makes UDC an attractive partner for private enterprise.

- Financial Resources. UDC is authorized to issue bonds and notes in an aggregate amount of $1 billion. It successfully marketed its first bond issue ($250 million) early in 1971. These bonds are presently selling at a premium.

- Tax Exemption. Under the Act, UDC projects are wholly or partially exempt from local real estate property taxes, except for assessments for local improvements. Also, broad exemptions are provided for other local and State taxes.

- Subsidiaries. UDC is empowered to create subsidiary corporations to carry out UDC's purposes. It has used this power several times (Welfare Island, Harlem, Rochester, and its suburbs) and expects to use it more.

- Administrative Flexibility. UDC has grown to keep pace with its workload but is relatively free to devise new administrative and organizational solutions as experience and opportunities dictate. For example, it does not have civil service requirements or tenure.

- Community Advisory Committees. UDC is required to establish local Community Advisory Committees for all projects. Forty-eight committees have been established in communities around the State.

Achievements

UDC does not have its own subsidy money to underwrite the cost of land or to reduce the interest rate on mortgages so that the people who need better housing can afford today's high prices. Such support is available only from the Federal Government, unfortunately in amounts that do not begin to meet the need. Without more effective support from Washington, it is not likely that local or State effort can keep pace with the problem.

Even without its own subsidy money, UDC is a public benefit corporation with a variety of strengths and resource opportunities.

In its first two construction years, 1970 and 1971, it began construction on 18,211 units of housing in 55 projects, almost all of which were for low and moderate-income families and elderly people. These projects represent construction costs of $486 million and total development costs totaling approximately $600 million.

The target for 1972 was at least 15,000 units of new housing, plus a variety of industrial, commercial, educational, recreational, and cultural facilities -- and to continue work on three new communities, Welfare Island, Lysander, and Amherst.

Welfare Island

Welfare Island, located in the East River between New York City's Boroughs of Manhattan and Queens, is to become a new-town-in-town for 20,000 people. A UDC subsidiary, the Welfare Island Development Corporation, is primarily responsible for the development of the two-mile long Island into an economically integrated and technologically innovative new community. In 1969 the Island was leased to UDC by the City for 99 years. In May 1971, work on streets and utilities began; and in December 1971, construction began on 1,011 units of housing.

The Island will be automobile-free (a mini-transit system will provide transportation for residents and visitors). It will have a dispersed public school system with classrooms located in residential and other buildings. Housing will be divided into North and South Towns, separated by parks and a Town Center, the latter to contain a glass-roofed arcade similar to the gallerias of Europe. Landmark buildings are being preserved and will serve various uses for the new community. A promenade for pedestrians and bicylists will encircle the Island, providing spectacular views of Manhattan. Welfare Island development will be completed in 1978.

Lysander

In upstate New York, 12 miles northwest of Syracuse, UDC is developing a completely different kind of new community, Lysander. Most of the 2,700 acre Lysander site was used for the manufacturer of munitions during World War II. In 1968, 2,300 acres under single ownership came to UDC's attention. After determining, in the context of greater Syracuse area projections that the site had growth potential, UDC purchased the land and began planning a new community.

The plan, completed by David Crane & Associates, includes a 795-acre industrial park, 500 residential units for an estimated 18,000 persons of all income levels and related public and community facilities. It is scheduled to be completed over a 10-year period. The Lysander New Community, to be managed by a UDC subsidiary corporation, carries an estimated cost of $300 million. UDC will recover the costs of constructing roads, utilities, and other infrastructure through the sale of land.

Amherst

UDC's third new community, Amherst, presently in planning, is a different kind of project. A decision to build a new campus of the State University of New York at Buffalo in the suburban town of Amherst, near Buffalo, prompted the Governor to ask UDC to examine ways in which the impact of the development on Amherst and the surrounding area could be cushioned.

In 1971, the British planning firm, Llewelyn-Davies Associates, completed a proposal for UDC which recommended the development of a new community on 2,400 acres of land near the new campus. The proposal is under review by UDC, local residents and local public officials.

The proposed community will contain a wide range of designed housing to accommodate many of the new residents who will be working or studying at the University. It will also contain commercial and industrial developments, community service facilities, parks, and open space.

Officials of the Town of Amherst expressed concern over certain portions of the proposal for the new community and filed suit in an effort to halt the development. A special negotiating committee, selected by the Town Board, entered into talks with UDC in an effort to resolve the differences. The most sensitive area of discussion involved the impact of the development on local taxes.

Operating Principles

It is too soon to draw definitive conclusions about UDC's efficiency as a mechanism for developing and financing new communities. However, it is clear that UDC with its unique combination of powers and resources, can take the actions necessary to get a project started, i.e., assemble land, commission development plans, and provide difficult-to-obtain "front-end money."

Private enterprise, with which UDC expects to work closely in any new community project, finds it increasingly difficult to provide the critical initial financial commitment. Private land assembly is also increasingly difficult. Therefore, agencies such as UDC can play an especially important role.

Existing communities are with justification, concerned about what the advent of a new community will mean to them since local services remain their responsibility. To clarify the problems and document fiscal impact, UDC can and does carry out sophisticated economic studies. Also, UDC works out agreements with a variety of existing service districts. Water, sewerage, electricity, schools, libraries, fire protection, health care, police, and the like are folded into new community planning at an early date. These agreements outline financial arrangements and the type of service to be provided. Legislation passed in 1971 gives UDC authority to lease to these districts capital facilities, such as schools and libraries.

What quantities of front-end money are involved? On Welfare Island, where land costs to UDC were zero, public facilities will require an investment of $50 million. In Lysander, the costs will be approximately $30 million. UDC consultants advise that land and infrastructure costs in Amherst will amount to about $60 million by 1965.

Altogether there is an initial investment of about $140 million for three new communities that will accommodate 60,000 people. This comes to $2,300 in UDC investment prior to the construction of one dwelling unit, one office, or one store.

In Lysander and Amherst, UDC intends to recover the investment and interest charges through the sale or lease of developed land to public and private entities. On Welfare Island, in lieu of tax provisions in the lease with the City of New York make it possible to recover the costs of public facilities.

One of the earliest realizations was that UDC would be short-lived if it could not support itself financially. Thus far it is doing well. Each year it has requested less and less in the way of appropriations from the New York State Legislature. In 1972, it requested funds only for high-risk feasibility studies, assistance to communities for projections that may not lead to revenue-producing developments, and for support of two ghetto-based subsidiaries, in Harlem and Central Brooklyn, which will take some time to become financially solvent.

Funding for UDC projects, including new communities, comes primarily from the proceeds of public bond sales. These are debt obligations which UDC must repay with interest. UDC in turn collects fees from its developer/builders and receives a premium from its equity investors. Only prudent financial management and a proven record of project success will enable UDC to retain the confidence of present bondholders and enlist the support of new investors.

Independent economic consultants have confirmed that each of UDC's new communities is financially viable. UDC expects, therefore, to be in a position to sell or lease all or a portion of its new community developments to private enterprises as ownership, management, or investment opportunities.

The financial principles that govern UDC's approach to new community development are not dissimilar to those used by the private sector: maximize revenue; minimize costs; recapture investment as quickly as possible, with a reasonable profit; realize that time can be a project's greatest enemy. In addition, UDC has statutory social responsibilities and is committed to the best possible design quality in each of its developments.

Conclusion

In the United States, long-range community building is an interdependent responsibility. The primary resource is private capital. The public role is a catalytic one. How well para-public corporations such as UDC perform their function will determine how effective the public-private partnership will be -- or indeed whether there will be any partnership at all.

COLUMBIA, MARYLAND

. . . An Example of Private New Town Financing,

a Digest of a Paper

by Walter F. Terry, III

Land Acquisition Financing

In 1963, the Connecticut General Life Insurance Company agreed that it was appropriate and logical to consider the development of a new town between Baltimore and Washington. In exchange for one-half of the ownership of the developing corporation, Connecticut General loaned to that corporation what eventually amounted to be $22,500,000 for the purpose of acquiring 14,000 acres. The underlying security for Connecticut General was the fact that Baltimore and Washington, being only 32 miles apart, center to center, were gradually growing together. The worst thing that could possibly happen to them was that they would get rich slowly. Since Columbia is a private venture, the secrecy concerning acquisitions, and the ability to pay cash, was essential. Connecticut General agreed in advance that the Corporation could acquire any land within a given geographic area, and that it would put up all the money to pay for that land if the average purchase price did not exceed $1,500 per acre and that no single purchase exceeded $3,000 per acre. The price was arrived at by the economic model. The acquisition phase of Columbia took approximately six months, and after 153 separate purchases resulted in the acquisition of 14,000 acres at an average purchase price of $1,435 per acre.

The next step of Columbia was to develop a detailed physical and financial plan. A work group was established to aid planners in the design of the city. Included in the group were advisors from the fields of government, family life, recreation, sociology, economics, education, health, psychology, housing, transportation, and communication. The work group met for two days and one night, twice a month, for six months. Every issue was addressed, from problems of the aged to the functions of libraries. The result was an optimum plan for the quality of life in Columbia. The planners could now work in a way without being encumbered by their own biases. The final plan for the physical and financial aspects of Columbia was well received by residents of the area and by government officials. New town zoning was granted.

Land Development Financing

The second phase of Columbia financing, which was land development, occurred in 1965. At this point, the Corporation had the necessary land to build a new town, the necessary zoning, and a logical physical and financial plan; it was time to move ahead. Funds were needed to refinance the land acquisition loan on a long-term basis, as well as for roads, lakes, parks, utilities, etc. After devising an economic model for Columbia that represented the entire development over its 15-year life, the Corporation was able to ascertain the fact that the peak debt would build up to $50 million. It was able to achieve the $50 million financing at an average interest cost of 7%. The financing was for a period of 10 years, and is due in 1975. At that point in time, the economic model shows that profits from land development will enable the venture to carry its own cost of operation. During the first six years, no amortization payments were required. The Corporation has the right to release any parcel of land from the $50 million debt, without payment, provided a certain land debt ratio is maintained. Since Columbia was acquired for $22,500,000, the value was substantially increased after zoning was achieved. A sufficient margin of safety was established to allow the lending institutions to release land without requiring retirement of debt.

In 1968, the Corporation had the opportunity to locate a General Electric appliance park in Columbia. This required that Columbia be expanded in size to 18,000 acres. The GE appliance park will be, when complete, a roofed facility of 7,000,000 square feet, which will employ 12,000 people. The expansion required additional land development debt of $30 million, which was obtained in 1969.

Project Financing

Project financing consists of obtaining funds for specific buildings on an as-needed basis. The various kinds of projects would include apartments (low and high-rise), office buildings, retail facilities, industrial space, special purpose buildings, and single-family houses. There is nothing unusual or innovative in this kind of financing. However, in a new town, in the early stages, a "critical mass" must be achieved. Slow pace is the enemy of the new town developers. Therefore, all aspects of city life must begin to appear in the very early stages so that a credible momentum may be achieved. The Corporation did not start out simply building houses in the hopes that someday it could justify retail and office space. It began with all forms of development: homes, offices, stores, etc. Each helped the other. Stores came because people were coming, people came faster because stores were there. Industry came because employees were there. More people came because jobs were there. This is the critical mass that allows the developer to achieve the necessary pace in a new town.

Community Structure Financing

Community structure financing is similar to municipal financing. However, in Columbia, it goes beyond the norm to include programs and facilities that enhance the quality of life. Columbia is not an incorporated city. Therefore, it is dependent on the County government for the usual services such as schools, police and fire protection, etc.

The development term of Columbia is 15 years, and at that point the developer leaves the project. Since it is the Corporation's desire to enhance the quality of life that will survive the development period, it had to create a financing vehicle for the community. The Columbia Park and Recreation Association (CA) was established. CA is an entity designed to supplement the county government. It has a lien on all property in Columbia and receives an annual assessment of $.75 per $100 of assessed valuation. At full development of Columbia, that assessment income, together with modest facility use charges, will support all operating costs, as well as retire debt associated with capital costs.

CA provides the following services/facilities:

- Neighborhood swimming pools.
- Village community meeting and multi-purpose rooms.
- Recreation facilities, such as golf courses, tennis courts, lakes, ice skating rinks, arts and crafts centre, athletic club, etc.
- Owns and maintains all the open space and parks.
- Provides the transportation system.
- Operates recreational and educational programs, e.g., early childhood education, youth centres, athletic and camping activities, and a center for the aging.

Presently the developer is funding CA and controls the board of directors. For each 4,000 dwelling units in Columbia, a resident is elected to the board. It is planned that when CA is economically self-sustaining the residents will be in full control of the board.

Many lessons have been learned in Columbia thus far. The financial lessons are allowing the Corporation to confirm or alter some of the basic guidelines that should be established to measure the quality of any financial arrangement. Some of these guidelines are:

- Obtain adequate dollars, as defined by an economic model.
- Carefully associate repayment with economic model pace.
- Obtain flexible disbursements and land releases.
- Be sure use of proceeds is flexible and responsive to the "critical mass."
- Allow adequate funds for the community structure.

FINANCIAL ASPECTS OF NEW TOWN MANAGEMENT

. . . the Milton Keynes Experience

by K. Wren, FIMTA, FRVA, Chief Administrative and Finance Officer

Milton Keynes Development Corporation, United Kingdom

Introduction

The Milton Keynes Development Corporation was created by the Minister of Housing and Local Government in 1967, to plan and build a new city in North Buckinghamshire. The plan for the new city, prepared by Llewelyn-Davies, Weeks, Forestier-Walker & Bor, provided housing, employment, and essential services for 70,000 newcomers by 1981 and for 150,000 newcomers by the early 1990's, by which time the city's total population will be 250,000. The new city is designed to take overspill population from London and the south of the county of Buckinghamshire, as well as part of the general population increase expected in the southeast region of the country.

The primary considerations in planning the new city have been social and environmental, but that is not to say that financial and economic considerations have been ignored. Indeed the Corporation is statutorily charged with the responsibility of producing a reasonable return on public funds invested in the project.

This paper describes, and attempts to reconcile the plan with:

- The general financial framework within which development corporations must operate.

- The work undertaken in the preparation of an economic and financial appraisal for the new city's plan.

- The new form of financial arrangements being introduced in new towns.

The Financial Framework

A new town's activities fall under the general control of central government. Its proposals for development require the approval of the Minister with the added concurrence of the Treasury, since corporations are charged with securing a reasonable return consistent with the social and environmental planning needs of the new community.

New town development corporations are empowered "to secure the laying out and development of the new town and to fulfill that function may acquire, hold, manage, and dispose of land and other property; carry out building and other operations; provide services and generally do anything that is necessary and expedient for the purposes of the new town."

All capital expenditure incurred by a development corporation is financed by way of loans from the Treasury and must be repaid (together with interest) over a period of sixty years. In practice, since revenues take some time to build up in the earlier years, the loan repayment on that capital must also be borrowed from the Treasury as must overheads and running costs of the corporation.

A development corporation has power to buy land, build houses and develop factories, offices and shops but must attract at least 50% of the investment needed for establishing industry and commerce from the private sector, and also achieve at least 50% owner occupation of all new houses.

While a development corporation acts as the principal agency in a new town, coordinating the resources of all interests and authorities, it does not replace the normal functions of the public authorities -- central government, and local authorities -- but in practice makes special arrangements with them for the provision of strategic services. It is empowered to make suitable contributions to insure adequate provision.

The Appraisal

Although social and environmental considerations are uppermost when a new city is planned it would clearly be undesirable to ignore the financial factors which influence most planning decisions. It is essential, therefore, to prepare a financial blue-print of the development of the city to act as a spring-board for the programming and planning changes that will undoubtedly arise as the city develops; and establish a continuing financial appraisal of the plan.

Analysis of the Physical Plan -- Physical Form

It is necessary as part of this exercise to set down the six broad goals identified by the Milton Keynes Development Corporation, which the plan is intended to achieve. These are:

- Opportunity and freedom of choice.
- Easy movement and access, and good communications.
- Balance and variety.
- An attractive city.
- Public awareness and participation.
- Efficient and imaginative use of resources.

Although these goals were to determine the final choice, extensive cost analysis was an important feature in the production of a physical plan.

A number of different concepts for the overall plan were considered, high density and low density; many centered and single centered plans; fixed track public transport; and more diffuse public transport plans.

A number of possible alternatives were ruled out due either to a major conflict with the Corporation's goals or the constraints and opportunities of the site.

The remaining alternatives were examined in terms of land use concepts, the main variable being the degree of concentration of dispersal of employment. Since neither concept has a cost advantage, social and site considerations favored the more dispersed patterns of employment opportunities. Two different sizes of grid mesh roads, one at an English mile, the other at one kilometer were examined, the latter proving the cheaper of the two, corresponding with the social and environmental preference for the smaller grid net work.

Phasing -- The First Ten Years

In addition to the exercise outlined above, detailed financial appraisals were undertaken for each of the seven possible phasing strategies, covering the first ten years of development, allowing comparisons to be made in both economic and planning terms. A total of six alternative plans were produced and costed, and the financial effects compared over years one to ten.

Service considerations (sewage, drainage, and water supplied) more or less determined very early phasing and were found to be a common feature of all of the alternative plans under consideration. Other factors, such as a constant land acquisition and land use budget, and a common road program in the first five years, simplified comparison.

The resultant comparative costs were discounted in order to arrive at an equivalent annual charge for each scheme. The first exercise was based on 1969 levels of cost and a further exercise undertaken allowing for inflation at 4% per annum.

After taking into account population support for the city center, essential in the early years, the two schemes finally were compared in detail and the more economic adopted.

The Basic Approach to Financial Control

The first step is the preparation of a statement showing the yearly build-up in capital expenditure in both the public and private sectors and the return on that proportion of capital investment for which the Development Corporation is responsible. The forecasts should be based on the assumption that progress will be made according to proposed planning and phasing strategies and that the necessary employment, housing and other services will be provided in parallel with the projected build-up in population in the new city.

The total capital cost of the new city was estimated to be 700 million (at 1969 prices). These figures are broken down into five year periods, showing the allocation between the various agencies responsible for investment in the new city, subdividing the total cost into acquisition, construction of housing, industry, commerce, and the various services, and estimating the proportions of capital cost which relate to the new population and to the natural increase of the existing population. These per capita costs were important in comparing the figures for Milton Keynes with similarly based cost exercises undertaken for more recent new towns. These comparisons confirmed the reasonableness of the capital cost of Milton Keynes.

Although one must clearly bear in mind the difficulty in accurately forecasting results over a period of 25 years, the figures must indicate the broad economic pattern that will emerge in the new city, based on current programming/planning strategies and assumptions.

To achieve greater financial control, and to simplify the necessary viability tests, it is essential to separate land development transactions from other "trading" operations of the Development Corporation. This needs to show the year by year predictions of the proposed land use budget in terms of purchase and development costs on the one hand and values created on the other thus providing a clear indication to the economic success of the city.

Land Transactions Account

The chief factors for appraisal (common to all planned development) are:

- Population -- existing, target figure, period of growth, planned rate of build-up.

- Area -- total of designated area, existing build-up and net area for development.

Both factors merge to determine a broad land use budget and the phasing of that land use during the development period. This is the starting point; many other factors will influence these broad assumptions of land use as we examine the various activities to be undertaken by the Development Corporation.

The Milton Keynes project is further influenced by:

- The Corporation, under the terms of the New Towns Act 1965, possesses powers of compulsory acquisition.

- There exist, in the designated area, large agricultural holdings, the whole of which has had to be purchased rather than parts only.

- Legislation under which Development Corporations are created imposes a legal obligation on them to purchase land and property, if requested to do so by the owners, after seven years from the date of designation.

- On the credit side, land prices are fixed at the level of development values of the land ruling at the time of designation thus avoiding the rapid escalation of prices generated by the Corporation's own activities.

- One other is the need to allow reasonable flexibility of development should the chosen strategic phasing plan call for changes as development proceeded.

Development Value of Land

The figures need to reflect the expected value of land over a variety of uses, assuming the provision of the main services to the area (roads, sewerage, drainage, and water). Values will differ widely dependent on use. Land for local parks and playing fields, may only be retained at purchase price (including interest) while prices in the commercial centers will reflect the high value of land that can be expected immediately as development gets underway. Special arrangements operate in the values to be used in the transfer of land between the Development Corporation and local and public authorities. Forecasts must also be made of the change in values (excluding inflation) that can be expected to occur as development proceeds in the city.

The Role of the Local and Public Authorities in the Provision of Services

It would be appropriate at this stage to turn to the role of the authorities in the planning and provision of services in the new city. The local authorities in the designated area of a new town are responsible for highways, sewerage and drainage with the Water Board (ad hoc public) being responsible for water supplies.

Since the forward provision of these major services prior to the build-up of taxable resources would clearly place an undue burden on existing taxpayers and water consumers, in practice financial arrangements have to be made with these authorities to insure the adequacy of the services in pace with demand.

In the case of sewerage and drainage, due to the size and complexity of the task, both physical and administrative (four different drainage authorities), Milton Keynes Development Corporation has assumed sewerage and drainage powers. In this particular instance, therefore, the financial arrangements made were designed to insure that contributions from the various authorities to the Corporation were matched by a commensurate build-up in their rateable resources.

Contributions towards highway construction costs of the local authorities are restricted to the provision of non-principal roads. These are usually paid for and constructed entirely by the Development Corporation then handed over after completion for the local authorities to maintain. This will be broadly the case at Milton Keynes. (Note: Principal road networks are grant aided by the central government to the extent of 75% of capital cost; the remaining cost is usually absorbed by the local county authorities without further contribution).

The local authorities are primarily responsible for the provision of social and recreational facilities. The Development Corporation is, however, empowered to contribute towards the capital cost of these amenities but the powers as they currently exist are somewhat restrictive, and in terms of city scale provision, the permitted level of contribution would appear to be far from adequate. Amenities in a city themselves create value and there seems to be no surer way to make both a social and economic success of a city than to provide the very best in levels of amenity as early as practicable. Every effort should be made to achieve this goal; the success of the city may well depend on it!

Education, health and other miscellaneous services are provided and paid for by the local authorities without contribution from the Development Corporation.

The Role of the Local Authorities in the Exercise of Planning Control of New Development in the City

Planning in a new city starts with an outline conception of the city as a whole and then passes through an additional two stages; district planning in more detail; local planning in even more detail.

The overall plan, commonly called a Master Plan, is a non-statutory document but is nevertheless important as a basic framework into which future detailed planning can be fitted. Development corporations consult public authorities and private individuals prior to submission for formal approval by the Minister of State.

A District Plan follows the same process but local plans, dealing with particular parts of the district, are subject to the statutory requirements of Section 6(1) of the New Towns Act of 1965. Public authorities have the right of consultation and their representations are taken into account by the Minister in considering the development corporations' planning proposals under this section of the Act.

Housing

The plan is arranged to accommodate an average net residential density, over the whole city by the end of the development period, of eight dwellings to the acre, but could accommodate a variation between six and ten to the acre. The Development Corporation has been asked by the Central Government to achieve at least 50% owner-occupation in housing but early surveys suggested that the potential for home ownership of the incoming population (based on level of earnings, anticipated growth rate in the national economy, and ability of the houseeholder to raise mortgage finance) might be somewhat delayed.

This certainly would apply to many new towns in Britain, which have also been asked to achieve the same target of owner-occupation, but experience so far in Milton Keynes has produced a marked demand for housing for sale. This position arises, no doubt, from the new city's close proximity to London (50 miles -- with good road and rail communications) and the Government's "greenbelt" policy.

Based on these factors, broad assumptions have been made in drawing up a forecast of the financial results from housing transactions in Milton Keynes:

- The population build-up set midway between the even growth rate and accelerating growth rate suggested in the plan.

- An occupancy rate of 3.2 persons per dwelling (current experience of English New Towns).

- The densities for housing: in a public rented sector starting at 12 but eventually falling to 8 dwellings per acre; in the housing for sale sector starting at 10 but eventually falling to 4 dwellings per acre.

- A yearly stocking rate of 50% of all dwellings built for owner-occupation to be achieved at the end of five years.

Within the broad objective to build at least 50% of all housing for owner-occupation, the Development Corporation, which until recently had authority to build one third of all housing for sale in the city, has now been instructed to make land available to the private sector for all but a very small percentage of the building for sale program. The Development Corporation is transferring land to the private developer on a freehold basis which reflects the full market value at the time of sale. The operations of the Leasehold Reform Act (which allows for a leaseholder to enfranchise his lease after a period of 5 years) militates against leasehold in the private housing sector.

To stimulate owner-occupation in new towns, arrangements have been made between the Department of the Environment and the Building Societies Association to allow at least 70% of the mortgage finance for dwellings built on land made available by the Development Corporation, the remaining 30% (or balance) to be provided by the Corporation by way of a second mortgage, with money borrowed from the Treasury.

An interesting partnership arrangement has emerged between Development Corporation and private developer. Due to the fairly rapid increase in the price of land to be transferred and in house prices, the initial price of the land is being fixed in accordance with currently forecast house selling prices. Should the market dictate a higher selling price for the houses, then the Development Corporation gains a percentage share of the increase.

It has been assumed that almost all the new rented housing is likely to be provided by the Development Corporation. Local authorities own a modest stock of rented housing at present (mainly post-war) but their building activities will now be restricted to the provision of rented dwellings to replace slum clearance and for the aged.

Arrangements are about to be made with the local authorities in the area for easy transfer facilities between tenants of both organizations and for the introduction of common tenants' waiting lists.

The Government policy on housing subsidies applies to development corporations as well as to local authorities, although an additional "unit grant" subsidy for new town corporations is payable annually for a period of ten years to relieve the early economic difficulties; the amount per dwelling allowed reduces as development proceeds. Rents are traditionally much higher in comparison with housing rented by the local authorities in the area but a rent rebate scheme operates for the less well off tenants.

The Government's new "fair rents" policy, shortly to be introduced, will apply to new towns; the broad theory being to fix a rent (to be ratified by a Rents Assessment Committee convened for the purpose) which reflects true market conditions, and is comparable with rents operating in the private sector. A comprehensive rent rebate scheme for national implementation assists the lower paid tenants. The balance between expenditures and net income from these transactions will be met from the Treasury as far as new towns are concerned. Rather more complicated arrangements apply to local authorities with rating powers.

Rents generally in the public sector will increase over the next few years under the arrangements to be introduced and will clearly accelerate the current movement towards owner-occupation. Indeed facilities exist for a Corporation tenant to purchase his own dwelling at 20% below market value subject to the price paid not falling below the original cost of provision. Any profit from sale by the purchaser within five years of his ownership is shared by Corporation on a diminishing basis.

Investment in Industry

The location of industry in new towns is subject to the issue of an Industrial Development Certificate by the Department of Trade and Industry. Government policy which determines a priority for the so called "development areas" (usually areas of unemployment) has at times caused difficulties in new towns, due to the uncertainty of industrial growth sufficient to match housing and other developments. In a well ordered world, bearing in mind the level of investment now being reached in new towns, forward planning should ideally include a surer rate of industrial expansion than has been the case.

This situation is uppermost when forecasts of likely industrial investment have to be made for the development of a new city. The first step is to pursue a broad land-use budget for industry that can be ascertained from the planning and economic forecasts of the number of workers to be employed; the likely density of workers per acre (hectare), and the likely floor space per worker.

Assuming an even growth of industrial expansion and allowing for alternative forms of employment in the city (service industry, office employment) the forecast of the build-up in population will give likely year by year figures of factory floor space required. This in turn determines the likely pace of industrial land development.

It has already been stated that the Corporation is charged with attracting 50% of its investment in industry from the private sector. The Corporation has assumed responsibility, however, for developing the whole of the acreage ear-marked for industry (following the precept of recovery of the heavy infrastructure costs); undertaking site development works; building and renting speculative factor space; specially built factories for particular industrialists; and leasing land to an industrialist wishing to build and finance his own factory.

In practice, this policy produces at least 50% of investment in factory floor space from the private sector due to the desire of many industrialists to own their factory buildings. The Corporation has resisted, so far, the demands for sale of the freehold of the land for industrial purposes. Land is currently being leased for 99 years with reviews at 14 year intervals; factories to rent for 42 years with reviews at 7 year intervals. Shorter leases are available for small speculative factory units, a great success so far in Milton Keynes.

Partnership Arrangements

A unique opportunity exists in Milton Keynes to create a new commercial center on a green fields site, and it need hardly be said that values will escalate rapidly in this situation. Again, it is the Corporation's intention to retain the freehold of the land. In order to attract private investment from the commercial field generally, the Corporation will be entering into the now familiar partnership agreement with private developers. The Development Corporation will act as ground landlords, the private sector providing capital for the site development costs and buildings. Any surplus made over and above the normal risk rate of return is shared between the two parties on an agreed basis. Clear advantages to both the private and public sectors arise in this sort of arrangement.

Lease and Lease Back

There has been a growing interest in the development field by institutional lenders with long term funds available; inflation has forced them to seek a built-in improvement in the rate of returns as money values continue to fall. Lease and lease back arrangements are recently growing in popularity in new towns and should facilitate the investment of these long term funds.

In this particular arrangement, the Development Corporation retains control of the development as the developer; the institutional lenders secure for themselves an increasing return on their capital investment by taking an agreed share of future rent review increases after quoting an initial rate of interest for their investment.

Cash Flow and Profit and Loss Forecasts

Having completed a comprehensive survey into the land transactions and the various trading activity performances of the Corporation, the whole exercise now needs to be consolidated to create a year by year cash flow program. The results tell the year in which:

- A net inflow of funds prior to repayment of annuities will be achieved.
- The year in which the peak cumulative demand for funds will occur.

- A positive inflow of funds (all annuities being met when due) will be achieved.

To complete the exercise, a consolidated record of the revenue transactions was prepared on a year by year basis, whereby interest on loans, depreciation of assets, and administration expenses not charged directly to trading accounts were debited and net income from all sources credited.

From the consolidated trading account (not reproduced) we are able to conclude:

- The year in which the annual surplus will be reached.

- The year by which all cumulative loss will be absorbed.

- The annual rate of surplus and the cumulative rate of surplus that will be reached by the end of the development period.

Continuing Review

The financial objectives determined within the broad framework of the financial appraisal would be of little value unless backed up with a continuous review of the forecasts made. Such forecasts are bound to change as planning and programming changes occur, and it is essential that a monitoring and feed back process be implemented right from the very start.

In this context, it was of great interest at Milton Keynes, following completion of the financial appraisal when the Ministry of Housing and Local Government (now the Department of the Environment) commissioned a report on a management accounting system to assist the Ministry in appraising the plans and controlling the financial problems of new towns.

The system will determine the changes necessary to meet the long term planning objectives. Further problems will arise from the resultant changes, requiring examination of the alternative means of achievement and the resources available to put them into effect.

The broad framework adopted will embrace the use of the many advanced management and investment techniques necessary to achieve overall financial control, and thereby enable the Development Corporation to achieve the goals set for the new city.

Capital Financing

In the current climate of a drive to restrict expenditure in the public sector, private investment opportunities must be vigorously pursued. Development Corporations do not possess the general powers which are available to local authorities to raise capital on the money market as a charge against their revenue producing assets. While partnership and lease/lease back arrangements are admirably suited to new towns, they have the disability of a rather complicated process when compared with the raising of loans bearing fixed rates of interest, and carry the further penalty of conceding a share of the equity to a third party.

The granting of wide borrowing powers to Development Corporation is currently under debate and their introduction would clearly allow for more flexibility in funding projects in the new towns. Rates of interest paid on Treasury loans reflect the market rate under current practice.

Conclusion

It has not been easy in so short a space to do more than describe in outline the work that has and will be done in this important field of financial planning as an aid to the management of urban development at Milton Keynes.

From the work done on the financial plan the building of a new city except by close partnership between the public and private sectors cannot be conceived. Expenditure on infrastructure and the social services must, in the main, be financed out of rates and taxes since rateable resources will also be generated, hopefully sufficient to meet the level of demand without the necessity of heavy calls on the revenue earning development. Even so, the rapid build-up of services required, could place the public authorities responsible for their provision in a difficult financial position. For this reason, the developing agency must inevitably be prepared to make resources available in the early stages until local resources have caught up with the demand.

FINANCING NEW RESIDENTIAL AREAS IN THE STOCKHOLM AREA

by Jon Hojer and Sture Ljungqvist

Introduction

Features of relevance in the Swedish scene are:

- Relatively small towns in relation to the population of 8 million. In 1970, the population of the Stockholm Region was 1.3 million, the Goteborg Region, 0.7 million, and the Malmo Region, 0.5 million. Only 5 other towns had more than 100,000 inhabitants.

- Population drift, not limited to the northern half of the country.

- A considerable integration of income groups in new residential areas.

- In housing, a high technical standard but a relatively low space standard.

- A mean pre-tax income for an industrial worker of Sw. kr 2,250 per month (1968 value of money). About Sw. kr 250 of this goes to national income tax and about Sw. kr 400 to local taxes. (4.75 kr = $1)

- Monthly rent of about Sw. kr 550 for an average 3 or 4 room flat in a new residential area. Income left over for private use, Sw. kr 1050.

Generally, Swedish planning may be characterized as a balance of the extremes of centralized government planning on traditional liberal lines. The government and the municipalities are responsible for community planning and housing; however, the community is interested in benefitting from the experience and ideas of the private sector. Contributions to the community development from this sector are welcome, although on the community's team. This is a reflection of the Swedish mixed economy principle.

The following planning items in the Government's 1968 directive for new building legislation follow:

- Equality of status, freedom of choice, security, hygienic, and social welfare.

- Application of the "rolling" planning techniques.

- Early consultation with involved land-owners and other population groups.

General Rules for Organization and Financing of New Residential Areas in Sweden

The country is divided into 24 counties, each of which has a County Administrative Board which is responsible for government administration at the local level. It also coordinates the community planning. Ten or so specialized agencies are engaged in the planning process, but each is concerned with only a limited sector, such as education and housing policy. To avoid sectorial bias, the agencies are not accorded the right of decision but are concerned only with the preparatory work. The agencies views are not considered until the time comes for the decision to be made.

The County Administrative Board has no financial resources of its own but relies on Government funds which it must allocate to the municipalities.

Below Administrative Board level, there are (1972) 460 municipalities, but according to the new municipal reform, whose implementation will be completed in 1974, there will be only 270, most of them with at least 10,000 inhabitants. All have the same rights and responsibilities.

The municipalities occupy an extremely strong position in relation to the State; for instance, municipal self-government with the right of taxation, and a planning monopoly. Neither the State nor a private person can override the municipality in planning matters. In order for plans approved by the municipality to gain legal force, however, they must be ratified by the County Administrative Board, which implies that the State possesses the right of veto.

Through amendments to the legislation, the municipalities have taken over an increasing number of tasks from the State, and thus the responsibility for financing them. This has entailed a large increase in the level of local taxation. The income that the municipality derives from individuals and businesses amounts to roughly one-fifth of their taxable income -- normally, a larger fraction than the national tax.

By law the municipalities have the main responsibility for community development and housing.

Each year the government distributes new housing among the County Administrative Boards, the actual allocation being based on a national housing plan covering several years. On the basis of claims presented in an annual municipal housing program, the Administrative Board in turn shares the housing quotas among the various municipalities according to their needs.

A considerable portion of Sweden's total investments is in new housing. In the next few years, a large portion of the housing will be placed in expanding municipalities with populations of 30,000 to 100,000. Here the residential areas will be increasingly located on virgin land, which is utilized mainly for housing and has no direct link and physical contact with earlier residential developments. Examples of such new projects in the Stockholm Region are Salemstaden, Norra Botkyrka and Jarva.

In large-scale development, the land is usually in municipal ownership. To enable the municipalities to procure land for future development areas an existing law enables them to purchase land in advance, even though it may be in the hands of private developers. As an aid in financing such acquisitions, the community may obtain special loans from the Government.

A fund of some Sw. kr 75 million is available for this purpose, but this covers only a small part of the municipalities' annual costs. One reason for enabling the municipalities to acquire land is to hold down land speculation; the land itself, however, accounts for only a small part of the total costs.

In connection with the development of land in municipal ownership, the building sites can be either sold or leased, with a usufructuary right to estate that is valid for an indefinite period.

In the development areas where housing will be financed partly with government funds the land and development costs must be kept within limits proposed by the individual municipality and approved by the relevant County Housing Board. They may thus vary from one municipality to another.

Where land is disposed of on a leasehold tenure, the municipality obtains a site lease loan covering 95% of the development costs as estimated by the loaning authority. The remaining 5% and any other costs must be financed from taxation. The ground rent is then set at a level that will provide a long-term yield on capital.

The housing loan is raised partly on the open market with a first mortgage loan, and partly with a Government loan, subject to the development satisfying certain requirements, and the calculated production costs being kept at an acceptable level. Of the new housing, nine-tenths is financed in part by government housing loans. The loans for the remaining tenth are obtained on the open market. Government loans for a particular project will depend on the form of ownership.

The loan basis for a building is a standard amount for structural components, fittings, area, etc., and is the same for all types of buildings. It serves only as a basis for calculating the government loan. The mortgage value of the building consists of the loan basis plus a supplement for those components, fittings, etc. not covered by government loans. Costs in excess of the mortgage value must be defrayed by a primary loan or private capital.

The first mortgage loan is an annuity loan, repayable over usually 40 years by equal annual installments covering capital and interest. There are two forms of government housing loan, a nominal and a parity loan. In the former case, repayment of capital begins immediately and is spread over 30 years, the interest is based only on the outstanding amount of the loans. For the parity loan, the capital costs increase with time. This loan, too, is repaid within a prescribed period. The difference between the two types is that at first the annual repayments, and hence the rents, are lower with parity than with a nominal loan, and after a number of years the reverse is the case.

Besides credit for new housing and modernization, the government and the municipalities provide individual subsidies in the form of supplementary payments to families with children.

In municipalities with large development projects, it is not the actual development costs that present the main financial problems but the municipal investments in infrastructure and amenities. Because of the limited availability of loans these investments must at present be financed by taxation to the extent of about 50%. Another problem is that the tax revenue from the residents does not begin to come in until 1-2 years after occupation. One result of this is that the government and municipal bodies responsible for finances have a large influence on building and environmental standards. If the municipality is short of funds there is a risk of curtailment of the social services.

Municipal Collaboration in the Stockholm Region

The city of Stockholm forms the nucleus of the Greater Stockholm Region, and is surrounded by other independent municipalities.

In the mid-fifties, the shortage of land for housing within the boundaries of the City of Stockholm prompted collaboration with the neighboring municipalities. In 1957, an action program was presented for housing in Greater Stockholm, and the initiative was taken to set up the Greater Stockholm Planning Board, a body for voluntary collaboration among the municipalities composing the region. Its main purpose is to promote purposeful and planned expansion of Greater Stockholm on the basis of a regional plan.

In 1959, the legislation was amended to enable a municipality to participate in housing projects in another municipality when the municipalities form a common unit, as regards housing. This opened up the possibility for Stockholm to collaborate with neighboring municipalities in implementing the action program drawn up for Greater Stockholm, and to utilize the capacity possessed by the City's housing enterprises by engaging them in projects beyond the City boundaries. (The neighboring municipalities did not themselves have the capacity for such development unaided.)

Since the turn of the century, the city has acquired large areas of land in adjacent municipalities as a reserve to meet the needs of future expansion. Some of these areas had been incorporated in Stockholm, while others were located in independent municipalities, among them Salem, Botkyrka, and Grodinge.

Salemstaden

At the beginning of the sixties, Salem was a small municipality located between Stockholm and Sodertalje, with about 3,000 inhabitants living in scattered settlements, largely made up of farms and woodlands. The Salemstaden area, which covers about 400 hectares (1,000 acres) and lies in the Municipality of Salem, was acquired by the City of Stockholm as early as 1899. With the objective of forming a public utility housing company for the development of Salemstaden, a preliminary agreement was concluded in 1963 between the City of Stockholm and the Municipality of Salem. The City was to develop the land at its own expense, provide sites on a leasehold basis, and turn over the rest of the land to the Municipality.

The Salemstaden project was to cover 5 years, beginning in 1966; some 10,000 people have moved there to date. This has entailed a most rapid development of the cultural and social services -- schools, day nurseries, and kindergartens, health service, and the like -- making heavy demands on the municipal economy. According to an economic investigation carried out by the municipality, the operating costs during the first 5 years exceed reasonable returns from taxation.

The aim of the municipality was to create a neighborhood comprising only one-family houses. However, to obtain a more representative household structure and a normal income grouping, and to provide a population basis for a senior high school and a small shopping center with some social services, a denser component of low-rise apartment houses was added near the center.

According to the agreement, the responsibility for the planning, erection, and administration of the buildings would lie not with the Salem-Stockholm Housing Company, but with the public utility company AB Svenska Bostader. The drafting of the comprehensive plan for the area and then the town plans for the various districts was begun in 1963 and carried out by the consultant firm of Hojer & Ljungqvist Arkitektkontor AB.

To reduce building costs, and thus the rents and purchase prices of the major portion of the one-family housing, the package deal form of contract was applied, which covers all the work on the site and the public land.

As a basis for the bid negotiations, a series of types of one-family houses was evolved, with variants for both level and sloping terrain. About 20% of the houses were rented and the rest were sold through a bank to clients belonging to its Save-for-a-Home Plan. With the loan and taxation regulations current in Sweden today, it is a good financial proposition to own one's house, but this entails a cash payment of about one-half a year's salary (after taxation). In one type of project for one family houses operated by the City of Stockholm, this amount is paid in the form of the owner's own contribution of work in the construction, a principle applied in a small portion of the houses in Salemstaden.

Norra Botkyrka

The Land

At the beginning of the sixties, the Municipality of Botkyrka had a population of about 10,000, located in Tumba and Tullinge along the railway. Large, undeveloped areas of land along the shore of Malaren in the north, only 15 km from the City center, had long been owned by the City of Stockholm.

In the fifties and early sixties, the Municipality of Botkyrka purchased land located just south of the City's property; together the City and the Municipality controlled somewhat more than two-thirds of a 2,000 hectares (5,000 acres) area between Lake Malaren in the north, Albysjon in the east, and Aspen in the southwest. In 1965 the City, together with the Municipality of Botkyrka, formed the Botkyrka-Stockholm Housing Company to administer the building of a new group of districts in Norra Botkyrka.

Through a special company, AB Strada, created to manage the acquisition and disposal of land on behalf of the City of Stockholm, the City and Municipality has today gained possession of practically all the land intended for development. Where appropriate, expropriation measures have been resorted to.

Stockholm and Botkyrka were agreed that the land should be apportioned in accordance with the regulations applied in the City of Stockholm -- that is, 45% to public utility companies, 45% to private interests and 10% to cooperatives. Moreover, each municipality should dispose of its areas on a leasehold basis. The rest of the land owned by the City of Stockholm and intended for roads, parks, and general purposes would be handed over to the Municipality of Botkyrka without compensation.

Administration

So far as the technical implementation is concerned, an agreement on management was drawn up directly between the City of Stockholm and the Municipality of Botkyrka, and AB Svenska Bostader. In addition, a development committee was appointed having only administrative responsibilities and consisting of most of the chief administrative officers.

For the investments in infrastructure and amenities, a special municipal building committee was appointed, and this assigned to AB Svenska Bostader the responsibility for managing this part of the project.

Planning Work

The work on the master plan for the whole area and, subsequently, the work on the town plans for the two districts of Alby and Fittja, were carried out by Hojer & Ljungqvist Arkitektkontor AB. For the other districts, the town plans were drawn up by AB Svenska Bostader.

During the course of the work on the master plan, ten or so alternative designs were considered, in one of which bus transport was solely relied on. Because of the proximity to the City of Stockholm and favorable conditions for extending the underground and solving the refuse disposal problem, it was decided in consultation with the regional planners to provide an underground line with four stations to serve a population center with approximately 45,000 inhabitants. It was to be built over a five-year period, the first dwellings being ready in 1970.

In 1966, a draft master plan was presented to 30 or so authorities at municipal, county, and government levels and to all landowners. One year later the definitive master plan was adopted by the Municipal Council. The aim of the Municipality of Botkyrka was to create a settlement that would provide the inhabitants with a good standard of services from the time they moved in. Features deemed important were traffic separation, consideration of the handicapped, an efficient public transport service, with schools, day nurseries, play areas, recreational centers and sports and athletic centers, located near the dwellings and produced simultaneously with the housing.

Because of the need for more job opportunities for women near home, and in order to minimize transport, the Municipality set an employment ratio of 50% in the area of the master plan. The jobs were provided in service centers with offices, shops and public institutions, besides two separate employment areas for offices and manufacturing industries.

The fundamental aim of the plan is to create an interesting townscape, with high-rise blocks at the underground stations surrounded by rather densely-built, low-rise housing. So far as practicable from the aspect of building technology and economies, it was also desired to achieve a certain level of integration between these types of buildings in order to create a varied urban pattern and discourage social segregation as regards income and age classes.

The follow-up of the costs is carried out by breaking down all development costs into component items such as highways, pedestrian and cycle ways, pedestrian subways and bridges, main water supply, and sewerage system. A continuous survey is maintained, and computations at the general planning level are progressively replaced with cost computations at the level of the detailed development plan, and finally by bid awards after negotiations with contractors. By means of an index, all costs are adjusted to apply to the data of implementation.

Financing

The first costs analysis for Norra Botkyrka was included in the agreement and was based chiefly on earlier experience from Bredand, Satra and other projects.

As a result of centralized project management -- with network planning and computer techniques and the organizational procedure -- it has been possible to keep a firmer hold on times and costs than is usual in such large comprehensive construction projects, and to draw up an implementation schedule.

The Municipality of Botkyrka has concluded that the Norra Botkyrka project will eventually be self supporting. According to a long-range budget, the Municipality will have repaid all its debts after 15 years, without the need to raise local taxation. As regards the operating costs, an annual per capita sum (adjusted according to an index each year) has been computed as a guide in preparing the budget. In the early years, child supervision and social welfare services will exceed their computed share, and other sectors will have to be held in check. Furthermore, various social benefits have cost considerably more than was computed because of unexpected development of the household and income structures.

While these extra costs naturally present a financial problem, the Municipality is convinced that they will pay off, in terms of social welfare. Besides there is evidence that the provision of youth recreational centers tends to decrease juvenile delinquency, and hence the expenses incurred by damage and various forms of supervision.

Experience

Norra Botkyrka

The experience gained in the development of Norra Botkyrka, together with other similar projects, has been considered by the government and other relevant authorities, and is being used for future projects in the metropolitan regions. In 1971, the Riksdag (the Swedish Parliament) passed legislation conferring the right of the municipalities to obtain advance payment of local tax by the government. In addition, the Stockholm municipalities decided to set up a fund covering operating costs for municipalities in the stage of intensive development.

In general, two requirements stand out as essential in future projects:

- Further efforts by the Government to solve the financing problems (perhaps as in England in the context of New Towns).

- Better collaboration between the authorities as regards directives and control (building and planning codes).

As a principal consultant organization on the planning side, this Architect's Office would like to stress the importance of two factors, namely continuity and information.

Continuity

- A period of three years between elections is a short time. For planning questions (including goals and programs) comprehensive decisions having a long duration of validity are required.

- There is need for a procedure that keeps open alternative courses of development for as long as possible.

- On the responsibility side, the planning personnel must be doubled so as to guarantee continuity. This applies over the whole system, from the politicians to the project leader and other consultant groups.

Information

- Factual and intensive information in good time before presentation and publication of individual decisions in the process.

- At Botkyrka there was a special information group whose task was to enter all physical events on maps for rapid distribution (thus avoiding the otherwise frequent need for alterations due to errors and misinformation).

- A desirable and useful interaction between planners and public opinion would be promoted by early factual information, preferably transmitted by district councils in certain decentralized roles of responsibility.

- The apprehensions experienced by newly settled families confronted by unfamiliar and sometimes perplexing situations must be dispelled by personal contact and readily digested information on the district, its services, and opportunities for contact.

Jarva (Sollentuna)

The rapid development of large new residential and employment areas created a series of new housing problems, among them:

- High initial rents that can be paid only by households with high incomes or ones qualifying for rent subsidies.

- Uneven age distribution, which eventually leads to a range of unsatisfactory social conditions, with undesirable concentrations of younger age groups and overcrowding of schools, day nurseries, welfare institutions, and other services.

- An unattractive external environment during the completion of the project.

- Difficulties in synchronizing residential and employment areas.

These observations have focused attention on the need for better physical, social, administrative, and economic planning, with integrated collaboration.

Apart from the concrete results of the planning of Salemstaden and Norra Botkyrka, other experience of current planning projects, especially from another area in the Stockholm Region, Jarva, is reported below under the headings:

- Improved municipal economic analysis.

- A "module" for the settlement.

- Physical residential environment.

Improved Municipal Economic Analysis

The first stage of the planning work now consists of the preparation of a detailed budget allocation program with improved optimizing models for the appraisal of various planning alternatives.

It is proposed that from 1974 government housing loans will be made available not only for dwellings but also residential amenities (schools, day nurseries, service premises). This would afford the opportunity for an efficient coordination of premises, personnel, and activities. In connection with the planning of Norra Botkyrka the Municipality took the unusual step of placing all these residential amenities more or less under a common roof, thereby providing organizational linkin' of various recreational and cultural activities, adult education, etc.

A "Module" for the Settlement

- The organization of various kinds of social activity in connection with commercial and other services has been studied. A unit for 4,000-5,000 persons has been found to be the smallest that can support a relatively complete range of services. It also provides reasonable opportunities for contact between service personnel and families, and between the families themselves. Such a unit affords the basis for:

    - Education in the junior and senior stages and some adult education.

    - Welfare for the children, the elderly, and the physically, mentally, and socially handicapped.

    - Recreational activities, both spontaneous and organized.

    - Commercial services, pubs, assembly halls.

    - Perhaps a forum for district counselling work.

Physical Residential Environment

The gains derived from the highly rationalized, large-scale construction of high-rise blocks are not readily converted into reductions in rent and improvements in the residential environment. The construction projects of the last decade or two suggest a preference for the one-, two-, and three-story buildings of the thirties, with particular emphasis on densely built estates of prefabricated one- and two-story houses. High-rise blocks are reserved for dwellings having indoor contact with service centers, residential hotels, blocks of service flats and the like.

General

In conclusion, mention may be made of certain improvements in planning techniques of particular interest in community planning in Sweden today. The aim here is:

- To bring about a better distribution of authority and responsibility at the national, regional and municipal levels through:

    - National planning.

    - New building legislation.

    - New legislation on urban renewal in order to find ways of reconstructing and preserving old town centers and individual buildings, or at least of avoiding decline into slums.

- To analyze the causes of road accidents, and to formulate road safety regulations and standards with a view to securing a safer environment.

- To determine permissible levels of noise from roads and airports, and to devise appropriate remedies.

- To find procedures for preserving vegetation in connection with new development.

- To develop further models for evaluating soft and hard data.

EXPERIENCES IN FINANCING A NEW TOWN

. . . The New Town of Wulfen, Federal Republic of Germany

by George Wittwer, Geschafstfuhrer Dipl.--Ing.
Entwicklungsgesellschaft Wulfen MBH

Location of Development Project

The new town of Wulfen (target population 50 to 60,000 inhabitants) is a part of the Northern development zone of the Ruhrdistrict. Wulfen, together with the neighboring towns of Marl (20,000 inhabitants), Dorsten (40,000 inhabitants) and Haltern, forms a developable, policentric regional town. Access to this regional town is provided by the Wesel-Datteln-Canal, the river Lippe, a railway serving industrial development in an east-west direction, and two railway tracks and three motorways from north to south. This development zone is surrounded in the north by the landscaped park "Hohe Mark," a large recreation area of the Ruhrdistrict.

Goals of Development

The development is being carried out in three independent communities. For the communities mainly concerned -- Wulfen and Lembeck -- a collective land-use plan has been drawn up. Before the start of the development, both communities had about 3,500 inhabitants, each of basically rural structure (especially Wulfen) with a large commuter population. From the viewpoint of regional and state planning, the new town has to fulfill the following tasks:

- To provide for the population migrating from the Ruhrdistrict, mainly young people.
- To prevent destructive land use from a concentrated urban structure on the rim of a congested area.
- To improve the economic structure by the introduction of industrial and commercial enterprises.
- To complete the regional infrastructure for the designated development area.
- To provide an example of modern urban development.

The immediate reason for building a new town was the construction in 1958 of a new mine with good coal resources in Wulfen.

State of Development

By 1971 about 1,200 apartments, one shopping center and one elementary school had been completed. Two church centers and two additional elementary schools are under construction, in addition to about 800 housing units. The development program provides for the construction of about 600 to 800 apartments with all supplementary public facilities and private services. By 1975, the program proposes to provide, besides other facilities, 3,000 new apartments, the first section of a town center, a joint school center, sports grounds and swimming pools, and the development of new industrial and commercial sites.

By 1971 Wulfen, with a population of 8,500, had about 1,800 jobs. There were about 1,100 commuters out of Wulfen, and about 1,000 commuters coming into the town. By 1975, about 2,000 new jobs will be provided.

Organizational Prerequisites

The two communities, Wulfen and Lembeck, are autonomous, in that they have planning and financial autonomy, with their own legislation. But they jointly share an administration. A Development Company, Wulfen Ltd. (Entwicklungsgesellschaft Wulfen MBH), has been founded as entrepreneur for the urban development.

The company is provided with a supervisory board represented by shareholders, delegates from the Federal Ministry of City Planning and Housing, and from the responsible Ministry of the Land North Rhine-Westphalia (Ministry of the Interior). The State Secretary of the Interior presides over the supervisory board.

The Wulfen Development Company is responsible for planning, sub-division of land, provision of access, and the steering of the entire development. Within this framework, it also prepares the programs for public facilities.

The company has no executive powers. All plans prepared by it have only the legal character of draft plans. Sub-division will be carried out solely on a private law basis. Necessary appropriation procedures can only be pursued by the communities. Cooperation between development company and community is regulated by contracts.

Activity of the Development Company

The company deals only with those functions that cannot be carried out elsewhere. This especially applies to land acquisition, organization, cost control, and coordination of planning and development. For this purpose, the company has a small staff of highly qualified persons to supervise the development process.

For detailed planning and for special tasks, the company uses the services of independent consulting and engineering firms and institutes, which can be commissioned full-time or intermittently through consultant contracts.

Legal Basis

Current Law

The basis for all measures of urban construction has been hitherto the Bundesbaugesetz (Federal Building Act) of 1960. This provides the legislation for land use and zoning plans, sub-division and access. It does not contain special regulations for the development of new towns, but regulates the general urban development of communities. In addition to the Bundesbaugesetz of 1961, a land-use ordinance was issued which, having been revised, provides nationwide uniform regulations for the use of real estate and building sites. Besides these nationwide regulations, each federal state has a Landesbauordnung (State Building Act). The financing of urban construction measures depends on the individual federal states (Lander). Considerable differences in this respect exist from state to state.

The Stadtebauforderungsgesetz (Federal Act for Promoting Urban Construction and Renewal)

As an addition to the existing legislation in 1971, the Stadtebauforderungsgesetz was issued providing special regulations on urban renewal and development. Experience on the use of this law is not available.

The Land North Rhine-Westphalia is the only state which has sponsored the building of new towns since the war. Unlike Great Britain, no special regulations for development measures have been issued, and financing of these developments has followed the rules generally valid for all communities. Thus, the financing of the new town of Wulfen up to now has been based upon the following rules.

Costs

Planning

The Land North Rhine-Westphalia subsidizes the costs of urban planning to an amount varying between 20% and 40%, depending on the importance of the project, and the existing annual budget of the state. The remaining costs are to be covered by the sale of building sites.

Subdivision

At the beginning of sub-division, the Federal Republic allocated a single credit of about 8 million Deutschemarks to the project. This will be used for the budgeting of housing. The Land North Rhine-Westphalia also provides subsidies for acquisition of non-profitable sites. The major costs of sub-division will be met by the prices charged for the plots sold. For profitable sites (which will be used for building purposes), the state has given cost subsidies for a period of five years.

Major Roads and Infrastructure

The high non-profitable expenditures for infrastructure services, such as roads, water supply and sewage, and canal construction will be covered by contributions by the state. The share of this construction in recent years has been between 70% and 100%. The remaining fraction of costs will be met from the sale of land.

Internal Access Roads and Services

Under the regulations of the Bundesbaugesetz (Federal Building Act), all expenditures on internal roads in a building area will be allocated to adjoining owners under a fixed ratio formula. The community -- for Wulfen it will be the Development Company -- is now obliged to pay at least 10% of these costs by itself. This 10% cost proportion was formerly covered by contributions from the state. Sewage systems do not count as infrastructure services in this respect. Cost for this service will be met by the owner of house and plot on the basis of cost of provision and current charges for use.

Housing

In this context, only publicly-subsidized housing construction will be of interest. This makes up 85% of the housing at Wulfen. Nationwide uniform regulations relating to rents, areas of floor space, and individual qualifications exist for the financing of housing construction. Construction of housing in Wulfen follows these regulations. The houses are built by builders or the owner. The Federal Republic has especially promoted construction of housing at Wulfen in support of demonstration projects.

Public Facilities and Buildings

Construction and installation of community facilities are the tasks of public bodies, especially community and development associations, including churches. The Land North Rhine-Westphalia gives contributions towards the construction of those facilities, such as schools, which are dependent on fiscal capacity of the community. For the construction of schools in the new town of Wulfen the contribution of the state totals 80% of building costs.

Building costs will be met, one-third by the state, one-third by the Landkreis (county) and community, and one-third by the administration community association or church. For sports facilities (as long as they are not built in connection with school sport areas), the community provides 30% of the cost. Seventy percent of the costs will be paid jointly by the state and the Federal Republic; the state contributing the larger share. Sixty percent of the costs for installations for medical care will be paid by the state. The development authority and the community are responsible for the remainder of the financing.

For other social facilities, such as facilities for the elderly, and for young children, the Landkreis (county) provides contributions and credits up to 25% of the costs. The body responsible provides another 25% and the state the remaining 50%. All other facilities, which are erected by the community for purposes of its own administration, or for its municipal services, refuse disposal, etc., must be financed completely by the community.

Relation of the Price of Building Plots to Costs

In connection with the planning, sub-division, access, and building of the new town, there are, in addition to the above described costs, expenses for personal and material services; for example the costs of the development company. In addition to this, high costs are incurred in financing the necessary credits for the total project. This means that expenditures for administration and financing must be added to the costs arising from land purchase. A fixed formula is used to distribute the total cost over the newly subdivided total side. Non-profitable sites are surcharged at a low rate; profitable sites, such as building plots, are more heavily assessed. The real estate prices developed in this way will be further reflected in the floor area ratio permissible on each plot. An additional variation of prices can be made depending on the different location values and the kind of use allowed. Thus, the financing of the entire project pays reasonable regard to the prospects of future development value.

Experience Under Existing Regulations

Legal Regulations

- As an entrepreneur, the limited company has shown good results during the construction of Wulfen. A limited company can act much more flexibly than a municipal administrator.

- The lack of legal power of the company necessitates a municipal government favorably disposed towards the new developments. But the necessary appreciation of the value of large-scale development and the problems that have to be overcome are slow to appear.

- The planning of the community was decided in the primary phase by a municipal parliament, which represented both a population of 3,500 existing residents and which also had to project arrangements for 50 to 60,000 new inhabitants.

- The regulations on land expropriation procedures need revision.

Financing Procedures

- During the early stages of development, the cost of building plots will reflect the heavy burden of planning, sub-division and administrative charges.

- The fiscal competence of the community is especially problematic during the opening phase, when provision of infrastructure designated for future development exceeds the current fiscal capacity.

- Financial support does not sufficiently consider the special economic situation of a new town. It is oriented towards the needs of a normal community and is too rigid for the development of a planned community.

Improvement of Financing

An improved method of financing could be achieved by adopting the following methods:

- Total financing of a basic unit of about 20 to 30,000 inhabitants by the Federal Republic and State (Land). The community's budget should be continually reviewed to insure a steadily increasing participation by the community in line with its growing tax revenues. The responsibility of the community could be increased in step with its increasing participation in the financing.

- Low State contributions in the early phases of the project create a high credit burden which inflates the plot price. The contributors (Federal Republic and State) would achieve better results if higher contributions were made during these early phases (10 to 15 years). These could be used, for instance, to provide a cash flow for housing during the development period.

Process of Development and Financing

Because of changes in the economic conditions, trends, and structural problems of the entire region, the development of Wulfen has been slower than anticipated. But previous experiments at Wulfen and the new towns in the United Kingdom have produced evidence that the process of development can be influenced by appropriate financing. Method, scale, and timing of public financing are important factors. Almost without exception, private investments follow the public lead.

From the experience obtained at Wulfen the following basic rules can be deduced:

Period of Planning

To produce a satisfactory overall plan, a preparatory period of three years is necessary.

- This period should be followed by another phase of about two years, during which time the major parts of general sewage and main service facilities should be prepared and construction started.

- During this five-year planning period, the major parts of subdivision development must be completed.

- This phase of the planning process requires large subsidies from the financial backers for planning, sub-division, access, and administration. The supply of credits during this period is only useful when interest- and repayment-free years, and long-term loans are guaranteed.

- An additional preparatory period of about five years will be necessary for settlement of about 5,000 inhabitants, for construction of the first public facilities, and for the establishment of first industrial enterprises.

- This development period is also a non-profitable part of the project because it requires subsidies from the public for the following:

    - Non-profitable land for housing and industrial enterprises.

- Construction of schools and facilities for leisure time and recreation.

- Low rent housing and facilities for supply and maintenance.

- Public relations measures to stimulate an influx of inhabitants, industry and private investors.

The next development period of 5 to 10 years will be accompanied by accelerated growth of the new town, up to a scale of about 20,000 inhabitants. In British new towns, this size is the threshold point for private investment, especially for industrial establishments. At this phase, Wulfen can anticipate a growing involvement of private investors. Public investors will concentrate on the completion of the major services, construction of public facilities, and a 10% investment subsidy for the establishment of industry.

Conclusions

Large, directed public investments must be provided during the early planning and starting period (i.e., 10 to 15 years) in order to stimulate private investments. These investments should be made, if possible, as grants and long-term credits.

The investments during the starting phase may be applied later as stimulants to further investment, as soon as the proportion of private investments rises.

It is of great importance that during the early phases of development, public facilities for education, leisure, recreation, and social services be developed to a high standard in step with the building of houses.

In the early phase, there will be opportunities for the establishment of smaller or medium-sized industrial establishments serving about 5,000 inhabitants, but the development of larger enterprises should not take effect until the population has reached 1,500 inhabitants.

The Stadtebauforderungsgesetz (Federal Act for promoting urban construction and renewal), valid since 1971, provides improved measures in the field of financing, development, and, to a limited extent, for the institutional control of these activities.

OECD The Financing of Planned Communities: Note of Salient Features of Papers Submitted to Urban Environment Sector Group in April, 1972.

Country	General (1)	Land Acquisition (2)	Land Control (3)
UK	Large new towns programme under special legislation.	DC's have wide powers of compulsory purchase at CMV less new town hope value.	Land either retained by DC's for development direct or disposed of (leasehold except for housing) to p.c. to develop in accordance with overall plans.
France	Legislation of 1967 set up development zones procedure providing the terms and conditions of co-operation between the public and private sectors by contract to suit the particular circumstances.	The Land Use Act 1967 was designed for the purchase of land by the State in new towns.	1962 legislation grants regional public authorities control over land transactions. Land purchased and leased by private enterprise for development in accordance with master plans.
US (Columbia)	Completely p.c. town.	Private purchase by Rouse Company in advance of almost 100% of area.	Through ownership and disposal terms.
US (NY State)	Urban Development Corporation created by an Act of the New York State Legislature with a mandate to combine public and private energies to renew existing urban areas and assist orderly growth of new ones. The UDC was given statewide jurisdiction. It is undertaking a number of new towns and also a large number of small urban redevelopment projects.	The Corporation has compulsory purchase powers (so far not used but regarded as an essential tool). Some Federal subsidy money is available to write down land acquisition costs, Welfare Island (in New York City) was leased to the Corporation on highly favorable terms. Otherwise, outright purchase on the market.	Through ownership and disposal terms.
Sweden (Greater Stockholm)	Essentially suburban developments undertaken in collaboration between Stockholm and other municipalities.	Current acquisition by open market purchase. The price is as agreed between private purchasers (when the l.a. intervenes in a private transaction) or as fixed by a Court in case of compulsory purchase. But Stockholm has a large land bank resulting from purchases up to 70 years ago.	Land disposed of leasehold -- 60 years for houses; 26-100 years for industries. Ground rents reviewed every 20 years for houses; every 10 years for other buildings. The City can give notice of termination after first leasehold period if land is needed (and proved in Court) for other purposes.
Finland (Helsinki Region)	No fixed national policy for urbanization; no new towns programme. Satellite towns have developed in Helsinki region but are part of the larger urban structure on which they are dependent.	By voluntary sales. Powers of compulsory purchase exist but little used for fear of high compensation being awarded and affecting the voluntary sales market.	No special control except via planning. 70% of underdeveloped land in cities and towns privately owned.
W. Germany	Legislation of 1960 requires urban development to be in accordance with master plans. Powers are given to assemble land, control speculation, and secure development. Responsibility rests with local authorities.	Under 1971 Act (see (3)) all designated as development areas can be compulsorily acquired by the local authorities or the development agent (see (5)); compensation takes no account of increases in value due to planned development.	An Act of 1971 provides for rises in land values to be creamed off and devoted to financing development.
Holland	Unique scheme. Land reclaimed from sea by State. New Town in agricultural regional center. Finance and construction entirely carried out by Development Authority delegated by State. When inhabited -- normal municipal administration.	State-owned (see (1)).	No special control. Industry-lots being offered for sale at moderate prices to private developers. No fixed policy decisions on offices in centers.

SOURCE: A. J. Fairclough, U.K. Department of the Environment

Planning (4)	Public Finance (5)	Private Finance (6)	Financial Control (7)
DC prepares Master Plan. These are special planning procedures, under Central Government control, for detailed planning within MP framework.	DC's finance infrastructure costs and can build. Aim at 50/50 division of both housing and commercial/industrial building, with p.c.	Either financing building on land released by DC's or institutional funds participating in financing large-scale developments.	A wide variety of national and special NT controls apply to DC's. Long-term, management accounts provide for investment appraisal and overall control.
Master development plan and town planning blueprint done by Research and Planning Commission. Local authorities closely associated with the work.	Central Government provides lump sums for research and planning; infrastructure studies; and initial development work. Other operations financed by 6-year loans from public funds.	Provides market and caters to requirements. Purchases and leases land; prepares site; finances, constructs, and markets buildings. Wholly responsible for industrial development within framework of zone.	The development corporations are controlled by 6-year loans; half membership of Boards are Central Government officials.
By Rouse Company in accordance with a detailed physical and financial plan.	County government finances normal county services -- police, schools, etc.	Acquisition and land development financed by Rouse Company from Institutional loans. Project financed on an "as needed" basis.	Through a sophisticated economic model. Company aims to withdraw at end of 15-year development period -- on a profitable basis.
The Corporation has power to override local zoning (land use planning) and building codes. It has to abide by State Codes, however.	None initially (except for subsidies etc. available nationally and certain tax exemptions). Whole "front-end" investment borne by Corporation (see (6)); serviced land then sold or leased to, <u>inter alia</u>, public entities providing services (e.g. schools, utilities, etc.).	Whole of UDC's operation financed by publicly issued bonds and notes, backed by a special form of State guarantee. Serviced land sold or leased to developers who contribute some equity but also obtain substantial mortgages from UDC.	By UDC in whose hands whole operation rests. Independent economic consultants confirm financial viability of each new community or project.
Control in the hands of the Municipality by virtue of land ownership.	Municipality and State bear remaining 30% largely for roads and sewerage (10% of total capital costs) and schools (10%) and other public facilities.	Bears over 70% of capital costs (of which houses account for 64% in a typical suburb).	
No special legislation. Planning handled under controls applicable to city areas in general. Development has to be in accordance with town plan on which the municipality (with Government approval) has the final say.	Construction and initial financing usually undertaken by p.c. or non-profit organizations (only 2.4% of housing costs is borne by municipalities). Then:		
	Public buildings disposed of to Municipality; some 30% of total cost. State assists private house purchase with subsidies and low interest loans -- 20-25% of total costs.	Houses sold to individuals represent something like 70% of total costs; financed privately as to 75-80%.	No special controls.
Planning autonomy rests with local authorities; this causes problems when very weak l.a.'s are involved in NT development.	Development is undertaken by development agents approved by the Lander; they are enterprises acting as trustees on behalf of the l.a.; they can include interested landowners.		
	Federal funds are available if Lander and l.a. formally finance two-thirds of the project. Overall ultimate division public/private not clear.	Development agents are required to buy and service land in the development area and sell to would-be builders; surpluses go to the agents or l.a.'s.	
Responsibility of Development Authority at all stages.	DA finances out of budget as much infrastructure as possible by 1975. Funds annually from central government. Temporary State subsidies to industry. Existing companies finance utilities. Central government provides schools.	Currently starting to take over financing part of house building, industries, shopping centers.	Amount of central government funds provides rate of growth. Normal municipal subsidy regulations.

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