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DEVELOPMENT IMPACT FEES AND OTHER DEVICES

A report on methods used to reallocate infrastructure costs in the USA

by
John Delafons

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INTRODUCTION

This report deals with the methods that have been evolved in the USA for reallocating the costs of development infrastructure (roads, water supply, and other facilities) between the public and private sectors.

In the past it has been assumed that the public sector should meet most of these costs, recouping them by means of general and local taxation and user charges. In both America and the UK, housebuilders and other developers have generally been expected to provide on-site services (local estate roads, link-up to mains water and drainage, car parking, etc.), but the public sector has been responsible for off-site provision -- major roads, water supply, sewerage, and a range of other physical infrastructure and community facilities. But it is not inevitable that all of these costs should be met by the public sector. It can be argued that there is a good case for those costs being met, at least in part, by the landowners, developers, and employers who will benefit from them.

The problem is to find practical and consistent methods of allocating those costs and of requiring developers and others to meet them or to provide the necessary facilities themselves. In the UK there has been some movement in this direction in recent years, mainly by means of planning agreements under Section 52 of the Town and Country Planning Act 1971.* Such agreements have been limited in extent and not applied in any comprehensive or consistent manner. The Water Act 1989 introduced provisions enabling water companies to levy charges towards the capital cost of new installations, and there are provisions concerning highways in earlier legislation. But there has been no general application of the principle that "the developer pays." In the USA, on the other hand, there has been a long tradition of requiring developers to provide roads, parks, local school sites, and various other facilities within their developments.

In recent years this type of requirement has been extended to a wider range of purposes (e.g. traffic lights, school buildings). Smaller developers

*Now Section 106 of the Town and Country Planning act 1990, but referred to in this report by its more familiar title "Section 52."

can make payments in lieu of actual provision. But many American cities and counties have gone well beyond such on-site requirements. In these cities, developers are now expected to contribute towards the costs of off-site roads, bridges, intersections, water mains and sewerage, storm water drainage, high schools, major open space, public car parking, libraries -- even "law and order." Some cities have extended the concept so as to require office developers to contribute to the provision of public transport (mass transit), low-cost housing, and child-care facilities.

Various novel methods have been developed for achieving this. The most widespread is the concept of "development impact fees," which prescribe a standard scale of charges for new development. There is a variety of other fiscal devices for similar purposes. In addition, some cities are making extensive use of "Development Agreements" which, instead of standard fees, rely on negotiated agreements with individual developers. Some local governments use all these methods, and new measures are constantly being devised.

That is what this report is about. I now briefly summarise its structure and content.

Part One deals in detail with development impact fees, since this is the most widely used method of charging developers for the costs of the infrastructure needs that their development generates. Chapter 1 explains the concept of impact fees and illustrates their use. This is intended as an "appetiser" for what follows. Chapter 2 is also a prelude to the main course and is something of a minestrone. Its intention is to explain the context within which impact fees and similar devices have evolved, the scale and pace of development, and the changing climate of local government finance. The miscellaneous information that it displays is drawn from a wide variety of sources, from scholarly books to newspaper cuttings. It is impressionistic and serves to demonstrate that, while much of the language of land-use planning in America will be familiar to the British reader, the context within which it operates is something different.

Chapters 3 to 6 are the meat of Part One. In these chapters I set out the concept of impact fees as it has developed in the somewhat demanding judicial atmosphere that prevails in most states, where the Courts are very protective of private property rights and tend to take a cautious view of fiscal and regulatory innovations. To safeguard against the risk of successful legal

challenge, the proponents of impact fees have adopted a belt-and-braces approach, and the result is a distinctly complex and demanding process for devising and validating impact fees. It is necessary to set out the lineaments of the system in this fairly detailed manner, as it provides the basis from which a somewhat simpler approach could be developed. It was reassuring to find that in California, where impact fees originated and are most widely used, the courts have taken a less rigorous approach to impact fees. Provided they can be satisfied that appropriate legislative or regulatory powers exist for the purpose, that the fees adopted have a rational basis and are reasonable in relation to the relevant expenditure, and that they are administered in a consistent and equitable manner, they do not demand an unrealistic degree of precision in the methods of calculation and attribution. I think that in the UK our approach would be similar, but it is useful to be aware of the more theoretical formulation.

Chapter 7 indulges in a digression on housing, suggesting that the costs of infrastructure and the level of fees could be moderated if Americans were less prodigal in their use of land and applied more effectively what they know about land-use planning or, in their terms, "growth management" (which can mean either facilitating or restricting development). There is more about housing in Part Two.

Part One concludes with a case study of Raleigh, North Carolina, and its recent experience in introducing an impact fees system.

Part Two of the report reviews more briefly a variety of other methods, both traditional and novel, of exacting or soliciting contributions from developers to the provision of infrastructure and community facilities.

I deal first with the longest established forms of developer contributions: those implemented through traditional subdivision regulations. Secondly I deal with "contract zoning," another adaptation of a traditional regulatory system, which relates to variances granted in exchange for some undertaking given by the developer. I then consider the much more recent "linkage programmes," which are in some respects similar to impact fees but where the concept has been extended beyond what is normally regarded as infrastructure to include the provision by office developers of low-cost housing -- and child-care facilities. I describe separately arrangements that require housebuilders to include a proportion of low-cost housing in their

projects or, more often, offer zoning incentives to do so. I include a short note on excise taxes as an alternative to impact fees. I explain the concept of the Special Assessment District, where a supplementary local tax is levied on occupiers in a specific area to pay for services that benefit solely that area. This mechanism has been extended in some states to facilitate developments on the scale of a new town, and I describe the Florida legislation. I deal more fully with the scope for negotiated agreements with developers, which are favoured by many experienced local government officials and major developers, as it is a much more flexible method and offers more scope for the exercise of negotiating skills on both sides than a standard fees scale. I describe the Californian legislation. In Chapter 8 I deal with various methods used in California to finance transportation systems. Chapter 7, on Development Agreements, is particularly relevant to the US situation and the possible reform of Section 52/1971.

All these methods are in use in the US, and they demonstrate that a developer is pursuing his project usually needs the co-operation of the local authority and other bodies, both in securing his building permit and in ensuring that his development is adequately serviced. He may prefer a predictable scale of fees and to know in advance that will be required of him; but he may also be prepared to negotiate a higher contribution, especially if he needs a higher standard of provision or seeks higher priority among competing projects.

Part Three provides a general assessment of what has gone before, and offers some conclusions on its relevance to the US and a possible legislative approach to recasting Section 52 to provide for both Development Agreements and Developer Contributions in a form compatible with UK conditions.

In conclusion, I should emphasise that this is not a work of scholarship and therefore lacks entirely the scholarly apparatus of footnotes and bibliography. I have freely pillaged (but I hope not plagiarised) a wide range of materials generally without acknowledgement. But, so far as I am aware, there is no single publication that deals with all the varieties of systems described in this report. It is, of course, written by a visitor to the US and from a British perspective. But in my own experience it is always interesting to see how someone from another country describes processes with which one is familiar: even their errors and omissions can prove instructive.

The work on this report was done during my tenure of a Nuffield and Leverhulme Travelling Fellowship in 1989-90 while on secondment from the Department of the Environment. I readily record my appreciation of the Fellowship programme, which affords the opportunity to those in government service to combine their experience of practical administration with the benefits of new experience. In the course of my fellowship I prepared a second report on Aesthetic Control: methods used in the USA to control the design of buildings. Both reports are being published by IURD, and both deal with the relationship between public and private interests in the development process.

Although I cannot attempt here to acknowledge all those who have helped me in the course of this study --academic colleagues, developers, realtors, homebuilders, city, county, state, and federal officials, and many others -- I must express my thanks to my two main hosts, Professor Michael Stegman, Director of the Department of City and Regional Planning at the University of North Carolina at Chapel Hill, and Professor Peter Hall, Director of the Institute of Urban and Regional Development in the University of California at Berkeley. I worked for several weeks at both of these institutions and had every assistance from them. I must also thank Dr. Derek Nicholls, the Director of the Department of Land Economy at Cambridge University in England, where I now enjoy similar facilities.

Finally, I should record that the contents of this report are the author's responsibility and do not necessarily reflect the view of the Department of the Environment. It is published with the Department's permission as a contribution to debate on the subject.

J.D.

November 1990

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PART ONE: DEVELOPMENT IMPACT FEES

Chapter 1 Concept

It is said that the concept of requiring developers to provide the roads and other services needed by new development, which has been spreading like a prairie fire in America in recent years, can be traced back to colonial times and to Royal edicts; but I have not attempted to do that. It seems a natural thing that someone building their own property should provide their own access to it. Equally natural that speculative developers who want to sell their product, whether houses or commercial buildings, should provide the services that their customers will require: at least access, water, drainage. But local communities will need collective services that individual developers operating on a small scale will not be able or willing to provide -- main roads, schools, fire service, law enforcement, hospitals -- and the community will join together to provide these by voluntary contributions or some form of local levy or tax.

At some stage the community will discover the need to regulate new development in the interests of economy and efficiency in the provision of these local services and so as to provide a coherent basis on which to levy local taxes. So the institutions of local government and land-use control evolve. In principle it is simple and inevitable. But it is a long time before land-use controls become institutionalised and conventional. In Britain the first Town and Country planning legislation dates from 1909, and there was no comprehensive system until the 1947 Act.

It has been said that in the US there is not one planning system but 10,000: every city and county has its own system.

Each community can have as much or as little planning as it chooses. Over the past thirty years, most communities have opted for more. The chaos of urban development that one sees everywhere is mainly the legacy of the past. But despite infinite local variations, the two basic components of land-use control in the US are subdivision regulation and zoning. Subdivision regulation relates to the process of land registration: anyone laying claim to land ownership, or dividing land that they own into smaller lots for sale, has to

register their holding under state law. In earlier times, land holdings were defined in terms of "metes and bounds" or by reference to natural or topographical features. But the need for certainty and continuity led to the adoption of official procedures for registration -- in California, for example, in 1893 (then repealed in 1913 and not re-enacted until the 1920s).

Land registration is a privilege granted by the state and conditions or requirements can be attached to it. Zoning control relates to the use of land and originated in the need to separate incompatible uses. The classic cases that established the zoning principle in California in the 1920s related to Chinese laundries. When that principle was finally appealed in the US Supreme Court in 1928, the Court epitomised a public nuisance as "a pig in the parlour."

Zoning regulations are based on what in America is known as the Police power -- the inherent right of local governments to pass laws or make regulations in the interests of public health, safety, and welfare -- to which trilogy the word "morals" is sometimes ambiguously added. No compensation is payable to those adversely affected by such controls, but there are limits beyond which control is judged to be a "taking" of private property and attracts compensation.

These two systems are the basis of land-use control in the United States. While the Sub-division process has remained relatively stable and simple, the zoning process has developed in ever more complex ways since its origins in the 1920s. It is common practice for subdivision regulations to require developers seeking registration to provide the roads for servicing their development. Very often there are requirements to dedicate land for public open space and sometimes for schools. These requirements can be commuted to cash payments, particularly for smaller developments that do not warrant separate provision. Zoning control operates in a different manner by defining many separate types of use zone, according to the type and density of development, and attaching detailed conditions to each type. A developer whose proposals conform with those requirements is entitled to his building permit. There is no discretion unless the developer seeks a variance or exemption from the standard controls, in which case there may be scope for negotiation but usually subject to a public hearing. There may also be provision for major "planned" developments to be dealt with by separate procedures since they do not fit the standard provisions but may offer other advantages. Again there is scope for negotia-

tion between the developer and the planning authority. Over the past 30 years or so, these discretionary elements in the American system have grown in significance. In areas of rapid growth and large-scale developments, planning has become a matter more of negotiation than of regulation. But the more traditional regulatory systems may be retained to provide a basis from which negotiation can start and to provide the planning authority with effective leverage in the negotiating process.

It is in this context of change in the character of the planning system that the practice of exacting benefits or contributions from developers has evolved. The traditional pattern of standardised and non-discretionary regulation would not have permitted it. Equally, those who are concerned about the apparently unfettered proliferation of such demands on developers are anxious to bring it within the more specific and systematised processes that characterised traditional land-use control. When one sees the extent and variety of the demands now being made on developers in many areas, that concern is understandable.

It is in an attempt both to rationalise and legitimatise these demands on developers, and to secure a more reliable flow of funds, that the concept of development impact fees has arisen.

"Development impact fees" (referred to in this report as "impact fees") are financial contributions required from developers as a condition of carrying out their development. They may be linked with the traditional process of subdivision or zoning control already described, or they may be established under separate state enabling law, or be based on the "home rule" privileges with which municipalities in some states are endowed, or they may be brought under the same Police power that provides the cover for traditional zoning control. In general there is a tendency for states to provide specific enabling powers, in order to overcome possible legal or constitutional deficiencies in those traditional powers and to provide a more stable and robust framework for this new source of funding for development infrastructure.

The concept of impact fees is very simple, and very beguiling to local governments faced with the costs of rapid growth and falling federal and local revenues. It is also a concept that is far less simple than it appears, as will become apparent when we come to look more closely into its implementation and administration. But let us begin by describing and illustrating what it is

and how it works in the simple terms that have proved so popular with hard-pressed local governments.

Traditionally in America developers, especially homebuilders, have been required to provide all the on-site roads, water, and sewerage needed to service their development. As already explained, those requirements are usually linked to the normal processes of subdivision regulation and zoning control which evolved in the 1920s, became commonplace in the 1930s, and remained substantially unchanged, though of growing complexity, for the next 50 years.

In the last 20 years, however, and increasingly in the 1980s, the notion of levying fees or charges on developers as a prerequisite to carrying out their development has grown rapidly and spread even more rapidly. Now, instead of being required simply to provide roads and basic services on-site, the developer may be presented with a bill for contributions to all manner of services on- or off-site which would in the past have been provided by local government or other agencies and paid for by local taxes (both property taxes and other fiscal instruments -- e.g. sales tax).

These fees are normally expressed in terms of cost per dwelling (or per square foot for commercial development). In 1983 a survey of 23 fast-growing cities and counties in Southern California showed the following average fees for a 3-bedroom house in a typical 25-acre development of 100 homes:

	<u>\$ per dwelling</u>
Roads	1,635
Schools	1,313
Parks	1,128
Water	926
Sewer	905
Flood control	358
Other	<u>382</u>
TOTAL	6,647

Actual fees can vary widely around these averages -- e.g. roads from \$360 to \$360 to \$3,050 per house; parks \$1,100 to \$3,050. Average fees of this order were said to represent about 7-1/2 percent of the market price of the typical house. Whether this charge is an additional cost to the housebuyer or is carried by the developer or results in a lower building specification or is reflected in the price paid for land, are very pertinent and very vexed

questions that we will have to consider later. As the fees are standardised, they can easily range between 10 percent or more of the price of low-cost housing and less than 5 percent of more expensive houses. At once the problem of inequity presents itself. (A new draft Ordinance for Palm Beach, Florida, seeks to mitigate this regressive element by relating the fee to the number of bedrooms and by citing a survey that showed that the larger houses had a higher occupancy rate.)

A more recent (1986) survey of a random sample of nearly 500 house-builders across the nation showed that around 45 percent of builders paid impact fees of between \$1,000 and \$5,000 per unit (dwelling), and 10 percent paid more than \$5,000. In the majority of cases, fees had been introduced only within the past five years, although in some areas more rudimentary charges dated back to the 1970s or earlier.

Charges of this order can clearly be a significant addition to developers' costs and to house prices, especially when added to more conventional zoning/building permit fees, plus the legal and other costs associated with home purchase, which in total can add 20 percent or more to the "up-front" costs of house purchase.

A 1987 survey of development fees in about 40 localities in the Bay Area of California showed the following median fees incurred on a typical housing development of moderate-priced single-family housing:

	<u>\$ per dwelling</u>
Roads	1,076
Parks	1,204
Schools	2,151
Fire and Police	312
Water, Sewerage, and Utilities	3,291
Other "growth" fees	880
Planning application fees	68
Building permit fees	<u>1,094</u>
TOTAL	9,110

The comparable fees in 1981 totalled \$4,037, so the scale had more than doubled in six years. Fees vary widely between municipalities -- from \$2,673 to \$14,766 on a modest single-family house. In the Bay Area, house prices are exceptionally high by American standards. Very little is available below about \$100,000, and average prices (new and second hand) were around \$140,000 in 1987

and may now be nearer \$200,000). These levels are roughly twice those in North Carolina. The national median for new housing prices in 1987 was \$79,900. In many of the northern metropolitan areas and in rural areas, prices are a good deal lower. Of course, house prices reflect what the market will bear, but, in rapidly growing areas like California, demand far exceeds supply (thanks largely to "growth management" policies), and lower-income households are priced out of the market.

It should be noted that the fees for particular services do not reflect the relative cost of different types of infrastructure, which may be affected by the availability of state grants, etc., or other sources of revenue (e.g. main roads are financed chiefly by gasoline tax). The cost of schools falls on the School Districts, which have taxing powers but now rely heavily on impact fees for new school building. California state law enables School Districts to charge a maximum fee of \$1.50 per sq.ft. on new residential development and 25 cents per sq.ft. on new commercial and industrial development. In 1981 only 24 percent of School Districts in California charged impact fees: now 93 percent do so. It is the most widely used type of impact fee in California. The 1987 survey showed the following proportions of cities charging other types of fee as compared to 1981:

	<u>%</u>	
	<u>1981</u>	<u>1987</u>
Parks, open space	56	76
General "growth" fees	43	55
Roads and traffic	4	52
Fire and Police	0	19

The California Bay Area Council (a voluntary citizens' organisation) has assessed the cost components of new housing as follows:

	<u>%</u>
Land	10
Construction	45
Site works	10
Impact fees and other charges	10
Developers' overheads	25

It is interesting to compare this with the similar (though not precisely comparable) analysis in the Conran Roche report on Costs of Residential Development in South East England (prepared for DOE in November 1989):

	<u>£</u>
Land	45
Construction	30
Site works	8
Off-side infraststructure	5
Community facilities	5
Developers' overheads	20

Apart from the fact that in Britain the land cost substantially exceeds the building cost, it is noteworthy that the costs of off-site infrastructure and community facilities amount to 13 percent of the total cost of development. These items are those normally covered by impact fees in California, where they account for 10 percent of the total housing cost. If the cost of land is excluded, however, the infrastructure/community costs represent over 30 percent of the total cost in Britain, whereas in California they remain at about 12 percent. Both sets of figures are very approximate and are probably not closely comparable (the difference may be accounted for partly by the cost of land for "off-site" roads). But the important point is that in America those costs are met, at least in part, by impact fees, whereas in Britain they would normally fall on the community rather than on the developer. In the case of large-scale developments, British housebuilders are increasingly expected to make some contribution to those costs, but there is no standard scale of charges (except for water), and the developer's contribution is the subject of negotiation between the developer and the local authorities concerned.

The significance of developers' contributions can also be illustrated in terms of the total fees generated by a major development. In 1989 The New York Times reported a proposed development in New Hampshire where the city of Nashua (pop. 80,000) reached an agreement whereby the developer would pay \$18 million for "public improvements" in exchange for the rezoning of a large rural area (656 acres) to permit residential (3,450 units) and commercial (225,000 sq.ft.) development. This seems to have been the result of a "one-off" negotiated agreement rather than derived from a standard fee scale, but it works out at around \$4,800 per house. In this case the developer is to pay his contribution over a period of 10 years, in line with his planned rate of development.

I have found it very difficult to obtain comprehensive information on total fees income for individual areas and, even more obscure, on what proportion they represent of total municipal revenues or expenditure on related

infrastructure. One is forced back onto random information gathered from a variety of places. But it will serve to show that impact fees can yield substantial amounts.

Broward County in Florida (one of the leading exponents of impact fees) collected the following amounts in fees in 1983:

	<u>\$</u>
Roads	3,398,907
Schools	1,190,567
Parks	871,704

These figures are for actual receipts and exclude the value of other developer contributions -- e.g. land dedicated for open space or road construction undertaken by the developer.

Palm Beach County, also in Florida, collected about \$1m a year in road fees in the early 1980s but also has a backlog of over \$9m outstanding as a result of delay in litigation. Although the county won the case, it now has a major problem in collecting overdue payments.

Similar information from Raleigh and Durham in North Carolina is given in Chapter 8.

In Orange County, California, developers along the routes of three proposed freeways are being required to pay contributions which are expected to raise \$630 million, representing over 60 percent of the total cost of the new roads. The area includes Irvine, "the largest planned community in America" (a dead ringer for Milton Keynes). I met with officials of the Irvine Company, who confirmed that the company would be contributing about \$400,000,000, including \$100,000,000 in land dedication.

Developers in Fairfax County, Virginia, including a huge new commercial area just outside Washington, DC, have agreed to make contributions totalling \$20 million towards road improvements serving the new development. Further examples of developer contributions to transport infrastructure, including mass transit, are given in Part Two, Chapter 8.

Finally, among these random examples, Michael J. Ciccarone, County Attorney of Lee County, Florida, told me that Florida as a whole is generating over \$600 million a year in impact fees. Mr. Ciccarone also told me that his own county (population 310,000, doubled with summer visitors), which has a

highly developed impact fees system, collects \$15-16 million a year in fees, and over 90 percent of the county's roads programme is financed by this method. If so, it is striking evidence of the potential of impact fees as a source of local government finance.

Sometimes the developer, in exchange for zoning consent, is persuaded to provide some external benefit unrelated to the needs generated by the development. Los Angeles recently gave consent for a \$1.9 billion office-commercial complex in exchange for a new art gallery. English readers will recognise this variety of "planning gain."

Planning-law journals and newspaper reports in the local and national press abound with examples of benefits "proffered" or exacted from developers -- some examples: golf course, football ground, pedestrian tunnel, freeway sound-wall, portable library, "shuffle-board park." This type of contribution is the result of negotiation rather than specified in a standard fee system. For the most part they are relatively trivial additions to the developer's costs and may often be regarded as good PR rather than a serious burden. The big money relates to a few types of public infrastructure -- roads, water, sewerage, flood prevention, public open space -- and they relate primarily to residential developments.

There is a separate class of development fees or exactions that relate to commercial (mainly office and retail) development. These have been evolved chiefly in California and Massachusetts, but they are spreading to other areas. They require developers to either provide, or contribute financially towards, low-cost housing, child-care facilities, or other types of social provision -- including in one case "cultural provision for the poor." This type of "linkage programme" is dealt with more fully in Part Two of this report. In some respects it represents a charge on employers rather than on developers, although developers may be the first to incur the charge, which is then passed on to commercial tenants in rental levels.

All these varieties of development fee, charge, or exaction derive from the simple thought that those who want to carry out development can reasonably be expected to contribute to the cost of providing the infrastructure and community services that new development requires -- and, beyond this, that developers can be expected to contribute other benefits to the community. As Douglas Porter, director of the Urban Land Institute's development policy

program, has commented, "Development approval is now seen more as a privilege than a right. The message to developers is 'if you want to play the game, you'll be expected to pay something.'" The ULI is a research body largely funded by developers, and Porter was not necessarily expressing approval of this new tendency. Another commentator on subdivision exactions has noted that Webster's Dictionary (1986) defines the word "exaction" as "extortion." Nevertheless, most developers seem to recognise that "Pay to Play" is now the name of the game.

Chapter 2

Context

The reasons why the concept of development impact fees has made such an "impact" on American local governments and on developers are not far to seek. They are, firstly, the severe cut-back in federal funding for local infrastructure; secondly, local resistance to increased taxes and in some areas legislative requirements to reduce taxation or to restrain municipal borrowing; and thirdly, the immense rapidity and intensity of growth in some areas.

The first two reasons are readily explained. During the Reagan administration, federal funding to state governments for infrastructure development -- mainly roads and water but other services too -- was roughly halved. That perpetuated an earlier trend in federal expenditure on public infrastructure, which declined from around \$31.3 billion in 1965 to about \$20 billion in 1983 (at 1972 prices). At one time the Federal Government paid 75 percent of the costs of many municipal sewage treatment plants, but no longer provides that support. At the same time a taxpayers' revolt developed, which in some states has compelled local governments to restrain or reduce the existing levels of property taxation and has certainly left no room for increases sufficient to offset the reduction in federal funding.

California is the prime example of these drastic changes in local government finance. Following the adoption of the notorious Proposition 13, which not only set a cap on the property tax but required its progressive reduction, revenues from that source have been almost halved, from \$165 to \$85 per person. At the same time, federal and state financial support for cities dropped from \$204 per person in 1978 to \$94 in 1985. And yet California continues to be one of the fastest-growing parts of the nation: the population of the Bay Area grew by over 500,000 between 1980 and 1987: an increase of almost 10 percent in 7 years. Some cities show growth rates of more than 5 percent a year. (Compare the projected increase in the population of South East England of one million, or 5.8 percent over the 15 years 1986-2001. And we think we have got problems.)

The resultant "fiscal stress," sometimes more alarmingly "fiscal distress," that has afflicted local government has led to an anxious search for alternative sources of revenue. In America these are more varied than in the UK. Apart from property tax, general sales tax is the most pervasive, and

there can be separate and differential rates of tax on gasoline and on other products or services. All these types of local tax, however, are paid by the resident population at large and are therefore unpopular; any proposed increase is liable to be voted down. In California, any increase in the property tax now requires a two-thirds majority at referendum. How much more attractive to levy a separate tax or charge on newcomers to the area and on developers whose prodigal rate of building generates the need for expenditure on new roads, schools, and other facilities. Existing residents are politically organised and have the vote; the potential newcomers are unidentified and not yet enfranchised. Development fees present themselves as the simple and acceptable solution to fiscal stress. There may be adverse side effects, but those may not be apparent until later.

The need to cast around for new sources of local revenue is obviously greatest in areas where population growth is most rapid and development pressures most intense. These factors vary widely across the states. The areas under greatest pressure are in the South, particularly Florida, and on the West Coast, particularly California. But regions as far apart as Colorado, Oregon, New Jersey, and Massachusetts are experiencing intense development pressures. And many medium-sized cities in favoured locations are seeing rates of growth which generate similar concern.

In recent years, new homebuilding has been running at around 1.75 to 2.0 million units, or more, and is expected to continue in the range 1.9 million to 2.2 million a year in the period 1990-2000.

The pace and random pattern of suburban development in America is, of course, fuelled by the almost universal dependence on the motor car for travel and the almost universal level of car ownership. In 1987 there were 167 million cars in America. Between 1983 and 1987, America added 9.2 million people to its population and 20.1 million cars to its roads. Already in 1983 over 87 percent of households owned at least one car, and 98.9 percent of those with incomes over \$40,000 (about the median level). Even among those with incomes under \$10,000, over 60 percent owned at least one car; 87 percent of those on incomes over \$40,000 (the typical suburbanites) owned two or more cars. The volume of traffic and the demands it makes on highway infrastructure is America's biggest planning problem.

It is difficult for those accustomed to more moderate rates of growth and more diffuse development activity to comprehend the scale of development in America, or the velocity of the economic forces that drive new development. A brief excursion into the kind of statistical extravaganza in which Americans delight will serve to illustrate the scene.

With characteristic aplomb, the National Realty Committee, in a recent publication, America's Real Estate (1989), puts a total value on the country's land and buildings of \$12 trillion -- more than twice as much as all other forms of US tangible capital combined. Of this, residential development capital accounts for \$4 trillion, non-residential buildings \$2 trillion, and structures other than buildings (e.g. roads, bridges) \$2 trillion. Land accounts for the remaining \$4 trillion. These are nice round numbers.

Quoting the same source, and no-one has any better figures to offer, in 1987 private real estate development contributed \$950 billion to the American economy, more than 20 percent of GNP. Public development (although not counted in GNP) added another \$100 billion.

The total land area of America is about 2.3 billion acres. Nearly half of that is used for agriculture. Only 2.6 percent is in urban use (broadly defined as urban areas down to 2,500 residents). But this tiny proportion nearly tripled from 1949 to 1982 -- from 18 million acres to almost 50 million acres. Despite this, the amount of land in agricultural use remained broadly unchanged from what it was in 1949. The land taken for new development was largely unused -- virgin territory or the residue left by earlier waves of development that have swept over the rural hinterland in an incredibly wasteful tide of discontinuous "real estate" development. In some states, for example North Carolina and Massachusetts, development often impinges on areas of natural woodland, but not always in a crudely destructive manner. Often new buildings are slotted into the wooded landscape with surprisingly little disturbance, and the result can be a distinctly attractive form of urbanisation. In Southern California, on the other hand, development swarms over the coastal plain and the hillsides in a seemingly endless blanket of urbanisation.

Surprisingly, however, the second-largest land-use change since 1949, after urban development, has been the addition of 183 million acres of land set aside as recreational and wildlife areas: State and National Parks increased from 19 million to 116 million acres and wildlife areas from 9 to 95 million acres.

Real estate generates about 23 percent of total tax revenues (on income, property, and sales) collected by all levels of government -- \$200 billion in 1987. American cities, towns, counties, and school districts raise about two-thirds of all their tax revenues from property taxes on real estate: \$106 billion in 1987. Homeowners paid about 45 percent of those taxes and commercial owners 54 percent.

The significance of property taxes as a source of local revenue creates an ambivalent attitude towards growth. On the one hand, new development generates new taxable units and broadens the area's fiscal base, besides creating employment opportunities and new economic activity. On the other hand, growth is seen to generate new demands for public infrastructure and community services, and a consequent increase in local taxation.

There are varying and competing views among economists as to whether the costs of new infrastructure impose an unfair burden on existing residents and one which should be mitigated by imposing impact fees on new development. Some economists argue that, in certain conditions of growth, the cost of servicing loans raised to pay for new infrastructure will be sufficiently offset by the tax revenues generated by new development to render impact fees unnecessary. Others argue that, in certain conditions, improved local infrastructure will enhance the value of existing property so as to offset increases in local taxation. Similarly, others argue that the infrastructure needed to service new development will be reflected in the value of that property and that impact fees are a means of paying for that increment. In addition, it is sometimes argued that if, as is generally assumed, the fees will be passed on by the developer to the housebuyer the price that the housing would otherwise fetch will be reduced to take account of that factor. Others argue that there will be no such reduction. We will return to this issue in Part Three, but the most probable explanation is that the impact of impact fees depends chiefly on local housing-market conditions.

As to the fiscal implications of new development, whatever the theoretical economics, the fact is that infrastructure expenditure is "lumpy," whereas new development tends to proceed at a more even rate. It will take time for new property tax revenues to come through. Meanwhile the cost of debt repayment is carried by existing residents, and it is unlikely that a possible increase in the capital value of their property will reconcile them to a

present increase in their property tax. Besides, some people's property may be adversely affected by new infrastructure development. And in many fast-growing areas, there is a general feeling that growth brings congestion and a deterioration in the quality of the local environment.

For all these reasons, the political and practical reality is that existing residents will tend to be resistant to new development, or will want to be assured that the new development will "pay its way." Impact fees at least have the virtue of going some way to mollify this resistance -- and, beyond that, can be used to mitigate the adverse environmental effects of new development and avoid overloading local services.

1990 is the year of the decennial census, so general information on population growth and rates of development is now ten years out of date. But the 1980 census showed extreme variations across metropolitan areas in different parts of the country. From 1960 to 1980, the Houston, Texas, area grew by 134 percent, from 1,243,000 to 2,905,000, and the housing stock increased by over 7 percent a year. Fort Myers in Florida grew from 55,000 to 205,000, an increase of 276 percent, and their housing stock increased by 21 percent a year on average over those 20 years. At the other extreme, several of the older metropolitan areas have been declining in population. It is the contrast between the sunbelt and the frostbelt.

To take a fairly typical example, Raleigh, the state capital of North Carolina though not the largest city, had a population of about 184,000 in 1985 and is growing rapidly at 5.8 percent a year. If growth continues at that rate, Raleigh will be twice its present size by the year 2000. This development pressure is reflected in land prices: undeveloped land for residential use tripled in price over the period 1980-85, whereas the average increase across the United States in that period was 5 percent. In Raleigh it rose from \$6,400 to \$20,000 an acre. (English readers will note the astonishing contrast with UK prices -- at least £400,000 an acre in the South East -- but bear in mind that typical suburban densities in the US may be around 4 or 5 an acre or less, rather than 15-20 or more in England.) Despite the rate of new housing development, the price of the average older house in the Raleigh area rose 14 percent in 1984-85, while house prices across the country remained fairly stable. Obviously new roads, sewers, and other public infrastructure is needed to service this new development. But the North Carolina Highway Trust Fund

already faces a \$5 billion backlog of urban highway needs (at least, that is what they claim: in my view America spends too much on roads and would do better to invest more in other forms of social infrastructure -- but I am not standing for election). Raleigh has recently introduced a system of development fees, and I take it as a case study in Chapter 8.

Raleigh, however, displays a relatively modest scale of growth. Florida's is more exuberant: its population has doubled every decade for the past 30 years. On average 1,000 people a day move to live in Florida, and 30 million people take their annual vacation there. It is now in the forefront of developing impact fees and other methods of "growth management." Whether those techniques will wholly succeed in reining in the pace of growth, or matching infrastructure to new development, may be doubted. The impetus may be irresistible. It has been that way for the past hundred years. Florida has a long history of real estate and development extravaganza. In 1881 the state government sold 4,000,000 acres in south-central Florida to a Philadelphia investor, Hamilton Disston, for 25 cents an acre and thus saved the state from bankruptcy. Disston himself went bust in the 1893 panic, but he was succeeded by those amazing friends and rivals Henry Plant and Henry Flagler, who pushed the railroads at fantastic speed into Tampa on the west and Miami in the south, creating the Florida tourist business. They deserve to be better-known folk heros. Flagler virtually invented Palm Beach and Miami, and built the most amazing resort hotels, including three massive piles in St. Augustine modelled on the Alhambra, and a marble palace for himself at Palm Beach which he called "Whitehall." Walt Disney proved a worthy descendant when he bought 27,000 acres south of Orlando to create his new Disneyland. Orlando now proudly heads the league of cities in terms of hotel rooms -- 67,500 rooms at the last count. In 1989 they nearly lost the first place to Long Beach, but Disney came to the rescue with a new 1,509-room hotel, shortly to be followed by two more with 1,214 rooms, bringing Orlando up to 72,000 hotel rooms. The Disney Corporation are now planning a 4,000-bed hotel. Even Henry Flagler might have been impressed. As a final flourish, one notes the Palm Beach Polo and Country Club, a newly developed community of unaffordable housing which boasts 11 polo grounds. One would not have thought that there were that many polo players in America: certainly not in geriatric Palm Beach. But as an advertising gimmick it takes some beating.

In America, as in Britain, the anti-development tendency is also well-developed, although it is probably a minority rather than a majority interest in the US. The term NIMBY originated in California, and the director of the American Planning Association told me that it is now being superseded by NOPE -- Not On Planet Earth. There is another useful acronym, NIMTO -- Not In My Term of Office. Local opposition to change in the neighbourhood environment is, of course, commonplace in America as in most other countries. There are also, in some states, well-organised "conservation" groups which, as in Britain, are blind to the needs of the community (for housing and employment) and rejoice in the self-righteous knowledge that opposition to development is in itself a virtue. By way of example, environmentalists in California recently launched a ballot initiative (i.e. a proposal subject to referendum) virtually to prohibit further development in Martinez county -- an area to the north of San Francisco with a population of 775,885 which is expected to grow to 930,205 by the year 2005. This objective would be achieved by replacing the existing low-density zoning in areas as yet undeveloped by requiring 320-acre-minimum lot sizes. The organisers of this brilliant idea expect no difficulty in collecting the 25,600 signatures needed to place their proposal on the ballot next November. The main sponsors are the Sierra Club, the Mount Diablo Audubon Society, and the Greenbelt Alliance. Having seen the beautiful hills and coastal country to the north of San Francisco, we were tempted to sign the ballot ourselves. But what is needed is some sensible planning, not a mindless moratorium.

The point of this chapter, apart from whatever entertainment value it may have, is to remind the British reader that although the language of American land-use planning and control may seem fairly familiar, the scale, pace, and character of development in the USA are something different. As Martin Amis has observed, America goes too far in all directions. He remarks on the "vehement and anarchic" nature of American free enterprise. One admires its vigour and vitality. It is of a different order from the modest attempts at development in our country that some "conservationists" profess to find so alarming. The methods of growth management and of financing infrastructure described in this report are a valiant attempt to grasp this tiger by the tail. The fact that they have been applied, with some degree of success, suggests that they might work in Britain. It is at least worth taking a look at them.

Chapter 3 Criteria

With local governments eagerly pursuing the new revenues apparently offered by development impact fees, and with developers expressing both alarm and a willingness to cooperate, the American legal profession has performed its familiar role in offering to impose order on the incipient confusion. Attorneys acting for local governments and for developers, academic lawyers, and the Courts themselves have shown their customary creativity in tackling this new field of planning law and local government finance.

As was the case 60 years ago with the emergence of land-use regulation, there is no convenient federal legislation on the subject, no "Town and Country Planning Act." Individual states, counties, and cities have evolved their own legislation, helped or hindered by the legal profession, acting for one side or the other. The result is enormous diversity and some uncertainty. It has also meant progress by trial and error, with each area gaining from the experience of others, and continual change in the ground rules. It is all very confusing, but it is perhaps preferable to uniform legislation that allows little adaptation to local needs and which may ossify over time.

A great deal of the earlier writings on the subject was concerned with establishing whether the concept of a development impact fee was something that could be brought within the scope of the Police power (which permits regulation without compensation); or whether constitutionally it involved a "taking" (public acquisition of property rights), which is illegal without compensation; and whether such charges should be regarded as a regulatory "fee" (for the levying of which local governments have implicit powers), or as a "tax," which requires specific state enabling powers.

So far as the UK is concerned, we do not need to address these questions, or not in the same terms, since in our country local authorities are "creatures of Statute" and can only do those things which Parliament has decided they can do; and this certainly does not (at present) extend to levying compulsory fees or charges on developers of the kind described in this report. But Parliament can enact whatever laws it chooses, and it would be able to pass legislation authorising local authorities to introduce development impact fees, either in a standardised format or at local discretion, or subject to some form of Minis-

terial approval. No constitutional issues would arise, although the Courts might raise difficulties of interpretation or other obstacles if they considered that the new law was unreasonable or confiscatory when considered in the context of general property law. However, if the legislation was properly drafted to express Parliament's intentions, the basic powers could not be questioned. Despite this, the exacting scrutiny to which the American Courts have subjected the new concept of impact fees has produced a set of principles or criteria which could be very relevant if the UK were to embark on a similar course. It is also worth noting that, in most states where impact fees have been introduced, it has been found advisable to pass enabling legislation, for the avoidance of doubt and also to avoid the expensive and time-consuming legal arguments that would otherwise delay their introduction. But first it will be useful to consider the general principles that have been evolved.

Rational nexus. This is the principal judicial concept that the Courts have introduced in considering the cases that have come to them challenging the imposition of development impact fees. It is an elegant concept with an appealing title that has rapidly found a prominent place in the planning vocabulary -- all the more appealing since it implies a rationality in the planning process which is not always evident. "Rational nexus" is what the Court will look for in examining a development impact fee (having first disposed of the question of vires -- i.e. whether the authority has power to levy such fees). They will want to be satisfied that there is a clear relationship between the facility (road, sewer, park, etc.) which the developer is being asked to provide, or help pay for, and the development which he is proposing to carry out. The Court will not endorse a demand to pay a fee which is to be spent in funding some facility on the other side of town and which offers no benefit to the development in question.

This principle is clear enough and similar to that adumbrated by Lord Scarman in the House of Lords' decision on the Covent Garden case. But (as indeed the Covent Garden case showed) there is a wide spectrum across which such a relationship can be spread. In America, different State Courts have adopted differing approaches to this key issue. In Illinois the Courts require that the purpose for which the fee is to be charged is "specifically and uniquely attributable" to the development that gives rise to the fee. The Californian Courts, on the other hand, have adopted a much more liberal or

flexible approach and require only that there should be a "reasonable relationship" between the facility to be provided and the development in question. As a result, impact fees (and negotiated exactions or contributions) have flourished more in California than in any other state. Courts in other states have pitched the rational nexus test at varying points on the scale of relativity.

But this basic relationship is only one of the tests that the Courts apply. There are several other tests that various Courts have devised at various times and in different cases, and all or any of them may be referred to under the generic title of "rational nexus." I outline them briefly in the following paragraphs -- in no order of priority and with my own sub-titles.

(i) Need

It must be shown that the new development requires the expansion of existing facilities (not just that it would benefit from improved facilities).

(ii) Proportionality

The fees must be proportionate to the scale of expenditure required to provide the new or improved facility. Fees cannot be levied simply as an additional source of revenue to finance an expanded capital improvements programme for the town, as a whole.

(iii) Accountability

The fees collected must be spent for the purpose for which they have been levied. Fees raised for parks cannot be spent on roads. Sometimes referred to as "earmarked funds" (we would say hypothecated revenues).

(iv) Congruity

The fees must be levied for purposes that are congruous with the type of development in question. This is an aspect of (i) above but can prove contentious: for example, fees for the provision of neighbourhood parks may be acceptable in the case of residential development, but should they be levied on offices and commercial premises? On the other hand, office workers use city centre parks in their lunch break. A State Court recently decided that impact fees for schools should not be levied on senior citizen housing since elderly households do not normally include children of school age. But thinking on those lines could undermine much local taxation and is not likely to be upheld by the Superior Courts.

(v) Type of facility

Since impact fees are a rapidly evolving concept, there are no hard-and-fast rules about what types of facility can attract such fees. Roads, water, sewers, and parks are the commonest items. But school sites, possibly school buildings, fire stations, fire hydrants, street lighting, traffic signals -- almost anything normally associated with new residential development -- may be

brought within their ambit. Office, retail, and other commercial developments can generate a genuine need for public car parking provision, new road interchanges, bus station, pedestrian underpass, etc. There is ample scope for extending this frontier. Chapter 8 in Part Two of this report reviews a number of examples of impact fees and other developer contributions used in California to help pay for public transport (mass transit) and other transport needs.

(vi) Capital not revenue cost

The convention seems to be that impact fees are to be expended on the capital costs of new facilities rather than on revenue or running costs. So the provision of school sites and school buildings are acceptable, and perhaps major, items of equipment, but not teachers' salaries, which are still paid for by local taxes. The reason for this is probably that capital costs are once-off and ascertainable, whereas revenue costs are continuing and less predictable.

(vii) Standards

Appropriate standards must be fixed for each type of facility, so that the level of fee is predictable and applicable for all developments of the same type. This is easily enough done for some types of facility (e.g. parks -- X acres per Y dwellings; or primary schools -- X places per Z residents). It may be less easy in relation to roads (beyond on-site estate roads) which serve other traffic besides that generated by the new development. But, as we shall see in Chapter 5, fairly sophisticated (or, at least, complicated) techniques have been proposed for such purposes.

(viii) Mode of payment

The developer may choose (or may be required) to provide the facility himself or to make a cash payment. If the former, he must be credited with the equivalent fee; if the latter, the fee must be comparable to what it would have cost the developer had he done the work himself.

(ix) Timeliness

The facility for which the fees have been levied must be provided within a reasonable time (which in some jurisdictions can be as much as six or ten years or even longer). If this time limit is not met, the fees must be refunded with interest.

(x) Equity

This raises by far the most difficult issues -- double payment or double taxation. If the developer or homebuilder pays fees for the provision of services that are normally paid for out of local taxation, and if the cost of those fees is (or appears to be) passed on to the new homebuyers, then the newcomers will be paying twice -- first the fees and then (ongoing) their local taxes. This apparent unfairness as between existing and new residents is the obverse of the older unfairness of existing residents being burdened with the costs of new development. To avoid it, various devices may be adopted to give the newcomers credits for taxes paid, to be offset

against their fees liability. I deal with this aspect much more fully in Chapter 6, but it raises difficulties that have not yet, in my view, been satisfactorily resolved. The problem may be insoluble, and would not arise if the cost of the fees were carried by the developer and reflected in lower land prices, rather than being passed on to the homebuyer. I will argue that this is likely to be the result if an impact fee system were introduced in Britain.

The last of these tests or criteria presents the greatest difficulties in implementation. But several of the others also pose knotty problems for those charged with implementing an impact fees system. The lawyers and the Courts have set out some principles to govern the introduction of such a system, and they have now been repeated so frequently in Court cases, the law journals, and academic writings that they have become the conventional wisdom. But to translate those principles into a practical fee system raises further difficulties. The Courts may eventually rule on how successful those attempts have been, but many of the communities who thought that development impact fees offered an easy new source of revenue for financing infrastructure must now be having second thoughts.

The case of Texas provides a cautionary tale. There the state introduced an enabling act authorising local authorities to establish impact fees. It is said that the developers' lobby insisted on its incorporating all the latest techniques and judicial wisdom on the subject. The result has been a set of requirements so exacting that few cities have felt able to take advantage of the new Act, and some of those that already had impact fees systems in place are now contemplating their abolition because they do not measure up to the new criteria. It is said that this is exactly what the development lobby and their crafty lawyers intended. I can well believe it. Attempts are now being made by the Act's proponents to amend and simplify it. A typical American legislative scenario.

In the next chapter we will consider some of the key requirements and administrative problems that arise in implementing the impact fee concept. In a subsequent chapter I deal with some of the techniques that have been developed -- or at least suggested -- for turning the impact fee concept into a workable system.

Chapter 4 Implementation

While the Courts have developed the theory of the impact fees concept, it has been left largely to others to work out methods and techniques for its implementation. In doing so, it has been necessary to bear in mind the judicial approach and to try to anticipate the kind of scrutiny that the courts might bring to bear if a particular scheme becomes subject to judicial review. So far the Courts have concentrated largely on questions of vires and constitutionality, but the dominance of the legal process in America, particularly in commercial and property matters, tends to cast its influence on any regulatory system. The result is that those who have been concerned to advance the impact fee concept have tended to adopt a distinctly elaborate and legalistic approach which, while unimpeachable in principle, can present considerable difficulties for those at the working level in City Planning Departments who have the task of constructing and operating a fees system for their area. This has been especially true in states such as Florida where the Courts adopt a conservative stance towards innovation; less so in California, where the Courts have tended to be supportive of policy initiatives in achieving environmental goals in growth management.

It is necessary to make these points because the kind of prescriptions set out by some of the academic and legal commentators on the subject seem to suggest a standard of perfection which practical administrators seldom aspire to, and which may well be beyond the competence of most local government officials. Certainly it is difficult to believe that many of the cities and smaller towns that have so eagerly adopted the impact fees system over the past ten years or so have in fact complied with (or even known of) the formidable requirements that are set out in the more recent textbooks on the subject.

Despite these reservations, it is well worth looking at the approach that has been evolved, since it serves to set a standard against which individual fees systems can be assessed and reminds us of the principles that should underpin them. The main components are as follows:

(i) Population and growth forecasts

Since the need for a development impact fees system derives from concern about future growth and development pressures (whether that concern is to promote growth or to contain it), it is necessary to start by looking ahead and projecting likely trends in population and economic activity. A time-span of at least

five, preferably ten years, is required, since any realistic capital works programme for major infrastructure works is likely to need that kind of time scale. Careful and realistic population projections are necessary, since population growth will largely govern the types of infrastructure required, and will generate the need for development from which the impact fees revenue will be drawn. There must clearly be a close correlation between the pace of development, the flow of fees revenue, and the provision of infrastructure. Forecasting and managing this equation is one of the most difficult aspects of designing an impact fees system.

(ii) Comprehensive Plan

Having settled on a range of population growth projections, the next step is to prepare a comprehensive plan setting out the expected or intended scale and direction of new development (and redevelopment) over the next ten years. Most American cities do in fact have such a plan. It may be proudly on display in City Hall or it may be buried somewhere in the Planning Department. There was a great vogue for City Master Plans in the 1920s, propelled partly by confidence in future growth and the belief that it was good for business, and partly by the "city beautiful" movement that inspired major works of municipal improvement in many American cities. Master plans were also deemed to be necessary to underpin the land-use regulation systems that spread rapidly in the 1920s and 1930s -- although it was also argued that the zoning map itself was a "master plan," and this legal issue was never universally resolved. Master plans were dug out and revised from time to time, sometimes at the instigation of an ambitious Mayor or progressive Planning Director -- plans being cheaper to produce than the projects themselves. In more recent years, however, as concern for growth management has been combined with those earlier motives and the persistent feeling that any city of consequence ought to have a City Plan, the production and maintenance of master plans has become better established as a normal part of the planning process. Thus most local authorities that are minded to embark on adopting an impact fees system already have a comprehensive development plan and can update it if necessary as part of the preparatory work on a fees system. The same would be true in England -- or will be when all Districts have a local plan covering their whole area, as most expect to have by 1991-92.

(iii) Standards

In drawing up the comprehensive plan, the city will need to decide on the standards of provision or service which they intend to apply to new development. They may already have standards for some components -- e.g. estate roads and neighbourhood parks -- which are embodied in existing subdivision and zoning regulations. These may also include standard requirements for land dedication for school sites, etc. These can be readily incorporated into the impact fees system, if that is how these items are to be financed in future. Alternatively, those traditional exactions may be abolished and replaced by new standards in the impact fees ordinance. Or it may be decided to leave the traditional items in place and to apply the new impact fees system only to those items

of infrastructure that are not covered by sub-division/zoning requirements. These items may include collector and distributor roads, major intersections, main drainage, town parks, high schools -- all those facilities that serve a wider area than that covered by a single housing development or commercial building. We will take a closer look at the question of standards-setting in the chapter on techniques. We will also consider there the relevance of the "equal standards" concept. This is something that the lawyers have dreamt up and which is the source of much difficulty. It assumes that in setting standards for new development, the city must either set standards no higher than those that pertain in existing development, or, if higher standards are set for new development, then the whole of the city must be brought up to those standards. There are quite sound logical arguments for this, but whether it is practical or realistic to proceed on this basis seems highly dubious, and to insist on it may largely compromise the potential benefits of introducing an impact fee system.

(iv) Benefit Areas or Zones

It may be decided to divide the city into several areas or zones in which different standards of service and different fee levels will apply. There seems to be no legal objection to doing this, and it may reflect practical considerations such as spare capacity in existing infrastructure, or varying levels of open-space provision according to the density of development (houses with one-acre or half-acre lots may need less in the way of public open-space provision -- although in practice the lower the density the more prodigal the open space and landscaping provision seems to be). It is a mistake, however, to define more than a very small number of separate areas, as a larger number would make it much more difficult to allocate fee revenues in a flexible manner and to fund the larger projects. A medium-sized city of (say) 100-150,000 population might warrant only four or five zones at most.

(v) Capital Works Programme

Having introduced or revised their comprehensive plan, the city then has to produce or revise a capital works programme. Most cities of any size will have such a programme, extending over the next five to ten years. It will cover all the major roads and other infrastructure projects that the city has in view. It may be ambitious, even unrealistic, and subject to the vagaries of political and economic fortunes, and to unpredictable federal and state funding. But it is obviously an essential tool both for planning the city's growth and for projecting municipal expenditure. It will then be necessary to identify those items in the programme that are to be financed in part by development impact fees. Usually this will be a limited range of facilities -- roads and parks, probably storm water drainage, possibly schools. Some cities have extended fees to law enforcement, fire protection, and many other types of service, but I doubt the realism and practicality of some of these refinements, which I discuss in Chapter 5. Some of the services to be covered by fees may be the responsibility of other agencies -- School Boards or Drainage Boards who may have their own powers to levy fees or charges. The enabling

legislation may empower the city or county to charge impact fees for these purposes and to pass the receipts onto the authority providing the service. This can simplify the process of assessing and collecting the impact fees, so that one consolidated payment is made by the developer or homebuilder.

(vi) Capital budget

The programme then has to be costed and a capital budget prepared, in broad terms, for three to five years ahead on an annual basis. Receipts from impact fees and other sources have to be forecast. All this is well within the established processes of municipal financial management and need not detain us here. But three points have to be noted in the context of impact fees. First, those fees are dependent on the actual rates of development that are experienced, and these can fluctuate widely -- especially in homebuilding, where national economic policies and local market conditions can result in wide variations in levels of construction. Fees are an unstable and unreliable source of revenue, and that has to be allowed for in the forecasts. Secondly, impact fees are rarely set to cover more than 50 percent of the capital costs involved, sometimes as little as 15-20 percent. The remainder, usually much the greater part, has to be found from other sources -- chiefly local taxes and/or federal or state grants. Thirdly, since the impact fees collected have to be used to benefit the area from which they were collected (though the closeness of that relationship may vary, as explained in Chapter 3), this will tend to influence priorities within the capital works programme and may dictate them. An impact fees system can thus be quite a severe constraint on capital works programming and funding.

(vii) Financial management and control

An impact fees system requires new systems to be set up for assessing and collecting fees, accounting for their receipt and disbursement, monitoring cash flow, and many other details of financial administration. I do not propose to consider these, since they are within the competence of the municipal treasurer and the capacity of computer technology. But it can be a complex process, not least because it can involve many different departments within city Hall. The fee assessment for a particular development may be made initially by the Appraiser's/ Valuer's department or by the local tax office; the collection of fees may depend on the issuance of a building permit or certificate of occupancy by the Building Inspection department; accounting for the receipts will be for the Treasurer's department; the spending on planned infrastructure may fall to any of the departments with a works programme; and the Planning Department is likely to be responsible for monitoring the whole process and preparing annual reports on its administration. The City Council and many of its committees will have an interest in it. All of this needs to be considered and planned for before an impact fees system is set in motion.

(viii) Rational Progression

This is a term that I have invented myself and which I offer as a contribution to the terminology and literature of development

impact fees. It is perhaps an aspect of the rational nexus test described in Chapter 3 and which is generally accepted as the bedrock of impact fees. But my term "rational progression" serves to highlight what in practice may be one of the most difficult aspects of impact fee administration. This concerns the problem of relating impact fee income to the provision of the infrastructure or other services for which fees are levied. If the fees can be collected only as development takes place, and fees are to be an essential source of revenue for that purpose, how can the infrastructure keep pace with the development? The types of infrastructure to be provided are usually those that serve more than one housing estate or commercial development -- roads or neighbourhood parks serving several developments, or major roads or drainage systems serving a large area of the city. Traditionally those types of infrastructure are undertaken well in advance of new development, and are funded by bonds/loans serviced from tax revenue. Since one of the main reasons for adopting an impact fee system is to avoid the need to raise taxes or to avoid further borrowings, how can a rational progression from infrastructure to development be secured? The answer seems to be that either the infrastructure must be deferred until sufficient development has taken place to pay for it (as may be possible in some cases but not others), or new borrowing must be committed and sufficient fees must be generated to service the bond or loan. The latter is more certain in securing the funds needed to pay for the infrastructure but may raise problems over indebtedness (including legal constraints); the former means deferring provision beyond the point when it is needed. In either case, the uncertainty and possible volatility of fee income may cause difficulty.

The dilemma of ensuring "rational progression" is not a fatal flaw in the impact fee concept, but it is necessary to be aware of it in planning and implementing such a system.

This chapter has identified the main components involved in establishing an impact fee system. The next chapter looks in more detail at some of the more technical aspects. My own instinct is always to look for simplification rather than complexity in administrative or regulatory systems. As in other aspects of management, the precept "Keep it simple, Stupid" has a lot to commend it. My study of the subject, however, has found that there are great pressures towards over-elaboration -- from the Courts, who are far readier to specify requirements than to produce useful guidelines for their implementation; from lawyers anxious to comply with or to anticipate those requirements; from economists who purport to show how it can be done (with hypothetical examples of course); and from those interests who see in imposed complexity an effective obstacle to implementation. It is reasonable and necessary to place some constraints on the ability of local governments to impose charges on

developers, especially where those charges are likely to be passed on to the homebuyer rather than the landowner. But there are also limits to what can be achieved by administrative systems. Harry Stewart, who, as County Attorney for Orange County, Florida, has much practical experience of these matters, cites with approval and relief the observation of the Florida Court in the case of Contractors and Builders Association of Pinellas County v. City of Dunedin: "Perfection is not the standard of municipal duty." They might have added "Competence will do nicely."

Chapter 5

Techniques

The main purpose of impact fees is to enable the local authority to facilitate or regulate growth by the orderly provision of infrastructure and without that cost falling wholly on existing residents. As explained in Chapter 4, this requires the preparation of a development plan for the area and a capital works programme for the planned infrastructure. Those elements would be needed in the interests of growth management, whether or not it was intended to introduce an impact fee system. Nor do those prerequisites involve any novel techniques. This chapter concentrates on the three main elements involved in setting up an impact fee system and which are closely inter-related:

- (1) Setting standards of infrastructure provision.
- (2) Determining unit costs of provision.
- (3) Deciding the level of impact fees.

The standard of infrastructure or service to be provided for new development can usually be based either on the standards already provided to the existing population of the area or on standards promulgated by relevant Government Departments, professional organisations, or advisory bodies. If it were decided to introduce impact fees in the UK, no doubt there would be extensive consultation with those interests. I do not purport to make recommendations on such standards but only to illustrate them by reference to American practice. The examples simply make the point that standards are necessary to a fees system and can be defined.

An aspect which has presented much difficulty for American practitioners has been the question of whether higher standards can be set for new development than those that pertain for existing development -- i.e. whether new residents should enjoy higher standards than the existing population. If the cost of provision in new development were to be met wholly by the developers or by the occupiers of new development, then there would be no grounds for complaint by existing residents, although they might exert political pressure on the local authority to upgrade existing provision. But in practice impact fees are seldom, if ever, set at a level which covers the total cost of provision: part of the cost, often the greater part, will be met by other means -- by user charges, specific taxes (e.g. gasoline tax), or by property

tax revenues which are paid by all users or residents. It is these considerations that lead to the elaborate attempts (described in Chapter 6) to adjust notional fees to take account of other payments or revenues. But those problems relate to the setting of fee levels, as distinct from standards.

As regards the setting of standards, some theorists argue that higher standards can be set for new development only if the local authority resolves to bring all existing provision up to that standard. It is assumed that the Courts would enforce this in the interests of equity and that the American Constitution requires it. Other legal experts dispute this, and I suggest that the doctrine of equal standards is unnecessary and unrealistic, at least in the context of impact fees. In any area that has developed over a long period, there are bound to be quite wide variations in the provision of such facilities as open space, and probably even wider variation in the age and quality of school buildings and other physical stock. It is unrealistic to expect all of these to be brought to a uniform standard. In some cases the older parts of a city may enjoy better facilities than new development is likely to attain -- e.g. mature city parks, art galleries, and other civic facilities that are more accessible to those who live in or near the centre than to those in the suburbs. In other cases -- e.g. quality of school buildings -- the older stock may fall well below modern standards in some respects. But that demonstrates not inequity but the fact that there will usually be a tendency for service standards to be raised in new development, just as with standards of construction, fire safety, or energy conservation which are liable to be raised progressively. Insistence on the attainment of uniform standards across the board is more likely to impede progressive improvement. While a local authority should no doubt address serious deficiencies in existing provision, there seems no need to inhibit the adoption of higher standards in new development simply because it is impractical to raise all existing services to a similar standard concurrently.

The derivation of standards and the related fee scale is relatively simple when what is required is the provision of new infrastructure related directly and exclusively to the new development. It is simplest when the new development is on a scale that requires new water supply, roads, schools, parks, etc., which would not be provided but for that development. In that type of case, the relevant standards can be applied and translated into total provision, and the total cost can be assessed and allocated by means of the fee

system to each housing unit (possibly scaled according to the size of dwelling, number of bedrooms, average occupancy, etc.).

The process becomes somewhat more difficult when development is taking place in relatively small groups or areas rather than in whole new neighbourhoods. But the cumulative effect of such developments is similar for most types of infrastructure or service provision, and the scale of fees appropriate to "whole neighbourhood" development can be applied to these smaller units, provided that the fees collected are used for servicing those developments. The need to utilise the fee income efficiently in the provision of infrastructure should provide an incentive to ensuring that new development takes place in an orderly and compact manner rather than haphazardly.

The difficulties become much more marked, and the rationale changes, when new development is not serviced by totally new provision but taps into existing infrastructure. This may often happen where there is spare capacity in existing systems (water, roads, etc.) and new development is proceeding at a moderate pace. It may well be a planning objective to ensure that new development takes place in a way that enables it to tap into existing infrastructure rather than generate the need for investment in new facilities.

In these circumstances, the charging of impact fees represents not a contribution to the cost of new capacity but an "entrance fee" for linking into existing facilities. That concept is in fact already commonplace in relation to water and sewerage, where "hook-up" charges are normally levied to cover the cost of the linkage itself. But the charge may also include a contribution to the capital cost of the main installation and/or to the cost of future improvements or extensions to the system. (In the UK, the Water Act 1989 includes provision for payments of this kind.)

For these reasons there is no standard formula whereby fees for a variety of infrastructure or service needs can be readily devised. It is necessary to consider:

- (i) the type of provision required -- which may vary from a small park or open space serving only the local neighbourhood to a major water or sewerage system serving a large sector of new development, or a new stretch of major road or intersection;
- (ii) the cost -- whether land only or land and buildings;

- (iii) who benefits from the provision, whether exclusively the residents of a new development or a mix of new and existing population;
- (iv) at what stage the provision is made, whether in advance of new development, concurrently with it, or at a later stage;
- (v) how it is to be paid for -- exclusively by fees, or partly also by user charges, specific or general tax revenues, and by federal or state grants;
- (vi) how it is to be financed -- from revenue or by loan, and over what period.

The permutations on these variables are almost infinite. The best course is to adopt the method of fee assessment which is most apt for the type of provision concerned and one that best serves the main objectives of the impact fee concept -- i.e. the timely provision of infrastructure to meet the needs of new development and in a way that avoids that cost falling mainly or wholly on existing residents but transfers it to the landowner, developer, and occupier, in whatever proportions seem reasonable and politically defensible.

It is generally acknowledged among those familiar with the impact fee concept, and especially among practitioners who have had to devise means of implementing it, that it is a mistake to demand too much of impact fees as a source of local revenue and infrastructure provision. It can provide a useful addition to more conventional forms of finance grants, taxes, and user charges. But it is better adapted to some purposes than others. It is important to have this in mind in considering specific applications.

We can now turn to the techniques for translating standards of provision into a practical impact fee system. At this stage I exclude the question of whether and how the maximum or nominal fee can be adjusted to take account of other payments: I deal with that vexed question in Chapter 6. As noted above, the standards cited are illustrative, not normative.

Parks and Open Space

Parks and open space are probably the simplest types of "infrastructure" for which impact fees can be devised, so it is convenient to start with them. In larger housing developments, the developer will usually be required to provide local or neighbourhood open space under normal subdivision regulations. Indeed, in many cases developers will do so of their own accord to enhance the "quality of life" that their development offers. It is common for developers

of even quite small groups of around 50 homes to provide extensive landscaping (if only because the local topography means that much of the site cannot be built on). Larger developments may provide "country club" facilities such as swimming pool, tennis courts, etc. Where these exceed the basic open-space standards prescribed in subdivision regulations or associated with impact fees, the fees can be waived.

In the case of smaller developments of a few single houses, or with higher-density flats or town houses (often jointly owned and managed as "condominiums"), it may not be practical or economic for the developer to provide open space. In that case the subdivision regulations will usually prescribe "in lieu" cash payments towards the provision of open space by the local authority.

The relevant standards will be expressed as X acres per 1,000 population, translated into so much per dwelling, household, or person.

A similar approach may be adopted for the provision of larger "community" or "town" parks, which serve an area greater than even the larger residential developments. There is a trend away from large public parks of the traditional kind towards much more interesting and varied types of landscaping, preserving and enhancing strips of natural terrain threading through the city and extending into the suburbs. Provided that there is a coherent policy of this kind, backed up by detailed landscape plans, impact fees can be used to fund their extension. This type of open-space provision is proving very popular and is a good example of what positive planning can achieve. Future maintenance will often be undertaken by neighbourhood or citizen environmental groups.

Traditional sub-division regulation usually required only the dedication of land for these purposes, leaving the local authority with the cost of improving it for public open-space purposes and providing other facilities on the site. This was largely unavoidable, since the application to register the subdivision might be made years before any houses were built and before there was any demand for open-space provision. Since impact fees are normally payable by the developer or homebuilder at the time when the building permit is granted, the fee can contribute towards not only the land cost but also towards its drainage, preparation, and planting. In principle there is no reason why it should not also cover part or all of the cost of other recreational facilities on the site.

In setting up an impact fee system for these purposes, the requirements of rational nexus (explained in Chapter 3) have to be borne in mind -- the chief of which is that the facilities provided must benefit primarily (if not exclusively) the local residents who have to pay the fee, as reflected in the development to which the fee relates. In addition, the fees collected must be kept available for these purposes and must be spent within a reasonable time or, if not spent, must be returned to whoever paid the fee. One notes that it may be difficult to ascertain who did in fact pay the fee -- the landowner, developer, housebuilder, or occupier: in practice refunds seem to be rarely, if ever, paid since the authority makes sure that the fee revenue is spent. But this may not always be the case in future, especially where the fee covers only a relatively small proportion of the cost and the authority may have difficulty in raising the remainder or in giving the project sufficient priority among competing claims on its resources. This could be a hidden time bomb in many apparently successful fee systems. The remedy is to spend fee income as soon as possible and on those items which it can fully cover -- e.g. land acquisition and preliminary works, rather than items of construction, which may have to come later.

The use of impact fees to help finance other types of open space, e.g. town parks serving the central city or regional parks serving a much wider area, is sometimes assumed in the literature to be feasible but in practice presents serious difficulties. Regional parks are used by the population at large and, like town parks, may be too far removed from the places where those who pay the fee live for the rational nexus test to be satisfied. Attempts to use impact fees for that type of purpose serve only to demonstrate that there are limits to its applicability.

Schools

The rationale for applying impact fees to meet school provision, and the techniques for assessing fees, are very similar to those for parks and open space. Indeed, many traditional sub-division regulations require the developer to dedicate sites for school purposes, or provide for payments in lieu, as with parks and open space. As with the latter, the requirement for school places can be assessed on the normal scale of places-per-thousand population and translated into a per-dwelling or per-capita basis.

Again, as with open space, the system works best in relation to primary or local schools that clearly serve discreet neighbourhoods in areas of new development, rather than high schools that have a much wider catchment area and are likely to include pupils from older parts of the city.

Fees may be related only to site acquisition costs or may include site development and construction of buildings. Enthusiasts for impact fees would have them extend to books, computers, etc., but since these will require relatively frequent maintenance or replacement, they are best treated as part of ongoing or revenue costs, as with staff costs and other running expenses. Those costs can be met from normal local tax revenues, as they are in existing schools. There is always a danger of undermining the credibility and acceptability (and legality) of the impact fee concept by stretching it to cover every type of local expenditure. This point recurs later in this chapter.

Water Sewerage, and Storm Water Drainage

The standards for the supply of potable water and for the disposal of waste water can be readily derived from existing practice -- per household or per capita -- and by types of nonresidential use or individually for industrial uses which vary widely in water consumption.

The capital costs of water and sewerage facilities are normally met partly by initial connection or "hook-up" charges linking new development to the existing mains system, and partly by user charges that include provision for debt repayment. In the US, water charges are often based on metered consumption. Provision for storm water drainage can be dealt with on a similar basis to that for sewerage.

In effect, such connection charges are an early form of development impact fee and comply in most respects with the rational nexus criteria. The initial connection charge may be limited to the actual cost of making the connections from the mains to the individual property or to the local on-site distributor, while the cost of mains will be covered in the normal water/sewerage payments. Where, however, the existing mains system is already fully loaded and requires extension to serve new development, the impact fees may be extended to cover part or all of those costs attributable to the new development.

Again, the fee concept is easiest to apply where the need for it derives clearly and directly from the demands of new development and where new or addi-

tional facilities are to be provided to meet that development. But major water treatment and sewerage disposal systems are not generally provided on a strictly incremental basis. Infrastructure works of this kind usually involve major investment of a kind that recurs only infrequently. Such new facilities, or major extensions to existing systems, will usually include substantial spare capacity for the next 10-20 years to meet demand from both existing and future development.

The question then is whether new development should be expected to contribute a lump-sum payment towards the capital costs already incurred in the provision of these facilities, or whether the new residents should simply contribute towards those costs through the normal water and sewerage rates or charges in the same way as existing residents. In either case, the cost to existing residents will be reduced since either the outstanding loan debt will be reduced or the cost of servicing the loan will be spread over more consumers. This raises somewhat complex issues that are dealt with more fully in Chapter 6.

Roads

Road networks are similar in some respects to water and sewerage systems, in that there is a hierarchy of main roads, local distributors, and connection points. The capital costs of each new element in the system are also readily identifiable. The developer will normally provide the local distributors and access to the main road system. Sub-division regulations may specify standard dimensions, etc., for those purposes, or standards may be set which have to be met if the local authority is to adopt the road. Main roads will normally be provided by the highway authority, although in some cases developers may offer to do so in order to advance their project.

The analogy with water and sewerage is less useful when it comes to deciding the standards of provision and how to allocate the costs of the main roads system. Unlike water, individual consumption cannot be metered (or not with the means at present available). Moreover, the rate of consumption (i.e. use of road space) tends to increase or change over time. Thirdly, there are choices to be made about the standard of roads to be provided, which will be influenced partly by traffic volume (present and future), and also by the ease of movement or average speed/travel time desired.

In America (where the electorate expects and gets a much higher standard of roads than in the UK), the more recent impact fees systems generally incorporate two main components:

- (i) The highway capacity related to "level of service." The Institute of Traffic Engineers has developed six levels of service or LOS. The highest LOS, standard 'A', is the capacity where traffic flows at its design speed without interruption. The lowest LOS, standard 'E', is reached at the point where traffic is at its maximum volume before becoming seriously congested. While freeways and major highways will be designed at or near level 'A', local distributors are usually set at level 'D', which is adequate and restrains traffic speed. These levels of service can then be translated into road capacity (depending on various design factors) -- e.g. level 'D' roads can handle about 8,000 vehicles per lane mile per working day. The cost of constructing roads to these various standards (including land acquisition) can be ascertained in the light of recent local experience.
- (ii) The amount of road space required to service each type of land use. This is calculated by first attributing a specific number of vehicle trips to each specific land use, then multiplying this by the average trip length to give average daily mileage (e.g. -- residential: one dwelling, 10 trips per day x average length 6 miles = 60 miles). That mileage can then be converted into the road space/capacity required. The cost of providing that amount of road space would be the amount of the impact fee (if the aim was to meet 100 percent of the cost by that method, although in practice fees are usually pitched well below the 100 percent level for reasons that will become apparent later).

This calculation is not as complex as it sounds, given general acceptance of the Institute of Traffic Engineers' published standards. No doubt the Department of Transport or Road Research Laboratory could produce similar guidance for the UK if they have not already done so. There is room for argument about the daily trip generation and trip mileage attributable to different types of land-use or to specific developments that may vary significantly from the average. Impact fee ordinances may contain provisions enabling the developer to challenge the local authority's assessment, but as it takes time and money to collect independent evidence and to go through the appeal process, most developers will acquiesce in the standard method for determining the fee, provided that it is seen to be applied consistently.

Other types of infrastructure

The types of infrastructure or community facilities so far considered are those most commonly covered by impact fees -- parks and open space, schools, water, sewerage, storm water drainage, and roads. Some local authorities have developed fees for other types of provision that are fairly comparable -- e.g. local libraries or neighbourhood clinics, which can be dealt with on similar lines to local schools. Costs of both site acquisition and building construction can be included, provided that they serve solely or primarily the development that will generate the fees, and provided that uniform standards are consistently applied. Large developers may discharge the fees obligation by providing such facilities themselves (if the site only is provided, the value can be offset against the total fee), or there can be payments in lieu by smaller developers.

Some local authorities have gone further than this, or have been urged to do so by their academic or professional consultants. But there comes a point at which the assumptions or attributions that have to be made, as regards level of service or allocation of costs, become somewhat artificial -- not to say fantastical.

A good example of this tendency is the attempt to devise an impact fee system for "law and order." It may not be too difficult to establish that new development generates a need for expanded police services. And the cost of that expansion can be estimated, as it normally is for local tax purposes. It may be decided to limit the impact fee to the cost of capital provision -- e.g. a new police station. But a new station may not be required, and the bulk of the additional capital costs may relate to patrol cars -- which, however, have to be replaced every few years. Moreover, the costs of increased personnel, both police officers and support-staff, are likely greatly to exceed the amortized capital costs. Assuming, however, that the relevant costs can be established, how are these to be allocated to different types of development and how are they to be converted into a credible fees system? Ways of doing this have been proposed, but they involve a host of more or less arbitrary assumptions and other devices that would almost certainly render such a system vulnerable to legal challenge and incredibly difficult to administer. In any event, police services have to be deployed in a highly responsive and flexible

manner. That requirement cannot be aligned with those for roads, parks, schools, and other facilities that are more readily assessed and attributable.

I conclude that the attempt to extend the impact fees system to "law and order" merely serves to demonstrate that impact fees cannot displace the need for more conventional methods of local taxation. The adroit City Manager will want to have a range of fiscal instruments at his disposal and will adapt his choice of methods to the types of expenditure that he has to finance. Impact fees are one of those methods, but there are practical limits to their application; and attempts to stretch these beyond those limits are likely to undermine their credibility.

Chapter 6 Equity and Reasonableness

We now have to address the issue which in my view is casting a shadow over the development of impact fees in the USA. The question is whether impact fees impose inherent unfairness as between existing residents and newcomers to an area -- the problem sometimes referred to as "intergenerational equity." And, if so, what to do about it.

I have already dealt briefly in Chapter 2 with the conflicting and inconclusive economic arguments on this subject. This chapter addresses the legal or "philosophical" aspects, and it has given me far more difficulty than any other. I am not aware of any published article or discussion that deals with the subject in a fully comprehensive or coherent manner. I am convinced that there are two separate but related issues involved and that they have been unnecessarily confused.

The first issue, already referred to, concerns equity as between existing residents and newcomers. The second concerns the reasonableness of the impact fees actually charged. The two aspects are related since, even if the concept of a charge on newcomers is not found to be inequitable, the fee itself must be reasonable in the way that it is assessed and administered. Equally, the fee may be considered reasonable in terms of the costs and benefits to which it relates (the rational nexus test) but might still be considered inequitable in principle.

There has been one Court decision that has come to dominate consideration of these matters: Banberry Development Corporation v. South Jordan City, Supreme Court of Utah 1981. The case involved a challenge to the validity of two types of impact fees: one for water services and the other for public parks. I deal with the details of the judgement later, but the key point is that the Court, having upheld the validity of impact fees in general, chose to address the question of their reasonableness in terms of inter-generational equity. They said that:

the fees in question should not exceed the amount sufficient to equalise the relative benefits and burdens of newly developed and other properties.

The Court, while acknowledging that "The rule we lay down must be given a pragmatic application," and that "Equality of treatment may upon occasion be forced to give way before some supervening public interest," nevertheless rammed home their opinion: "But insofar as such equality can reasonably be achieved this must be done."

The Court proceeded to lay down a number of principles or criteria that in their view would need to be satisfied in order to achieve this result. But before considering those aspects, it is necessary to take a more critical look at the basic question of whether impact fees are in principle inequitable.

This question would need to be considered if the adoption of an impact fee system were to be contemplated in the UK, although the difficulties that it presents would not be identical. In America, as is often the case, the problem tends to be considered in a constitutional and legal context. In the UK, where we are not confronted with a written constitution, it would need to be considered in terms of its political and administrative implications.

In the early days of impact fees, when the concept was first introduced in the 1970s, it was based on the assumption that it was reasonable to require developers to meet at least some of the costs that their development would generate in the way of public infrastructure -- roads, parks, schools, etc. As we have seen, there were precedents for this in traditional subdivision regulations and in the charges made for connection to water and sewerage services. It seemed reasonable to extend such requirements to other types of infrastructure.

In general, developers were prepared to acquiesce in such requirements or charges, as the price of getting the necessary approvals and permits, provided that they represented a relatively modest addition to total development costs. Opposition to these demands inevitably began to develop as the scope of the charges was extended to cover a wider range of services and as the cost became more than a relatively minor imposition. The position became most contentious where some local authorities in an area imposed charges and others did not, thus distorting conditions of competition within the local housing market.

Opposition to impact fees also arose from those who were concerned about the effect on house prices, and particularly on access by lower-income families to affordable housing. In some cases it was alleged that impact fees were

being set at a high level in order to exclude lower-income groups. There was felt to be a close parallel with restrictive low-density zoning policies, which had already been successfully challenged in the courts.

Those seeking to challenge the legality of impact fees on the grounds of "inequity" have invoked the "equal protection" provisions of the US Constitution (Amendment XIV), which read "nor shall any state deprive any person of life, liberty or property, without due process of the law; nor deny to any person within its jurisdiction the equal protection of the laws." The latter provision is the basis of judicial decisions prohibiting discrimination on grounds of race, gender, or religion, and is of fundamental importance. But is it relevant to the introduction of impact fees?

The pronouncements of the Utah Supreme Court, while widely quoted, have not been universally endorsed. (The decisions of one State Supreme Court are not binding on other states, although they may be cited.) There is a contrary view, held by some distinguished lawyers, that the Constitutional provisions that afford equal protection to individuals against discrimination based on race, gender, or religion would not prohibit the introduction of regulations that apply only to new development -- provided that they are applied consistently to all new development of a similar type and can be shown to have been assessed on a rational basis as a means of facilitating new development by ensuring the timely provision of the infrastructure needed to support it.

On balance, the more convincing legal view seems to be that impact fees are unlikely to be judged unconstitutional if and when the matter is addressed by the US Supreme Court. If so, the attempts now being made by some exponents of impact fees to achieve inter-generational equity may prove to be as superfluous as they are certainly complex.

One recognises, however, that until the constitutional issue is finally resolved, the advocates of impact fees are understandably concerned to guard against the possibility of legal challenge which, if successful, could undermine the whole concept. There are different ways of achieving this but, before considering the practicalities, we should consider further the issue of principle.

The question of equity or fairness has two aspects, depending on whether it is approached from the point of view of the existing residents or of

newcomers to the area. From the standpoint of the former, it may seem unfair that existing residents should have to carry the cost of infrastructure that will benefit newcomers, whether it is provided specifically to meet planned growth in the future or because it is thought prudent to provide spare capacity in the system. It may also seem unfair that newcomers should benefit from facilities and amenities that have been paid for by earlier generations, and which may be among the reasons that attract them to the area. The introduction of impact fees is one way of redressing this apparent inequity. One justification for levying a charge on new development is to help recoup expenditure already incurred. Impact fees can thus be seen as a "membership fee" which newcomers have to pay to join the established community and to draw on the benefits that it affords, in addition to helping to pay for the infrastructure needs that the new development generates.

From the point of view of the newcomers, however, there are two apparent inequities. First, they will have to pay for the infrastructure or services whose costs have in the past been shared by the community at large. Second, having been required to pay the initial impact fee, they will also be paying through their local property tax (and possibly by other means such as gasoline tax) towards redeeming outstanding debt on infrastructure costs that were incurred before the introduction of impact fees. In short, it will be said that they are being required to pay twice -- both for their own infrastructure and for other people's. Thus the alleged conflict with the requirements of equal protection.

It has to be acknowledged that there would be considerable force in these arguments if the new development were entirely self-contained -- i.e. if it provided for all its own infrastructure needs and received no benefit from any existing services. In that case it would be unreasonable to require the newcomers, in addition to meeting their own needs, to contribute to the costs incurred by others. But in practice this will very rarely be the case and, where it is, it can best be met by separate local taxation arrangements (i.e. by means of a Special Assessment District as described in Part Two of this report). In practice it is far more likely that new development will draw substantially on the existing network of infrastructure and service provision, and on the established attractions of the locality and other community facilities.

It might be argued that the charges and local taxes which each individual incurs should be exactly proportionate to the use that they make of those services. But that is patently not practicable, except for those services where consumption can be precisely metered. Attempts to follow through the rational nexus test in this manner tend to undermine the basis of local government finance as well as the impact fee concept. In a recent case where impact fees for schools were being challenged on "equal protection" grounds, the lower State Court ruled them invalid not on the grounds expected but because, as they said, "Not every household has children of school age." That judgement is generally regarded as aberrant and likely to be overturned on appeal. But it serves to show where arguments based on considerations of equity or equal protection tend to lead.

In the present state of uncertainty, however, some impact fee strategists urge the need for caution and the advisability of devising an impact fee system so as to demonstrate that account has been taken of the equity issue in the terms in which the Utah Supreme Court defined it.

The Utah Court reviewed a variety of earlier judgements in other states and came up with seven factors that "a municipality should consider in determining the relative burden already borne and yet to be borne by newly developed properties and other (i.e. existing) properties":

- (1) the cost of existing capital facilities;
- (2) the manner of financing existing capital facilities (such as user charges, special assessments, bonded indebtedness, general taxes, or federal grants);
- (3) the relative extent to which the newly developed properties and the other properties in the municipality have already contributed to the cost of existing capital facilities (by such means as user charges, special assessments, or payment from the proceeds of general taxes);
- (4) the relative extent to which the newly developed properties and the other properties in the municipality will contribute to the cost of existing capital facilities in the future;
- (5) the extent to which the newly developed properties are entitled to a credit because the municipality is requiring their developers or owners (by contractual arrangement or otherwise) to provide common facilities (inside or outside the proposed development) that have been provided by the municipality and financed through general

taxation or other means (apart from user charges) in other parts of the municipality;

- (6) extraordinary costs, if any, in servicing the newly developed properties; and
- (7) the time-price differential inherent in fair comparisons of amounts paid at different times.

Having set out these desiderata, which have now been glibly quoted with admiration in countless law journal articles and textbooks, the Utah Court gave no guidance as to how they might be achieved in practice. Some pundits purport to be able to do this, but their methods involve some very uncertain assumptions as regards future rates of tax, interest rates, rate of growth, etc. The calculation becomes far more complex when it extends, as the Utah Court envisaged, to past expenditures financed by a variety of means at varying rates of interest, including the disaggregation of previous municipal loan transactions so as to identify the means by which each element of infrastructure has been financed. It is easy enough to do this in a purely hypothetical mode, using computer technology. I have had it demonstrated to me and found it totally unconvincing. Seasoned municipal treasurers with whom I have discussed it confirm that it is not a practical proposition.

My own conclusion is that attempts to achieve perfect equity as between existing residents and newcomers not only lead into horrendous complexity but also seem to involve an inherent contradiction. The introduction of an impact fees system applying to new development changes the conditions in which development takes place. It changes "the rules of the game." No subsequent adjustment can put existing residents and newcomers on the same footing. Nor is it logical to attempt to do so. Impact fees change the incidence of infrastructure costs: whereas in the past such costs have been treated as a charge falling on the community at large by means of local taxation, in future newcomers will have to meet part of that cost as an initial capital payment. There is no way in which that imbalance can be redressed: it is inherent in the new system.

The key test of the fairness of an impact fees system is not whether it treats existing and new residents equally, since that is not its purpose. The key tests are whether the new system applies in a fair and consistent manner to all those to whom it relates, and whether the fees themselves are "reasonable."

This, of course, begs the question as to what is meant by "reasonable" in this context. In attempting to answer that question, I would not approach it from the direction of Utah (not a state, so far as I am aware, otherwise distinguished for its land-use planning, or, perhaps, for its jurisprudence). I would suggest a simpler approach.

The first steps, as we have already seen in Chapters 4 and 5, are to establish the standards of facilities (roads, parks, water, etc.) needed to service new development, and to determine the cost of provision. It makes no difference in principle whether those facilities are to be provided concurrently with new development, or have already been provided in anticipation of future growth, or are to be provided in the (reasonably near) future. Interest charges on expenditure already incurred can be included in the total. That cost (net of any state or federal grants and user charges) is then attributed to new development on a per-dwelling/household or square-footage basis. That provides the maximum potential fee.

The next stage is to decide whether, and if so how, that maximum fee should be adjusted to take account of the fact that those who pay the fee will also be liable in future for local taxes (property, gasoline, etc.), part of which may be attributable to the cost of servicing outstanding debt on infrastructure that was incurred before the introduction of impact fees. Part of that debt will relate to infrastructure that will be of benefit to newcomers as well as to existing residents, and there is no reason why the former should not help to pay for that. But part of it will relate to infrastructure (either extant or to remedy existing deficiencies) that benefits only existing residents and which will not benefit newcomers who have met their own costs by means of the impact fee. The argument then is, as we have seen earlier in this chapter, that newcomers should not be required to pay twice -- both for their own infrastructure and for that of existing residents.

I have argued that it is not practicable to achieve perfect equity as between existing and new residents in these circumstances. But the more general test of reasonableness suggests that some account should be taken of this potential double payment. There are essentially two methods of doing this.

The first method is to identify that part of a householder's property tax (or gasoline tax, etc.) which relates to the redemption of debt on infrastructure that is of benefit only to existing residents. The net present value of

that revenue over (say) the next 20 years is then deducted from the maximum impact fee that could be justified by reference to total net cost. This is the so-called "credits" system. It incorporates some elements of the "Utah" process, but in a relatively simplified form. It is feasible but still complex and is practicable only on the basis of fairly crude assessments.

The other method by which some account can be taken of these factors is as simple as the other is complex. It is to pitch the impact fee at a level significantly below the maximum that could be justified by reference to total cost. Many local authorities choose to set their impact fees at a level not exceeding 30 percent or 50 percent of total cost, with the remainder to be met from other sources -- local taxes, user charges, etc.

There are reputable legal experts who consider that the courts would accept this as a "reasonable" way of dealing with the problem, and most courts might well be glad to avoid the need to delve into the more elaborate formulae with their attendant computery. Moreover, as more empirical evidence is gathered from those cities that have adopted the "credits" system, it may be found that the resultant reduction in impact fees is equivalent to a more or less standard deduction of (say) around 30 percent. If that were the case, the problem would be readily disposed of. In any event, it would be prudent to begin with fees set well below the theoretical maximum, taking account of other sources of revenue, and to consider increasing them in the light of experience.

There is no doubt rough justice in this, but attempts to fulfil the full rigour of the Utah Court's demands are in danger of rendering the impact fee concept inoperable and beyond the competence of most local authorities. Moreover, as I have tried to show, they purport to achieve a degree of equity that is incompatible with the impact fee concept.

I have felt obliged to treat this aspect of the subject at some length, because it is one that is generating a good deal of confusion and uncertainty in the US at present, but also because it raises issues which would need to be addressed if a similar system were to be introduced in the UK. In practice, however, these issues arise only if it is assumed that the impact fee will fall on the housebuyer rather than on the developer or, more especially, on the land owner. The problems which we have been discussing, and which arise in the US context, concern the individual in his/her dual role of home buyer and local taxpayer. It is only if the development impact fee falls on the homebuyer

(directly, or indirectly in the house price) -- as may often be the case in US market conditions -- that the question arises of mitigation to take account of future tax payments.

In the UK context, it seems far more likely that any impact fee would be passed back to the landowner, in the price that the developer was prepared to offer for the land, than that it would be passed forward to the homebuyer -- at least in normal market conditions. (I consider this aspect in more detail in the third Part of this report.) If I am right in this, then the questions of equity that have been raised in the US are not likely to be relevant to the UK. There would no doubt be transitional problems to be resolved concerning landowners and developers in relation to previous transactions, but these should be capable of technical solution.

Finally, I remind myself that it is not for me to solve America's problems. For the reasons that I have given, I conclude that the equity issue is not likely to present the same problems in the UK. But it is as well to be aware of the difficulties that our American colleagues have encountered, and it would be necessary to reach a considered view on the political and practical implications before any such system was introduced in the UK.

Chapter 7
A Digression on Housing

As in other countries, the typical single-family house in America is an expression of personal life-style and a personal asset: a store of wealth, even if heavily mortgaged. In 1985, among the 88.4 million US households, 62 percent lived in detached single-family houses. Of the other 38 percent, about 16 percent lived in attached housing of between 2 and 4 units, and another 16 percent in flats containing 5 or more units. 5.4 percent lived in mobile homes. So about one-third of all American households do not live in single-family detached homes (and over a third were not homeowners but renters), although that would be the preference of the vast majority.

The typical (at least for two-thirds of families) American house is also the source of many of the problems that underlie the concern with growth management. It is so large, stands on such a large site, is so well-equipped, and such a profitable product. If Americans were prepared to spend less on their house, and to occupy less space, many of the land-use planning and environmental problems that worry them would be less intractable. With the savings thus released, they could buy a better-quality environment and adequate infrastructure -- if they were able to act collectively. Moreover, more people could afford to buy a house; rents would be lower: the "affordability" problem would be reduced. The problem with affordable housing is that the people for whom it is intended cannot afford it. For all the fuss about impact fees increasing the cost of housing, and putting it beyond the reach of lower-income families, the answer lies not simply in abolishing fees (and thus reducing the ability to provide adequate infrastructure) but in providing a less-expensive form of housing. There is ample scope for doing so.

At present the trend is towards ever-larger and more elaborate types of housing, on larger lots and in spacious private landscape settings with a range of "country club" amenities and facilities that demand even greater quantities of land for fewer houses. According to HUD and the Department of Commerce, the average size of a new single-family house completed in 1988 grew by 90 sq.ft. from the previous year, to 1,935 sq.ft., at least twice the size of the typical new house in England. In the last four years, the average floor space of new homes has soared by 215 sq.ft. In 1988, 26 percent of the homes had four bedrooms or more, compared with 18 percent in 1984. Homes with 2.5 baths or

more jumped to 42 percent from 28 percent; two-car garages, 66 percent from 55 percent. The proportion of single-family homes under 1,600 sq.ft. shrank by more than 20 percent during these four years.

We visited some of the new houses featured in the Durham Chapel Hill Homebuilders' 1989 Parade of Homes. The prizewinning entry was a "two-storey, French Country style" house of 2,989 sq.ft. on a site of 22,929 sq.ft. It had only four bedrooms (with 3-1/2 bathrooms), but a living room, dining room, family room (350 sq.ft.), recreation room (500 sq.ft.), and a "guest suite." In other ways it was fairly restrained compared to some of the other houses on display, which included such features as a two-storey-high kitchen, "master bedroom with cathedral ceiling," bathroom with "double vanities and oversized tub" (plus a "double bath" in the secondary bedroom), and, the ultimate luxury, two laundry rooms.

It is not only the individual houses that are extravagant of land, but the layout and setting of modern housing developments. Homebuilders aiming at the more profitable end of the market, which is constantly expanded by the more affluent portion of society, now offer their customers not just a desirable house but a desirable "community." This often takes the form of a small group of around 40-50 houses built on a site of around 150 acres and well-distanced from any neighbouring development.

These small satellite settlements, usually within about five to ten miles of the nearest town or city, are commonly advertised as "new communities," although they hardly amount to more than a group of relatively high-cost houses in a carefully protected enclave. They usually offer a range of private facilities -- swimming pool, club house, tennis courts, jogging paths, golf course. But not only that; developers now emphasize the natural landscape features within which the development is sited and which form part of the private domain:

Deep within the woods of Regency Park Estates . . . the topography is exquisite . . . gentle rolling woodlands are abundant with oak, beech, maple, pine, birch, many old enough to have been silent witnesses to the Civil War . . . each one acre estate [i.e. single-house site] is carefully carved into the majestic landscape.

And another example from within the municipal limits of Raleigh:

Adventura is a combination of rolling meadows, mature foliage, and wildlife . . . deers still peer from the meadow's edge and horses are cordially invited to live in a natural environment with three-acre lots available.

And a third example from many more within easy reach of the Raleigh-Durham Research Triangle (where 12,000 people work in a landscape setting):

Piney Mountains features the most beautiful backyards in North Carolina. Nestled among mature oak, beech and maple trees, and of course loblolly pines, your homesite will blend into its own unique environment. Bordering Duke Forest, Piney Mountains' 59 homesites share dramatic views, a pond and gently flowing streams. Hiking trails wind throughout the 50 acres of community green space.

All this for around \$160,000 -- little more than the average semi-detached house in almost any provincial town in the UK. It is the modern American dream-house. But at an overall density of around one dwelling per acre, what an incredible rate of consumption!

It should be said that many of these newly built homes are very attractive, and the best succeed in capturing the charm of the traditional building types, with their well-proportioned roofs and windows, generous "decks" (verandas) on two or more sides, good-quality timber finishes, and attractive simple exterior decoration. The interiors are often of excellent finish, well-designed, and with a profusion of closets (cupboard space) and other thoughtful design features. And they are, by British standards, amazingly cheap -- around \$140-200,000 for some 2,500 sq.ft. of superb family living space.

This is middle-class middle-income housing, of course, but within the reach of such a family, especially when (as is often the case) there are two salary-earners to meet the mortgage payments. The whole of mortgage interest payments is tax-deductible.

There is also plenty of new housing in the \$60-80,000 range, and this is within the reach of those on average incomes. Of course, there are many on below-average incomes, and there is not much available for them in the new housing market. But there is a vast stock of second-hand homes, at around \$40-50,000, which tends to be overlooked in the heated debates about affordable housing.

What I have been describing is the situation in the Raleigh-Durham region of North Carolina, which is fairly typical of many areas. But in the fastest-growing regions of California, housing is much more expensive. The houses are quite as large but tend to be crowded onto much smaller plots.

In most parts of the country, the supply of second-hand homes for sale is fairly plentiful, but in California and some other metropolitan areas there is growing demand for such homes in locations that are more accessible to downtown than the newer suburbs. "Gentrification" of these previously down-market properties is the latest trend (and "gentrification" has been imported to describe it). The result is that, in these areas, conveniently located older houses are fetching the same sort of price as the more distant new suburban housing, around \$200,000 even for the despised post-war "tract houses" that originally cost around \$8,000 in the 1950s. In such areas the second-hand market offers no answer to the demand for affordable housing. At present, no one has the answer, although the kind of devices described in Part Two of this report, in the chapter on Housing Bonus/Linkage, may offer some hope.

The point of this digression has been to illustrate the demand that new housing makes on the supply of land and on the provision of public services. When those who are the customers for new housing want a house of around 2,000 sq.ft. and a site of at least a quarter acre -- more usually half an acre or more -- then housing is going to be more expensive than it needs to be and demands vastly more land than it needs. The low-density, scattered form of development also adds greatly to the costs of infrastructure provision -- from roads and sewers to postal services.

Many of America's housing, land use, traffic, social, and environmental problems stem from this prodigality in the use and development of land. Those who criticise attempts at "growth management" ignore the costs that this pattern of development imposes on the community and which must be reflected in the cost of housing and in the costs of infrastructure and service provision, accessibility, and journey to work, which all have to be paid for by the consumer and taxpayer over and above their direct housing costs.

Professor Michael Stegman of the Department of City and Regional Planning at the University of North Carolina, and the joint author of the best book on the subject, is a sceptical critic of development impact fees and other growth management devices. But he acknowledges that "a greater proportion of the year

to year increase in the price of new housing is probably due to increases in dwelling size and the complement of amenities than to the adoption of increasingly restrictive growth management and impact fee policies."

In Britain, on the other hand, the virulent opposition to development might be mitigated if new housing was built on less restricted sites, and if housebuilders followed their American counterparts in taking more care over the quality of environment that they create, and if they produced a better house for the price they charge. It would also help if they paid less for the land and contributed more to the infrastructure and community needs that their development generates. Impact fees could be a means of redressing the balance.

Chapter 8
Case Study: Raleigh, North Carolina

In Chapter 2, I cited the city of Raleigh in North Carolina as an area experiencing (indeed, actively promoting) rapid growth and one which had recently decided to adopt an impact fees system to help finance its future development. It will serve as a case study, since Raleigh has had the benefit not only of the experience of other cities that were earlier on the scene with impact fees, but also of the formidable legal and other professional expertise available in the surrounding academic community. It was also the area in which I worked during the first few weeks of my study, and I got to know it fairly well. The Raleigh/Durham/Chapel Hill "triangle" comprises one of the most thickly populated university assemblages in the US, with at least 16 academic establishments within its area, and the highest ratio of PhDs per 100,000 pop. in the US. So Raleigh's experience in introducing impact fees probably reflects better than most cities the problems involved in this form of regulatory innovation. It certainly tackled the task systematically and very thoroughly and, if the results to date are fairly modest and illustrate the difficulties involved, then that is perhaps a more useful lesson than that provided by those cities which adopted the impact fees approach earlier in its history and carried it out in a more facile manner.

As explained in Chapter 1, most cities that adopted impact fees in the early years did so as an extension of traditional zoning systems under cover of the Police power and without any specific state enabling law. The experience of subsequent litigation and the emergence of a reasonably consistent set of judicial guidance on the subject has led most of those states, where interest in impact fees has been active, to adopt enabling legislation. This has provided a firmer basis for fee systems while also, in most cases, setting limits to their scope and varying stringent conditions on their implementation.

In the case of Raleigh, their legal advisers concluded that it would be prudent to seek enabling powers from the state, not least because in the absence of such powers the State Courts, who had not at that time had to rule on any impact fee proposals, might well have taken a stance that would restrict and inhibit any future attempt to pursue impact fees under the Police power.

As the state was not minded to introduce a general enabling Act authorising impact fees, Raleigh had to prepare a local Bill just as an English local

authority might seek Local Act powers. By tradition in North Carolina, a local Bill is approved only when it is supported by the entire delegation from the sponsoring city or county. This naturally tends to compel compromise. In the course of its passage, the Raleigh Bill underwent some significant changes, the most important of which were:

- (1) Scope. The city's original intention was "to make new development pay the entire cost of public facility expansions attributable to new development." That was a bold policy decision and proved to be quite unrealistic. No other city's impact fee system attempts to achieve that degree of exaction or, at least, succeeds in doing so. In fact, when the Bill was introduced, it sought to cover seven types of infrastructure:

- storm drainage systems in public rights-of-way
- sewer systems
- water systems
- parks
- roads
- offstreet parking in the downtown area
- satellite (local) fire stations

In the event, enabling powers were granted only for storm drainage, roads, and parks.

- (2) Instead of 100 percent cost recovery, the State General Assembly agreed that fees should cover only 50 percent of any single project.
- (3) In an unexpected decision, the General Assembly ruled that fees could not be used to retire existing debt (i.e. to pay the loan charges on capital expenditure already incurred). This amendment was probably intended to prevent fees raised on new development being used to pay debt on existing infrastructure serving the older areas of the city. But the effect was to prevent new infrastructure being provided ahead of new development and the cost of loan charges being met by fees. It would also have discouraged early acquisition of land ahead of development and before land values rose. Fortunately, within two years and before the new fee system was brought into effect, the city succeeded in getting the Act amended on this point, and fees can now be used to repay existing debt on those facilities that serve new development.
- (4) An amendment of less importance but also of detrimental effect was to prevent fees collected for parks being spent on anything but land acquisition. It was the kind of ill-thought-out amendment that often gets conceded under pressure of the legislative process.

Despite these set-backs, Raleigh by 1985 had its enabling powers, and the city had to set about the task of devising a practical impact fees system. The

first decision that the city took was to call the new charges the "Facility Fees Program" -- a more user-friendly term than "impact fees."

Although the enabling Act authorised the introduction of fees for roads, parks, and storm-water drainage, it was decided to start by tackling only the first two items. Developers in the area were fully consulted on the preparation of the fees program and co-operated in its adoption. They apparently acknowledged that it was necessary for developers to contribute towards the costs of these facilities if future development was not to be constrained by the lack of provision, and they preferred the certainty afforded by the fees system rather than the more arbitrary process of negotiating financial contributions on a project-by-project basis. The fees schedule enabled them to see in advance what their contribution would be and to take account of this in their financial planning for each project. Whether this now influences the price they are prepared to pay for land is unclear, since the fees system has been in place for only a year or two, competition for developable land is keen, and the fees have been set at a relatively low level -- at least as regards residential development.

The Ordinance implementing the fee system took nearly two years to prepare, and finally came into effect in December 1987. It sets out succinctly the considerations that led the city to adopt a fees program. In particular, the city's share of the cost of implementing the major roads programme over the next ten years was estimated at \$78 million. This was the cost attributable only to new road construction, and not the cost of improving existing roads. This restriction ensured compliance with the rational nexus test that impact fees should relate only to the costs generated by new development and not to correcting deficiencies in existing facilities. Likewise with parks, it was estimated that over the next five years it would be necessary for the city to acquire an additional 782 acres of land for public open space, including both parks and "greenways" (strips of undeveloped land threading through the urban areas -- an attractive feature which many cities have introduced, often alongside major roads). The standard of open space provision was 11.4 acres per 1,000 pop., which is high by UK standards (7 acres per 1,000 pop. tends to be regarded as generous, but that relates to playing fields rather than informal open space or conserved landscape).

Raleigh was able to base its new fees system on a reasonably firm foundation because it already had a comprehensive plan for the city and a ten-year capital works programme for roads. Parks were part of the comprehensive plan. A series of reports on the public expenditure costs associated with future development had also been prepared. Not all cities that have introduced impact fees have done their homework so thoroughly. The fact that this comprehensive preparatory work had been done no doubt facilitated the introduction of the new system and helped to reconcile the local development industry to the fees prescribed. It will also stand the city in good stead if the fees system, or the reasonableness of the fees themselves, is later challenged in the Courts.

The open-space fees are charged only to residential development -- ranging from \$227 to \$375 per dwelling, according to the character and density of the area as defined in a plan accompanying the Ordinance. Unlike many earlier fee systems, Raleigh's scheme provides for differing levels of fee according to defined "benefit zones" and is intended to reflect different levels of services required, taking account of existing provision. Few home buyers are likely to quarrel with fees of this order, if open space on the scale envisaged is actually provided by the city.

The cost of land acquisition for open space in Raleigh is around \$25,000 an acre. The cost of acquiring 11.4 acres for 1,000 pop. would thus be about \$275,000. At 2.5 persons per house, 1,000 pop. represents 400 houses which, at an average open-space fee of \$300, would yield \$120,000 -- not far below the 50 percent maximum contribution that the enabling Act allows.

The fees for roads are similar -- \$292 for a single-family dwelling. But road fees are payable by many other types of development besides residential. Some examples of road fees from the Raleigh Ordinance:

<u>Retail</u>	<u>\$ per 1 000 sq.ft.</u>
less than 50,000 sq.ft.	954
50-100,000 sq.ft.	935
100-200,000 sq.ft.	1,188
200-300,000 sq.ft.	1,093
over 300,000 sq.ft.	905

Thus, a new 120,000 sq.ft. supermarket development would pay a fee of \$142,560 towards the cost of the roads programme.

Industrial or manufacturing developments would pay \$159 per 1,000 sq.ft.; warehousing or wholesale \$288 per 1,000 sq.ft. Most other types of use are covered by specific fees -- and one notes that offices and hospitals pay the same fee of \$417 to \$517 per 1,000 sq.ft.; doubtless this reflects the commercial character of medical services in America.

The basis on which these road fees were calculated is derived from a complex formula related to the number of car/vehicle trips per person generated by the type of development in question. I refer to this approach more fully in the chapter on techniques, but the Raleigh Ordinance helpfully includes a brief summary of the formula and invites any developer who disputes the standard fee to work out his own fee according to this formula and to submit his calculation to the city transportation department for professional verification.

The Ordinance is completed with a full set of definitions, the methods by which fees will be collected and from whom, and other details of administration. It also provides that:

- (a) fees collected shall be kept separate from other revenue of the city, and in separate funds for each of several defined areas that are to benefit from these receipts;
- (b) the funds are to be expended only on the capital costs of road construction and open space acquisition, but not for periodic or routine maintenance, and only in the areas from which the fees were collected;
- (c) expenditure from these funds is not to exceed 50 percent of the cost of any one project -- i.e. the city has to provide the other 50 percent from other sources;
- (d) funds shall be expended in the order they were collected (i.e. first to pay is the first to benefit), and if not expended within six years are to be refunded (except in the case of schemes jointly funded with other authorities, in which case ten years is allowed);
- (e) provision is also made for reimbursement if the developer provides "over-size" facilities that will also serve later development. (In practice, 20-25 percent of total fees received are reserved for possible future reimbursement.);

Finally, the Ordinance provides for a report to be presented to the council at least once every two years, showing from whence the fees have been collected and on which projects they are being expended. If it appears to the

council that the areas paying the fees are not getting the benefits, then the capital improvements programme is to be adjusted accordingly.

At the time of writing, the first two-year report was not yet due, but the City Planning Department had prepared an interim report. This showed that in the first year of operation (1987-88) the total fees collected were:

Thoroughfares	\$1,155,354
Parks/Greenways	\$ 404,187

These amounts were well below the potential revenues that will be generated when the system has been in operation for a few years. It is estimated that, if development continues at the rate of recent years, Raleigh will collect about \$9.5m in road fees and about \$5m in park fees over the next five years. This would amount to some 17 percent of total planned expenditure on those facilities. That is well below the maximum 50 percent that the enabling Act allows, but a useful addition to local revenues. The question is whether the city will be willing or able to raise the other 83 percent by other means.

In the first year, the amount collected was low because a four months' "exemption period" was allowed after the adoption of the Ordinance and before the first fees became due, during which -- as was to be expected -- a large number of building permit applications were received. This transitional provision eased the way for the introduction of the new system and avoided unfairness to those who were already well advanced with their building plans when the Ordinance was passed. Receipts were also affected by the fact that, as luck would have it, the introduction of the fees system coincided with a sharp downturn in homebuilding in the area, with only 1,747 new residential building permits issued in 1988 compared with an annual average of 5,178 over the past five years. The downturn was due to cyclical factors and higher interest rates rather than to the introduction of impact fees.

The Assistant Planning Director, William R. Breazeale, has prepared an article for publication on Raleigh's early experience of introducing an impact fees system, in which he makes some interesting points which largely bear out some of those made by other commentators on the impact fees concept, but which in his case are based on recent hard-won experience. The main points that he makes are:

- (1) Fees are an unstable source of funds, since the revenue stream depends on the rate of growth and the mix of project type.
- (2) The addition of fees to existing sub-division requirements (land dedication, on-site facilities, etc.) can put the community at a competitive disadvantage compared to neighbouring communities that have not adopted a fees system.
- (3) To the extent that fees are a substitute for taxes, the flexibility inherent in the allocation of tax funds is lost, since fees have to be spent for the benefit of the area from which they were collected and for the limited range of purposes specified.

Finally, William Breazeale comments, no doubt with heartfelt conviction, that "A fee programme can be time-consuming to develop and complicated to administer."

If anything, he is guilty of understatement. Raleigh's enabling legislation and its Fees Ordinance are deceptively simple. Behind those two instruments lies an amazingly complex process of calculation.

Raleigh was persuaded by its consultants that it had to deal with the "equity" issue discussed in Chapter 6, and that this should be done in two ways. The first was by reducing the assessed capital cost of servicing new development by a factor that represents what existing residents and businesses would be required to pay to bring existing facilities up to the standard required for new development. This is intended to put new and existing residents on the same footing as regards standards of service. I have argued in Chapter 4 that uniformity of standards is not a sensible prerequisite. Secondly, the maximum putative fee is reduced to avoid "double payment," for the reasons discussed in Chapter 6. I make clear in that chapter why I have major reservations about the need for such adjustments and why they should not be necessary in the UK context. But in Raleigh, the end result was to reduce the parks fee for a single-family dwelling in Zone 1 from about \$390 to \$265, a saving of around \$125, and in Zone 4 from \$352 to \$309, a saving of \$43. One wonders whether it was worth all the trouble.

Despite its complexities, or perhaps because of them, Raleigh's first experiment in implementing an impact fees system is instructive. Moreover, at present it extends to only two types of infrastructure -- roads and parks. There is a warning here against embarking on too extensive a fees scheme, covering a wider range of facilities, at the outset.

In conclusion it is worth noting that Raleigh's neighbouring city of Durham (pop. 102,000), and its rival in attracting new economic development, has followed Raleigh in adopting an impact fees system. In Durham's case they encountered strong opposition from developers and homebuilders -- who, while claiming to acknowledge the reasonableness of the concept, raised a good many pertinent criticisms of the details. They also secured that fees should not exceed 15 percent of the total programme costs for roads and 30 percent for parks (as compared to a permitted 50 percent in Raleigh). Despite this limitation, the fees to be charged in Durham for residential development are higher than those in Raleigh, whereas the fees for non-residential are lower:

<u>Residential (per unit)</u>	<u>Roads</u>	<u>Parks/Open Space</u>
Single-family	409	449
Multi-family	249	278
 <u>Non-residential (per 1,000 sq.ft.)</u>		
Commercial	2,694	0
Office	581	0
Industry	156	0

Thus the combined fee for a single-family house will be \$858 -- rather less than 1 percent of the market price of a moderate-income house, but a not inconsiderable addition to the other "up front" fees that the housebuyer has to find. An interesting feature of Durham's scheme is that the fee is payable not when the homebuilder applies for his building permit but when the house is completed and before the "certificate of occupancy" is granted (this certification system is widespread and ensures that the house has been built in conformity with the building permit and is fit for occupation). The effect of this provision (which the local Homebuilders Association insisted upon) is to enable the homebuilder to pass on the fee more readily to the homebuyer than if it were payable before construction had begun: the result is that the fee hits the homebuyer rather than the developer or landowner. Durham estimate that once the fees program is fully operational it will generate the following annual revenues:

Roads	\$2,626,000
Parks and open space	\$ 685,000

I have rounded up these estimates to the nearest \$1,000. Thanks to computerised accounting, the actual published estimate for receipts on roads is

given to the final cent -- \$2,626,272.77. Whether that enhances the credibility of the estimate may be doubted. What is interesting, however, is that the total fees generated would be equivalent to an increase of 7.85 percent in the local property tax payable by the residents of Durham at large, whereas the impact fee falls only on newcomers -- and, of course, on existing residents moving to a house in one of the new developments. The latter feature has become a sore point with the local organisation Citizens for Tomorrow, who had originally welcomed the idea of charging impact fees. Fees can be a two-edged weapon.

PART TWO: OTHER METHODS

In this part of the report I deal more briefly with various alternatives to development impact fees (described in Part One). In fact, they are not so much alternatives as a range of other instruments than can be used, in addition to (or instead of) impact fees, to secure contributions from developers and others to meeting the cost of the physical infrastructure and community facilities needed to service new development.

Chapter 1 **Mandatory Dedications and Bonus Zoning**

As explained in the first chapter of Part One, sub-division regulations, together with zoning ordinances, are the basic means of land-use control in the US. Zoning allocates land to specific uses and may attach a variety of conditions as regards building height, density, design, etc. -- very similar to the British system of planning control but systematised (in the sense of being set down in legal form) and of general application rather than discretionary. Some more recent and sophisticated zoning ordinances offer the developer "bonuses" in the form of additional height/space in exchange for allocating part of the site for public use as a plaza or open space, but this does not normally require transfer of ownership of the land to the planning authority (although the developer may volunteer this). This type of bonus system has attracted criticism because it may mean allowing excessive height or density on the remainder of the site, and in contradiction of the limits that normally apply in the vicinity. If such controls are warranted in the first place, why should they be waived if the developer offers some other benefit? The point is even more pertinent where the Ordinance permits bonuses or credits earned on one site to be transferred to another site (which may be less suitable) or even to be sold on the open market. The counter argument is that planning control often involves a balancing of environmental benefits and disbenefits, and that a bonus system may produce a better result than sticking rigidly to standardised requirements. That may be true but has to be demonstrated in each case.

Generally speaking, although zoning controls may impose a wide variety of conditions on the developer as regards the type and form of development permitted, they do not require him to contribute in cash or kind to the provision of

public amenities or infrastructure. (I deal later with "contract zoning," which involves deals struck with individual developers rather than standardised conditions.) The courts are traditionally vigilant in preventing the zoning process, which can place such severe constraints on the use and development of land, from extending to the compulsory "taking" of land or to financial payments.

Subdivision regulations, on the other hand, frequently include requirements on the developer to dedicate part of his land for public roads and open space. It is not wholly clear why what is considered unconstitutional as a zoning ordinance is acceptable as an adjunct to subdivision regulations, nor have the Courts been entirely consistent in their views on this subject. The argument or rationale normally advanced in support of such exactions under subdivision regulations is that the registration of new subdivisions (i.e. the legal record of specific lot dimensions and ownership) is a privilege granted by the state and provides security of title much valued by landowners and developers. Therefore it is reasonable to exact some contribution from the developer, either in the form of land or by a pro-rata payment in lieu.

The legal or constitutional basis for this convention looks somewhat shaky but it is so long-established that it is rarely successfully challenged. In general, the Courts uphold the practice, and tend to apply a form of "rational nexus" similar to that more recently developed and applied to impact fees, i.e. the requirement must be reasonably related to the development proposed, whether (in some states) solely and exclusively for its benefit or (in others) primarily but not wholly for its benefit. And it must be reasonable in terms of scale, purpose, financial burden, and timeliness. While specific requirements to dedicate 7 percent or even 10 percent of the land in question for open space have been upheld (or payments in lieu), ordinances requiring a similar transfer of land to the local authority for no specific purpose have been struck down.

Despite these somewhat uncertain legal foundations, some authorities have successfully extended the scope of subdivision dedications to include sites for schools and other purposes. The subdivision Regulations of Orange County, Florida, defines this purpose "as one of the several instruments of land-use control authorized by the legislature for Orange County." The Regulations include, for example, the reservation of sites for schools and their transfer to the County School Board. This type of requirement has become a common feature of landuse control in the US but would be disallowed as a condition on planning permission

in the UK. It is perhaps worth considering, however, whether something on these lines would be regarded as a reasonable addition to the British planning system. Provided that such requirements were clearly specified and consistently applied over a wide area (possibly a whole county or district), they would tend to be reflected in lower land values as developers trimmed the price that they were prepared to pay for housing land, so as to reflect these requirements.

While traditional subdivision regulations are a well-established means of securing some basic types of infrastructure within an area being laid out for development, they cannot extend to the provision of facilities outside that area but which are needed to service it. For that reason, development impact fees have evolved to meet the need for infrastructure that goes beyond the scope of the subdivision process. Impact fees are a far more versatile instrument in that (as explained in Part One of this report) they can be used to help recoup the cost of infrastructure provided off-site and in advance of demand or to finance future improvements.

In some areas impact fees have subsumed the dedication aspects of subdivision regulations, but in most areas the traditional mechanism is used for basic on-site provision of estate roads, neighbourhood parks, and schools, while impact fees are used to provide those types of infrastructure that serve a wider area.

The American Planning Association has recently advocated the combination of subdivision and zoning regulations into a unified system of development control (to which impact fees could also be linked), but so far this concept has made little progress. The sheer complexity and political difficulty of replacing the present arrangements is a deterrent to what would be a useful reform. As in the UK, the planning system tends to be so deeply embedded in property law and the development process that attempts to simplify the system and improve its efficiency are liable to destabilise it. It is significant that in the US the new concept of impact fees has been successfully grafted on to the long-established methods of subdivision and zoning regulation.

Just as traditional subdivision regulation has been used to enlist developer contributions to infrastructure, so has zoning control been used as a counter in the development process. We have already seen how "bonuses" can be formally incorporated into the zoning Ordinance. "Contract" zoning (or "contingent or "conditional ") is where additional requirements are imposed on

a developer in exchange for a variation or exemption from normal zoning control. Sometimes the developer takes the initiative in offering some benefit to the planning authority (e. g. a road improvement), hence what is sometimes termed "proffer" zoning.

There is a legal angle to this which is worth noting in relation to similar deals that are a common feature of the planning process in England. In the US, the Courts tend to look adversely on a local authority contracting with a developer to give a favourable decision in exchange for some benefit offered by him. This may be held to abrogate the proper exercise of the regulatory power, especially if it means restricting the authority's powers in future. The better course is for the developer to offer a unilateral undertaking, which becomes binding only if the planning authority gives the permission sought.

The suspicion that tends to surround any departure from the normal regulatory regime is illustrated by the stringent rules that the Virginia legislature laid down in 1986 to govern "proffer zoning." These are that the developer must voluntarily offer to accept the conditions proposed, which must be in writing; the rezoning must give rise to the need for the conditions (i.e. they must not be just an uncovenanted benefit); no cash contributions are allowed, nor any mandatory dedication of land or other property (other than that normally required by the subdivision regulations), nor any payment for or construction of off-site facilities; no offer can be made by the developer that is unrelated to the development or operation of the property concerned; and all conditions must be in conformity with the master plan. It seems that Virginia does not look favourably on "proffer zoning" and is not inclined to trust local authorities and developers to enter into such arrangements. Other states are less demanding, and in general the Courts tend to take a fairly benign view of the practice, provided that it can be shown to be clearly to the public's benefit.

I deal in Chapter 7 with Development Agreements, where the local authority and the developer enter into more broadly based arrangements for meeting the costs of infrastructure or for the comprehensive development or renewal of an area. These are usually contingent on a zoning variance or amendment (which can best be dealt with separately and concurrently with the signing of the development agreement). But such agreements may cover a wider range of commitments on both sides.

Chapter 2 Linkage Programmes

"Linkage" is the term used to define arrangements whereby office developers (and sometimes other types of commercial developer) are required to contribute to the provision of affordable or low-cost housing either in the form of housing units or by payments in lieu. It has been much written about and is much discussed, but only two or three cities have gone far in implementing it. In this section I describe how it works in San Francisco and in Boston. But first there are some conceptual problems to consider.

One of the main issues surrounding "linkage" is whether it is simply a logical extension of the development impact fee concept (which, as we have seen, can itself be traced back to more traditional forms of exaction), or is different in kind. If it is founded essentially on the same basis as impact fees, then most of the constitutional and legal questions that it raises (e.g. is it a form of taxation rather than regulation; does it involve a "taking" of property rights that requires compensation) can be resolved by reference to the by-now relatively well-established validation of impact fees.

At present these questions have not been fully resolved. Obviously the issues would not arise in the UK in the same constitutional and legal context. If the Government decided to introduce such a system, and Parliament enacted it, its legality would not be in doubt. But, as with impact fees, the concept raises questions of principle and political issues that would have to be considered before any such legislation were introduced.

As we have seen in the first part of this report, the case for impact fees rests on the argument that new development should meet (in whole or in part) the cost of the infrastructure requirements that it generates. Fees are most widely used to help pay for roads, water, sewerage, drainage, and land for schools and public parks. By analogy, land and buildings for other types of community use (e.g. libraries) may also be required. In some cases, attempts are being made to extend the scope to include almost any type of municipal service that requires capital expenditure, e.g. police squad cars or the initial book stock of public libraries. In general, however, impact fees are limited to those types of permanent physical infrastructure that are needed to open up new land for development.

Advocates of "linkage" tend not to rely on the impact fee or infrastructure analogy but to develop an alternative rationale. They argue that major new office development, especially in central areas ("downtown"), affects the local housing market and worsens housing problems, and that the developers can reasonably be required to mitigate those problems. The most obvious case is where new office projects involve the redevelopment of older neighbourhoods and the displacement of existing residents. Until a few years ago, the cities were left with the resultant housing problems, and federal grants were sometimes available towards the costs of rehousing. The cutbacks in federal funding have forced the search for other solutions, and developers are expected to help solve the problem. This is a straightforward case of redevelopment creating a rehousing need.

However, housing linkage requirements are not limited to cases involving displacement of existing residents. Much new office development is on vacant sites or involves the redevelopment of old commercial property. The argument then is that the creation of new office space and new employment opportunities also creates a demand for more housing. In addition, that demand may result in increased housing prices in the inner areas and the "gentrification" (the term is used in America) of older neighbourhoods, thus reducing the stock of low-cost housing. Even in the case of new out-of-town and suburban office centres, major new employment-generating development may drive up housing costs and create shortages, at least in the short to medium term.

In the early days of "linkage" programmes, these arguments were advanced with confidence but little proof. More recently, as other cities have sought to follow the lead set by San Francisco and Boston, developers have begun to challenge those assumptions. It is not self-evident that new office development creates a need for more housing: it may simply increase and diversify employment opportunities in the area, especially for female employment. As one critic has memorably said, "Office development does not create a need for new housing, any more than cribs make babies." There is something in that.

Insistence on "linkage" payments may drive developers away, worsen employment prospects, and deprive inner areas of the private investment that is needed to stimulate inner-city regeneration. Cities contemplating the introduction of linkage requirements are now strongly advised to assess their possible economic impact and -- where they are minded to go ahead -- to marshal

convincing evidence of the potential effect on the local housing market. In principle, however, or at least in theory, major new office and commercial development is likely to generate new housing needs. Certainly that may be so in America, where the scale of new downtown (and in some cases suburban) office development is often on a scale hardly known in Britain outside of Canary Wharf. In Boston, for example, the linkage requirements only bite on developments of over 100,000 sq.ft., and there have been plenty of those (see below). Even if the average office worker can afford the housing he/she needs, and while the homebuilders will be eager to respond to that demand, new development on this scale also generates a large number of low-paid jobs in the service industries, in office maintenance, cleaning, catering, etc.

So the notion that new office and commercial development creates new demands for low-cost housing is by no means unconvincing. Whether or not housing is properly regarded as a form of infrastructure comparable to roads or sewerage, it is not difficult to make the connection between new development and new housing demand. The "linkage" is there. Whether it is reasonable or prudent to require that office/commercial developers contribute to meeting that demand is primarily a matter for political decision. Some cities have decided to do so, and the methods of enforcing the requirement that they have adopted are simpler than many other types of infrastructure.

A recent survey identifies fourteen cities where housing linkage programmes have been adopted, but in most cases the programmes have not been fully implemented because they are being challenged in court. In two other cases (Chicago, Illinois, and Stamford, Connecticut) the Courts have already ruled against them. San Francisco and Boston remain the two leading examples where the programme is still in operation, and they illustrate the two principal types of scheme.

The first type involves simply a fee of \$ X per sq.ft. of development, usually above a threshold of 10,000 sq.ft. or more, or the equivalent value of the fee in the construction or rehabilitation of housing units. This is the method used in San Francisco, and applies to all office developments over 50,000 sq.ft. In Boston, and in most other cities involved, a fee is payable only where the developer is seeking a variance from the normal zoning regulations (usually increased height or floorspace ratio). The advantage of this approach is that it means that the city is offering the developer something in

exchange for the fee -- although this also opens the door to legal challenge. Some cities operate a "bonus" zoning process that systematises this type of concession, and which distinguishes it from the more open-ended "development agreement" approach described in a later chapter of this report.

San Francisco was the pioneer of "linkage" and introduced its first programme in 1981. The system was revised in 1986, and its main features can be summarised as follows:

- (1) Contributions are required of all downtown (city centre) office developments, or "substantially rehabilitated" office properties, over 50,000 sq.ft.
- (2) Developers have three options:
 - (i) Cash option (revised annually)
Net additional gross sq ft x \$5.69 = Total fee
 - (ii) Construction option
Net additional gross sq.ft. x .000380 = Number of housing units.

62 percent of these units (new or rehabilitated) must be affordable to households of low or moderate income for at least 20 years (affordability is calculated on the basis of rent or mortgage payments equal to roughly one-third of incomes 50 percent or 80 percent below average wage).
 - (iii) Combined option
Part fee, part construction -- calculated as above, or \$14,737 per unit.
- (3) The fee must be paid before a Certificate of Occupancy for the office space is issued. In the case of the construction option, 50 percent of the units must have begun construction within one year of the Certificate of Occupancy being issued, or the developer is in default and can be sued.
- (4) Financial contributions are paid into a Housing Trust Fund administered by the City Controller, and 100 percent of housing provided by this Fund has to be for low- or moderate-income households. If the construction option is taken, the units have to be managed by a non-profit housing organisation, either existing or formed for the purpose.

It is worth noting that when the revised system was being set up, private consultants were commissioned to establish the alleged "causal link" between office development and housing need. The consultants also recommended a fee of

between \$9.47 and \$10.47 per sq.ft. They arrived at their recommendations as follows (a hypothetical example):

a. net additional office space	2,000,000 sq. ft.
b. space per employee	268 sq. ft.
c. total employees	3,731
d. proportion requiring housing in locality	31% = 1,157
e. requiring new housing	45% = 521
f. average local employees per household	1.35
g. net new housing requirement	386 units
h. net new housing need per 1,000 sq.ft. office space	0.386 unit

This final figure was then translated into the amount of subsidy needed to enable those on below-average household income (in various income bands based on census data) to buy or rent a new housing unit costing \$100,000. A few taps on the computer keyboard and out come the linkage fees per sq.ft. (see above). But the City Council jibbed at the outcome and settled on a fee of about half this level for political and economic reasons.

As to the results achieved, under the original scheme from 1981 -- 85 thirty-eight office developments had linkage contributions assessed at \$28 million in total and produced 4,026 new units and 1,664 rehabilitated units. 67 percent of these were to be in the low- and moderate-income range, and nearly 90 percent of these have been completed. Since 1986, under the revised scheme, eleven office projects have been assessed for 1,200 units, but so far (1989) only one developer has paid up (\$410,422), and the other developments have yet to begin construction or have been covered by "credits" earned under the earlier scheme. Nevertheless, a total of around 5,000 units, mostly in the affordable range, is a substantial total from an innovative programme. San Francisco still has an acute shortage of affordable housing, but it was not to be expected that the linkage programme on its own would solve that problem, any more than new office development on its own created it.

In 1985, however, at the same time that the revised scheme was introduced, the city also adopted a resolution restricting the amount of new office space downtown to 2.85 million sq.ft. over the next three years. This was in response to the widespread opposition to new development and growing congestion throughout the Bay Area. In fact, in 1986 the citizens voted to limit office development still further, to 450,000 sq.ft. a year. The result has been to curtail the receipts from the linkage programme and to force up rents of available office space.

A study of the effects of the original programme estimated that the linkage fee had increased office development costs by only 1.2 percent, which seems a modest enough surcharge on a highly profitable sector of the development industry. The introduction of linkage fees had no apparent effect on the production of new office space, which continued at a hectic pace until the restrictions were introduced in 1985-6.

One feature of the San Francisco programme that seems to have helped its successful implementation was the fact that the developer could choose whether to provide the requisite housing himself or pay cash in lieu, or a combination of both. Developers could also choose whether to build new or to rehabilitate existing housing. Under the original programme, 10 developers produced their own housing, 28 opted for cash contributions, and two a combination of both. Two-thirds chose to build new and one-third to rehabilitate.

Another feature of the original programme was that housing units were counted in bedrooms rather than dwellings, so that developers had an incentive to build two- or three-bedroom dwellings, for which there was the greatest need among low-income households, rather than one-bedroom. This resulted in 45 percent of the housing having two or more bedrooms, although this was a rather lower proportion than in new housing production as a whole (54 percent). There was also a weighting in favour of low-income housing, although developers were not required to build solely for that group: the original aim was to increase the supply of housing in general, whereas the 1985 revised scheme specifically requires 62 percent to be affordable for low- or moderate-income households. The developer has either to find a means of providing housing at very low cost or to subsidise the rental (after allowing for any other forms of housing subsidy).

The Boston linkage policy was introduced in 1983 and revised in 1986. It has so far survived repeated legal challenges. Unlike the San Francisco scheme, it applies to all types of commercial development -- not only to offices but to retail, hotel, and institutional uses (all of which have a high proportion of low-income employees). The main features of the Boston scheme are:

- (1) Fee applies to all new development or substantial rehabilitation projects over 100,000 sq.ft. and which require a variance from normal zoning-regulations.
- (2) Developers have two options:

- (i) Cash option -- \$5 per sq.ft.; the total fee is payable over six years (downtown) or 12 years (elsewhere)
 - (ii) Construction option -- provide affordable housing equivalent to net present value of annual contributions, either directly or via partnership with non-profit housing organisation. Provision must be completed before offices are occupied.
 - (iii) Combination of above.
- (3) For downtown office projects, 10 percent of the housing provided must be in areas adjacent to the project; elsewhere 20 percent -- provided sites are available.

From 1981 to 1989 inclusive, Boston's linkage programme had produced nearly \$47 million in contributions or commitments from 27 development projects. Of this total, 60 percent had been received, resulting in the construction of 2,480 units, of which 83 percent were affordable (i.e. within the means of those households with 80 percent or less of average income). City officials consider that the scheme has been highly successful, thanks to the buoyant office market of recent years. Unlike San Francisco, there is no policy restriction on new office development in the Boston metropolitan area, and the linkage programme is expected to continue to yield a useful addition to the supply of affordable housing for some years to come (absent successful legal challenge).

None of the other cities that have adopted linkage fees has matched San Francisco or Boston in the results so far achieved. Most schemes exhibit very similar features but with fees ranging from just over \$1 sq.ft. (Menlo Park, California), to \$15 sq.ft. (Hartford, Connecticut). While most have a single fee rate, Sacramento has six levels for different types of use according to intensity of employment (which seems sensible).

Since the "linkage" concept has proved distinctly productive in the two cities that have made most use of it, the surprising fact is not that other cities are seeking to emulate them but that the concept has not generally been expanded beyond housing to other types of provision, the need for which (it may be argued) stems from new commercial development but which is not covered by development impact fees. No doubt there is some concern not to kill the goose that lays the eggs.

San Francisco and Boston, however, have again shown the way by introducing linkage programmes that require office and other commercial developers to

contribute to the provision of childcare facilities. San Francisco was first in the field with its 1985 Ordinance. This requires that any new converted or additional office building over 100,000 sq.ft. shall provide childcare facilities on-site, or, for developments over 50,000 sq.ft and up, 100,000 sq.ft. of alternative child-care services within a radius of two city blocks. Or the developer can make a payment into a child-care fund run by the city. The formula is:

- (a) provide space for child-care facilities of at least 3,000 sq.ft. or 0.01 sq.ft. for every 1 sq.ft. of additional office space.
- (b) make that space available to "a non-profit child care provider without charge for rent, utilities, property taxes, building services or any other charges of any nature."
- (c) or make a payment in lieu of \$1 per sq.ft. of additional office space to the Affordable Child Care Fund.
- (d) or a combination of a) and c).

The purpose of these provisions is "to mitigate the impact on the availability of child care facilities which will be caused by the employees attracted to the proposed office development project." Thus the rational nexus is boldly asserted. Boston is now in the course of following suit.

It is remarkable that the land-use planning system is being used in this way to secure what is no doubt an admirable social objective. A payroll tax or levy on all employers would be a more effective mechanism. But the regulatory system is there, so it is used for that purpose although the legality may still be challenged. It may not be easy to demonstrate the equity of requiring only new development to meet these costs (and the employers who occupy the premises, who will pay through increased rentals), whereas existing development and employers presumably generate similar requirements. But it is being done. Chapter 8 deals with the linkage between new employment generating development and transportation requirements, where the costs involved are potentially much greater.

Chapter 3 Housing Bonus/Linkage

I have coined this hybrid term to describe one type of arrangement which combines something of both bonus zoning and linkage programmes, although it is different from both. This involves requiring housing developers to include in their development a proportion of low-cost or "affordable" housing, and offering a higher-density zoning approval if they include more than the minimum amount required. In that sense it is a variety of bonus zoning. It is also somewhat comparable to office linkage programmes (described in the previous chapter), because it links the provision of low-cost housing to normal market housing development. But it is difficult to maintain that middle- or upper-income housing generates a need for low-cost housing. That argument is in fact advanced by some proponents, who point to the demand in affluent residential neighbourhoods for domestic and custodial services, maintenance work, grass cutting, etc. -- all low-paid jobs. Other housing advocates argue simply that communities should not be allowed to use land-use controls to cater solely for higher-income groups and the more expensive types of housing, but should be required to provide for low-cost housing needs as well. Housing bonus/linkage transfers the cost of doing so from the public purse to the pockets of private homebuyers.

Not surprisingly, this is not a widely popular policy among aspiring homebuyers, and very few local politicians have had the nerve to try to implement it. But I did come across one striking example that has been in existence for nearly ten years and has generated nearly 7,000 low-cost/affordable homes. This was in Montgomery County, Maryland, a very large area of some 5,000 square miles with a rapidly growing population of about 750,000 (and a Planning Commission with a staff of 170). It serves mainly as a commuter suburb for Washington, DC, but it is also developing a substantial employment base of its own. The western half of the county is reserved for agriculture, and this is achieved by enabling farmers to transfer their low-density zoning entitlement to developers in the more accessible parts of the county.

Montgomery's system is simple and appears to work. Its main features are:

- (1) All housing developments of more than 50 units must include at least 12-1/2 percent of low-cost housing units (as defined by reference to income levels in the Ordinance).

- (2) For each 0.1 percent increase in the proportion of low-cost/affordable housing above this minimum, the overall density of the development can be increased by 1 percent, up to a maximum of 22 percent bonus for 15 percent low-cost housing.
- (3) By agreement, instead of building the low-cost housing as part of the same project, the developer can provide it at one or more other locations, or transfer to the county land equivalent in value and suitable for such housing, or make a cash contribution in lieu to the county's Housing Initiative Fund, which provides low-cost housing.

There is a variety of other refinements in what must be one of the most remarkable examples of developer "exactions" in America. But it has not been challenged by the homebuilders in the area, and the indication is that it works because the housing bonus more than compensates the developer for the costs involved. As a result, he can absorb those costs rather than pass them on to the homebuyers in the form of higher house prices.

Montgomery County is exceptional in requiring developers to include a proportion of low-cost housing in their residential developments. But the housing bonus device is widely used in California. A recent survey showed that 29 percent of the cities which responded to the survey and 36 percent of the counties (over 300 authorities in all) had adopted ordinances providing density bonuses for low-cost housing. In addition 36 percent of cities and 62 percent of counties had adopted "granny-flat" ordinances that allow the construction of a second unit on a single-family housing lot. It appeared from the survey that relatively little use was made of the granny-flat provisions, but they are there if wanted. This example serves to make the point that modest relaxations of planning control do not necessarily lead immediately to an avalanche of applications to exploit the concession.

Seattle (Washington) has an extraordinary collection of devices to promote the provision of low-cost housing in the downtown area. These rely chiefly on zoning bonuses and the transfer of development rights, but include other methods as well, and are evidently based on the same assumptions as linkage programmes. One commentator has remarked on the "insuperable complexity and attendant uncertainty" of Seattle's housing incentive programme. Perhaps this is why it produced only 274 housing units in the first three years after its introduction in 1985, 256 of which resulted from a single project, the 55-storey Washington Mutual Tower. In exchange for 13 extra storeys, the developer paid

for 101 new housing units and rehabilitated 155 others. This contribution was equivalent to about \$9.60 per sq.ft. of the commercial development. Before the housing incentive programme could make much further headway, however, a Citizens Group succeeded in placing a "cap" on the amount of new office space to be allowed in future. Developers are now limited to 38 storeys, and the zoning bonus criteria are now more stringent. As in San Francisco (see Chapter 2), the result of rationing office development in this way will also result in fewer low-cost houses being built. Housing bonus/linkage works both ways.

All this may seem strange to those accustomed to the British planning system, where modest deals may sometimes be struck with housebuilders on the inclusion of low-cost housing or housing to rent, but where policy has been ambivalent and the legal position unclear. The "bonus" concept, however, or something similar, is reflected in the 1989 initiative that encouraged planning authorities to release sites for housing in rural areas that would not normally be allowed, provided that it is restricted to meeting local housing needs. There may be scope for extending this practice of modifying one planning objective in the interests of promoting another. No doubt any such adjustments would be condemned as a "threat to the countryside" and as undermining the Seven Pillars of the planning system. But the planning process should be used in pursuit of policies that serve the public interest. Housing is part of the human environment and not a form of environmental pollution. The planning system can provide for housing to be built in the right places, but other measures may be needed to ensure that it gets built and that the housing needs of all the community are catered for. There is a need for "linkage" between demand and supply. The American methods described in this chapter may not be suitable for the UK, but they show that there is scope for new ideas.

Chapter 4
Development Excise Taxes

Probably the most recent variation on the theme of getting developers to pay for infrastructure is the proposal to levy an "excise tax" on the development process. This idea has the support of some reputable academics, since it is thought to avoid some of the legal constraints that can inhibit impact fees. I doubt whether these factors are relevant in the British context, but it is worth a brief note.

Excise taxes are taxes on "fungible" goods (e.g. alcohol, petrol, and services, as distinct from individuals or corporations). They require enabling legislation, as they would in Britain, since there is no inherent power of taxation in a municipality. Their main advantage is said to be that they are easier to administer than impact fees and that the revenues can be used more flexibly. It is not necessary to show "rational nexus" either in levying the tax or in the purposes to which the proceeds are applied.

A lot of ingenious legal argument has been expended in proving either that a charge of this kind on development is a tax or, alternatively, that it is a regulatory fee and not a tax. But in practice this seems to be a distinction without a difference, since the purpose is perfectly plain and exactly the same as an impact fee -- to make the developer pay. As with impact fees, that cost will usually (in American market conditions) be passed on to the homebuyer.

The Litigation Counsel for the National Association of Homebuyers in Washington, DC, has published several articles fulminating against this latest innovation, on constitutional grounds of equal protection, due process, and taking without just compensation. But the main point he is making is simply that such charges on developers will not be made any less odious and onerous by calling them an excise tax rather than an impact fee. On the whole it seems unnecessary to stir up again all the legal controversy that impact fees encountered in their early days, and which has now been largely resolved, by redefining them as an excise tax.

Excise taxes are, however, used for a variety of other purposes and have the advantage that they can be applied more uniformly than impact fees, which apply only to new development and can do nothing to meet the costs generated by existing development. Hard-pressed local governments are naturally attracted

to the idea. Recently Montgomery County, north of Washington, DC, an area of rapid development, proposed introducing an excise tax of \$10 a month on all private parking spaces downtown -- new and existing. This would be payable by the owner, who could arrange to pass it on to the user -- e.g. an office employer could charge his employees. It was not small change: IBM, the county's largest employer with 10,500 workers, would be liable for more than \$1.3 million a year; and Giant Food would get a tax bill of \$616,000. Many of these employees live outside the county, and the idea was to charge commuters who do not pay local taxes. The aim was to raise revenue to help pay for road improvements. It caused a tremendous outcry from developers and property owners and has not yet been enacted. But it shows the way the wind is blowing. Birmingham, Alabama, already levies a tax on car-commuters to the city centre to help pay for public car parks: it has not proved particularly controversial since it can be seen that it has resulted in the provision of badly needed and reasonably priced car parking space. There may be a lesson here.

Chapter 5 Special Assessment Districts

Special assessment districts (SADs) are a means of charging the cost of public works to those who will specially benefit from them. Despite the constitutional constraints of "equal protection" (as discussed in Chapter 6), there is ample legislative authority in most states for this form of discriminatory local tax or charge, and it has a long history stretching back to colonial times. Although it has only recently begun to attract renewed academic interest, it is widely used. While the number of local government areas has remained fairly stable over the past forty years (about 3,000 counties and 35,000 cities and townships), the number of SADs has increased from about 8,000 to over 28,000.

An SAD can be established by a local authority or by other types of body undertaking public works. The residents of an area can also petition to have one set up in order to secure the carrying out of public works that they want for the benefit of their area. There are democratic procedures to be gone through, often including a referendum, and a Board may be established to define the area and to assess the charges on individual properties -- which may be by reference to length of frontage, size of plot, or property value. Once the SAD is established, loans can be raised for the carrying out of the works and repaid over a period of years. The obligation is a lien on the land, which provides security for the loan.

There is some ambiguity in the legal principles underpinning the SAD concept. The works undertaken have to be of a "public" character -- i.e. available for public use and not restricted to certain individuals or groups; but at the same time they have to be shown to be of special benefit to those in the area where the tax will be levied. However, it is not too difficult to conceive of circumstances where these conditions are met (e.g. a road that is a public highway but which is used chiefly by the residents of an otherwise inaccessible neighbourhood). The fact that SADs are so numerous suggests that the concept is practical and robust. The advantage to residents is that it enables them to invoke public powers of land acquisition, construction, and finance to carry out improvements which they could not otherwise undertake. Equally it enables public authorities to carry out works that benefit primarily a particular group of residents without the cost falling on the local taxpayers at large.

The main disadvantage of the SAD is that it may be, or appear to be, discriminatory in that residents in one area have to pay for benefits (e.g. road improvements) that have elsewhere been a charge on general revenues. This objection might be overcome if all improvements were financed by this means in future. But that would result in a proliferation of special districts and involves a much more cumbersome process than the introduction of impact fees. SADs on the other hand enable the charge to be spread in equal installments over a period of years rather than being levied as a capital charge at the start of development or on first occupation.

SADs can be particularly useful where new infrastructure is needed not to serve new development but to improve services to an existing neighbourhood (where development impact fees would by definition not be available). If all existing residents, or a substantial majority, endorse the proposal, it offers a convenient mechanism for this purpose.

In the past, SADs have been set up mainly to perform a single function such as road construction, fire service, water, sewerage, or hospital building. More recently there have been examples of multi-purpose districts, where the distinction between SADs and general-purpose local authorities becomes blurred. California has been exceptionally inventive in the use of SADs and has over 20 enabling Acts authorising their establishment, the earliest dating back to 1887, which authorised irrigation districts. Prior to 1949, only 214 districts were established in California, mostly relating to agricultural land drainage. But in the next two decades 568 new districts were formed, mainly to provide urban facilities and services.

There exists the possibility of the rate of tax exceeding the cost of the works done in cases where the value of benefit to residents also exceeded that cost. So far, the notion of a betterment levy of this kind has not been carried through to implementation. But it is thought to have potential, particularly in relation to central business areas or suburban shopping centres where property values could be substantially enhanced by improved road access, public transport, or car-parking space. There may be interesting developments in this direction over the next few years.

On the other hand, SADs are not without their critics. There is scope for exploitation by unscrupulous developers who can secure the setting up of an SAD so as to raise cheap capital by the issue of tax-exempt bonds, but who then

fail to make it clear to homebuyers that they will incur continuing charges for the provision of services and will have no control over their charges.

Five years ago California introduced a novel system for shifting infrastructure costs onto the homebuyer. This is known as a "Mello-Roose" (named for the two state legislators who promoted it, apparently with the connivance of the housebuilders). It is similar to a SAD but is initiated by the developer. It enables the developer to issue bonds to finance the infrastructure necessary for his development, and the bond repayments are then a lien on the new houses. Homebuyers find that they face a bill for these payments every six months in addition to their normal property tax. The system was described to me enthusiastically by two major housebuilders. But they admitted that, in practice, homebuyers jibbed at a Mello-Roose of more than \$1,000 a year and that the existence of this commitment tended to reduce the sale price of the housing (as indeed it should). The advantage was said to be that it enables the developer to finance the infrastructure at a lower cost than he would otherwise incur and to pass the repayments on to the homebuyer, usually spread over ten years. There is no end to the ingenuity of the American homebuilder and his legal advisers.

While safeguards can be introduced to protect the homebuyer and prevent the grosser abuses, the proliferation of SADs and similar devices on the periphery of developed areas can result in a multiplicity of overlapping single-function districts with a raft of outstanding indebtedness and general administrative confusion. It is hardly a model one would want to follow.

In Florida, however, the SAD concept has been adapted to provide the framework for private development on the scale of a new town, and warrants a more detailed description.

Chapter 6 Community Development Districts

Florida first embarked on this course in 1975 with its New Communities Act. The aim was to provide a more orderly and secure basis for large new residential developments, many of which had been developed without adequate infrastructure and where developers had abandoned them in an unfinished state, leaving the local authorities to pick up the pieces and as a burden on the local taxpayers. The 1975 Act enabled landowners to apply to the County Commissioners to set up a special district which would be authorized to raise funds by revenue and general obligation bonds and to be responsible for the development and servicing of the area until such time as the residents petitioned for incorporation as a local government unit or for amalgamation with an existing one.

In the event, no new communities were established under this Act, largely because the procedures involved were so complex and protracted that developers were not prepared to incur the costs involved.

The Uniform Community Development District Act of 1980 was intended to overcome the difficulties encountered with the 1975 Act. The powers which it offers to prospective developers are remarkable. The first requirement is that it can apply only to developments of over 1,000 acres, and the promoters must first secure all the requisite planning and environmental approvals at state and county level, and the proposal must also be approved by those other authorities who would normally provide services to new development -- water, schools, police and fire services, etc. Once those hurdles have been cleared, the new Community Development District (CDD) can begin operations.

The CDD is administered by a Board of five Supervisors appointed by the landowners and subject to their direction. The Board is authorized to hire managers and staff, to exercise compulsory purchase of land within the district (and outside its boundaries subject to local government approval), to raise funds by the issue of tax-exempt bonds, to assess property values for taxation, and to levy taxes. It can then provide and maintain water and sewerage services, roads, bridges, and street lighting. It can also provide a range of other services, subject to the approval of the "overlying" local authority or other body who would normally provide them, including waste collection and

disposal, recreational and cultural facilities, fire prevention, school buildings, security services, and (this being Florida) mosquito control.

In short, Florida's Uniform Community Development District Act enables a landowner or group of landowners to set up a new town, to acquire land compulsorily, to issue tax-exempt bonds, to levy taxes, provide services, and do pretty well everything that a properly elected general-purpose local authority can do. There are some limitations: the CDD's general-obligation borrowing cannot exceed 35 percent of the taxable value of property in the district at the time the loan is raised, and taxation for operating purposes cannot exceed 3 percent of assessed value. Finally, a contract for sale of property within the CDD must include "a statement, in conspicuous type and appearing immediately above the space reserved for the signature of the purchaser," that states that the district imposes taxes to pay for the construction, operation, and maintenance of public facilities. Caveat emptor!

That such wide-ranging powers can be conferred on private developers leaves one somewhat incredulous. It seems that even the Florida legislature had second thoughts, since in 1984 the 1980 Act was amended to meet some of the criticisms that had been raised, by expanding the requirements for public notice and participation, refining the procedures for winding up a CDD, establishing requirements for voter approval of general obligation bonds, and placing a cap on the rate of ad valorem taxes for operational purposes. There is also provision for an existing local government to take over any of the CDD's functions if it believes that it can perform them better than the CDD.

While no new communities have so far emerged from this remarkable legislation, I was assured that several are working their way through the preliminary stages.

Chapter 7 Development Agreements

In America, the term "Development Agreement" tends to imply a specific type of arrangement between the developer and the planning authority, as I shall explain in this section. In the UK, many (or perhaps most) planning permissions involve a degree of negotiation between the developer and the authority, although the outcome is contained in the permission granted rather than in a separate agreement. The exception is where a "planning agreement" is executed under S.52 of the Town and Country Planning Act, 1971, whereby the developer undertakes certain obligations that could not be covered by conditions attached to the planning permission.*

The increasing use of S.52 (which originated in the Planning Act of 1932) has shown that it is not very well-adapted for the purpose, and in 1989 the Department published proposals for some modest amendments to it. The present provisions will need to be reconsidered if more extensive use is to be made of agreements or if provision is to be made for a more formal system of developer contributions. It should be noted that the American system of development impact fees involves compulsory contributions, whereas S.52 agreements are by definition voluntary arrangements. But in practice the distinction is not so clear. Variations in impact fees may be negotiated as part of a development agreement, and a S.52 agreement is often "compulsory" in the sense that it represents what the developer has to concede in order to get his planning permission. In view of this similarity, the American practice may prove relevant in considering the revision or replacement of S.52. As usual, the British policy has tended to evolve in a pragmatic and somewhat inconsistent (not to say confused) manner, whereas the American process usually evolves within a constitutional and legal context which requires more precision.

*Section 51/1971 is now Section 106 of the consolidated Town and Country Planning Act 1990. The two main provisions are:

- (1) A local planning authority may enter into an agreement with any person interested in land in their area for the purpose of restricting or regulating the development or use of the land, either permanently or during such period as may be prescribed by the agreement.
- (2) Any such agreement may contain such incidental and consequential provisions (including financial ones) as appear to the local planning authority to be necessary or expedient for the purposes of the agreement.

I do not deal in this section with those types of agreement that occur where the public authority owns all or part of the land that is to be developed. In that situation, more normal commercial and contractual relationships are involved, although the public authority may also be exercising concurrent regulatory powers. In America, as in the UK, such agreements have often been used for redevelopment schemes and other joint public/private projects. An interesting current American example is where the Bay Area Rapid Transit Authority is involving commercial office developers in the building of new passenger stations on its extended network of commuter lines serving San Francisco and its suburbs.

Development agreements of the kind that are now becoming more common in America do not normally involve public land ownership but usually derive from the developer's need to obtain some variation from the standard regulatory regimes that would otherwise impede his development. As we have already seen, Boston's office linkage programme (which requires the office developer to provide affordable housing and child-care facilities) applies only where the developer needs a zoning variance.

But there is a further and very important reason why development agreements are increasingly sought by American developers, and it is one that would not normally apply in the UK. This derives from the developer's need for a firm assurance that any such regulations will not be changed while his project is under construction or, if they are changed, that the new rules will not apply to his project. This is known as the "vested rights" issue or "regulatory security" -- i.e. once the developer has secured zoning approval (planning permission), he has the vested right to proceed and complete his development without the risk that changes in the rules will put the project in jeopardy or increase his costs. A key decision of the California Supreme Court in 1976 (AVCO Community Developers, Inc., v. South Coast Regional Commission) ruled that the developer did not have that degree of security unless he had already obtained all the requisite approvals (i.e. not only zoning approval but also the building permits that would normally be sought at a later stage in the design process or for later phases of a large development). Other Court decisions also called in question a local government's right to commit itself (or its successors) not to enforce subsequent regulatory changes. As a result of the uncertainties created by these decisions, California introduced state

enabling legislation in 1979 to provide a firmer basis for development agreements, and I explain this later in this section.

I doubt whether this question of "regulatory security" would arise in the UK, at least in quite the same form. Once the developer has his planning permission, it cannot be revoked or modified without compensation, and when statutory or regulatory changes are made there are usually transitional provisions (known in America as "grandpa clauses") to avoid unfairness or retrospective effects. I find it remarkable that in America there is well-established legal authority for local planning authorities to act in this way (e.g. to "downzone" land to a less valuable use) without incurring compensation. The courts have ruled that, provided the owner is left with some reasonably beneficial use (which can be pretty minimal!) he has no claim to compensation. In this respect the British system seems to be more careful of property rights than the American.

The other question raised -- whether a local authority can grant immunity from future regulatory changes or commit its successors to doing so -- may be more relevant to the British scene. But I must simply note this as a point that may need to be considered with legal advice.

The Californian enabling legislation states that, unless otherwise provided for in the agreement, the "rules, regulations and official policies" applicable to the property in question shall be "those that were in force at the time of the execution of the agreement." That is intended to deal with the problem of regulatory security, although (inevitably) it has since been found that there is still some scope for litigious argument.

Other features to note in the Californian legislation are:

- (1) specific power for local governments to enter into such agreements;
- (2) provision for annual review of implementation and enforcement (the local authority has the right unilaterally to terminate or modify the agreement if the developer does not comply in good faith with the terms and conditions of the agreement);
- (3) provisions regarding duration of agreements, subsequent agreed variations, commencement of development, and cancellation;

- (4) a mechanism whereby the developer can undertake to finance public infrastructures and to be reimbursed over time from tax revenues generated by the development;
- (5) a public hearing to be held before any agreement is entered into;
- (6) registered records to be kept of all such agreements, which are binding on successors in title.

These are some of the points that should be considered in any future revision of S.52/1971, which is silent on most of them at present.

On the other hand, I do not suppose that we would want to follow the California example by making such agreements subject to referendum. In California almost any governmental action is liable to become subject to referendum at the instigation of some group or other of "concerned citizens." But it can be a long and expensive process to secure a referendum, and so far no development agreements have been subjected to it. It is worth noting, however, that S.52 agreements are sometimes criticised for having been reached behind closed doors and in a dubious manner. If more extensive use were to be made of development agreements in the UK, then it might be advisable to include provision for some form of local publicity and public scrutiny prior to adoption.

While the Californian legislation goes a fair way towards smoothing the path for development agreements, there remains the problem that the local planning authority can only bind itself in the agreement and not other public agencies, whose approval may be needed if the development is to proceed and whose current rules or requirements may be changed at a later stage and in a way that jeopardises the project. The Californian legislation specifically excludes development agreements in areas covered by the California Coastal Commission (which quite rightly has priority), and also provides that a development agreement has to be amended to comply with any subsequent changes in state or federal laws or regulations (as they cannot be subordinate to local action).

There is probably no way in which an agreement reached between a local authority and a developer can also safeguard the developer against the regulations or actions of other public agencies, unless those agencies are also willing to join in the agreement -- which may sometimes be possible (I cite one example below).

The California enabling legislation has proved very popular with local authorities. A recent survey showed that at least 154 authorities (a third of

the total) had adopted these provisions, and, by 1987, 333 agreements had been concluded, with another 141 under negotiation. Florida, Nevada, and Hawaii have passed similar legislation and other states are likely to follow.

While development agreements, as practised in America, are clearly not the answer to all the problems that can arise in managing the relationship between private development and the public interest, and are probably practicable (or worth the effort) only in the case of major developments, there have been some remarkable examples of apparently successful agreements in recent years. Here are some that I have come across, all from California:

- (1) The developers of the Hacienda Business Park in Pleasanton proposed a mixed-use development of nearly 12 million sq.ft. to be built in several phases by the year 2010. It will generate 40,000 jobs. As part of a Development Agreement, they undertook to construct \$32 million worth of off-site works, including six-lane access roads, five freeway interchanges, an 8-million-gallon emergency reservoir, storm drainage, undergrounding of utility lines, and landscaping. For good measure the developers also agreed to provide an extension to City Hall and a new fire station. They expect to recoup these costs not only through the return on their own development but from contributions from other developers in the area who will need their assistance -- e.g. in providing access to their land.
- (2) The City of Irvine were anxious that the retail part of a major downtown mixed-use development might not in fact be built (the office component being the more profitable), and that this would deny them the sales-tax revenue which they needed to finance public services for the project. The developer signed up to a development agreement by which he undertook to pay \$21.7 million in anticipated sales tax revenues even if he did not go ahead with the shopping plaza.
- (3) Orange County brought off an amazing series of development agreements in 1988 with eleven developers whereby, in exchange for a commitment to approve 60,000 dwellings over 20 years, the developers would contribute \$250 million to a new coordinated road system. Spurred by this success, the county then secured nine further agreements for similar contributions of \$200 million for other public facilities.
- (4) In the San Bruno Mountain area, a 3,000-acre island south of San Francisco, a remarkable multi-agency agreement was reached between the public authorities (three cities, a county, two state park agencies, and the federal wildlife agency) and a number of land-owners and developers. The agreement provided for the conservation of 2,000 acres of the island in exchange for permission to build 3,021 dwellings on other parts of the island, which would yield a continuing stream of tax revenues to pay for conservation.

- (5) In Fairfield, the owners of Rancho Solano proposed a development of 850 single-family luxury homes on a site of a 2,284-acre cattle ranch. They also proposed to dedicate 1,600 acres as open space. The city decided that they would like an 18-hole public golf course, and the developer agreed to provide it in exchange for permission for an extra 350 houses. The city then pointed out that not only would this increase the profitability of the project but that the new golf course would enhance the value of the whole development. The developer acknowledged as much and agreed to make a further substantial contribution to the city's infrastructure needs. The project encountered fierce local opposition from conservationists, but the developers did a deal with them whereby they will set up a county-wide open-space foundation, with an endowment of \$7 million to be financed by special assessments levied on the new residential development.

These examples, and there have been many more in the past few years, serve to illustrate what can be gained through Development Agreements. They may also suggest some of the disadvantages or dangers which some observers are increasingly concerned about. The first and most obvious is that the local planning authority may be tempted to concede too much and too readily, and to prejudice or impair other policy objectives. Secondly, since experienced developers are not in the habit of giving something for nothing, their apparent willingness to enter into such agreements should not be mistaken for public-spirited generosity (although there is sometimes an element of that). How can the public be sure that their representatives have not bargained away the public heritage -- or at least that they have got a good price for it? That anxiety is enhanced (and shared by some officials) by the knowledge that the big developers can marshal far greater negotiating skills and legal resources than the average local government. Are these Agreements as water-tight as they appear; can they be circumvented; how can they be enforced?

Aside from these practical considerations, there is a wider concern that this method of planning by Development Agreement is not planning at all but mere opportunism on the part of local government. The initiative usually comes from the developer, and the motive is usually to obtain some exemption from the normal regulatory regime or some departure from existing planning policy. The result could be a "scatteration" of large developments not related to any planned pattern of growth, and a complex patchwork of agreements that may prove difficult to reconcile with later developments. It has been said that the practice of entering into Development Agreements may mean gaining some immediate advantage at the expense of future problems, since such agreements seldom

allow the local authorities to respond to unforeseen changes in circumstances. But to provide otherwise would undermine the "regulatory security" that the developer seeks, and which is the authority's bargaining counter.

The growing practice of relying on Development Agreements is certainly a wide departure from the traditional American planning process, with its reliance on regulatory systems that, whatever their limitations, ensure a reasonable degree of predictability and consistency. The new methods obviously open the doors wide to maladministration, and deals may be struck with little or no public knowledge or scrutiny. The process almost by definition lacks consistency and may be very unfair as between one developer and another, and in its effects on other property owners.

All of these criticisms have some force. But they are risks or dangers that can be guarded against if the public authority is aware of them, if the public officials are sufficiently skilled in negotiation and in the legal intricacies, and if the public can see what is going on and have the opportunity to comment on it.

It seems increasingly likely that, both in America and in Britain, the planning process will involve this type of negotiation between public and private interests. The notion that plans are immutable, and that they are to be implemented simply by a regulatory process, is very out-of-date and was never realistic. It is not plans or planners that generate development and economic activity but the entrepreneurial skills of the gainfully speculating developer. Therefore the planning authority must do business with developers. In doing so, they must have clear and consistent policy objectives in view and must act in the public interest.

What has not been sufficiently recognised in the UK is that the public interest can be served not merely by imposing controls and constraints on developers but by enlisting their cooperation in securing public policy objectives -- including the necessary infrastructure and community services needed to serve that development.

The concept of Development Agreements may offer far greater potential for good planning than either the traditional regulatory process or the standardised application of impact fees or similar devices. But if the dangers inherent in this approach are to be avoided, it needs to be based on clear and con-

sistent policies. Those policies need to be expressed in published plans and to be implemented in a fair, open, and consistent manner. This will usually require a formal process of planning application and approval, and published standards or guidelines regarding infrastructure requirements and developer contributions. In short, greater use of negotiation and Development Agreements is likely to make for more effective land-use planning, but it must be based on secure procedures that protect both public and private interests.

Chapter 8
Transportation: Every Which-Way

In the earlier stages of my work I was puzzled to find that there seemed to be almost no examples of impact fees, linkage programmes, Development Agreements, or other types of developer contributions being used to help finance public transport or "mass transit." On the face of it, major commercial developers and employers might be thought to have a more direct interest in the provision of mass transit for their employees than in low-cost housing or child-care facilities. Certainly there would seem to be a close "rational nexus" between major employment generators and the means of getting people to work. But when I reached the West Coast I found that California has been highly active in developing mass transit and other transport systems and in finding new ways of financing them. Almost every method described earlier in this report has been pressed into service for this purpose in California.

The material in this chapter is drawn mainly from a recent paper which Robert Cervero, who works at the Institute of Urban and Regional Development at Berkeley, prepared for the State Governor's Office of Planning and Research and the California Policy Seminar in 1987. One of the reasons why I had not come across references to mass transit earlier in my work on impact fees was that very few cities in America have a metropolitan or suburban rail system, and not many have an adequate bus service. Until the last twenty years or so, New York and Chicago were among the few notable exceptions. But in the light of growing public concern about both the spread of suburban development and the decline of the older cities, plus the explosion in car ownership and traffic congestion, the federal government instituted grant programmes to help finance new metro systems in some major cities. Washington, DC, and Atlanta were among the beneficiaries and now have superb facilities, although limited in extent. The Bay Area of San Francisco has developed its own rapid transit system (BART) with no assistance from federal funds. Los Angeles only recently "broke ground" on a new \$1 billion system.

one of the problems with mass transit in America is that the need for it began to be perceived only after the pattern of vastly diffused suburban development had become the norm. It is impossible for fixed-track transport systems to service more than a relatively small proportion of these sprawling metropolitan populations, often extending fifty miles or more from the central

city. Nevertheless, in conditions of chronic overload on the road network, metro-rail systems can help alleviate the problem. What has prevented more widespread adoption of such systems has been the physical difficulty of inserting them into densely developed centres, their limited ability to serve low-density suburban areas, and the problems of financing them.

But transportation is not my subject and I have not studied it. My interest has been in finding out how far the methods described in this report have been used to help fund mass transit and other transport systems. There are references elsewhere in the report to developer contributions to road improvements, car parking, etc., but California yields some further striking examples:

- (1) In the rapidly growing Westchester area of Los Angeles, a fee of \$2,010 is being collected for each evening rush-hour car-trip generated on an average weekday by new commercial and office developments. Estimated receipts will meet \$235 million of area-wide road improvements. Developers can gain credits against their fee obligations by dedicating land for future transit centres.
- (2) In Contra Costa county, part of a 80-cents-per-square-foot impact fee levied on new office and commercial development will go towards financing local transit improvements.

Similarly, Development Agreements of the kind described in the previous chapter have produced some huge contributions by developers (of equally huge projects) for transportation purposes -- as the result of "enlightened extortion," as it has been called:

- (1) The developers of the Irvine Spectrum office/industrial/biotechnology project of 2,900 acres have agreed to pay Orange County \$500 million towards a variety of major road and traffic management schemes.
- (2) In San Diego County, Shapell Industries have agreed to provide 33 separate capital infrastructure projects at a total cost of \$58 million. As their own development is expected to cost about \$1 billion, this represents a relatively modest addition to their costs and, of course, the capital improvements will enhance its value.
- (3) Contributions from smaller developments generated about \$135 million between 1954 and 1986 in California for building or improving freeway interchanges giving access to those developments.

However, impact fees and Development Agreements are relevant only in the case of new development, and the proceeds are necessarily devoted chiefly to improvements that serve or benefit those developments, whereas the greater part of the transport problem is generated by existing development and by the resident population and their cars. Bob Cervero concludes that developer contributions, whether by compulsory impact fees or Development Agreements, will have only a relatively modest part to play in solving current transport problems. He considers that the costs of improving and maintaining transportation systems -- both highways and mass transit -- will have to be met primarily by the users and by employers, commercial property owners, and the population at large. He believes that the problems are so great and the need so urgent that every available instrument must be deployed, and new ones invented. He canvasses special tax assessments for transportation purposes to be levied on property in existing developed areas, and not only on areas of new development. He urges that full use be made of bridge tolls, toll roads, employer-based parking taxes (see Montgomery County in Chapter 4), increased gasoline ad valorem taxes, and -- in the not too distant future -- charges for road usage based on electronic metering. He also advocates privatisation of transport systems, existing and proposed, because they tend to be less costly, more efficient, more competitive, and better able to charge the market rate for their services. Deregulation of taxis and "jitneys" (minibuses) has a part to play. Finally, he suggests that major employers should be encouraged to help get their employees to work. Some of the more enlightened employers already do this.

- (1) Hughes Aircraft Corporation in El Segundo has set up a private transit system to help its 25,000 employees by running nine regular coach routes at an annual operating cost of \$650,000.
- (2) Pacific Bell in San Ramon provides an express bus service from the nearest Metro station to its main offices. Since this service was instituted in 1985, the number of their employees travelling to work by the BART mass transit has increased from 500 to over 3,000 a day. The owners of the Bishop Ranch business park, of which Pacific Bell is part, now offers a free bus service for employees of companies that lease office space in that development.
- (3) The Hacienda Business Park in Pleasanton operates six shuttle buses between the complex and several BART stations, and a free lunchtime shuttle service to nearby shopping centres, plus a continuous internal circulation within the 1,200-acre development.

This variety of financing mechanisms simply serves to demonstrate that the costs of infrastructure provision can be shifted, at least in part, from the public to the private sector. It also suggests that requiring developers, commercial property owners, and employers to meet an increased share of these costs makes at least as much sense as requiring those costs, or cost subsidies, to be met wholly by the public sector and the taxpayer. American experience also demonstrates that the private sector can be persuaded, or required, to contribute in these ways and that it is often in their interests to do so, whether as developers, property owners, or employers. The essential prerequisite is to establish robust and effective mechanisms for bringing this about. This report has reviewed many of those methods.

PART THREE: ASSESSMENT AND CONCLUSIONS

This report has reviewed ways in which the costs of development infrastructure can be reallocated between the public and private sectors in the USA. These methods range from mandatory impact fees to negotiated Development Agreements. Part One of the report dealt with development impact fees in detail; Chapters 3, 4, and 5 explained the criteria on which such fees are based, their implementation and techniques. Part Two of the report summarised a variety of other methods, which may be used in conjunction with impact fees or separately.

In Part Three, I assess the possible relevance to the UK of American practice, the policy factors involved, and the policy issues that would need to be considered if similar methods were to be introduced in the UK. In conclusion I suggest a possible approach to implementing such a policy.

Relevance

Despite the differences between the USA and the UK in terms of size and geography, the scale and pace of development, the constitutional conventions, the organisation and powers of local government, and many other factors, when it comes to land-use planning there are distinct similarities. Public attitudes towards new development, and concern for the environment and for neighbourhood amenity, are now very similar in the two countries, at least in those regions where development pressures are greatest. As in the UK, there are areas in the US where employment-generating activity is welcome, but there are others where development is increasingly resisted. If there is less concern in the US with protecting open land for its own sake, there is at least as much concern about the effects of congestion, the overloading of roads and local services, and resistance to the costs which new development is thought to impose on existing residents.

In some areas, local electors have voted to put a "cap" on new development and to prevent any increase in local taxation, property assessments, or municipal indebtedness. Anti-development sentiment is now a potent political factor in some of the fastest-growing parts of America. The effect of restrictive policies on house prices and the supply of housing have led some commentators to claim that the lack of affordable housing will be the major domestic issue of the next decade.

There is no need to labour the point. America and Britain face very similar problems in coping with the development needs generated by economic activity, population growth, and demographic change. These are primarily political issues. This report focuses on one aspect: how to pay for the physical infrastructure needed to service new development. The American experience is certainly relevant.

Policy Factors

Some important policy factors can be derived from the American experience of coping with the costs of development, and each of those factors suggests scope for change in the UK. They can be stated quite briefly.

(i) Allocation of Infrastructure Costs

The boundaries between the public and private sectors in the provision of physical infrastructure and community facilities are not immutable. There is no need to retain the traditional allocation. There is no reason why the public purse alone should pay for those infrastructure works that enhance private property values and facilitate private development. The only problem is to find practical and equitable methods of reallocating those costs.

(ii) Local Government Revenues

The traditional sources of local government revenues -- property taxes and Government grants -- are also not immutable. In the UK, the local tax on residential property has now been replaced by the "community charge," which is levied at a standard rate (in each locality) on every individual over 18, rather than on property owners. Part of the rationale for that change was to increase the local electorate's awareness of the costs incurred by local government. One effect of this is likely to be greater resistance to expenditure that would increase the community charge. Central government will also have a strong interest in restraining local government expenditure, since the public is liable to attribute increases in local taxation as much to central as to local government. For these reasons, there is likely to be increasing interest in finding alternative sources of local revenue and new ways of meeting the costs of infrastructure needed to service new development or new ways of providing those services.

(iii) Developer Contributions

There is no need to assume that developers will refuse to undertake a larger proportion of those costs, provided that the costs are reasonable and are allocated in a consistent and predictable manner, and provided that an adequate supply of land is available for development. The latter is a crucial factor to bear in mind when

contemplating any change of direction in allocating the costs of development.

(iv) Land-Use Planning and Capital Programmes

The reallocation of infrastructure costs between the public and private sectors requires an effective land-use planning system and a sound basis for the programming of capital expenditure. These are essential if developers are to be assured that land will be available for development and that the resources will be forthcoming to ensure the timely provision of the requisite infrastructure. Developer contributions cannot be relied upon as the sole means of financing those facilities, except perhaps in the case of a self-contained development such as a new town or new village. In general, the development process is too variable in timing and scale to provide a wholly predictable or sufficient source of local revenue for capital works. For these reasons, while developer contributions can provide an important means of financing capital improvements, they will usually need to be supplemented from other sources -- local taxes, government grants, and user charges. In short, requiring developers to contribute to those costs also requires a commitment of local resources.

(v) Public opinion

While public opinion is likely to support the transfer of infrastructure costs from the local taxpayer to developers and land-owners, this will not in itself overcome resistance to new development. American studies have shown that the revenues generated by new residential development do not fully cover the demands that it imposes on local services, and this is likely also to be the case in UK conditions. Certainly this is one of the main reasons advanced by those local planning authorities who resist new development. American studies have also shown, however, that when looked at in a broader context than the residential sector, new development generally benefits an area in terms of economic activity, job opportunities, and local business. But this too will not disarm the Anti-development sentiment in those areas where it is most strongly entrenched. However, there is no escaping the fact that room must be found to accommodate a growing population and increasing housing demand (700,000 more people, or 600,000 more households, in the South East from 1990 to 2000). Central and local government have this responsibility. A clear policy of requiring new development to meet at least part of the costs that it generates should go some way towards mollifying anti-development pressures, and can also help to mitigate the environmental disbenefits of new development by ensuring that it is adequately serviced. Involving housebuilders and developers more closely in the planning process, as will be necessary if they are to carry a greater share of these costs, should help to achieve greater economy in the provision of services and a better end product.

Policy Issues

While the case for requiring developers to carry a larger share of infrastructure costs seems a strong one, the application of that principle raises some important policy issues. I discuss those issues in terms of the UK context, but similar issues have also been raised in the US, and the American experience helps to illuminate them.

(i) Policy and Powers

There may be concern at the prospect of enabling local authorities to exact financial contributions from developers, or to require them to provide off-site infrastructure. It is possible that some local authorities would not use such powers in a reasonable manner, and some might well use them to deter development rather than to facilitate it. But, in fact, local planning authorities already have such powers, in the sense that their powers to grant or refuse planning permission will often enable them to secure certain types of contribution from developers, as a legitimate condition attached to planning permission, or more widely as part of a Section 52 agreement, or in the course of negotiating planning consent. At present, however, this process takes place in a somewhat random and unpredictable fashion. Local authorities have been known to compile "shopping lists" of items that they suggest developers should provide, and sometimes these demands have been regarded merely as the "price" of planning permission and have borne little or no direct relationship (or in the useful American term "rational nexus") to the development proposed.

The Department's policy guidance on the use of planning conditions and on Section 52 has consistently stated that such requirements should not be sought or imposed, except where they are necessary to the development proposed or where the development ought not to be allowed to proceed without them. In the revised draft policy guidance on Planning Agreements published in July 1989, examples of such requirements included "provision of adequate access, water supply and sewerage and sewage disposal facilities . . . car parking, reasonable amounts of open space related to the development, or of other public infrastructure the need for which arises from the development," or "in the case of financial payment, will contribute to meeting the cost of providing such facilities in the near future." The policy advice further stated that "Such agreements can therefore relate to land or buildings other than those covered by the planning

permission, provided that there is a direct relationship between the two. But they should not be sought where this connection does not exist or is too remote to be considered reasonable." In addition, "the extent of what is required" should be "fairly and reasonably related in scale and kind to the proposed development . . . (and) to the benefit which the proposed development will derive from the facilities to be provided." At the time of writing, this new guidance had not been published in its final form. But I would say that it expresses admirably the principles of "rational nexus" that the American Courts have adumbrated.

The difference between the British and American situation, however, is that this policy guidance relates to planning agreements rather than to any explicit powers to require such contributions (except in the limited circumstances where they can legitimately be imposed as a planning condition). But, as noted earlier in this report (see Part Two, Chapter 7), this difference is not as marked as it may appear. Although Section 52 relates to negotiated agreements, it may be perfectly proper to refuse planning permission in the absence of such an agreement; and developers may well be prepared to enter into such an "agreement" in order to secure their planning permission. In short, Section 52 is quite a forceful instrument.

It is for consideration whether Section 52 should be recast so as to state more explicitly that local planning authorities may seek contributions from developers, as an adjunct to the grant of planning permission, for the purpose of securing the physical infrastructure and other facilities needed to service that development. At present Section 52 is expressed in very vague or broad terms, and might be read as referring only to the use of land other than that covered by the planning application, rather than to the provision by the applicant of works and services. Although in practice Section 52 has been construed in the latter sense, it would be helpful, and deter misuse of these powers, if their intended scope and purpose were defined more clearly.

A revised Section 52 could provide both for negotiated Development Agreements and for Developer Contributions in conjunction with an application for planning permission. The advantages of building on Section 52 is that it expresses the new arrangements in the context of the long-established provisions relating to "Planning Agreements" rather than in terms of a separate system of regulation and compulsion. In addition, developers could have the

option of offering a "Unilateral Undertaking," as proposed in the July 1989 consultation paper, as a safeguard against unreasonable demands being made on them. That offer would then be a material consideration if the matter were referred to the Secretary of State on appeal or call-in.

Such an approach would require the planning authority to set out its normal requirements in published form, specifying standards for roads of various types, open space, school sites, etc., as is the case with American impact fee systems (see Part One, Chapters 4 and 5). The July 1989 policy guidance advised that "Where a planning authority intends to seek such agreements, or to impose such obligations, on a regular basis in relation to similar types of development, it should set out those requirements in the development plan."

Thus it appears that the Department has already laid out the basis for a comprehensive system of developer contributions. But it is for consideration whether the relevant powers should be more clearly defined, and whether the policy should be expressed in a less general and more positive form, coupled with the adoption of published standards. The more that the process can be systematised and made explicit and predictable, the more likely it is that it will come to be accepted by developers as part of the development and planning process, and the less likely that it will be applied in an arbitrary or inconsistent manner. It would also help to ensure that these obligations on developers were reflected in the price that they were prepared to pay for land and hence in land values, rather than that these costs were passed on to homebuyers and commercial tenants. I deal with this aspect more fully in the next section.

(ii) Economic effects

If it became established policy and normal practice to require developers to contribute to the cost of off-site infrastructure and other facilities, the cost of those contributions would be an addition to the developer's costs -- just as in the case of on-site works such as estate roads, landscaping, etc. The developer would normally seek either to recoup those costs in the price charged for his product (i.e. house prices or commercial rents) or to offset these costs in the price he was prepared to pay for development land. He might seek to cover those costs by both of these methods. He might also offset at least part of the costs by economising in construction costs or in the size or quality of the end product or by higher residential densities or by increased

floor area ratio of commercial development. Only in very exceptional circumstances, it is reasonable to suppose, would he be able or willing to accept a lower rate of return on his development.

The most critical issue to consider in assessing the merits of such a policy is whether the imposition of these costs on housebuilders would feed through into house prices. If that were the likely outcome, it would not only increase the price of new houses but would also tend to increase the sale price of existing houses, since owners will not expect to sell their property for significantly less than the price of comparable new housing. Moreover, if this were the effect of introducing such charges (or applying them more widely than at present), it would raise the vexed questions of intergenerational equity discussed in Part One, Chapter 6. It would also, of course, throw doubt on the political feasibility of such a policy, despite the fact that (as demonstrated in section (i) above) the basis of that policy already exists.

These issues have attracted much concern and debate in the US. The general conclusion has been that, in American market conditions, such fees or charges will normally be passed on to the homebuyer and be reflected in the price of both new and "second-hand" housing. The main reason for this seems to be that in areas of high housing demand (which are the areas where impact fees are most likely to have been adopted), the developer finds it easier to pass on the cost to the homebuyer than back to the landowner. There is a fair amount of empirical evidence to support this conclusion, although the effect of typical fee levels adds only around 4 percent to average house prices (varying examples are cited in Part One, Chapter 1).

Proponents of the need for affordable housing claim that the rapid spread of impact fees, and increases in the scale of fees, are significant factors in pushing house prices beyond the reach of the average family. The Department of Housing and Urban Development, who, in their 1988 Report to the President, warmly endorsed the concept of impact fees, are now having second thoughts. When I visited HUD in Washington, I was told that Secretary Kemp was in the process of appointing a "blue ribbon" Commission to advise on the factors impeding the supply of "affordable" housing, and that impact fees would feature largely in that inquiry (along with excessive zoning controls, subdivision regulations, construction and fire safety standards, permit processing costs, etc.). In fact such an inquiry is hardly necessary: academic work already

done shows that both in theory and in practice impact fees are likely to be reflected in house prices, pretty well "dollar for dollar." The only exceptions would be where demand for new housing was weak, or where one local authority within a wider housing market was charging fees, or (though examples are hard to come by) landowners were prepared to accept a lower price for their land, in which case the benefit would not necessarily be passed on to the homebuyer. The fact that, in American market conditions, impact fees (or similar developer contributions) will usually be reflected in house prices, is not necessarily a conclusive argument against adopting such fees or charges. Insofar as they reduce opposition to new development and facilitate the development process by ensuring the provision of necessary services, they may result in more houses being built, albeit at a slightly higher price. Increasing supply will help to counteract the effect of shortage on house prices, but the exact equation may be impenetrable.

Would similar effects be found in UK market conditions? The answer must be that they would, if UK market conditions were comparable to those in the US. In many respects conditions are similar: the factors that affect house prices in a market economy are not likely to differ greatly -- supply and demand, interest rates, mortgage availability, average earnings, rate of inflation, taxation, locational factors, and the health of the local economy.

But there is one crucial difference between the US and UK situation. This is to be found in the price of land and the proportion that land cost forms of the total production costs of new housing. The periodic reports from the Valuation Office show housing-land costs of around £400,000 an acre in the South East -- more than £1 million per hectare in many parts of the Home Counties. Even in less-favoured regions, land costs can be around £100,000 an acre.

As shown in Part One, Chapter 1, land now accounts for 40 percent or more of house production costs in the South East -- more than the cost of construction. Competition between housebuilders for a larger share of the market has forced up land prices to unprecedented levels, and a developer has to comply with them if he is to stay in business.

Land cost is thus a prime factor in housing costs, despite the fact that many other factors affect the price of housing. It is true that the reverse also applies, and that the value of land for housing is determined largely by

the market price for housing. The housebuilder will charge what the market will bear, or that segment at which he is aiming his product, and this will largely determine the price that he is prepared to pay for the land. But, as we have already seen, the land price is a major part of his costs of production. If his other costs increase, he will not be able to offer as high a price for the land unless he can pass those higher costs on to the homebuyer.

By contrast in America (as shown in Part One, Chapter 1), land does not usually account for more than about 10 percent of total house production costs. In most parts of the US, land is generally in more plentiful supply, and planning restrictions on the release of land for development are generally less severe, than in the UK and especially in the South East. Since the cost of land is comparatively low and the demand for new housing generally buoyant, the American housebuilder finds it easier to pass on the cost of impact fees to the homebuyer than back to the landowner. In the UK, the cost of new housing is now probably as high as the market can bear, as has been seen in the effect of increased mortgage rates and the ending of dual tax relief. As a result of those changed conditions, house prices have fallen by 10 percent or more in many areas and the demand for new housing has markedly fallen off. Whether this will be reflected in lower land prices is not yet evident, and it is very likely that landowners will hold back until the housing market recovers. What is clear is that any marked increase in total housing costs will tend to result in lower market prices for housing. This was not always the case: twenty years ago, the typical household was paying a lower proportion of total income on housing. The discovery that people could afford to pay a higher proportion of their income on housing was a potent factor in increasing house prices and hence land values. But it seems probable that the limit has now been reached, at least for the present, and housebuilders would find it difficult to pass on developer contributions to their customers. They are more likely to seek an adjustment in land costs when negotiating to buy sites or organising options to purchase subject to planning permission and any associated fees or charges.

In some parts of America, conditions similar to those in South East England do apply, and the result is as one would predict. In San Diego, Southern California, I had discussions with the Chairman of the American subsidiary of one of the largest British housebuilding firms, who have been active in the American housing market for several years (as have a number of other British

housebuilders). This firm builds about 2,000 houses a year, half of them in California and the rest in a number of other states. They are aiming to increase this to 5,000 a year, which will make them one of the largest producers in the country. The Chairman had experience of speculative housebuilding in both the US and UK. He and his colleagues told me that, whereas in other parts of the country they would expect development fees to be passed on to the homebuyer in the sale price of the house, in Southern California house prices were now so high that this was no longer practicable. The cost of land in that part of the country had been nearing 40 percent of house production costs, but the rapid increase in development fees had reversed the trend. Now they would always take account of the fees in deciding the price they were prepared to pay for the land, and the landowners were aware of this. In short, exactly the result that one would expect in UK market conditions.

The conclusion I venture to suggest is that, in the UK, landowners are in a much better position to accept a somewhat lower price for their land than housebuyers are to pay an even higher price for their housing. In those circumstances, housebuilders faced with increased costs are more likely to pass them back to the landowner than forward to the housebuyer. The introduction of impact fees or developer contributions is likely to have that result in the UK situation. This was confidently asserted when provisions were introduced into the Water Act 1989, enabling water companies to levy a similar charge on new development to help pay for new installations. The likelihood of that result occurring was much enhanced by the fact that the new charges would be administered on a consistent and predictable basis across large areas.

The question to be addressed is whether these arguments are sufficiently realistic and convincing to enable a stronger policy on developer contributions to be introduced without significantly affecting house prices and without the need for any regulatory controls to ensure that the costs are reflected in land values rather than house prices. Any attempt to regulate the price of land directly would be a hazardous course indeed. The experience of successive attempts to do so since the 1947 Act suggests that it is likely to be both excessively difficult to administer and largely ineffective in its results.

I suggest that on balance the market solution is the best and most feasible option. The gross imbalance that exists at present between the cost of land and other components of housing costs makes it most likely that the effect of

introducing developer contributions would be to reduce the price that the developer is prepared to pay for the land rather than to increase the price that the homebuyer has to pay. That is certainly the result that most people would want to see -- developers included. Moreover, the scale of contributions required from developers is not likely to be so large as to result in a dramatic fall in land values. The landowner is still likely to get a very good price for his land: quite sufficient to provide adequate incentive to sell. By analogy with American examples, if the developer contribution were equivalent to 5 percent of the average price of a new house (say £120,000 in the South East) and the average density were 15 houses to the acre, the total contribution would be £90,000 an acre. The farmer whose land, without planning permission for housing, might fetch £4,000 an acre is not likely to jib at getting around £310,000 an acre rather than £400,000. Outside the South East, the comparable figures might be about half these levels -- a contribution of (say) £45,000 an acre, reducing the land value from £200,000 an acre to £155,000. (It is possible that infrastructure costs in different parts of the country do not vary as widely as housing and land values. If so, development contributions would yield a lower proportion of those costs, unless the contributions were set at a higher level. But as land acquisition is a significant part of most infrastructure expenditure, the difference may not be very marked. This aspect requires more detailed analysis.)

If the difference between these two sets of land values (with and without developer contributions) could be channelled into the provision of necessary infrastructure and other facilities, as the result of the market's response to the changed conditions under which development takes place (i.e. the introduction of developer contributions), the public interest will have been well served.

Implementation

The implementation of a system of developer contributions to infrastructure provision presents some quite difficult policy and administrative issues. These concern the scope of such a system, and relate to three main aspects:

- (a) should such contributions be sought in respect of all new development or in relation only to certain areas and/or types of development?
- (b) should such contributions always be a matter for negotiated agreement, contingent on the grant of a planning permission, or should there be a standard scale of contributions payable when planning permission is granted?
- (c) for what types of infrastructure should contributions be sought?

The rationale for seeking developer contributions rests on the argument that new development generates new infrastructure requirements. Therefore any such contributions should be related to such requirements. It is a mistake, however, to restrict this relationship too closely. It should not be confined only to future infrastructure provision, since such provision may have been made in advance and in anticipation of future growth. It is reasonable that when that development occurs it should contribute to the costs already incurred. It may be necessary to maintain separate accounts of such expenditure, in order to assess and substantiate developer contributions.

In the case of substantial new developments (e.g. development on the scale of a new township or village, a new residential neighbourhood, or large commercial development), the need for new infrastructure to service that development will usually be readily identifiable. In such cases the developers' contribution may best be dealt with by negotiation and incorporated in a Development Agreement. If agreement cannot be reached by negotiation, it should be open to the developer to offer a Unilateral Undertaking which would be a "material consideration" if the matter was referred to the Secretary of State on appeal.

Negotiated agreements, however, are often complex and time-consuming, and are practicable only in the case of relatively large-scale developments. It would hardly be possible to enter into negotiations over every application for new development. Therefore a system of standard contributions is necessary if the process is to operate in an equitable and consistent manner. The American examples cited in Part One of this report show that this is practicable, and that methods can be devised for attributing infrastructure requirements to almost any new development, and that these can be translated into unit terms (per dwelling or per square foot, etc.). Those requirements can be converted into payments in lieu of actual provision by the developer. A uniform system

of this kind has the great advantage of predictability and thus a more consistent effect on development costs and hence on land values.

This type of system seems to work well in America, and has become generally accepted by developers in those areas where it has been introduced. Its adoption has certainly been facilitated, however, by the fact that most new residential development in America (and much new commercial development too) takes place on a large scale and on open land. The process of suburbanisation is rapid and is constantly pushing out into new territory. In those conditions the need for new infrastructure is self-evident, and the costs can be readily computed and attributed to that development.

In the UK, on the other hand, much new development takes place on a smaller scale and in a more disaggregated or dispersed form. The periodic statistical reports on Land Use Change have shown that around half of all new residential development is on previously used land or on unused land within urban areas. Much of the remainder takes place in a relatively slow and incremental manner around existing towns and villages.

It may therefore be difficult in many cases to demonstrate that new development generates identifiable new infrastructure needs and expenditure to which developers' contributions can be related. On the other hand, it may be thought reasonable to proceed on the basis that almost all new development is bound to place some additional demand on existing infrastructure and other services, and that the cumulative effect will generate a need for increased capacity or new provision. If that is a reasonable assumption, then all new development could be expected to contribute to those costs -- whether or not specific new infrastructure is to be provided at the time that the development takes place.

If it were thought impractical to introduce a comprehensive system of this character, or advisable to move forward in stages, there are several ways of moderating its impact:

- (a) require such contributions only in relation to areas of land allocated for new development in the local (District) development plan and where the plan also indicates a need for associated new infrastructure or improvements to existing infrastructure;
- (b) require such contributions only in the case of developments above a certain threshold -- e.g. excluding single houses not forming part of a larger development, or housing schemes of less than

(say) ten dwellings or commercial developments of less than (say) 10,000 sq.ft.

- (c) divide the authority's area into several sub-areas (or, in American parlance, "benefit zones") and relate the scale of contributions to infrastructure requirements and programmed works within those sub-areas allocated for future growth in the development plan;
- (d) exclude areas where policy is directed at encouraging urban renewal or the restoration of derelict land, and where a requirement for development contributions could act as a deterrent.
- (e) set contribution levels well below the maximum implied by potential expenditure (most American systems aim to recover 50 percent or less, and there is sometimes a statutory limit -- as in the Raleigh example cited in Part One, Chapter 8).

As regards the types of infrastructure to be included within the scope of such a scheme, most American local governments that have adopted impact fee systems or similar methods have confined their scope to a limited range of infrastructure -- typically roads, water, sewerage, drainage, open space, and school sites. Others, as we have seen, have extended the concept to include a variety of other facilities -- school buildings, libraries, traffic signals, even "law and order" (i.e. police stations and patrol cars). The list can include almost any type of infrastructure required to service new development, the need for which can be assessed by reference to anticipated rates of population growth, and which is included in a capital works programme. "Linkage" programmes, which require the provision of low-cost housing or child-care facilities as an adjunct to office or residential development, are similar in concept but are not related to a capital programme.

If a system of developer contributions were to be introduced in the UK, it would be necessary to consider whether its scope should be defined by statute, or be left to the discretion of local authorities, or be subject to the Secretary of State's direction or policy guidance. It may be thought prudent to give the Secretary of State power to prescribe the scope by means of Regulations, and to confine it to relatively few types of infrastructure, at least initially.

(iv) Adoption and Endorsement

If local planning authorities were to be encouraged to secure developer contributions to infrastructure costs as part of the planning approval process

(under the provisions of a revised Section 52), it would be for consideration whether they should be required to publish their standards of provision and scales of payment in lieu. I have already suggested that published standards and payments are highly desirable in order that developers can see what is required, and can take account of that in deciding on the price that they are prepared to pay for development land. Such proposals should be published in draft for public comment, and local housebuilders and developer organisations should be consulted on their preparation.

Although the draft guidance published in July 1989 indicated that a statement of such requirements should be incorporated in "the development plan" (presumably the county structure plan and/or District local plan -- since both types of authority may have an interest in developer contributions), I would suggest that these requirements should be published separately from the development plan, since the plan approval process is already slow and complex, and it might well be necessary to revise the scale of developer contributions more frequently than the normal quinquennial plan review.

It is also for consideration whether such published scales of contribution should be subject to the Secretary of State's endorsement. At present, if they were incorporated in the county structure plan, they would be subject to his approval: but proposals have been published for dispensing with this requirement (although the plan would still be subject to a public inquiry process and the Secretary of State could call in particular components of the county's policies for his consideration). Locally adopted scales of contribution might also be referred to the Secretary of State on an ad hoc basis in conjunction with a planning appeal. But this would surely be most unsatisfactory, since it would mean that the whole basis of the scale contributions would have to be considered in the context of a particular application. This situation should certainly be avoided. I suggest three possible options:

- (a) Once a scale of contributions has been adopted, following local publication and opportunity for objection, it should not be subject to challenge as part of a planning appeal.
- (b) The Secretary of State should have power to intervene and call in a proposed scale of contributions prior to adoption (and/or to revoke or modify a scale after adoption).
- (c) Proposed scales of contribution should be subject to the Secretary of State's approval, following local publication, but without the

Secretary of State being required to hold a separate inquiry on the proposals.

I would also suggest that County Councils should be responsible for drawing up scales of contribution, in consultation with the Districts. There are several good reasons for this. Firstly, it would avoid a proliferation of fee scales within a single county. Secondly, the county itself is responsible for some major types of infrastructure provision (notably county roads and schools). Thirdly, the county should be in a position to ensure a reasonable degree of consistency between Districts. Fourthly, in its planning role, the county could also help ensure that the operation of such a system was matched with an adequate supply of land for development across the county. Fifthly, it would simplify the process of consultation and adoption, and would greatly ease the burden on the Secretary of State if it were decided that scales of contribution should be subject to his approval (or if he were empowered to call in specific proposals).

There are other more detailed aspects of implementation, many of which have been illustrated in Part One of this report. This section has dealt with those matters that require prior consideration and political judgement. It will be seen that the concept of developer contributions also raises a variety of practical administrative issues.

The original version of this report concluded with proposals for legislation which are not reproduced here since they were of detailed technical character. In brief, it would be necessary to amend Section 52/1971 (S.106/1990) so as explicitly to enable local authorities

- (a) to negotiate agreements with developers for the provision of infrastructure needed to service that development, and to enter into such agreements in advance of an application for planning permission but conditional on the subsequent granting of permission for the whole or successive stages of development (Development Agreements).
- (b) to require contributions from developers for the provision of infrastructure needed to service new development, in conjunction with the grant of planning permission (Developer Contributions).

The previous sections of this Part of the report, together with the more detailed description of American practice in Parts One and Two, will hopefully provide sufficient material on which to reach a decision whether to adopt a

more positive and systematised process of developer contributions to infrastructure costs in the UK. That is for Ministers to decide.

The alternative to arrangements of this kind would be to retain Section 52 in substantially its present form (plus provision for unilateral undertakings) and to leave local planning authorities to continue using it, having regard to policy guidance published by the Secretary of State. But it may be thought that there would be distinct advantages in moving to a more explicit and consistent policy of securing developer contributions to the provision of the physical infrastructure and other facilities needed to service new development, while setting reasonable limits to the demands made on developers. It could be that the time is ripe to move in that direction.