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Design Guidelines in American Cities

A Review of Design Policies and Guidance in Five West Coast Cities

JOHN PUNTER

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PREFACE

Origins of the study

The origins of this paper lie in two articles published quite independently in the *Town Planning Review* in the late 1980s. These drew attention to developments in urban design regulation in American planning looking at the content of plans (Southworth 1989) and design guidelines (Habe 1991). At the same time a major survey of design regulations in twelve cities was produced (Shirvani 1991) which attempted, not altogether successfully, to draw out the key consistencies and contrasts. Five west coast cities featured strongly in these articles—Seattle, Portland, San Francisco, Irvine and San Diego—and all had particularly interesting experiences that seemed relevant to aspects of British practice. A sixth, Bellevue adjacent to Seattle, had also developed a national reputation as an innovator in design controls (Hinshaw 1994).

In the same year John Delafons, newly retired from the Department of the Environment where one of his responsibilities had been Central Government design advice to local planning authorities, completed a study of American practice that featured Portland, San Francisco and San Diego (Delafons 1990). He drew some conclusions for British practice that found their way into Chris Patten's key speech to The Royal Fine Art Commission in 1991 (Patten 1991). It was this speech that helped to pave the way for a more positive approach to design that eventually emerged, albeit tentatively, in the English Planning Policy Guidance Note 1 in 1992 (subsequently revised and strengthened in 1997).

A review by the author of all four publications and a number of related studies was published in a special issue of *Urban Design Quarterly* in 1992. It looked at aspects of current design policy in Britain and America (Punter 1992), but interest in the subject was intensified by an exceptionally well focused International Symposium on Design Review held in Cincinnati in the autumn of that year. The 49 papers in the proceedings of this symposium proved to be a very rich collection of practical experience, and contained a number of sustained critiques of particular importance (Preiser & Lightner 1992). Some of the best papers have been subsequently published in a more accessible reader (Scheer & Preiser 1994). Again American experience was very well represented, although east coast and mid west cities rather predominated.

Relevance to international—especially British—practice

Inspired by the ideas of this symposium, and with long-promised Department of the Environment initiatives on research into design having failed to materialise, the

author began work on a research proposal to study the design policies of the new generation of English development plans. With section 54a of the 1991 Town and County Planning Act raising the status of the development plan, and requiring the rapid production of district-wide development plans, it was clear that practical and effective design policies were a priority for practice. A research proposal submitted to the Economic and Social Research Council in the spring of 1993 included an American dimension, and the eventual grant funded a hectic twelve days of interviews, document collection and dawn-to-dusk exploration in the five west coast cities in July 1994. The initial conclusions were relayed in five short articles in *Planning* in 1995. This monograph provides a fuller account of design initiatives and policies in each of the cities, and provides the space to reproduce substantive sections of the key documents that underpin design control in these cities. It is hoped that these extracts will prove of interest, inspiration and practical use to academics and practitioners who want to know more about American practice, and who want to improve the standard of design policies and design control. While four years have elapsed since the original data collection, and the development industry has moved out of recession in the USA, most of the examples, analyses and conclusions remain relevant to current practice.

A city-by-city approach has been maintained, but an introduction and conclusion have been included to provide a framework for comparative analysis and to draw out some of the key findings of relevance to an international audience. These six American cities do not provide a representative sample of American practice, but they do provide a rich vein of ideas about recent policy development and current initiatives that should stimulate thought about ways of formulating effective design controls.

Further reading

Those wishing to learn more about design control and design policy in the United States are recommended to consult Jonathan Barnett's *Introduction to Urban Design* (1982) which, although dated, has five substantive chapters on design regulation, and six chapters on design and development strategies. A more recent synthesis of theory and practice, remarkable for its comprehensiveness and its masterly review of the social science bases for urban design, is Jon Lang's *Urban Design: An American Perspective* (1994). British readers will particularly value Richard Wakeford's *American Development Control* (1990), and Barry Cullingworth's *The Political Culture of Planning* 1993. These four sources provide an ideal introduction to, and amplification of, the issues discussed in this paper while the symposium papers previously mentioned (Preiser and Lightner 1992; Scheer and Lightner 1994) provide a wealth of other American and international comparative cases.

Acknowledgements

The author wishes to acknowledge the assistance provided by planning officers and commissioners in the cities of Seattle, Bellevue, Portland, San Francisco, Irvine and San Diego to these researches. Their willingness to be interviewed and to allow their guidelines to be reproduced were indispensable to this study. Their names are listed in Appendix II. The author also wishes to acknowledge the comments of three anonymous referees on a first draft of this paper, particularly the British design practitioner who took the author to task over his analytical and comparative frameworks. Thanks are also due to Anne Lockhart and Adri Stoffaneller who typed drafts of the paper and to Janice Cole who produced a number of the diagrams. Finally, the author wishes to acknowledge the financial support of the Economic and Social Research Council towards the travel costs involved in the collection of the data, as part of a ESRC-funded research project, the Design Content of District-Wide Development Plans and their supplementary guidance.

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ONE

NATIONAL CONTEXT AND A COMPARATIVE FRAMEWORK

Introduction

Design regulation, and the systems of review and control that implement them, constitute a complex and controversial area of planning practice, but an area of increasing importance in city, suburbs, towns and villages throughout the developed world. There is increasing recognition of the need to find more effective means of delivering development of a quality that respects the character of the locality and is environmentally sustainable. There is widespread acknowledgement that many of the current systems of regulation are ineffective, unfair, exclusionary, undemocratic and visually illiterate. In a number of countries regulations are seen as part of the problem rather than part of the solution to design quality, because they straitjacket designers and stifle innovation and imagination, encouraging only the safe and mediocre.

There are longstanding dissatisfactions with modernist architecture and planning, with the international style and its way of designing urban space, with large-scale redevelopment and urban renewal, with corporate franchise design and standardised building forms. There are perhaps deeper dissatisfactions with the loss of local landmarks, with reduced access to the natural world, with the erosion of urban fabric perpetrated by the car, and with the consequent decline in air and environmental quality. There is also a growing dissatisfaction with the fake, the pastiche, the façadist, the gentrified and the 'themed' landscapes that are commercial responses to the failures of modernist architecture and town planning and, in part at least, a product of more sophisticated design controls.

As local identity and a sense of place are obliterated by global culture, as the pallette of building types, styles and materials is widened infinitely, so local communities search for regulatory frameworks that can help retain local character, make the most of existing assets in the built and natural environments, and create developments that are safe, attractive and user-friendly. There is increasing recognition by local and national government that high quality redevelopment and the retention of a sense of place can do much to foster economic regeneration and community well-being.

International perspectives on contemporary design review

All the aforementioned factors help to account for the fact that in a number of countries major initiatives are under way in the design control arena to tackle

issues of common interest and to seek to find new approaches to common problems.

A number of examples come to mind. In Australia in 1994, the Prime Minister established a task force to review the quality of urban design and to make recommendations for improvement (report by the Prime Minister's Urban Design Task Force 1994). It produced 29 recommendations about urban design plans and guidance, potential federal initiatives, design education and research, community preferences and public participation, and government-development industry responsibilities. In England, in the same year, the Secretary of State for the Environment launched a 'Quality in Town and Country' initiative (DoE 1994) that began with an extensive consultation exercise, identified common themes including mixed use, density, user-friendly transport, local involvement, design guidelines and local identity, environmental awareness and design training. This has now has culminated in an urban design campaign, revised policy guidelines and a good practice guide, (DoE 1995; DoE 1997a; DoE 1997b). It has sparked a wide variety of initiatives and collaborations with different design professionals and development agencies, and already produced some interesting ideas about strategic quality goals, town centre strategies, character assessment, and denser mixed use communities. In France there have been attempts to overcome the limitations of the local plans and their zoning and building envelope regulations, to integrate the *grands projets* into design strategies, to make controls more responsive to local character and more easily understood, and to offer protection to areas of aesthetic quality whether built or natural (e.g. Loi Paysage 1993).

In the USA there has been a partial and sporadic return to more traditional forms of suburban design, and experimentation with building codes to provide more urban and sustainable forms of development in place of the omnipresent single-family zoned subdivision (Katz 1994; Langdon, 1994). There has also been widespread adoption of design review mechanisms to supplement zoning controls in existing built-up areas, and extensive experimentation with design policies and guidelines in a bid to ensure that redevelopment enhances the qualities of towns and cities (Habe 1989).

Each country is addressing these design issues in different ways, through different legal and administrative frameworks, with different systems of planning and building control, and in different physical contexts with different development regimes. Each is struggling with similar problems—how to gain consensus on rules and regulations to allow clear and objective evaluation of projects; what trade-offs to make between generality and precision, flexibility and certainty, mandatory controls and guidance; how to ensure appropriate review processes that balance professional skill and lay perspectives; and how to ensure fair treatment for applicants and third parties, and maintain a control process that is efficient and effective, appropriately resourced and skilled.

In the USA there has been dramatic growth in design review since the 1970s. A 1992 survey of 360 towns and cities across the nation revealed that 83 per cent are now undertaking some form of design review. Simultaneously, another survey

revealed that over half the architectural practices were experiencing design review on at least half of their projects. The same survey revealed that half those practices considered design review to be 'a good concept with serious flaws', while just less than a quarter thought that it improved the product (Scheer 1994). These findings suggest the need to continue the search for better design plans, guidelines, review processes and implementation mechanisms.

The value of cross-comparative research

Each solution that is developed to each of these problems in different cities, provinces or countries around the world is, of course, context-specific. Each is a product of different governmental systems, administrative and legal frameworks, divisions of powers and responsibilities, different systems of zoning and planning control, different built heritage and environmental quality, different development pressures and design problems, different levels of public awareness and sense of urgency, and different access to design expertise and review procedures. So the possibility of taking policies, practices and procedures out of one context and grafting them on to another is severely limited. Attempts to do so are frequently naïve, ill-informed or positively misleading.

Nonetheless, a number of exponents of cross-comparative research have suggested that significant practical benefits might be forthcoming from the study of other regulatory systems if the differences in the systems are acknowledged and appropriate adjustments made in the application of ideas. Booth has noted that while planning systems are culturally determined, and that even the same terminology and procedures mean very different things in each system, nonetheless 'at a deeper level the basic problems [of] ... systems of development control are shared' and cross-comparative research can probe 'the central dilemmas that all systems face' (Booth 1996; p. 2). As Charles Haar has noted, 'The primary value of foreign exploration lies not so much in the discovery of readily transportable concepts, technologies, or techniques ... but rather in the stimulus of insightful reflection of culture and experiences' (Haar 1984).

Wolman has also reflected on the utility of comparing planning practice in the USA with that of other countries and has noted that '... such an analysis can both broaden the sense of the possible and provide a framework for better understanding our own behaviour ... questioning what frequently is simply assumed without question' (Wolman 1985, p. 116).

Richard Wakeford, in his description of *American Development Control*, usefully written from the perspective of a senior British civil servant in the Department of the Environment, has suggested that there are 'tantalising parallels' between the United States and Britain in recent planning experience.

> The American and British processes seem recently to be headed in precisely opposite directions—for example, America towards more discretionary control, and Britain in the 1980s towards deregulation and some zoning (Wakeford 1990, p. 252).

Booth, however, has warned that such parallels are largely fallacious except as generalities and has argued that 'the starting point for any evaluation must be the successes and failures, both seen from within and as visible from the outside' (Booth 1996, p. 146).

The focus of this study

The account of developments in design review and regeneration in selected American cities presented in this monograph is an attempt to provide what Haar (1984) has described as 'insightful reflection' into the problems of the subject area at large, rather than to draw out 'lessons' for British or any other national planning practice. There will be instances where initiatives in these cities have direct applicability to British practice, or indeed to other systems of design review, but the principal interest is in different approaches to the familiar and fundamental problems of design control because they expand the potentialities of policies and review, and stimulate thought about what to control and how to do it.

As to why American experience of design review is worthy of study, several factors are relevant. In the first instance a number of major American cities now have 25 years of experience with various forms of design policy and review, and have progressively developed innovative approaches to a wide range of issues. Secondly, the sheer number, diversity and a relative autonomy of American local authorities have allowed for a wide variety of experimentation with different approaches to the problem in both the public and private sectors. Thirdly, American practice has attracted significant critical attention from both academics and practitioners (to say nothing of Supreme Court judges), and this has spawned significant debate about the key issues in control that, if not unparalleled elsewhere in the English-speaking world, is certainly more profound than in other countries. Finally, American practice has attempted to tackle major design problems in a climate of rapid economic growth and largely unfettered free enterprise, where land speculation and property development are widely trodden routes to wealth creation, and where high levels of personal mobility allow a very wide choice of living environments and impose very significant costs particularly upon urban communities. The experience of the USA and the design problems it faces has a predictive value to other developed and market-dominated countries, particularly as globalisation gathers pace, while also offering a wide variety of potentially fruitful approaches to these problems and varying degrees of successful regulation.

Why west coast cities of the USA?

The choice of six communities in the west coast of the USA (Fig. 1) as the case studies for American design review is justified by their repeated citation as examples of innovative best practice. Five of the cities feature in Shirvani's twelve-city review of design practice (Shirvani 1990), which is the most comprehensive treatise on the subject, and the sixth has been widely written up as one of the most interesting suburban experiments in design control (Hinshaw 1994). Three cities have been studied in some detail by British commentators looking at design policy (Delafons

1992) and development control (Wakeford 1990). All are repeatedly referenced in recent reviews of design plans, guidance and control (Southworth 1989; Habe 1991; Preiser and Lightner 1992; Scheer and Preiser 1994).

The lure of the west coast of the USA played its part in the selection process, as did the practicalities of limited research time and travel funds. These cities were not chosen to represent design control practice in the USA, but to illustrate 'best practice', as evidenced by a number of factors. These include a long-standing commitment to developing design policy and guidance, a wide variety of design initiatives and design documentation, and interesting review processes and programmes of public participation, all tackling some of the most pressing design issues of the moment—residential intensification, downtown revitalisation, conservation, urban regeneration, edge cities, suburban design, sustainability, habitat and landscape protection, and design thinking at a regional level. Most importantly, all had attempted to set out clear goals, objectives, principles and guidance in user-friendly forms that could articulate community aspirations, provide developers/architects with clear ideas as to what was required, and give decision takers a more objective basis for judging applications for development.

Understanding American planning systems

American design review has to be carefully situated in American planning practice, and it is necessary to explain briefly the basic characteristics of the American planning system—the nature of local government, the political culture of planning, the role of the courts, the key role of zoning, the role of plans, the nature of development control and environmental review. Zoning has an important role to play in controlling the form of development, but design review is a relatively new, but now commonplace, phenomenon. In contrast with much American planning, it is a largely discretionary process that has been added to the existing control process, rather as has environmental impact review, and it is important to explain how these various mechanisms relate one to another.

The very concept of an American planning system is a misnomer, for as Cullingworth has emphasised in his richly-sourced review of the political culture of American planning, there are '40 000 local governments which administer zoning . . . most of them autonomously within fifty states, each with its own history, culture and constitution' (Cullingworth 1993, p. 1).

There are as many local government units which do not administer zoning at all to emphasise the absence of controls over much of the country. As Karl Popper has emphasised, the American federalist system of land-use controls is

> so loose, so deliberately disjointed and open ended, that it is barely a system in the sense that European elite civil service bureaucracies understand the term. The right to make particular regulatory decisions shifts unpredictably over time from one level to another. No principle of administrative

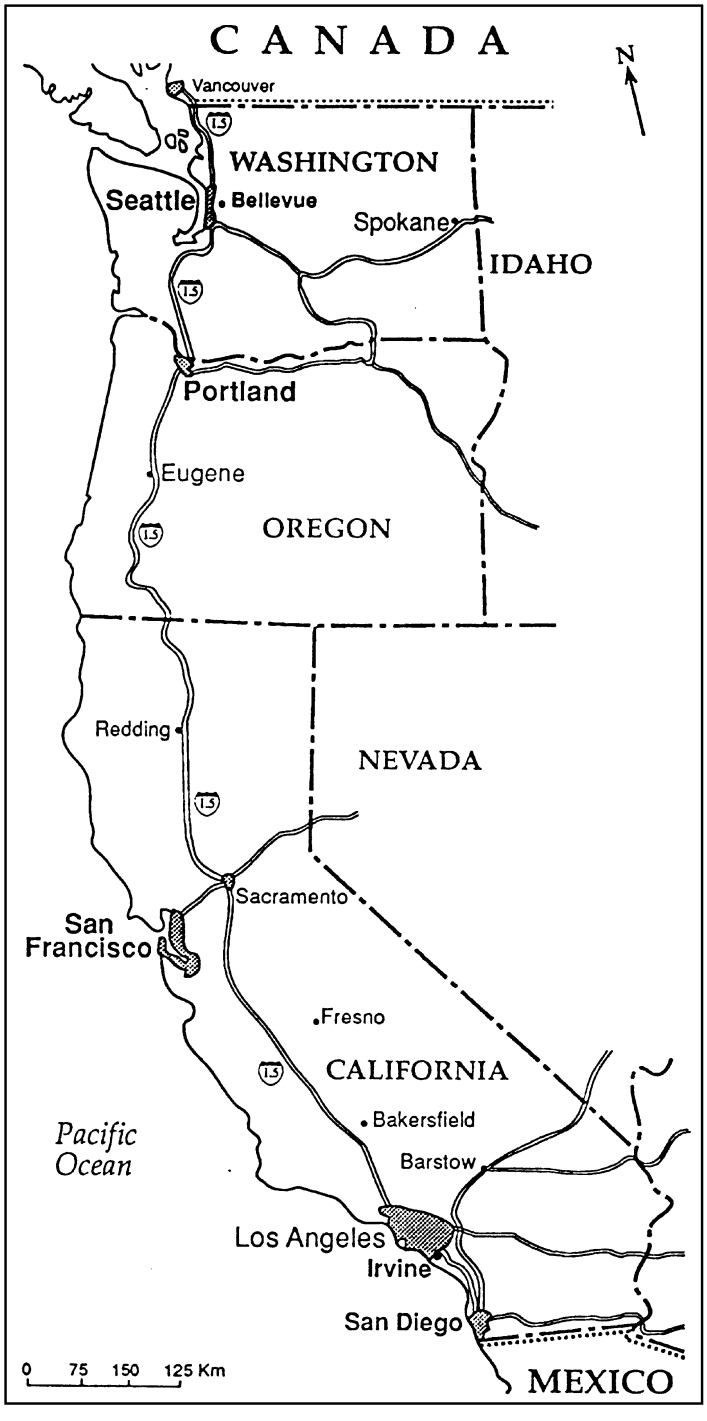


Fig. 1 Map of the West Coast Cities of the USA

> rationality, constitutional entitlement, economic efficiency, or even ideological predisposition truly determines the governmental locus of decisions. It is more often a matter of the inevitably uncertain catch-as-catch-can pluralism of democratic power politics (Popper 1988, p. 299).

So while the six cities that are the focus of this monograph have sophisticated systems of planning control, and are located in three states which unusually take all forms of land-use and environmental planning very seriously, they each display important differences one from another over time as politics, resources and development pressures change. None can be said to be representative of the immense diversity of American planning, but each demonstrates some aspects of best practice.

Local government structures

Local government in the United States has been variously described as fiercely localist, fragmented, balkanised, participative, corrupt, financially autonomous, lean and under-resourced (Wakeford 1990; Cullingworth 1993). Each of these words encapsulates one key aspect of a system that has evolved over two centuries largely without state or federal government direction. These local government units have increasingly resisted (but rarely successfully) annexation by larger towns and cities in a bid to avoid big city problems, and have jealously guarded their autonomy. Their powers generally include the provision of a range of services to protect the public health, safety and welfare of their citizens (Wakeford 1990, p. 32). The latter are known as 'police powers', the most important of which for our purposes is zoning. These local government units are often in fierce competition with one another for urban development because of their reliance on the property tax, and more recently the sales tax, as their source of income, although increasingly there is a resistance to growth because of the costs it can impose upon a locality. While local government is financially autonomous, it is also frequently under-resourced, partly because tax minimisation is a popular goal, but also because more than half the American municipalities have populations of less than 1000 persons (Cullingworth 1993, p. 13).

To what extent these factors account for the leanness of American local government is uncertain, but almost everywhere the size of elected bodies is quite small (a number of major cities have 13-person councils) and the forms of government are quite distinct. Strong mayors with the power to veto legislation are common, but so too are weak mayors who have an equal status with other council members. Many municipalities, particularly smaller cities, use the city manager form of government where a chief executive manages the bureaucracy, leaving matters of policy to the council (Wakeford 1990, p. 37). The small size of the council is partly responsible for another key phenomenon of American local government—the use of appointed boards to perform key functions, examples in the case of planning being landmark commissions (for conserving historic buildings) and design review boards.

However, the use of boards, special purpose agencies, and other citizen committees and non-profit agencies is also an expression of a vital local democracy and strong participatory tradition. The same public interest in government is also exemplified in some states by the use of initiative and referendum powers to enact or reject ordinances respectively, whereby a petition with the requisite number of signatures can trigger a ballot of the electorate. This has been of considerable importance in west coast states and cities, as will be seen. Despite this active public participation in politics, corruption is regularly rewarded and seems to be an inevitable part of a system where political appointments are common and a handful of local aldermen play a key role in decision making (Wakeford 1990, p. 40).

The role of the courts

In most of the United States the state governments do not exert any control over local government, although the three west coast states of California, Oregon and Washington are exceptions to this. There is certainly no federal control of local government, although its influence on patterns of development—through transportation, tax, welfare and environmental regulation—is immense. Instead, the higher level of authority is the courts. It is their function to 'ensure that local governments act in a correct legal and constitutional manner' (Cullingworth 1993, p. 10), but as will be seen in the case of design control, the courts do not necessarily make consistent decisions, and nor do they provide a clear set of principles which planning bodies and appellants can follow. Court cases are also comparatively rare and Cullingworth notes that 'The general experience of those who come into contact with land use planning is of a bureaucratic rather than a constitutional nature' (Cullingworth 1993, p. 20). Nonetheless, as Cullingworth himself argues later (p. 221), the lawyers and the courts play an overwhelming role in planning in comparison with the British or Canadian planning systems.

While the Supreme Court is the ultimate authority, there are three tiers of both Federal and State courts—supreme, intermediate appellate courts and local (superior or district). However, until cases are decided at the Supreme Court, inconsistencies abound because each state may interpret the law differently, and dissenting opinions can be as influential as the courts' judgement. In fact, different states, and indeed different districts, have built up quite distinct approaches particularly to zoning, and these have a determinate effect on patterns of land-use regulation in those states. However, as Cullingworth reminds us,

> The role of the courts is not to sit in judgement on the wisdom of a local government's legislative actions; that is the function of the political process. The judicial role is circumscribed. Typically, it can overrule a legislative body only if its actions are shown to be clearly arbitrary, capricious and unreasonable (Cullingworth 1993; p. 18).

However, litigation is rife in planning matters and embraces both constitutional cases, where plaintiffs argue that decisions have violated their constitutional rights,

and statutory cases, where the plaintiff argues that statutes have been violated. The latter cases are frequently brought by disgruntled property owners and planning laws rely heavily on citizen enforcement lawsuits. The former cases are more commonly brought by landowners and developers because they feel that they have not been afforded 'equal protection' under the law, or because some of the value of their property has been 'taken' by planning decisions (Fulton 1990, p. 32–3).

The American Constitution itself has a particular relevance to planning and design control. The Fifth Amendment states that private property should not be taken for public use without just compensation, and the Fourteenth Amendment entitles every citizen to 'due process' and each equal protection. The latter ensures that citizens are notified of decisions, that emphasis is placed upon 'reasonable and fair decisions', and that government intervention serves a legitimate purpose. Of particular importance to design review is the First Amendment and the right to free speech, which has often been interpreted as a right to freedom of architectural expression and legitimate use of property.

The Constitution also underpins American attitudes to land and property. Land ownership has always been seen as a key to independence and democracy in the United States. The size of the country and the frontier ethic have helped to create a view of land as a replaceable, tradable, exploitable commodity like any other, and an important factor in wealth creation. It is this ethic which has been so critical of the development of zoning, rather than planning, as the most influential form of land administration.

Zoning

Having introduced key aspects of the system of local government and administration in the USA, it is now time to turn to a description of zoning as the principal instrument of land-use regulation, and indeed design control in the United States. The nature of zoning as a 'police power', designed to protect public health, safety and welfare, has already been mentioned. Zoning regulates not only land use but also the physical form of development, including often height, setbacks, lot dimensions and coverage, building volume, car parking and the like. These regulations can be as simple or as complex as the local government wishes, and a key feature of zoning has been its ability to become a very sophisticated, if frequently flawed, system of development regulation. The concept originated in Germany and was introduced to the USA in the early twentieth century as a mechanism for controlling density and sorting out land uses to reduce negative externalities. Unlike in Europe, zoning did not become a policy document (as for example in the French *Plan d'Occupation des Sols* (POS)), but rather a device for protecting the interests of property owners, ensuring neighbourhood stability and promoting real estate development. Its essential rigidity was part of its 'enormous public appeal' (Cullingworth 1993, p. 33) because it gave homeowners and other property owners both certainty and security by clearly stating what might and might not be developed on adjacent plots or in the vicinity.

Zoning passed its constitutionality test in 1926 (Village of Euclid v. Amber

Realty) and the Standard State Zoning Enabling Act was passed in the same year, providing a model for State Acts to be passed almost everywhere. While the Act required zoning regulations to 'be made in accordance with a comprehensive plan', as Cullingworth points out,

> this meant that zoning should be carried out comprehensively ... even where the zoning legislation mandates comprehensive planning ... it is the zoning ordnance which carries the force of the law, not the comprehensive plan (Cullingworth 1993, p. 12).

As Booth has noted '... zoning ordinances were never intended to be a policy document. They nevertheless have come to be the sole means by which land-use policy at the local level is defined' (Booth 1996, p. 78).

Initially, zoning was a very simple and rigid system of regulation that defined precisely the form of development permitted and thus the property owner's development rights. Over the years it has become both much more complex and much more flexible through the use of a variety of modifications as follows:

floating zones allow certain uses but do not specify where they should go;

spot zoning brings special provisions on to a particular site;

planned unit developments allow different forms of development within the overall density and use constraints;

cluster zoning allows land to be kept underdeveloped for conservation or open space purposes;

special district zoning protects certain uses and encourages other compatible use;

incentive zoning grants bonuses for certain uses or design features;

transfer of development rights (TDR) allows development rights to be transferred to other sites (e.g. to protect historic buildings);

performance standard zoning uses performance criteria in addition to dimensional criteria; and finally;

inclusionary zoning specifies uses to be included in development such as low income housing.

Each of these refinements addresses a particular weakness of zoning, but each in turn raises new problems by undermining both certainty and precision (Wakeford 1990, pp. 64–75).

Zoning has the great advantage of precisely prescribing the amount and form of development to be permitted, and this is of particular appeal to those interested in regulating the three-dimensional form of the city. If it is not integrated into a more

comprehensive planning system, then it has a number of serious weaknesses. Delogu has enumerated what he considers to be the hidden defects of zoning:

1. the absence of a comprehensive planning framework (inevitable with 'non-comprehensive jurisdictional entities');
2. the predominance of municipal self-interest and the lack of a mechanism to allocate undesirable but socially necessary land uses to optimal sites;
3. the inherent inability of local governments to address larger environmental questions;
4. the essentially negative character of local controls. Little of a positive nature (e.g. affirmative action) can be achieved. The gross inadequacies of the situation are such 'that one is tempted to argue that if we do nothing more than repudiate local land use controls in toto, leaving the whole land use development process to the market, we should hardly be worse off' (Delogu 1984, p. 133, quoted in Cullingworth 1993, pp. 231–2).

Chief amongst these weaknesses is the exclusionary and discriminatory nature of zoning and the way it has been used to exclude lower income groups from subdivisions, neighbourhoods or even entire municipalities.

Zoning was intended to be a simple, self-executing system where a development application was checked against the code, and a permit issued if the application conformed. The official concerned was not expected to exercise discretion. In practice a code can rarely cover all eventualities and special exemptions, variances and amendments provide mechanisms by which some flexibility and discretion are injected into the system. Exceptions and variances are granted by Boards of Adjustment and are quasi-judicial acts, while amendments are more fundamental and are legislative acts passed by local government.

Planning and development control

In general, land-use planning in the United States seems to be more a matter of zoning than planning. Cullingworth quotes Banfield as follows:

> American cities seldom make and never carry out comprehensive plans. Plan making is with us an idle exercise, for we neither agree upon the content of a 'public interest' that ought to override private ones nor permit the centralisation of authority needed to carry a plan into effect if one were made (Banfield 1961).

However, this is no longer the case in many municipalities, and in the last two decades American land-use regulation has moved beyond zoning and has become 'increasingly centralised, more and more likely to originate with regional, state and federal agencies rather than local ones' (Popper 1988).

The Standard State Zoning Enabling Act of 1926 required that zoning

regulations 'be made in accordance with a comprehensive plan', but most have not been. Cullingworth notes that this clause meant that the whole area of the municipality should be covered by a zoning ordinance rather than that a comprehensive plan should be created. However, in a number of states, notably California, Oregon and Florida, the State zoning regulation requires comprehensive planning. Oregon passed a number of planning acts between 1969 and 1973, and the Land Conservation and Development Act included a set of 19 goals to guide local planning and significantly increased its powers and responsibilities by requiring a comprehensive plan. In 1971, California passed legislation requiring counties and most cities to bring their zoning ordinances into conformity with their general plans. As Fulton notes, this 'essentially reversed the legal powers of the general plan and the zoning ordinance' (Fulton 1991, p. 65). In 1990, the State of Washington passed a Growth Management Act requiring comprehensive plans to guide urban growth, municipal actions and relationships with other cities, counties and the state government.

Although in much of the United States a Comprehensive/General Plan does not exist, and the zoning ordinance remains the only form of planning regulation, in the west coast states the general plan is now of considerable importance in shaping development. These plans will be essentially familiar to British eyes with their general strategies and policies, goals and objectives, brief overview analyses and vision statements. But, unlike Britain, these are not the principal source of policy, and the zoning maps and codes remain the critical documents for deciding what land uses are allowed, what physical form development should take, and for assessing permit applications. In addition to comprehensive or general plans, there are frequently more detailed sub-area plans, particularly for city centres as well as for individual communities (e.g. San Diego had completed 40 of 59 community plans by 1994). While these will have produced amendments in the zoning ordinances, and occasionally complete rewritings of the code, they will not have diminished the code's influence on the pattern of development.

When it comes to the control of development the zoning ordinance will still be the critical document in determining whether or not a development will get a building permit (for planning permission). As in much of continental Europe, usually this will be a fairly simple, clerical matter of deciding whether or not the proposed development conforms to the rules, and granting a permit accordingly. Thus in Los Angeles in the late 1980s, about 84 per cent of applications for permits were granted 'over the counter' by officials ensuring their conformity with zoning laws, although most of the these were for minor alterations to the interior of properties or for extensions.

Wakeford, with his interest in comparing the British and American systems, has gathered very useful data showing the extent to which control decisions require any discretion on the part of officials, or variances/amendments to the zoning ordinance. He discovered that, standardising for population, the average discretionary component was eight per cent of applications in a sample of 23 major cities, and ten per cent in a sample of 19 smaller municipalities. Interestingly, of the west coast

cities, both Los Angeles and San Francisco are average in terms of discretionary decisions, but Seattle is nearly twice the average, while Portland is quite exceptional with half of all applications requiring a discretionary input (Table 1).

Variations in numbers, types, success rates and speed of determination of discretionary permit applications are noted in Table 2. Wakeford also provides some interesting figures for control in Los Angeles (1986–7). Only 16 per cent (7000) cases required a full plan check and could not be granted 'over the counter'. Over 2000 cases required some zoning variance, modification, amendment or consideration, and 2276 cases were considered for Environment Impact Action (although only 870 went to initial, and 22 to full, review). There were 872 subdivision cases and 1105 cases went on to the Planning Commission Agenda and 213 to the Board of Adjustment appeals (Wakeford 1990, p. 108). These figures provide a clear picture of how zoning works as a largely self-regulating system, particularly for minor developments, but they also indicate that discretion is required for a large proportion of applications for new construction. This may involve zoning variances/adjustments, planning commission appeal, or environmental impact review, or perhaps all three if they are major projects. However, it can be seen that the discretionary control is concentrated upon individually

Table 1. Selected development control statistics for west coast cities: numbers of applications

	Population 000s	Building Permits	Discretionary Variance Permits	Building Permits /1000 pop	Discretionary Permits /1000 pop	Building Discretionary Permits
SEATTLE, Wa	491	6000	883	12.2	1.80	0.15
PORTLAND, Ore	407	1344	681	3.3	1.67	0.51
SAN FRANCISCO, Cal	700	7400	612	10.6	0.87	0.08
LOS ANGELES, Cal	3071	45 000	3538	14.7	1.15	0.08

Table 2. Selected development control statistics for west coast cities: discretionary permits, success rates and time taken

	Re-zoning Requests			Zoning Variances			Cond/Special Permits			Sub-divisions		
	#	Success %	Time weeks	#	Success %	Time weeks	#	Success %	Time weeks	#	Success %	Time weeks
SEATTLE, Wa	–	–	36–39	103	50	9–13	77	21	13	–	–	–
PORTLAND, Ore	54	80	10	258	65	6	177	80	10	19	96	10
SAN FRANCISCO, Cal	–	–	26+	152	99	13	–	–	13	–	–	–
LOS ANGELES, Cal	1706	–	39	144	–	11	144	–	11	–	–	26

significant developments, minor development proceeding as of right. Design review and regulation is similarly focused upon major developments rather than upon the minutiae of development, whereas in Britain, all developments are subject to review of their design as an integral part of development control.

Most permits are granted by the building and zoning inspection departments who have their own staff to assess code compliance, to inspect buildings during construction and certificate them on completion. The Zoning Board of Appeals (or Board for Adjustment as it is sometimes called) exists to grant variances, adjustments or exceptions, to undertake interpretations or to hear appeals. Like most of the other bodies that operate in development control it is an appointed board with about seven appointees and two alternates. It acts in a quasi-judicial capacity.

The City Planning Commission or Board participates in most larger control decisions and is usually responsible for the preparation of a comprehensive plan and zoning ordinances, and for overseeing the work of both the plans department and the zoning and building control department. It too is appointed, generally by the mayor, and includes lay persons and also those with expertise relevant to land-use planning and development, often retired experts because the posts are unpaid. The Commission is usually advised by the City Planning Department, and they make recommendations to the City Council who take the final decision.

Other agencies that may play a critical role include Development Agencies, Redevelopment Authorities (whose task it may be to facilitate development) and two agencies critically important to design control—the Landmarks Commission and the Design Commission. Landmarks Commissions have proliferated since 1965 when the New York Landmarks Preservation Commission was established. They are also appointed by the mayor and they designate landmark buildings and historic districts; any modification of a landmark building or development in a historic district must first of all receive their approval. Design Commissions are appointed bodies who review particularly important development applications referred to them. Sometimes these commissions conduct all their hearings in public.

Mention should also be made of environmental review which, although not strictly speaking a development control mechanism, is nonetheless now an important element of the control process. Most states have modelled their review processes on those devised by the Federal Government for their own major projects under the 1970 National Environmental Policy Act. This involves a three-step process determining whether a project is eligible for, or exempt from, review; undertaking an initial study utilising a checklist if it is; and then if the project is likely to have a significant environmental impact the local government preparing an environmental impact report (EIR). In fact developers usually retain teams of consultants to prepare such reports on major development applications.

Few projects actually require full EIRs (for example, 22 in Los Angeles and 7 in San Francisco in 1985/6 (Wakeford 1990, p. 78)) but a significant number (870 in Los Angeles and 194 in San Francisco) may require initial review. Not only do major developments require EIR, but so too do new versions of municipalities' general plans and zoning ordinances, and sometimes variances to such ordinances.

In addition to environmental review, special permits may also be required for developments that impinge upon coastal lands, wetlands, particular habitats, or even water resources. In Southern California major development proposals are analysed for their effects on air quality as part of the functions of the South Coast Air Quality Management District. These environmental controls are an increasingly important consideration in development control (Wakeford 1990; pp. 78–80; Fulton 1991, pp. 172–87) but, as Fulton emphasises, they have merely been added to the existing collection of development controls, and not necessarily integrated in a coherent, efficient and effective manner.

Examples of the control process—Portland and Seattle

To consolidate the preceding discussion and to illustrate how the control process can work, two examples are provided. Drawn from the case studies, these show the important differences between the systems of any two local governments. Figure 2 provides a convenient summary of all the development control procedures (except EIR) in the city of Portland, whilst Figure 3 compares the salient features of design control in Portland and Seattle.

Taken from the city of Portland's admirable *Central City Developer's Handbook*, which ensures that applicants for permits and the general public understand the complexities of the planning system, Figure 2 identifies the ten necessary steps towards a development permit. This begins with an analysis of the zoning regulations (Steps 1 and 2) and the overlay zones and special district zoning (Step 3). Next, development standards and design guidelines are established (Steps 4 and 5), along with the transportation regulations (Step 6). Step 7 in Portland constitutes a pre-application conference, if required, and then the submission of an application (Step 8). The application is then evaluated for its code conformity and compliance with the plan (Step 9), with the possibility that public hearings will be required (Step 10). A decision will then be forthcoming.

This diagram reveals the enduring force of zoning, albeit now contained within, and constrained by, a plan which contains a vision of the future city and goals and objectives, policies and proposals to achieve this view. It also reveals the increasing sophistication of the planning instruments and their use of development standards, design guidelines and transportation regulations, and the use of appointee boards to review conservation and design.

Figure 3 contrasts Portland's permit processing and design review processes with those of Seattle in order to emphasise broad similarities but also important differences. The points of difference illustrate the impossibility of generalising about the role of particular agencies and their advisory decision-making or appellate roles. In the first instance, what is subjected to design review is defined differently in Portland and Seattle, and design review operates only in clearly defined localities. The role of the planning department is similar, and the procedures for seeking public opinion are similarly thorough, but procedurally different, with Seattle

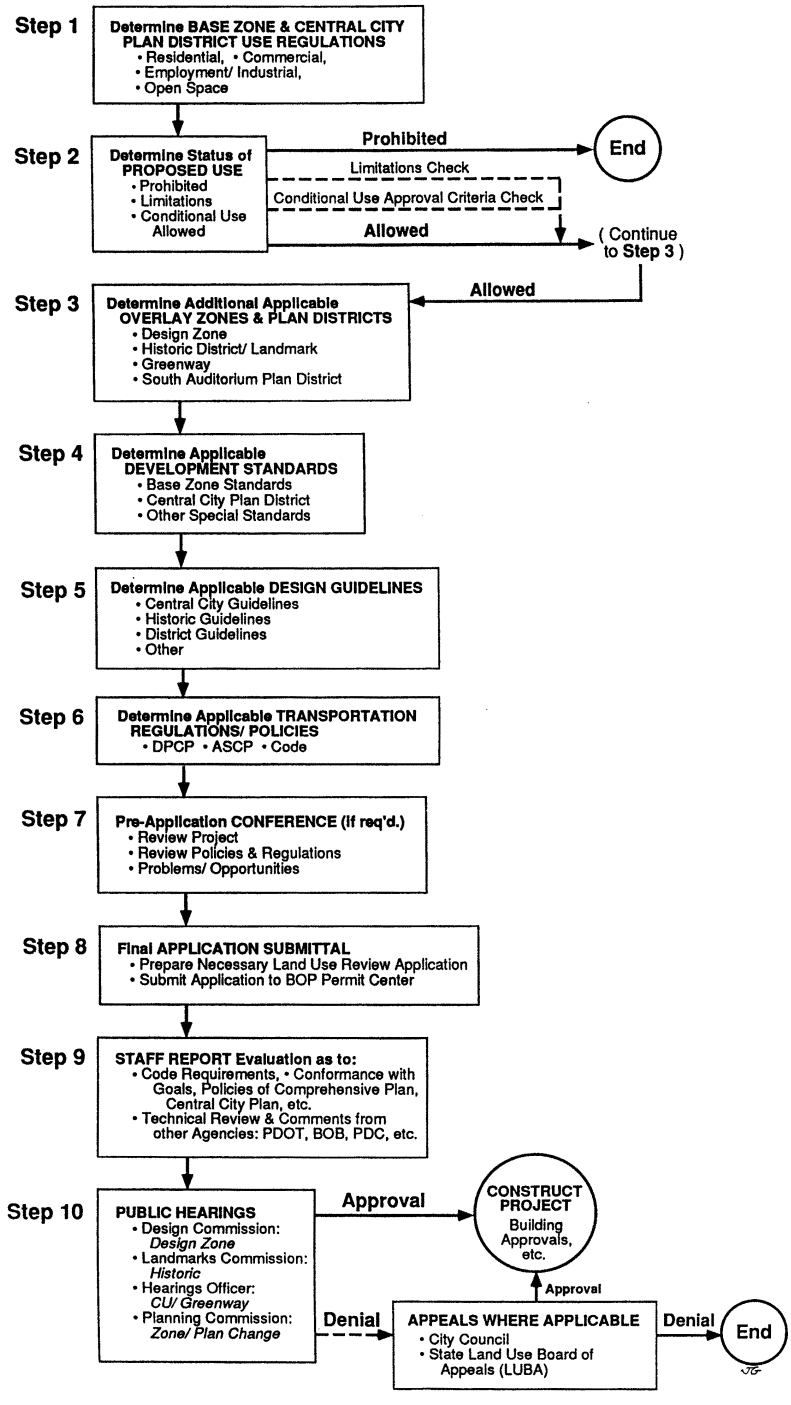


Fig. 2 The Land Use | Development Review Process: the example of Portland (1992)

developing innovative neighbourhood design review boards. The key advisory bodies are very different, with Seattle's new neighbourhood boards undertaking design reviews and the Design Commission advising on public projects, while Portland has an appointed Historic Districts Advisory Board and a Design Commission, both of which take decisions. What are advisory bodies in Seattle are decision-making bodies in Portland—notably the Design Commission and a Landmark Commission—whereas in Seattle the Director of Construction and Land Use (a bureaucrat) takes the decisions. Both cities use council-appointed Hearing Examiners/Officers for appeals, but in Portland the full council will hear appeals on major development, with the possibility of the appellant and third parties appealing to the State Land Use Board.

The systems of planning and design review described here are among the most sophisticated operating in the United States, and this has been a key factor in their selection for this study. In certain important respects they represent highly-skilled responses to the general problems encountered with design review and regulation, not just in the United States, but also internationally.

Key criticisms of planning and design review

This is an appropriate point to review key criticisms of planning and design regulation in the United States in order to pose a range of questions that can guide the more detailed enquiry into the practice in each city. It will be demonstrated that these criticisms are equally fundamental to design review in other national planning systems, as a framework and focus for international comparison is developed.

The criticisms of planning at large will be dealt with briefly and only to provide a context for a more detailed criticism of design review. Richard Lai, in his detailed critique of law in urban planning, written with specific reference to the 'invisible web' of design controls, has enumerated eight principal defects of physical planning in the United States:

1. reliance on zoning as a 'police power' rather than on other sources of public authority;
2. zoning's undesirable socio-economic implications;
3. zoning's lack of integration with planning;
4. the fragmentation of planning within different governing bodies (local legislature, planning commission, board of adjustment, review boards);
5. the confusion of the implemented character of zoning with the policy making of planning;
6. the conflicts between large inflexible end-state planning with the emphasis on increasing flexibility in planning regulation through administrative discretion;
7. the lack of effective regional planning as a result of investing planning authority in local government;

	PROJECTS FOR REVIEW	TECHNICAL ADVICE	PUBLIC PARTICIPATION	ADVISORY BODIES	DECISION	APPEAL
SEATTLE	General permit review and grant for conforming development.	Department of Construction and Land-use.	Neighbour notification within 300 ft and site notices.		Director of DCLU	
	Design review in multi-family and commercial zones of projects > 4000 and 12 000 ft^2 respectively.	Writes report: makes recommendation.	Pre-design public meeting with DRB and definition of community priorities (major projects – 4000/ 12 000ft^2).	Local Design Review Board makes recommendations.	After considering DCLU and DRB recommendations.	Hearing Examiner.
	Pre-application conferences for design departures, sub-divisions, major projects, shoreline development.		Public review with SEPA.	Design Commission advice on public projects.	(in conjunction with other land use approvals).	
PORTLAND	Permit centre approves all minor code-conforming development.	Planning Bureau.	Neighbour notification within 150 ft and neighbourhood and business associations.		Design Commission (8) hearings and vote.	Hearings Officer (minor development).
	Land-use Reviews for all non-conforming or major projects 710 000ft^2 or $1m outside sensitive areas.	Writes report: makes recommendation.	Public can attend and speak at meetings and appeals.	Historic Districts Advisory Boards.	Landmarks Commission (8) hearings and vote.	City Council (major development).
	Pre-Application Conference – Code and other issues – with Planning Department and interested parties.					State Land Use Board (provision for third party appeals).

Fig. 3 Permit processing and design review: Seattle and Portland compared

8. (as a result of 7) the over-reliance on the legal system of appeals burdening the judiciary that may or may not be knowledgeable on planning matters (Lai 1988, pp. 430–2).

Lai has noted that urban designers need to remain acutely aware of each of these as they seek to develop processes and principles for design review. Fulton, in his review of Californian planning, identifies five areas for reform which emphasise the problems of parochial decision making, particularly the fiscal factors which discriminate against lower cost residential development and encourage intense competition for retail development, and the exclusionary effects of zoning and sometimes design control. Fulton also seeks to find constructive forms for citizen participation that go beyond NIMBYism (Not In My Back Yard protectionism), but his first and most problematic proposed reform is to break the dependency of Americans on low density suburban car-dependent development (Fulton 1990).

These general indictments of planning practice—one national, one state focused—provide a useful context within which to focus on design review and its role in planning. It is possible to draw on a whole host of critical writing, but emphasis has been placed on constructive critiques of design review that seek to improve the system not abolish it. Chief amongst these critiques is Scheer's review of the common shortcomings of design review which she regards as key academic and professional debating points. Her points of criticism are based upon practitioner's experience (in Boston), an extensive review of the literature, and surveys of planners' and architects' opinions. They are divided into two main groups—the easy and the endemic (Fig. 4). Under the former are issues of cost/delay, manipulation, skill/staff resources, and efficiency. Under the latter are issues of power (professional expertise, personal v. public interest), freedom (violation of free speech/self-expression, subversion of the original), justice (arbitrary/vague decisions, unlimited, lack of due process or appeal), and aesthetics (lack of rules, meaningless principles, pressure to mimic, failure to grapple with urban design and a focus of superficialities).

Most of these defects can be corrected by efficient and fair systems of review, appropriately skilled and qualified staff or commissioners, and properly defined principles, policies and guidelines. Meanwhile, these criticisms provide valuable criteria with which to assess each system.

Legal perspectives

Other critics have focused more narrowly on particular problems within this list, particularly upon issues of freedom, justice and aesthetics. The potential abuse of discretionary power in design review has been a major preoccupation at both the legislative and administrative levels. Costonis has argued that design review is an area that often partakes more of high farce than the rule of law . . . [and that] . . . its diversion to dubious or flatly deplorable social ends undermines the credit that it may merit when soundly conceived and executed' (Costonis 1982, p. 356).

Blaesser, a Chicago attorney, has examined the regulatory settings that most

EASY PROBLEMS

1. Design review is time-consuming and expensive
2. Design review is easy to manipulate through persuasion, pretty pictures and politics
3. Design review is being performed by overworked and inexperienced staff
4. Design review is not an efficient mechanism for improving the quality of the built environment

ENDEMIC PROBLEMS

Power

5. Design review is the only field where lay people are allowed to rule over professionals directly in their area of expertise
6. Design review is grounded in personal—not public—interest

Freedom

7. Design review is a violation of the First Amendment right to free speech
8. Design review rewards ordinary performance and discourages extraordinary performance

Justice

9. Design review is arbitrary and vague
10. Design review judgments are not limited
11. Design review lacks due process
12. Design review is difficult to protest on aesthetic grounds

Aesthetics

13. Design review is reluctant to acknowledge that there are no rules to create beauty
14. Design review principles tend to be abstract and universal, not specific, site related or meaningful at the community scale
15. Design review encourages mimicry and the dilution of the authenticity of place
16. Design review is a poor cousin of urban design (it does not promote an urban design vision for a place)
17. Design review is a superficial process

Fig. 4 The problems of American design review (Scheer 1994, pp. 2–9)

frequently lead to abuses of discretion in design review and the legal cases that have ensued, and noted that 'developers find it easier to accommodate a [design committee's] request than to challenge it' (Blaesser 1994, p. 42). He has identified a series of models for design review that deal appropriately with the advisory, decision-making and appeal aspects of the review process, three of which, Seattle, Portland and San Francisco, are represented in Figure 5.

A particular focus of debate has been the failure of the American courts to limit

	SEATTLE	PORTLAND	SAN FRANCISCO	IRVINE	SAN DIEGO
State Legislation and Controls	Washington Growth Management Act 1990. Vision 2020 Puget Sound : Urban growth boundaries 1992 (updated 1995).	Oregon Land Use Act 1973. 19 State-wide goals.	California Planning Zoning and Development Law 1971. Zoning to be consistent with general plan.		Regional growth mngt. strategy 1993 (SANDAG).
Comprehensive/ General Plan	1957; amended 1967. Seattle Comprehensive Plan 1994; sustainability theme, urban village strategy.	Portland Comprehensive Plan 1970.	San Francisco Master Plan 1972.	General Plan 1977 (slim). Under revision.	San Diego General Plan (1967) 1978. Revised 1989 : encourages infill not further suburbanisation.
Zoning Code	Revised 1994	New Code 1991.	Major revisions 1985 : down-zoning and special districts created.	1970s Ordinance under revision.	Revision nearing completion 1994.
Design Guidelines	Multi-family and commercial guidelines 1993. Neighborhood guides devolved.	Transport Regulations 1975.	Urban Design Plan 1972. Residential Guides 1979.	None.	Common reference points in 1989 Plan. Landscape Technical Manual 1989.
Downtown Central City Plan	Land-use and Transport Plan for Downtown Seattle 1984.	Downtown Plan 1972, 1980, 1988.	Downtown Plan 1985.	None.	Central City Community Plan 1992.
Design Review Guidelines		Center City Design Guidelines 1979. Selected design review 1979.	Plans include design objectives and policies.	Irvine Company (landowner) provides guidelines for developers.	
Neighborhood Community Plans	Provision made in 1994 Plan.	Strong neighborhood associations – first plan Albina 1994.	Numerous neighborhood guides (devolved).	Community control of development through CC&Rs. Company controls commercial areas through CC&Rs.	40 community plans (out of 58) completed by 1994.
Area Design Guidance	Neighborhood design guidelines start 1995 (devolved).	Albina design guidelines (1994). Selected design review. Supplemental compatibility standards. Developer's Handbook 1992 (Central City).	Numerous neighborhood guidelines.	Through landowner and developer.	Community Plans include guidelines and ordinances. Masterplanning by developers in new subdivisions.
Citizen's Initiatives	Citizen's Alternative Plan 1989 caps office development.		Propositions K&M 1984–6 – sunlight to open space : office development.	Proposition A 1985 to reduce sprawl : 230+ initiatives since.	

Fig. 5 Sources of policy and design guidance in the west coast cities of the USA

discretion, to insist upon appropriate review processes and properly prepared guidelines, and to establish the precedents for appropriate policy development. Lai notes that design review has 'befuddled the courts and confused review boards and elected community officials' (Lai 1994, p. 31), and he cites key Supreme Court cases where unfettered discretion has been upheld (Eustice v. Binford, 1969) and others where precise standards have been voided (Giacco v. Pennsylvania, 1966). Lai has also outlined a set of key requirements for urban design review which include careful consideration of the key criticisms of planning at large made earlier. He emphasises his concerns about the potential exclusionary effect of design review, that plans and regulations be regularly reviewed, and that regulations should not be over-prescriptive but should focus on providing a legal framework 'to guide pluralistic land development' (Lai 1988, p. 428). He makes three new points.

The first is that: 'beyond regulation through zoning, planners should also look to other public authorities that affect urban design and development, specifically to the option of compensable regulation, eminent domain, public subsidy and tax policy' (Lai 1988, pp. 430–1), and he bemoans the cuts in federal budgets and the tax reforms which have emasculated further intervention.

The second new point is that 'where rigorous a priori guidelines and rules are unworkable' proper administrative procedures must be laid down for review boards, including the handing down of written opinions, developing principles of judgement from precedent decisions, applying the test of reasonableness to all decisions, and providing the right of appeal to legal/administrative professionals (Lai 1988, p. 427; Lai 1994, pp. 37–9).

The third point is based on two judgements made by Supreme Court Justice Brennan, both in southern California, which have been amalgamated and labelled as 'Brennan's Rule'. The Judge argued that to accept a design judgement (on billboards in this case) requires that a municipality demonstrate both 'a comprehensive co-ordinated effort' in its regulation of environmental aesthetics, and that 'it is pursuing an identified objective seriously and comprehensively and in ways which are unrelated to the restriction of speech'. These imply that the municipality must have a comprehensive plan and programme for design quality of which design review would be a part (Lai 1994, p. 39).

Blaesser has also outlined principles for drafting design review standards and guidelines and these include:

- ensuring state law permits the desired level of control and mandatory guidelines;
- basing additional controls on specific studies of the locality;
- using guidelines to articulate desired, but not mandatory, outcomes;
- ensuring that standards and guidelines are detailed and precise rather than 'visionary';
- avoiding being too design prescriptive;

- stating the design principles that underpin the guidelines and then the advice that implements each principle;
- explaining the weight to be attached to each guideline (Blaesser 1994, pp. 49–50).

Developing criteria for comparison and evaluation

Many of these criticisms, points of debate and proposals for action are also relevant to control systems everywhere (Punter 1987; 1994, for British and European parallels) and they provide useful criteria with which to assess proposed reforms and innovations (Punter and Carmona 1997, Chapter 13). They will be used here to evaluate policies, guidelines and control practice in selected west coast cities of America. The analysis of each city's practice will focus on:

- the extent to which policies are based upon careful study of the locality and full consultation with the community;
- the extent to which design review is part of a 'comprehensive co-ordinated effort' at design regulation, and fully integrated into the planning process;
- the extent to which guidelines are over-prescriptive;
- the extent to which guidelines are precise, are underpinned by design principles, and backed by advice on how to implement that principle;
- the extent to which the process of control is efficient, fair and effective.

The hierarchy of policy and guidance

Having established the key criteria for evaluating different cities' systems for control, it is now possible to compare the different ways in which policy and design guidance are organised and documented for five of the six cities that are the focus of this study. Figure 5 identifies the relevant state legislation and regional initiatives, and then lists the relevant comprehensive plans and zoning codes and their dates of approval and revision. It briefly identifies the city-wide design guidelines, and then looks at downtown and other neighbourhood/area design guidance. It should be reiterated that this level of comprehensiveness and completeness of the policy hierarchy is very unusual in the USA and in large part a testament to longstanding west coast environmental design sensibilities.

Most of these policy documents will be discussed in some detail in subsequent chapters, and Figure 5 highlights some of the key features that will be examined—the design content of comprehensive plans, comprehensive revisions to zoning codes, city-wide design goals, downtown design guidance, differential development of neighbourhood/area, plans and guidance, and differential citizen activism on the planning and design front.

To facilitate international comparisons, Figure 6 compares design control practice in Portland, Oregon, with that in Britain, France and Canada. Vancouver, Canada, provides an example of a discretionary zoning system that otherwise shares

	USA Portland	CANADA Vancouver	UNITED KINGDOM	FRANCE Paris
Nature of permit	Permit.	Development permit (parking separate).	Planning permission (separate from building permission).	Permit to build.
Immediate permits for 'confirming' developments	Over the counter.	'a few days'.	No.	No.
Public consultation	Neighbour notification and can attend some pre-application meetings.	Neighbour notification and participation in permit decision process.	Neighbour notification and public can comment: can attend decision meeting.	Site advert ***after*** decision.
'Local' Plan	Portland Comprehensive Plan 1981. Central City Plan.	'City plan' in preparation. 1975 Downtown Plan.	Municipality-wide systematic policies.	Municipality-wide zoning map and regulations for each zone.
Zoning Ordinance	1991 Zoning Ordinance.	Zoning and Development By-Law.	No.	In plan.
Design Guidelines	Area design guidelines. Neighbourhood plans and guidelines.	Area guidelines (not comprehensive).	Policies in plan.	In plan.
Design Advice	Area design guidelines. Neighbourhood plans and guidelines.	Some adopted policy statements, e.g. skylines.	Variety of guidance notes.	Occasional further guidance.
Other	Developer's Handbook 1992.	Parking By-Law.	Central Government advice.	Code de l'Urbanisme (central government).
Technical Review	Planning Department consults and writes report.	Planning Department consults and writes report. Development Permit Staff Committee for major applications.	Planning Department consults and writes report.	Planning Department consults. (Government planning agency (DDE) in smaller cities).
Other Advisory Bodies	Variety of consultees.	Advisory Panel (7) appointees. Citizen Advisory Committees.	Variety of informed consultees with specialist interests.	Architecte Conseil.
Design Review	Integral in hearings of Design or Landmarks Commission only.	Urban Design Panel (12) appointed (half architects).	Integral.	Integral. Architecte Bâtiment de France in Cons. Areas and within 500m of LBs.
Projects subjected to design review	Selected large projects, otherwise zoning controls.	Selected large projects, otherwise zoning controls.	All.	All tested against the regulations.
Decision Taker	Design Commission. Landmarks Commission. Hearings Officer.	Development Permit Board (3) (Directors of Planning and Social Planning and City Engineer).	Council sub-committee.	Mayor.
Role of Council	None (but council appoints Commission).	Occasionally provide advice on decisions (appoints board).	Ratify sub-committee decision.	None (unless mayor consults).
Appeal	City Council. State Land Use Board.	Board of Variance.	Central Government Inspectors, then courts.	Administrative Courts and the higher courts.

Fig. 6 Permits, plans, guidelines and design review processes compared in four cities/countries

many similarities with the Portland case. France has been chosen as a representative of continental European systems where the local plan effectively contains a zoning ordinance, a very general set of regulations in many smaller towns and rural areas, but a frequently very precise set in major and historic cities. Finally, the British example is compared as an example of an almost entirely discretionary system of design control, but one which is an integral part of the permit (planning application) granting process and which covers all planning applications from a home extension to a major office complex.

Figure 6 compares the permits granted, the existence or otherwise of immediate 'over-the-counter' decisions, the nature of public consultation and the hierarchy of plan policy, zoning ordinance, design guidelines and other advice. It also outlines the nature of the review process and the various bodies which offer advice or take decisions, including those handling appeals. The major differences are clearly evident in Figure 6, and they include the lack of immediate permits in France and the UK; the lower levels of public participation in the UK, that are even less significant in France; and the reliance on zoning as a key element in control everywhere except in the UK. The latter relies on very general policies that are in many ways similar to those in comprehensive or area-specific plans in the USA (but of course the former lack the precision and implementation force of the zoning ordinance).

There is technical advice (a planning department) to support the review process in most large cities in North America, but not in smaller municipalities (it is a similar story in France), while in the UK all municipalities have the resources to establish adequate planning if not design expertise. A wide range of consultations is also standard, but it is the existence of advisory and executive citizen committees which is so distinctive in the North American examples, whereas in Britain and France it is the council and mayor respectively who are the decision takers (providing there is an approved local plan in the latter). The Vancouver system, where chief officers take the decisions, is unusual. Finally, all the review systems have an appeal mechanism, but these are all different, being to the City Council or State Land Use Board in Portland, a Board of Variance appointed by the council in Vancouver, the administrative or higher courts in France, or uniquely central government inspectors in the United Kingdom. It is the latter which is so unusual, and an expression of how centralised planning control is in the UK in total contrast with the USA.

The various documents that provide the basis for planning and design controls in the USA have already been identified in Figure 4. It is useful to generalise these into what has been described elsewhere as a hierarchy of design guidelines (Punter and Carmona 1997, Chapter 12), partly to provide a set of terms which are interchangeable between systems, but also to reveal the full range of guidance that is available to planners and urban designers (Fig. 7). This hierarchy proceeds from the national through the regional levels to the scale of the municipality, and then down through sub-areas of neighbourhoods to individual sites. Some of the instruments are system specific. For example, design briefs are widely used in the

NATIONAL	National planning guidance Circulars, Guidance Notes, National Codes (UK, France, Netherlands, FR Germany)
REGIONAL	Regional Planning Guidance Regional plans (N, FRG), Regional strategies, land-use allocations, landscape plans (FRG), regional vernacular guidance (UK, F) Sub-regional guidance City-region plans, General plans, Structure plans (UK, N, F, FRG), local vernacular guidance (UK, F, FRG)
MUNICIPALITY/ DISTRICT	Local guidance Local plans, District plans (UK, F, FRG, N), Comprehensive plans, Green plans (FRG) Design goals, objectives, principles, policies Zoning controls, Design codes – general, Development standards, Street classifications, highway standards
NEIGHBOURHOOD	Sub-area guidance Community plans, neighbourhood guidelines, zoning ordinances
Large sites:	Area Strategies, Development frameworks, Master Plans (subdivision plans)
Small sites:	Design briefs (UK), Building plans (N, FRG)
Design detail:	Design codes (detailed), signage/street furniture, Planting standards

Fig. 7 The policy hierarchy for design

UK, but rarely used elsewhere except perhaps for architectural competitions, while codes are a relatively new concept used by US developers, though they are in some senses a rediscovery of old ideas (Plater Zyberk 1993).

Goals, objectives, principles, guidelines and procedures

Perhaps most importantly, from the perspective of critical comparative analysis, it is necessary to say something about the nature of policy and guidance, and to articulate clearly the sequence and differentiation of goals, objectives, design principles, prescriptive and performance guidelines, advice procedures and implementation devices. Many of these terms are used very loosely in the literature on design review and in control practice, and much confusion has resulted. The same confusion is evident in policies which run the gamut from general 'motherhood' goals 'requiring a high standard of design' to very precise standards of setbacks, overshadowing, daylighting and sunlighting, garden sizes or parking standards (Punter and Carmona 1977, Chapter 5). Writing about American design review, Jon Lang has recently argued that:

> The quality of any urban design depends on the quality of the design objectives set and on the quality of the design principles and design guidelines used to achieve them. Writing empirically-based design guidelines so they are politically and legally acceptable is no straightforward task. An understanding of how cities and other human habitats function helps clarify the setting of objectives, but the decision on what they should be is always political. Specifying how design objectives are to be met is, however, a technical—if difficult—task. It is difficult because urban designers will always be working with incomplete knowledge and they will always be dealing with the future (Lang 1996, p. 20).

Lang has attempted to clarify the relationship between design objectives, design principles and design guidelines in order to progress this matter, and in a British context Tony Hall has done the same in an attempt to articulate clear design objectives for sub-areas (termed design areas) of a locality (Hall 1996). It is possible to use a modified version of both their ideas to identify the key components of design policies, and to use these components to investigate the nature of design guidance in west coast cities of the USA (Fig. 8).

There are no policies or guidelines that fully exemplify this framework, but both the Portland and San Francisco design objectives and policies exhibit aspects of this hierarchy. San Francisco's downtown plan, for example, has quality urban design, historic preservation, and a more liveable city centre as its goals, and these were translated into nine design and numerous other planning objectives. Each objective is then sub-divided into a set of what are described as policies, but what we would now refer to as principles (see Fig. 53). So objective 11 on urban open space as a counterpoint to the built environment has two policies/principles—to create distinct openings in the boundary wall, and to introduce elements of the natural

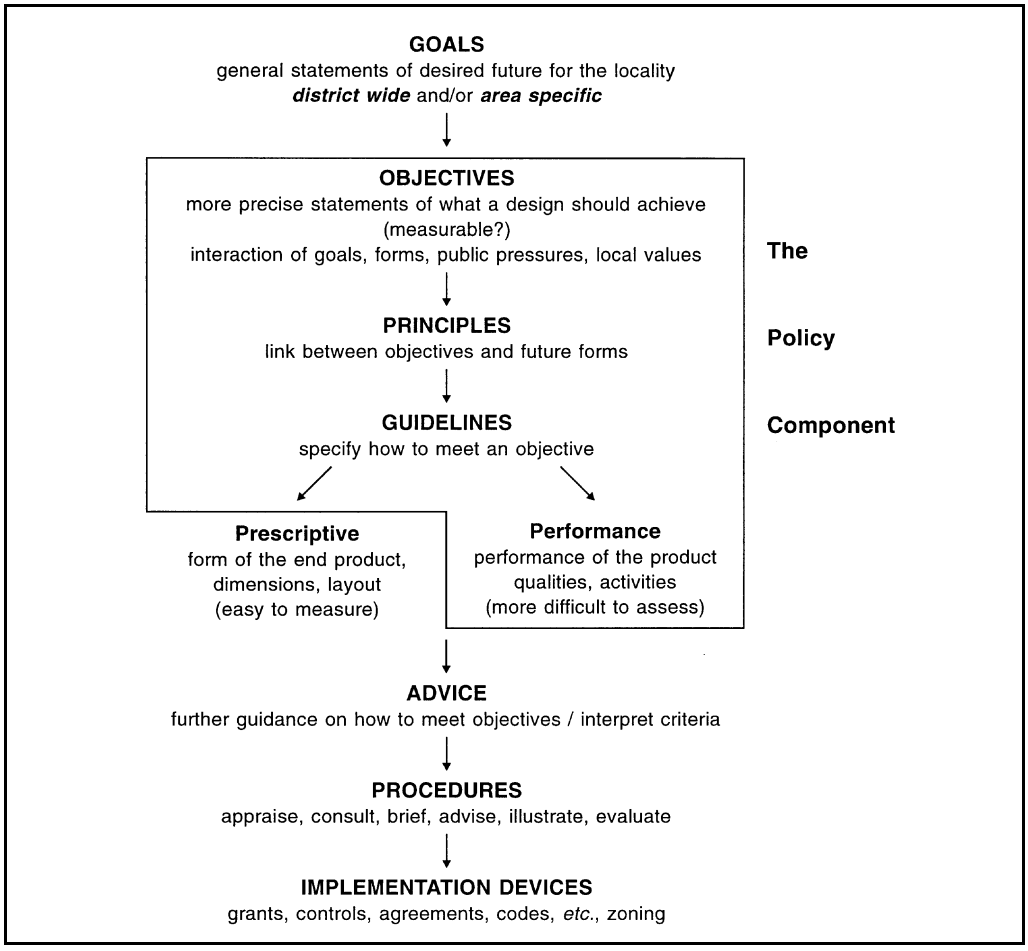


Fig. 8 Key components of design policy (Punter and Carmona 1997)

environment. All three are reinforced by objective 14 on creating a comfortable pedestrian environment with principles of sunlight access and wind speed reductions at ground level. These are well elaborated into guidelines for downtown open space that are part prescriptive, part performance related. So there are prescriptive standards for seeking public space per building square footage on the one hand, and performance standards like maximising sunshine or accessibility on the other (Fig. 55). The plan also includes advice on how to meet pedestrian improvement standards and the like (Fig. 56), and both the guidelines and the advice provide clear criteria with which to evaluate proposals.

The review process and design procedures

A few words are necessary on design procedures which can be equally useful in providing guidelines as to how applicants should prepare their designs, and acting as

mechanisms for advice, assessment and evaluation on the part of controllers. It is widely recognised that urban design is a process rather than a product, a process in which it is critical to appraise the site and its context, to develop design briefs and key principles, to provide mechanisms for public consultation and the provision of advice, to encourage the proper illustration and explanation of proposals, the criteria for evaluation and the monitoring of the end product (Fig. 9). These processes are particularly evident in recent developments with design guidelines and review in Seattle (Fig. 19), and there are parallel developments under way in villages and small towns in Belgium, France and England, to name just three examples. The procedures for policy development and design review are as important as the concept of a hierarchy of goals, objectives, principles and guidelines expressed in the documentation of urban design. This study will be looking closely at the different procedures of area appraisal or character assessment, consultation and advice, and the way they underpin policy development and design review, and seeking out other innovative procedures in development review.

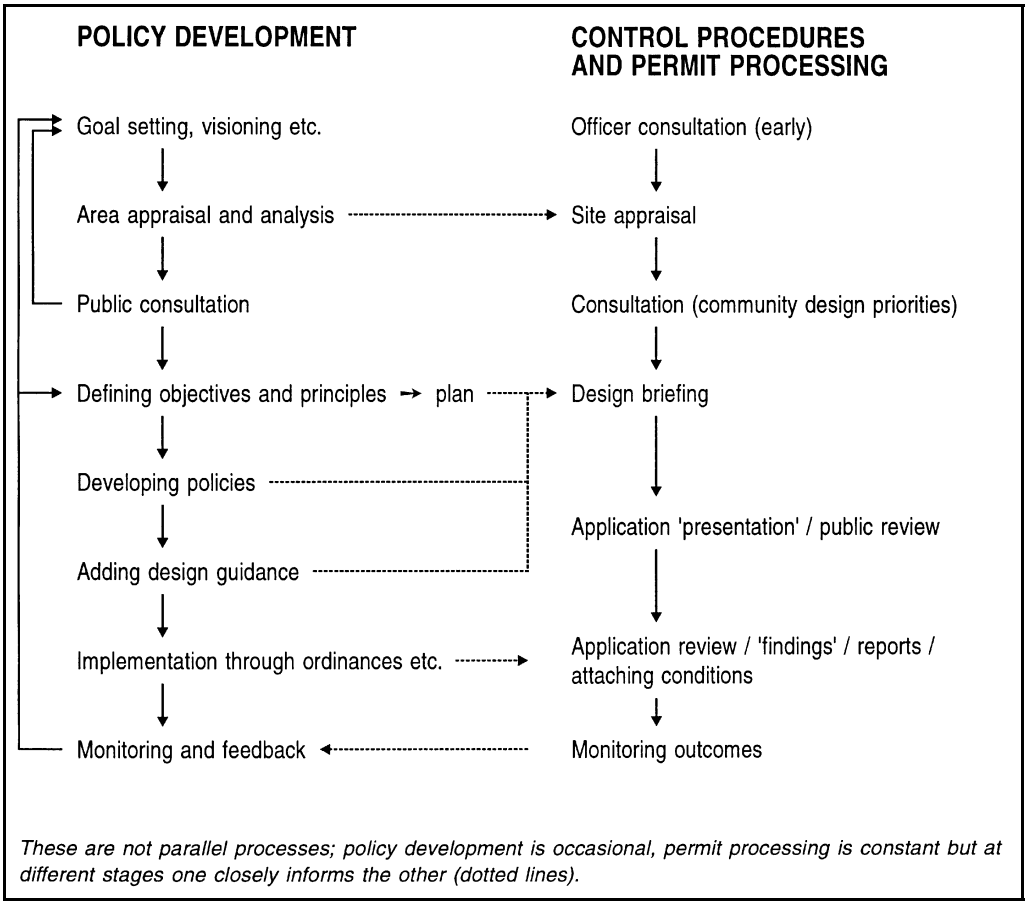


Fig. 9 The design process: policy development

In the approach to the case studies of these five cities there is a clear focus on the relevant policy documents, policy components, review processes and design procedures, both as constituted in American planning and design review at large, and as they relate to other planning systems, particularly in Western Europe.

To return to the discussion of the purposes of cross-comparative research in an introductory study such as this, it is important to emphasise that while the political and administrative structures are different, and the methods of control and implementation quite varied, nonetheless the problems that confront the development of design policy are very similar—how to write objective principles and guidelines that are clear, fair, rooted in public experience and preferences, relatively simple to apply and operate, and beneficial to design quality. The sophistication of American practice in these six cities should furnish valuable ideas for design policy writers everywhere. The purpose of this study is to explain to an international audience and examine critically these objectives, principles, guidelines, processes and procedures.

The nature of the case studies and the structure of the monograph

Each case study will be approached in a similar way, briefly reviewing the nature of the place and its salient characteristics before presenting an account of how planning and design policy have evolved in the last twenty-five years. Key features of the contemporary systems of design control will then be highlighted, and a summary evaluation attempted. Throughout the analysis and evaluation the focus will be on how policy and guidance have been formulated, structured and presented (Figs 5, 7, 8, 9) in the various documents that make up the policy framework, how the process of control operates (Figs 2, 3, 6), and how both respond to the criticisms commonly made of design control at large (Fig. 4). Evaluation of the effectiveness of policy, guidance and the review process cannot be thoroughgoing in a documentary review of this type. Reference will be made to secondary literature where this exists, but an evaluation of outcomes is a much more challenging task that has hardly been attempted by American researchers (see Shirvani 1981; 1991; Habe 1989) and is beyond the scope of this study.

What is offered here is more of a substantive review of the documents that underpin design review and a critical commentary on their content, orientation, intention, structure and presentation and use within the design process, including the extent to which they are based upon careful analysis of the character of the locality and full consultation with the community.

The cities are discussed chapter by chapter with the exception that Bellevue is included in the chapter with its close neighbour Seattle. The sequence proceeds from north to south for no other reason than this is the order in which the cities were visited. A final chapter (Chapter 7) attempts to draw general conclusions about the experiences of all six cities of relevance to American design review practice, but which should also be of interest to those engaged in design review and design policy formulation everywhere.

TWO

SEATTLE

Introduction

Seattle, the financial, industrial and service centre of the Pacific North-West has an unsurpassed physical setting on Puget Sound, out of reach of the moist Pacific fogs and cold winds. Located on originally wooded peninsulas between the Sound and the 20-mile-long Lake Washington to the east, almost all parts of the city have views north-westwards across the Sound to the Olympics, or eastwards across the Lake to the Cascade Mountains. To the south the majestic Mount Rainer, with its huge snow-field even in summer, has a palpable, spiritual presence which cannot be blurred by the Tacoma smog. Seattle is regularly rated near the top of the list of the most liveable cities in the USA (Boyer and Savagean 1989).

With a population of just over half-a-million, Seattle is home to about one third of the population of the Puget Sound urban region. While population is expected to grow by about 14 per cent over the next 20 years, employment growth is expected to be over twice that figure in an urban area which has virtually no green field sites.

Like San Francisco, the city suffered a disastrous fire (in 1889), but the subsequent rebuilding helped to give it the architectural homogeneity it enjoys today (Collins et al. 1990, p. 146). Despite well advanced urban renewal plans a citizens' ballot in 1971 saved the city's historic Pike Place Market, without doubt its greatest historic attraction, and citizen activism was also responsible for designating the first historic district nearby in Pioneer Square. As a result Seattle saved much of its historic character and identity, and when its economy recovered from the very deep recession of the early 1970s the revival in the city's fortunes was swift and dramatic, being most clearly expressed in a downtown high-rise office boom.

Seattle occupies an important position in planning debates in the United States, not least because of its highly successful citizen activism, and it shares some similarities with San Francisco in its recent downtown growth management debates and experience. However, more recently, the focus of planning debates has been on the city's suburbs and 'urban villages' and, to a significant extent, the design agenda has shifted to consider neighbourhood character and the problems of the intensification of development. The city is perhaps best known in planning circles for its citizen-led *Sustainable Seattle* initiatives and its programme of developing 40 indicators for a sustainable community. This is a testament to two key aspects of the Seattle public agenda—citizen activism and environmentalism—which have been fully expressed in the planning and design agendas of the 1990s.

Design and development in downtown Seattle

The city has a history of sharp citizen responses to growth and change. When downtown development boomed in the early 1970s, a neighbourhood-based campaign questioned the benefits to the city in terms of employment and tax revenue growth. In 1980 there was an unsuccessful citizen initiative to protect low income housing by regulations. In 1973 a citizen's commission produced *Goals for Seattle for the Year 2000* and this stressed the importance of citizen participation, limiting densities, preserving neighbourhoods and promoting transit, and eventually led to rezoning of residential neighbourhoods in 1982.

The Downtown Plan was a participative and corporate activity and mobilised a Mayor's Task Force to drive its production. The *Land Use and Transportation Plan for Downtown Seattle*, adopted in 1985, was the culmination of four years' work with the community, in the wake of the citizen-based Seattle 2000 Commission which had set new goals and objectives for the city at large. The plan's vision statement emphasised the need to strengthen the unique character of downtown, to increase its residential population, to make its streets more enjoyable for pedestrians and to improve the quality of design (Fig. 10).

Other key objectives included the desire to maintain and strengthen its retail district, to develop an international district with its Asian community, to protect its historical districts, to revitalise its waterfront, and protect its low income housing. A set of 14 framework policies set the key objectives, the urban form policy providing a clear statement of seven design objectives as follows:

> Public and private development shall make a positive contribution to the downtown physical environment by
> 1. enhancing the relationship of downtown to its spectacular setting of water, hills and mountains;
> 2. preserving important public views;
> 3. ensuring light and air at street levels and in public parks;
> 4. establishing a high quality pedestrian oriented street environment;
> 5. reinforcing the vitality and special character of downtown's many parts;
> 6. creating new downtown parks and open spaces at strategic locations; and
> 7. preserving downtown's important historic buildings to provide tangible links to the past.

These were then elaborated with specific policies and guidelines on historic preservation, building height (Fig. 11), building scale (massing and setbacks), street level views, use of street space, signs and open space. The various bonuses are discussed in detail in the plan and then their variances district by district with other additional policies.

The Seattle plan concentrated on large scale urban form and especially public realm matters and had a clear sense of the three-dimensional forms, detailed land-uses, and pedestrian environment that it was seeking to achieve in the downtown (Fig. 12). It said nothing about architecture or issues of context outside historic districts.

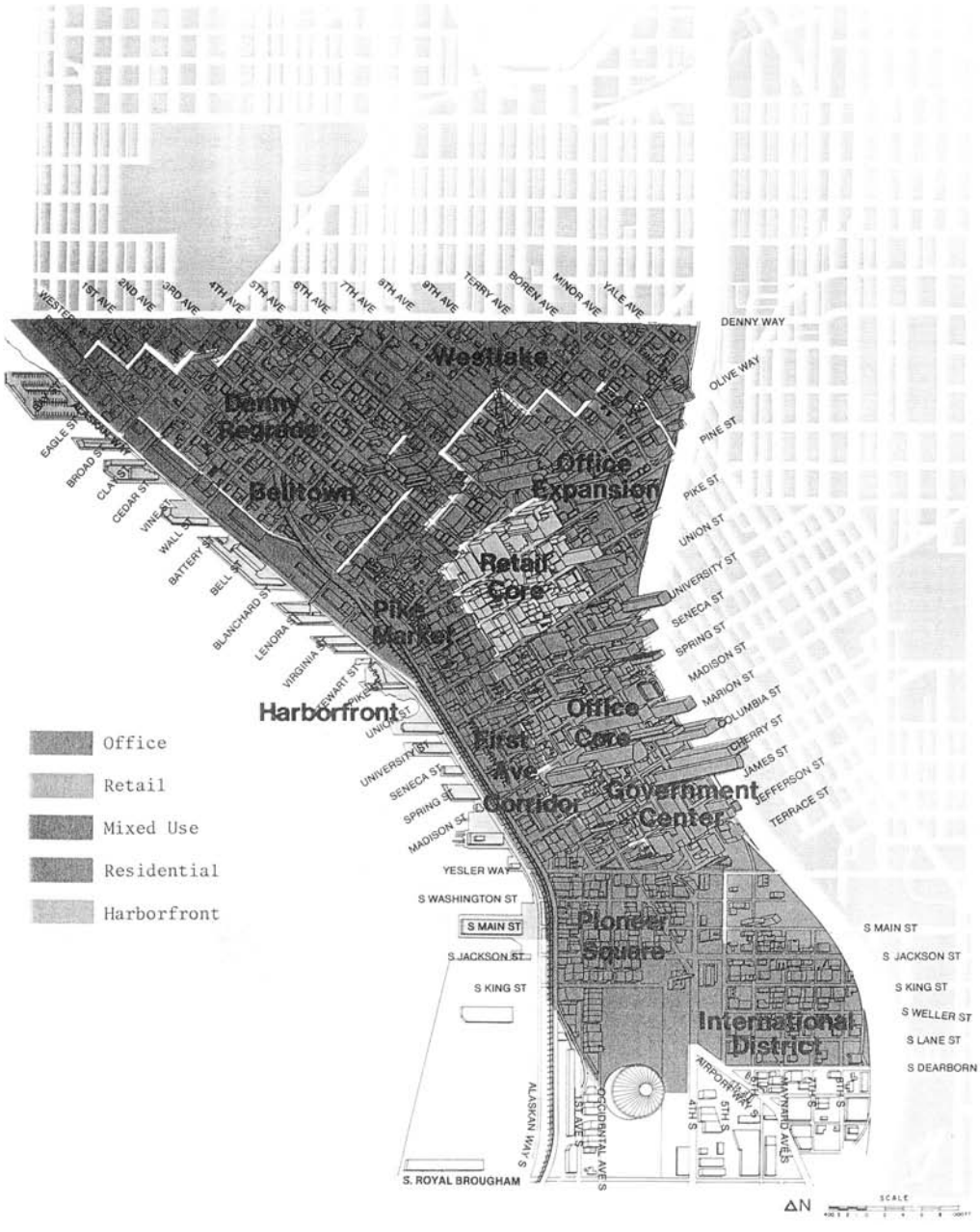


Fig. 10 Seattle: Downtown Areas of Varied Character (1984)

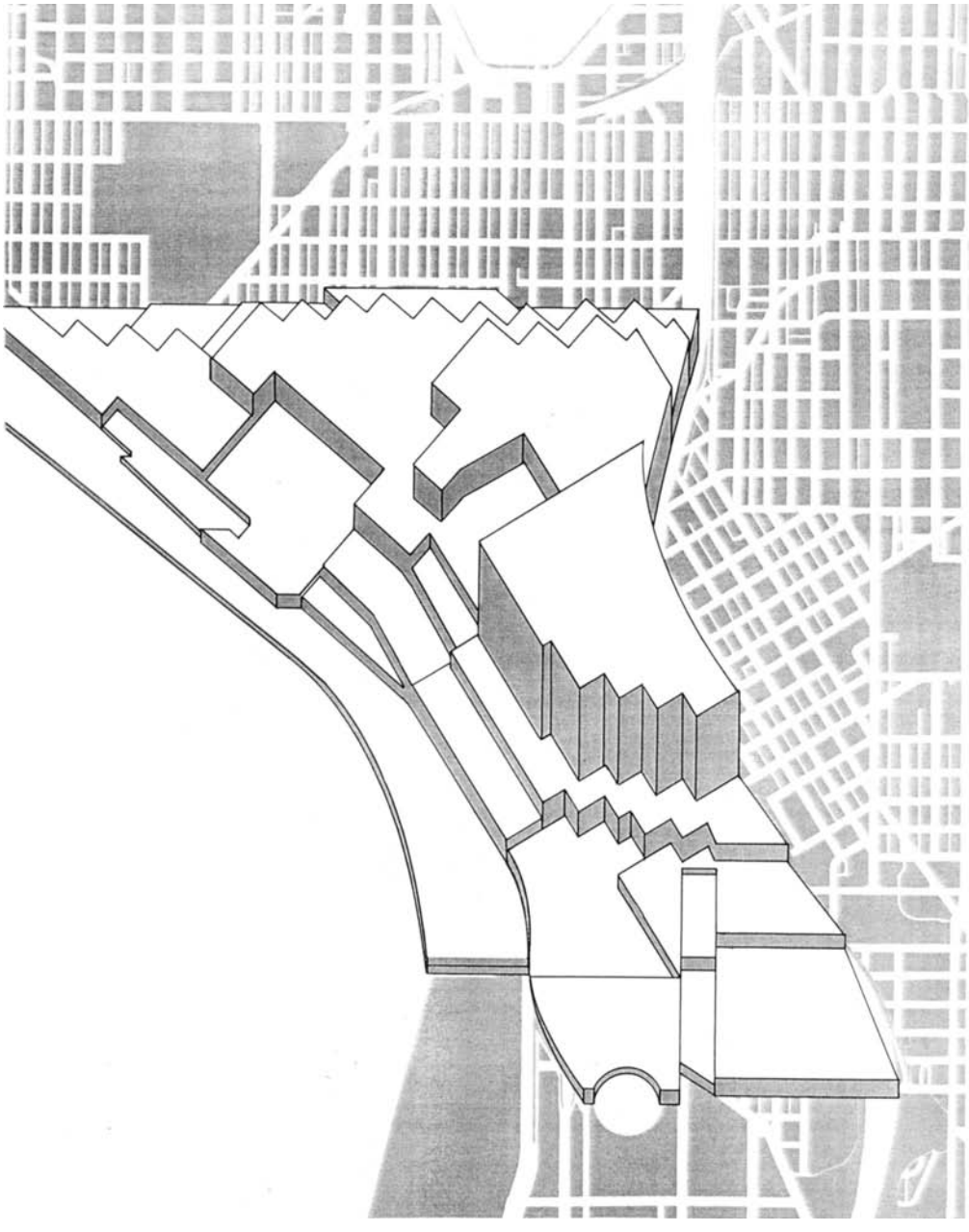


Fig. 11 Seattle: Downtown: Height Concept Map (1984)

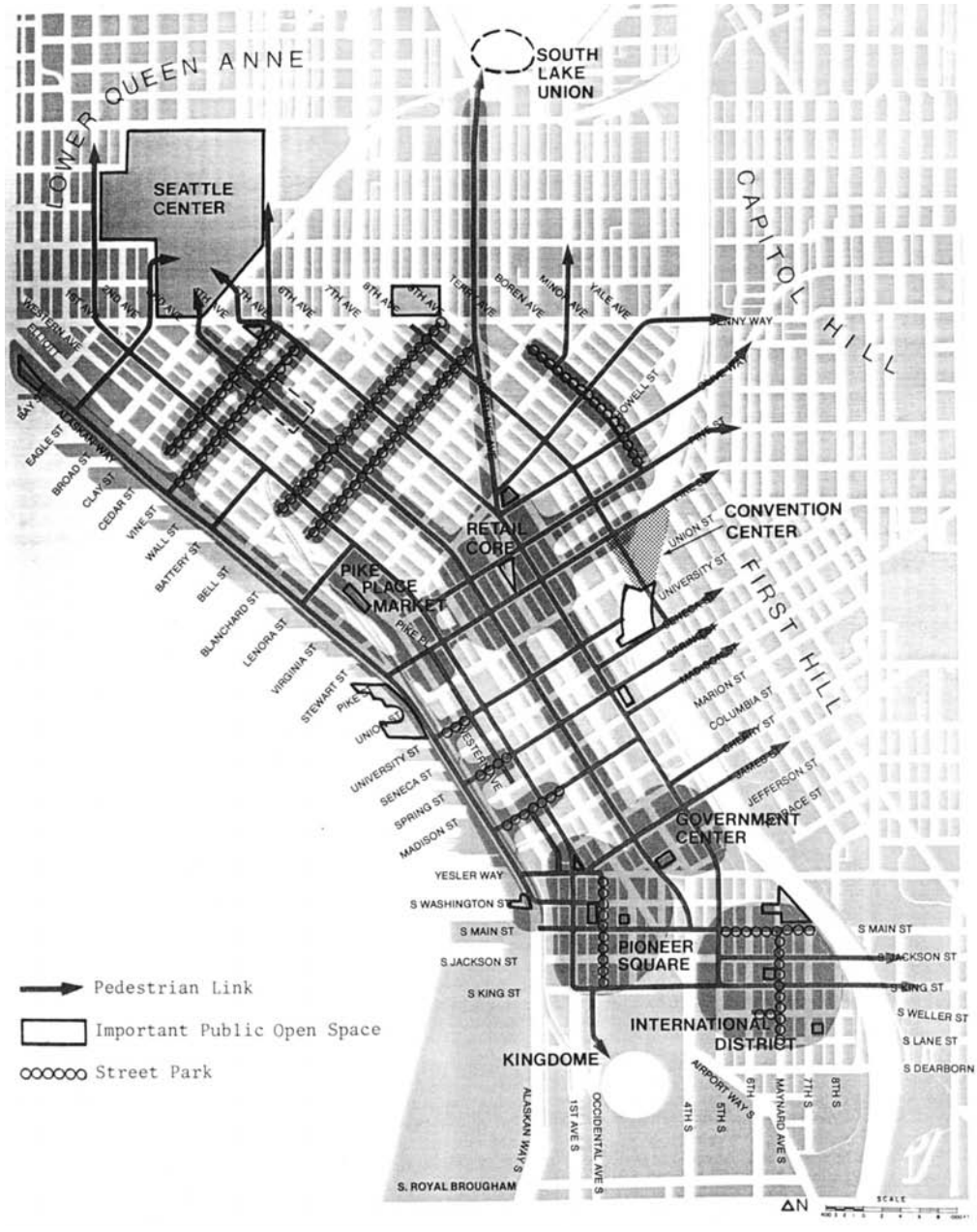


Fig. 12 Seattle: Downtown: The Pedestrian Environment (1984)

Zoning bonuses

A key to the implementation of the design policies was a generous floor area-bonus system which provided additional floorspace in return for particular retail, entertainment, human services and open space provision, sidewalk widening and protection, car parking and sculptural effects on tall buildings. An additional set of semi-automatic bonuses embraced theatres, public display space, accesses to the transit tunnel (a bus tunnel under downtown to speed north–south movement) and housing, while conditional bonuses were allocated for major retail stores, water dependent developments (e.g. harbour uses) and public art (Fig. 13). Some of these incentives had specific spatial implications in trying to protect the retail core, and encourage short-term parking, or design aspirations such as expressing the hillsides in development. Each sub-district of the downtown also had some policy variations to protect specific aspects of its character.

The result of the bonus system was to encourage a wide variety of mixes of development and public spaces, some of the latter being well used and very attractive while many are isolated dead ends. There were a number of spectacular results of the bonus system, most notably the 55-storey Washington Mutual Tower which more than doubled in size by virtue of the provision of a sculpted top, hillclimb assist (external escalator), child care facility, retail space, indoor lounge and outdoor plaza, and a contribution of $2.5m to downtown housing. The focus of

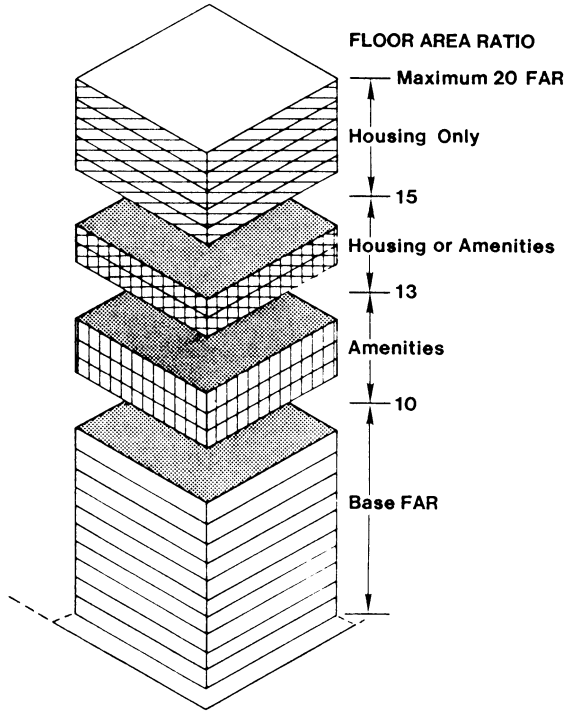


Fig. 13 Seattle: Downtown: Office Core Bonus System (1984)

endless arguments about the costs and benefits of the bonuses (did the developer gain floorspace worth $1m per annum from sculpting the top?), Washington Mutual and the bonus system became the focus of citizen dissent.

Citizen's Initiative 31 and the CAP

The perceived failure of the plan to manage growth effectively led to the formation of a 'Vision Seattle' group in 1987 which tried to scupper the long-debated Westlake Mall downtown retail project. It was followed by a citizens' coalition which called itself the Citizen's Alternative Plan (CAP). The *Citizen's Alternative Plan Initiative* sought to downzone the central area and to put an annual limit on the quantity of new floorspace. It argued that 'the rapid proliferation of large downtown office towers is creating a windy, dark, crowded and unpleasant environment in which to work and shop' (quoted in Collins et al. 1991, p. 145), and that employment growth was destroying low income housing and displacing small retail establishments. The alternative plan was enshrined in a citizens' ballot initiative which was passed in 1989. Its annual limits of 500 000 square feet of new office space (1989–94) and then 1 m square feet (1995–9), along with its preference for eight buildings of less than 85 000 square feet, rather than major projects, would have limited the scale of office development had not sharp increases in the quantity of vacant space and the collapse of demand occurred simultaneously. Meanwhile changes in the tax system had already made large-scale development much less viable.

Looking at the results of 1980s building boom and the buildings and spaces that were created downtown, there can be little doubt that the scale and height of developments began to overwhelm the character of the downtown, to block out light and sun and the views of the bay and mountains. In many ways the vitality of the street was protected, not least by the vastly increased footfall of pedestrians. Certainly a large number of plazas and pedestrian amenities appeared, some easily accessible and well integrated with streets and pedestrian 'desire' lines, others highly contrived and relatively inaccessible. The overdevelopment of a few sites at the expense of demand for development in other run-down areas of the downtown which sorely needed renewal, indicated a need to review the floor area ratios and the bonus system (Fig. 13).

The CAP created the conditions for a 'beauty contest' for office developments, with each proposal competing for a permit on the basis of their sensitivity to context, their siting and preservation of historic character, their intrinsic design quality and transportation/environmental impact. However the market conditions meant that there were few if any entries for the beauty contest.

There were those who argued that the 1984 Plan had not been given time to work, and that much of the development that had taken place between 1984 and 1989 was largely negotiated before the new plan. The coincidence of a number of major infrastructure (the bus tunnel project) and private projects (convention centre, retail centre, major offices), and the disruption these caused to the central city, fed the dissatisfaction with rapid growth. Nonetheless, the reaction against a plan that was collaboratively prepared with the citizens over a four-year period was

dramatic, and it provides a salutory warning that generous floor space bonus systems contain the seeds of their own destruction and can be self-defeating in design terms, a lesson that New York learned as early as the 1970s (Whyte 1989).

Keeting and Krumbulz (1991, p. 142) argue that:

> Seattle, like San Francisco, is an example of a city whose official downtown plan failed to fashion a publicly acceptable compromise between continued CBD Development and public concern about its negative impacts . . . As in San Francisco, while the downtown plan had the support of the political establishment and CBD business interests, it lost the support of a majority of the citizens. The growth strategy prevailed over equity and environmental concerns, resulting in a successful citizen backlash and stricter growth management.

The CAP effectively downzoned much of the downtown, particularly in the retail district where maximum heights were reduced by two-thirds to 85 feet (about 30 storeys). The bonus regulations were also rewritten in the wake of the CAP initiative to place greater stress on housing provision, particularly affordable housing, but there were still 27 other bonusable items that could offer generous additional floorspace (Fig. 14).

In the 1994 Seattle Comprehensive Plan the CAP was revisited, and the annual limit on office permits removed. However the Floor Area Ratios were further reduced in the highest density zones, while the bonus for low income residential units provided through TDR were expanded.

Seattle's urban villages growth strategy

In 1990, the State of Washington passed a Growth Management Act intended to curb urban sprawl and manage employment, housing growth and infrastructure provision, particularly in the Puget Sound Region of which Seattle is the focus. It required municipalities to integrate land-use, transport, housing and infrastructure issues, to consider these issues across municipal boundaries, and to establish what infrastructure would be provided at what level, and when, over a 20-year time period. Seattle began work immediately on its first comprehensive plan, feeling its way towards a new planning agenda and policy framework, and seeking to accommodate its share of regional growth—70 000 people (14 per cent) and 150 000 jobs by 2010. The politicians were unwilling to accept increasing densities in residential areas which were zones for single-family residence (about four-fifths of the residential area of the city), but were keen to reinforce neighbourhood commercial centres, reduce traffic congestion, increase open space and improve public safety.

Public participation was a key component of plan preparation and included public meetings, questionnaires and focus groups. It included an environmental risk

APPLICATION OF FLOOR AREA BONUSES BY ZONE

PUBLIC BENEFIT FEATURE	DOWNTOWN OFFICE CORE-1	DOWNTOWN OFFICE CORE-2	DOWNTOWN RETAIL CORE	DOWNTOWN MIXED COMMERCIAL	DOWNTOWN MIXED RESIDENTIAL	DOWNTOWN HARBORFRONT-2	MAXIMUM BONUS gsf
Cinema	X	X	X	S	S	-	15 000
Shopping Atrium	M	M	X	M	-	-	15 000
Shopping Corridor	M	M	X	M	-	-	7200
Retail Shopping	M	M	-	M	M	-	15 000
Parcel Park	X	X	-	S	-	-	7000
Residential Parcel Park	-	-	-	-	S	-	12 000
Street Park	-	M	-	M	M	-	ns
Rooftop Garden–Street Accessible	X	X	-	S	-	-	20% of lot
Rooftop Garden–Interior Accessible	X	X	X	S	-	-	30% of lot
Hillclimb Assist	M	M	-	M	-	-	ns
Hillside Terrace	M	M	-	M	M	-	6000 gsf
Harborfront Open Space	-	-	-	-	-	X	ns
Sidewalk Widening	M	M	M	M	M	-	= widening
Overhead Weather Protection	M	M	M	M	M	-	ns
Voluntary Building Setback	-	-	-	-	M	-	10' x frontage
Sculptured Building Tops	X	X	-	-	-	-	30 000
Short Term Parking	M	M	M	M	-	-	ns
Small Site Development	X	X	X	M	S	-	ns
Human Services	X	X	X	S	S	-	10 000
Child Care	X	X	X	S	S	-	10 000
Performing Arts Theatre	X	X	-	-	-	-	ns
Museum	X	X	-	S	-	-	ns
Urban Plaza	M	M	-	-	-	-	30 000
Transit Tunnel Access	M	M	M	-	-	-	15 000
Public Atrium	X	X	X	-	-	-	5500
Housing	X	X	M	X	S	-	ns
Council Conditional Use							
Major Retail Store	-	-	X	-	-	-	
Performing Arts Theatre	-	-	X	-	-	-	

- Does not apply
B Bonused throughout zone
M Bonused in accordance with map only (maps are found in Chapter 23.49, Seattle Municipal Code)
S Bonused in accordance with sub-district regulations

Fig. 14 Seattle: Downtown: Public Benefit Features and the bonus schedule (1989)

analysis focusing on the environmental consequences of car dependence as well as the development of sustainability indicators. It identified current problems that needed to be addressed and environmental assets that needed to be protected.

As the planning process took shape, so an urban design strategy emerged in the minds of planners, politicians and public as the means of enabling the necessary behavioural changes that would underpin a 'Sustainable Seattle' (Lawrence 1996,

p. 23). The media dubbed it 'the Mayor's urban villages strategy' and it was developed to resolve the four conundrums of how to accommodate growth while improving amenities, how to increase accessibility while reducing congestion, how to create urbanity while protecting neighbourhood amenities, and how to increase neighbourhood participation while promoting a city-wide growth strategy.

The *Comprehensive Plan: Towards a Sustainable Seattle*, was adopted in June 1994. Four years in preparation, it was based on three core values—stewardship of the environment, promotion of economic opportunity, and an equitable distribution of costs and benefits. Kaiser and Godschalk (1995, pp. 377–80) regard the plan as a good example of the 'contemporary hybrid plan' that not only maps and classifies land-use but proposes policies and management measures. They note the extensive public participation and 'animated political debates' about land-use alternatives which inform the plan, and the important influence of the neo-traditional and transit-oriented design movements. The plan's cornerstone is an urban village strategy which concentrates 75–80 per cent of the growth into five urban centres, four hub urban villages (with potential for three more), 17 residential urban villages and 26 neighbourhood anchors (Fig. 15). Two of these centres (the site of the 1970 World Fair and Capitol/First Hill) are actually contiguous with a third, Downtown Seattle, forming a very strong core area.

Urban villages are intended to have a strong core of commercial facilities, increased densities within one-quarter of a mile of the city centre, a social and economic mix, strong pedestrian orientation, a variety of house types and costs, mixed uses (vertically), appropriate community facilities, stronger transit and cycle/pedestrian connections, reduced parking space, integrated public space and a unique identity. The urban centres have a higher density than the hub urban villages, while the residential urban villages will contain less commercial development. Each of these will require a neighbourhood plan, as the Comprehensive Plan works its way through to the local level by 1999. It will be in these village hubs that new design guidance initiatives will be most thoroughly tested.

A particular feature of these village hubs is the role to be played by transit in extending the radius of each centre. The village concept is based upon the assumption that people will not walk more than a quarter of a mile, so a series of bus routes are planned with a five-minute frequency to widen the catchment of each centre to three-quarters of a mile. The Local Initiative for Neighbourhood Circulation (LINC) seeks to use small buses within urban villages and neighbourhoods to feed the centres and the stops of an express bus system between each centre or urban village. (See Seattle Comprehensive Plan 1994 A96–99; Zarker 1995, pp. 305–6: Fig. 16). Access to parks and open space are also important considerations in each village centre/hub, and deficiency areas (more than 250 yards walk) are noted on each of the village maps in the plan to guide future provision (Fig. 17).

The Comprehensive Plan provides a framework and structure for the various zoning ordinances, detailed sub-area plans and guidelines, so there is little that can be abstracted from the plan itself with a clear design content. Other key aspects of the plan are the calming of traffic and the encouragement of transit patronage. A

transit priority network is a fundamental objective, and major investments in the regional rail network and the express and feeder bus networks are planned. Environmentally critical areas will be protected through limited downzonings, and open space provision will be especially important in high density areas. Meanwhile, in the downtown area the plan has taken on Initiative 31's density and height limits, but not its annual allocations of commercial floorspace. The bonus system now emphasises the production of low income housing units while a new open space requirement per employee will contribute new public spaces on or off site.

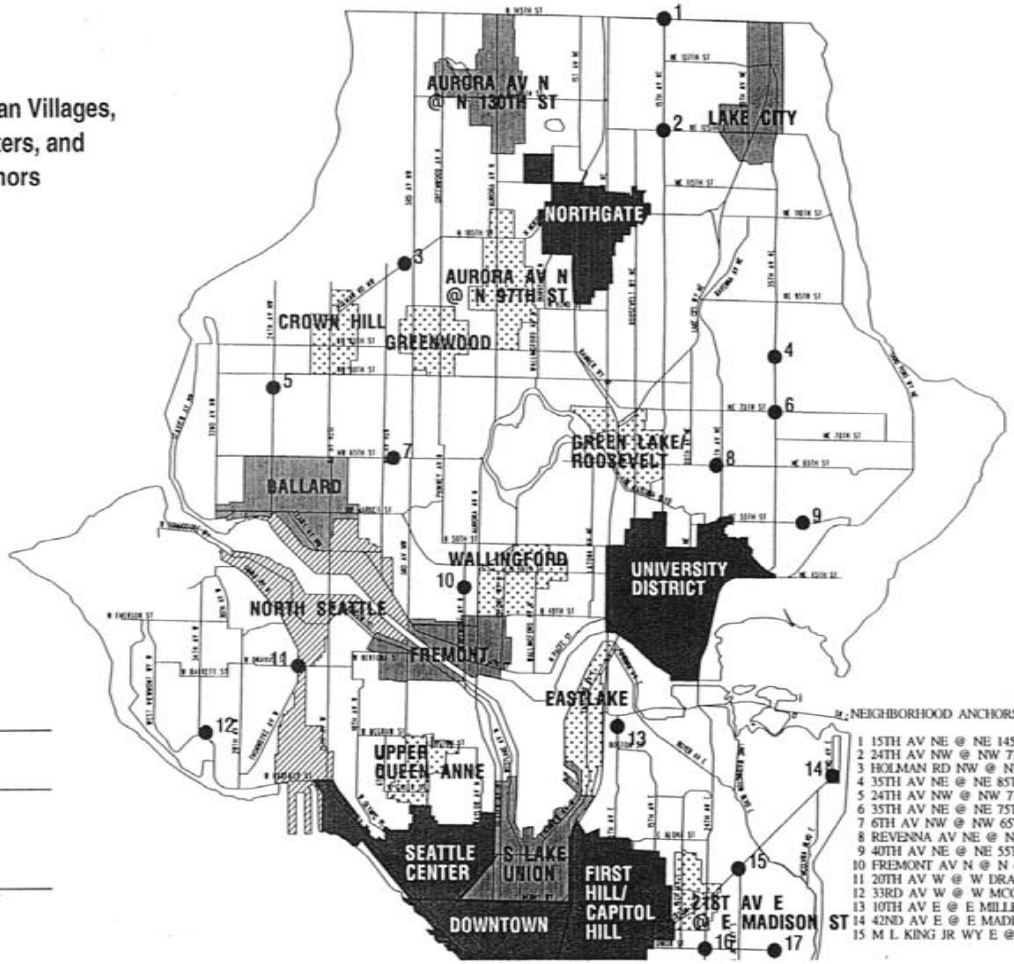
A key aspect of the Comprehensive Plan is that it should provide a framework for strong, effective and collaborative neighbourhood planning. A planning committee of representative stakeholders, including planners, will lead the process, but wide participation will be sought with resources made available to each neighbourhood. While growth targets will be allocated to each community, the neighbourhood planner will use a toolbox of regulatory mechanisms and capital programmes to decide how this is to be accommodated. Neighbourhood planning guidelines and procedures will be established to facilitate the process, and locally derived design guidelines will contribute a key input into the local planning process.

The past three decades have seen many demonstrations of citizen activism, from the saving of the Pioneer Square Historic Area and the Pike Street Market in 1970, to Initiative 31 in 1989 and the Sustainable Seattle initiative in 1992. Neighbourhood planning, with the community (residents, businesses, institutes, special interests and the City Government) as the driving force has been clearly enshrined in the Comprehensive Plan. Creating and following a plan is seen as a way of helping a community realise its potential, and the city is committed to full participation of all groups in each area.

Multi-family housing and commercial buildings: guidance and a devolved review process

City-wide design guidance for residential intensification, and locally prepared design guidelines for all new development will be the main control mechanisms for ensuring that the urban villages and neighbourhood anchors maintain the character and amenities. A major focus of design interest over recent years has been the control of multi-family housing and new neighbourhood commercial buildings. This emerged as a problem in the 1980s as development pressures intensified in the older suburbs and the rate of neighbourhood change, both physical and social, speeded up. In particular, there were problems with the quality of development (only 20 per cent was architect designed), and especially with the design of 'affordable' units. The Council were concerned with the effectiveness of their density controls but did not want to introduce control measures which would increase housing costs. City-wide guidance was envisaged, but research revealed very few examples of such an approach in the USA, and the 'Heinz 57 varieties' of Seattle neighbourhoods made such guidance difficult to develop. Nonetheless the city undertook to develop general design principles aimed at the average developer, focusing particularly upon multi-family and commercial buildings that were the

Urban Centers, Urban Villages, Manufacturing Centers, and Neighborhood Anchors



URBAN CENTERS

HUB URBAN VILLAGES

Level 1

BALLARD

Level 2

FREMONT
LAKE CITY
WEST SEATTLE JUNCTION

Potential

AURORA AVE N @ N 130TH ST
RAINIER AVE/INTERSTATE-90
SOUTH LAKE UNION

NEIGHBORHOOD ANCHORS

1 15TH AV NE @ NE 145TH ST
2 24TH AV NW @ NW 77TH ST
3 HOLMAN RD NW @ NW 100TH ST
4 35TH AV NE @ NE 85TH ST
5 24TH AV NW @ NW 77TH ST
6 35TH AV NE @ NE 75TH ST
7 6TH AV NW @ NW 65TH ST
8 REVENNA AV NE @ NE 65TH ST
9 40TH AV NE @ NE 55TH ST
10 FREMONT AV N @ N 43RD ST
11 20TH AV W @ W DRAVUS ST
12 33RD AV W @ W MCGRAW ST
13 10TH AV E @ E MILLER ST
14 42ND AV E @ E MADISON ST
15 M L KING JR WY E @ E MADISON ST

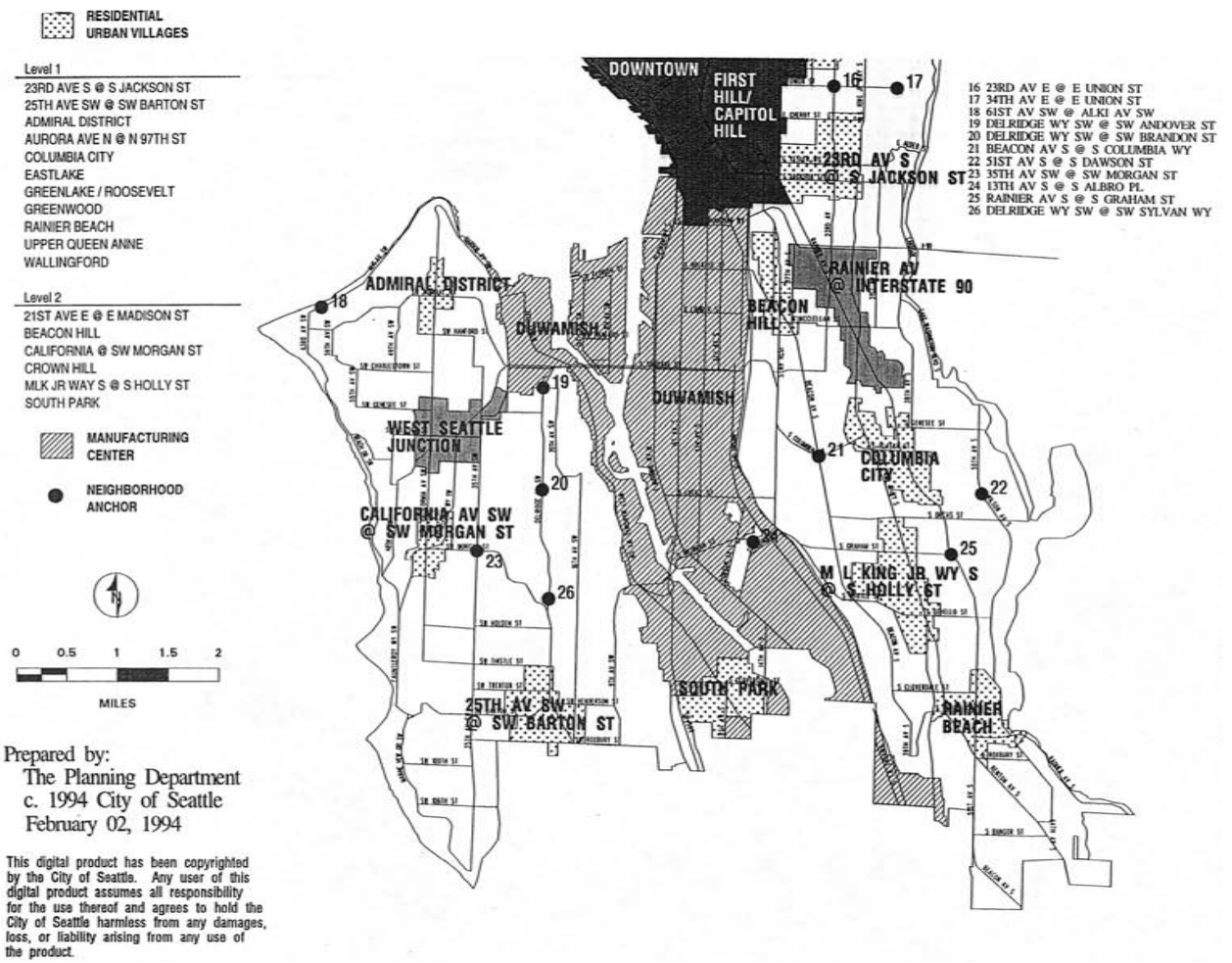


Fig. 15 Seattle: Urban Centres, Urban Villages, etc.: Comprehensive Plan (1994)

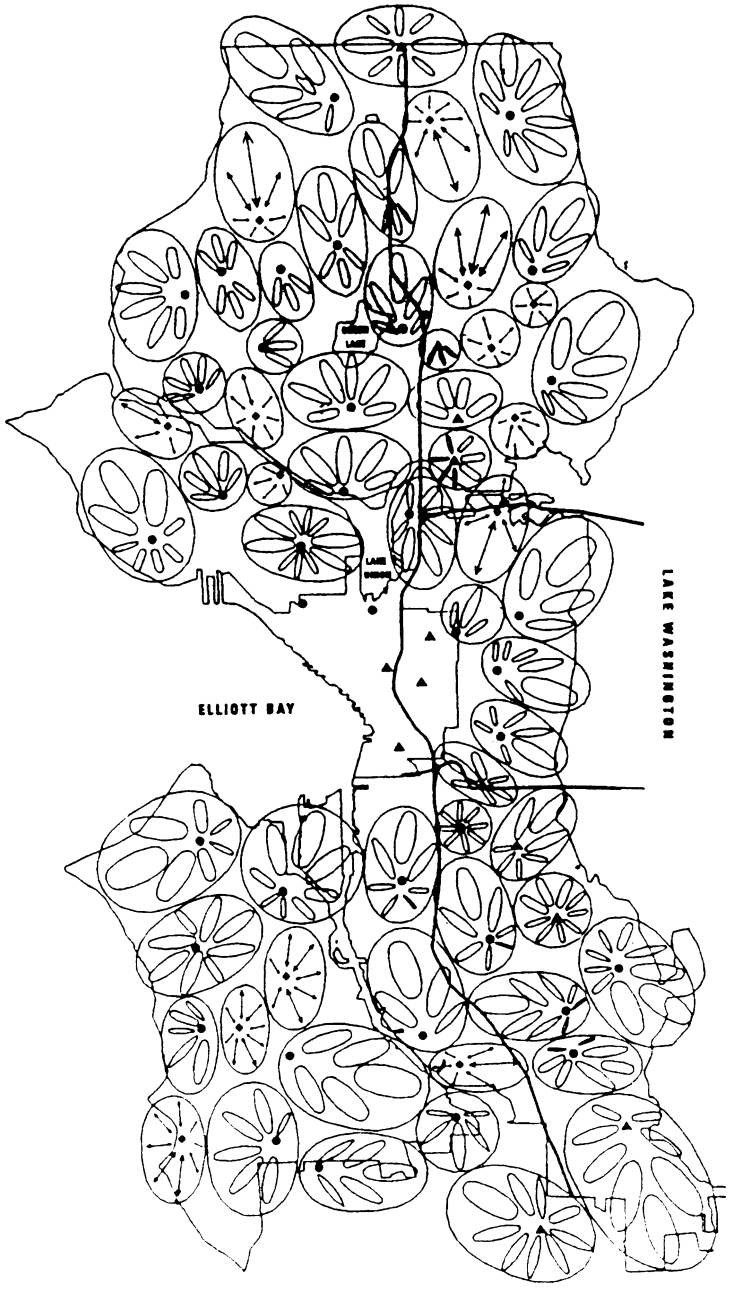
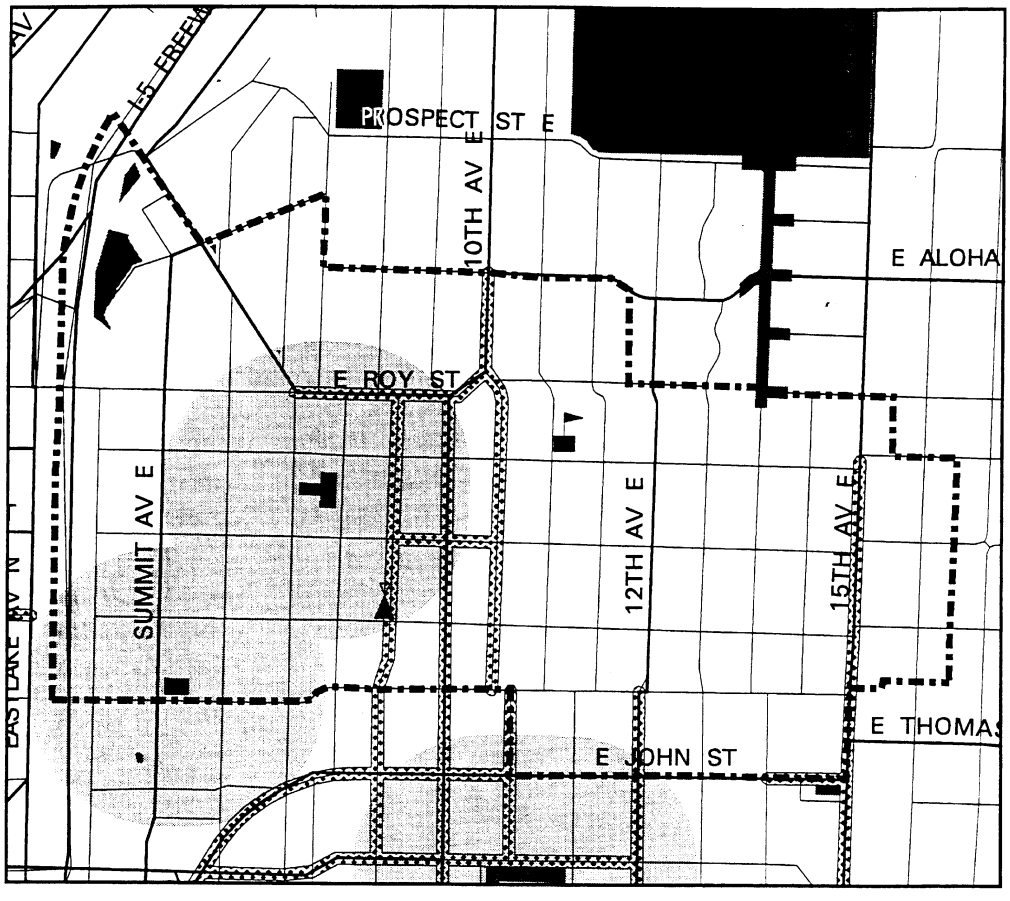


Fig. 16 Seattle: Comprehensive Plan: Neighbourhood Structure (LINC transit) (1994)



Village Boundary*
City of Seattle Parks & Open Space
Area Served by Existing Urban Village Open Space
Pedestrian Priority Street
Arterial
Other Street

P-Patch Community Garden
Public School
Library
Community Center
Police
Fire

Note: Symbols for Public Schools and Facilities Indicate Approximate Locations

0 0.25
MILES

Prepared by the Planning Department
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February 16, 1994

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***NOTE: VILLAGE BOUNDARIES ARE SUBJECT TO CHANGE THROUGH THE NEIGHBORHOOD PLANNING PROCESS**

Fig. 17 Seattle: Comprehensive Plan: Capitol Hill: Urban Center Village (1994)

source of so much controversy (Fig. 18). Consultants were used to prepare the original guidelines, but these were largely rewritten by planning staff looking for broader objectives and principles with which to judge projects.

The result, entitled *Design Review: Guidelines for Multi-family and Commercial Buildings* (1993a), is a guidance document used in a design review process first in areas which abut single-family development (1994) and then in the Neighbourhood, Commercial, Mid-rise and High-rise zones (1995). The guidelines provide the detailed design controls to underpin the intensification of the urban villages that are the focus of the comprehensive growth strategy (City of Seattle 1993a), while revisions to the zoning ordinance prescribe the densities, dimensions and uses in each of the suburban centres and their residential hinterlands. Crucially, the zoning ordinance sets the basic development entitlement on a city-wide basis, with the guidelines coming into play in the negotiation of how the floorspace can best be accommodated, and discussion of how the development must respond to its context and its site. In this way the overall strategy cannot be subverted through downzonings, but the local community can set more detailed design guidelines.

As befits both the participatory plan preparation process and the sustainability objectives in the Comprehensive Plan, the design guidelines will be implemented through a devolved system of design review which will provide a forum for the neighbourhood community and the developer to work towards better-quality development. The process provides for pre-application consultation with the Department of Construction and Land Use, a pre-design meeting with a local seven-member review board, a written agreement on the community priorities, and then a public and planning officer review before the Director makes a decision (Fig. 19). In this way the process emphasises the importance of establishing at the outset the planners' and the community's perspectives on the development of the site *before* any design work is undertaken, and on reaching agreement on the key design considerations.

The city's Design Review Board has 42 members appointed by the mayor and City Council to give geographical representation of community, development and design interests. There is a Review Board for each of five geographic sub-areas of the city, and a sixth board to serve as necessary. A further pool of board members representing the local community and local businesses, organised into 12 geographic sub-areas, is drawn on whenever a local project is reviewed. So each time the board reviews a project it has seven persons sitting, of which at least one represents the local community, and at least one represents local businesses.

The design guidance sets out the design elements—site planning, height, bulk and scale, architectural elements, pedestrian environment, and landscaping—that will inform these discussions. Similar in key respects to the Portland City Central City Design Guidelines, the design principles are summarised in a checklist which can help establish which design issues are of greatest importance and need closest attention (Fig. 20). Agreement is reached on which issues are most important, and the developer/designer then uses this as a framework to work up his/her design. The guidelines emphasise the need to recognise the individuality of each project, to respect the existing zoning designations, to analyse the context of the development,

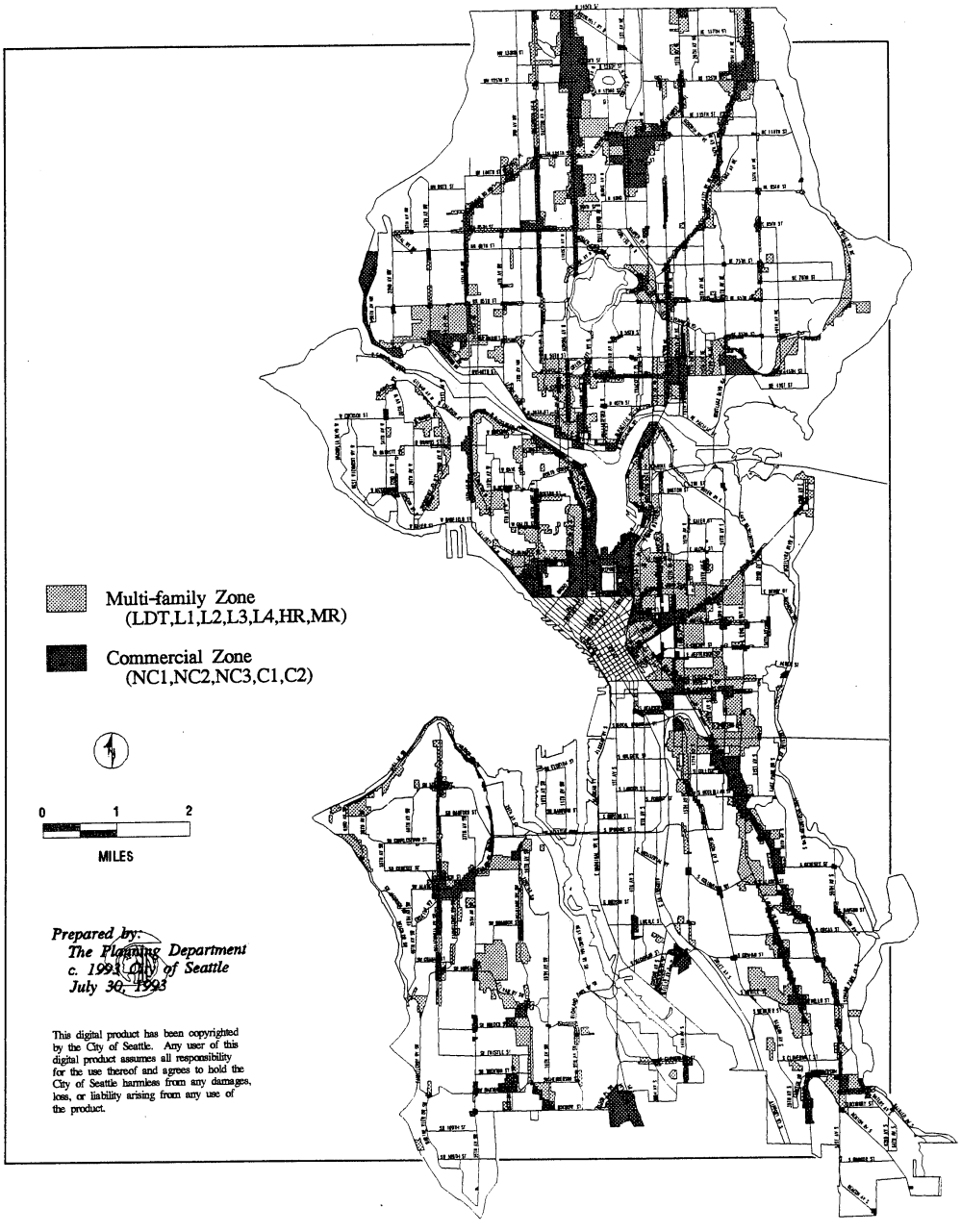


Fig. 18 Seattle: Comprehensive Plan: Multi-family and Neighbourhood Commercial Zones (1994)

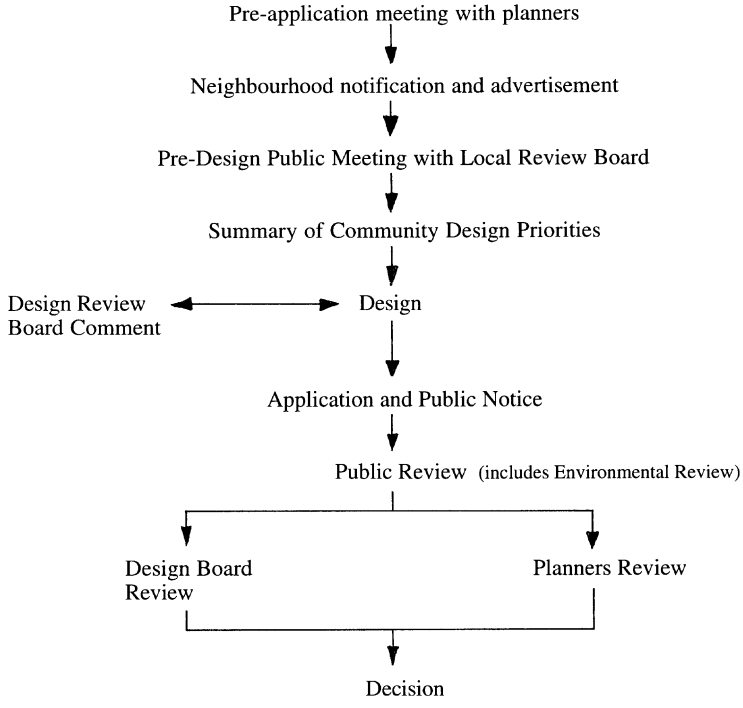


Fig. 19 Seattle: The process of design review in Seattle neighbourhoods (1993)

and not to copy the examples in the guide. There are thirteen key questions that those assessing a site should ask themselves in order to respect the streetscape area character and to improve the pedestrian experience and safety (Fig. 21).

Each of the 27 guidelines in the checklist is stated as a design objective that the development should meet, and various aspects of each objective are explained and illustrated. No rigid standards or criteria are suggested, though some will exist in the local zoning ordinance. Rather, these guidelines can be met in a wide variety of ways according to the skills of the designer. The guidelines emphasise the basic principles of site planning and landscaping, and of carefully relating development to the public realm, but they also tackle the most controversial issue, that of architectural elements and materials. Here the guide urges complementarity and compatibility, and argues that these may be achieved in several ways—using compatible architectural features, fenestration, proportions, etc.

Architectural consistency and a clear architectural concept are a second group of criteria, related to the articulation of the building's function and differentiation of the building's top and roof from its façade (Fig. 22). Human scale, another key criterion, is defined as 'the use of human-proportioned architectural features and site design elements clearly oriented to human activity' and it seeks to create pedestrian comfort and activity settings for the residents through encouraging balconies, bays and porches (Fig. 23). Thus scale becomes a social as well as an

IV. Design Guidelines Checklist

This checklist is intended as a summary of the issues addressed by the guidelines. It is not meant to be a regulatory device or a substitute for the language and examples found in the guidelines themselves. Rather, it is a tool for assisting the determination about which guidelines are most applicable on a particular site.

A. Site Planning

	N/A	Lower Priority	Higher Priority
1. Reinforce existing site characteristics	☐	☐	☐
2. Reinforce existing streetscape characteristics	☐	☐	☐
3. Entry clearly identifiable from the street	☐	☐	☐
4. Encourage human activity on street	☐	☐	☐
5. Minimize intrusion into privacy on adjacent sites	☐	☐	☐
6. Use space between building and sidewalk to provide security, privacy and interaction (residential projects)	☐	☐	☐
7. Maximize open space opportunity on site (residential projects)	☐	☐	☐
8. Minimize parking and auto impacts on pedestrians and adjoining property	☐	☐	☐
9. Discourage parking in street front	☐	☐	☐
10. Orient building to corner and parking away from corner on public street fronts (corner lots)	☐	☐	☐

B. Height, Bulk and Scale

	N/A	Lower Priority	Higher Priority
1. Provide sensitive transition to nearby, less-intensive zones	☐	☐	☐

C. Architectural Elements and Materials

	N/A	Lower Priority	Higher Priority
1. Complement positive existing character	☐	☐	☐
2. Respond to nearby historic structures	☐	☐	☐
3. Follow architectural concept	☐	☐	☐
4. Use human scale and human activity	☐	☐	☐
5. Use durable, attractive and well-detailed finish materials	☐	☐	☐
6. Minimize garage entrances	☐	☐	☐

D. Pedestrian Environment

	N/A	Lower Priority	Higher Priority
1. Provide convenient, attractive and protected pedestrian entry	☐	☐	☐
2. Avoid blank walls	☐	☐	☐
3. Minimize height of retaining walls	☐	☐	☐
4. Minimize visual and physical intrusion of parking lots on pedestrian areas	☐	☐	☐
5. Minimize visual impact of parking structures	☐	☐	☐
6. Screen dumpsters, utility and service areas	☐	☐	☐
7. Consider personal safety	☐	☐	☐

E. Landscaping

	N/A	Lower Priority	Higher Priority
1. Reinforce existing landscape character of neighborhood	☐	☐	☐
2. Landscape to enhance the building or site	☐	☐	☐
3. Landscape to take advantage of special site conditions	☐	☐	☐

Fig. 20 Seattle: Neighbourhoods Design Guidelines Checklist (1993)

Viewing a Site

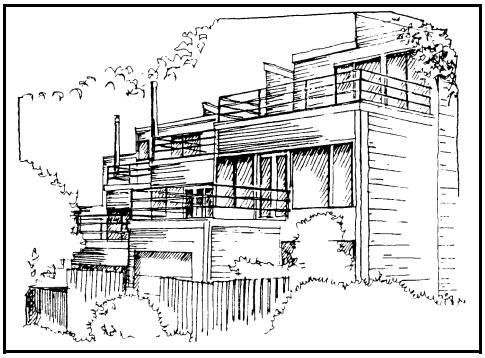
Seattle's Land Use Code sets specific, prescriptive rules that are applied uniformly for each land-use zone throughout the city. There is little room in the Code's development standards to account for unique site conditions or neighborhood contexts. A project architect can read the Code requirements and theoretically design a building without ever visiting the site.

However, to produce good compatible design, it is critical that the project's design team examine the site and its surroundings, identify the key design features and determine how the proposed project can address the guidelines' objectives. Because they rely on the project's context to help shape the project, the guidelines encourage an active viewing of the site and its surroundings.

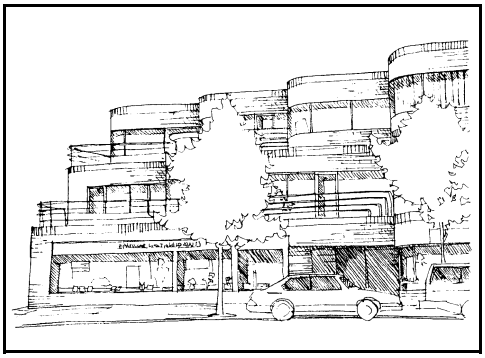
For a proposal located on a street with a consistent and distinctive architectural character, the architectural elements of the building may be the key to helping the building fit the neighborhood. On other sites with few attractive neighboring buildings, the placement of open space and treatment of pedestrian areas may be the most important concerns. The applicant and the project reviewers should consider the following questions *and similar ones* related to context when looking at the site:

- What are the key aspects of the streetscape? (The street's layout and visual character)
- Are there opportunities to encourage human activity and neighborhood interaction, while promoting residents' privacy and physical security?
- How can vehicle access have the least effect on the pedestrian environment and on the visual quality of the site?
- Are there any special site planning opportunities resulting from the site's configuration, natural features, topography, etc.?
- What are the most important contextual concerns for pedestrians? How could the sidewalk environment be improved?
- Does the street have characteristic landscape features, plant materials, that could be incorporated into the design?
- Are there any special landscaping opportunities such as steep topography, significant trees, greenbelt, natural area, park or boulevard that should be addressed in the design?
- Do neighboring buildings have distinctive architectural style, site configuration, architectural concept, materials or other features that add to the neighborhood's visual identity or quality?
- Do nearby buildings have a characteristic scale, proportion, rhythm, or other patterns that add consistency to the streetscape?
- Is the site next to or across the street from a less intensive zone?
- Are there special conditions related to a zone edge which should be addressed in the project's design?
- Does the existing layout and visual character of the streetscape promote a general sense of personal safety and discourage crime? Can the proposed project preserve and enhance such elements?
- Are there any special opportunities for the design of the project to correct or reduce elements of the existing streetscape which have elevated fear levels or promoted crime?

Fig. 21 Seattle: Residential Guidelines: Key questions when viewing a site (1993)



A contemporary townhouse building that employs building articulation, broken roof lines, chimneys, multicolored trim and consistent detailing in a pleasing composition.



This contemporary building employs decorative masonry, modulation of the building face, decks and railings, and a recessed entry to give it a distinctive architectural character.

C-2 Architectural Concept and Consistency

Building design elements, details and massing should create a well-proportioned and unified building form and exhibit an overall architectural concept.

Buildings should exhibit form and features identifying the functions within the building.

In general, the roofline or top of the structure should be clearly distinguished from its facade walls.

- *Explanation and Examples*

This guideline focuses on the important design consideration of organizing the many architectural elements of a building into a unified whole, so that details and features can be seen to relate to the structure and not appear as add-ons.

The other objective of this guideline is to promote buildings whose form derives from their function. Buildings which present few or no clues through their design as to what purpose they serve are often awkward architectural neighbors. For example, use of expansive blank walls, extensive use of metal or glass siding, or extremely large or small windows in a residential project may create architectural confusion or disharmony with neighbors. Conversely, commercial buildings which overly mimic residential styles might be considered inappropriate in some commercial neighborhoods.

Architectural features may include any of the following.

- Building modulation or articulation
- Bay windows
- A corner accent, such as a turret
- Garden or courtyard elements (such as a fountain or gazebo)
- Rooflines
- Building entries
- Building base.

Architectural details may include some of the following.

- Treatment of masonry (such as ceramic tile inlay, paving stones, or alternating brick patterns)
- Treatment of siding (such as wood siding combined with shingles to differentiate floors)
- Articulation of columns
- Sculpture or art work
- Architectural lighting
- Detailed grilles and railings
- Special trim details and moldings
- A trellis or arbor.

Fig. 22 Seattle: Residential Guideline C2: Architectural Concept and Consistency (1993)

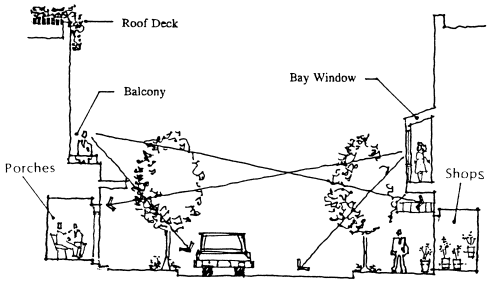
C3 Human Scale

The design of new buildings should incorporate architectural features, elements and details to achieve a good human scale.

- *Explanation and Examples*

The term "human scale" generally refers to the use of human-proportioned architectural features and site design elements clearly oriented to human activity.

A building has a good human scale if its details, elements and materials allow people to feel comfortable using and approaching it. Features that give a building human scale also encourage human activity.



The following are some of the building elements that may be used to achieve better human scale.

- Pedestrian-oriented open space such as a courtyard, garden, patio or other unified landscaped areas.
- Bay windows extending out from the building face that reflect an internal space such as a room or alcove.
- Individual windows in upper stories that:
  - — are approximately the size and proportion of a traditional window
  - — include a trim or molding that appears substantial from the sidewalk
  - — are separated from adjacent windows by a vertical element.
- Windows grouped together to form larger areas of glazing can have a human scale if individual window units are separated by moldings or jambs.
- Windows with small multiple panes of glass.
- Window patterns, building articulation and other treatments that help to identify individual residential units in a multifamily building.
- Upper story setbacks.
- A porch or covered entry.
- Pedestrian weather protection in the form of canopies, awnings, arcades or other elements wide enough to protect at least one person.
- Visible chimneys.

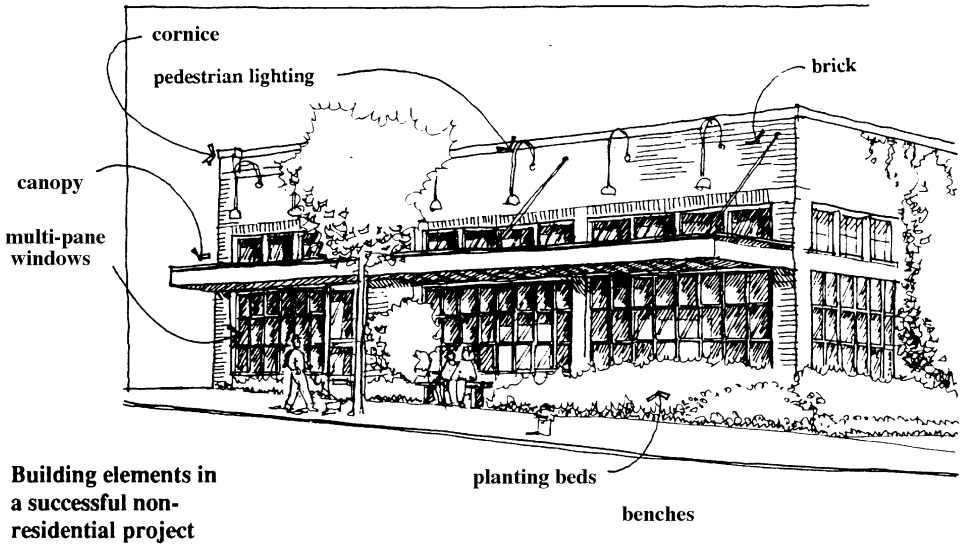


Fig. 23 Seattle: Residential Guideline C3: Human Scale (1993)

NEIGHBORHOOD INVENTORY

You will not need all of this information to develop your Neighborhood Design Guidelines; important features or characteristics will vary from neighborhood to neighborhood. This is a checklist for use in documenting your neighborhood's visual character.

NATURAL AND ENVIRONMENTAL FEATURES

Look for the following elements of the natural environment and show on a map (see Figure 10, Sample Natural and Environmental Features):

- Land form (ridges, slopes, streams, shorelines, bluffs, valleys, and general topography).
- Street trees and other vegetation including special landscape features (also see list of landscape features under Urban Design Features, below).
- Parks and open space areas, undeveloped areas, or greenbelts.
- Views and view corridors.

URBAN DESIGN FEATURES

For basic information about urban design, see the sources listed under Urban Design Resources at the end of this handbook. Refer to the glossary in Appendix A for definitions of terms listed below. Make note of design features on a map (see Figure 11).

NEIGHBORHOOD FORM

- Activity centers or focal points, such as a plaza, community center, library, or park.
- Neighborhood gateways, such as a bridge or major street or intersection.
- Neighborhood edges, where discernible, such as abrupt change in topography, wide street or boulevard, or change in street pattern.
- Major visual focal points within the community; not necessarily buildings.
- Major travel corridors (pedestrian and automobile).

ARCHITECTURE

- Scale of buildings (building height and width, massing, size and shape).
- Subareas, districts, or building groups with a predominant architectural style, building type, and/or period of development (such as a "traditional" commercial district like Ballard or an area of older, mostly brick apartments such as Capitol Hill).
- Prominent community landmarks such as schools, churches, or community centers.
- Buildings that are designated historic landmarks or of recognized historical or architectural value.
- Facade elements of buildings in terms of patterns, rhythms, and alignments (look at windows, awnings, cornices, and architectural details).
- Primary building materials commonly found in the neighborhood.
- Other elements of buildings such as rooflines or modulation.
- Artwork including public art, murals, distinctive signs, unofficial art, etc.

LANDSCAPE FEATURES

- Parks or other public open spaces.
- Distinctive landscaping such as formal gardens, naturalistic landscaped areas, and historic Olmsted landscapes.
- Significant trees or groups of trees.

STREETSCAPE AND PEDESTRIAN ORIENTATION

- Building setbacks (note whether there is a consistent setback from the street).
- Pedestrian-oriented shopping areas.
- Pathways, pedestrian connections, or trails.
- Character of sidewalks.
- Boulevards, medians, tree-lined streets.
- Street furniture, especially when it is distinctive.
- Attractive streetscapes (such as those with pleasing views, unusual alignments, landscaping, or other features that make them unique).

EXISTING LAND USE

Land use is different from zoning. It is how the land is presently used, while zoning establishes permitted uses for a piece of property. Existing land use information includes the locations and type of existing uses and recent and planned changes. If you can obtain information about patterns of ownership, especially public versus private ownership, this may also be helpful. Most of this information is available on maps from the Planning Department or DCLU. DCLU has Kroll Maps showing existing land use at 1 inch = 200 feet that may be available for copying. Check to see how current maps for your area are and update as necessary.

The basic land use categories you will want to map include:

- Residential
  - — Single Family
  - — Duplex/Triplex
  - — Multifamily (Lowrise, midrise, or highrise)
  - — Other (group homes, mobile homes, etc.)
- Commercial
  - — Neighborhood level versus regional
  - — Retail
  - — Services
  - — Mixed Use (combination of commercial – usually at ground floor – and multifamily on upper floors)
  - — Major Parking Lots
- Industrial
- Public
  - — Parks
  - — Schools
  - — Other (library, community center, etc.)
- Semi-Public (churches, other schools, etc.)
- Vacant Lands.

ZONING

You will want to map the existing zoning classifications. The uses and development standards that apply to each may be on the map or in accompanying text. You may also want to gather additional information on recent permit activity in the area. Zoning information is available from DCLU (see Figure 12, Sample Zoning).

OPTIONAL AREAS

Neighborhood History —
Traffic and Transportation Issues —
Demographic Trends —

Fig. 24 Seattle: Residential Guidelines: Neighborhood Inventory (1993)

aesthetic concept, making it much more relevant to everyday experience of the city. Advice on materials is very general as befits the diversity of Seattle neighbourhoods, but it does emphasise their importance to design quality at large.

Do-it-yourself design guidance

Simultaneously the city has been preparing another major design review initiative, which takes controls one step further by allowing neighbourhoods to write their own design guidelines, and a handbook has been produced to guide communities, explaining the design review process and why neighbourhoods should prepare such guidelines. *Preparing your own Design Guidelines: A Handbook for Seattle's Neighbourhoods* (1993b, p. 12) argues that such guides allow citizens 'to play a role in helping to accommodate growth ... gracefully by promoting dialogue among developers, the neighborhood, and the City to enhance trust and communication'. Grants are available to provide assistance in preparation, but they have to be matched with volunteer contributions in money, time or materials. Some areas may have guidelines developed as part of the city-initiated neighbourhood plans.

The guide explains how to form a working group, how to involve the broader community and use consultants, and how to develop a budget. There is a crucial chapter which explains how to conduct a neighbourhood survey advocating Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis and assessments of natural environment, urban design, land-use and zoning (Fig. 24). It looks at how to manage the process (Fig. 25) and how to develop goals and objectives, and rehearses brainstorming techniques, area tours, surveys including image/response exercises, and charrettes. It then suggests how design guidelines might be written, and identifies three stages—issue identification, explanation and then the development of a goal statement. The dos and don'ts are particularly interesting (Fig. 26). The 'Resources' section and appendices are very useful in terms of providing a bibliography, glossary and survey instrument, and are educational tools in themselves.

Conclusions

Seattle offers a fascinating example of the development of design policy, an example with a number of twists and turns. It shows the importance of having mechanisms by which the citizenry at large can bypass the normal political process, first of all in the 1970 ballot that saved Pike Place Market, and then in 1989 with the CAP ballot that altered the downtown plan. In a city which has prided itself on its highly participative and collaborative planning process there is a certain irony in the 1989 CAP initiative reversing widely agreed and well established policies. While the evidence against the downtown plan is not entirely clear cut, there can be little doubt that overdevelopment was prejudicing the character of the city and its amenities. The lessons for bonus systems everywhere are very clear, but the amended system implemented in 1989 has yet to be put to the test.

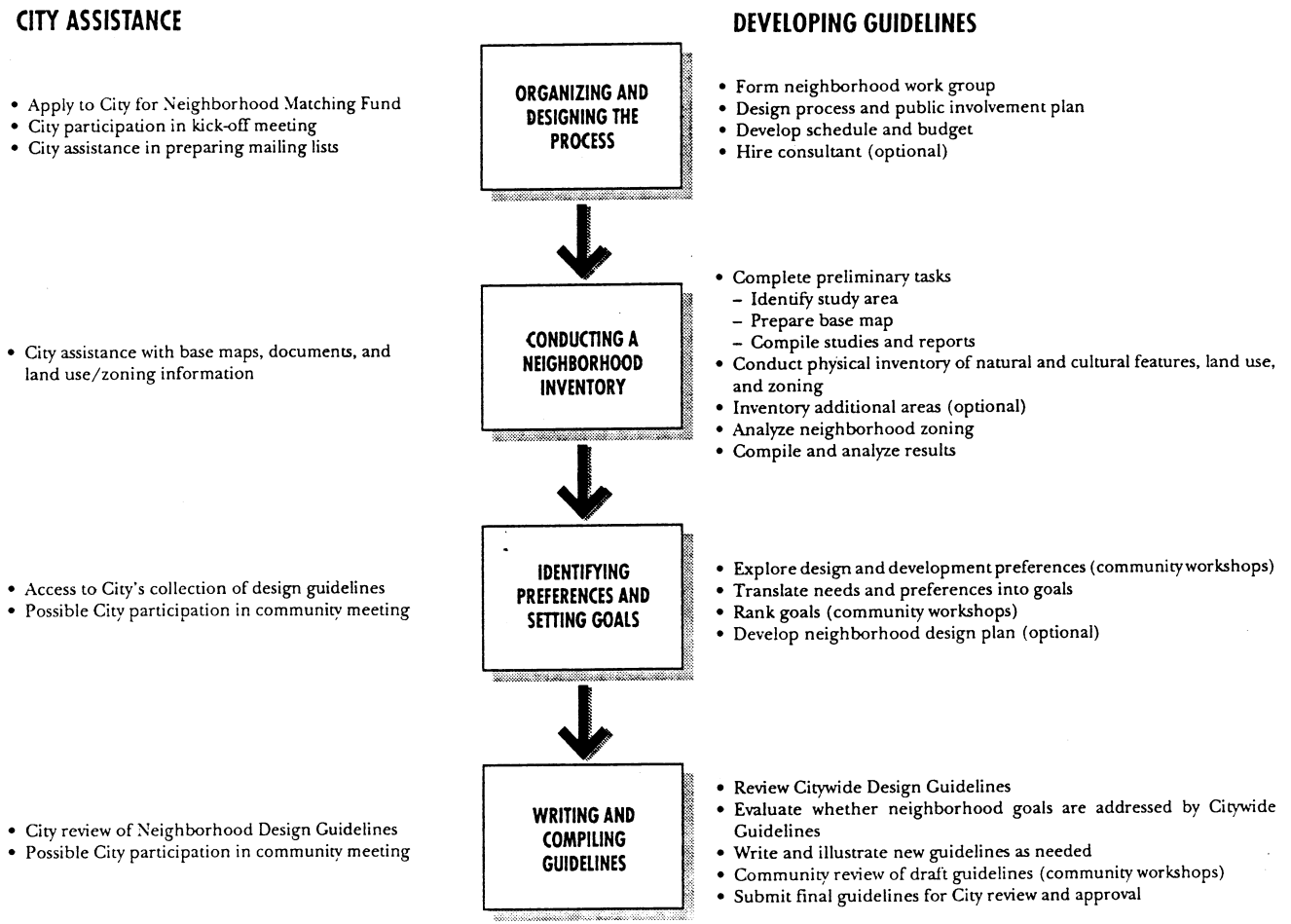


Fig. 25 Seattle: Preparing your design guidelines (1993)

DESIGN GUIDELINE DOs AND DON'Ts

DO	DON'T
• Be specific with language. • Use lots of illustrations (both positive and negative examples). • Address the community's most important issues rather than trying to cover everything: the fewer the better is a general rule. • Use ideas from other design guidelines. • Consider the unique characteristics of your neighborhood.	• Don't be prescriptive about solutions (e.g.: "you must use wood" or "fences must be 6 feet high"). Instead provide a clear explanation and a variety of examples. • Don't get into issues of taste or fashion. • Don't create guidelines that will add to the cost of housing. • Don't try to use guidelines to rezone a particular area. • Don't propose guidelines that conflict with basic Land Use Code requirements. • Don't reinvent the wheel.

Fig. 26 Seattle: Residential Guidelines: Dos and Don'ts (1993)

The shortcomings of the 1984 plan should not blind observers to some of its important qualities. The plan developed a clear sense of the three-dimensional form desired, a clear sense of how the pedestrian environment could be enhanced to strengthen retail functions, to link to the waterfront and to knit the city together. It established a positive policy towards the creation of pedestrian amenities, and laid the basis for differentiating the downtown into a series of more distinct quarters.

The new Comprehensive Plan, with its emphasis upon sustainable development—a polycentricity with higher density nodes where transit can be encouraged and car journeys discouraged, and where employment opportunities and services can be dispersed in a series of 'urban villages'—provides an interesting example of a clear, sustainable and easily grasped spatial strategy at the city-wide scale. It is particularly interesting to note that the urban design-led strategy emerged from dialogue between planners, politicians and the public, and that it was seen as a 'means of enabling the individual behavioural changes needed to assure the future sustainability of Seattle' (Lawrence 1996, p. 23).

The devolution to the neighbourhood level of detailed planning and design control, within growth targets set by the Comprehensive Plan, will provide an interesting experiment in local control. Again there is an important innovation in bringing the developer and the community together to establish the key design issues and community design priorities, but within a clear framework of agreed unit targets and floorspace entitlements, so that the NIMBYist tendencies of local control can be avoided. The early involvement of the developer with the local review board, immediately following a pre-application meeting with the planners, gives the community a genuine opportunity, rarely afforded elsewhere, to participate in design negotiations. The whole provides a remarkable experiment, and the efficiency, effectiveness and fairness of the process will need to be carefully monitored along with the quality of outcomes to see if it delivers the benefits intended.

This experiment in devolved controls will be reinforced by encouraging

neighbourhood groups to prepare their own design guidelines. This new DIY handbook for the preparation of guidance is another major innovation in design review, and is a model for communities conducting area appraisals and character assessments and translating these into design goals and guidelines.

The multi-family/commercial buildings design guidelines are also of considerable interest as model policies for the control of residential and commercial intensification, and as a framework for more detailed controls. They provide a fine example of a 'process approach' to policy/guideline writing, encouraging the designer to analyse carefully both site and context before considering key questions of height, bulk and scale, and then the details of architecture and landscape. Importantly, the policies/guidelines are not prescriptive. They are constructed more as performance criteria with a range of ideas as to how each might be achieved. They are written in language that is fully accessible to a lay audience.

Seattle has developed a city-wide design strategy with a strong sustainability dimension, which will be implemented through new guidelines for intensification, new neighbourhood-prepared design advice, and through a devolved design review process in which the public can participate. It exemplifies a community-based approach to design control set within the context of a city-wide design strategy, and a comprehensive effort to raise design standards and promote sustainable development. Its design guidelines are clearly based on design principles which have a strong social/activity dimension relating to street life and pedestrian experience rather than townscape per se, and which are not prescriptive about design solutions. It has also created a review process which is fair to the developer in terms of his/her development rights, but which allows the community to set more detailed parameters appropriate to the site and context. This experiment in enlightened planning and design control will be watched with great interest as it impacts upon development proposals and trends. In the meantime, there is much for an international audience to learn from both the processes of guideline preparation and design review, and from the way the substantive guidelines are constructed.

City of Bellevue

Introduction

Before leaving the Seattle region it is worth noting the experience of the city of Bellevue—a fast-growing suburban municipality seeking to achieve a more urban form of development that is also sustainable and focused upon a walkable, civilised downtown rather than upon a series of suburban shopping malls.

The city of Bellevue occupies the eastern side of Lake Washington, seven miles east of downtown Seattle. It is bisected by Interstate 405, and confined to the east by another smaller lake. A nondescript suburb in a beautiful setting, the municipality is famous as the world headquarters of the Microsoft Corporation. It grew rapidly as a

post-war residential suburb of Seattle with ranch-house subdivisions, single-storey commercial strips and suburban shopping plazas, and reached a population of 86 000 in 1990. It has flourished particularly as an 'edge city' office centre with eight million square feet of office space, now housing over 20 000 employees. Such 'downtown' as there is is spread over 12 super-blocks of about 1300 feet square (see Fig. 27), with office towers dispersed between suburban malls, drive-in commercial strips and low-density residential development. It is rumoured that downtown workers drive between office, shops and civic centre at lunch time.

The pressure for planning and design regulation

In the late 1970s a proposal for a major regional shopping centre galvanised public and political opinion, and pointed to the need for more public direction of development. The formation of neighbourhood groups determined to resist the invasion of commercial development intensified the search for an appropriate urban form and, around 1980, land-use studies identified a twelve-block area for a 'downtown' with a mix of public and private developments, transit services and freeway access. A downtown plan was subsequently produced in 1981. In 1982 the city revised its Zoning Ordinance and introduced a density bonus scheme (entitled 'FAR Amenity Incentive System'). This encouraged the provision of pedestrian amenities, including enclosed plazas, arcaded sidewalks, public art and water features at a generous rate of 10 square feet of office space for every one square foot of amenity space, and a 2:1 bonus for the provision of retail space in some zones. Housing attracted a 4:1 bonus and could be built on site or within the downtown area, and this helped to promote a significant number of apartment developments which have contributed to downtown vitality.

To promote pedestrian activity and transit ridership, parking standards were progressively reduced to a maximum of 2.7 spaces per 1000 net square feet of floorspace in 1987, with reductions allowed for shared developments. The system encouraged underground parking provision on a 2:1 floorspace bonus, and this has helped reinforce lower levels of provision while ensuring better site planning and a more pedestrian-friendly environment.

As a complement to lower parking standards the city has entered into an agreement with Metro transit services to increase bus services in line with increasing employment densities and lower parking ratios, and one major mixed use development (Bellevue Place) has appointed a transportation co-ordinator to promote ridesharing and reduce peak employee parking. This package of initiatives has reduced solo-commuting to 75 per cent, one of the lowest rates nationwide (Cervero 1989, p. 176), which only serves to emphasise how far there is to go to make a major impact on car use. However, what Bellevue has attempted to do is to link an urban design programme creating a dense and vital downtown with a broader package of measures to produce a more sustainable form of development, particularly to reduce car use for commuting and downtown movement.

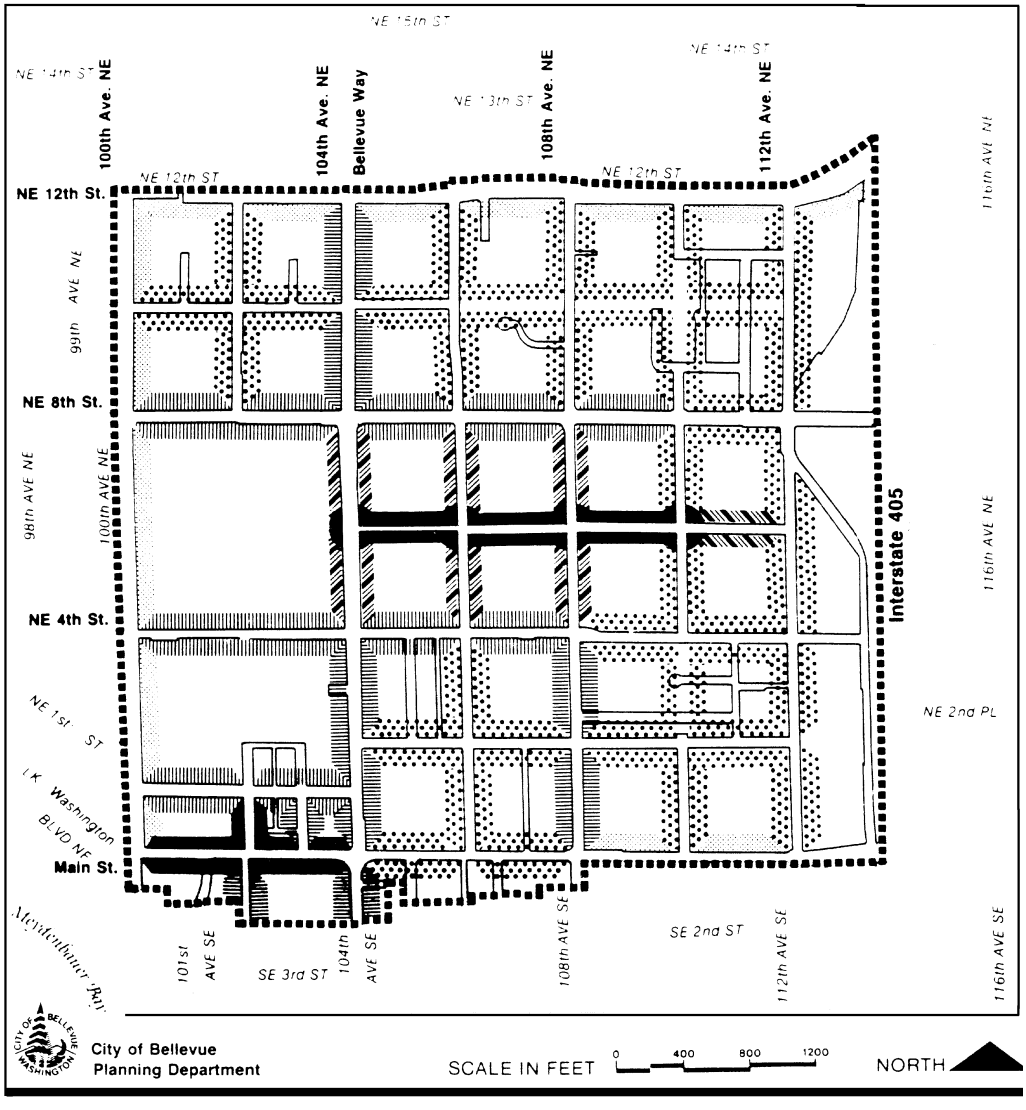


Fig. 27 Bellevue: Downtown: Right of Way Designations (1983)

One expression of Bellevue's search for urbanity was its creation of a downtown central park, an idea driven by a Citizens' Park Coalition who persuaded the City to acquire a 17.5-acre site for the local school board and to launch a design competition for it in 1983. The park, occupying most of a city block immediately south of the Bellevue Square Mall (a regional shopping mall) is distinguished by its circular open space framed by a double avenue of trees, circular promenade and water features. In recent years it has been extended with new land acquisitions to complete the block and to provide the first truly public place in Bellevue (Beckley 1990).

The downtown design regulations and review process

The design review process, introduced in the early 1980s, is administrative and not as participative as the other major cities discussed in this monograph. Large-site notices and notification procedures encourage comment to the planning department who employ architecturally-trained staff to review design. Written reports are made on each project, with notification of any conditions, and there is an appeal process open to both sides. Only one downtown project has ever been denied a permit on appeal.

Great stress is placed on pre-application conferences as a means of ensuring that the views of local government are understood at the outset of the design process. The review process incorporates public comment on major applications and insists upon detailed drawings (1:48) for elevations at pedestrian level to ensure appropriate detail (Hinshaw 1994).

The review process relies upon two published design guidelines, *Building Sidewalk Relationships* (1983) and *Pedestrian Corridor and Major Public Open Space* (1985). What is interesting about both sets of guidelines is that they focus almost entirely upon design principles that will help to create a safe, comfortable, lively and attractive downtown public realm, and are only indirectly concerned with building forms and elevations. There is much to be admired in this focus upon the qualities of public space and the pedestrian experience.

The first document sets out a series of urban design goals (character enhancement, creation of a pedestrian environment, buildings' contribution to the pedestrian orientation, selective pedestrian priority, connections to adjacent neighbourhoods) and discusses a series of design issues that emanate from these goals. These issues almost constitute a series of principles (enclosure, lively ground-floor uses, sidewalk width, planting, street furniture, etc.), but the guidelines that emerge are set out as a series of five different 'rights-of-way designations' with different orientation to pedestrians, different dimensions and furnishings, and different ground floor design treatments (Fig. 28). There are also 'definitions of edge conditions' which consider how the building design should respond to the street, and which discuss fenestration, the street wall, entrances, differentiating the ground level, arcades/canopies, etc., paving, landscaping and street furniture.

The latter document sets out the principles for designing a major pedestrian corridor east–west through the centre of the downtown area linking the regional shopping centre with the transit mall. The guidelines were prepared by consultants retained by adjacent landowners and the Downtown Association, and were refined by a planning, property owner and developer committee. They were adopted in 1981, and subsequently refined in 1983 and 1985. A set of design objectives are now clearly defined (safety-comfort-vitality, identity, urbanity, adaptability, accessibility, etc.) with a set of design considerations for primary and secondary paths of movement, corridor walls (Fig. 29) and massing, elements of continuity and diversity, disposition of open space and design of crossings, and landscaping, amenities and microclimate. A series of illustrative conceptual designs for particular

'A' Rights-of-Way

Intent:

Rights-of-way designated 'A' shall have the highest orientation to pedestrians. This shall be achieved by emphasizing the designer relationship between the first level of the structure and the horizontal space between the structure and the curb line. This relationship should emphasize to the greatest extent possible, both the physical and visual access into and from the structure, as well as the amenities and features of the outside pedestrian space. In order to achieve the intended level of vitality, design diversity, and people activity on an 'A' right-of-way, retailing or marketing activities shall be provided for in the design.

Guidelines:

1. Street level edges of the entire project limit shall incorporate retail activities.

2. The following characteristics shall be incorporated into the design of the structure:

   Windows providing visual access
   Street walls
   Multiple entrances
   Differentiation of ground level
   Canopies, awnings or arcades

3. The following characteristics should be incorporated into the design of the sidewalk:

   Special paving treatment
   Seating

4. These Guidelines for 'building/sidewalk relationships' are to be used in conjunction with other guidelines adopted by the City. In the event the guidelines conflict with more specific guidelines adopted for Old Bellevue, the Major Pedestrian Corridor, or the Major Public Open Spaces, the more specific guidelines, now or as amended in the future, take precedence.

Examples:

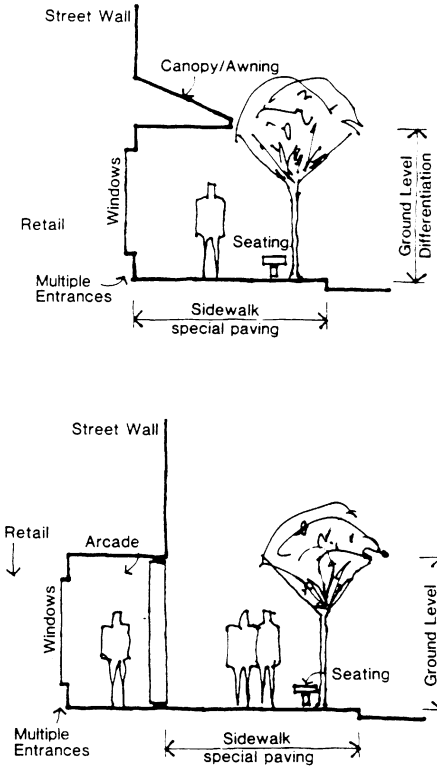


Fig. 28 Bellevue: Downtown: 'A' Rights of Way (1983)

spaces en route has also been prepared. The guidelines are repeated using more or less the same design considerations to relate buildings to open space (Fig. 30) and concluded with very precise prescriptions for street furniture, planting and signage.

The value of this guidance lies in the way it sets consistent parameters and principles for the design of a critical pedestrian route. While its principles can be adapted to other contexts, particularly because they articulate how different design qualities can be achieved, it is important to recognise that design consultants,

I. PEDESTRIAN CORRIDOR DESIGN GUIDELINES

OBJECTIVES

The objectives of the Corridor as defined by the Committee are as follows:

Provide a safe, comfortable, lively, and attractive place for pedestrians.

Achieve an identity and an image as a special place.

Allow for modification and expansion over time as surrounding conditions change.

Accommodate access to other major public facilities such as transit center, civic/convention center, and other public spaces.

Reflect the qualities of a truly "urban" environment with its intensity, sophistication, and diversity.

Reinforce and stimulate high quality future adjacent development.

Reflect characteristics of this locale: climate, vegetation, and topography.

Encourage evening and weekend use, as well as weekday use.

Provide a new focal point for downtown Bellevue.

IDENTIFICATION

The Council and property owners should select an appropriate name and symbol for the Corridor.

CORRIDOR WALLS

Intention

To ensure that the design and use of the "walls" abutting the corridor support the pedestrian-oriented character of the corridor.

Accomplished by

Ensuring that the walls of structures abutting the corridor incorporate major "visual breaks" at some point above the level of the corridor. The breaks should be positioned so that the ratio of the width of the corridor to the height of the breaks falls between 1:2 and 2:1. Therefore, since the width of the corridor can vary from 40 to 60 feet, breaks should occur at some point between 20 feet and 120 feet above the corridor. Examples of visual breaks include setbacks, large recesses, corners, and changes in materials.

Ensuring that uses fronting on the corridor are pedestrian-oriented. Pedestrian-oriented frontage is defined as being devoted to uses which stimulate pedestrian activity, provide visual interest, or use sidewalk space (for cafe seating, displays, etc.). Access for pedestrians from the corridor to buildings shall be at convenient intervals.

Ensuring that first floor facades are predominantly glass to maintain a high degree of transparency. Highly reflective and dark-tinted glass is prohibited.

Ensuring that facades of other floors abutting the corridor also include some amount of glass.

Allowing certain features, such as outdoor cafes, showcase windows, awnings, canopies, and bay windows to extend into the corridor.

Discouraging long, uninterrupted facades.

Principles addressed
Spatial containment
Multiple use of edges
Weather protection

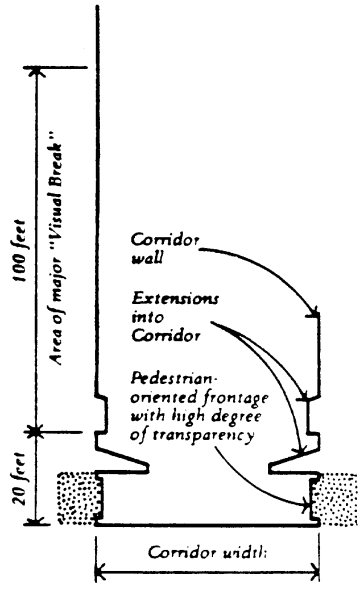


Fig. 29 Bellevue: Pedestrian corridor design guidelines

1. PRIMARY PATHS OF MOVEMENT

Intention

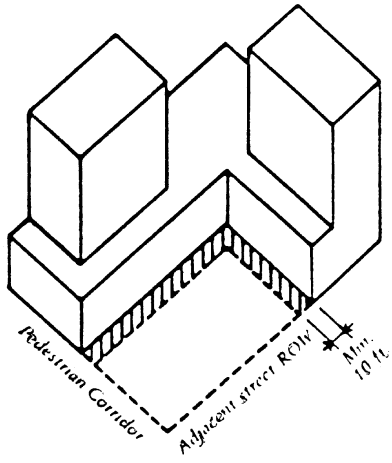
To provide for preferred primary pedestrian movement patterns.

Accomplished by

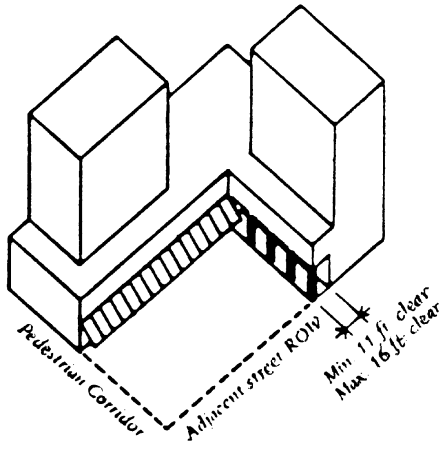
Providing paths of movement connecting the sidewalks on the adjacent street ROW at the corner of the MPOS (major public open space) with the Pedestrian Corridor. These pathways should follow the edge of the MPOS, allowing pedestrians to benefit from storefront views and weather protection of the abutting structures (see 3. Walls of enclosure).

The primary pathway, adjacent to the building walls enclosing the MPOS, should allow for an unobstructed pathway of ten feet. This pathway may be in a straight path or meander between uses, such as cafe tables and chairs, displays, kiosks, and planters. A perimeter colonnade, if provided, should allow for ten feet plus six inches next to the shopfronts and columns, resulting in a minimum clear width of 11 feet (allows two groups of two pedestrians to pass) and maximum clear width of 16 feet (allows groups of three to pass). The sidewalks on the adjacent street ROW are also primary pedestrian paths.

The Pedestrian Corridor will intersect the MPOS and will include two paths of pedestrian movement. The pathways in this location may be channelled to a moderate extent by gateways or focal elements such as sculpture, fountains, archways, or plantings. Pedestrians should be able to maintain the same general direction of travel without major diversion.



The primary pathway, adjacent to the building walls enclosing the MPOS, should allow for an unobstructed pathway of ten feet. The pathway may meander between uses, such as cafe tables and chairs, displays, kiosks, and planters.



A perimeter colonnade should allow for a clear width of 11 feet (allows two groups of two pedestrians to pass) and maximum clear width of 16 feet (allows groups of three to pass). Displays, cafe seating, planters,and similar features within the colonnade should not obstruct more than half the width to allow through pedestrian movement.

Fig. 30 Bellevue: Primary Paths of Movement (1983)

relevant landowners and property developers have fully participated in their preparation, and that this helps explain their high level of detail and precise prescription in places.

Mark Hinshaw, the urban designer who wrote most of the design guidelines, has noted five benefits that have resulted from what he describes as an 'aggressive' design review process:

> buildings are externally oriented in contrast to previously, and connect to other buildings and public places;
> shops, services and restaurants on the ground floor create street life;
> the street level is established as the only circulation level (no skywalks or underpasses);
> the downtown economy has been strengthened by better quality development and investment; and
> public consciousness of design has increased. (Hinshaw 1994, pp. 117–18)

Thus Bellevue has established itself as an exemplar for most other American 'edge cities' seeking to recover urbanity, pedestrian life and a mixed use urban core that can serve a large tract of suburbia.

Conclusions

Bellevue's experience is of particular interest because it takes ideas about how to create a pedestrian-friendly, vital and urbane downtown and tries to apply them to an emergent downtown in an 'edge city' context. The guidelines for the downtown area may take three or four development cycles to be substantially realised, but if the council maintains its commitment to a pedestrian downtown reinforced by a good transit service, limitations on parking, principles of mixed use, residential intensification and the development of extensive recreational and cultural facilities, then Bellevue could emerge as a distinctive, urbane and much more sustainable city centre, able to compete with any of Seattle's urban villages except the downtown itself.

There is clear evidence that the intensification of downtown was an approach supported by local residents, not least because it gave them greater protection from invasive commercial redevelopment. Citizen activism helped to launch the 1979 downtown plan. New zoning ordinances, transportation strategies, and the urban design guidelines reinforced both to deliver a pedestrian-friendly environment. With no historic buildings, little natural landscape or vegetation on a gently sloping site, and very dramatic changes to the landscape envisaged, there was no requirement for extensive appraisal of the locality. However, the guidelines do prescribe three different districts—an intense core with pedestrian spaces, a perimeter district gradating to the surrounding low-density residential districts, and a civic centre district with a series of public buildings. A former village core is

accommodated in the south-west corner of downtown. The city has demonstrated that design review is part of a 'comprehensive co-ordinated effort' (cf. Brennan's Law) to transform the downtown area through the provisions of the downtown plan, its investment in a new central park and the first phase of a new civic centre, and through the development of clear guidelines for downtown development.

As for the guidelines themselves, they are primarily oriented towards the creation of a pedestrian-friendly and active street-level environment, and incorporate a wide range of ideas to ensure that developments create an urbane relationship to the street. They are prescriptive insofar as they perceive five different forms of street-level treatment with varying degrees of pedestrian orientation, as is the treatment of street furniture, but they are not at all prescriptive about architectural treatment other than at ground-floor level where the building meets the sidewalk.

Although employment and office floorspace are projected to double by 2005, it is unlikely to deliver the urbanity that the downtown plan's proponents have been looking for. Part of the problem is that the bonus system seems to encourage large-scale developments at a very high density rather than spreading development more widely across the intervening areas between the civic centre, shopping mall and park, transit mall and convention centre. Councillors in particular have voiced concern that single large-scale developments like Kohn Pederson and Fox's 35-storey first Interstate Plaza merely saturate the office market (Kay 1991, p. 8). Bellevue's experience emphasises the difficulties of integrating zoning, bonus systems, design guidelines and transportation requirements into a cohesive and effective control mechanism over a long period of wildly fluctuating speculative development. In its determination to pursue a long-term perspective on development over almost a one-square-mile central business district (which may take two or three development cycles to fill up at urban densities), it may yet create an 'edge city' downtown with far more coherence, diversity and pedestrian vitality, and one that is much more sustainable in mixed use and transportation terms. For the present, the central area townscape is a bizarre mixture of ranch-house suburbia, drive-in strip commercial, office park and downtown mixed use and sidewalk sophistication; but when the property recession ends the city has in place the downtown guidelines to ensure another phase in the steady progress towards a true urban centre.

THREE

PORTLAND

Introduction

Portland, Oregon is a relatively small city of just less than half-a-million population in a metropolitan area of about 1.3 million people, placing it 26th in the American urban hierarchy. Straddling the Willamette River at its confluence with the Columbia River, and some 100 miles in from the Pacific and south of Seattle, the city has a fine setting bisected by wooded hills and with long-distance views to the snow-capped Mount Hood and Mount St Helens.

Portland was one of the last American cities laid out before the development of the streetcar, and its central area benefited from a much finer-grained grid that created blocks of only 200 feet in length. This increased the permeability of the city and raised the ratio of open space to 55 per cent (as opposed to 33 per cent in Seattle or New York), thereby ensuring a more human scale of development. The Willamette River and the wooded West Hills enclosed the downtown, while a system of park blocks divided the central business district off from the inner suburbs to the west, helping to ensure an attractive and vibrant urban form.

The city has a culture of design quality stretching back to its original small block layout in 1857 (Fig. 31), and its park blocks. Frederick Law Olmsted's park system and particularly good local architects in the 1920s such as Pietro Belluschi and A. E. Doyle maintained the impetus. In the post-war period the indefatigable conservation efforts of the Oregon Historical Society and multifarious neighbourhood groups have ensured continuity of design quality. In the early 1970s the urban designer/landscape architect Lawrence Halprin undertook a variety of projects which gave the city two outstanding plazas and fountains. He was responsible for recommending the use of London Planes as street trees, and the creation of a downtown transit mall modelled on the Minneapolis example, to improve bus travel and interchange and environmental quality. In the 1980s the city launched a design competition for a new city administration block, with the result that the City Planning Department is now housed in what is generally acknowledged as the vanguard and hallmark building of post modernism, Michael Graves's vibrant but weirdly eclectic Portland Building (see Jencks 1987, pp. 6–8; City of Portland General Bureau of Services 1985). These are not random acts, but evidence of sustained architectural patronage and the pursuit of excellence, of an exceptionally positive and integrated view of planning and a clear-sighted concept of urban design, and of sustained philanthropy and public-private investment in the public realm.

Most discussions of Portland's design quality focus upon its downtown, but it is

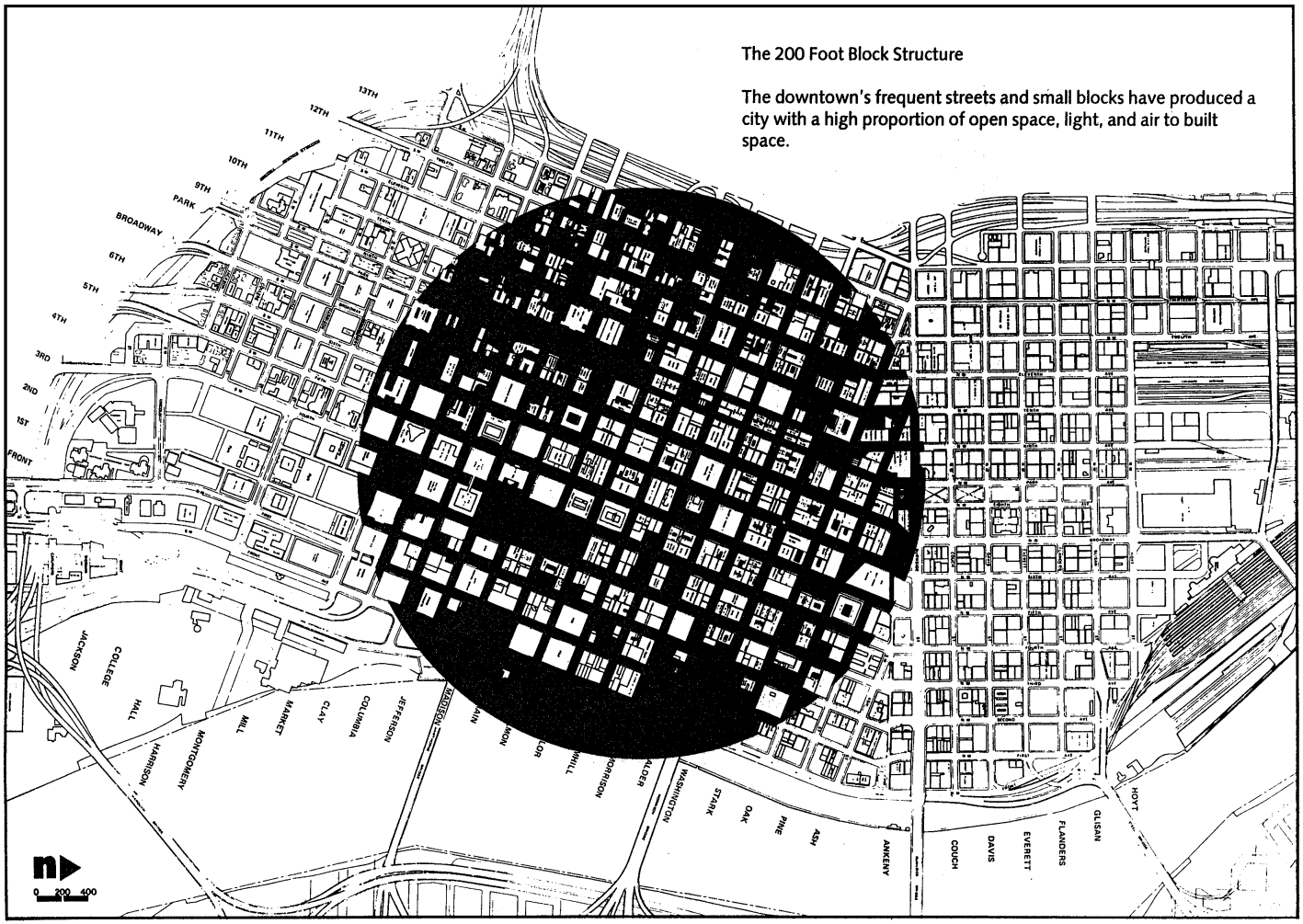


Fig. 31 Portland: The 200 foot block structure (1983)

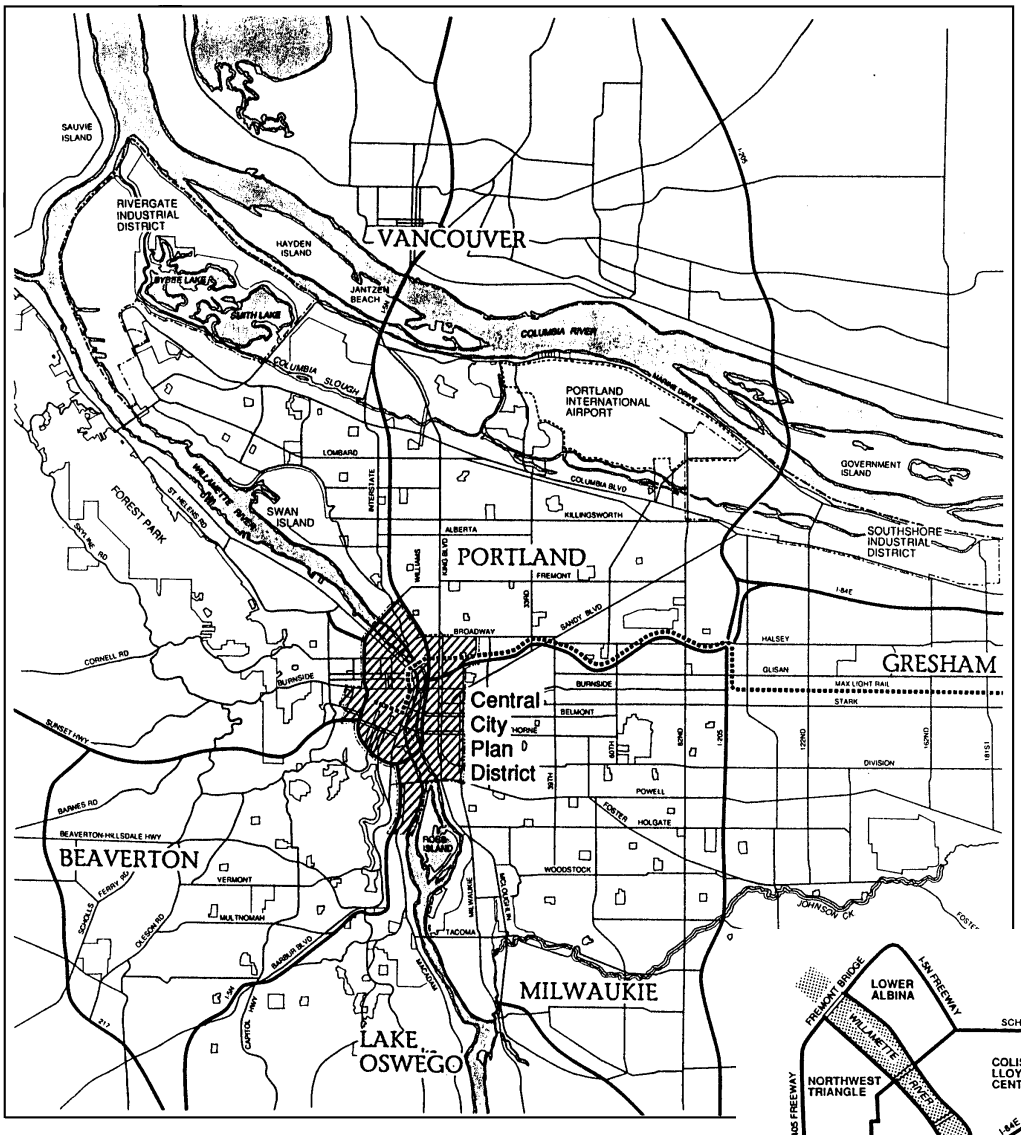


Fig. 32 Portland: Metropolitan Area and 1988 Central City Plan Sub-Districts

important to recognise that the city began planning for the metropolitan region in the 1930s, and Metropolitan Government was established in 1979 bringing 24 municipalities together. An Urban Growth Boundary was established to prevent urban sprawl and to promote compact development, affordable housing and transit usage (Fig. 32). In 1992 Metro was given regional planning as its primary role, and has set about defining the future vision of the region and designing a regional framework plan (Fregonese 1990, pp. 289–91) which incorporates many of the principles of transit-oriented development (Calthorpe 1993, pp. 122–6), so that urban design is significant at the city-wide as well as the district level in Portland.

State legislation and the policy basis for planning decisions

The city's efforts to manage urban development positively and ensure environmental quality are paralleled and reinforced by state planning initiatives. Foremost among the latter was the Oregon Land Use Act 1973 which required all cities and counties to adopt comprehensive plans and land-use regulations and to meet 19 state-wide goals. Portland's Comprehensive Plan was approved by the State in 1979 and it requires that planning control decisions be based upon 'findings'. This means that planners have to state clearly what policies and guidelines are in operation, and assess each project against these guidelines, explaining how conformity or non-conformity have been weighted and how conflicts have been resolved. This legislation has provided an important spur to a disciplined approach to policy writing and decision-making, but it can also be severely limiting (e.g. in matters of planning gain in insisting upon a direct relationship between project impact and mitigation factors).

The evolution of planning practice

Characterised as America's most liveable city as early as 1970, Portland has developed an outstanding reputation for quality planning and design through a long series of planning innovations and design successes. The city had early experience of large-scale urban design and redevelopment with the 84-acre South Auditorium district as part of the Federal urban renewal programme. Initiated in 1956, the urban design experience was instructive with the creation of a very distinguished Design Advisory Board to help humanise an improved site plan drawn up by Skidmore Owings and Merrill. The result was a monumental major office and apartment complex relieved by excellent pocket parks and gardens, notably Lawrence Halprin's waterscapes (Abbott 1994, p. 3) and particularly the still unsurpassed swimmable waterfall, the Ira Keller Fountain park.

Conservation concerns were articulated early by the various historical, art, architecture and beautification groups, and their windshield survey provided an inventory of valuable historic landmarks which led to the formation of the Historic Landmarks Commission in 1968. By the end of the 1960s the largely reactive approach to design and development crises was being supplanted by a more

systematic approach to downtown design, spurred on by the demise of waterfront development plans, falling retail sales, and transit and parking problems. By 1971 retailers, property owners, neighbourhood, area and professional organisations had been drawn into the process that produced the Portland Downtown Plan. Public pressure for a vital pedestrian environment and the creation of a waterfront park was given clear expression in guidelines that had a strong urban design orientation (Abbott 1991, p. 5). The plan also included a proposal for a transit mall to serve high-density retail and office corridors and to provide a more efficient bus service. Underpinning the downtown design concept was an American Institute of Architects' visual survey based upon Kevin Lynch's methodology identifying imageable districts, landmarks and activity nodes.

During the 1970s a series of important environmental, planning and design initiatives established the basis for comprehensive management and enhancement of the central city. The Downtown Plan, completed in 1972 (Fig. 33), was reinforced by a Clean Air Act which limited downtown parking and emphasised transit. The Transit Mall was completed by refurbishing and planting two north–south streets to act as one-way exclusive streets for buses where passengers could easily interchange between all services. Tree planting and a fountains programme were initiated for downtown streets and spaces. In 1974 the office of Downtown Neighborhood Associations was established to co-ordinate neighbourhood participation and programmes with planning initiatives.

In 1977 Downtown Transport regulations were published, and an Arterial Streets Classification Policy was introduced to produce a range of traffic improvements to key streets, and also to bring major environmental improvements, consistent landscaping, paving and street furniture improvements to many others. In 1979 the first Comprehensive Plan was introduced, and revisions to the Downtown Plan were initiated and published a year later. Downtown design review was also introduced in 1979 and its guidelines were published a year later.

During the 1980s there were three outstanding successes: the completion of the Performing Arts Complex to reinforce the entertainment zone; the demolition of the six-lane highway on the west bank of the Willamette River and its conversion into a 50-acre riverside park; and the demolition of a multi-storey car park and the creation of Pioneer Courthouse Square at very heart of downtown, enhancing the retail area and its links with the Government office area.

By 1988 the Downtown Plan had been revised and broadened to provide a 20-year time horizon for the whole of the central city (Fig. 37). The plan's area was expanded to include several industrial-wholesaling districts where new industrial, commercial and residential development could take place, but where blue collar jobs could also be stabilised by an 'industrial sanctuary', zoning policy. Furthermore Single Room Occupancy (SRO) housing was also preserved although controlled more tightly (Keating and Krumholz 1991, p. 48). New developments included the first phase of the new LRT in-street system, the completion of the Convention Centre on the east side of the river, and the introduction of a new zoning ordinance in 1991. By 1998–9 the city had so consolidated its reputation for planning

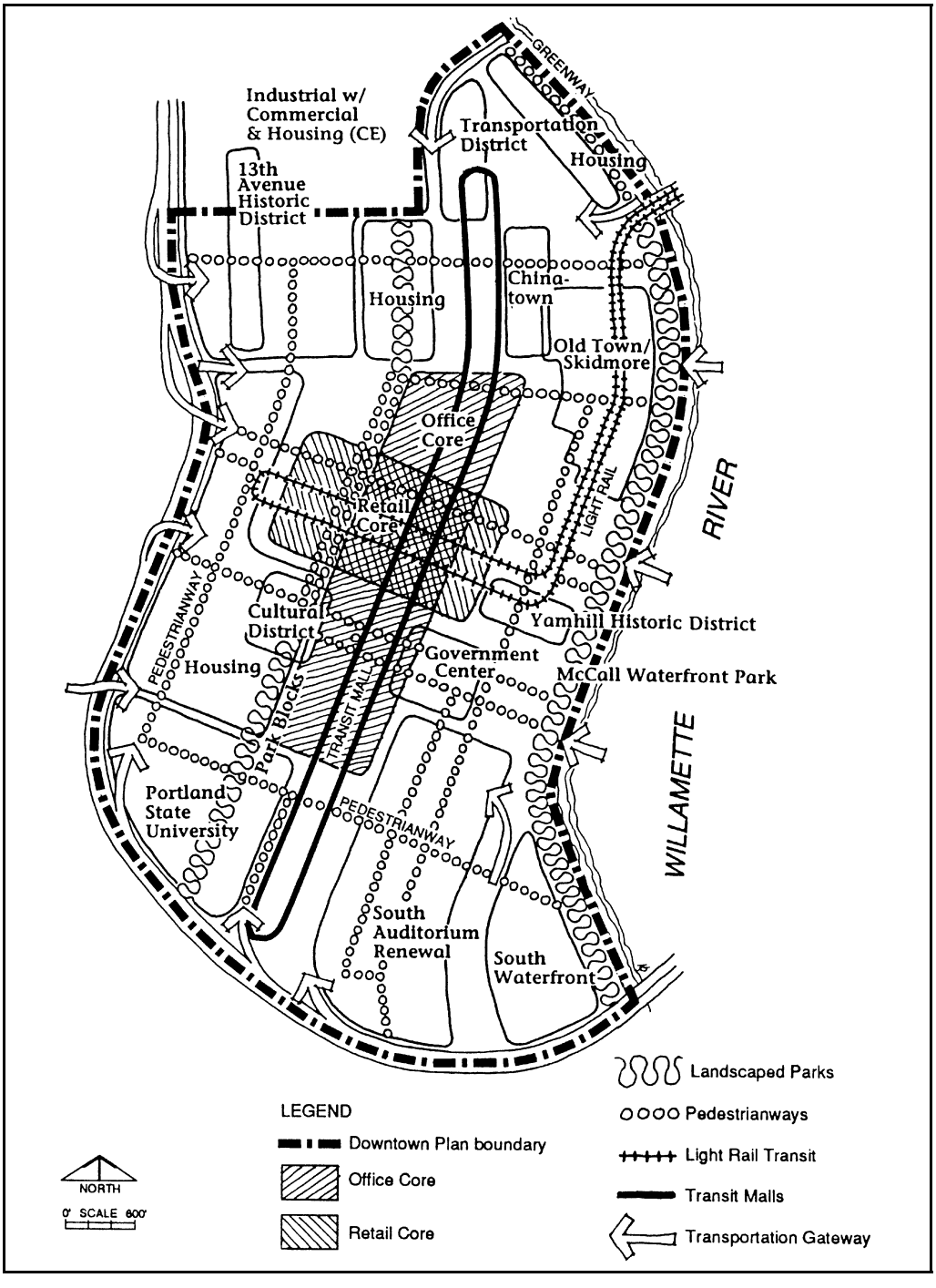


Fig. 33 Portland: Downtown Concept Plan (1972)

achievements that it won two national awards and wide acclaim in the élite national media.

The political and social context for the pursuit of design quality

When John Delafons celebrated Portland's design achievements he drew particular attention to the city's long tradition of civic pride (Delafons 1990). Carl Abbott, Portland's planning historian, describes it as a political culture in which moralistic policies and the public interest have, since the war, gradually squeezed out individualistic politics and created the possibility of disinterested civic decisions. He links this to Oregon's status quo conservatism and conservation ethic; but in the context of downtown revitalisation he notes that ever since the 1972 Downtown Plan the strategy has been to offer all parties and neighbourhoods key benefits from planning intervention—high-density offices and retail corridors, public transport and parking restraint, riverfront amenities and extensive pedestrian improvements, neighbourhood revitalisation but protection of diversity (Abbott 1994). Successful public/private partnerships are evident in a number of spheres—economic development, employment training, neighbourhood improvement, transit development, and performing arts (Barbour 1982). All these successes may be attributable in part to a stable business community with a strong commitment to the city, and the commission form of government, elected on a non-partisan basis, where a mayor and four councillors exert a high level of executive and administrative control and display a capacity for strong leadership. Abbott argues that the commission system of government acts to diffuse power and leadership, and allows commissioners simultaneously to set policy and manage operational departments (Abbott 1991, p. 2), but he always emphasises the city's essential conservatism.

These positive factors have been reinforced by the fact that Portland's suburban communities have been generally weak, while an incomplete suburban beltway has not encouraged major commercial decentralisation. The facts that the city remains one of the most homogenous American cities in racial terms (92 per cent whites even in the inner city), and that the inner city neighbourhoods have retained their upper middle class population (partly because of the wooded West Hills which enclose the downtown), have also facilitated revitalisation. Furthermore, Portland's growth has been slow but steady, avoiding the worst effects of the boom-bust property cycles that have recently plagued most major American cities, including Seattle, San Francisco and San Diego. The Urban Growth Boundary imposed in 1979 and associated regional planning initiatives have helped to maintain and improve the quality of city neighbourhoods and encourage steady investment in the downtown and city neighbourhoods.

At the heart of the City's planning efforts have been the politics of participation with at least 68 distinct neighbourhoods and 54 independent neighbourhood associations being consulted in housing, transport, park or planning developments. An Office of Neighborhood Associations was founded in 1974 to co-ordinate neighbourhood programmes with the Planning Department and the Development Commission. The Portland neighbourhood participation programme is particularly

interesting because it incorporates several best practice features aimed at increasing citizen involvement. These include funding and tax exempt status for neighbourhood associations, training programmes for activists, early notification processes for major projects and the active co-operation of top city officials (Adler and Blaker 1990, p. 37). The measures have helped to equalise the capacity to participate across the city (with the partial exception of North Portland), despite significant ethnic, demographic and socio-economic variances.

An original proposal to have six district-level organisations to provide an upper tier of co-ordinating groups with full time staff was rejected, but over time six District Coalition Boards have been organised by the neighbourhood associations themselves, stimulated and staffed by City Hall. Following problems with and citizen opposition to a major redevelopment proposal in 1979 the city adopted new procedures for managing redevelopment projects in the waterfront half of the downtown, to allow extensive citizen involvement in defining the development concept and to provide selection criteria in order to make the final decision technical rather than political or purely aesthetic. It is standard practice for neighbourhood associations to receive notices of changes in zoning or conditional use permits, and the District Boards provide expertise and resources to facilitate responses.

Portland has established one of the most participative planning systems in the USA. The City Planning Department is reported to spend up to 70 per cent of its budget on public meetings and consultation. Its plan-making is a very expensive activity (for example, $1.6m for the 1988 City Centre Plan; $1m for the 1993 Albina plan; see below) and a very time-consuming process. The 1972 and 1980 Downtown Plans both benefited from extensive public participation by neighbourhood associations and citizen groups. The 1980 plan introduced the idea of an overall Citizen Steering Group and Functional Advisory Committees to tackle individual policy areas like urban design, transportation, environment and culture.

The 1988 plan was initiated in 1984 by a city commissioner Margaret Strachan on the basis of maximum citizen participation and minimum professional input. She set up a 15-person voluntary citizen steering committee which hired its own small professional team. Through a series of sub-committees involving a further 108 individuals, the teams produced a draft plan backed by 65 research reports and the inputs of over 10 000 individuals over a three-year period (Keating and Krumholz 1991, p. 148). When Strachan failed to be re-elected in 1986 the City's Planning Bureau was given the task of completing the plan, which it did in two months, including negotiating its terms of reference and the necessary political compromises. While the design content and strategic vision of the plan are exemplary from a professional planner's perspective, it is worth noting Strachan's disappointment with the failure of the plan to 'broaden the traditional land use focus of comprehensive plans' (Oliver 1989).

As regards design review the city had de-politicised and institutionalised it with the creation of a Design Review Commission to enforce downtown design guidelines adopted in 1980, and a Willamette River Greenway review process had also been established. During the 1980s, three additional districts for special control were

designated and design review was extended to three districts on the edge of the downtown (see Fig. 32).

Abbott emphasises the way in which the city has routinised and de-politicised the cause of urban design.

> The urban design bureaucracy . . . operates within fixed and understandable rules, it gathers data before action, and it relies on trained specialists. To a substantial degree it treats all persons alike on the merits of their development proposal. This process of rationalisation has channelled the high level of public interest that was apparent by the 1970s into a series of accepted procedures that have so far proved capable of implementing a broad community consensus (Abbott 1991, p. 15).

The Central City Design Guidelines

Turning now to the city's interventions and achievements in the field of urban design, Portland is renowned for its Central City Design Guidelines. Widely copied and imitated, and a model of clarity and simplicity, these have a very interesting genesis. They originated in the 1971 draft Downtown Plan as five of thirteen general policy goals embracing historic preservation, open space, waterfront enhancement, building density control and visual image issues, all linked with the objective of creating a vital pedestrian environment.

The current guidelines were refined by the city planning director, Michael Harrison, who has been with the Planning Bureau for twenty years. Harrison wrote a thesis (entitled The Identity of Place) in the mid-1970s as part of his masters degree at the University of Oregon. It was his response to the vagaries of the design review process, and it developed 28 design guidelines to determine the acceptability of projects. Inspired by Christopher Alexander's then current work on the University of Oregon campus (*The Oregon Experience*, 1977), armed with a pre-publication copy of Alexander's *A Pattern Language* (1977), and inculcated with the Architecture Faculty's emphasis on 'fit' and 'context', Harrison tailored his guidelines to fit Portland's personality and character. Other influences were clearly Kevin Lynch, Jane Jacobs and William H. Whyte. Harrison refined his guidelines when he began working for the city planning department. Repeatedly modified by public debate and control practice over the years, they were reduced to 21 guidelines in 1980, when they were rewritten to consider 'the street level perspective of a visitor or office worker', and then increased to 26 in 1988. They are most easily summarised by reference to the checklist which is now used to assess each project in the city centre, and which stands as a testament to the relevance of Harrison's original project (Fig. 34).

Central City Fundamental Design Checklist

The checklist is divided into three topics—personality, pedestrian emphasis, and project design. Closer examination tends to suggest that there are only two factors,

context and public realm, a view which is confirmed by some Portland planners. Nonetheless, on reflection, the three sections emphasise a well-organised and logical evaluation process that starts by establishing the potential contribution of the development to Portland's urban design framework, then emphasises its necessary contribution to the development of the pedestrian environment, and concludes by ensuring that the project design is both sensitive to the immediate architectural character of the locality, and creates appropriate amenities for the area.

The 26 guidelines are elaborated in one or two sentences as general principles to be observed in new development design. They eschew detail and technical language and leave the developer and architect free to interpret an appropriate response (Fig. 35). The tone is always positive and the objective clear. Among the most interesting and concise guidelines are those relating to architectural compatibility and detail. The guidelines are phrased in a way that befits a more positive climate of public consensus and public-private partnership, but the policies are backed by a panoply of zoning regulations to help ensure an appropriate scale of development.

Central City-wide Fundamental Design Guidelines

The goals and objectives of Central City Design Review are:

- Encourage urban design excellence in the Central City.
- Integrate urban design and preservation of our heritage into the process of Central City development.
- Enhance the character of Portland's Central City districts.
- Promote the development of diversity and areas of special character within the Central City.
- Establish an urban design relationship between the Central City districts and the Central City as a whole.
- Provide for a pleasant, rich and diverse pedestrian experience in the Central City.
- Provide for the humanization of the Central City through promotion of the arts.
- Assist in creating a 24-hour Central City which is safe, humane and prosperous.
- Assure that new development is at a human scale and that it relates to the character and scale of the area and the Central City.

Design Guideline Categories

The Fundamental Design Guidelines focus on three general categories:

A. **Portland Personality** – Establishes Portland's urban design framework
B. **Pedestrian Emphasis** – Emphasizes people and walking
C. **Project Design** – Assures that each development is sensitive to both Portland's urban design framework and the users of the city.

(see over)

Fig. 34 Portland: Central City Fundamental Design Guidelines and Checklist (1992)

Project: _____

Case File No.: _____

Date: _____

Applicable	Does Comply	Does not Comply	
			A. PORTLAND PERSONALITY
☐	☐	☐	A1 Integrate the River
☐	☐	☐	A2 Emphasize Portland Themes
☐	☐	☐	A3 Respect the Portland Block Structures
☐	☐	☐	A4 Use Unifying Elements
☐	☐	☐	A5 Enhance, Embelish, and Identify Areas
☐	☐	☐	A6 Re-use/Rehabilitate/Restore Buildings
☐	☐	☐	A7 Establish & Maintain a Sense of Urban Enclosure
☐	☐	☐	A8 Contribute to the Cityscape, The Stage, & the Action
☐	☐	☐	A9 Strengthen Gateways
			B. PEDESTRIAN EMPHASIS
☐	☐	☐	B1 Reinforce & Enhance the Pedestrian System
☐	☐	☐	B2 Protect the Pedestrian
☐	☐	☐	B3 Bridge Pedestrian Obstacles
☐	☐	☐	B4 Provide Shopping & Viewing Places
☐	☐	☐	B5 Make Plazas, Parks, & Open Space Successful
☐	☐	☐	B6 Consider Sunlight, Shadow, Glare, Reflection, Wind & Rain
☐	☐	☐	B7 Integrate Barrier-Free Design
			C. PROJECT DESIGN
☐	☐	☐	C1 Respect Architectural Integrity
☐	☐	☐	C2 Consider View Opportunities
☐	☐	☐	C3 Design for Compatibility
☐	☐	☐	C4 Establish a Graceful Transition between Buildings & Public Spaces
☐	☐	☐	C5 Design Corners that Build Active Intersections
☐	☐	☐	C6 Differentiate the Sidewalk Level of Buildings
☐	☐	☐	C7 Create Flexible Sidewalk Level Spaces
☐	☐	☐	C8 Give Special Attention to Encroachments
☐	☐	☐	C9 Integrate Roofs & Use Rooftops
☐	☐	☐	C10 Promote Permanence & Quality in Development

Fig. 34 (continued)

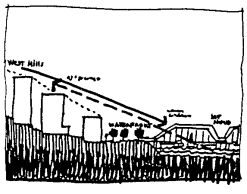
A. PORTLAND PERSONALITY

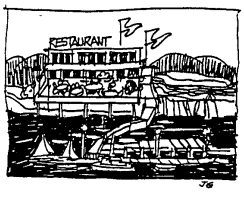
These guidelines reinforce the existing character of Portland's Downtown and Central Eastside Subdistricts. The guidelines also look to the maintenance of this character as the city expands along the river on the west side and as the Lloyd Center/Coliseum Subdistrict redevelops.

A1. Integrate the River

Integrate the river as an important design consideration in projects which are located along or near the edge of the Willamette River. This can be done through means such as the composition of architectural and landscape elements, location of windows, doors and attached outdoor areas, and provision of accessways for the pedestrian to, along, and from the water's edge.

Improve the bridges across the Willamette River for the pedestrian with convenient bridge-head connections, safe and pleasant lighting systems and comfortable walkways in a manner which improves the bridge appearance and facilitates access between Downtown and the Eastside.





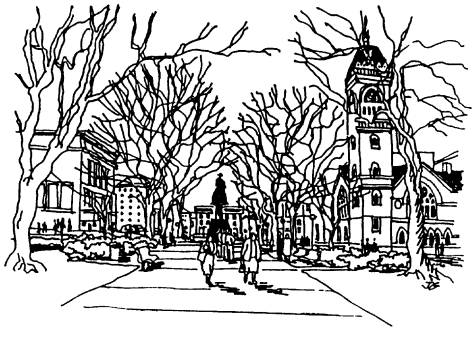
A2. Emphasize Portland Themes

Incorporate Portland related themes into a project design, where appropriate.

A3. Respect the Portland Block Structures

Maintain, and where appropriate, extend the traditional 200-foot block pattern and preserve the ratio of open space to buildings that it produces.

Where the superblock is employed, locate driveways and pathways in a manner which reflects the traditional block pattern, including elements such as galleries and public passages to accommodate the pedestrian. Locate high rise structures in a manner which respects the traditional block grid.



The South Park Blocks were established when Portland was founded. Park Blocks have been enhanced and continue to be one of the City's assets. The Central City Plan calls for the creation of new Park Blocks to achieve a continuous landscaped strip from the South Park Blocks to Willamette River.

A4. Use Unifying Elements

Strengthen the continuity of the Central City by using existing elements and/or adding new elements that unify and connect individual areas.

A5. Enhance, Embellish and Identify Areas

Enhance the identity of Special Districts by incorporating small scale features that add to the District's identity and ambiance. Embellish with elements that build district character and respect district traditions.

A6. Reuse/Rehabilitate/Restore Buildings

Reuse, rehabilitate, and restore buildings and building elements, where appropriate.

A7. Establish and Maintain a Sense of Urban Enclosure

Define public rights-of-way in a manner which creates and maintains a sense of urban enclosure.

A8. Contribute to the Cityscape, the Stage and the Action

Contribute to the cityscape by providing a stage for action.

Develop the sidewalk level with as much public use space as possible.

Create frequent views and easy access into internal activity spaces from adjacent sidewalks.

Allow the outside of the building to reflect important internal spatial qualities and activities such as atriums, grand entries, office, residential and retail.

A9. Strengthen Gateways

Develop or strengthen gateways at locations identified by the Central City Plan.

Creating a sense of enclosure is an important urban design consideration in the core area. Buildings are required to be built up to the property line and greater height is allowed.

Fig. 35 Portland: Central City Fundamental Design Guidelines (1992)

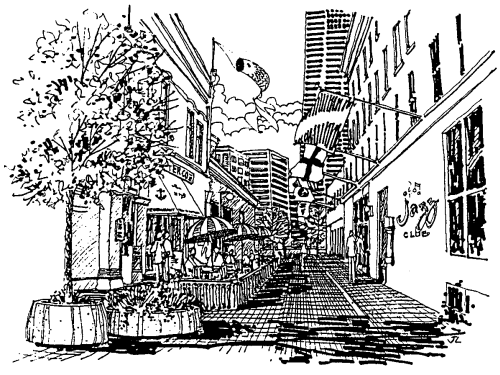
B. PEDESTRIAN EMPHASIS

The emphasis on barrier-free pedestrian movement complements Portland's investments in mass transit, parks and useful street furniture. These seven guidelines conceive of pedestrian movements as a system – sometimes a movement system, sometimes a place to be. The following seven guidelines implement the objectives of a pleasant, rich and diverse pedestrian experience:

B1. Reinforce and Enhance the Pedestrian System

Maintain an attractive access route for pedestrian travel where a public right-of-way exists or has existed.

Recognize the different zones of a sidewalk: curb, street furniture zone, walking zone, and window shopping zone.



Where appropriate, develop pedestrian routes through sites and buildings to supplement the public right-of-way. Provide an attractive, convenient pedestrian accessway to building entrances.

Integrate an identification, signage and lighting system which offers interest, safety, vitality and diversity to the pedestrian.

B2. Protect the Pedestrian

Protect the pedestrian environment from bicycle and vehicular movement.

B3. Bridge Pedestrian Obstacles

Bridge across barriers and obstacles in the Central City by connecting pedestrian pathways with strongly marked crossings and inviting sidewalk design.

Buildings should be stair-stepped height to eliminate casting shadows on public spaces

B4. Provide Stopping and Viewing Places

Increase the pleasure of the Central City experience by providing safe, comfortable places where people can visit, meet, stop and rest without conflicting with other street uses.

B5. Make Plazas, Parks and Open Space Successful

Plazas, parks and open space should be inviting and maximize opportunities for public use. These spaces should be well defined, friendly, accommodating, and create a secure environment. Such areas should be oriented to receive sunlight, work well with pedestrian circulation patterns, and accommodate special events to make them successful.

B6. Consider Sunlight, Shadow, Glare, Reflection, Wind and Rain

Locate and design buildings with consideration given to the effects of sunlight, shadow, glare, reflection, wind and rain on pedestrians.

Maximize the amount of direct and indirect sunlight reaching adjacent public spaces, and avoid the creation of public spaces that are in shadow most of the time.

Avoid glare, but consider the advantages of reflected sunlight and reflected views.

Whenever possible, provide weather protection for the pedestrian at the ground level.

B7. Integrate Barrier-Free Design

Accommodate access for people with physical limitations in a manner that is integral to the building and is not designed merely to meet minimum building code standards.

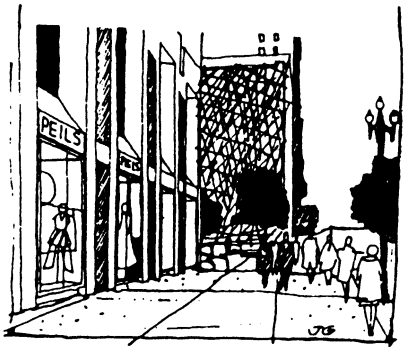


Fig. 35 (continued)

C. PROJECT DESIGN

Project design guidelines call attention to traditional concerns for architectural integrity, compatibility, and permanence and quality of materials. Also, special attention is given to the relationship of the building to adjacent streets and public spaces.

CI. Respect Architectural Integrity
Exterior modification of an existing structure should respect the original character of the building. Additions to existing buildings are encouraged to be compatible in size, scale, color, material and character with the existing building.

New buildings and building elements such as roofs, entrances, signage and lighting should be designed to form a cohesive composition.

C2. Consider View Opportunities
Create new viewing opportunities through the situation of windows, entrances, and adjacent exterior spaces as they relate to surrounding points of interest and activity.

C3. Design for Compatibility
Achieve design compatibility between new and existing buildings by using a design vocabulary that adds to the identity and character of an area.

C4. Establish a Graceful Transition Between Buildings and Public Spaces
Provide a harmonious relationship and graceful transition between private projects and public spaces. Incorporate features which respond to the character of adjacent public space.

C5. Design Corners That Build Active Intersections
Building corners at intersections should consider the intersection as a single space and reinforce it as an activity area.

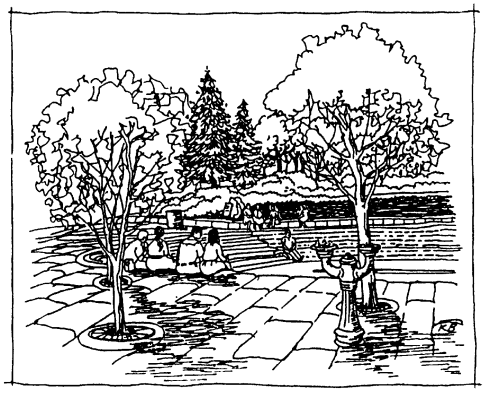
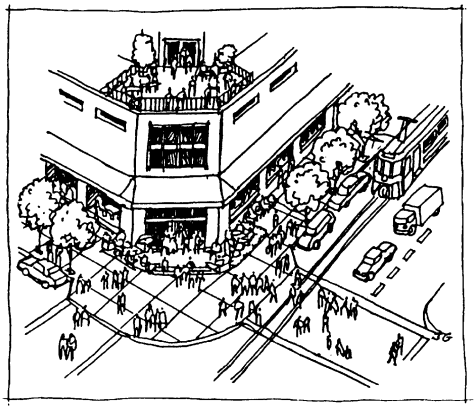


Fig. 35 (continued)



Active sidewalk corners can add vitality to the urban experience. Buildings with angled corners create attractive entryways. A change of sidewalk levels, lots of display windows, landscaping and outdoor dining and seating add excitement and a 24-hour use of Downtown sidewalks. Rooftop activity and viewing areas are also encouraged in the Urban Design Guidelines.

Emphasize intersection activity by creating pedestrian access at building corners.

Use elements such as awnings, canopies, marquees, signs, vending operations, kiosks, and entrances to celebrate these intersections.

C6. Differentiate the Sidewalk Level of Buildings
Differentiate between the building facade at the sidewalk level and the floors above.

C7. Create Flexible Sidewalk-Level Spaces
Maintain the opportunity and flexibility to accommodate active uses adjacent to sidewalks and plazas.

C8. Give Special Design Attention to Encroachments
Skybridges are discouraged. Where necessary, they should be visually transparent, level and unobtrusive. When designing permitted structures over the public right-of-way, preserve significant views, ground-level pedestrian pathways and provide usable pedestrian places below.

When objects such as public art or street furniture are placed within the public right-of-way, they should be situated and designed in a manner which contributes to the pedestrian experience without creating an obstruction.

C9. Integrate Roofs and Use Rooftops
Integrate roof shape, surface materials, colors, mechanical equipment and other penthouse functions into the total building design. Roof terraces and gardens are encouraged.

CI0. Promote Permanence and Quality in Development
Use building materials and design features that promote permanence, quality and delight.

The 1988 Central City Plan

The 1988 Central City Plan was a update of the 1972 plan extended to include nearly as much land again on the eastern side of the Willamette River. The vision statement respects the basic principles of the 1972 plan, as do the twelve general and eight district policies, while design review now encompasses the major commercial districts on the east side of the river. Although the plan designated three new historic districts, quadrupled the coverage of building line requirements and revised FARs and building heights, essentially it only refined the principles and design concept that had been set out in 1971. The principles were less explicit, but the objectives, actions and overall urban design concepts were expressed in a very simple and imaginative way. A single objective was elaborated with up to six more precise objectives; an action chart identified a set of projects, programmes and development of regulations with timings and agencies (Fig. 36). A clearly expressed design framework gave the policies and objectives a clear spatial structure that is essentially a vision of the desired future (Fig. 37).

To express these design frameworks Portland planners worked hard on developing a coherent notation for conveying urban design ideas spatially, something that academics have often failed to do by resorting either to over-elaborate or extremely partial systems. The question of an appropriate notation is one of Michael Harrison's current interests, recognising its value as a means of communication between professionals and their public. He has combined ideas from Lynch, Alexander, Sommer, Asihara and others, but readily admits to the need for more sustained development and refinement of his concepts (Fig. 37).

The 1988 Plan develops the same two-page format for each of eight sub-districts that make up the downtown area, identifying key projects and programmes and allowing the more precise definition of initiatives, while still projecting a clear concept of the design framework for the locality (Figs 36 and 37). Thus the sub-district plans articulate a vision for the area that embraces three-dimensional form, land-use patterns and public space networks, while the design policies and the city's design programmes constitute firm commitments to control, action and enhancement.

Portland's Developer's Handbook: a user-friendly guide to design excellence

The 1988 Central City Plan has been recast as the *Central City Developer's Handbook* (1992). This is a remarkable document, a user-friendly summary of the various plans, policies, legal requirements and processes which control development and which aims to address the key questions for developers and to simplify the permit granting process. It is organised in such a way as to take the developer through the different processes and procedures that constitute the land-use/development review process. It parallels the procedures of the Bureau of Planning in reviewing development applications (Fig. 2). Its 160 pages, printed in large type and spiral bound in a legal folio format, are remarkably well designed, and are clearly illustrated with line drawings, diagrams and maps on almost every page. It was prepared (in the wake of the new 1988 Central City Plan) in order to explain how the

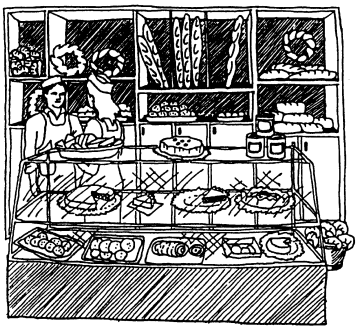
POLICY 14. DOWNTOWN

Strengthen the Downtown as the heart of the region, maintain its role as the preeminent business location in the region, expand its role in retailing, housing, and tourism, and reinforce its cultural, educational, entertainment, governmental and ceremonial activities.

FURTHER:

A. Maintain and implement the Downtown Plan as a part of the Central City Plan.

B. Continue to actively foster the growth and attractiveness of the Downtown, enhancing its competitive position over other commercial areas in the region.



Saturday Market Shoppers. The market is recognized by the Plan as a major attraction.

ACTION CHART

#	PROPOSALS FOR ACTION	TIMING: ADOPT WITH PLAN	TIMING: NEXT FIVE YEARS	TIMING: SIX TO 20 YEARS	POSSIBLE IMPLEMENTING AGENCY	INDEX TO ACTION DETAIL
	PROJECTS					
D1	Widen sidewalks and make improvements between SW Salmon and Ankeny for Park Block connection to provide pedestrians wider sidewalks, street trees and other improvements.		++++		PDC/Parks	P 98
D2	Improve S.W. Ankeny, Harrison, Main, Morrison and Lincoln as pedestrianways.		++++		PDOT/PDC/LID	
D3	Extend Waterfront Park to the west under the Morrison Bridge and establish a botanical garden, conservatory or aviary; study removing Front Ave. ramps, lowering/bridging over Front Ave. with open space.			++++	PDC/Parks	
D4	Establish a public park on the block bounded by Park, 9th, Taylor and Yamhill Streets.			++++	PDC/Parks/Pvt.	
D5	Establish a public park, perhaps with parking below, on the block bounded by Park, 9th , Stark, and Oak.		++++		PDC/Parks	
D6	Study the establishment of active uses under the bridge ramps in Waterfront Park.		++++		City Council/Parks/PDC	P 98
D7	Improve S.W. Ankeny Street between 5th and Front Ave. for pedestrians.		++++		PDOT/PDC	
D8	Build Downtown District gateways in locations shown on map.		++++		Pvt.	
D9	Improve S.W. Harrison between 4th and Broadway to formalize connections between the South Auditorium and University Districts.		++++		PDC/PDOT	P 98
	PROGRAMS					
D10	Provide street trees, with priority given to fully developed blocks and pedestrianways.		++++		Parks/Pvt.	
D11	Create financial incentives for infill development.		++++		PDC/Planning	P 98
D12	Establish a cultural district on the South Park Blocks.	++++			PDC/Pvt.	P 98
D13	Preserve the Waterfront Park meadow area for large gatherings.		++++		Parks/Planning	
D14	Reinforce the art gallery area on First and Second Ave. as a cultural development area.		++++		PDC/ArtsComm./Pvt.	
D15	Reinforce Broadway as Portland's theater and bright light district.		++++		PDC/Pvt.	
D16	Encourage Downtown retail businesses to remain open evenings and Sundays.		++++		PDC/Pvt.	
D17	Establish a University District for PSU.		++++		Planning/PSU	P 98

NOTE: Proposals for actions shown on the Action Charts and maps were adopted through City Council Resolution. The projects, programs and regulations listed are a starting place. As studies are undertaken, some actions will need to be amended, or in some cases, replaced with other proposals found to be better or more feasible.

Fig. 36 Portland: Central City Plan: Policy 14: Downtown (1988)

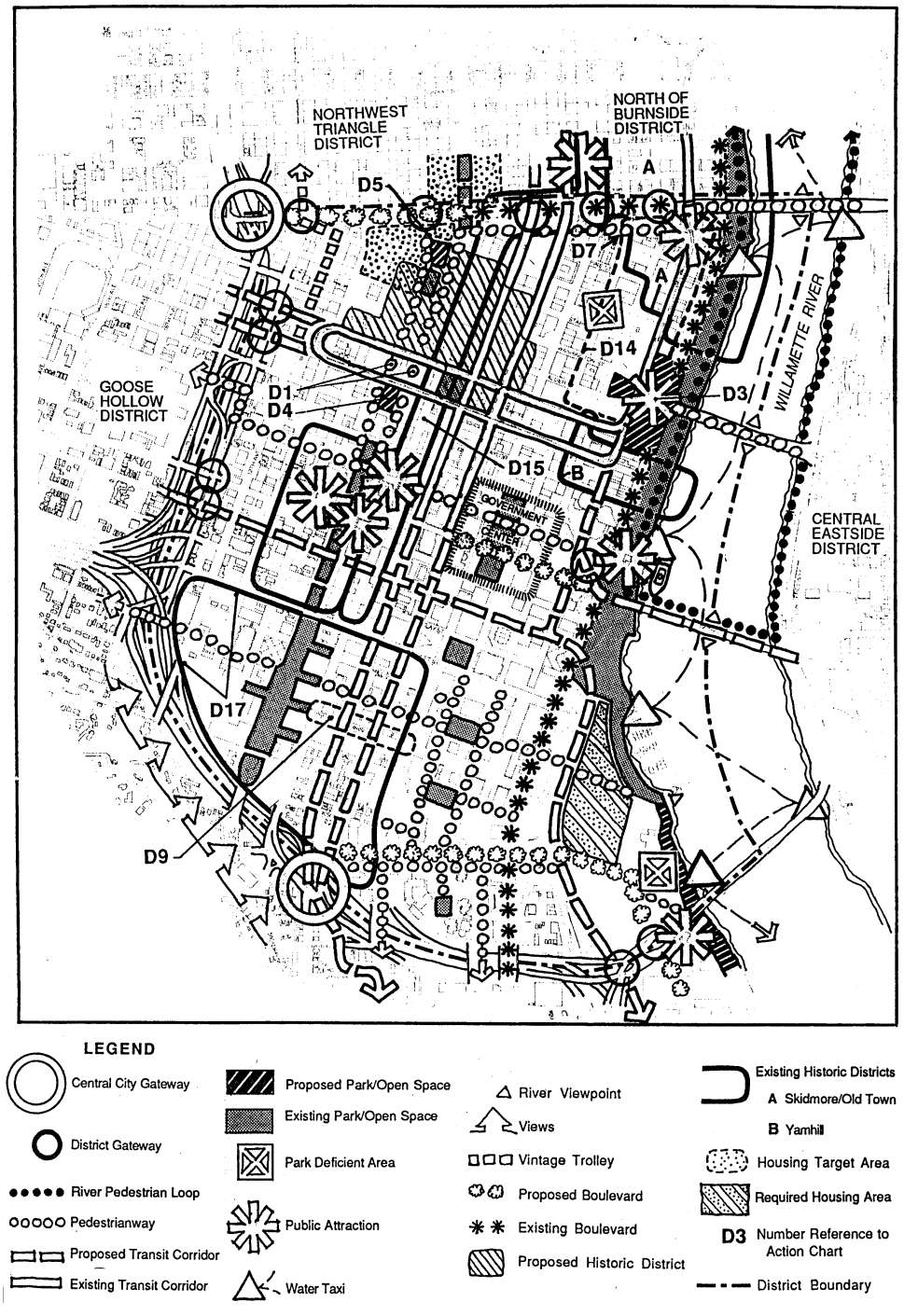


Fig. 37 Portland: Central City Plan: Urban Design Plan and Downtown (1988)

plan related to the zoning code (which was subsequently revised in 1991) with its allowable, prohibited, and conditional uses and development standards, and the transportation regulations, and how each of these impinged upon the pre-application, submission, evaluation, design and appeal processes. It complements the city-wide Development Manual which performs the same function across the built-up area.

A large number of the illustrations in this chapter are drawn from this document including the design checklist (Fig. 34), the design guidelines (Fig. 35) as well as numerous maps and guidelines (Figs 37–41).

The Handbook is worth a close examination for several reasons:

> it explains how a complex series of land-use and transportation regulations and development standards are combined with a process of design and project review to provide a sophisticated system of planning control;
> it tailors these general policies through specific regulations to nine sub-districts in the central area;
> it shows how to present such regulations in an attractive, interesting and positive way in order to make planning comprehensible to its major consumers, and to be as objective as possible.

The ten-step process of development review (outlined in Fig. 2) requires the establishment of the permissible uses, the development standards, the design guidelines (and review procedures where appropriate), the transportation regulations (where appropriate) and the application review process. Each stage is dealt with in a separate chapter, following an introduction which explains the key planning documents and their relationship to the plan. Reference is made both to the overall goal of the plan to encourage investment and maintain the city's attractiveness for work, recreation and leisure, and to the Central City Plan's vision statement, itself an innovation.

The zoning code is explained in a Land Use Regulations chapter which uses a matrix to explain whether uses are allowed, limited, require conditional approval or are prohibited in the nine zones. The regulations also aim to create a continuous open space zone along the river and to protect existing residential districts while retaining both a large central commercial zone and a large employment/ industrial zone east of the river. Maximum and minimum residential densities are set.

The chapter on development standards explains the floor area regulations which are part of the zoning code, but links these to height and other urban design regulations. Height and lot size are controlled by base zone regulations, and signs and pedestrian requirements are set out in various design overlay zones. Meanwhile density, building coverage, setbacks, landscaping and parking are controlled by sub-district regulations. The floor area ratios create a high-density commercial development corridor (from FAR 9:1 to 15:1) particularly well served by the transit (bus) corridor, but they also seek to protect views from the West Hills to Mount Hood, and to step the height of buildings down to the residential districts

and the river (Fig. 38). A bonus system up to a FAR of 3:1 exists as an incentive for the provision of residential uses and amenities in the commercial zone, for the provision of day-care and additional retail space in the retail zone, and for the provision of other pedestrian amenities throughout the city. No development can exceed the maximum height limit (see below). Residential bonuses also operate in employment/industrial zones. The bonus system is particularly directed at securing a one per cent (or better) provision for art, at securing fountains, rooftop gardens, day-care and retail facilities. There are floor area transfers to protect single room occupancy accommodation which is critical to the lowest income groups in the city.

Maximum height limits are set in a very fine-grained way in order to prevent overshadowing of public spaces and to respect historic districts; they also protect scenic view corridors, particularly to Mount Hood to the west and Mount St Helens to the north. There are large bonuses for creating open space and additional residential accommodation.

Certain design oriented regulations apply not only to new developments but also to major remodellings of existing structures. They include :

> required building lines throughout much of the commercial core with permitted setbacks 'designed as an extension of the sidewalks and committed to active uses ... or developed as stopping places';
> 'required retail opportunity areas' which reinforce the continuity of retail display windows over the retail core and the transit corridors;
> superblock regulations which protect pedestrian permeability and require open space creation;
> ground floor window standards (50 per cent of the length and 25 per cent of the wall area) which operate in all commercial and employment areas, although public art may be substituted.

These regulations, along with regulations to discourage right of way encroachments (skywalks, etc.), emphasise Portland's commitment to a lively, surveilled public realm. A variety of other design regulations protect the city's greenways, require parking lot landscaping and the planting of city trees with a species approved by the City Forester.

Part Four of the document explains the city's design review process and its design guidelines. There are guidelines for each sub-district (Fig. 39) (including four Historic Districts: Fig. 40) as well as four general guidelines, so their application is quite complex. Importantly, the handbook emphasises the intention to 'provide a design guidance system that is helpful and flexible but which leads one through a *process* that creates desired results ... (and) ... is an opportunity for applicants to propose new and innovative designs' (Portland 1992, pp. 4–5). The design guidelines and the objectives on which they have been based are illustrated in Figs 34–5.

Historic landmarks (about 100) and historic districts (Fig. 40) are protected by their own district regulations and design review processes undertaken by the Historic Landmarks Commission, advised by Historic District Advisory Boards.

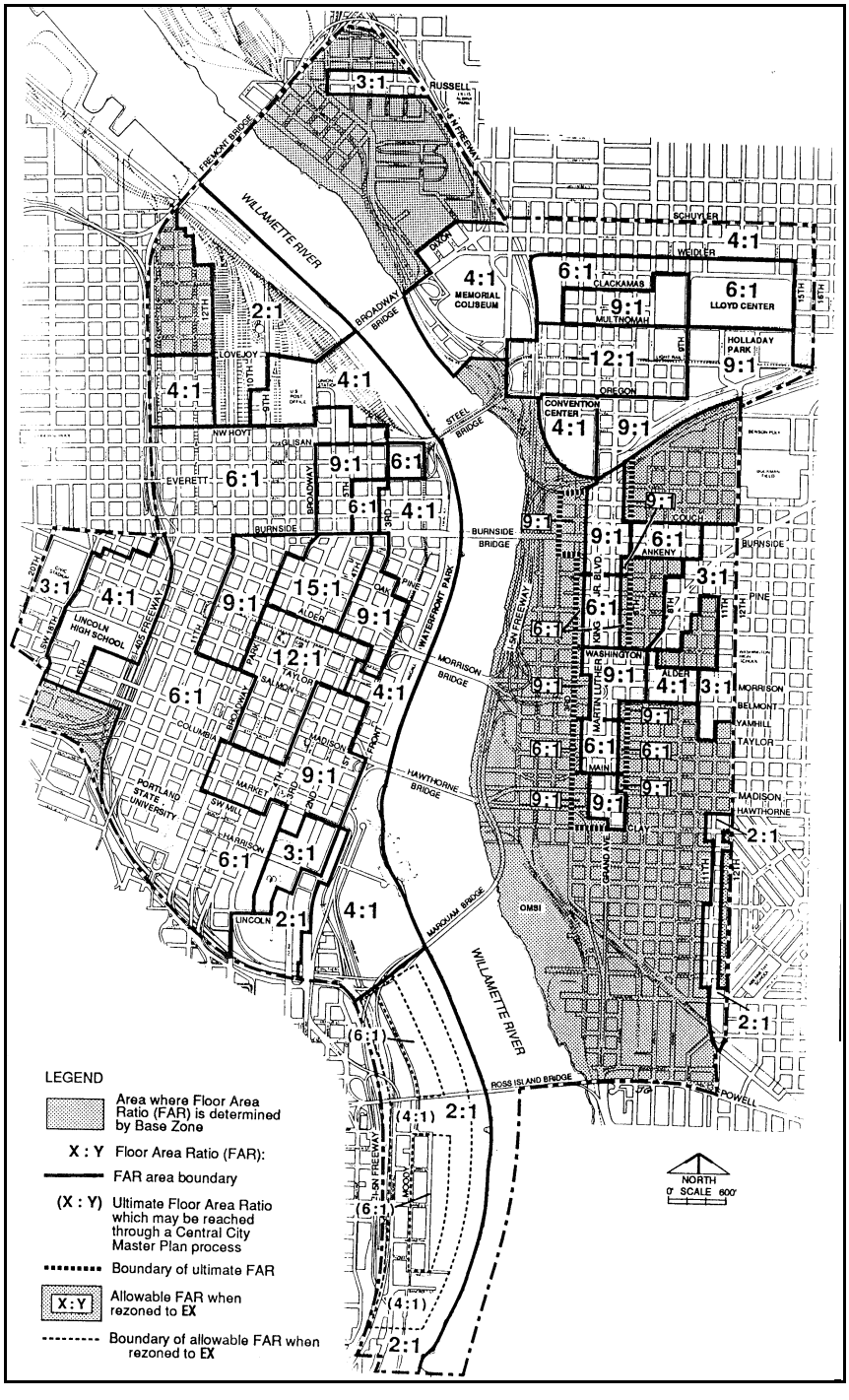


Fig. 38 Portland: Central City Plan: Maximum Floor Area Permitted (1988)

USE OF DESIGN GUIDELINES

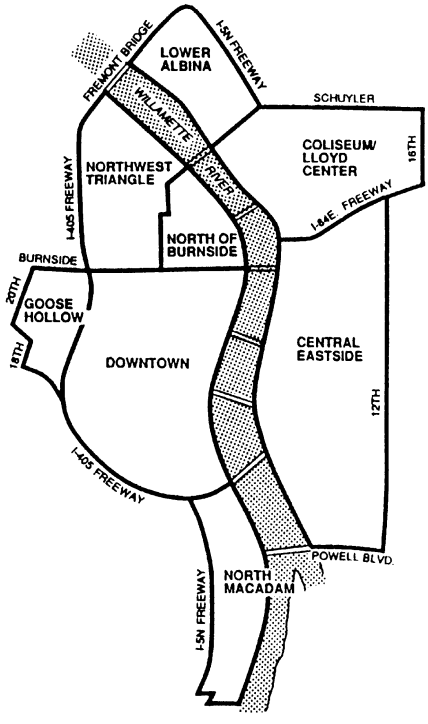
Design Guidelines work differently than the Land Use Regulations or Development Standards stated in the Zoning Code. Design Guidelines provide a design guidance system that is helpful and flexible but which leads one through a *process* that creates desired results. Design Review also provides a means of granting adjustments to many of the Zoning Code Development Standards.

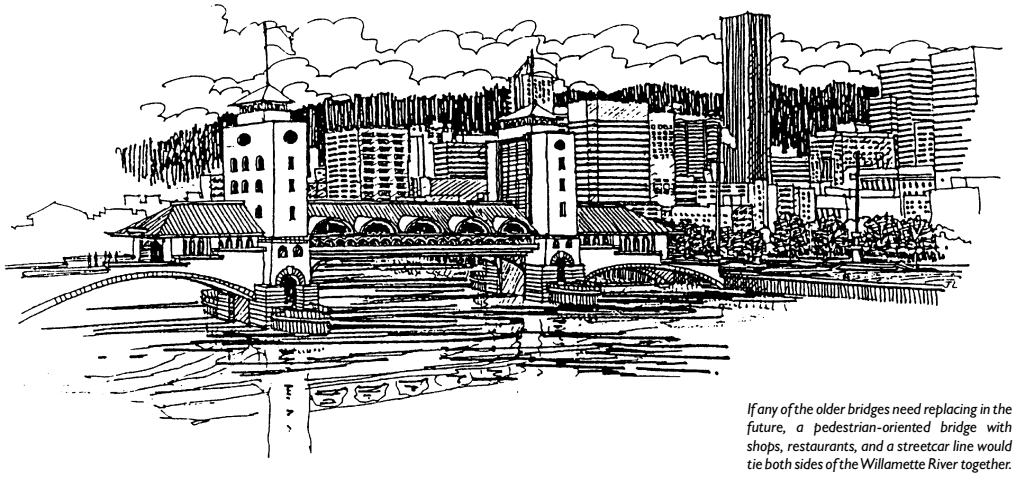
> *The City characterizes the guidelines as follows:*
> *They are to be used to coordinate and enhance the diversity of activities taking place in the Central City. Many ways of meeting a particular guideline exist. Since it is not the City's intent to prescribe any specific design solution, the Design and Historical Landmarks Commissions encourage a diversity of imaginative solutions to considerations addressed by the guidelines.*
>
> *Portland Zoning Code*

The Design Commission may waive individual guidelines for specific projects based on findings that the waiver will better accomplish the goals and objectives for Central City Design Review. Likewise, the Design Commission is not limited to the Design Guidelines in its review.

Design Review goes beyond minimal design standards. Likewise, Design Review is an opportunity for applicants to propose new and innovative designs.

Central City Fundamental Design Guidelines, p. 7





If any of the older bridges need replacing in the future, a pedestrian-oriented bridge with shops, restaurants, and a streetcar line would tie both sides of the Willamette River together.

Fig. 39 Portland: Developer's Handbook and Use of Design Guidelines (1992)

Applicable Design Guidelines by Central City Subdistricts

Central City Subdistricts	[1]Central City Fundamental Design Guidelines	[2]Special Guidelines	Historic District Guidelines
Downtown	Apply to all development in Subdistrict (entire Subdistrict is in the Design Zone).	Downtown Design Guidelines apply for entire Subdistrict, along with more specific guidelines for: • Broadway/Burnside • Park Blocks • South Waterfront	• About half of Skidmore/ Old Town is within the Subdistrict. • All of the Yamhill Historic District. • Potential future Terra Cotta H. D.
Goose Hollow	Apply to part of Subdistrict within the Design Zone.	None at this time. Special Subdistrict Guidelines will be developed in the future.	None.
North of Burnside	Apply to all development in Subdistrict (entire Subdistrict is in the Design Zone).	Downtown Design Guidelines apply for entire Subdistrict along with more specific guidelines for: • Chinatown • Park Blocks	• About half of Skidmore/ Old Town H.D is within the Subdistrict. • Proposed Chinatown H.D., (Downtown D.G.'s apply temporarily).
Northwest Triangle	Apply to the part of Subdistrict within the Design Zone.	Downtown Design guidelines apply for areas within boundary shown on Figure 4-3, along with more specific guidelines for: • N. Park Blocks	13th Avenue Historic District (Guidelines pending)
Lower Albina	Apply only to the part of Subdistrict within the Design Zone (Russell Street area).	None	Potential Future Russell Street Historic District
Lloyd Center/ Coliseum	Apply to the part of Subdistrict within the Design Zone.	Lloyd Center/Coliseum Subdistrict Design Guidelines, apply in area within Design Zone.	None
Central Eastside	Apply to part of Subdistrict within the Design Zone.	Central Eastside Subdistrict Design Guidelines.	East Portland/Grand Avenue Historic District (Guidelines pending).
North Macadam	Apply to all development in Subdistrict (entire Subdistrict is in the Design Zone).	North Macadam Subdistrict Design Guidelines (adoption pending).	None

[1]Central City Plan Fundamental Design Guidelines apply only to those areas within the Design Zone (See Figure 2-1 or 2-3 for location). Areas not currently in the Design Zone but eligible for upzoning to a Comprehensive Plan designation, will become subject to Central City Fundamental Design Guidelines and other Subdistrict Guidelines at the time of the zone change.

[2]All Subdistricts but Goose Hollow have areas designated as part of the Willamette Greenway Zone, shown on Figure 4-1. See Willamette Greenway Plan (1988) for guidelines.

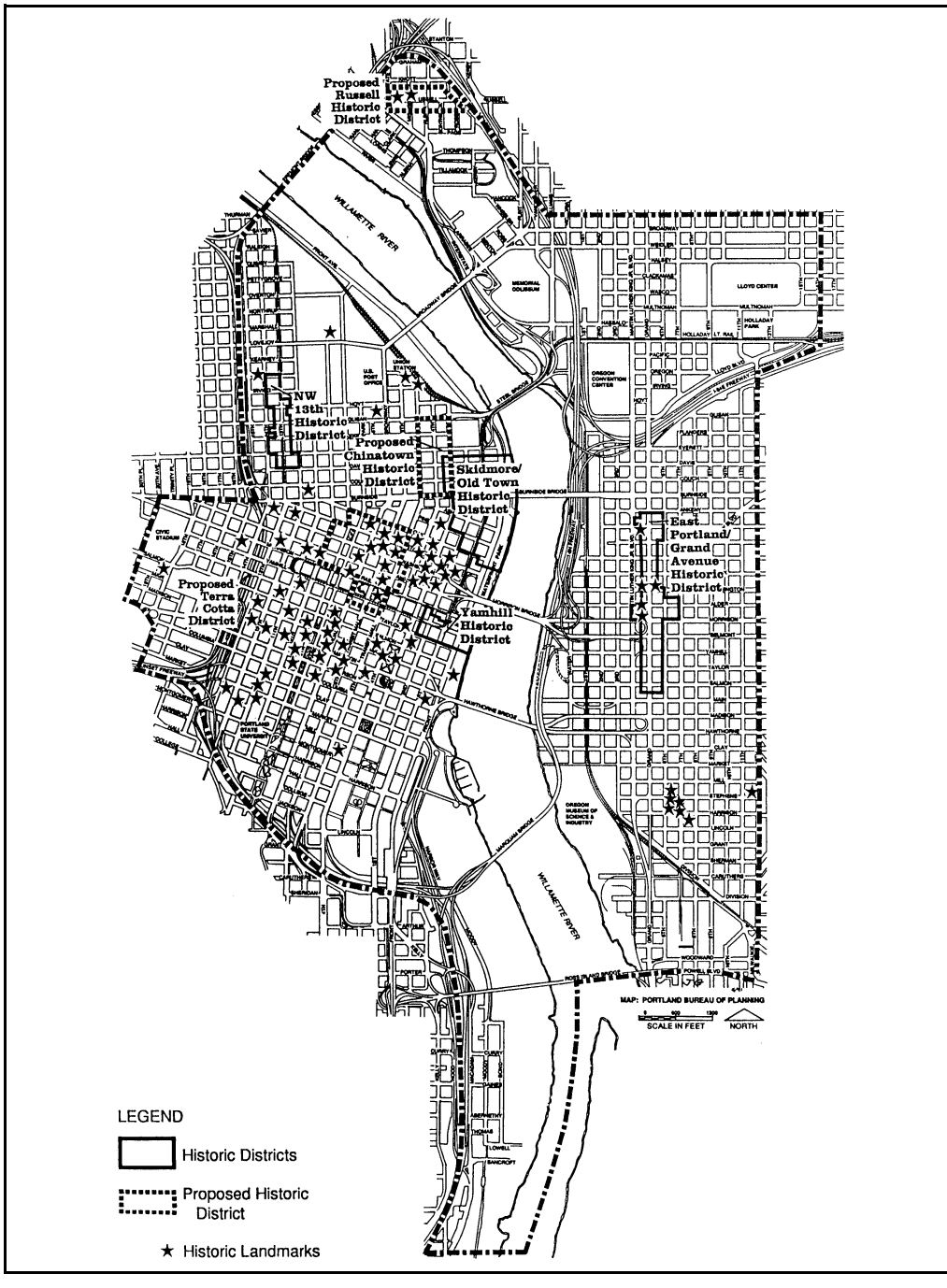


Fig. 40 Portland: Central City Plan: Historic Landmarks and Districts (1988)

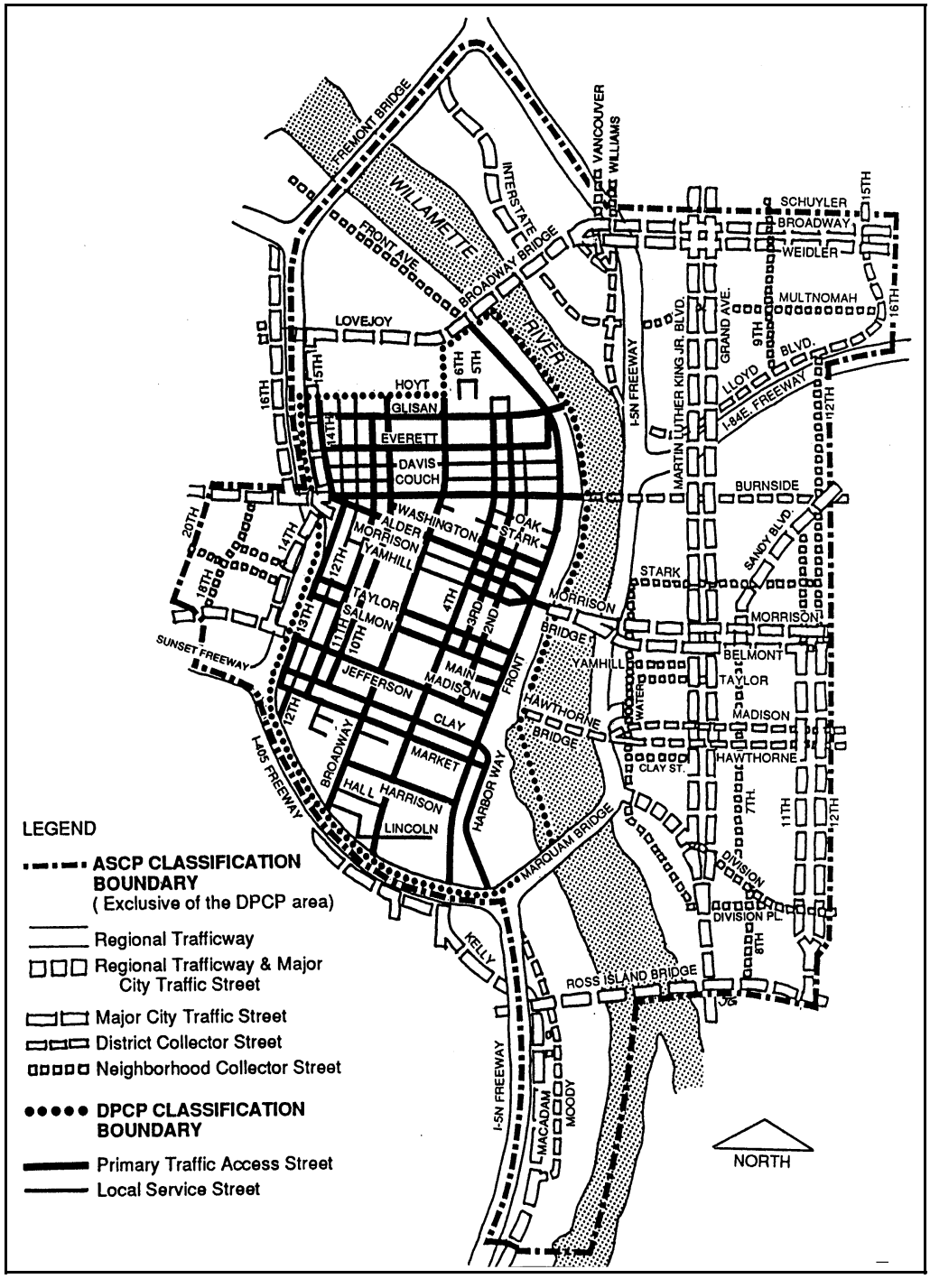


Fig. 41 Portland: Central City Plan: Traffic Street Classifications (1988)

The regulations include a 150-day demolition delay and various tax incentives and grants, while each district has its own guidelines (and most have a development plan) covering very detailed aspects of elevations and materials (see discussion of East Portland below). It is intended to create three more such districts.

Transportation regulations draw together the Downtown Parking and Circulation Policy and the Arterial Streets Classification Policy (ASCP) (Fig. 41) to classify streets, to indicate their present or future function and their specific implications for project design (for example what loading might be permitted, what provisions for cycling or pedestrians will be necessary). These street classifications ensure that project design extends beyond the building site into the street and the public realm, and they ensure that new development can be properly co-ordinated with other public street improvements when they take place. The classification is elaborate—the ASCP has five types of traffic streets, four kinds of transit streets, as well as bicycle streets and pedestrian streets. Parking regulations complete the picture. There has been some relaxation of the limitations originally imposed to protect air quality, but the policy is designed to encourage visitor parking. New parking lots have to undergo a Conditional Use Review process.

Having summarised the substantive regulations, the Developer's Handbook goes on to describe the project review process with firm deadlines for each stage (Fig. 42). Public hearings in front of the Design Commission are usually required for projects over 1000 square feet or alterations worth over $200 000 throughout the downtown and historic districts, but elsewhere projects of over $1m require review. Smaller applications are dealt with in 34 working days, or 76 days if the decision is appealed. Property owners within 150 feet of the site, neighbourhood and business associates may appeal a decision notice and precipitate a public hearing. An application which requires a public hearing will reach this stage after 51 days with a decision within 120 days, so the process is speedy and efficient as well as being transparent and clearly based on 'findings'.

All hearings follow the same process of city staff presentation of the planning criteria and the project evaluation, the applicants' presentation (a common request from architects in the other planning systems), public testimony, questioning by the hearings officer and a written report. The Design Commission has one member drawn from each of the Planning Commission, Metropolitan Arts Commission and the public at large, and five members representing design or development interests, while the Landmarks Commission has stronger architectural representation.

The Developer's Handbook is only really an index to the complex regulations and the multiplicity of technical documents that carry the actual controls and standards, but it serves to explain the full complexities of regulations and in no small way to justify them. The bad news is that Portland is unlikely to be able to update the document, or repeat it elsewhere, because Property Tax restrictions now make such projects difficult to finance. Nonetheless, the document stands as a testament to a positive planning system that emphasises the importance of encouraging the development industry and business-developers to contribute to the character and vitality of the city, that makes the public an integral part of the control process, and

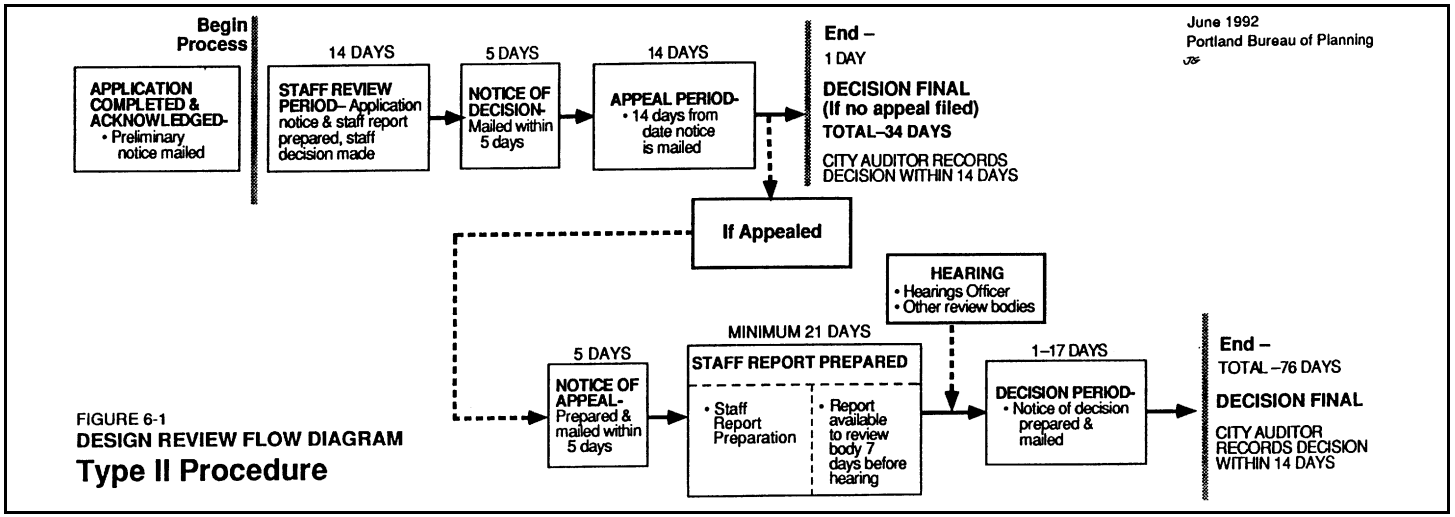


FIGURE 6-1
DESIGN REVIEW FLOW DIAGRAM
Type II Procedure

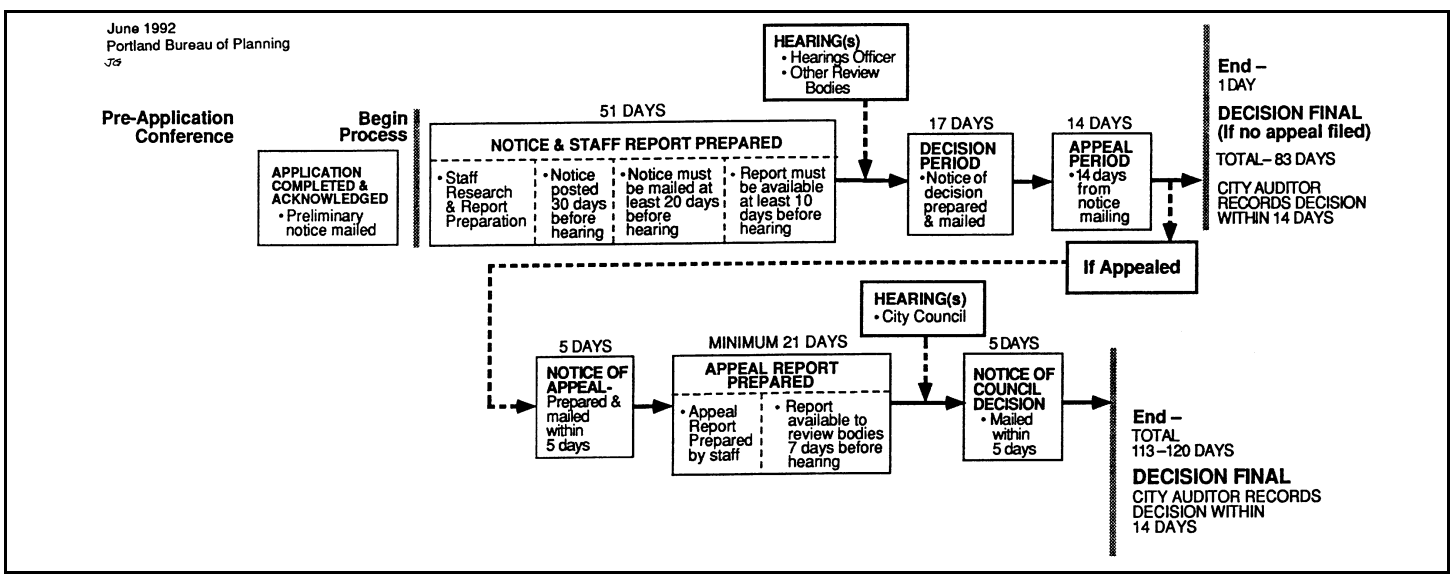


Fig. 42 Portland: Developer's Handbook: Design Review Procedures

that puts urban design at the heart of both its wider vision of the future city and its evaluation of each individual project. As a model for a user-friendly and attractive planning document, it could scarcely be bettered.

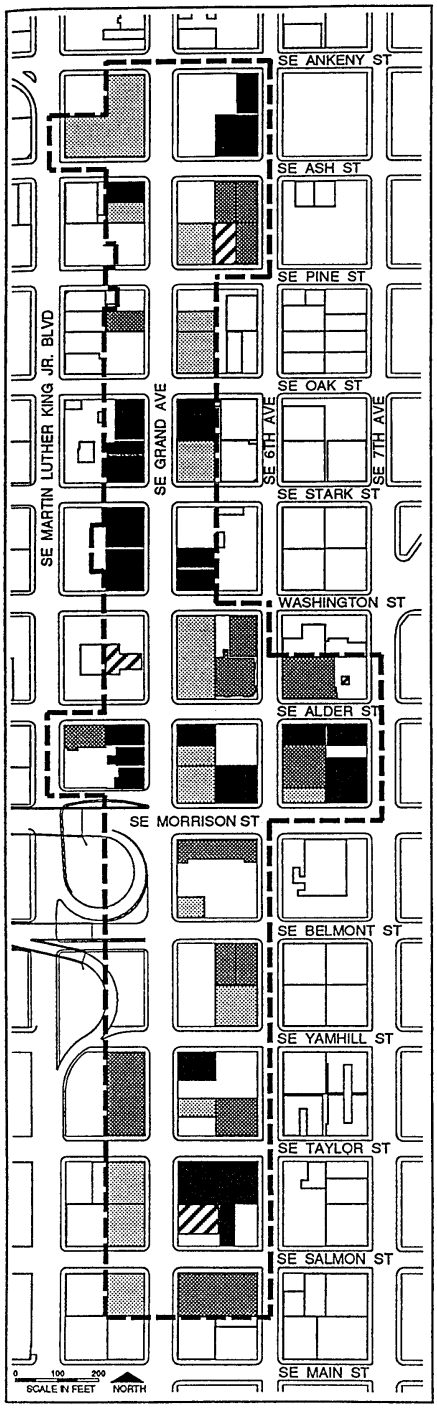
Guidelines in a historic district

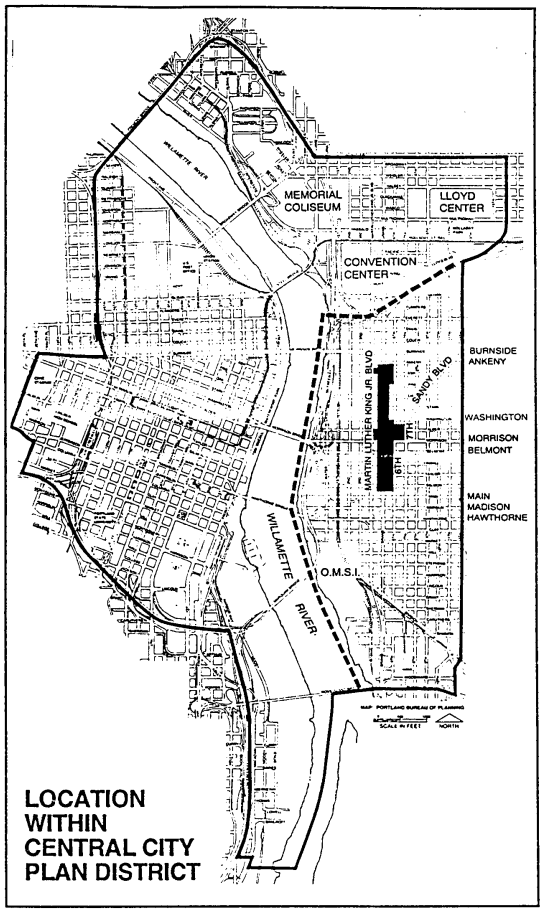
General historic development guidelines prepared in 1988 are now being tailored to individual historic districts, such as those prepared in 1994 for the historic core of East Portland focused on Grand Avenue (Fig. 43). Lying at the heart of a largely industrial and warehousing area with very much secondary commercial uses, and severely affected by a riverside freeway and ramps to the Willamette Bridges, this is a severe test for historic conservation. The old core has about 40 buildings of historic importance, and their eclectic styles, the mix of land uses they house and which exist elsewhere in the area, are considered to be the basis for a 'respectful, opportune, creative and compatible' programme of conservation and revitalisation. A well illustrated context statement outlines the area's history, character, context and setting and discusses how the boundaries of the area were defined using five criteria. Key historic buildings (pre-1930) are identified by property type (function) and ranked according to their historic interest and quality. Historic non-contributing (1883–1930) and non-contributing buildings (post-1931) are also identified.

The guidelines are set within the context of the Central City Design Guidelines (Portland Personality, Pedestrian Emphasis and Project Design). Seven of the 26 guidelines have one or two additional sentences added to tailor them to the localities' particular needs. Two of the 'Personality' guidelines have been significantly elaborated, while five specific guidelines have been added to the area identification and enhancement policy (A5) to emphasise various ideas like reinforcing arcading, and incorporating works of art and water features. The building restoration policies (A6) have been the most elaborated with twenty new guidelines for alterations, new construction, street systems and parking improvements. For alterations, these emphasise factors like size and proportion, materials, rear and side elevations and plant, colour, signs, lighting and canopies. For new construction, building line and ground floor uses, and the handling of parking are added as major considerations. Finally, street and sidewalk improvement guidelines are elaborated, covering landscaping, historic aspects of the floorscape, lighting and 'street embellishments'. These guidelines show the robustness of the Central City Design Guidelines and how they can be adapted and fleshed out in historic districts once the context has been appraised and defined. More importantly, the whole project reveals a determination to pursue design quality in a very run-down part of the inner city and to use conservation as a catalyst for regeneration.

The Albina Community Plan

Portland's latest plan is for the Albina community, a largely low-density residential area north of the downtown, south of the airport, but on the east side of the





LEGEND

- PRIMARY
- SECONDARY
- HISTORIC NON-CONTRIBUTING
- NON-CONTRIBUTING
- HISTORIC DISTRICT BOUNDARY

Building Classifications for East Portland/Grand Avenue National Historic District

Fig. 43 Portland: East Portland Historic District: Building Classifications (1993)

Willamette River, and with the greatest ethnic diversity in the city (Fig. 44). This is the city's first comprehensive planning effort since the Model Cities Programme of the 1970s and it is intended to combat the loss of employment and disinvestment that have resulted from suburbanisation, while improving the environmental quality of the area. Nearly two-thirds of the housing was constructed before 1930 and it constitutes an important stock of affordable housing in a region where only a quarter of the population can afford a detached dwelling. However, it has proved difficult to attract both residential and commercial developers to the area, not least because of the lack of medium to large sites available for development.

The process of plan preparation relied upon three district-wide, eleven neighbourhood and two business association workshops on discrete policy areas in the draft plan. The Planning Commission reviewed the plan in fourteen working sessions with many of the original participants to publish a very much amended draft plan. A final set of hearings, and review by the various city departments and commissions, culminated in an amended plan being adopted in 1993, exactly four years from the original discussions on the planning process.

The plan has a rather imaginative foreword presenting an optimistic description of the community in 2015 when the plan is supposed to be fully implemented. This stresses the creation of a series of business nodes along the main boulevard, industrial concentration, an increase in open space provision, expanded LRT and bus services, and a high quality of design of new development. Other key objectives are an increase in employment opportunities, community services and neighbourhood diversity, and improved community policing. These emphasise the plan's comprehensive character. The plan itself has little to say about design, but has a strong emphasis on improved transport, business growth and development, jobs and employment, affordable housing and public safety. Land use policies seek to ensure reduced emphasis on the automobile and improved viability of neighbourhoods through reinforcing neighbourhood centres, sensitive infill and the elimination of nuisances. 'A Pattern of Green' marks an attempt to create a green framework in the area, but an improved pedestrian environment on selected streets is all that might be achieved. A chapter on Environmental Values picks up the issue of a parks master plan and the need for improvements to existing parks, but does not propose any new open spaces. The housing policies create an alternative design high-density zone that relaxes the rules both for creating accessory rental housing, and for infill development, and gives density bonuses for meeting design standards, thus providing direct incentives for good design and for affordable housing.

Design policies are largely confined to a chapter on Community Image and Character which seeks to build a positive identity for the area through arts and culture, celebrating the area's ethnic diversity, urban design and historic preservation (Fig. 45). The design objectives extend the use of Portland design themes into the area, but also seek to develop indigenous themes. They emphasise views to the hills, mountains and rivers, gateways, district focal points and pedestrian pathways. Historic preservation is also stressed. A number of programmes emphasise both cultural and educational initiatives from public art to the development of cultural

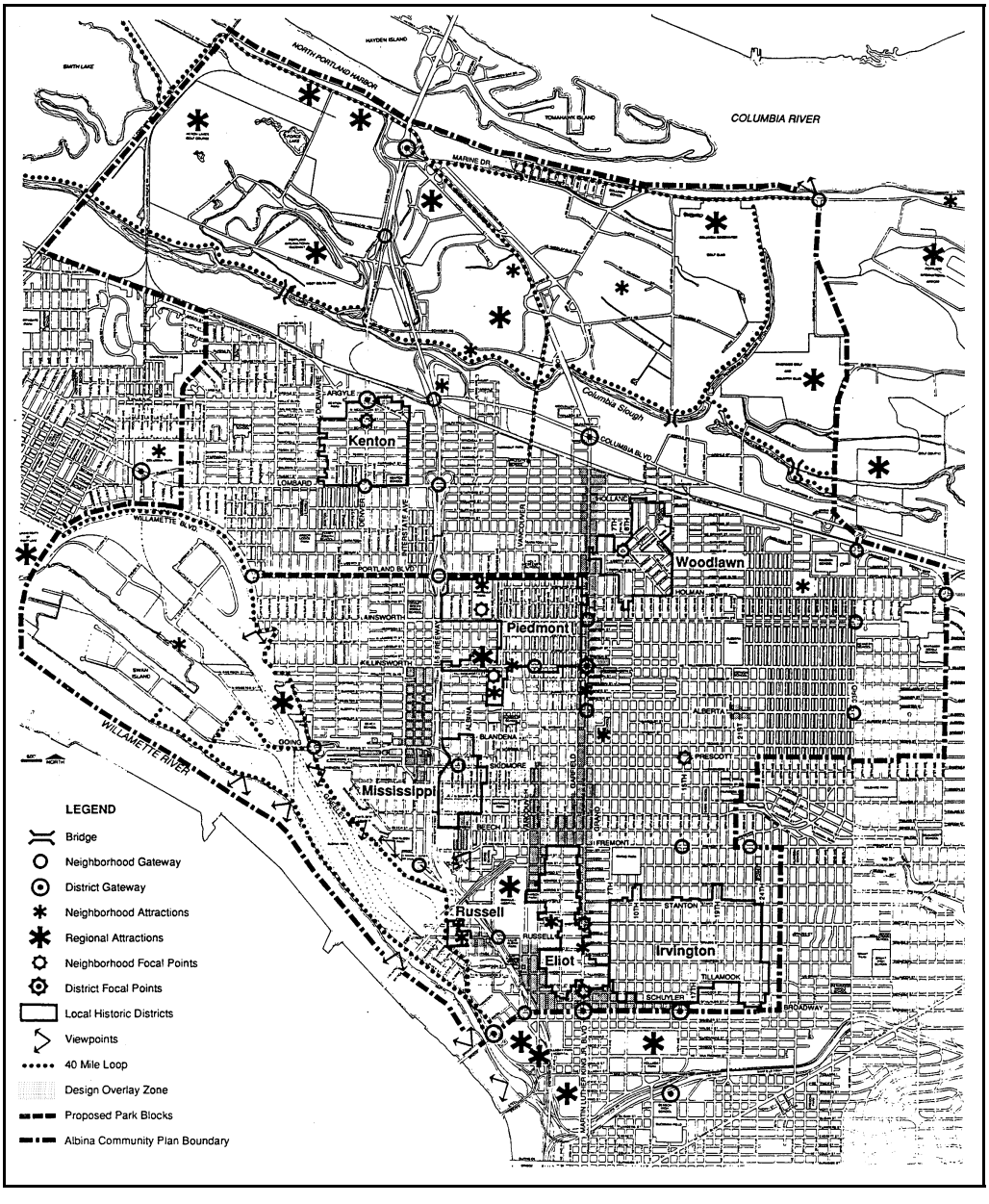


Fig. 44 Portland: Albina Policy IX: Community Identity and Character (1993)

POLICY IX: COMMUNITY IMAGE AND CHARACTER

Build a positive identity for the Albina Community throughout the metropolitan area. Reinforce Albina's identity as a part of Portland and celebrate its special diverse architectural and cultural character. Provide opportunities for people outside of the district to experience the positive characteristics of the Albina Community. Strengthen the Albina Community's sense of place through the promotion of its art, history and culture.

Policy A: Arts and Culture

Encourage private and public organizations to participate in activities and actions that create a sense of identity and community among those living and working in the Albina Community. Promote the importance of art as a means for community pride, involvement and revitalization.

Objectives:

1. Celebrate the ethnic diversity of the Albina Community through multicultural fairs, murals as community art, visual and performing arts, and other community-based cultural events and programs.
2. Explore opportunities to develop and sell arts-related products that reflect the community's ethnic diversity, promote the arts of the area, and provide a dedicated stream of funds to support artists.
3. Encourage Albina Community neighborhood associations, institutions and business groups to participate and support neighborhood cultural activities.
4. Encourage the neighborhood associations and real estate community to market the arts and culture of the Albina Community to new and prospective residents, local visitors and tourists.
5. Make efforts to inform the larger community about the range of multicultural activities in the Albina Community.
6. Involve children in activities that celebrate and provide information about the art, history, and culture of Portland's ethnic communities.
7. Promote the use and rehabilitation of underutilized cultural centers, clubs, schools, theaters and other structures originally designed for community gathering activities.

Policy B: Urban Design

Improve the physical appearance of Albina. Enhance the desirable and distinctive characteristics of the Albina Community and its individual residential, commercial and employment districts. Strengthen visual and physical connections to the rest of the city. Mark transitions into neighborhoods and districts. Create a safe and pleasant environment for pedestrians. Strengthen the pattern of green that exists throughout the Albina Community.

Objectives:

1. Extend the use of Portland design themes into the Albina Community as a way to reinforce Albina's relationship to the City of Portland.
2. Develop symbols and design themes unique to the Albina Community's residential, commercial and employment districts that reinforce their positive characteristics.
3. Design and install public improvements that are attractive and responsive to the needs of the area.
4. Protect significant public views that emphasize the district's geographical location in the City of Portland and illustrate its close proximity to water features and surrounding hills and mountains.
5. Establish a hierarchical system of gateways that mark the arrival into Portland, the Albina Community and the district's individual neighborhoods.
6. Foster the creation and enhancement of district and neighborhood attractions and focal points.
7. Create a network of safe, comfortable, pedestrian pathways that link the district's neighborhoods, commercial areas, transit facilities, parks, water features and other attractions.
8. Protect and enhance Albina's historic and cultural characteristics and encourage compatible, quality development.

Policy C: Historic Preservation

Protect the rich historic, cultural and architectural heritage of the Albina Community for its residents, workers and visitors.

Objectives:

1. Preserve the historic resources and spatial patterns that reflect the development of the Albina Community as a separate city and as a part of Portland.
2. Identify and protect the Albina Community's significant historic districts, ensembles, sites and structures and other features.
3. Encourage adaptive reuses of historic properties as long as the historic character of the structures is maintained.
4. Research and promote the historical use of native and ornamental plantings in the historic districts. Extend these plantings outside of historic districts where appropriate.
5. Establish a network of carriage routes that connect the historic areas of the Albina Community.
6. Encourage activities and programs that educate Albina residents about the historical and architectural heritage of their district.

Fig. 45 Portland: Albina: Community Image and Character (1993)

facilities, inventories and documentation of key sites and community history, walking and carriage tours, an educational initiative, and technical assistance for conservation. The preparation of a handbook to show how to design a project in accordance with the new quantitative design standards is a part of this programme. Each of these initiatives shows how design and conservation are tackled in a much broader way with the direct involvement of the public, and with a strong emphasis on raising awareness of the area's qualities.

With regard to landscaping, the guidelines include a list of solar friendly trees currently available in Portland, along with their ranking, and two prohibited plants and a long list of nuisance plants to be discouraged, as part of a longer list prepared by the city's Energy Office. However, the use of these lists in the context of landscaping is not explained.

Design review will only be applied to three types of area—all six historic districts, four selected commercial and employment areas (largely the north south strips through Albina), and North Marine Drive on the Columbia River (with additional guidelines for the projected LRT corridor to come). Residential zones are covered by guidelines in a separate document (see below). Developers of smaller projects can opt to avoid design review by following Supplemental Compatibility Standards established to streamline the development control processes and to create certainty. The Design Review Process is one of administrative review with appeal to the Design Commission or Historic Landmarks Commission, whose decision is final. Minor design cases cannot be appealed. It works in a similar way to the Seattle multi-family/commercial building review process. Developers are required to contact and meet with neighbourhood associations to discuss the design of the project, and the developer must write and explain to the residents the way the project will be modified (if any) to meet their views. This letter then becomes a key consideration in the administrative review.

To back up this process the City has developed Design Guidelines 'to set the parameters for design review and ... to lead the development'. In the Historic Districts, one-page background statements identify the 'characteristics ... that need to be protected and reflected in restoration ... and new construction' and separate guidelines are developed. Elsewhere overlapping sets of guidelines are specified with some specific guidelines for areas with a different character like North Marine Drive (Fig. 44).

The guidelines have emerged from four key sources. The most obvious are the Central City Design Guidelines and the Downtown Guidelines both prepared by the Portland Planning Bureau, and the Secretary for the Interior's Standards for Rehabilitation of Historic Buildings. The fourth source is a book of guidelines for housing renovation and new construction prepared by the local branch of the American Institute of Architects in conjunction with a design competition for 'Essential Housing' organised in the area in 1991 (Portland Chapter AIA, 1991). This incorporation of local architectural expertise, directed at a key design problem that has great economic and social importance, is particularly welcome and emphasises the general potential for professional collaboration in the preparation of guidance.

Whereas the Central City Guidelines were grouped under the three titles of personality, pedestrian emphasis and project design, the Albina guidelines are organised rather differently into four sections—site design, building design, community image and pedestrian emphasis. Most of the downtown design principles are marginally remodelled and regrouped for use in Albina, but more emphasis is placed upon landscaping, the treatment of parking, signage and safe vehicle access as key elements of site design. The building design principles concentrate on architectural integrity, visual delight and design for compatibility, while community image reflects the key Portland personality principles. In North Marine Drive three special policies supplement 14 of the previous policies and emphasise the desirability of developing a linked series of distinct and well-landscaped open spaces.

The Historic Design Zone /Neighborhood Conservation District Policies are based, as are so many American urban conservation guidelines, upon the Department of Interior's Standards for Rehabilitation (see Appendix 1), though the design guide applies them as guidelines for project evaluation. These emphasise the conservation of the historic integrity of the property and its environment. Additional guidelines are then provided for residential areas and the commercial districts. The residential guidelines emphasise the need to respect aspects of site design like building orientation, setback, grade treatment, boundary treatments and parking placement, while building design concentrates on architectural integrity, porches, roof pitches, materials and construction details, landscaping, street trees and historic plantings, landscape buffers, and street and alley patterns and features. In commercial and employment areas in historic districts the latter guidelines are linked to storefront protection, sensitive alterations to buildings, pedestrian orientation and active frontages, awnings, retractable signage, and particularly crime prevention through design.

Supplemental Compatibility Standards—a new alternative to guidelines

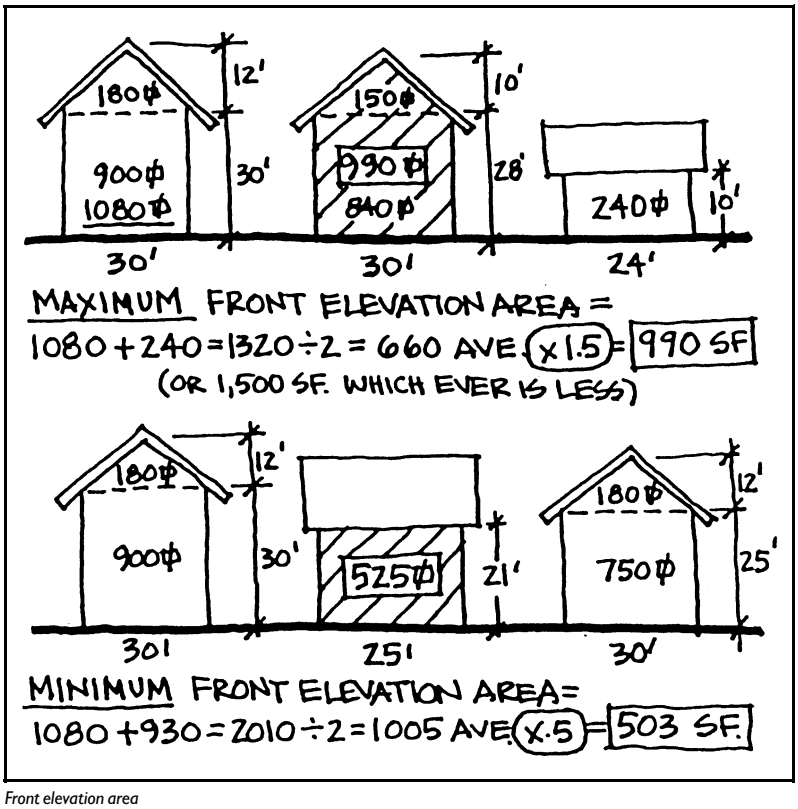
A particular innovation in Albina has been the introduction of Supplemental Compatibility Standards for those undertaking development or remodelling projects in areas subject to design review. If developers or householders adhere to the standards they can avoid design review and a public hearing. Each standard is an individual threshold and each is designed to function without the use of qualitative judgements. While they have the same objectives of ensuring the compatibility of development and its positive contribution to the pedestrian environment, the standards are also designed to allow the extension of design controls without increasing staff workloads, and to avoid the imposition of additional fees on development projects. Large projects still have to go through the design review process and the cut off varies zone by zone. No modification of a historic landmark can use these standards to avoid design review. Standards have been adopted both for single dwelling zones (discussed below) and mixed use zones.

The residential standards include a requirement for at least 1:96 scale drawings of elevations and site plans, and drawings which show adjacent building elevations. The actual standards embrace site and building design dimensions for primary and

accessory structures. They include landscape (fencing, planting, trees), site design (setbacks, height, bulk, roof slope, entrances, parking) (Fig. 46), and building design (materials, fenestration and gables, siding, garages, satellite dishes, trim, porches and, in some areas, proportions). An appendix includes 12 points of advice that would further enhance project compatibility. Other appendices explain the requirement to contact the neighbourhood association (for all developments of more than 10 000 square feet or more than four houses this is mandatory, but contact is advised for all developments). This is to allow a meeting between the developer and the community to discuss mutual design concerns, but the discussion at the meeting can only be advisory. Final appendices identify solar friendly trees and provide a glossary of zoning/architectural terms.

The Albina Supplemental Compatibility Standards are an imaginative approach to design regulation because they are an *alternative* to design review and its uncertainties. The requirement to consult with the neighbourhood association is retained in a bid to ensure positive relationships between developer and community, while the standards themselves are quite demanding. They make an interesting comparison and contrast with the neighbourhood consultative approach adopted in

The area of the front elevation of a structure may be up to 150 percent of the average area of elevation of the primary structures in the vicinity area, or 1,500 square feet, which ever is less. The area of the front elevation of the structure must be at least 50 percent of the average front elevation size of the primary structures in the vicinity area that are in the same use category. The maximum size limitation of this standard is not applicable to buildings being developed on a site or portion of a site within 250 feet of a transit street.



Front elevation area

Fig. 46 Portland: Albina Community Plan: Building Height, Bulk and Roof Slope Standards (1994)

Seattle, and the detailed stylistic guidance provided in Golden Hill in San Diego (see Chapter 6). Typically, Portland has managed to combine precision and objectivity, a choice between clearly defined standards or discretionary review, a basis for consultation and a potentially 'light' touch in control.

The residential guidelines have benefited from the research conducted by the Portland Chapter of the American Institute of Architects in 1991, and produced to help independent and city-aided non-profit groups with their rehabilitation programmes. Their 34-page booklet, *The Ten Essentials for North/Northeast Portland Housing*, is full of excellent tips on site planning, landscaping, materials, building forms, building details and extensions. Their 'essentials' are as follows:

1. every house needs a useable front porch;
2. the frontyard is the house's 'contribution' to the street;
3. build at the existing grade;
4. landscaping is not a secondary thing (Fig. 47);
5. use affordable materials in ways that fit the neighbourhood;
6. make roof pitch similar to others in the neighbourhood;
7. every house should get at least one dormer;
8. repetitive vertical windows;
9. trim and details give the house warmth and character;
10. create density one or two additional living places at a time.

The Albina Community Plan and its design guidelines illustrate a low-key and subtle approach to urban design. They are based on the same principles of reinforcing the community image, and sub-district identity (integrally linked to various cultural and educational initiatives) and ensuring an improved pedestrian environment (with a particular emphasis upon safety), that were so evident in the Central City Design Guidelines. More emphasis is placed upon site planning factors, particularly the need to incorporate landscape and to integrate parking carefully into the design process. Design review is limited to the historic districts and a series of commercial strips, but since the latter are the focus of most activity they represent the areas which are most public and most subject to change, and are thus an appropriate focus for design expertise. The experiment of using Supplemental Compatibility Standards to offer an alternative to design review will need monitoring, as will the Alternative Design Density experiment to allow the creation of additional housing units within established residential areas—a crucial part of the drive for affordable housing. It will be interesting to see what quality of development emerges in Albina in response to the new plan and guidelines, and how design concerns are integrated with the economic and social objectives of employment, business creation and an increase in affordable housing.

Landscaping helps to intergrate the house and lot. Planting provides shade, can produce food, and beautifies the house and neighborhood. Cluster rather than disperse plants to form edges for "outdoor rooms".

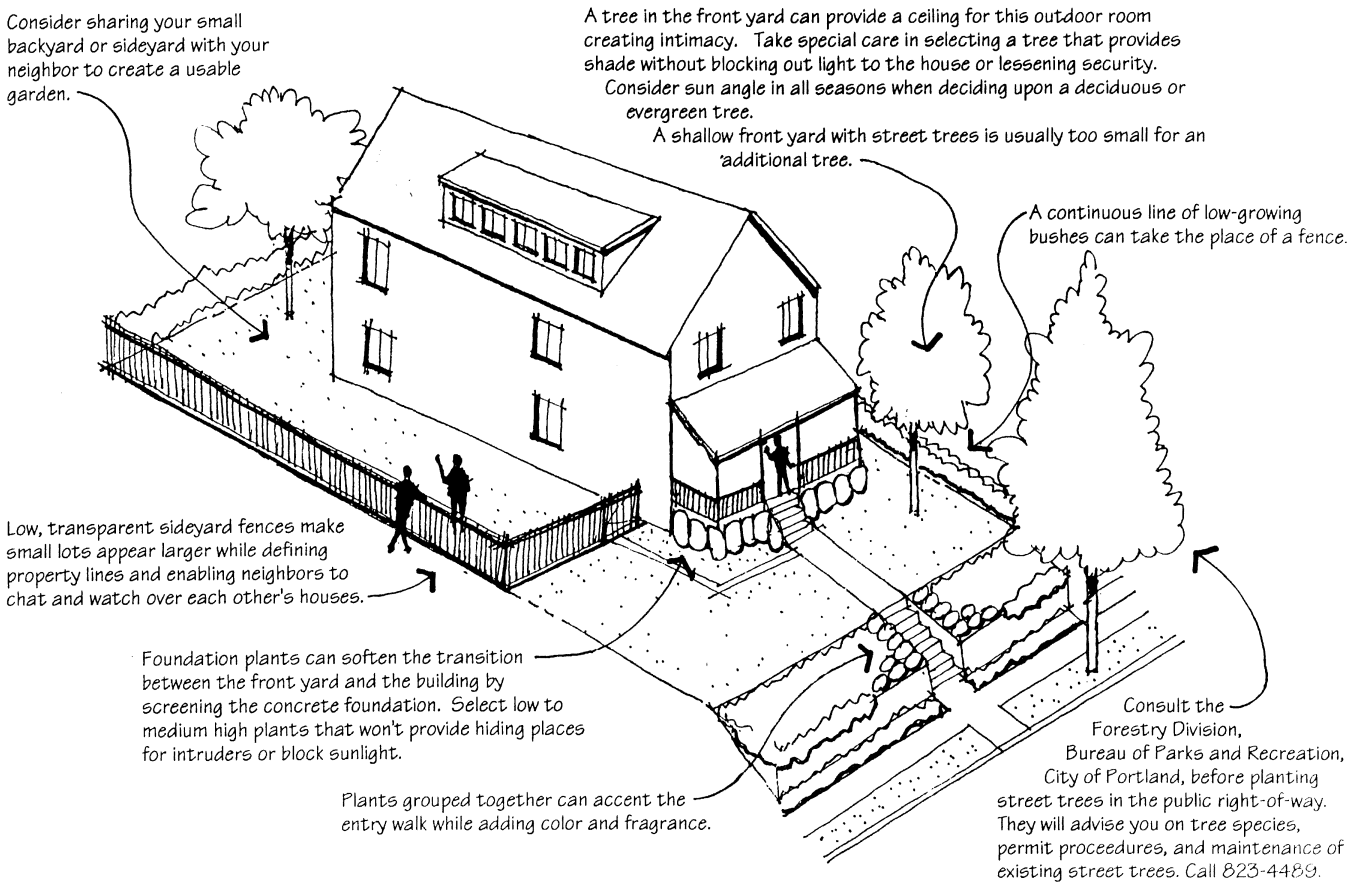


Fig. 47 Portland: NE Portland Housing: Landscaping

City-wide planning, urban growth boundaries, housing density and affordability

The Albina Plan, with a control process that tries to ensure a positive relationship between developer and community, attempts to regenerate suburbia and combat employment loss, improve accessibility and liveability, through encouraging residential intensification. It raises a set of issues about the revitalisation of suburbia that are at the heart of current debates about American planning and housing. In recent pages of *Housing Policy Debate* there have been extensive discussions of city-wide and sub-regional planning in Portland, and particularly its experience with the Urban Growth Boundary, imposed in 1979 along with a fair-share housing policy, as the central planks of a comprehensive regional planning strategy. The debate has centred upon the impacts of these policies upon housing, particularly now in the light of a 50 per cent rise in median house values over the period 1988–95, and moves by many other cities (including Seattle in 1994) to impose a similar growth boundary.

There are some commentators who see the growth boundary merely as creating a scarcity of development land, driving up land and property prices, and creating an exclusionary housing market which excludes the poorer sections of society. They note a failure to attract major commercial and industrial investment in suburban areas (Richmond 1997; Fischel 1997). There is some evidence of this in Albina where housing values have doubled in the 1990s and where low income displacement is evident (Harrison 1995). However, there are other commentators who, while acknowledging rising land and property prices, note that the result has been an end to exclusionary zoning and its replacement by a much more relaxed and flexible system which has trebled housing potential on development land. They note a diversification of housing production which has used smaller lots and house sizes to increase affordability for the purchaser/renter and profitability for the developer. These proponents of Portland's approach point to the further benefits of a compact urban form in terms of a city served by more accessible transit and the conservation of valuable agricultural land on the periphery (Richmond 1997).

In the debate two particularly important arguments were made. The first, by a proponent of growth management, criticises Carl Abbott's arguments (which have hitherto been heavily relied upon in this chapter) about Portland's moral vision, civic consensus and conservation ethic. Henry Richmond argues that:

> Portland's success results from tough policy choices—choices that have won and maintained strong majority support on the basis of economic self interest . . . Oregon's and the Portland regions land use practices provide significant economic benefits to many powerful political interests (Richmond 1997)

and these powerful interests include consumers, developers, farmers, industrialists and conservationists. A second argument relates directly to strategic urban design at the downtown, city-wide and sub-regional levels. As the editors of *Housing Policy Review* note:

> There is one key point that we believe should not be lost in the interpretation. Portland's plan uses urban form—in and of itself—as a key element in addressing regional issues such as housing, transportation and economic development. While many other states and regions experiment with ways to correct inequalities between the city and suburbs . . . none does so by building equity directly into regional urban design (Lang and Hornburg 1997, p. 5).

They go on to quote a recent article in the *Washington Post*:

> The acceptance of compact urban form by suburbanites, for self interested reasons, has the unintended effect of directing growth back to cities, just as Oregon's attempt to save its farmland and open spaces had the unintended effect of saving its cities (Dionne 1997, quoted in Lang and Hornburg 1997, p. 5).

As the Metropolitan Council develops its Region 2040 Growth Concept for a million more residents, using a broad participative process that includes home-builders and commercial property interests, so the 1000 Friends of Oregon have completed a nationally funded study *Making The Land Use, Transportation, Air Quality Connection* (LUTRAQ). This emphasises that there is a developing consensus about a regional vision which above all else is not Los Angeles and not Seattle! (Abbott 1997, p. 32).

Conclusions

Portland has received many awards for the quality of its urban design and planning, and general acclaim for the quality of the urban environment and urban liveability that has been achieved. To any visitor to downtown, the quality is obvious in the general absence of 'grey areas' or abandoned inner city blocks, in the quality of streets and public spaces, and in the general standards of signage, furniture, landscaping and paving, in the way traffic is handled and public transport provision is made. There is a series of outstandingly good public spaces, a civilised transit mall, a beautifully designed LRT system and associated street furniture, surface treatments and landscape, and quality conservation everywhere—all combined in a comfortable, lively, safe and above all walkable downtown and inner city. There is perhaps little modern architecture of outstanding quality, though the Portland Building is an eloquent statement of civic ambition; but the whole central city has a quality, coherence and vitality marking it out as something special in the USA.

The city possesses some of the simplest, clearest, best thought-out and without doubt best presented design policies of any American city. The dual emphasis on an appropriate response to the personality of the city and the context of the site, and on a lively public realm represent an important reconciliation of the visual and social

aspects of design called for by Jarvis (1980) and others. The quality of policies is not itself the key to success, and Portland demonstrates both the value and the coincidence of a number of factors that are critical to design quality. These include :

- a highly participative planning process with strong neighbourhood and business participation;
- a design aware community committed to retaining a sense of place;
- a corporate commitment to environmental quality linking transportation, development, cultural investment, open space and urban design;
- a pro-active approach to investment in public space;
- a long-standing commitment to quality architecture, public art and quality landscape and wide use of competitions;
- a tradition of public-private partnerships in all aspects of urban design;
- a high level of architectural skill and design imagination in planning and other services (e.g. transit design).

These factors loom large in determining the design quality of many places. In Portland the design guidelines are also integrated with a wide range of plans, a zoning code, bonus systems, development standards and transport regulations, special district controls and both design review and project review processes. These controls represent the American planning system at its most sophisticated and most design-aware.

Examining the city's achievements against the criteria drawn up in the introductory chapter, it can be seen that the design principles and guidelines have been progressively developed over nearly three decades, based on the initial surveys of the citizens and architects and refined by endless neighbourhood and district studies conducted by citizens and professional planners alike. Both the survey methodologies and the guidelines that emerged are firmly grounded in the work of the great American urban design writers from Alexander through Jacobs and Lynch to Whyte.

Without doubt what distinguishes Portland's design objectives and guidelines is that they are built on public consensus and the most thoroughgoing and comprehensive process of public consultation of perhaps any city in the USA. The investments in public participation and consensus building, particularly for major plan-making exercises like that for the City Centre (1988) or Albina (1993), are staggering, while the resourcing of neighbourhood associations, and their incorporation into planning and other governmental processes is exemplary. Carl Abbott has phrased Portland's achievement very eloquently:

> *What* Portland has accomplished centers on decisions about *urban design and the physical shape* of the central city and its related communities. How Portlanders have shaped their cityscape and metroscape has to do most essentially with *politics*—with public values, leadership, the capacity of planning agencies and local governments, and the quality of civic discourse (Abbott 1997, p. 13).

Applying Brennan's Law (Lai 1994, pp. 316–19) it is obvious that Portland has undertaken a comprehensive, co-ordinated effort to promote design and environmental quality in all facets of its governmental activities. The quality of design of public transit, public space, streets and public furniture are all outstanding and the effort to promote broad environmental quality embracing transport, open space, culture and entertainment, urban conservation and air quality are both long-standing and effective. At a city-wide scale, again in Abbott's words, Portland has combined the 'neotraditional vision of compact development' with the 'environmental regionalism of ... Lewis Mumford' to promote the sustainable city and a 'potent alliance between boulevardiers and environmentalists' (Abbott 1997, p. 33).

The detailed concern with downtown design quality has been extended into the inner city and now into Albina, the largest and most disadvantaged of the city's suburbs. The design quality has had to be redefined alongside goals of job creation, economic regeneration and provision of low-cost housing. It will be clear too from the planning process and procedures that have been developed that design quality is deeply embedded within the land-use and development review process (Fig. 2), and is an integral and logical part of the assessment of the suitability of a development for its location.

The design review process is clearly efficient, fair and effective. It is only applied to particular zones and areas with publicly stated guidelines, and it is closely time limited. There are opportunities for pre-application discussions and hearings, and an independent expert review body—be it Design or Landmarks Commission or Historic Advisory Board—will make its views felt. Written reports are prepared by planning staff and made available to all partners, and there are appeal procedures to a hearings officer, or to the council itself (appeals are heard and decisions taken within about a month). With Oregon state law requiring that all planning decisions are based on 'findings', there is the extra protection for the applicant/appellant in that decisions have to be clearly related to established policy and guidelines.

As for the guidelines themselves and their level of prescription, it is here that Portland has most to teach other cities. Figure 39 clearly spells out 'the intent not to prescribe any specific design solution' and that design review is 'an opportunity for applicants to propose new and innovative designs'. The design goals and objectives are clearly stated (Fig. 35), and like the 26 guidelines themselves, have remained remarkably constant and unchanged through two decades of public debate. They remain broad, and accessible without being in any way prescriptive, but they are sufficiently precise to provide criteria with which applications can be evaluated. They have proved that they are robust enough to be amended and adapted to less frequented inner city and suburban areas, and deepened and refined for historic districts.

In all these respects Portland remains the model for design review to which other cities can aspire. Perhaps most particularly, it is in the presentation of its policies and guidelines through its plans, posters and particularly its *Developer's Handbook* that Portland shows how to communicate its intentions to a wider public and to the development community.

FOUR

SAN FRANCISCO

Introduction

San Francisco probably needs very little introduction, even to British planners who have never been there. It is a comparatively small city with a population of only three-quarters of a million, occupying only the northern seven miles of the seven-mile-wide peninsula formed by the Pacific Ocean to the west, the Golden Gate to the north and San Francisco Bay to the east (Fig. 48). It is part of a conurbation stretching south through Silicon Valley for more than 60 miles to San Jose, and from there 80 miles north to Rodeo on the east side of the Bay. Its spectacular hilly site provides much of its attraction, but the rebuilding after the 1906 earthquake and fire gave it a cohesive character and a rich eclectic 'domestic' architecture that was largely undisturbed until post-war redevelopment intervened. A major building boom added 36 million square feet of office space downtown between 1965 and 1983, and along with new expressways and the demolition of many fine historic buildings, galvanised local pressure groups into action that finally bore fruit in 1985.

As the first American city to develop, or at least widely publicise, city-wide urban design policies (1971) it occupies a special place in the history of design guidance, and its well documented planning history and achievements have all sorts of important lessons for planners everywhere. However, a series of natural and political disasters have badly affected the city over the last decade, undermined its tax base, and resulted in it losing its pre-eminence in many aspects of planning.

Proposition M in 1986 put a curb on major office development, and tax reforms and the property recession lowered property and assessment values. The planning department's fee income from planning applications declined accordingly. The 1989 earthquake resulted in a massive bill for repairs to public buildings and infrastructure, though on the positive side it destroyed the Embarcadero Freeway which cut downtown off from the waterfront. Meanwhile, successive droughts in the Sierra Nevada have reduced the city's ability to sell water to other municipalities, a key source of municipal income. The result of all these factors has been a 75 per cent budget cut for the Planning Department in the early 1990s, and a shift in focus towards long-range planning at the expense of concerns like urban design. In addition, the problems of unemployment and large-scale homelessness have become all too evident on the city's streets, and are now immediate priorities in policy terms. Nonetheless, aspects of design regulation in both downtown and residential districts remain of major interest, and San Francisco shares with New York the most demanding set of design controls of any major city in the United States.

The 1972 Master Plan and its urban design policies

> 'This city (San Francisco) and every city long ago should have documented for itself and its citizenry a clear and unequivocal physical design for how the city should look, feel and breathe'—Robert Weaver, Secretary of Department of Housing and Urban Development, USA (June 1967), (quoted in Jacobs 1980, p. 190).

The San Francisco Urban Design Plan was part of the 1972 Master Plan prepared to meet State requirements under a law passed in 1970, which required Californian towns and cities to bring their zoning ordinance and sub-division procedures into conformity with their general plans. Its key effect was to reverse the legal power of the zoning ordinance and the general plan, giving the latter the critical role in determining the pattern of future land-use (Fulton 1990, pp. 64–75). The general plan had to include seven elements—land-use (and density), circulation, housing, conservation (natural environment) open space, noise, and safety (natural hazards)—but the San Francisco Master Plan placed more emphasis on urban design than any other factor, prompting one lawyer to comment that 'some people have thought of it as the whole master plan' (Lai 1988, p. 334).

The plan was essentially a planners' initiative whose origins date back to 1967. It was largely funded by the Federal Government (hence the relevance of the quotation above) as part of their urban renewal responsibilities and could never have been fully funded internally—costing $270 000 for a two-year study 1968–70. Indeed, federal funds were withheld initially, possibly due to the opposition of the city's Redevelopment Agency, to emphasise the political obstacles to such studies. A citizens' advisory committee of about 20 interested activists, officials and professionals guided the project, although it was essentially a planning department initiative. However, the committee was not fully representative of San Francisco's community, and as the City Planning Director noted 'one might well conclude that the urban design study was in the hands of a somewhat elitist group' (Jacobs 1980, p. 197).

The Urban Design Plan was based upon eight preliminary reports designed to encourage public response, and three special studies conducted between 1968 and 1970. The first report (Background) analysed the climate, natural environment, and built environment, and mapped 82 city neighbourhoods. The second (Existing Plans and Policies) looked at existing policies and ordinances and noted the focus on downtown controls as well as the general absence of city-wide controls. The third preliminary report emerged from debate within and between the planners and the advisory committee to develop the design policies themselves (Goals, Objectives and Policies). The fourth report (Existing Form and Image) drew together staff research and much high-powered consultancy work, and evaluated the environmental strengths and deficiencies of each city block against nine criteria. It included an imageability analysis, a 'view from the (arterial) road' survey, and 'an external form and image study'. The fifth report (Urban Design Principles) distilled the emerging rules or principles for streets, relationships of building façades to streets, and the

relationship of both to topography; the sixth (Social Reconnaissance Survey) analysed residents' responses in 13 neighbourhoods. The seventh report (Implementation Approaches) assessed the practical actions the city might take, while the final report (Citywide User Design Plans) outlined the plan components. Of the three special studies the Street Livability study was the most important in explaining the effects of traffic on environmental quality and social interaction (Fig. 48), (Appleyard et al. 1981).

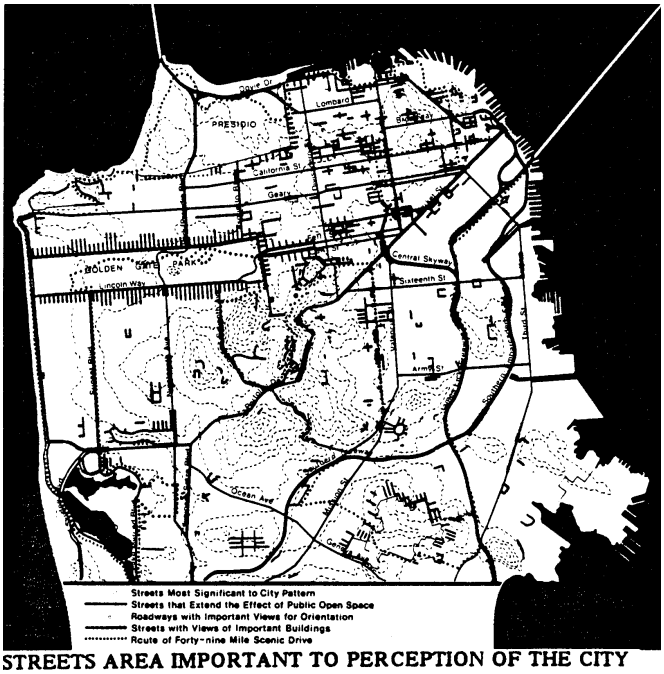
The urban design analysis involved 15 staff members at various times, and three leading consultancies, over a period of two years, so major staff resources were devoted to the work. The Citizens' Advisory Committee acted as a sounding board rather than as active participants, but there was little participation from other city departments. Nor was there much political or strong press involvement in the process until the plan was presented in May 1971, so the work proceeded quietly and uncontroversially. When the plan was published, the Director of City Planning noted that the reaction to the substance of the plan was 'well of course, but what are you going to do about it?' (Jacobs 1980, p. 214). The plan was adopted and a string of legislative actions to implement it followed—historic district designations, building ordinances, zoning initiatives, design reviews, etc.

The 1971 Design Plan provides the best example of thoroughgoing area appraisal being used to develop plan objectives, design principles and policies. Its eight reports and three specialised studies, with pioneering consultancy studies by Kaplan, Gans, Appleyard and others, carefully analysed the character of the city, neighbourhood qualities, public perceptions and the panoply of existing controls and their impacts on development (Jacobs 1980, pp. 189–223). Few other cities have been able to seize the moment, and commandeer the resources to undertake work of such quality, and the city continues to draw on this fundamental work for its new guidance and policies.

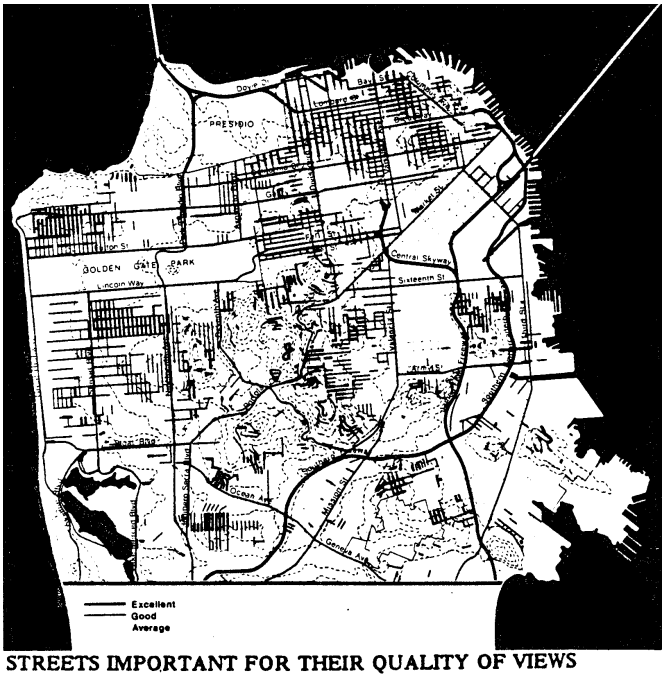
The urban design content of the 1972 Master Plan is well known and much copied. The amount of public attention it attracted was unprecedented and tended to obliterate all other aspects of the plan. Its four objectives focus on preserving the city pattern (imageability and natural environment), conservation (nature, the built and the street environment), moderating new development (harmony, respect, bulk controls) and improving the neighbourhood environment. The 45 policies developed to implement these objectives were clearly stated, well justified and explained in a document that was a model of clarity and comprehensiveness (Fig. 49).

The 1979 Zoning Ordinance

Following the provisions of California State Law, the city had to translate the broad objectives and principles of the Urban Design Plan into a new zoning ordinance. Although the boundaries of each zone were little changed, new regulations were imposed to control the height and bulk of development, with most of the city subjected to a limit of 40 or 50 feet, and bulk controlled in relation to height and depth and the degree of slope. In commercial and apartment districts, height limits reached 200–240 feet, while in downtown they increased to 300 feet on the periphery

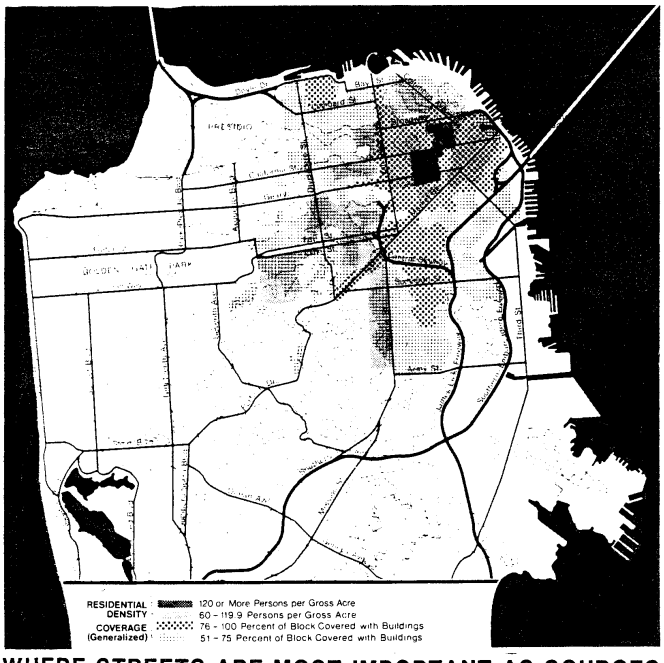


STREETS AREA IMPORTANT TO PERCEPTION OF THE CITY

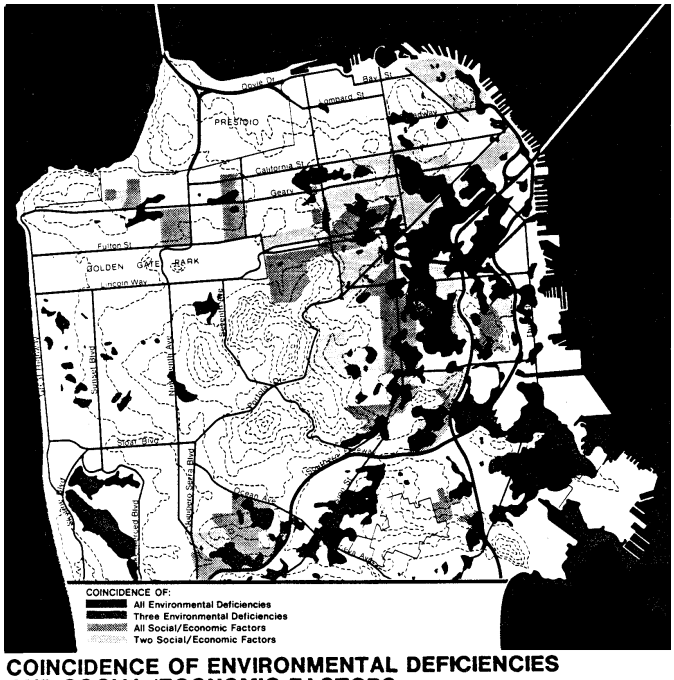


STREETS IMPORTANT FOR THEIR QUALITY OF VIEWS

Fig. 48 San Francisco: Master Plan: Design Analysis (1972)



WHERE STREETS ARE MOST IMPORTANT AS SOURCES OF LIGHT, AIR AND OPEN SPACE



COINCIDENCE OF ENVIRONMENTAL DEFICIENCIES AND SOCIAL/ECONOMIC FACTORS

Fig. 48 (continued)

NOTE:

Environmental Deficiencies—a rating below the city average for the following:

1. **Level of Maintenance** (cleanliness and state of repair of sidewalks, streets, yards and buildings)
2. **Presence of Nature** (quantity and quality of trees, shrubbery, flowers, grass, water and other visible natural features)
3. **Distance to Open Space** (reasonable walking distance to accessible public open space, with size and variety of facilities considered)
4. **Visual Interest of Street Facades** (variety and quality of architectural styles and character, landscaping, scale, colors and pattern)

and up to 700 feet in the centre. These were just the beginning of extremely prescriptive controls that governed key aspects of façade treatment requiring the provision of bay windows, and visual divisions in structures over 35 feet wide to replicate the townhouse character of the city. Stepped heights, varied depths, pedestrian entrances every 25 feet, discouragement of blank ground floor façades, compatible setbacks, and protection of back yards, landscaping and tree planting requirements were also set out in the ordinance, setting unprecedented constraints on architectural forms across the city.

The 1985 Downtown Plan

The 1985 Downtown Plan makes some major revisions to the 1972 Master Plan, but maintains many of the same design policies (Fig. 50). It was the culmination of a long citizens' campaign against the pace and impact of growth on downtown. The stopping of two proposed central expressways in the 1960s was followed by three attempts to prevent or ameliorate large-scale high-rise development in Propositions, I, O and M in 1971, 1979 and 1983. None of these gained the necessary majority to be passed into law but their growing popularity—winning 37 per cent, 45.6 per cent and 49.9 per cent of the vote respectively—could not be ignored. Thus the 1985 plan grew out of a range of planning considerations expressed in the successive Propositions—skyline and view protection, tighter controls on the height and bulk of development, more emphasis on historic preservation, better urban design, more housing and transportation, better infrastructure and more attention to local employment/smaller business needs and, above all, tight restrictions on new office floorspace.

It was enacted into law by a narrow 6–5 vote of the Board of Supervisors. Citizen discontent with the pace and nature of change was not mollified by the enactment of the plan, despite the 'cap' placed on office development of 950 000 square feet of new space approved per annum. A further citizen initiative was put forward late in 1986, and this was passed by a narrow majority. This did not alter the floorspace limits, but it did require each scheme to be tested for its conformity to priority policies like neighbourhood preservation, landmark and open space conservation, affordable housing and transportation leading to a 'beauty contest' for office approvals. In the event, six buildings were approved and three were rejected over the next three years, but floorspace limits became irrelevant as a rise in office vacancies severely depressed the demand for development.

There were many who were sharply critical of the 1985 plan and its failure to control the activities of big business and major developers, and the failure to address the need for affordable housing and mass transit (Simmie 1987; Hartman 1984; Keating and Krumholz 1991). The victory of growth control advocates in 1986 emphasised popular mistrust of pro-development policies and this culminated in the election of a new mayor in 1987 who was more prepared to consider tighter controls on development. It proved to be a pyrrhic victory, as the city entered a property

SUMMARY OF OBJECTIVES AND POLICIES

CITY PATTERN

OBJECTIVE 1

EMPHASIS OF THE CHARACTERISTIC PATTERN WHICH GIVES TO THE CITY AND ITS NEIGHBORHOODS AN IMAGE, A SENSE OF PURPOSE, AND A MEANS OF ORIENTATION.

POLICY 1

Recognize and protect major views in the city, with particular attention to those of open space and water.

POLICY 2

Recognize, protect and reinforce the existing street pattern, especially as it is related to topography.

POLICY 3

Recognize that buildings, when seen together, produce a total effect that characterizes the city and its districts.

POLICY 4

Protect and promote large-scale landscaping and open space that define districts and topography.

POLICY 5

Emphasize the special nature of each district through distinctive landscaping and other features.

POLICY 6

Make centers of activity more prominent through design of street features and by other means.

POLICY 7

Recognize the natural boundaries of districts, and promote connections between districts.

POLICY 8

Increase the visibility of major destination areas and other points for orientation.

POLICY 9

Increase the clarity of routes for travelers.

POLICY 10

Indicate the purposes of streets by means of a citywide plan for street landscaping.

POLICY 11

Indicate the purposes of streets by means of a citywide plan for street lighting.

CONSERVATION

OBJECTIVE 2

CONSERVATION OF RESOURCES WHICH PROVIDE A SENSE OF NATURE, CONTINUITY WITH THE PAST, AND FREEDOM FROM OVERCROWDING.

POLICY 1

Preserve in their natural state the few remaining areas that have not been developed by man.

POLICY 2

Limit improvements in other open spaces having an established sense of nature to those that are necessary, and unlikely to detract from the primary values of the open space.

POLICY 3

Avoid encroachments on San Francisco Bay that would be inconsistent with the Bay Plan or the needs of the city's residents.

POLICY 4

Preserve notable landmarks and areas of historic, architectural or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

POLICY 5

Use care in remodeling of older buildings, in order to enhance rather than weaken the original character of such buildings.

POLICY 6

Respect the character of older development nearby in the design of new buildings.

POLICY 7

Recognize and protect outstanding and unique areas that contribute in an extraordinary degree to San Francisco's visual form and character.

POLICY 8

Maintain a strong presumption against the giving up of street areas for private ownership or use, or for construction of public buildings.

POLICY 9

Review proposals for the giving up of street areas in terms of all the public values that streets afford.

POLICY 10

Permit release of street areas, where such release is warranted, only in the least extensive and least permanent manner appropriate to each case.

Fig. 49 San Francisco: 1972 Master Plan. Summary of Objectives and Policies (1985)

MAJOR NEW DEVELOPMENT

OBJECTIVE 3

MODERATION OF MAJOR NEW DEVELOPMENT TO COMPLEMENT THE CITY PATTERN, THE RESOURCES TO BE CONSERVED, AND THE NEIGHBORHOOD ENVIRONMENT.

POLICY 1

Promote harmony in the visual relationships and transitions between new and older buildings.

POLICY 2

Avoid extreme contrasts in color, shape and other characteristics which will cause new buildings to stand out in excess of their public importance.

POLICY 3

Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.

POLICY 4

Promote building forms that will respect and improve the integrity of open spaces and other public areas.

POLICY 5

Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

POLICY 6

Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

POLICY 7

Recognize the special urban design problems posed in development of large properties.

Fig. 49 (continued)

POLICY 8

Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the city.

POLICY 9

Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.

NEIGHBORHOOD ENVIRONMENT

OBJECTIVE 4

IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY.

POLICY 1

Protect residential areas from the noise, pollution and physical danger of excessive traffic.

POLICY 2

Provide buffering for residential properties when heavy traffic cannot be avoided.

POLICY 3

Provide adequate lighting in public areas.

POLICY 4

Design walkways and parking facilities to minimize danger to pedestrians.

POLICY 5

Provide adequate maintenance for public areas.

POLICY 6

Emphasize the importance of local centers providing commercial and government services.

POLICY 7

Encourage and assist in voluntary programs for neighborhood improvement.

POLICY 8

Provide convenient access to a variety of recreation opportunities.

POLICY 9

Maximize the use of recreation areas for recreational purposes.

POLICY 10

Encourage or require the provision of recreation space in private development.

POLICY 11

Make use of street space and other unused public areas for recreation.

POLICY 12

Install, promote and maintain landscaping in public and private areas.

POLICY 13

Improve pedestrian areas by providing human scale and interest.

POLICY 14

Remove and obscure distracting and cluttering elements.

POLICY 15

Protect the livability and character of residential properties from the intrusion of incompatible new buildings.

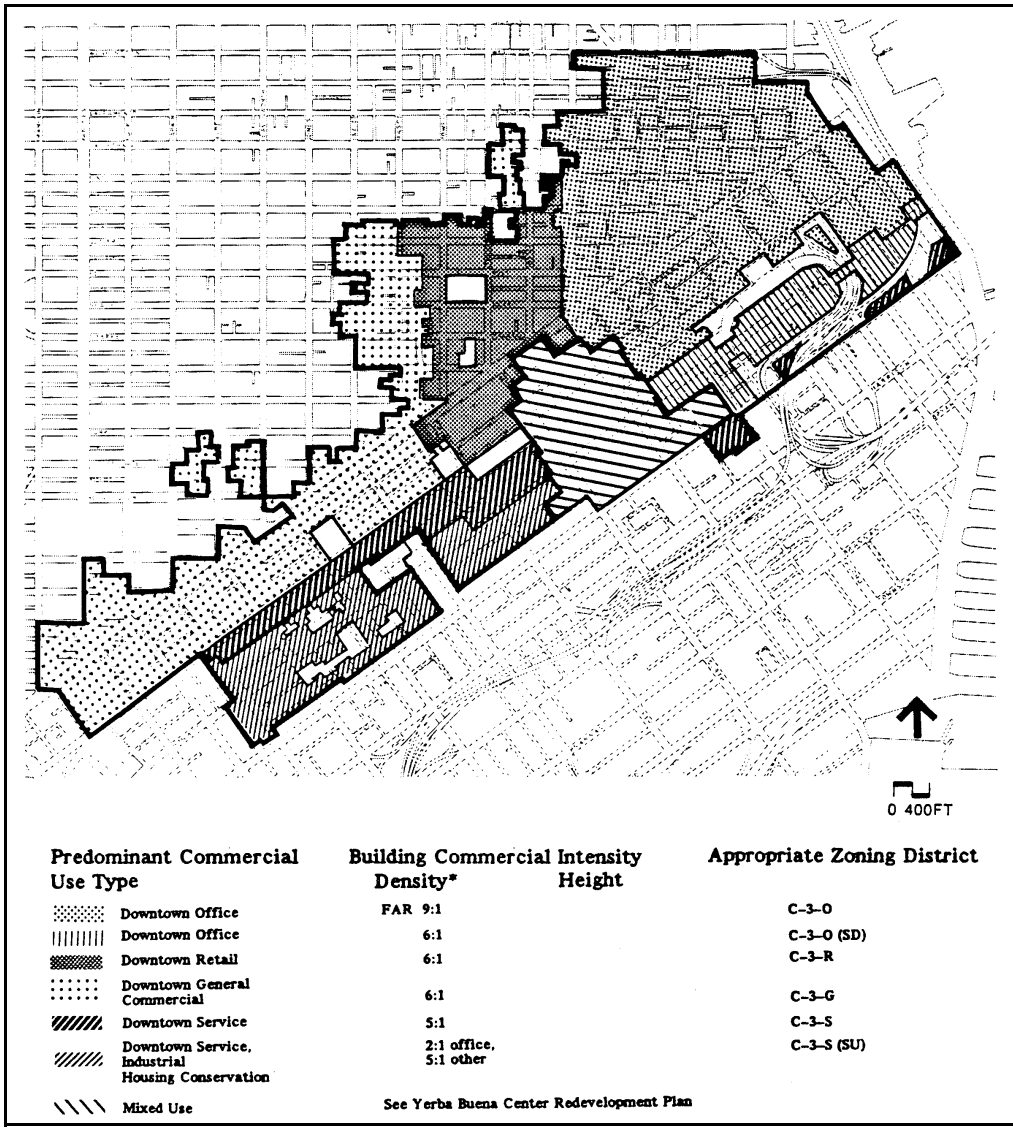


Fig. 50 San Francisco: 1985 Downtown Land Use and Density Plan (1989)

recession which marked the beginning of a sharp reversal of its fortunes that has lasted until very recently.

As an area-specific plan the Downtown Plan translated the design objectives and policies of the Master Plan into more detailed policies, with the surprising exception that there was to be no closure of residential streets to enhance neighbourhood liveability, San Franciscans apparently preferring not to create such protected enclaves. Furthermore, in contrast to most other American community plans, the

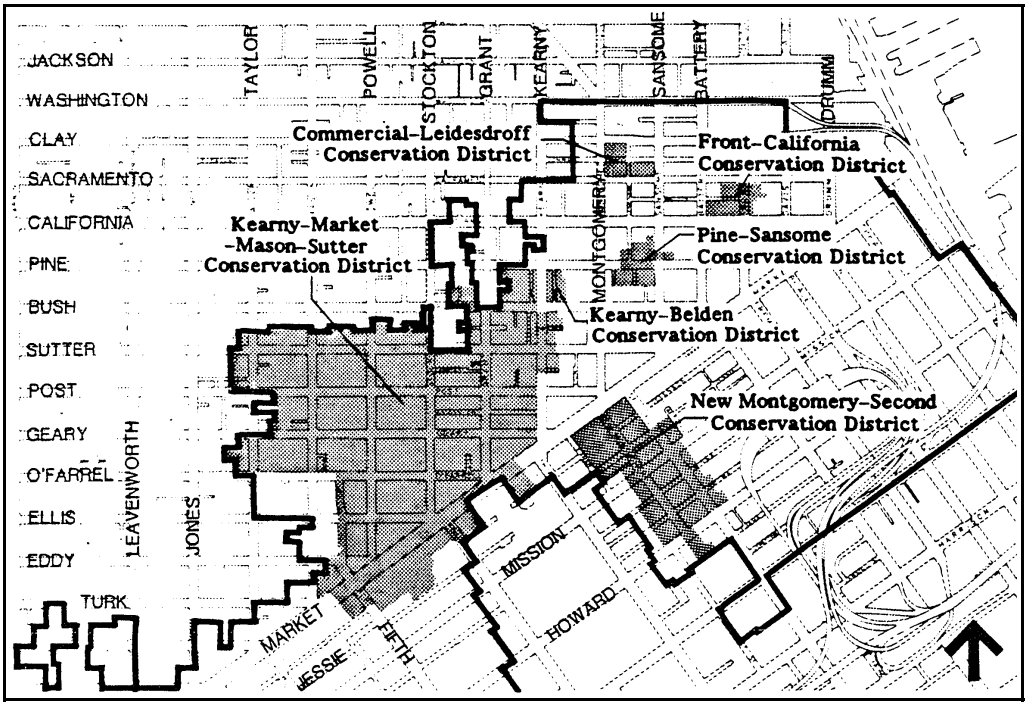


Fig. 51 San Francisco: Downtown Conservation Districts (1985)

Downtown Plan embodied zoning regulations as well, thus making it a much more effective planning document with the force of law. The combination of more detailed design guidelines and block-by-block detailed and prescriptive zoning regulations prompted extensive comment and reaction in academic, professional and development industry circles. As the architectural critic of the *Los Angeles Times* put it, the plan and regulations 'all but dictates the actual architectural drawings for buildings' (Lai 1988, p. 337).

The key changes to the regulations were the downzoning of the retail district to discourage redevelopment for offices, the creation of a downtown expansion district for three blocks south of Market Street around the city's bus terminal, the reduction of the allowable maximum building heights (from 700 to 550 feet), and density (from a maximum FAR of 14:1 to 9:1), and the removal of the bonus system. Higher FARs were possible in downtown office areas but only through the use of Transferred Development Rights (TDRs) which were part of the mechanism for protecting historic buildings (Fig. 50). Meanwhile, ground floor uses devoted to pedestrian activity generating uses were excluded from the floorspace calculations.

Historic preservation was a strong element of the plan. Major pressure group studies in 1979 and 1982 had identified not only the targets for preservation but also appropriate mechanisms (Collins et al. 1991, pp. 134–5), and well-conceived TDR proposals provided a workable set of policies for the city to develop. The city

planners identified 251 historic buildings for retention, allowing substantial alteration on only 42 of these, and providing themselves with the powers to review the 'consistency of architectural character' of adjacent new buildings. A further 31 contributory buildings were also identified for protection if possible, while six conservation districts were designated 'to facilitate preservation of the quality and character of the area as a whole'. The only large conservation area covered the retail core and its western fringes (Fig. 51).

Proposition M and the cap on office development

A key aspect of the plan was the placing of an overall cap on new office space of 950 000 square feet per annum (or 2.85 million square feet over a three-year period). Always a problematic approach to regulation, this policy was added to the plan at the insistence of the council (Board of Supervisors) in the wake of the first Proposition M vote, but the lobbyists remained concerned about the number of existing permits, including many approved just before the plan's enactment. So in 1986 Proposition M was put to the electorate again, with proposals to cut new permits to only 500 000 square feet, (allowing the remainder to be taken up by 'pipeline' projects previously approved) and making the limit permanent. This time the Proposition passed into law. It was this new limit that gave special impetus to the policies of the planning department, first published in 1983, for a more interesting architecture and a more vital public realm in the downtown area.

The 'beauty contest' for office development

The 1986 cap on office development led to what has been derisively termed the 'beauty contest' as each major project competed to offer the best combination of mixed uses, housing, transit facilities, small business protection, employment, seismic safety, historic preservation, open space or quality architecture. Each year proposed projects were evaluated against each other by the planners and their director who, in turn, made recommendations to the Planning Commission who then decided which projects to approve. The process seems to have been nearly as much a nightmare for the planners as for the developers, as they deployed their matrices and charts to assess each project, and were forced to hire consultants and create an architects' panel to offer expert evaluations. There was general acceptance that the process raised the quality of development, but that the costs were unacceptably high and the process inequitable, discriminating particularly against small projects. Certainly, looking at the schemes built in this period, and reading expert evaluations in various architecture guidebooks (Woodbridge et al. 1992), it is hard to discern what was the especial merit of the particular projects that were selected.

The 'beauty contest' criteria embraced all the key planning goals but particularly emphasised architectural quality and urban design (included as part of location considerations), and the planners developed a four-point scale of excellent, good, fair and poor for a wide range of criteria—projects were not even considered for approval if they did not score at least good on master plan, architectural quality or

location criteria. Architectural quality embraced the design quality of the building, and the open spaces and the public art it provided, while urban design embraced streetscape coherence, spatial definition of the street, scale, preservation of context and composition in the cityscape (Fig. 52).

The design policies in the Downtown Plan

These criteria were derived from the design policies in the Downtown Plan which were grouped under eight simply expressed design objectives. Three of these related to open space which were in turn translated into 12 policies that sought a diversity of usable, accessible, indoor and outdoor space. These emphasised sunlit plazas and parks, with minimal wind speeds, with a variety of seating, within easy access of all workers/residents and connected to the pedestrian network; and complementing, structuring and relieving urban forms through the use of natural landscape and breaks in the street wall. The urban form objectives re-emphasise a sunlit/sheltered pedestrian environment but otherwise concentrate on retaining a distinctive urban form, visually interesting and harmonious building forms, and attractive and interesting streetscapes. They are expressed by four policies on building height, sheltered forms, interesting tops, and adequate light and air (Fig. 53).

These simple policies are backed by quantitative criteria and a detailed map of special height and bulk districts established to protect historic districts and the city's skyline, and to encourage the densest developments in the downtown extension south of Market Street. Setbacks of 15 to 35 feet are required above the height of the building's base (defined as 1.25 of the street width) while bulk limits are defined for the lower and upper towers as length, diagonal and floor size regulations. Three building form policies seek harmonious façade relationships, visual unity and 'more variation in building façades, and greater harmony with older buildings through the use of architectural embellishments and bay or recessed windows'. Height and bulk policies emphasise relating building height to the city pattern, sculpturing building forms to reduce their bulk and make their tops more interesting, and preserving light and air between towers. An 'interesting streetscape' objective is sought by five policies that conserve the traditional street, maintain the dominant street wall allowing setbacks above, retain cornices and projecting belt courses to top the street wall, enrich the pedestrian level through materials and design, and encourage public art (Fig. 54).

Richard Lai has noted that 'these specifications governing architectural decoration and fenestration not only promote designs reminiscent of older, prewar buildings about the city but give virtual code endorsement to the current fashion of postmodernism', and he quoted the City Planning Director as stating that 'we think it is time for a departure from the International Style' (Lai 1988, p. 339).

These quite precise architectural and 'townscape' type policies are complemented by a variety of traffic, transport and pedestrian/cycle movement policies aimed at providing an efficient, comfortable and safe environment and network for pedestrians (Objective 22).

1. Summary Rating of the Design Quality of the Building

Excellent : Outstanding qualities of composition and detailing. Few, if any, negative qualities. Building will make an outstanding contribution to the visual quality of the city.

Good : Overall effect is positive although there might be some negative qualities. Building will make a positive contribution to the visual quality of the city. Design responds well to site constraints.

Fair: Possess neither notable design strengths or weaknesses, or the positive and negative features tend to cancel each other out. Building will neither add nor detract from the visual quality of the city.

Poor : Negative qualities clearly dominate the overall effect such as: awkward or graceless composition, excessively bland, dull appearance, poor quality of detailing and/or materials. Building will degrade the visual quality of the city.

2. Design Quality of the Open Space

Excellent : Accessible, spatially exciting, comfortable open space, providing a variety of experiences and generously fulfilling all the requirements. Represents a most desirable addition to the city's open space.

Good : Features all the necesssary elements but in a less generous and exciting manner. Altogether, the space will make a positive contribution to the city's environment.

Fair : Fails to provide some of the elements constituting 'useful' open space. Will not particularly be an asset to the city.

Poor : Poorly conceived open space where important elements have been poorly designed or left out. Will detract from the ambience of the city.

3. Quality of the Art Concept

Excellent : Eminently well placed on the site and successfully integrated with its surroundings, the art work will be highly visible and accessible. The art work(s) in its arrangement makes an outstanding contribution to the city's public places.

Good : Works well with its surroundings; is visible and accessible. The choice of location is satisfactory. All in all, the art work(s) is an asset to its surroundings.

Fair: Falls short in certain aspects of placement, scale or integration with the project; is not as physically and visually accessible as desired. Does not contribute to its surroundings.

Poor: Substantial flaws on location. Poor public visibility and accessibility. Inappropriate scale. Has a negative impact on its surroundings.

Fig. 52 San Francisco: Proposition M: Office Development 'beauty contest criteria' (1985)

Urban design was also to be a factor in judging the suitability of the development for its location.

In evaluating urban design, the following five factors will be considered:

1. **Coherence**
   Does the project contribute to a visually coherent streetscape?
2. **Spatial Definition**
   Does the design contribute to a well proportioned and defined street space for the pedestrians?
3. **Scale**
   Does the massing and design detail create a comprehensible building size in relation to adjacent scale of structures?
4. **Context for Preservation**
   Does the building provide a supportive context for noteworthy buildings likely to remain?
5. **Composition in Cityscape**
   Does the building fit into the skyline with grace and harmony?

The evaluation of these five urban design factors will be condensed into a composite evaluation using the following scale:

Excellent : Contributes in significant ways to the quality of streetscape, city views and positive contextual relationship.
Good : Generally positive in most aspects but not outstanding.
Fair : Little impact of either a positive or negative manner, or good and bad qualities may balance each other out.
Poor : Design would be disruptive to the development of a cohesive streetscape, relates poorly to the surrounding buildings, failing to either harmonize or complement.

Fig. 52 (continued)

Performance guidelines for downtown open space
A set of performance guidelines for open space is set out, intended to ensure that the open spaces created by each development are usable and attractive to people, and in particular that they are sunlit, a fundamental requirement for San Franciscans. Proposition K in 1984 prohibited development which shaded public parks as a response to the fact that many of the plazas created in the past had been in shadow much of the day. The new rules aimed at creating a wide variety of sunlit open spaces. A two-page matrix defines 11 kinds of open space, and sets out their size, location, access, seating and tables, landscaping (hard and soft), food services, microclimate, and public availability. It includes some standards (particularly as regards size), some bonuses and much advice (Fig. 55). Further Downtown Linkage Requirements set out required amounts of open space *vis-à-vis* floor space (a ratio of

OPEN SPACE

OBJECTIVE 9

PROVIDE QUALITY OPEN SPACE IN SUFFICIENT QUANTITY AND VARIETY TO MEET THE NEEDS OF DOWNTOWN WORKERS, RESIDENTS, AND VISITORS.

POLICY 1

Require usable indoor and outdoor open space, accessible to the public, as part of new downtown development.

POLICY 2

Provide different kinds of open space downtown.

POLICY 3

Give priority to development of two categories of highly valued open space; sunlit plazas and parks.

POLICY 4

Provide a variety of seating arrangements in open spaces throughout downtown.

POLICY 5

Improve the usefulness of publicly owned rights-of-way as open space.

OBJECTIVE 10

ASSURE THAT OPEN SPACES ARE ACCESSIBLE AND USABLE.

POLICY 1

Develop an open space system that gives every person living and working downtown access to a sizeable sunlit open space within convenient walking distance.

POLICY 2

Encourage the creation of new open spaces that become a part of an interconnected pedestrian network.

POLICY 3

Keep open space facilities available to the public.

POLICY 4

Provide open space that is clearly visible and easily reached from the street or pedestrian way.

POLICY 5

Address the need for human comfort in the design of open spaces by minimizing wind and maximizing sunshine.

OBJECTIVE 11

PROVIDE CONTRAST AND FORM BY CONSCIOUSLY TREATING OPEN SPACE AS A COUNTERPOINT TO THE BUILT ENVIRONMENT.

POLICY 1

Place and arrange open space to complement and structure the urban form by creating distinct openings in the otherwise dominant streetwall form of downtown.

POLICY 2

Introduce elements of the natural environment in open space to contrast with the built-up environment.

PRESERVING THE PAST

OBJECTIVE 12

CONSERVE RESOURCES THAT PROVIDE CONTINUITY WITH SAN FRANCISCO'S PAST.

POLICY 1

Preserve notable landmarks and areas of historic, architectural, or aesthetic value, and promote the preservation of other buildings and features that provide continuity with past development.

POLICY 2

Use care in remodelling significant older buildings to enhance rather than weaken their original character.

POLICY 3

Design new buildings to respect the character of older development nearby.

URBAN FORM

Height and Bulk

OBJECTIVE 13

CREATE AN URBAN FORM FOR DOWNTOWN THAT ENHANCES SAN FRANCISCO'S STATURE AS ONE OF THE WORLD'S MOST VISUALLY ATTRACTIVE CITIES.

POLICY 1

Relate the height of buildings to important attributes of the city pattern and to the height and character of existing and proposed development.

POLICY 2

Foster sculpturing of building form to create less overpowering buildings and more interesting building tops, particularly the tops of towers.

POLICY 3

Create visually interesting terminations to building towers.

POLICY 4

Maintain separation between buildings to preserve light and air and prevent excessive bulk.

Fig. 53 San Francisco: Downtown Plan: Objectives and Policies (Urban Design) (1985)

POLICY 1

Promote building forms that will maximize the sun access to open spaces and other public areas.

POLICY 2

Promote building forms that will minimize the creation of surface winds near the base of buildings.

Building Appearance

OBJECTIVE 15

TO CREATE A BUILDING FORM THAT IS VISUALLY INTERESTING AND HARMONIZES WITH SURROUNDING BUILDINGS.

POLICY 1

Ensure that new facades relate harmoniously with nearby facade patterns.

POLICY 2

Assure that new buildings contribute to the visual unity of the city.

POLICY 3

Encourage more variation in building facades and greater harmony with older buildings through use of architectural embellishments and bay or recessed windows.

Streetscape

OBJECTIVE 16

CREATE AND MAINTAIN ATTRACTIVE, INTERESTING URBAN STREETSCAPES.

POLICY 1

Conserve the traditional street to building relationship that characterizes downtown San Francisco.

POLICY 2

Provide setbacks above a building base to maintain the continuity of the predominant streetwalls along the street.

POLICY 3

Maintain and enhance the traditional downtown street pattern of projecting cornices on smaller buildings and projecting belt courses on taller buildings.

POLICY 4

Use designs and materials and include activities at the ground floor to create pedestrian interest.

POLICY 5

Encourage the incorporation of publicly visible art works in new private development and in various public spaces downtown.

MOVING ABOUT

MOVING TO AND FROM DOWNTOWN.

OBJECTIVE 22

IMPROVE THE DOWNTOWN PEDESTRIAN CIRCULATION SYSTEM, ESPECIALLY WITHIN THE CORE, TO PROVIDE FOR EFFICIENT, COMFORTABLE, AND SAFE MOVEMENT.

POLICY 1

Provide sufficient pedestrian movement space.

POLICY 2

Minimize obstructions to through pedestrian movement on sidewalks in the downtown core.

POLICY 3

Ensure convenient and safe pedestrian crossings.

POLICY 4

Create a pedestrian network in the downtown core area that includes streets devoted to or primarily oriented to pedestrian use.

POLICY 5

Improve the ambience of the pedestrian environment.

Fig. 53 (continued)

1:50 for commercial uses), contributions to park provision ($2 per square foot), and public art (one per cent of construction cost), in addition to requiring contributions to affordable housing, child care, transit, schools, etc.

Other policies for the public realm are included within the chapter 'Moving About' and these include 12 standards/guidelines for pedestrian improvements, four of which are reproduced in Figure 56. Trees, paving, sidewalk elevators, newspaper vending machines, sidewalk vaults, construction aisles, and traffic signal boxes are also discussed. A four-part pedestrian network classification system is also developed to indicate levels of pedestrial orientation.

BUILDING APPEARANCE

OBJECTIVES AND POLICIES

OBJECTIVE 15

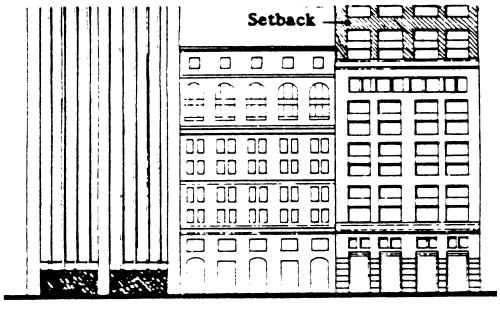
TO CREATE A BUILDING FORM THAT IS VISUALLY INTERESTING AND HARMONIZES WITH SURROUNDING BUILDINGS.

POLICY 1

Ensure that new facades relate harmoniously with nearby facade patterns.

When designing the facade pattern for new buildings, the pattern of large nearby existing facades should be considered to avoid unpleasant juxtapositions. Incongruous materials, proportions, and sense of mass should be avoided.

As a general rule, facades composed of both vertical and horizontal elements fit better with older as well as most new facades.



The all vertical pattern of this building has little in common with the center structure

Strong verticals and horizontals strong base and similar street wall height help give building a positive relationship to center building

POLICY 2

Assure that new buildings contribute to the visual unity of the city.

For the most part, buildings in San Francisco are light in tone. The overall effect, particularly under certain light conditions, is that of a whole city spread over the hills. To maintain continuity with this existing pattern, disharmonious colors or building materials should be avoided. Buildings should be light in color. Highly reflective materials, particularly mirrored or highly reflective glass, should be used sparingly.

POLICY 3

Encourage more variation in building facades and greater harmony with older buildings through use of architectural embellishments and bay or recessed windows.

STREETSCAPE

OBJECTIVES AND POLICIES

OBJECTIVE 16

CREATE AND MAINTAIN ATTRACTIVE, INTERESTING URBAN STREETSCAPES

POLICY 1

Conserve the traditional street to building relationship that characterizes downtown San Francisco.

San Francisco is noted for streets that are at the property line with little or no space between them. This historical pattern of development gives San Francisco its intense urban quality.

This pattern should be preserved and fostered. Structures generally should be built to the street property line along the entire frontage to a sufficient height for proper definition of street space. Exceptions to this streetwall should be allowed to create open space and circulation space where desirable and appropriate. However, open spaces should not be so frequent or close together that they undermine the sense of a continuous streetwall.

POLICY 2

Provide setbacks above a building base to maintain the continuity of the predominant streetwalls along the street.

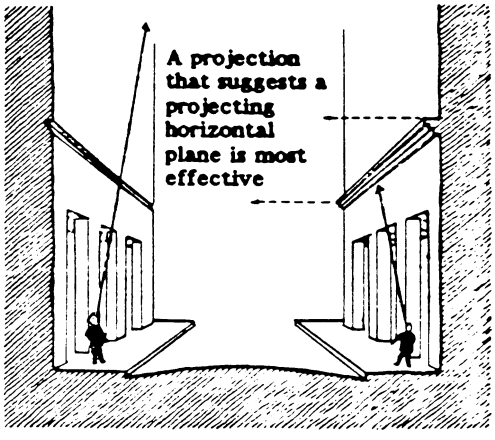
Many downtown streets contain ornate older buildings of modest scale, which should be preserved for future generations to appreciate. While the heights of these buildings vary when taken together, they often create a sense of a unitary street facade or wall. This streetwall gives continuity and unity to the streetscape. The intrusion of large, flat planed modern buildings among small-scaled and decorated older buildings can break up the continuity and unity.

If the new taller building is set back an appropriate distance above the existing predominant streetwall height, the upper portion of the building will not be perceived as part of the streetwall, and if the lower portion were given a similar texture and projecting cornice the disruption would be minimized. The depth of the setback required would be a function of the width of the street and the height of the existing streetwall.

Fig. 54 San Francisco: Downtown Plan: Building Appearance and Streetscape Objectives and Policies (1983)

The height of the streetwall cannot be determined with great precision by a mathematical formula. Often there is considerable variation in the heights of buildings on the same block. Determination of an appropriate streetwall height for the new building is a question of judgment—"What height would be consistent with the general scale of the buildings on the block that are likely to remain?" This question would be resolved in a case-by-case basis.

In areas where there is no pre-existing streetwall worthy of retention, setbacks may not always be needed if a strong, pedestrian scaled building base is created and the building tower is well separated from other towers. However, setbacks might still be needed for sunlight access or to create windbreak.



At the base of a building with a recessed band vision can slide by along the surface of the building

The projecting beltcourse firmly interrupts the line of vision and sets a scale for the street

POLICY 3

Maintain and enhance the traditional downtown street pattern of projecting cornices on smaller buildings and projecting belt courses on taller buildings.

The projecting cornice is a very distinctive San Francisco architectural feature. Most older buildings have them. Most tall older buildings also have horizontal architectural features that clearly define the building base at a level typically half to one times the width of the street. These projections, together with the generous use of decorative embellishments, contribute to the architectural sense and comfortable human scale of downtown San Francisco. Their contemporary use should be encouraged in new development. Alternative means of terminating the shorter building or defining the base of a taller one could be employed if effective in creating a sense of street scale. However, it is extremely difficult to do this unless one's eye is interrupted by a projection as it moves up the facade from the base. Change of color, colored bands, and grooves are generally ineffectual and rely on the projections on adjacent buildings for what effect they do have.

Fig. 54 (continued)

POLICY 4

Use designs and materials and include activities at the ground floor to create pedestrian interest.

Retail Uses

Shops and restaurants contribute liveliness and visual interest to street frontages, lobbies and plazas of office buildings. Group floor space fronting on streets, pedestrianways, plazas, and courtyards outside the retail district should be devoted primarily to retail and service uses that are of interest to pedestrians and that meet the needs of workers and visitors to nearby buildings.

Glass

The use of clear untinted glass on the first two or three floors of buildings permits pedestrians to glimpse the activity within, contributing to the overall sense of liveliness of the street. Dark tinted windows create a blank impersonal street front with no sense of life or activity, and should be discouraged.

Detailed Bases

Incorporation of visually interesting details and/or decoration into the design of the base avoids an excessively dull frontage.

Decorative features, including the detailing found on many older and some contemporary designs, assure needed visual interest for the pedestrian. They should be used whenever practical.

Table I. Guidelines for Downtown Open Space

	Urban Garden	Urban Park	Plaza	View and/or Sun Terrace	Greenhouse
Description	Intimate sheltered landscaped area.	Large open space with predominantly natural elements.	Primarily hard-surface space.	Wind-sheltered area on upper level.	Partially or fully glassed-in enclosure.
Size	1,200 to 10,000 sq. ft.	Minimum 10,000 sq. ft.	Minimum 7,000 sq. ft.	Minimum 800 sq. ft.	Minimum 1,000 sq. ft. Min. ceiling height 20 ft.
Location	On ground level, adjacent to sidewalk, through-block pedestrianway, or building lobby.		Southerly side of the building. Should not be near another plaza.	Second floor or above. View terraces should only be located in places which have spectacular views.	Locate in places too shady or windy to be used as open space.
Access	Accessible on at least one side of its perimeter.	Accessible from at least one street at Access from several locations encouraged. Park interior to be visible from entrances.	Accessible from a public street at grade or 3′ above or below street level connected to street with generous stairs.	Accessible directly from the sidewalk or public corridors. Must provide adequate signage about location and public accessibility at street level, in hallways and elevators.	Accessible from street at grade or 3′ above or below street level. Provide several entrances from public rights-of-way.
Seating,* Tables, Etc.	One seating space for each 25 sq. ft. of garden area. One half of seating to be movable. One table for each 400 sq. ft. of garden area.	Provide formal and informal seating, on sculptured lawn. Movable chairs desirable.	One linear foot of seating space per each linear foot of plaza perimeter. One half of seating to consist of benches.	One seating space for every 25 sq. ft. of terrace area.	One seating space for every 25 sq. ft. of floor area.
Landscaping, Design	Ground surface primarily of high quality paving material. Install plant material such as: trees, vines, shrubs, seasonal flowers to create garden-like setting. Water feature desirable.	Provide lush landscape setting with predominantly lawn surfaces and planting such as: trees, shrubs, ground cover, flowers. Provide a water feature as major focus.	Landscaping is generally secondary to architectural elements. Use trees to strengthen spatial definition and to create peripheral areas of more intimate scale.	Terrace may take one of the following forms: • complex architectural setting which may include art works; • flower garden; • space with trees and other planting.	Interior surface may be a mixture of hard surfaces and planting areas. Water features are desirable.
Commercial Services, Food		Provide food service within or adjacent to the park. 20% of space may be used for restaurant seating taking up no more than 20% of the sitting facilities provided.	Provide retail space including food services in space around plaza. 20% of space may be used for restaurant seating taking up no more than 20% of the seating provided.	Provide food service on or adjacent to terrace.	Provide food service within greenhouse; 20% of greenhouse space may be used for restaurant seating occupying no more than 20% of the seating provided.
Sunlight and Wind	Sunlight to much of the occupied area at lunch time. Shelter from wind.	Sunlight to most of the occupied area from mid-morning to mid-afternoon. Shelter from wind.	Sunlight to much of the occupied area at lunch time. Shelter from wind.	Sunlight to most of the occupied area of terrace at lunch time. Shelter from wind.	Sunlight at lunch time highly desirable but not required.
Public Availability	8 AM to 6 PM Monday through Friday.	At all times.	At all times.	10 AM to 5 PM, Monday through Friday.	10 AM to 5 PM, Monday through Friday.
Other	Security gates, if provided, should be an integral part of the design.	Security gates, if provided, should be an integral part of the design.		In wind exposed locations provide glass enclosure to create comfortable environment.	Include large movable windows or walls to open up greenhouse in warm weather.

*Seating dimensions are as follows:
Height – 12″ to 36″, ideally 17″; Depth – 14″ one-sided, 30–36″ double sided; Width – 30″ of linear seating are counted as one seat.

Fig. 55 San Francisco: Guidelines for Downtown Open Space (1985)

Snippet	Atrium	Indoor Park	Public Sitting Area in a Galleria	Public Sitting Area in an Arcade	Public Sitting Area in a Pedestrian Walkway
Small, sunny sitting space.	Glass-covered central open space in the interior of a building or block.	Interior open space where at least one wall facing the street consists entirely of glass.	Through-block, continuous, glass-covered pedestrian passage lined with retail shops and restaurants.	Continuous, covered passageway at street level, defined by building set back on one side and a row of columns along the front lot line.	Sitting area on a sidewalk of a pedestrian-oriented street in a lunchtime mall or in an exclusive pedestrian walkway.
Varying sizes permitted.	Minimum area 1500 sq. ft.; minimum ceiling height 30 ft.	Minimum area 1,000 sq. ft. Minimum ceiling height 20'. Area to be counted against open space requirement cannot exceed twice the area of the glass wall projected onto the floor plane.	Minimum average height 30 ft.; minimum clear area 12 ft. Only public sitting areas outside the circulation space which are buffered from it by various kinds of design elements will qualify.	Minimum clear width 10 ft.; minimum height 14 ft. Only public sitting areas which are delineated from the circulation space by appropriate means will qualify.	Varying sizes permitted.
On new or existing building site.	Interior of building or block.	Building interior adjacent to sidewalk or public open space.	In any approved galleria.	As identified in the Pedestrian Network Plan. Other locations must be approved.	As identified in the Pedestrian Network Plan. Other locations must be approved.
Accessible from public streets.	On street level or 3 ft. above or below street level. Accessible from one or more sidewalks through generous hallways. Space must be made available and inviting to the general public.	Accessible from street level. Provide several entrances to make the space inviting to the public.	Accessible from public right-of-way or open space at grade or 2 ft. above or below grade level of adjoining public area.	Accessible from sidewalks or public open space at grade level or 2 ft. above or below grade. Connect arcade to public space with continuous stairs.	
If functional for sitting and viewing, seating can be ledges, stairs, benches, chairs.	Provide one seating space for every 25 sq. ft. of floor area, one table for every 400 sq. ft. of floor area. At least one half of seating to consist of movable chairs.	Provide one seating space for every 25 sq. ft. of floor area, one table for every 400 sq. ft. of floor area. At least one half of seating to consist of movable chairs.	Provide sitting ledges, benches, movable chairs and tables in areas outside the pedestrian pathway. At least one half of seating should consist of movable chairs.	Place seating and tables outside the area of pedestrian flow.	If functional for sitting and viewing, seating can be ledges, benches, chairs.
Surface will predominantly be hard pavement. Add planting where appropriate.	Provide attractive paving material to create interesting patterns. Use rich plant material. Incorporate sculpture and/or water feature.	Provide attractive paving material to create interesting patterns. Use rich plant material. Incorporate sculpture and/or water feature.	Use rich paving materials in interesting patterns. Include sculpture or other works of art and water feature.	Arcades should be enhanced by creating attractive paving patterns with rich materials. Incorporate mosaics, murals or three dimensional elements into wall surfaces, coffering into ceiling surface. Include plant materials where appropriate.	Use rich paving material in interesting patterns. Include plant material.
Encourage food vendors to locate in the vicinity.	Locate food service adjacent to the atrium; 20% of area may be used for restaurant seating taking up no more than 20% of the seating and tables provided.	Provide food service; 20% of area may be used for restaurant seating taking up no more than 20% of the seating and tables provided.	Both sides of galleria should be lined with retail shops and food services. Locate sitting areas near food services. Restaurant seating is not to take up more than 20% of sitting area.	Attractive retail shops, food services and restaurants should front on the arcade. 20% of sitting area to be used for restaurant seating, occupying no more than 20% of sitting facilities and tables provided.	Attractive shops, restaurants, cafes and food services should line the pedestrian walkways and lunchtime malls.
Sunlight to sitting areas at lunch time. Shelter from wind.	Mass buildings surrounding the atrium in such a way as to maximize sunshine in the atrium space.	Orient park to the southeast, south or southwest to insure sunlight at least during lunch time.	Mass buildings surrounding galleria in a way as to maximize sunlight into the galleria space.		Sunlight to the sitting areas at lunchtime. In windy locations provide wind baffles.
At all times.	8 AM to 6 PM Monday through Friday.	8 AM to 6 PM Monday through Friday.	8 AM to 6 PM Monday through Friday.	At all times.	At all times.
Credit each seat as 25 s.f. of open space. Buildings up to 100,000 g.s.f. may satisfy 100% of requirement with "snippets"; larger buildings may satisfy up to 20%.	Insure proper ventilation. At least 75% of roof area to be skylit.	Insure proper ventilation. Install heating to make space comfortable in cool weather. Construct glass wall to be fully or partially movable.	Security gates should be integrated into overall design and concealed when not in use. At least 75% of galleria roof shall consist of skylights. Insure ventilation.		Credit each seat as 25 s.f. of open space.

Fig. 55 (continued)

Environmental Impact Review

In addition to the development permit, every major development is required to undergo an environmental review under the Californian Environmental Quality Act (1970). This is an exceptionally thorough process undertaken by the City Planning Department, who evaluate potentially significant environmental effects and report in a draft Environmental Impact report. This is then the subject of a public hearing, and comments and responses are then reported to a City Planning Commission Public Meeting. A final EIR is prepared and certified, and once this is completed building permits can be issued.

An example is provided by a 27-storey office development, approved in 1991, which will rehabilitate a three-storey historic building and create a small plaza on the site. The EIR runs to 759 pages of text and 50 pages of appendices. It examines thoroughly the environmental effects on zoning and land-use, architectural and historic resources, urban design, shadow and wind, employment and population and transportation, the latter being especially carefully analysed. Other environmental effects relate to air quality (traffic generated), construction noise, geology and seismicity, hazardous materials and growth inducement, and the mitigation measures to be undertaken by the developer are also analysed. Alternatives to the proposed project are identified and discussed—in this case the use was consistent with the plan so no alternative uses were considered—but the option of no development, and development at lower densities removing or reducing Transferred Development Rights (TDR), removing parking and verifying the uses in the historic building, were all considered.

The technical analysis of matters like traffic emissions, impact on transit, impact on expressways and city streets and so on are impressively detailed. So too are the photomontages of short and long distance views (Fig. 57). Project shadow is carefully mapped (net new project shadow is crucial), and the incidence of shadow on the open space is particularly carefully scrutinised because of Proposition K (1984) and other sunlight controls. Wind effect is also very closely monitored.

The planners' perspective on the EIR process is that it requires a very high input of planning resources to complete such a review, and that it generates an enormous amount of information that no one is quite sure what to do with. However, on the positive side, it is also perceived that developers adhere to all the city's objectives and policies, and undertake all the necessary technical studies, in order to ensure that the EIR is favourable.

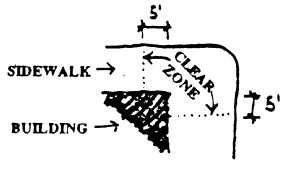
The Rincon Center—insights into the development and control processes

As a footnote to the downtown controls an interesting account of contemporary commercial development in San Francisco is provided in *From the Ground Up*, an account of the conception and execution of the Rincon Center, one block south of Market Street, and one block from the waterfront (Frantz 1991). This insider-view of the development process presents design control as a relatively unproblematic aspect of the development and a set of constraints to be complied with (though the scheme's approval does just predate the 1985 plan). The vagaries of the development

To continue to improve and enhance the pedestrian environment, as well as provide sufficient pedestrian movement and standing space, various standards should be used as guidelines in downtown planning and development. They should be incorporated into the review process of proposed downtown developments as well as into plans for street and sidewalk improvements. These standards serve to guarantee the consideration of pedestrian safety and convenience in decisions affecting downtown development. The following presents recommended standards:

1. CLEAR ZONES

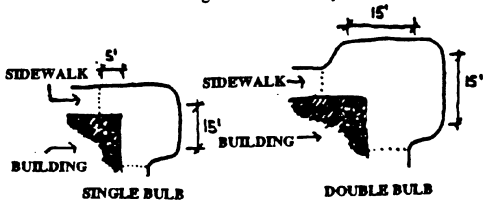
To ease problems of crowding and to create more circulation and holding space for pedestrians at corners, fire-pull boxes, pedestrian information signage, police call boxes, mail boxes, mail storage boxes, newspaper vending machines, and newspaper vendor booths, should be placed outside the immediate corner areas extending from the property lines, ("clear zones"), as shown on the diagram. At critical locations where standing in physical contact with others is unavoidable, queuing can only be sustained for a short period without discomfort, and circulation is severely restricted, the clear zone should be extended five feet back from the property lines and crosswalks should be widened accordingly. Only items essential to vehicular and pedestrian safety and flow should remain within the clear zones. Fire hydrants, street lights and other permanent fixtures not required in the clear zone should be removed to locations outside of the clear zone when repair or replacement of those items is required and as funds become available. Others should be relocated immediately.



2. CORNER "BULBING"

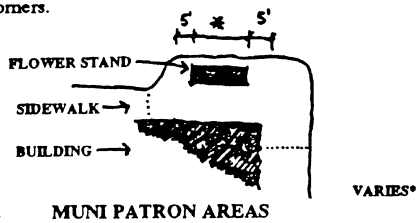
Where requirements for pedestrian reservoir space are acute and space can be obtained from existing parking or through traffic lanes, corner "bulbs" should be created. Corner bulbing serves to reduce pedestrian crossing distance, thus improving safety as well as providing needed pedestrian movement and reservoir space, concurrently allowing for some channelization of vehicular traffic. Typically corner bulbs extend down the face of a block for a minimum of 15 feet between curb tangent lines. At bulbed corners, the clear zone shall include the entire bulb.

Clear zone standards must be upheld on bulbed corners in order not to reduce sight line visibility.



3. FLOWER STANDS

Flower stands are recognized as a unique asset to the urban fabric of San Francisco, and as such are welcomed additions to the streetscape. They add color and rich, varied detail to many corners in the Central Business District (CBD) and are part of the street life of the city that helps give urban streets a pleasant "human face". Unfortunately, placement of flower vending stalls often constricts or interrupts pedestrian flow. To avoid this problem, flower stalls should be relocated, when possible, to corner bulbs or to areas where sidewalks have been widened. Where flower stands have been relocated, the size of the corner bulb shall be adjusted to accommodate the stand. These stands are the only nonessential furniture allowed in the clear zones and they shall be located five feet back from the property lines at the corners.



4. MUNI PATRON AREAS

Where possible, sidewalk widths should be increased without sacrificing vehicular traffic movement. Particularly where MUNI stops occur, an effort should be made to provide extra, sheltered reservoir space for MUNI patron queuing, distinct from normal pedestrian flow. Limited bulbing should be used for this specific purpose. To further distinguish MUNI patron areas from pedestrian flow corridors, MUNI patron areas should be uniformly paved with brick or other special paving materials.

Fig. 56 San Francisco: Downtown Plan: Pedestrian Improvement Standards and Guidelines (1985)

and design processes, the problematic costings of the project and the problems of the cyclical market are the issues which loom largest, and a one-third overrun on construction costs and a one-year vacancy on the office space added at least $35m to a $150–160m project. The account is an important reminder of how the realities of high finance drive development and design.

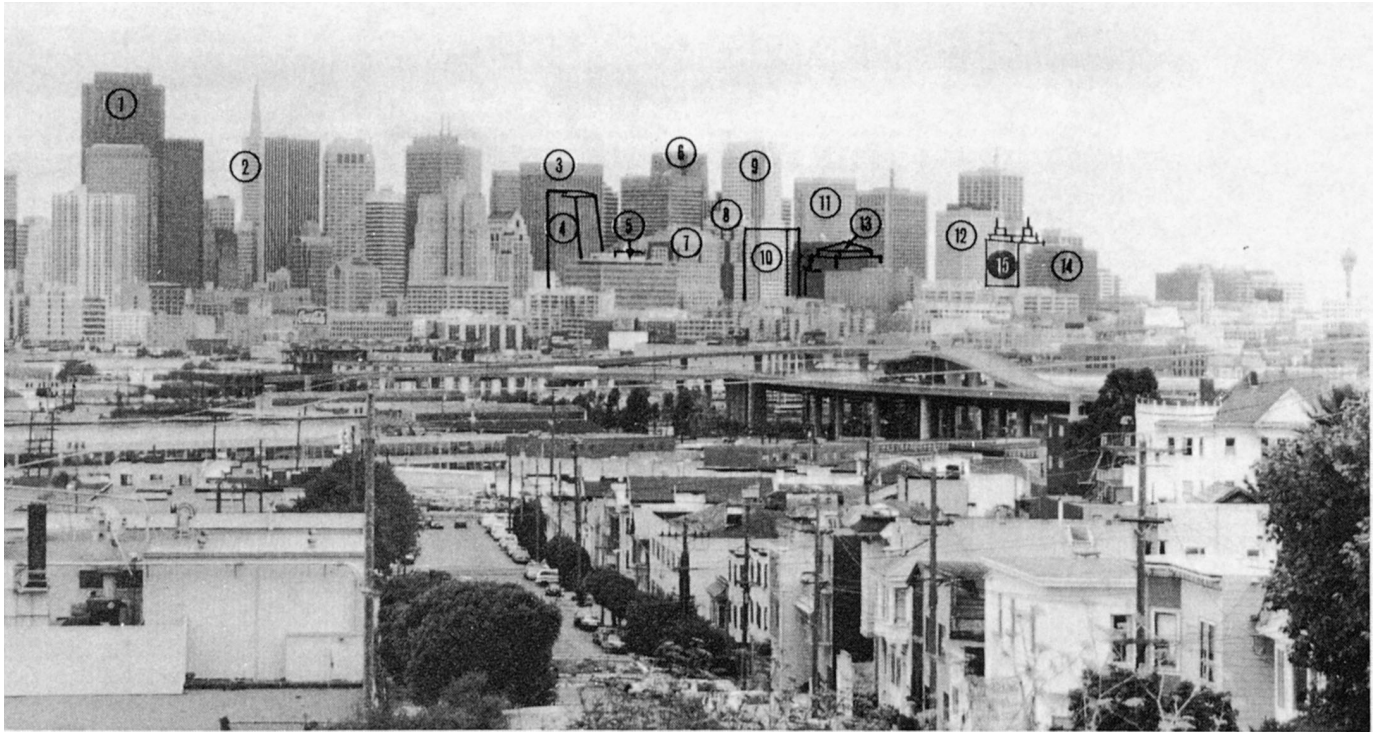
The completed scheme itself has been favourably reviewed by the architectural press ('handsome additions to the dull assortment of towers in the area'—Woodbridge et al. 1992, p. 36) principally because it conserves the 1939 Moderne style post office on the site, and its 1930s Works Project Administration murals (although most of the atrium of the building and its south façade have been demolished). A small plaza between the towers which catches the sun between 9 a.m. and 1 p.m., and the office-retail restaurant complex in the old post office which provides a public route through the block, both work well enough. The control process has certainly secured important design qualities.

What does emerge clearly in the book is the importance of two other factors: first, the post office being designated an historic building (by the National Park Service) and placed on the National Register, and second, the housing requirement placed on the site by the San Francisco Development Agency (before the Downtown Plan). Crucially, the retention of the post office attracted $7.5m in tax credits that made its incorporation into the development an attractive proposition (until the Tax Reforms of 1986) while its development rights (TDR) could be applied to the south of the site to help create twin 240-foot towers, 260 apartments and nearly half-a-million square feet of office space. The affordable housing element has served office workers and young professionals, rather than low-income households, but it has promoted a mixed residential population in the area.

The Residential Design Guidelines

It was not just the Downtown Plan that was heavily influenced by Proposition M. The 1986 initiative established the conservation and protection of neighbourhood character as a priority policy. In 1987 the city adopted Neighborhood Conservation Interim Controls which required the use of residential design guidelines to review building permit applications to assess visual compatibility (residential design guidelines had been first produced in 1979 and these had also sought to develop a set of design rules for compatibility). The Planning and Building Codes provide the basic limitations on the size and siting of the building, but the *Residential Guidelines* 'may require reductions ... and alterations ... to make the project compatible with its neighbourhood'. It is emphasised that 'the guidelines establish minimum criteria for neighbourhood compatibility, not the maximum expectations for good design', and that they do not seek mimicry (Fig. 58).

The second section of the guidelines defines the key aspects of neighbourhood character and the need to assess both the immediate and broader context for each permit application. Rather like many design policies (namely the City of



MAJOR STRUCTURES EXISTING, PROPOSED AND UNDER CONSTRUCTION

1 Bank of America
2 Transamerica
3 525 Market
4 101 Second Street (approved)
5 222 Second Street (approved)
6 101 California
7 75 Hawthorne
8 100 First Street
9 Fremont Center
10 524 Howard (approved)
11 Embarcadero 4
12 Pacific Gateway
13 299 Second Street (approved)
14 301 Howard Street
15 Project

Fig. 57 San Francisco: 300 Howard Street: Photomontage for Environment Impact Review (1991)

Westminster's (London) key design policy), the guide defines three types of situation: one where the visual character of the block face is clearly defined and existing patterns and styles will strictly define the options for new development; one where more variety exists and existing patterns and rhythms need to be taken into account; and one where the visual character is undefined and a much greater flexibility of design solutions will be allowed.

The third section outlines the five design considerations which are applied as a checklist to each permit application. Each of the design elements is defined and broken down into two, three or four sub-elements. A series of questions is used to explore the key design issues, and guidelines are developed to ensure design compatibility. The guide is liberally illustrated with line drawings to indicate desired and unacceptable practice (Fig. 59).

In terms of *siting*, development is required to respect the topography of the site, emphasise corner buildings, to respect front and side setback patterns and treat building corners carefully, and to acknowledge significant buildings with appropriate setbacks. In terms of *building envelope*, the key elements are the roofline, the volume and mass of the building. The guide suggests analysing the basic forms of adjacent development to identify the elements of the façade, the appropriate levels of ornamentation and the play of light and shade (the modelling).

The residential guidelines mark another attempt to systematise design control into a set of clear city-wide criteria. At the request of neighbourhood groups, and as in Seattle, they have been formulated as a checklist for project assessment that designer, planner and neighbourhood groups will follow. This innovation has been complemented by various community initiatives to write their own design guidelines, some for use with the original covenants, codes and restrictions on the area (where these exist), others as part of community review or part of the permit processing function. These various pieces of guidance provide evidence not only of a careful appraisal of the locality by the community, but also some quite sophisticated policy writing which can even, as in the case of Bernal Heights, articulate performance standards that can be readily used in the control process. Three examples can be briefly discussed.

Building guidelines for Bernal Heights

Bernal Heights lies about two miles south of the city centre, and its undeveloped scrubby hilltop provides spectacular views of downtown and much of San Francisco Bay. The residential area on its east slope particularly benefits from the latter, looking east to Oakland. Its very steep streets, and closely packed but detached houses in all manner of styles, create a number of design problems particularly because of the progressive intensification of development and resultant high levels of car ownership. The guidelines were prepared by the community, including 47 members of a preservation committee aided by a community planner and the assistants to a local councillor. Inspired by a 1978 community plan for the north-west slopes the guide owes much to that pioneering work.

The reasons for producing the guide were years of 'benign neglect' by the city,

RESIDENTIAL DESIGN GUIDELINES

1 Siting	
• Location of a project site, and its topography.	Respect the topography of the site; Emphasise corner buildings
• Setback of the building from the front property line.	Respect setback patterns; Respond to building corners; Acknowledge neighbours;
• Rear Yard i.e. the setback of the building from the rear property line.	Use setbacks to accommodate features Respect rear yard patterns and adjacent buildings
• Spacing between buildings.	Respect spacing patterns
2 Building Envelope	
• Roofline and profile the building makes against the sky.	Respect roofline patterns; Minimise the impact of inconsistent rooflines
• Volume and Mass as expressed by the visible facades.	Compatibility of Volume and Mass; Incorporate elements which contribute; Use ornament, use light and shadow
3 Scale	
• Dimensions of the elements which make up the building's facades.	Respect the scale of the neighbourhood
• Proportions of the building, and of the elements of its facade.	Comparability of vertical and horizontal proportions; Adjust proportions for greater compatibility
4 Texture and Detailing	
• Materials used to finish the surface of the building.	Use compatible materials; Use appropriate materials
• Ornamentation used, including the amount, quality, and placement.	Respect amount of detail of surrounding ornamentation
5 Openings	
• Entryways – The pedestrian entries into the buildings.	Respect stairway pattern, position and level of entry; Respect entryway patterns
• Windows – How they are articulated and used in the facade.	Compatibility of windows
• Garage Doors – The vehicular entries into the building.	Compatibility of garage entry; minimise negative impacts; screen other parking

Fig. 58 San Francisco: Residential Design Guidelines (1989)

and a series of recent developments which had reduced the rural character of the area, reduced sunlight and blocked views and copied a single undistinguished design. In the Preface to the guidelines the distinguished American architect Hugh Jacobsen is quoted approvingly: 'architecture . . . [is] . . . a matter of good manners. There is a politeness in every great city . . . The streets have their continuity but each building also has its own individuality.' In Bernal Heights these ideas of good manners are refined by the application of ideas from Christopher Alexander's *A Pattern Language* (1977) to emphasise their social and cultural as well as their visual content.

PROPORTIONS

Proportions are dimensional relationships among the building elements. These relationships exist at several levels: the relationship between the dimensions (height, width and depth) of each element of the building, the relationship of the dimensions of the element to each other and to the building as a whole, and the dimensional relationship of the building to other buildings along a block-face.

- *Have the prevailing proportions along the block-face been identified?*
- *Can the proportional relationship in the proposed project be identified?*

Compatibility of Vertical and Horizontal Proportions

The overall sense of a building working well within a particular context is often the result of carefully developed dimensional relationships. Poorly proportioned buildings may seem out of balance, inconsistent or unharmonious with their surroundings.

The proportions of the basic shapes of a project should be compatible with those of surrounding buildings. A basic step in identifying the proportions on a block-face is to map (in the manner described on p. 26) the vertical and horizontal elements that define the facades of a building, such as doorways, windows, cornices and garage doors and then analyze their dimensional relationships.

Adjust Proportions for Greater Compatibility

A simple change in proportions can often have an enormous impact on how a building fits into its surroundings. A building with strong horizontal elements in an area where vertical elements predominate can be disruptive. The example below illustrates a change in window proportions. The guideline applies, however, to any element of the facade.

The change in window proportions help make this building more compatible with its context. Other design elements would of course have to be addressed before it would meet the minimum standards of these guidelines.

Fig. 59 San Francisco: Residential Design Guidelines: Proportion (1979)

The guidelines (Fig. 60) tackle the problems that bedevil the area—the way that new garages and their driveways destroy the quality of the street in the close-packed neighbourhood; the need to increase greenery and street trees; the need to emphasise the entry point to houses; the need to retain visually permeable fences; the need to step down the building bulk with the slope and to respect the existing scale of buildings; the need for sideyards, and the desirability of converting the flat roofs to roof gardens. These six problems are all carefully analysed and illustrated, and the ways of resolving them discussed. The outcome of each is a simple rule usually stated in the form of an enforceable standard that clearly resolves the problem. The guide then addresses the more vexed issues of façade elements, colours and materials, but it eschews prescription.

To quote the guide, 'the intention here is to maximise the possibilities for diversity while striving for harmony between dissimilar pieces on neighbouring buildings so that they fit into a satisfying whole'. It refers back to design policies in the Comprehensive Plan on the total effect of buildings near hilltops, and on building scale and details, and it provides clues as to the variety of ways in which façades may be treated to create visual interest and harmony. With regard to materials and colour there is no attempt to dictate good taste (which is just as well as the area contains some quite delightful attempts to defy it), but stone veneers and plywood are viewed with caution, and the light Mediterranean colours that predominate in the city are recommended.

The guide deliberately does not address security matters believing that the solution to crime, particularly burglary, is not an architectural one. The guidelines have been checked to ensure that they do not impose financial burdens on developers or owners. The net result is an excellent example of how a community can prepare its own guidance, directly addressing those issues which are eroding the quality of the locality, and in the process creating effective planning rules (in this case standards) which both ensure that the most undesirable design practices cease, and that greater care is taken over new designs and alterations. It clearly illustrates the potential for community-derived guidance, and its clarity and effective standards are a model for professional policy writers. In 1986 the City adopted the guidelines as policy.

Union Street Design Guidelines: a historic commercial district

The Union Street Design Guidelines were also prepared by the local community although they have a much more interesting genesis and have had a more critical reception from the planners (Fig. 61). Union Street runs east–west about three-quarters of a mile south of Fisherman's Wharf and the north shore of the city. The eight blocks in question are largely composed of bay-windowed Edwardian homes. Nearly one-fifth of the buildings predate 1900, although they have been extensively modified in the conversion to retail, bar and catering uses, including the opening up of basement and courtyard shops. One particularly intrusive new block built in 1972 highlighted the need for close controls, and the merchants and property owners requested that the city more closely regulate commercial development. A 1978 city

SUMMARY OF DESIGN GUIDELINES

1. 9′–0″ CURB CUT/SINGLE CAR GARAGE DOOR

Garage doors shall be limited to a 10′-0″ width. Curb cuts shall be 9′-0″ and placed so as to create a 16′-0″ curb space within the 25′-0″ width of the lot to provide one full parking space on the street. In addition, the garage door shall be placed a minimum of 16′-0″ from the inside edge of the sidewalk so as to provide one additional parking space per residence in the driveway.

2. LANDSCAPING • FRONT YARD SETBACKS • STREET TREES

50% of the Front Yard Setback area (not including the driveway up to the garage) shall have provision for landscaping (i.e. trees, shrubs, flower beds, ground cover, vines, etc.)

One Street Tree shall be planted at the time of construction in front of each lot within the street right-of-way, and close to the front property line. Trees shall be 15-gallon size.

3. ENTRY TREATMENT

Make the entry of the house something special – a celebration – more than just a front door. Create a transition between the street and the doorway. Give special attention to the treatment of the framing of the opening itself.

Fences or walls which enclose a lot or a portion of a lot, which run parallel to the property line on the street side, and are not structural portions of the buildings or the stair leading to it, shall not be completely solid at eye level.

4. BUILDING AND ARCHITECTURAL MASSING

Step the building with the slope of the lot. Building shall not exceed 32′-0″ from any point on natural grade. This height shall be measured to the average height of a pitched roof or to the highest point of a flat roof. In addition, no point of the last 10′–0″ depth of the building may exceed 2/3 the height of the highest point of the structure. Highest point, once again, is defined as the average height of the pitch on a sloped roof or the highest point of a flat roof.

At the rear, a minimum 17′–6″ rearyard is required.

5. SIDEYARDS

A 4′–0″ sideyard is required on one side of each 25′–0″ lot. The first 5′–0″ back from the street facade shall be completely open. Beyond that, two of the four additional sideyard zones must be left open (See Guideline for discussion of "zones".)

6. ROOF TREATMENT • STEP WITH SLOPE ALONG STREET

Any roof which is not pitched at a ratio of at least one in four must be designed and surfaced so as to be usable.

Any flat roof must be accessible from a prime living space without the necessity of climbing a special set of stairs to reach it.

Step rooflines of adjacent buildings up or down in imitation of the slope of the street.

7. FACADE ELEMENTS

Any balcony, porch, deck or terrace above ground level must be at least 6′-0″ deep and a minimum of 36 square feet in total area.

8. COLORS & MATERIALS

No specific guidelines but suggestions and recommendations.

Fig. 60 San Francisco: Bernal Heights Design Guidelines (1986)

study and 1979 report led to the creation of a special use district to regulate commercial growth and to retain the area's vitality and character.

As regards design control, the planning department recommended that the Union Street Committee should undertake a survey and develop their own design guides and review board. An architectural consultant undertook a survey in 1980–1 and in consultation with the planners, a panel of local architects, and the Union Street Committee, with its own design review team, developed a set of guidelines that were adopted by the City Planning Commission in 1983.

The purpose of the design guidelines was defined as: 'To preserve, ensure and enhance the physical appearance ... by creating attractive and harmonious store fronts, by restoring the varied historic styles of architecture ... and by improving the public right of way' though it recognised the need to protect the street's economic base, and to allow the construction of new buildings as long as they were in character.

The Union Street Association reviews all applications for change of use or appearance. If there are objections from neighbourhood groups, or if they do not conform to the guidelines, they may be scheduled for discretionary review by the Planning Commission. As in Albina (Portland), the guidelines draw on the Secretary of the Interior's Standards for *Rehabilitation for Historic Buildings* (1983) (see Appendix 1), but they rely more heavily on a very detailed architectural survey of each building, establishing its origins and original elevations, and seeking to restore at least the façade of the building back to its original form (a guide to original styles is incorporated). Some general design principles are developed in the design of infill, but only rarely are design standards or firm guidelines involved. Some exceptions include the 25-foot rhythm of frontages, a minimum shop frontage of 10 feet, and a target of 70 per cent shop fronts on ground floors. Generally each topic is discussed in terms of the existing characteristics of the area's buildings and their replication. The architectural emphasis is overwhelming, as is the emphasis on detail, particularly of doors and windows, railings/fencing, signing and furnishing.

Part of the problem with the guidelines is that they appear to be rather thrown together in a disorganised and unstructured way. There are pages of extracts from other publications—presentation manuals, restoration guidelines (Oakland), design manuals (Racine), journals, magazines and catalogues—all presented seamlessly, but almost inevitably chaotically with far too much text. The general theme is authoritarian and prescriptive, a set of statements about what is acceptable, often culminating in the statement 'this pattern must be preserved'. The design guidelines provide no real principles or criteria for property owners, designers or councillors to consider design matters, being overwhelmed by detail and by a lack of structure as to how to approach the problem of design in a buoyant but eroded historic district, other than to restore to the original Edwardian and Victorian pattern. The extract of two pages from the guide (Fig. 62) encapsulates the kind of advice offered, but it is the photograph of the architect-designed L'Entrecôte de Paris that reveals the nature of the problem and the difficulties faced by any guidelines in this highly façadist and eclectic comercial district.

City planners regard the Union Street Design Guidelines with considerable misgivings as over-prescriptive, over-detailed and overly historical, and see them actually discouraging the innovation which the city-wide 1989 Residential Guidelines sought to foster. In reality Union Street is a very 'twee' area as a result of its fashionable boutiques, bars and restaurants and the frequent resort of its proprietors to the over-design of their buildings and courtyards. There have been a number of

Fig. 61 San Francisco: Union Street Design Guidelines (1984)

very successful restorations recreating the original façades, and reinforcing the historic character of the street, but the net result is a rather too self-conscious, prettified and precious street where contrasting conceptions of historic authenticity might be viewed as part of the problem not part of the solution.

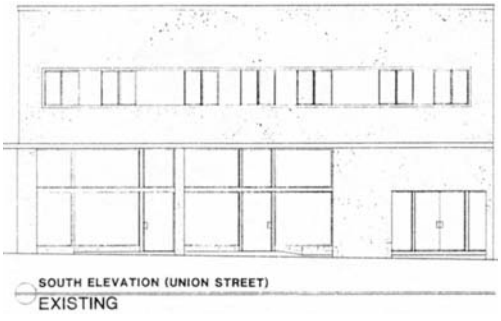
Westwood Park Design Guidelines

A very different approach has been taken in Westwood Park to tackle the problem of how to conserve the character of a 1920s bungalow development now subject, like all neighbourhoods in San Francisco, to residential intensification. Lying some four miles south-west of downtown on the southern slope of the Twin Peaks, the area was

BUILDING FRONTAGE

The basic character of Union Street consists of lots with frontages of 25 feet and depths of 100 feet. This basic module should be preserved in all conversions or new development. There should be no consolidation of separate lots. The exception might be permitted if structure is kept within the rhythm of the 25 foot frontages. Subdivisions of existing lots shall be done in such a way that no resultant property shall be less than 25 feet in width. This is meant to preserve smaller buiulding scale. Property should not be combined to produce larger scale "block-buster" buildings.

To conserve and enhance the small-scale, pedestrian character of the Union Street district, floor areas and frontages for new developments, conversions, and amalgamations of existing shop fronts should be limited to 2,500 square feet and 25 linear feet as a single and principal use; if larger floor areas and/or frontages are approved by the CPC, they should be carefully designed to fit into the overall scale and pattern of the street.



1686 Union existing 1950s Box design

When shops are subdivided in such a way as to be visible from the street, there should be a minimum street frontage of 10 feet.

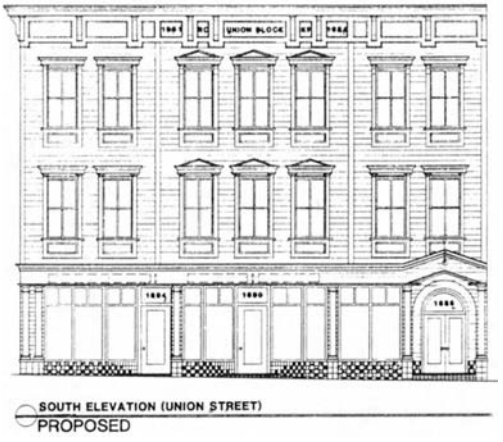
Open-air eating and/or drinking areas are encouraged on the commercial frontage provided that they can be secured during non-business hours by sliding glass panels, movable partitions, grates (excluding rolldown 100% metal or wood grates), and providing that such eating and/or drinking areas extend to the property line frontage.

Recessed arcades of any design do not exist on Union Street and are not appropriate in remodelings or new construction.

Any non-canvas awnings, canopies, or marquees, including, but not limited to metal or wood, should not extend beyond the property line.

LOT COVERAGE

Most buildings do not cover the entire lot and have backyards. This pattern should be preserved because Union and Fillmore Streets abut residential streets whose backyards and gardens adjoin the rear of Union and Fillmore Street commercial properties, and because the open areas in the back of buildings can provide for attractive and distinctive "courtyards". Except on corner lots, where 100% coverage may be appropriate, rear yards should be preserved if possible. Extensions of existing buildings and all new construction in the rear of lots should match the adjoining structure with a greater rear yard or may be an average of the two adjoining properties.



Proposed new facade for 1686 Union. Kotas/Pantaleoni architects.

Outdoor activity which is not noticeably audible from adjacent residential property is acceptable on the interior portion of lots. Such usages should be adequately buffered by walls, 100% opaque fences, or 100% opaque land forms and landscaping. Any such back-of-the-building outdoor commercial activity (including roofs) should in no way impinge on neighboring residential or commercial properties through noise, odor, lighting, or visual disruption such as unsightly storage. If unenclosed, such commercial activities should be limited to the natural ground level. No decks, porches, or platforms more than three feet above the ground should be used for any commercial activity if they impinge on residential properties through light, sound or odor.

Walls or fences should be at least six feet high. Barbed wire, broken glass, or other unsightly "security" additions should not be used.

PARKING

On-site, unenclosed parking is inappropriate. All roof-top parking should be entirely enclosed.

Outdoor dining at L'Entrecote de Paris, 2032 Union. Ron Nunn Associates, architect for addition.

Fig. 62 San Francisco: Union Street Design Guidelines (1984)

laid out at the end of the First World War as a series of gently curving, largely north–south streets bisected by a broad boulevard. On the 25-foot lots were placed largely architect-designed bungalows and houses in a variety of Californian styles of the period, all with a high level of period detailing.

The area has always had its own Codes, Covenants and Restrictions (CC&Rs) as part of the original development contract, and the original purchase agreement requires the Westwood Park Association to approve 'building operations, plans and specifications for all buildings, including garages and outhouses'. It also gives the Association unequivocal design control powers. There is much potential for intensification of use (92 per cent of the houses are one level over a basement, or possess an attic: Fig. 63), and there is a perceived need to develop policies to ensure that any intensification is done sympathetically to the original building and the neighbourhood.

In the wake of proposition M in November 1986, which aimed at preserving the character of the city's neighbourhoods, the Westwood Park Association sought to develop its own guidelines to control growth and intensification. Given the existence of CC&Rs, the City Planning Department was not in any position to step into the control process in Westwood Park; it had long devolved much of the responsibility for review to the Association, although the area was subject to zoning controls, and building permits were still issued by the city. Instead the Association took the 1989 city-wide Residential Design Guidelines and adapted them to the needs of Westwood Park, publishing them as a set of guidelines in January 1992, and using the legal force of CC&Rs to implement them. The guidelines include some historical background to the development, the Association and CC&R controls, before setting out a series of guidelines under the titles indicated in Figure 64. The guidelines themselves are a series of short, judiciously selected, quotes from the city-wide Residential Guidelines woven into a general guideline and related to, and often justified by, reference to the character of Westwood Park. The emphasis is very much upon close analysis of the context and, above all, on compatibility of architectural design in any alterations or extensions.

The guidelines carefully explain the review and approval process to be followed, treating it like any other enlightened system of public design review. The process includes opportunities for informal discussion with the Board of Directors of the Association, a formal neighbour notification procedure, a meeting to discuss the project with neighbours and the Board, the erection of storey poles to indicate the building envelope (a procedure used in Switzerland to illustrate building impact to the public), and an application for project review with full drawings. A design review checklist (Fig. 64) is provided as a tool to formalise the review process, to ensure that most criteria are met, and to assist in the final decision on whether to approve or refuse, which is taken on majority vote of the Board of Directors.

As the guidelines themselves note:

> The only efficient method for review of a project is to have documentation that can be utilized in an evaluation of a project in a fair, non partisan

BUILDING HEIGHT DESCRIPTIONS

1 "ONE LEVEL" (13.7% of total residences)

One story main "living" level on grade with no "basement." Usually with an on-grade detached garage.

1B "ONE LEVEL OVER BASEMENT" (77.3% of total residences)

One story main "living" level over a "basement." The majority of the lots slope with the basement built into the slope of the lot with retaining walls. The basement usually is used for parking and utility with less than the required ceiling height for utilization as living space. Many homes have utilized this "basement" area for living space with excavation to gain ceiling height.

1.5 "ONE LEVEL WITH ATTIC" (0.6% of total residences)

One story main "living" level with partial upper "living" level and no "basement." Upper level is fully within lower level roof form and visual impact is of a one story structure with steeply sloping roof and attic.

2 "TWO LEVEL" (4.5% of total residences)

One story main "living" level with partial upper "living" level and no "basement." Usually with an on-grade detached garage.

2B "TWO LEVEL OVER BASEMENT" (3.8% of total residences)

One story main "living" level with partial upper "living" level over "basement." Upper level usually has been added to an existing one story over basement.

A Denotes buildings where upper levels have been added to original buildings through the construction of a vertical addition.

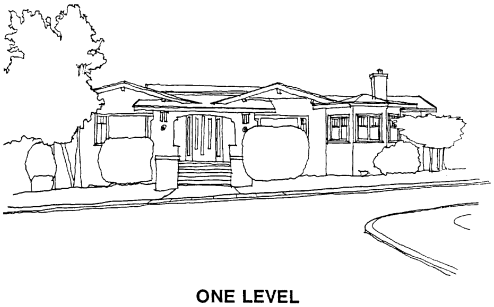


Fig. 63 San Francisco: Westwood Park Design Guidelines: House types (1992)

> manner. The guidelines are not intended to arbitrarily limit development of particular lots. They have been developed to assist the community in the preservation and enhancement of the unique neighbourhood character that the original designers created in Westwood Park. (p. 6)

The guidelines are quite strict in requiring a high level of design conformity, but this is justified through the Residential Guidelines themselves by arguing that Westwood Park has 'a clearly defined visual character' which can be clearly stated, as it is in the guidelines themselves.

In examining design review in Irvine, California in the next chapter, it will be seen how CC&Rs have been adapted to contemporary master-planned suburbs, and how it is a favourite tool of many developers and housebuilders to ensure corporate and then community control of development. In Westwood Park the addition of design guidelines and a review process introduce more flexibility into the CC&R mechanism, but they still operate rather like a set of detailed conservation controls protecting the architectural quality of the area. They clearly reduce the development potential of individual plots, but they do not eliminate personalisation in the same way as many new CC&Rs, and this is to be welcomed.

These three examples show how local communities in San Francisco have not been content with city-wide guidelines but have sought to tailor the 1989 Residential Guidelines (or their 1979 forerunners) to the particular characteristics of the locality. Westwood Park has the great advantage of being able to use CC&Rs and an essentially privatised form of design review procedure. Bernal Heights guidance is a model of its kind by virtue of its ability to define and address the key design problems (not just visual–architectural matters) and to avoid becoming too interventionist. The Union Street Guidance is equally instructive but for the opposite reasons. All three examples show how it is possible to devolve guideline writing to the local community once broad parameters have been set city-wide.

Conclusions

San Francisco's contribution to best practice urban design policy and guidance was made between 1971 and 1985. Since then there has been a significant retrenchment in the city's design initiatives and it has been forced to devolve the preparation of design guidance to neighbourhood groups, rather than to develop a positive programme of neighbourhood design initiatives and control.

Verdicts on its design policy and practice vary. All agree that the design appraisal and character assessment carried out for the 1972 Urban Design Plan was the most thorough and professionally/intellectually advanced series of urban design studies ever undertaken, and that policies which emanated from this work remain relevant today and into the future. Similarly, the clear and economical expression of goals, objectives and policies in both the 1972 and 1985 (Downtown) plans, remain a model of their kind. The policies themselves have been widely copied throughout

America (e.g. San Diego) and elsewhere, and they are valuable for their broad yet concise coverage of all the key urban design issues.

There is, however, a considerable controversy over the detailed prescriptions contained in the zoning ordinance which implements these policies, and the way this ensures close conformity to the row-house vernacular in residential areas. A number of prominent cities have commented favourably upon these controls. Paul L. Goldberger of the *New York Times* described the provisions as 'sensitive and intelligent'. Others, like the academic lawyer/planner, Richard Lai, are concerned at the 'total design' mentality of the controls, and bemoan the restraints imposed upon 'the organic process of pluralistic determination' (Lai 1988, p. 352). Lai concludes his study of San Francisco with the statement that 'The invisible web should provide only a structure framework and not be seen as total design' (Lai 1988, p. 352). Lai characterises the total control approach in San Francisco (and New York City) as an 'invisible web' implemented by the police powers of zoning. He contrasts this with the more flexible and more selective public works-led approach to design taken by Boston in the 1960s which focused upon the capital web of street improvements, transit investment, public buildings and spaces and open space provision. The capital web is a concept promoted by David Crane when he was that city's planning director, and it has been taken up by urban design critics like Peter Buchanan to criticise market-led design initiatives that neglect both infrastructure provision and the creation of the public realm (Buchanan 1987). Of course a public works-driven programme is impossible in an era of minimal public investment. In such times this kind of investment has to be extracted from private developers through bonus systems, deemed largely unsuccessful in San Francisco over the period 1968–85 by planner/designers like Richard Hedman, or through linkage systems such as the affordable housing and transit impact development fees introduced for downtown office developers in 1985.

Lai also notes the sheer complexity of the San Francisco zoning ordinance which creates a control system that only a handful of professionals (and highly skilled lawyers) actually understand. He also draws attention to the extensive discretionary powers that exist in the municipal code and which allow the city planning commission to initiate a discretionary review even when a project meets the criteria in the zoning ordinance. He notes that discretionary review is often initiated when there is extensive public opposition to a project, and that the ordinance permits a wide range of detailed design modifications as part of a list of 'additional requirements' contained in the ordinance (Lai 1988, pp. 347–8).

If San Francisco fails to meet the highest standards of design review because of the level of prescription in its zoning ordinance, or the unfair nature of its design review process, it still has much to offer progressive design control. It has a highly-disciplined and well-conceived approach to expressing city-wide design goals, objectives and policies, including some interesting performance standards for open space. It has a set of residential design guidelines that have proved to be a flexible framework which communities can tailor to their local circumstances, with or without a detailed zoning ordinance. All these policies and guidelines are solidly

DESIGN REVIEW CHECKLIST

Date: _____

Assessor's Block: _____

Lot: _____

Project Address: _____

Applicant: _____

Applicant's Address: _____

Applicant's Telephone: _____

SITE

Location:

_ The project must harmoniously integrate into the overall topography of the site.
_ The project must harmoniously integrate into the surrounding built environment.
_ The project must not block light, air, or views from surrounding structures.

Front Setback:

_ The front setback of the project must conform with the overall pattern of the surrounding area at all levels of the structure.

Rear Yards:

_ The rear yard must allow for open space of the subject lot.
_ The rear yard must allow for the overall open space of the mid-block.

Side Yards:

_ The side yard must maintain light and air for the subject lot.
_ The side yard must maintain light, air, views, and privacy for the adjacent lots.
_ The side yard must reflect the overall pattern of development in the surrounding area.

BUILDING ENVELOPE

Roofline:

_ The roofline of the proposed project must follow the pattern of adjacent or surrounding buildings.

Volume and Mass:

_ The volume and mass of the proposed project must be compatible with the surrounding buildings.
_ The design of the penetrations and articulation of the facade must be consistent with those of the surrounding area.

Dimensions:

_ The plan and height dimensions of the project must be compatible with the buildings in the surrounding area.
_ The proposed height of the project must be consistent with heights of adjacent or surrounding buildings.

Proportions:

_ The proportions of the massing of the project must be compatible with the massing of structures in the surrounding area.
_ Openings and ornamentation proportions must be consistent with those of structures in the surrounding area.

TEXTURE AND DETAILING

Exterior Materials:

_ Materials of the project must reflect the existing materials and/or those of the surrounding area.

Ornamentation:

_ The level of ornamentation must be consistent with the design of surrounding houses.

OPENINGS

Entryways:

_ The entryway must be proportioned, articulated, and decorated in a consistent manner with surrounding structures.

Windows:

_ Proportion of solid to void must be compatible with that of structures in the surrounding area.
_ Window material and design must be compatible with that of the structures in the surrounding area.

Garage Doors:

_ The garage door must be recessed or set back from the front facade.

LANDSCAPING

_ There must be sufficient unpaved open area for landscaping in the front setback area of the project.

RESTRICTIONS

_ The project must be clearly proposed for one unit.
_ Enclosed parking must be maintained.

NEIGHBORHOOD OPPOSITION

_ No substantial neighbor opposition to the project.

Fig. 64 San Francisco: Westwood Park Design Guidelines: Checklist (1993)

based upon a thorough appraisal of the locality and a high level of citizen participation and comment. Certainly the city clearly meets Justice Brennan's requirements of 'a comprehensive and co-ordinated community commitment' to environmental enhancement and aesthetic regulation.

The city has had to tread a fine line in its design policies between development interests, property owners and other proponents of growth, and a citizenry determined to protect the city's environmental quality, diversity and character. Public pressure has forced it to take a tougher line on the design of development than city leaders intended. In particular, the 'beauty contest' was an instructive experiment in design competition, widely agreed to be inequitable and discriminatory, which delivered a discernible but not pronounced improvement in design quality.

As Richard Lai also notes, there are significant dangers in attempting to apply San Francisco's (and New York City's) detailed and precise controls to other contexts, because the city has a unique development climate where developers will do more or less anything to get a building permit. This view, articulated at the height of the property boom in 1987–8, carried rather less conviction in the development recession of the mid-1990s, but the point is nonetheless a valid one—the kinds of requirements placed on developers in cities like San Francisco can only be successfully applied where there is very significant competition for development. Elsewhere they might constitute a serious constraint on market activity and encourage developers to take their projects elsewhere.

FIVE

IRVINE

Introduction

Of the six city studies that constitute this book, the study of Irvine (population 100 000) is the odd one out. Not a city at all in the conventional sense, Irvine is effectively the most south-easterly suburb of Los Angeles, though this dubious honour is already being lost to a chain of master-planned communities springing up along Interstate 405 that only stop at the San Onofre Nuclear Generating Station and the Pendleton Marine Training Base.

Why select Irvine as a case study of design control? In the first instance because it features strongly in researches on design control and design regulation (Shirvani 1991; Habe 1989) and is cited repeatedly as an example of suburban planning at its best (at least in the 1980s). Secondly, there is the interesting twist that design control in the city is operated first by the developer and then by the community as a 'privatised' system of control. Thirdly, Irvine is a fine representative of a master-planned community—a large-scale, primarily residential development undertaken by a single developer or landowner exerting short-term and long-term control through deed restrictions to ensure community stability and high property values, characterised by high incomes, social segregation and suburban lifestyles. Finally, Irvine is an 'Edge City' (Garreau 1991), part of post-suburban Exopolis (Soja 1996), set in the heart of Orange County, which is seen by many as one of the key laboratories of contemporary urbanism, a giant theme park not just in the eyes of UCLA geographers, but also in the hype of the Californian Office of Tourism (Soja 1996, p. 237).

Irvine represents one vision of the future where planning and design control continue to create private, highly segregated suburban utopias. Still less than twenty years old in conception, it is already being overtaken by new concepts of layout and design that also draw on 'traditional' American values—in this case the small-town America of the new urbanists rather than the ranch-house suburbia of post-Levittown.

Irvine is almost inseparable from the Irvine Company, whose 640 000 acres of landholdings nearly bisect Orange County and stretch from the Pacific inland to the Santa Ana Mountains in a 22-by-9-mile rectangle (much of which is outside the city of Irvine). Founded on a ranching enterprise that was superseded by irrigated arable farming, the Irvine Company realised the potential of planned communities in the 1950s beginning with a series of exclusive subdivisions overlooking the Pacific; it donated a large site to found the University of California Irvine a few miles inland,

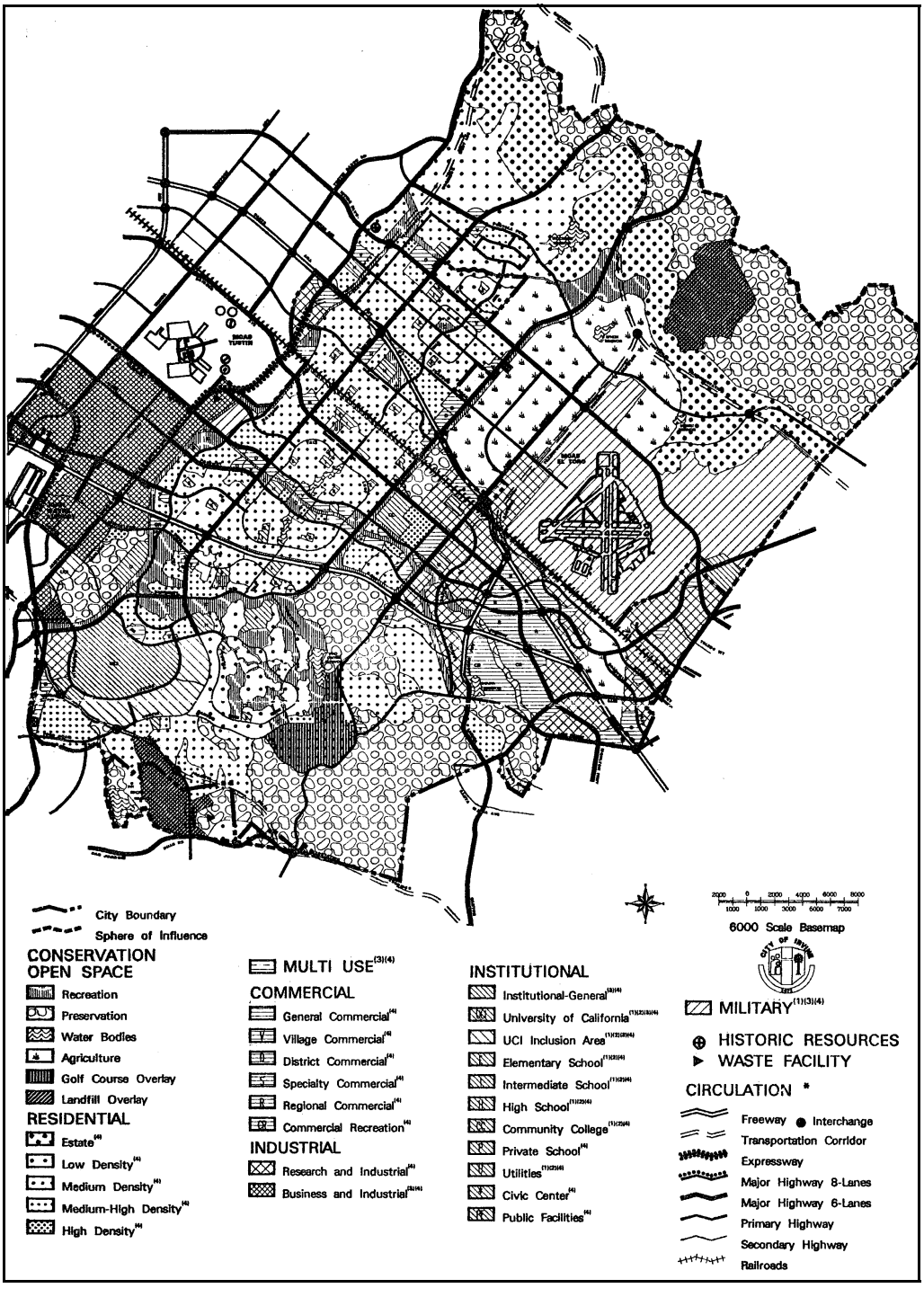


Fig. 65 Irvine: City of Irvine General Plan: Land Use Element (1977)

and then started a new nucleus of development close to Interstate 405. When the city was incorporated in the mid-1970s these two residential areas were its twin nuclei, and the village of Woodbridge was built as a link between the two (Fig. 66). Construction of the latter began in 1970 and was largely complete by the early 1990s, housing 26 000 people at about 9 dwellings per acre (gross). The Irvine Company regulated 12 builders responsible for a total of 140 different parcels of development (Moudon (ed.) 1990, p. 46).

It is Woodbridge (Fig. 66) that will be the focus of much of the discussion of design controls.

Company-controlled design

The Irvine Company operates the most extensive and influential design controls in the city. It develops the design guidelines for each successive tract of land it wants to develop, prescribing not only precise standards of layout and house type but also numerous aspects of architectural form, details and materials. The Company then selects a builder/developer to design and execute the project, and the developer's architect produces a detailed concept plan for subsequent review by the Company's Project Review Team and its Urban Planning and Design Department. Once the Company is satisfied with the concept, the plan is submitted to the city for approval, but this was usually only a formality.

The City Council retains zoning controls and in the 1970s developed a General Plan which was currently under revision (Fig. 65), as was the Zoning Ordinance in 1994. The city previously left most planning and design matters to the Irvine Company, but it has become gradually more interventionist, particularly in matters of open space preservation (Proposition 13 and its restrictions on taxation have now severely constrained this activity), although the general attitude is 'the less regulation the better'. Conversely, at the neighbourhood level community associations regulate many detailed aspects of building personalisation and decoration through Covenants, Covenants and Restrictions (CC&Rs) placed on the properties when sold. The net result is a series of very high-quality residential enclaves ('villages') permanently bathed in the Southern Californian sunshine, and blighted only by the helicopter activity of two Marine Corps airbases, and the constant roar of traffic on the city's six boulevards and Interstates 5 and 405.

Over time, the Company has also moved to regulate industrial and business development much more carefully. In the Irvine Business Complex near Orange County Airport the Irvine Company used CC&Rs to control industrial development concentrating upon quality landscaping, generous setbacks and controls on signs, but exercising little architectural control. When that development was completed, a second industrial area was developed to the east with slightly stronger architectural controls. In both areas intensification of uses in the 1980s essentially destroyed the coherence and quality of the area as a series of projects each adopted their own individualistic architecture and site planning. The Irvine Company reacted by

adopting stricter guidelines in their newest industrial areas with a private design review process conducted by the company's Urban Planning and Design group. In the Spectrum Development this provided a consistent, highly landscaped setting with evergreen trees providing a canopy for the streets in advance of development. It sought a simple modernistic architecture using predominantly white finishes and simple wall planes and fenestration patterns. The entrances of each building were to be emphasised architecturally and in landscape terms. The result is a pristine, manicured landscape with a strong contrast between the lush greenery and simple white buildings evoking the timeless modernist ideals of the 1930s, 1950s or 1990s. This is an adaptation of CC&Rs and the private design review process to corporate objectives, and it has proved very successful in attracting blue chip businesses and firms with a long-term economic outlook (Baab 1994, p. 194).

The limited role of the city

In Irvine the city plays very much a secondary role in all aspects of design control, deferring to the Irvine Company and the various community associations that the company establishes. The city controls the grading of the land and its landscaping, as well as the design details of the plans through a Code Compliance Review process which also embraces energy considerations. Many projects require a Landscape Construction Plan as part of the evaluation procedure, and an Environmental Impact Assessment which is checked against the Irvine Master Environmental Assessment completed in 1986.

The General Plan, heavily influenced by a plan commissioned in 1977 by the Company from Wallace McHarg et al., divides the city into 28 planning districts (largely defined by a grid of arterial roads), and controls the phasing of the development. It is concerned with perpetuating the city's low density and very green image, and its lack of commercial strip development. Large flanks of the San Joaquin hills to the south around the University of California are designated for preservation and recreation, as are the foothills of the Santa Ana mountains to the north, but on the valley floor the open space system is discontinuous, or aligns itself along arterial roads, which rather defeats its purpose.

Fiscal issues are also driving the planning agenda, both in terms of the emphasis on cheap government and efficient services, and now particularly in relation to the costs and benefits of development. At present, city revenue exceeds costs by 15 per cent, but there are major concerns about the long-term underfunding of maintenance costs. The city is currently working on an accurate auditing of development and maintenance costs, and this focuses particularly upon the relationship between land-uses and traffic generation, and the attempt to define and then limit the number of trips generated by particular uses. Development impact fees have been set up by the State to fund schools and sanitation, and by the city for street repairs and transportation corridors, but State law requires the justification of impact fees and the careful calculation of such things as the costs of traffic. Tax base planning is a key issue even in a city rich in industrial and commercial development.

Changes in housing policy at the State level are ensuring a greater level of social

mix than existed previously. The State has to certify municipal housing policies and ensure the provision of a five-year supply of housing land, and the goal is that 25 per cent of housing should be affordable, although there is no obligation on individual developers to provide such housing. However, the Irvine Company has embraced the challenge and has supplied land to several agencies for a variety of affordable projects, a number of which are located with, and almost indistinguishable from, middle class housing in the area.

Irvine's 'village' structure and layouts

The city's 1977 General Plan emphasises a hierarchy of service centres—city, district, village and neighbourhood centres—while the residential areas are conceived as a series of villages of about one-and-a-half square miles and 9000 inhabitants, each with its own distinctive architecture, schools and shopping and commercial centres to reinforce its identity, and each set in a park system/green belt (Fig. 65). Each village excludes through-traffic and has a circuitous street pattern, while the arterial roads are frequently six-lane boulevards, but extensively and lusciously landscaped. There is increasing concern that the villages will become inward-looking rather than relating one to another or to the whole city, and more emphasis is now placed on developing linkages between them.

'Woodbridge Village' is the largest of Irvine's villages with a population of 26 000, but in reality it is a district with at least four distinct neighbourhoods (villages). The plan for Woodbridge and its execution are good examples of the depth and sophistication of suburban master-planning in the USA. The concept was to build a balanced community with a clear identity, sub-divided into a series of visually distinct villages, each with its own elementary school. Built within a 2-by-1½-mile block, the village is focused on a pair of man-made lakes (complete with beach and tennis clubs) that run north–south. It is bisected by two boulevards running roughly east–west which enclose the commercial and institutional uses either side of the bed of San Diego Creek (Fig. 66). This arrangement was intended to make businesses, institutions and commercial facilities easily accessible to each residential area without compromising their environmental quality, while the residential densities were intended to make public transport a feasible proposition.

A looped boulevard serves each of the neighbourhoods, which in turn have looped local distributor roads, but most housing is built on cul-de-sacs. There are trails and cycleways to provide more direct links to schools, community facilities and shops. A high level of landscaping has been provided to help define the community and increase its amenities, while the architecture has gone through several fashion changes from a deep-eaved, flat gable-ended, natural wood-finished style (Fig. 67) to more colonially-influenced, white-painted row-houses. The impression of universal affluence and huge houses is moderated by the knowledge that nearly half the units are townhouses and about one-sixth are apartments, 16 per cent of units being classed as affordable.

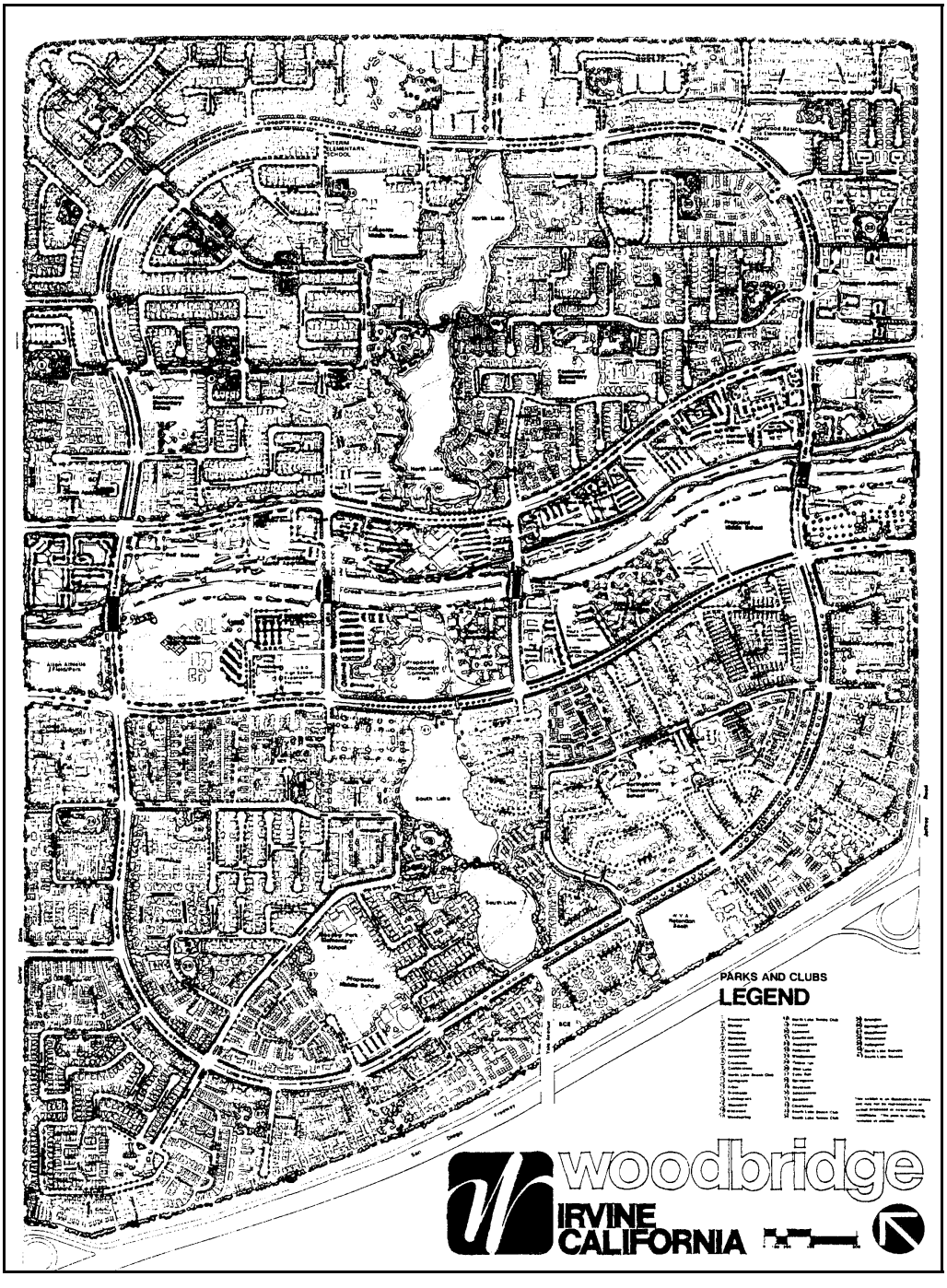


Fig. 66 Irvine: Map of Woodbridge Village

Developers' and urban designers' perspectives on Woodbridge

Reflecting on its experiences in Woodbridge, the Irvine Company has noted the need to integrate such a community very carefully into the sub-region, particularly in terms of transport and employment (Moudon 1990, pp. 45–53). The Company recognises the value of both a comprehensible plan with a clear circulation pattern and community identity, and design quality and consistency. But it is critical of the way the development fails to maximise the use of the two lakes, of the design and commercial shortcomings of the business area, of the fact that some of its amenities are underused, and of the overall profitability of the development. To emphasise the difference of perspective between developer and planner, the Company considers that more attention should have been paid to how people drive around the city, particularly in terms of being able to find their way around the community to see the lakes. 'People spend much more time walking than they do driving' is a poignant comment when the implication is that even more provision should be made and more priority attached to the needs of the car.

Urban designers would take the opposite view. Richard Untermann and Doug Kelbaugh (Moudon 1990, pp. 57–8) have both commented on the design of Woodbridge and other master-planned communities, emphasising the need to develop a pedestrian scale (the quarter-mile that people are prepared to walk—the 400-acre community), to create a vital public realm where people of all ages and interests meet, to encourage linkages within and between communities which would encourage interaction and socialising, and to encourage alternative modes of transport especially cycling and walking. Untermann emphasises the need to reduce road widths and slow traffic down, and to 'increase the amount of detail that is built into the communities'. Kelbaugh echoes the latter point to emphasise the values of architectural diversity and personalisation that these communities lack, largely because strict design controls make such innovations difficult.

Woodbridge, Irvine and the debate over neo-traditional design

It is useful to assess Woodbridge against the neo-traditional/new urbanist agenda for suburban design. The results are not as one-sided as one might expect. It is possible to synthesise the neo-traditional design concepts as follows:

1. a mixed-use core;
2. the establishment of employment and civic centres;
3. fostering a sense of community;
4. street patterns that allow drivers and pedestrians a variety of path options;
5. the encouragement of socio-economic diversification by providing housing for all income levels;
6. a balanced land-use mix to allow people to walk between residences, businesses, and employment centres;
7. higher than typical suburban density as a result of locating various uses within walking distance;

8. streets designed to encourage street life;
9. a common open space located and designed for intensive public use, often modelled after a historic village square or town green;
10. a distinct architectural character, often modelled on the traditional architecture of the region. (Christoforidis 1994, p. 432)

Applying these principles it can be seen that Woodbridge has gone a considerable way to meet points 1, 3, 5, 6, 7 and 10, albeit with a form that neo-traditionalists would not recognise as appropriate. The mixed-use core does not contain residential development, and tends to be quite large-scale and coarse-grained in terms of schools, churches, community centres, recreation grounds and shopping separated by large expanses of car parking. This centre cuts a swathe through the community rather than focusing its activity. On the issue of community, certainly the Village Association provides an important focus for community life, and an opportunity for a considerable degree of self-management. On the issue of socio-economic diversification, as previously noted 16 per cent of the housing is classed as affordable though there is a limited mix of house types. There is some balance in land-use mix, but no employment centres within the 'village', and walking distances to the centre rise to half-a-mile on the edges of the village. The development is compact by American suburban standards and was designed to make provision of transit feasible on the loop road, but the commercial uses, and the positioning of the lakes, rather militate against this. On the other hand, the lakes create an excellent amenity and attractive cycle and pedestrian ways, though they do not provide focal open space in the neo-traditional sense. The elementary school in each neighbourhood does provide some focus in the classic neighbourhood unit sense, as do the beach and tennis clubs. However, Woodbridge does have a distinct architectural character, or at least each of its neighbourhoods does. Whether these are modelled on the traditional architecture of the region is open to debate about just what that tradition might be.

The key failings of Woodbridge have been alluded to by both planners and designers previously quoted. They concern the lack of integration of neighbourhoods produced partly by the lake system; partly by the institutional/commercial zone bisecting the village; partly by the emphasis on cul-de-sac layouts; and partly by the very suburban relationship of building to street, often very garage-dominated. The enclave effect is not as extreme as many suburbs. There are in fact eight routes out of the village whereas in many suburbs there are only one or two. Every neighbourhood has at least two outlets onto the loop road, so there is less congestion than is frequently the case in 1980s suburbia. Overall, however, Woodbridge remains a very car-dependent community for all except children going to elementary school, and this combined with its lack of employment centres is what really undermines its sustainability. In the search for a more connected, livelier, sustainable set of communities that is going on throughout suburban America (Langdon 1994), Irvine does not have much to teach us. It remains a fascinating, if claustrophobic, example of privatised design control and a perfect expression of NIMBYism, in one of the fastest changing urban regions of the world.

Covenants, Conditions and Requirements—community control

Community organisations are mandated by the Irvine Company, through the Covenants, Conditions and Requirements (CC&Rs) placed on each house purchaser in the city, to control all visible alterations to the property. In the case of Westpark, the Westpark Maintenance District exercises controls on the alteration, maintenance and repair of buildings, and plans are vetted by an Architectural Committee. Zoning and code control are also exercised by the city, but they do not control the details of design and personalisation. In Woodbridge, a Village Association (WVA) provides property management services that extend to maintenance of landscaping, 'public space' and the beach and tennis clubs. Every home owner is a member of this non-profit organisation financed by mandatory monthly payments from each property owner and governed by a seven-person elected board. It is this body which enforces the CC&Rs.

In Woodbridge Village the CC&Rs specify the nature of architectural control

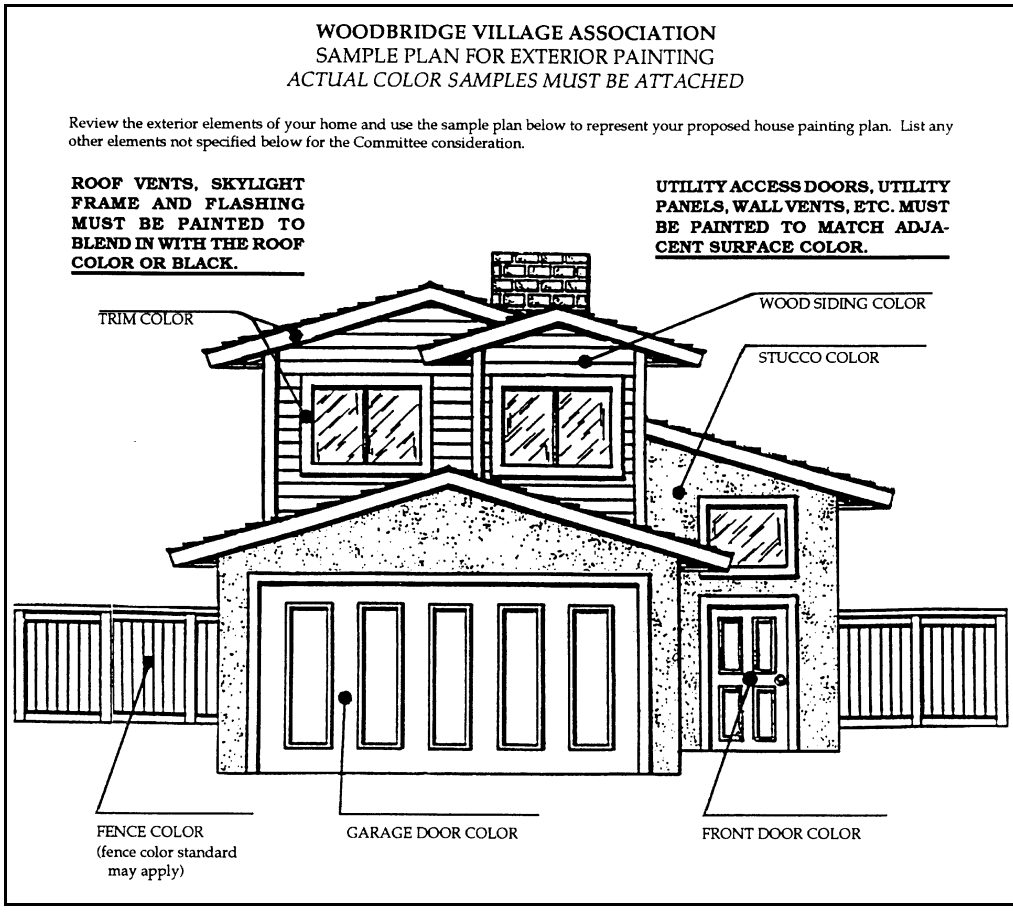


Fig. 67 Irvine: Woodbridge Village: Sample Plan for Exterior Painting (1993)

with the Company setting up the initial Architectural Committee of at least three persons. Moreover, the Company retains the right to appoint, augment or replace the committee for eight years or until 90 per cent of the lots are completed, while the Committee can establish its own rules and fees (up to $50) for plan review. The Committee is responsible for administering any architectural standards that the Board of the Company may promulgate. These can be very restrictive, and may regulate 'construction, reconstruction, exterior addition, change or alteration to or the maintenance of any building, structure, wall or fence, including, without limitation, the nature, kind, shape, height, materials, exterior color and surface and location of such dwelling or structure' (Woodbridge Village Association Code nd CC&Rs V3). Decisions of the Committee may be appealed to the Board of Directors.

In Woodbridge Village the regulations are based on the concept that 'maintenance ... of an attractive private community in which to live depends upon continuous design excellence and sensitivity to the environment' (Woodbridge Village Association Code nd s3.3–0, a). Application forms are provided for all home improvements; detailed and comprehensive plans have to be submitted, and the applicant has to get his/her neighbours to initial the plans, while the Architectural Committee will consider the neighbours' views in their decisions. Fees are only levied for house extensions, and inspections of the project are made by the Community Relations Department. Applicants are encouraged to seek a preliminary opinion on their plans from the Architectural Committee.

The 16 pages of regulations ensure that 'modifications of structures and materials ... are ... compatible with the dwelling and overall style of the tract' (Woodbridge Village Association Code nd s3.3–1), meaning that virtually all alterations or additions to property require prior approval from the Architectural Committee. The architectural guidelines and standards are very exact and embrace massing, roofs, fenestration, setbacks (Fig. 68), landscaping (Fig. 69), exterior painting (Fig. 70), room additions, windows and doors, patio covers and awnings, solar energy devices, fencing, mailboxes, sheds, satellite dishes, and mechanical equipment. There is even a mandatory standard for basketball backboards which controls their painting, net colour, size, and insists on the removal of any logos, etc! (Fig. 71). All colour changes require approval and Color Palette Guidelines are provided, and in some tracts particular colours are mandatory (Figs 67 and 70). One Woodbridge regulation states:

> The Architectural Committee does not allow homes directly across the street to be painted the same color scheme and will require a two-house separation between homes painted the same color scheme. Darker colors shall be limited to use as trim or accent colors. (Woodbridge Village Association Code nd s3.3–5, 2d)

In some communities in Irvine the colour of the curtain linings is controlled, in others the length of time a garage door may be left open. It is scarcely surprising that residents are reputed regularly to return to the wrong house!

WOODBRIDGE VILLAGE ASSOCIATION CODE
ARCHITECTURAL GUIDELINES AND STANDARDS

c. Mass. New additions or remodels must be planned to minimize mass on all elevations as to integrate more appropriately with the dwelling and other adjacent homes. Homeowners of corner lot dwellings will be required to reduce mass by incorporating architectural style and materials to reduce impact on open space and adjacent homes.

d. Roof. The committee will limit the overall height of all new additions to the maximum height of developer constructed two-story homes in the same tract.
Roof pitch and design shall not deviate from that which exists in the neighborhood. Roof materials must match existing materials on the dwelling, and all proposed projections must be noted on final drawings. Any change in materials would require a Home Improvement Application and a sample of the roof product and color, subject to approval by the Architectural Committee.

e. Front Setbacks. Setback standards on second story additons over the garage must be consistent with developer constructed two-story homes in the tract. Furthermore, any variance from the developer constructed second story setback will be considered by the Architectural Committee on a case-by-case basis. However, in no case shall the face of the second story setback be less than two (2) feet measured from the face of the garage. The Architectural Committee will not allow the extension of the existing garage towards the street, since it may significantly create inappropriate massing and is not an acceptable solution to obtain square footage on the dwelling.

f. Rear Yard Setbacks. Single-story additions shall extend no nearer than ten (10) feet from the rear property line. Two-story additions shall extend no nearer than fifteen (15) feet from the property line.

g. Side Yard Setbacks. Building in side yard areas shall be restricted to noninhabitable improvements, such as bay or garden windows, patio covers, etc. Additions may be considered if a minimum of ten (10) feet building to building is maintained and the proposed addition meets other review requirements.

(4) *Windows*. Window design and materials shall be consistent with other windows on the dwelling. Window style may not be acceptable if the proposed changes alter the character of the window elements already existing in the neighborhood. Metal window frame color changes require a Home Improvement Application. If approved, all exterior metal window frames on the affected side of the dwelling must match approved color. Approved wooden window frames will be allowed to be painted to match trim, wood siding or stucco of dwelling. Zero lot line windows are not permitted.

(5) *Skylights*. Skylights will be considered based upon location and number of skylights. Skylight domes may be bronze, clear or white. All metal framing and flashing must be painted to blend with the roof. All visible manufacturer labels shall be removed prior to installation.

(6) *Balconies*. Front yard balconies are not appropriate; however, the Architectural Committee will consider an application on a case-by-case basis relative to its design, size, location, and compatibility with adjacent homes.

Fig. 68 Irvine: Woodbridge Village: Architectural Guidelines (nd)

WOODBRIDGE VILLAGE ASSOCIATION CODE
ARCHITECTURAL GUIDELINES AND STANDARDS

(1) *Landscaping.* Landscaping components can be defined as (1) hardscape: walkways, driveways, planters, pilasters, etc., and (2) softscape: grass lawn, flowers, shrubs, ground cover, trees, etc. All hardscape components covered by section 3-3 must be approved by the Architectural Committee. Landscaping installed must present an attractive appearance for the property and must include a reasonable combination of grass lawn and/or ground cover, shrubs and trees, walkways, etc. (See recommended percentages below for softscape.) Any softscape landscaping which deviates from the minimum landscaping requirements must be approved by the Architectural Committee.

a. The following landscaping materials are not permitted within the front and visible side yards, without the approval of the Architectural Committee:
   1. Decorative rock, wood chips, sand, gravel, or any other rock-like substance. However, these materials may be acceptable when installed as an accent in the visible areas. Non-plant materials are not to be used as a substitution for hardscape, lawn or ground cover.
   2. Hedge-type plants exceeding eighteen (18) inches in height and/or shrubs with thorns planted adjacent to sidewalks.

b. The following minimum landscape (softscape) requirements will generally be accomplished if the Association must enter upon a lot to install landscaping on the front and/or side yard property:
   1. Eighty (80) percent of the front and side yards planted in ground cover or grass lawn, or a combination of both.
   2. Twenty (20) percent of the front yard planted with shrubs as follows:
      i. One (1) one-gallon shrub for every ten (10) square feet.
      ii. One (1) five-gallon shrub for every fifty (50) square feet.
      iii. One (1) fifteen-gallon tree planted.
   3. A manual sprinkler system installed.

Fig. 69 Irvine: Woodbridge Village: Landscaping Guidelines (nd)

Detailed planning control in Irvine is very much a company or community affair with one principal objective in mind—the maintenance of a very high quality of environment that holds its value and continues to express its original aesthetic. This is an expression of a deep conservatism, a desire for conformity and resistance to physical and, therefore, social change. The ability to control social change is of course limited, but public safety is very much a key issue in the city today, so much so that much of the city's budget (and part of the 40 per cent cut in the Planning Budget) has gone to finance more police and various security initiatives. Design against crime is looming much larger, and may well destroy some of the city's

traditions of quality landscaping and pedestrian routes and cycleways. Gated communities, barriers between residential development and open space, better surveillance and visibility all threaten to exacerbate the problems of community isolation and access to natural open space. Although Irvine is included in the FBI's list of the top ten safest cities it is extremely sensitive to any sign that the problems of south Los Angeles might be catching up with it.

Community conformity and claustrophobia or democratic control?

Buying into one of the villages of Woodbridge or of Irvine itself means buying into a very privileged community, where conformity is strictly enforced. There have yet to be studies of the longer-term effects of CC&Rs on community structure and character, or of violations of covenants and effects on individuals or community relations. At a symposium of master-planned communities there was some discussion of what happens as properties age and need more radical surgery, and as communities age and new needs become apparent. It emerged that CC&Rs are extremely expensive to challenge, and extremely expensive to defend, and it was argued that they remain psychological rather than strictly legal controls (Moudon 1990, pp. 113–15).

There are those who see CC&Rs as the mechanisms maintaining the exclusion, social segregation, and social conformity that zoning and master-planned communities have created. Perhaps it is the fear of crime and of the encroachment of urban problems from Los Angeles which underlie the obsessively detailed, conformist controls exercised in Irvine. These controls also underline how residents can be harnessed to the same causes of social control and environmental conformity in the name of 'community', thereby giving credibility to one of the key marketing concepts in the development of such 'edge cities'.

A more positive verdict on CC&Rs is recorded by David Baab, a local planning consultant (Baab 1994). He argues that private design review is more effective than public design review, more based upon intimate first-hand knowledge of the locale, and more aware of community values. Baab considers that the problem with public design review is that it is undermined by many single purpose government agencies which ignore the aesthetic impacts of their actions (public works landscaping standards, highway standards, public buildings like schools, post offices, etc.), and that public design review should concentrate first on these issues. He sees private design control as empowering residents and communities without the need for any government intervention.

Baab argues that CC&Rs are no longer a tool to discriminate against race and class, and that many low to middle income communities use CC&Rs, while some of the most uniform and themed developments have a large number of low income units in apartment and townhouse form. Westwood Park in Irvine is a case in point. Baab goes further to argue that while it is easy for residents to escape CC&Rs by moving, it is more difficult to escape municipality-wide design guidelines or other

WOODBRIDGE VILLAGE ASSOCIATION CODE

(2) *Exterior Painting*. A home improvement application is not required for a home which is being repainted using the existing colors in the same locations, provided the colors were originally used on the home by the developer or were colors previously approved by the Architectural Committee. (Refer to subsection (2)f. of this section for paint finish limitations.)

a. Color Changes: A home improvement application is required for any proposed change in exterior paint color(s) or the location of existing colors.
b. A home improvement application must include paint chips and a completed sample plan provided with the application by the Association.
c. The Architectural Committee reviews applications for exterior painting to determine that color choices are consistent with the Architectural Guidelines and Standards. All colors are reviewed on a case-by-case basis for compatibility with the home and tract.
d. The Architectural Committee does not allow homes directly across the street to be painted the same color scheme and will require a two-house separation between homes painted the same color scheme. Darker colors shall be limited to use as trim or accent colors.
e. *The number of contrasting colors on the home, as established by the developer, may be required to be maintained as determined by the Architectural Committee.*
f. Flat paint finishes are acceptable for all exterior elements of the home. The application of semigloss finishes is to be limited to windows and doors only (excluding garage doors). High gloss finishes are not permitted.
g. Fence paint color standards by tract may be applicable or Exhibit E may be applicable. (Refer to subsection (15) of this section or contact the Community Relations Department for information.)
h. Mailboxes and posts must be maintained consistent in color, materials, design and installation as established by the developer, within the immediate tract. (Refer to subsection (16) of this section for complete definition and exceptions.)
i. *Color Palette Guidelines. The Association has adopted a color palette to be considered by homeowners (tract exceptions may apply) as a suggested guideline when proposing paint color changes. The color palette is on display at the Association office.*

General Palette Numbers (Old Quaker Paints*)

146	112	145	175	147	460	06	454	439	55	27	423
434	410	412	SD616	413	411	90	407	406	405	403**	519
545	452	76	99	106	105	102	SD620	SD621	101	414	

Color Combination Numbers (Old Quaker Paints*)

414	102	101	101	414	SD621
SD620	452	407	SD616	412	106

(Revised 10-7-92)

* Note – Old Quaker paints are used as color guidelines only. The Association is not endorsing Old Quaker paint products or information. Most paint manufacturers can match Old Quaker paint colors upon request.
** To be used as trim colors only.

Fig. 70 Irvine: Woodbridge Village: Exterior Painting (nd)

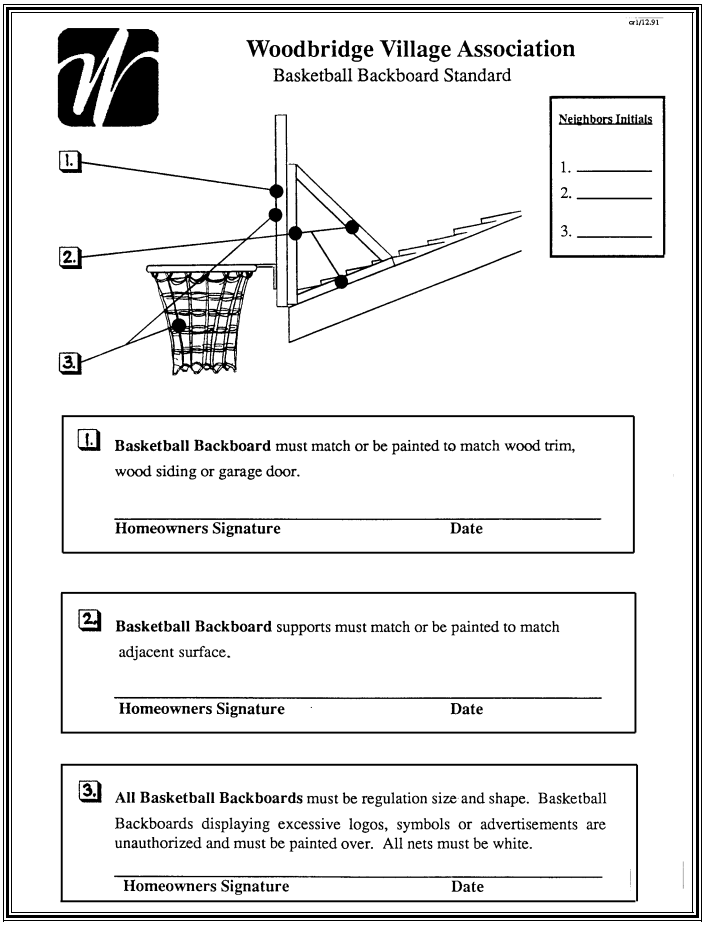
forms of built form regulation. Baab sees private design review as a very positive phenomenon and a powerful tool to protect housing investments and quality of life, a way of actually subordinating individual property rights to community values. The increasing number of new communitites built with CC&Rs, and the rising number of community associations to operate them, are testimony to their popularity and effectiveness, but the debate about their social, economic and aesthetic impacts goes on.

Conclusions

Irvine provides an important example of the new kinds of privatised planning which are exerting such an influence on the new patterns of urbanisation in the USA. The Company's controls on developers certainly ensure a high quality and consistency of design at the neighbourhood and village/district level. While layouts are of a rather conventional kind in terms of wide cul-de-sac streets where frontages tend to be dominated by garages and hardstanding, the design of the housing and the quality of landscaping are generally of a very high order. Having established the standards of design, the neighbourhood or village associations are empowered to control all alterations to the original design through CC&Rs imposed on each property when sold. In this way the integrity and quality of the original design is fully protected from unsympathetic extensions, alterations or changes of use.

The latter controls provide a means of empowering local citizens and giving them more control over the maintenance and management of the physical character of their neighbourhoods, but they can be used in very negative, exclusionary and conformist ways particularly when allied to the deep conservative values that prevail in much of Orange County. Debates about neighbourhood participation in design control and the neighbourhood protection service that it offers are perhaps at their most extreme in Irvine, but can be seen as important in all five of the cities studied. Whereas CC&Rs essentially freeze the character of the neighbourhood at its as-built character, the design control devolved to the community in a city like Seattle still allows significant change and intensification of use by virtue of the Comprehensive Plan with its urban villages strategy. It has yet to be seen how the tensions surrounding neighbourhood amenity and stability are played out in the design control and planning arenas in Seattle, but as will be seen in San Diego, neighbourhoods use community plans and zoning ordinances essentially to minimise intensification and social change.

The Woodbridge CC&Rs are extremely prescriptive about matters that would not require planning permission or permits in any other country. These include the choice of colours for painting the exterior and even the trim of houses, on exact specification of areas to be landscaped, and controls on fences, awnings and garden equipment (Figs 69 and 70). They are far more detailed than those prescribed in Westwood Park in San Francisco, and they ensure a parade-ground neatness that most residents seem to appreciate.



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Woodbridge Village Association

Basketball Backboard Standard

Neighbors Initials

1. _____

2. _____

3. _____

1. **Basketball Backboard** must match or be painted to match wood trim, wood siding or garage door.

Homeowners Signature **Date**

2. **Basketball Backboard** supports must match or be painted to match adjacent surface.

Homeowners Signature **Date**

3. **All Basketball Backboards** must be regulation size and shape. Basketball Backboards displaying excessive logos, symbols or advertisements are unauthorized and must be painted over. All nets must be white.

Homeowners Signature **Date**

Fig. 71 Irvine: Woodbridge Village: Basketball Backboard Standard (1991)

While many commentators find this level of control stifling and destructive of diversity and vitality (Untermann 1990; Kelbaugh 1990), others see it as more unified, more effective and more responsive to community values than any kind of public design control. Baab is unmoved by the exclusionary implications of CC&Rs, arguing both that many of these developments do have an in-built mix (by virtue of State-imposed affordable housing regulations; e.g. 25 per cent affordable in Woodbridge) and that many low income neighbourhoods use CC&Rs to maintain environmental quality. He sees CC&Rs as a mechanism for subordinating individual property rights to community values and as a progressive rather than a regressive tool.

CC&Rs are of course widely used in master-planned neo-traditional communities where the building code sets narrow constraints on all matters of layout, siting, landscaping and property extension. The comparison of Woodbridge with

neo-traditional layouts revealed fewer differences than might at first have been expected, but focused upon the lack of vehicle and pedestrian permeability of cul-de-sac layouts, the lack of an accessible (by walking) mixed-use core, the lack of employment opportunities within the village, the general absence of street life and the lack of a focal open space. These are all factors which encourage walking and cycling rather than car driving and which help to foster a stronger public realm.

The issue of mobility and mode of travel is also critical to design at the city-wide scale, and it is here that Irvine's limitations are most significantly exposed. As the developers of Irvine themselves recognise, it is the integration of a community like Woodbridge into the sub-region, particularly in terms of transport and employment, that is so critical (Moudon 1990, pp. 45–53). In Irvine the segregation of land uses, the huge concentrations of commercial/industrial enterprises on the western and eastern margins, the failure to use the rail corridors or to consider the possibilities of transit all make the future of this part of Southern California bleak in terms of air quality and public health. In his review of Californian planning, Fulton puts breaking suburban car dependence at the very top of his list of necessary reforms for Californian planning (Fulton 1990, pp. 264–8), but while the ideas of Calthorpe and others promoting transit-oriented development win wide acclaim amongst environmentalists, they have yet to make significant inroads into suburban design in Southern California despite important studies in San Diego. Where large-scale planning is effectively led by market research into consumer preferences, it may be some time before more sustainable forms of community and city design are forthcoming.

SIX

SAN DIEGO

Introduction

> *Look at the land as it was before any major settlement occurred upon it. That is the basis of the city's quality. We must work with that base or pay an unremitting price.*—Kevin Lynch and Donald Appleyard writing on San Diego (1974).

The city of San Diego encompasses some 403 square miles of land and water, and houses a population of 1.1 million. Located in what is ostensibly Southern California desert with a rainfall of less than ten inches per year, its climate is modified by the Pacific Ocean which gives it an average summer temperature of only 70°F. Its excellent climate and 42 miles of beaches are its great attraction, and help to account for its growth rate of 90 000 per annum through the last decade, although current rates are only half that figure. Nonetheless, growth rates of over 40 per cent are projected for jobs and households up to 2005. The city dominates the County of San Diego (2.6 million) but it is the County which provides basic municipal services, including law enforcement, public health and welfare. Metropolitan San Diego, in which the city has a 40 per cent voting stake, embraces 17 other municipalities, and this area is the focus for strategic planning by means of a General Plan. The plan therefore covers a coastal tract about 20 miles wide stretching for more than 40 miles from the huge Pendleton Marine training base (which is all that separates the outliers of Los Angeles from the San Diego conurbation) to the Mexican border (Fig. 72).

The General Plan

A General Plan for the city was first adopted in 1967. The current Progress Plan and General Guide was first adopted in 1978, but was revised and updated in 1989. A document of over 400 pages, it is in legal terms 'a comprehensive long term . . . plan for the physical development of the city', and it includes all development policies, objectives, principles, standards and plan proposals. It is required by state legislation to embrace land-use, circulation, housing, conservation, open space, seismic safety, noise and scenic highways, but it also includes optional sections on issues like redevelopment, cultural resources, energy conservation, recreation, industry, commerce, public service and urban design.

The plan functions as the yardstick for evaluating all significant public and

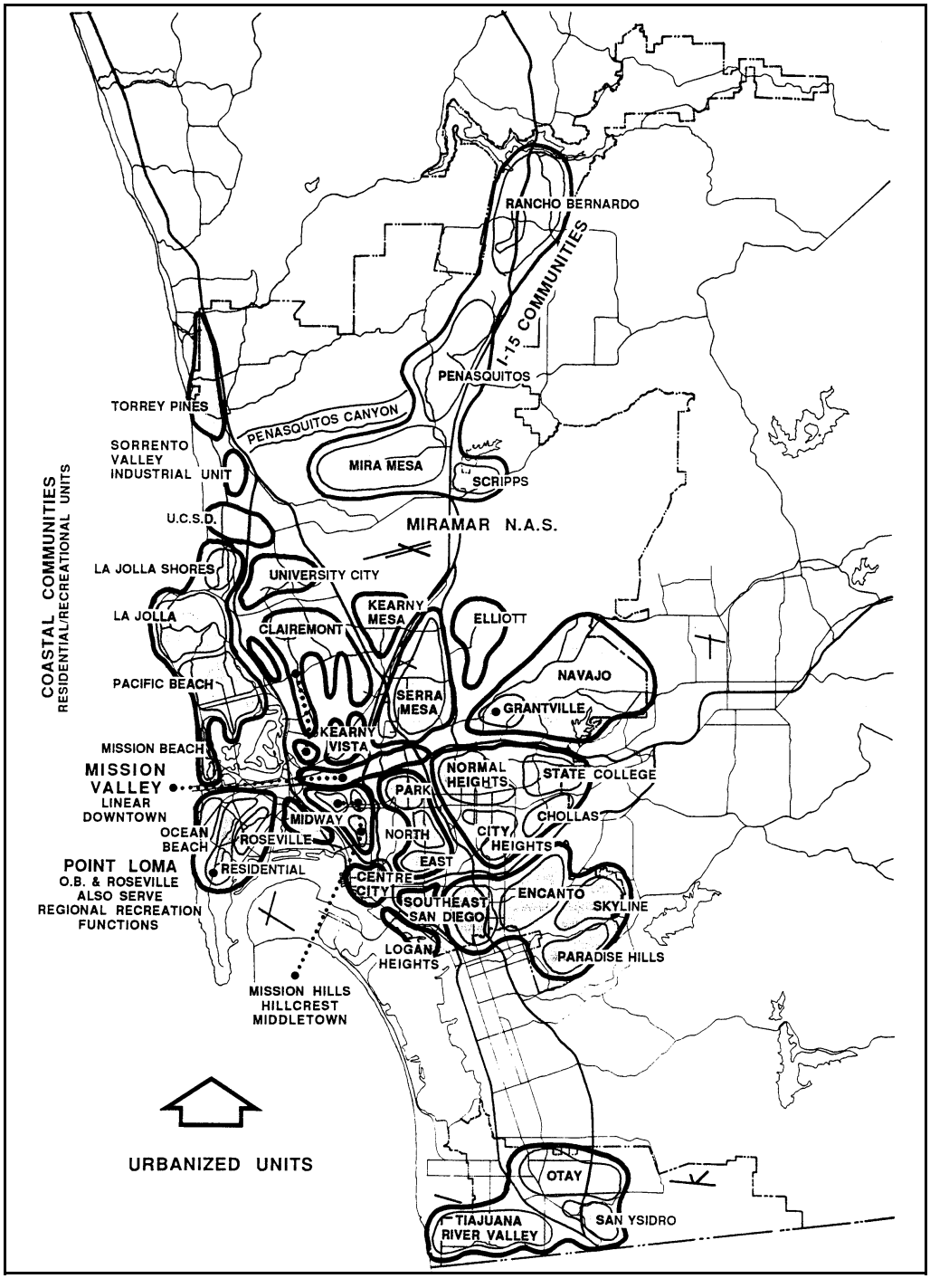


Fig. 72 San Diego: General Plan: Urbanised Communities (1989)

private development proposals, provides guidance to all investors and developers, and often some environmental stability to the community. It establishes a framework for the development of more detailed and specific community plans while identifying and locating all facilities of city-wide importance. The basic goal of the plan emphasises the 'fostering of a physical environment ... that will be more congenial to healthy human development' and sub-goals emphasise life-style choice, responsive environments, conservation and citizen participation.

Managing urban growth

The key element of the plan since 1979 has been the management of urban growth and the designation of areas into urbanised, planned urbanising or future urbanising (Fig. 73). These might be defined as urban, suburban and rural respectively, and the plan encourages infill development in the urban areas by waiving development fees, while in the rural areas developers were required to pay full infrastructure costs, and encouraged to retain land in agricultural use through tax breaks (Fulton 1991, pp. 131–2)

Like Seattle and San Francisco, San Diego has been subject to 'ballot box planning' with residents using direct political action and referenda on various propositions to change land-use planning policy. In 1985 the electorate approved Proposition A preventing conversion of future urbanising land without a majority vote. The growth strategy has always been a compromise between the creation of balanced and self-sufficient communities in the suburbs, and the alternative approach using denser, transit-served corridors and growth nuclei, although the importance of increasing the attractions of the core has been emphasised more recently. A study commissioned in 1984 by the mayor showed that the plan had halved projected suburban growth, and that sixty per cent had been directed into existing urban areas increasing inner city growth rates ninefold, resulting in heavy pressures for small-scale condominium development. Meanwhile the city was not receiving any funds to upgrade its urban infrastructure. This began to stretch urban services and required the city to impose similar development fees in urban areas. This trend aroused significant opposition to further development in established communities. Between 1986 and 1990 twenty anti-growth propositions were voted on and nine passed, the majority limiting further residential growth in various ways. With the threat of these initiatives the City Council imposed a cap on residential building permits of 8000 units per annum in 1987.

In 1988 two complementary propositions were put forward. These would have limited new residential units to 6000–8000 per annum during the 1990s, and 4000–6000 for the following decade—(compared with 1985 completions this would have constituted a 40–75 per cent reduction (Caves 1994, pp. 45–7). Both were defeated, but growth control advocates continued to dominate the County Board which oversees the development in the unincorporated areas. The San Diego Association of Governments (SANDAG) initiated the preparation of a regional growth management strategy which was adopted in January 1993.

The growth management strategy emphasised the need to service adequately

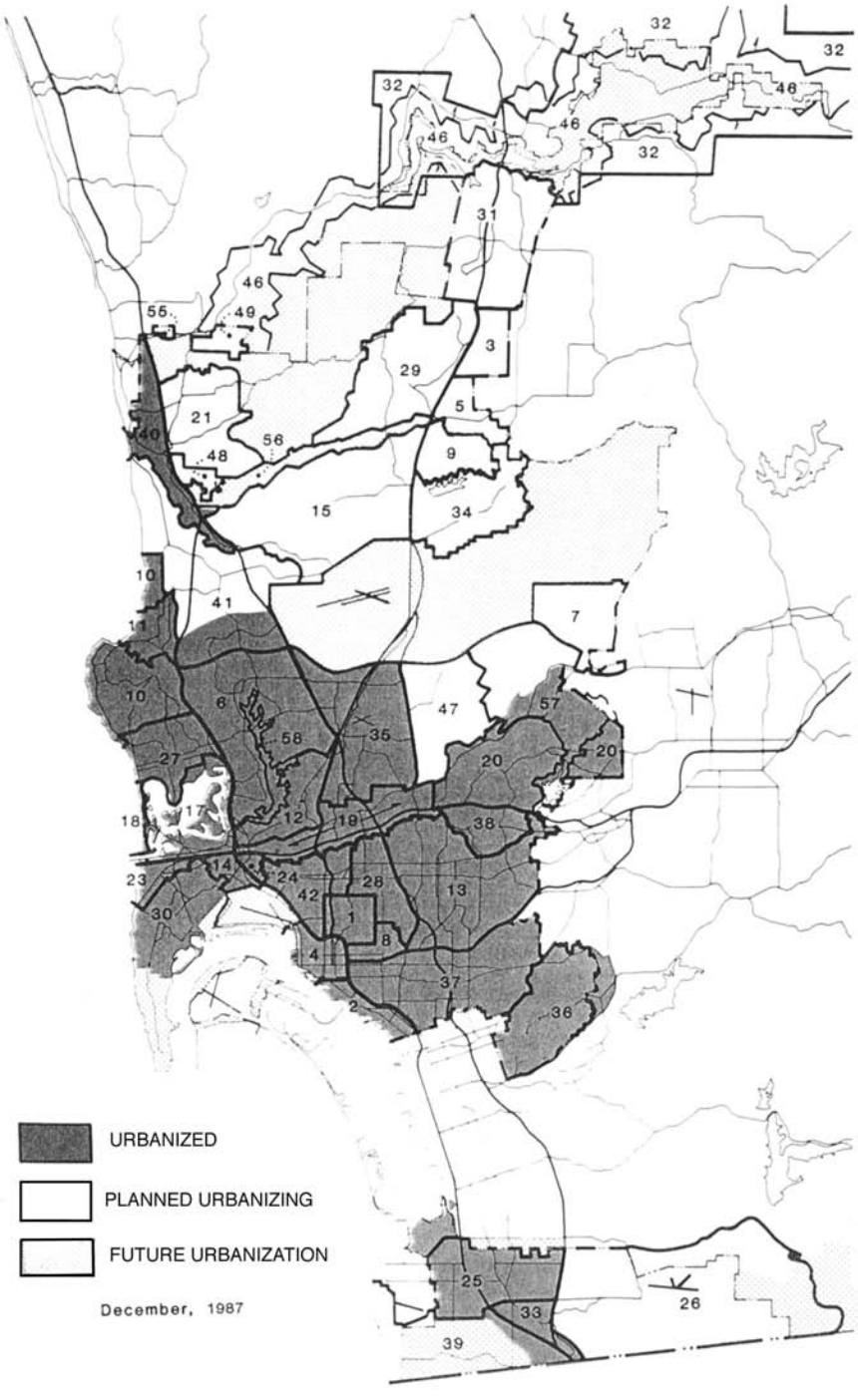


Fig. 73 San Diego: General Plan: Phased Development Areas (1989)

new development, and to provide new employment in these growth areas, as well as to conserve environmentally sensitive areas and water supplies, and to develop a continuous open space system. To finance new development two kinds of impact fee were levied, either a Facilities Benefit Assessment which is worked out on a permit by permit basis in new suburbs, or a development impact fee for urbanised areas. Both are legally tied to facilities required to service the new growth. However, major problems have been created by California's Proposition 13 which has resulted in the local authorities being unable to raise taxes to finance the running costs of new facilities like parks and libraries, although there is a levy on commercial development to provide some funds for low income housing.

The growth strategy focused on nine quality of life factors as follows:

air quality;
transportation system and demand management;
water;
sewage treatment;
sensitive lands and open space preservation and protection;
solid waste management;
hazardous waste management;
housing;
economic prosperity.

These were chosen because they were issues affecting the whole region, and because most were mentioned in the initial Proposition. For each factor a set of standards and objectives was set, some derived from existing plans and policies, some developed anew, and a series of recommended actions was put forward across a wide range of government functions. A key aspect of the strategy is to provide adequate funding and siting processes for regional public facilities, and to analyse and forecast growth and travel patterns.

The strategy is to be implemented through a self-certification process applied to local jurisdictions including the air, water and transport authorities and the Refuse Department. In January 1994 a local/regional 'consistency checklist' was added to the strategy to allow agencies to evaluate their performance and to permit them to self-certify their programmes. The strategy will be the one instance where multiple actions affecting the nature of growth and the quality of life will be assessed in an integrated way. It will also provide a basis for co-operation and joint action between governments and agencies (SANDAG 1994, pp. 3–4), but the institutional and implementation devices do not look like a convincing package for regional growth management.

The Multiple Species Conservation Programme—habitat-based land-use planning

The environmental concerns became clearly separate from the fiscal issues in 1989 when the City Council approved an ordinance to protect environmentally sensitive land in the city—'wetlands, wetland buffers, flood plains, hillsides, biologically

sensitive lands and significant prehistoric and historic resources'—setting up encroachment limits, but bringing the clearing, grassing and filling of land under control. This was the first land-use planning ordinance to express the provisions of two critically important environmental acts—the Federal Endangered Species Act of 1973 and the Californian Endangered Species Act. The Federal act was originally conceived to protect the grizzly bear and the largest birds of prey, but as the list of endangered species has grown, so has its influence on the planning of urban growth. In the case of San Diego it was the inclusion of the Californian Gnatcatcher, which lives in the coastal zone, that proved particularly significant and its habitat now has to be protected when granting any development permit. Such species protection has become the most effective way of preserving biodiversity, and is providing the means for introducing habitat-based comprehensive land-use planning in California (Porter and March 1994).

California's Natural Community Conservation Planning Act passed in 1991 emphasised the role of local government in protecting multiple habitats, and the three interlocking programmes in the San Diego region are the most ambitious in the state (Fig. 74). Plans for protected wildlife corridors in the east of the county, and for habitat protection in the north will be linked with San Diego's Multiple Species Conservation Program. The latter, part of the city's Clean Water Program which is significantly expanding sewage treatment, aims to provide a connected

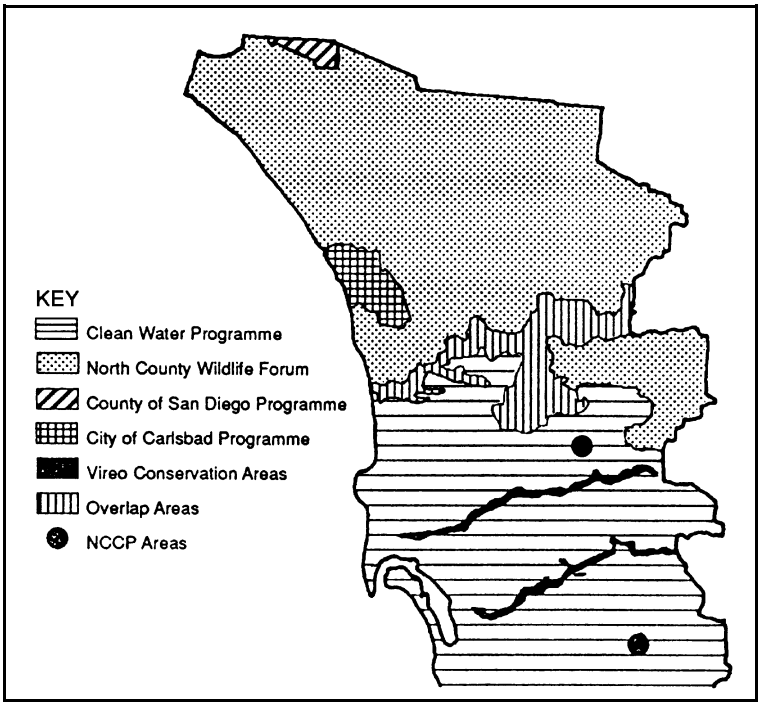


Fig. 74 San Diego: Multiple Species Conservation Programme (1994)

system of habitat preserves covering nearly 600 000 acres in San Diego and municipalities to the south, and it is based upon protection of eight endangered species (there are 24 endangered animals or plants in the county). The system is based upon a GIS-based mapping of habitats (on a scale of 1:2000) that has required 10-person years of survey work at a cost of $7m, and which rates each habitat on a four-point scale as of very high, high, moderate or low quality. From this information San Diego has defined four alternative preservation programmes for feasibility analysis, although it has yet to decide how to implement these measures.

A group of landowners and development interests, formed under the somewhat mistitled Alliance for Habitat Conservation, came together to ensure that development can still proceed, and to make sure that the costs of conservation are not met entirely by the new community (Whalen 1994, p. 68). Private developers will be required to mitigate the impacts of development on high-quality habitats, and may even be required to pay impact fees for developing on moderate or low-quality habitats in order to fund land acquisition elsewhere. Public bodies will be expected to make a major contribution through land acquisition or land donation measures.

Problems have already arisen over the cumulative impacts of small developments, over how to relate the preservation of particular habitats to the conservation of broader ecosystems, and over the identification of habitats after substantial infrastructure has been developed. The creation of an adversarial and highly polarised debate between conservationists and developers has not helped matters. Some of these problems will be reduced once the habitats have been clearly defined, but the mechanics and costs of implementation still have to be resolved. Nonetheless, this is an exciting development which places nature conservation in its broadest sense where it belongs, at the heart of the development land allocation process.

The design content of the General Plan

The design content of the General Plan owes much to the 1974 Lynch and Appleyard study (quoted at the beginning of this chapter) in its discussion of the image and sensory quality of the city; the natural environment base; the neighbourhood environment; the height, bulk and density of development, and circulation. Each of these five topics is discussed through a set of findings, and then articulated by a goal statement that is given a policy thrust by a set of guidelines and standards (Fig. 75). These are in turn reinforced by a set of recommendations regarding further analysis or policy development.

The guidelines and standards are perhaps more accurately described as objectives, but many of them are too generalised to warrant even that description. Each guideline requires an extensive analytical base to define the parameters for development, and to some extent the recommendations merely list the kind of further work required as a basis for policy development.

The chapter on urban design is organised under five themes which are explored with a set of findings, a goal statement, a set of guidelines and standards and some recommendations for further study or guidance (Fig. 75). They have less of an

URBAN DESIGN—AN ELEMENT OF THE SAN DIEGO PROGRESS GUIDE AND GENERAL PLAN

AN IMAGE OF SAN DIEGO

GOAL

— Development of a comprehensive concern for the visual and other sensory relationships between people and their environment

GUIDELINES AND STANDARDS

— Recognise and protect major views with particular attention to those of open space and water

— Recognise that buildings, when seen together, produce a total effect that characterises the city and its communities

— Emphasise the unique character of each community

— Protect and promote open space systems that define communities

— Increase the visibility of major destination areas and other points for orientation

— Recognise the relationship of land to structure and the importance of the natural landforms and the natural environment

— Continue systematic review and evaluation of the city's zoning, subdivision, and building regulations to insure a conscious choice of the best of available options, instead of mere satisfaction of minimum standards

— Evaluate discretionary actions that relate to planning, urban design and input criteria rather than equity type variance findings

THE NATURAL BASE

GOAL

— Preserve the natural base of the city; the valleys; canyons; hillsides and shorelines by encouraging development to respect a vanishing resource

GUIDELINES AND STANDARDS

VALLEYS, CANYONS AND HILLSIDES

— Maintain the character of the undeveloped valleys, canyons and hillsides

— Valleys and canyons should not be considered as rights of way for highways and future transit lines until all other alternatives have been explored – Leave valleys as undisturbed greenways

— Parts of the valley and canyons should be ecological preserves. Others, campgrounds and parklands for children to explore

— A complete trail system – for walking cycling and horseback riding should be developed along these natural valleys

— Allow for reasonable use of hillside area

SHORELINE

— New development should be back from the water's edge

— Make the beaches accessible without destroying the communities behind them

— Encourage housing of mixed price and type to locate along the shore

— Control the height and bulk of shoreline development

— Preserve the historical aspect of the San Diego Bay waterfront

— In the long term, remove all uses from the shore which are not water-related, and are not housing or recreation

THE NEIGHBOURHOOD ENVIRONMENT

GOAL

— Improvement of the neighborhood environment to increase personal safety, comfort, pride and opportunity

GUIDELINES AND STANDARDS

EXISTING COMMUNITIES

— Avoid radical and intrusive changes to existing residential character

— Protect the residential areas from through traffic

— Bring more open space into use

— Improve the surroundings of schools, libraries, churches and community facilities

— Improve the pedestrian environment in the commercial strip

— Remove and obscure distracting and cluttering elements

— Increase the traffic capacity of the major arterial streets

— Use appropriate plant materials and give careful consideration to environmental factors in the design of landscaping and open space to contribute to the environmental quality of the community

NEW COMMUNITIES

— Slow down the inland suburban growth but do not try to stop it

— Encouraging smaller, less homogenous development

— Use a more appropriate form of settlement

REDIRECTION OF GROWTH

— "Densification" should be balanced with city and regional controls

— The rate and character of densification should not destroy existing community character

— Public improvements should focus on present urban areas

— Promote mixed usage as a key to an active, lively urban environment

Fig. 75 San Diego: General Plan: Urban Design Guidelines (1989)

HEIGHT, BULK AND DENSITY

GOAL

— Review and revise regulations dealing with height, bulk and density to reflect quality development rather than quantity

GUIDELINES AND STANDARDS

— Promote development which is sensitive to the particular needs of individual areas

— Promote harmony in the visual relationships and transitions between new and older buildings

— Promote efforts to achieve high quality of design of buildings to be constructed at prominent locations

— Promote building forms that will respect and improve the integrity of open spaces and other public areas

— Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development

— Recognise the special urban design problems posed in development of large projects

CIRCULATION

GOAL

— Improve the visual quality as well as the physical efficiency of the existing and future circulation system

GUIDELINES AND STANDARDS

FREEWAYS

— Freeways must be sensitively designed

— Incorporate the freeway into the community landscape, where feasible

— Cluster vegetation, use native plants

— Urban freeways should be pleasant to drive

STREETS

— Design streets for a level of traffic that will not cause a detrimental impact on adjacent land use

— Street layouts which do not emphasise topography reduce the clarity of the city's form and image

— Street guidelines

— Increase the clarity of routes for travellers

TRANSIT

— The detailed location and form of the lines and stations must respect the local fabric

— Transit stops and stations can be important community foci

— Transit routes, stops and transfer points can be more easily understood and remembered if they are distinctly identified by signs, landscaping and illuminations

— Transit guidelines

PEDESTRIANS

— Widen sidewalks where intensive commercial, recreational, or institutional activity is present and where residential densities are high

— Partially or wholly close certain streets not required as traffic carriers for pedestrian use on open space

— Provide adequate light in public areas

— Design walkways and parking facilities to minimise danger to pedestrians

Fig. 75 (continued)

architectural emphasis and more of a functional and perceptual basis than those in other cities in this study, largely because of their regional remit and the fact that they pay more attention to the natural environment which is more demanding than in the cities to the north. They are not a set of policies or relatively precise guidelines as are the Portland or San Francisco equivalents, perhaps because they have to deal with a conurbation and not just a central city. The plan describes them as 'a system of common reference points to enlist community agreement' and recognises that 'there is no overall implementation system, no authorised hierarchy of standards and procedures to be used in questions affecting urban design' (San Diego 1989, pp. 406–7). The plan recognises the difficulty of establishing such a system and looks to establish a climate for agreement with the community in which design professionals make a key input into city-wide discussions. It emphasises the significance of a planning/design process in which open meetings have an important educative role for all parties. It recommends both further design studies and the development of design policies, and the establishment of a design section in the Planning Department. The latter has never been established.

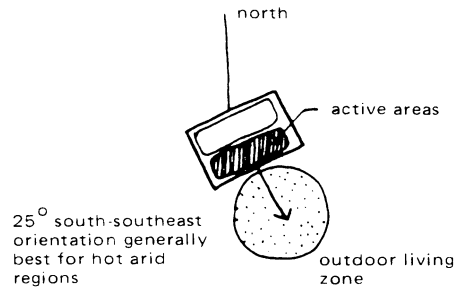
Nonetheless, the guidelines or policies help provide a strategic design framework, although the General Plan does not articulate the desired urban form in a spatial diagram. What is of particular interest is the discussion of key residential design parameters in the cooler coastal zone as opposed to those in the hot and arid inland zones, and the need to develop more appropriate forms of settlement and landscaping to moderate the effects of climate and reduce energy consumption (Fig. 76). Whether this has yet had much effect on the design of development is doubtful. The General Plan's guidelines have no statutory force, but they do provide a framework for the development of policies for each of the 58 Community Plans that will eventually provide complete plan coverage for the metropolitan area.

Rationalising the zoning code

Over the years, the zoning code, which is the main implementation tool for the control of development, has been progressively complicated by the creation of special overlay zones to protect the coastal zone (California Coastal Act 1976), hillsides and canyonlands, small-lot areas and the city centre, and to provide overall height restrictions. Furthermore, each Community Plan, in tailoring the zoning code to the locality, has produced its own Planned District Ordinance with often very detailed and quite prescriptive controls. In addition, the introduction of design review in selected localities, and the required environmental review of many developments, has further complicated the process of control. At the heart of the rewriting of the Code, which has been under way since July 1992, is the desire clearly to separate planning policies from the zoning code, and both from support documents (technical manuals and design guidelines, etc.). The aim is to take the current 22 000 pages of documentation and to rationalise it to make it more concise, clearer, more objective, predictable, consistent and more user-friendly.

HOT - ARID ZONE

In this zone desirability of heat loss over rules the demands of cool periods. Lower hillside locations, benefiting from cool air flow, are preferable if arrangements are made to interrupt the air flow during under heated times. Wind effects have resistively small importance. In a large portion of the year afternoon shade is required, making sites with east-southeast exposure preferable in the hot-arid zone.



Objectives:

Maximize shade for late morning and afternoon solar radiation

- Orient active living areas to the south-east to collect early morning sun
- Glass areas should face south with properly designed overhangs
- East and west windows should be avoided to minimize radiation with low sun angles
- Cluster buildings and utilize solar panels for shade

MAXIMIZE DESIRABLE AIR MOVEMENTS

Maximize the humidity and cooling effects of evaporation across water bodies

- Utilize the lower hillsides to benefit from cool natural air movements in early evenings and warm air movements in early morning

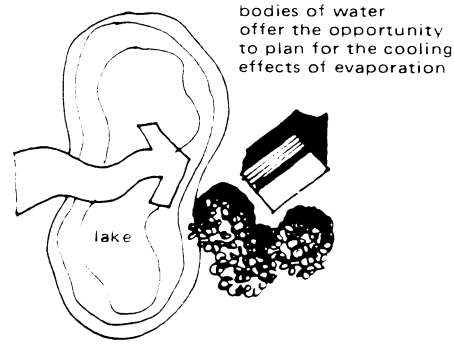


Fig. 76 San Diego: General Plan: Design Principles in the hot-air zone (1989)

The General Plan and the Community Plans will focus exclusively on policy. Zoning will be redrafted into city-wide regulations and regulations for common zones (incorporating all the different nuances that have developed in the Community Plans), stripping out all the policy and regulations from the support documents and leaving them with the advisory (and very technical) material. There are obvious resonances here with British planning practice, except of course that in the latter's discretionary system there is no code to provide clear-cut controls on land-use, building form, volume, siting and access, while most standards have been

excised from plans particularly in the new generation of plans (see Punter and Carmona 1997).

The new zoning code has taken all the land, development and zoning regulations and reorganised them into five chapters. These deal with the *procedures* of control and the decision-making process; *land development reviews,* defining the approval processes; the *regulations for all zones,* including those for special historic and redevelopment districts; *development regulations,* dealing with all city-wide regulations on drainage, refuse collection, subdivision regulation, etc.; and finally the *building regulations*. Some localities have resisted such a reorganisation of the code, fearing that it reduces their autonomy and individuality, but in reality there should be little or no diminution of local controls while the comprehensibility of the system will be dramatically improved. A key aim, as with much of San Diego's recent planning activity, is to provide clear rules for development that do not require council intervention.

Community Plans

Perhaps San Diego's most impressive achievement is to have developed Community Plans for 40 of its 58 communities (or phased development areas: Fig. 72—a programme started in the 1960s, but accelerated in the 1980s). The achievement is magnified by the extent of citizen participation and therefore the sense of ownership of the plans which thereby ensues. Planners usually work with citizen groups to prepare the plan providing the necessary technical assistance to the community. However, in some of the new communities developers essentially prepare the plans, submitting them to the City Planning Commission's perusal, and leaving the planners to check the policy, conformity and regulations, before the council finally approves them (San Diego County has 17 developer master-planned communities under development with an eventual total of nearly 90 000 housing units (Jensen 1994, pp. 60–1)). Economic and social issues are increasingly being addressed in the plans and the professional hierarchies and bureaucratic boundaries are having to be dismantled to cope with the issues raised.

The Community Plans each number upwards of 100 pages and have a broadly similar format—a general introduction reviewing community and planning history, a summary of the plan focusing on the issues facing the community, the goals and objectives, and then a set of systematic or thematic topics similar to most local plans anywhere. The means of implementation and the planning processes involved usually conclude the plan. Regrettably, space does not permit a detailed analysis of a wide range of plans, but some flavour of the diversity of their design content may be obtained from briefly comparing five quite different examples. These embrace the downtown, a historic district, an inner city mixed neighbourhood, an affluent suburb and finally an 'edge city'. The diversity of responses is interesting and reveals a number of different approaches to design control.

(i) Center City Community Plan

The Center City Community Plan completed in 1992 marks the end point of a five-year plan review process that began with the establishment of a citizen's planning committee in 1987. The review worked through a Concept Plan (visions and goals) to a Preliminary Plan and on to a final plan with 'major public' inputs at each stage. Its urban design objectives dovetail with the 2025 vision statement to stress the bay and waterfront street enhancement and vitality, residential diversity and design review (Fig. 77). This last emphasises that the city is a long way behind other major west coast cities in its design regulation. An action chart sets out the tasks for urban design into the twenty-first century, emphasising the intention to prepare a pedestrian improvement plan, a gateways programme, an open space acquisition plan and a major downtown improvements plan. The major urban design studies have been completed and their standards, criteria and guidelines are reflected in the

URBAN DESIGN (UD)

GOALS

Take maximum advantage of Center City's unique topography and waterfront setting with a plan oriented to "people and their activities" in a dynamic expanding downtown.

OBJECTIVES

1. Maintain a compact urban core in downtown that is the focus of the highest intensity development.
2. Establish lower intensities in surrounding mixed-use areas and along the waterfront.
3. Protect views of the bay by establishing view corridors which accentuate key public rights-of-way (streets and sidewalks, both existing and proposed) with appropriate zoning, setbacks and design standards. Further protect major bay views from key freeway points and similar locations by clustering of tall buildings, slender towers, proper building orientation and floor area restrictions and height limits where necessary.
4. Continue to develop the waterfront as Center City's primary open space, park and playground; which is both physically and visually accessible to the public.*
5. Enhance the principal streets traversing downtown with particular emphasis on Broadway and Fifth Avenue. Aim for interesting, tree-lined streets throughout Center City with all buildings designed to be pedestrian friendly at ground level.
6. Provide incentives for developers to include museums, theaters, art galleries and other cultural uses such as rehearsal halls, sound studios, artists' workshops, live/work lofts, etc. in their downtown buildings.
7. Establish development intensities and design criteria for residential areas that protect access to sun, light and air and provide a human scale in a pleasing neighborhood environment.
8. Plan downtown district-by-district giving due consideration to the special needs, constraints and characteristics of each district.
9. Establish a design review process for all civic buildings and for all buildings taller than one hundred and twenty five feet in Center City to ensure compliance with the criteria of the Preliminary Community Plan.

Fig. 77 San Diego: Center City Community Plan: Urban Design Goals (1992)

floor area ratios, bulk controls, street level development standards, view corridors and open space provisions in the plan.

A street enhancement programme with street design standards (Fig. 78) is emphasised, concentrating on Broadway (east–west) and Fifth Avenue (north–south), the latter the focus of the historic Gaslamp Quarter. There is an emphasis on incentives for mixed uses, cultural and entertainment uses and developing the diversity of each downtown district. Floor Area Ratios define the stepped pyramid of downtown densities rising to 10-times coverage on Broadway, B and C Streets, but with a two-times average bonus for street level amenities. There are special bulk, setback and top regulations for buildings over 125 feet, while street level development standards seek to ensure that buildings respect the street with appropriate enclosures, uses, windows, entrances and open spaces. Stepback regulations protect a set of east–west, north–south views of the Bay.

The guidelines have nothing like the sophistication of the other major west coast cities, and are essentially implemented alongside the zoning ordinance. It is significant that the final urban design objective concerns the establishment of a design review process, long resisted by development interests, senior politicians and the City Center Development Corporation (CCDC).

The CCDC has been in existence since 1975 to promote downtown development, and it has assumed the responsibilities of strategic planning, urban design, land acquisition and negotiations with developers, and enhancement schemes. This helps to account for the nature of the Center City Community Plan which is long on proposals but short on policies. The CCDC is financed by tax increments and it is able to claw back the difference between the new and old tax assessments to provide itself with an increasing annual income. The list of quality projects is impressive—the Horton Plaza shopping centre being the first. It was redesigned a dozen times and the development agreement was renegotiated five times, before it emerged as a mould-breaking shopping centre (Frieden and Sagalyn 1989). In addition, nine major office towers were built between 1982 and 1991, the Gaslamp Quarter was restored and gentrified as an entertainment centre, and major housing development has been achieved, including significant single-room occupancy and low cost senior citizen development, as well as a number of luxury condominiums. The other key project is a major landscape boulevard/park linking the Marina, hotels and convention centre on the bay with the new residential complexes, Gaslamp Quarter and Downtown. With a rail track, two LRT tracks, a four-lane highway and hotel sliproads the park is really a rather utilitarian boulevard lacking enclosure and identity, but it is initiatives like these which are the most important design developments in the city.

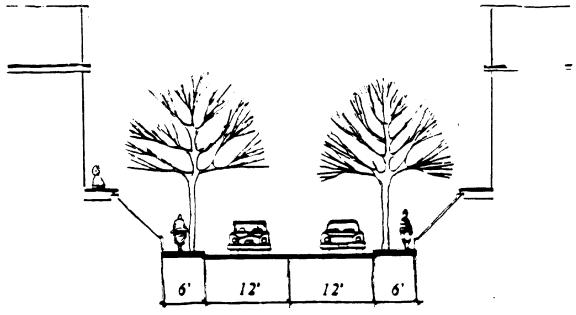
The CCDC has invested $150m between 1975 and 1992 at a gearing ratio of 11:1. Since 1991 it has been especially concerned to develop a social strategy which would allow it to undertake developments in the area east of the central city while strengthening inner city neighbourhoods. It is confronting the problem of homelessness (which is also all too evident in Seattle, Portland, San Francisco and San Diego) and it is interesting that the city's efforts to develop single-room

MID-BLOCK CONNECTOR

These streets do not currently exist in the downtown. This study recommends that the City adopt standards to permit these types of streets.

TYPE I: RESIDENTIAL STREET

A one-way street for access to garages or the location of residential uses (Harborview and Center City East). Parking could be permitted and landscaping would be required. A small sidewalk should be required if parking is permitted.



TYPE 3: PEDESTRIAN WAY

A landscaped pedestrian walkway or mews providing primary or secondary access to residences. Vehicles would not be permitted.

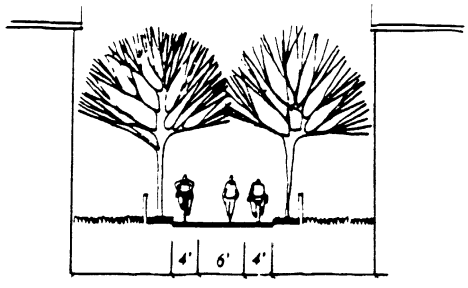


Fig. 78 San Diego: Centre City Community Plan: Street Design Standards (1992)

occupancy hotels have been particularly successful, with their design quality and architectural forms attracting plaudits from their residents, downtown users and tourists (Schraeger 1994). Overall, however, development priorities eclipse design ambitions in central San Diego. In contrast to San Francisco and Portland there is no real constituency for quality design, no tradition of design intervention and, since the early 1980s, a suspicion of design control amongst senior politicians.

(ii) Old Town San Diego

The Old Town San Diego Community Plan (Fig. 79) takes in the original settlement site established by the Spanish in 1542, extended by the Mexicans in the first half of the 19th century, and consolidated by the Americans up to 1871. It includes over 60 historic sites and a dozen historic buildings, some of which have been transferred to the site to ensure their preservation. Most are concentrated in a State Park established in 1968 on the site, which is an important regional attraction. Meanwhile the community plan grapples with the problem of how to balance community interests and tourist demands. A task force led by a city councillor undertook the

task of updating the plan which considered four alternative scenarios selecting, unsurprisingly, an option that sought to balance the needs of tourists and residents.

The 1987 plan seeks to make a series of public improvements to promote tourism and use a series of design guidelines to control the form of developments. The essential idea is to expand the State Park to create a major 'gateway' into the area and to use detailed design guidelines to ensure that there are different site planning and landscaping responses in different areas in the historic centre ('pueblo'), fringe ('rancheria') area, hillsides and riverflats. Three historic styles are identified to be 'followed' to reinforce each area's character and identity (Fig. 79)—Spanish adobe, Mexican brick/shingle and American wood/shingle—but this approach seems more likely to reinforce the feel of a theme park than to promote a living piece of city.

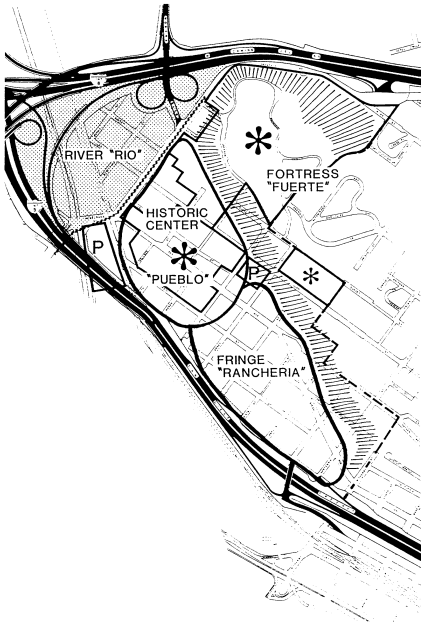
(iii) Golden Hill

The issue of historic replication as a goal of design control is important in the Golden Hill Community Plan (1987), which covers a large mixed community to the south and east of the city's vast and splendid Balboa Park. The goals of the plan have strong conservation, urban design and 'housing for all' aspirations. As befits an inner city neighbourhood the urban design guidelines concentrate on key issues like building scale and consistent lot patterns; building harmony, rhythm, grain and bulk; landscape and streetscape, hillside protection, screening of car parking and defensible space; while separate design guidelines emphasise the spatial elements (pattern and alignment of lots and buildings), visual elements (massing, materials, number of lines, and entrances), design elements and landscape elements. These design criteria have the principal objective of establishing conformity with the historical and architectural character of the district, and yet are said to allow for creativity in design.

Each residential development must maintain a consistent design character using the same materials on all elevations facing the street, with no more than two wall siding materials used throughout the project; aluminium window frames are forbidden. The guide goes further than this in its prescriptions requiring each development to reflect Victorian (Figs 80 and 81), Craftsman, Spanish or Contemporary styles. The characteristics of each style are described, a certain number of features being designated as mandatory, with architects/designers required to choose a certain number of the other features to be incorporated into the design. Thus the Craftsman style has four mandatory features, and the designer is required to choose two additional features out of a further five. Roofshaping and materials are also specified. The aim is to ensure that the styles become recognisable, so that a perception of continuity is obtained. Of course the definition of the Contemporary style is very important in providing architects and designers with a greater measure of freedom. In this instance the architects have a choice of five materials, but must incorporate a further six of the twelve features as listed. Of interest is the fact that patterns of landscaping have also been defined for each historic type, although these are quite concise and general.

Such controls have been described as 'comic opera' guidelines by sceptics like

DEVELOPMENT DESIGN/SCALE:



FOUR DISTINCT DESIGN DISTRICTS SHOULD BE DEVELOPED, AS FOLLOWS:

HILLSIDES. The "Fuerte" Presidio area.

Development should respect the hillsides and revegetate them. Minor encroachments could be permitted on steep hillsides (25 percent or greater). Encroachments should be designed to fit into the hillside as unobstructively as possible. Hillside development should be clustered. This area is also crisscrossed by earthquake fault lines, thus development should be minimized from a safety standpoint.

RIVER. The "Rio" area.

Development should re-create the river environment by consolidating lots into large parcels and providing low scale development set into a park-like "riverine" environment. In order to create this riverine environment, at least 70 percent of the site should be landscaped with wetland vegetation species. Buildings on stilts are appropriate for this area. This area is subject to liquefaction, therefore development intensity should be reduced for safety reasons.

CORE. The "Pueblo" area.

Development should be urban with no setbacks and one- or two-story structures covering the front area of the site at the street. Open, unbuilt areas, if any, should be relegated to the back portion of the lot.

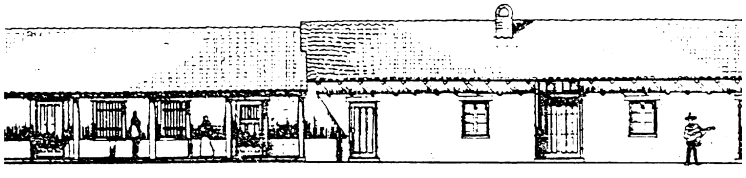
CORE SUPPORT. The "Rancheria" area.

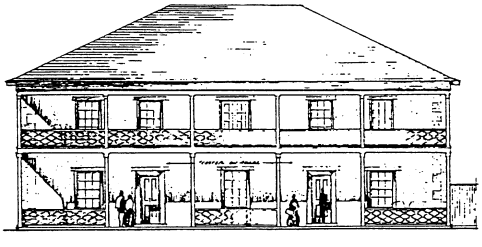
Development should have larger setbacks of 15 to 20 feet. Side yards should also be observed, of five feet or so, and backyards of ten feet from the property line should also be observed. Open landscaped frontages as well as open wood fences of rural character or four- to five-foot-high walls at the street frontage are to be encouraged, re-creating in this manner the residential settlements of old Hispanic villages.

HISTORICAL ARCHITECTURAL STYLE SHOULD BE FAITHFULLY FOLLOWED.
This should also include the incorporation of original/historical bearing wall structural standards. The observation of these standards will result in a better, more faithful historical/architectural design. Maximum height of buildings or structures shall not exceed 30 feet from the natural grade.

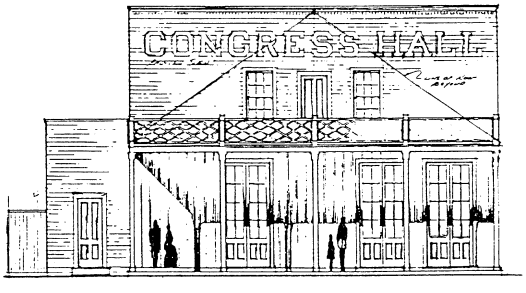
The following historical/architectural styles should be followed:

SPANISH: Bearing wall adobe brick construction with thatched or clay tile roofs and hewn timbers. Buildings of this period are one story with towers, special facade treatments, and high floor to ceiling heights reflective of the related mission style.





MEXICAN. Bearing wall adobe brick construction with wood shingle, tiled or sod roofs and hewn timbers. Buildings of this period are one to two stories.



AMERICAN. Wood wall and roof wood and shingle construction, a brick wall with wood roofs and shingles with sawn timbers. Buildings are one to two stories.

Fig. 79 San Diego: Old Town San Diego Community Plan (1987)

John Delafons (Delafons 1990), but it is interesting to look at them as manifestations of community conservatism much like the Codes, Covenants and Restrictions that prevail in new developments in cities like Irvine. While they read as rather fatuous formulae for architectural conformity, and their precision is somewhat naïve, they do provide quite precise measures of conformity that can be used by controllers, while allowing architects/designers a good deal of architectural scope and creativity even within a chosen style. The diversity of Golden Hill probably does not really need such detailed guidelines while developments are small-scale, one-off projects on small plots, but clearly the community at large sees it differently.

(iv) La Jolla

A fourth example of plan design content is provided by the coastal suburb of La Jolla, a mature and very rich suburb with rolling hills that culminate in attractive coves and a magnificent beach to the north of the city. Here the issues of the intensification of development and the invasion of larger-scale commercial uses are a particular bone of contention, and detailed design controls have been advocated by the residents as a way of controlling the rate of change and the impact on the locality. The outcome of the Community Plan process was a set of recommendations that banned large commercial buildings, insisted on bulk/height compatibility

VICTORIAN STYLE

Features 1–3 are mandatory. Choose three (3) features from items 4–9.

Mandatory:

1. Horizontal wood siding or shake shingles on all elevations facing a street.
2. Narrow vertical windows with lintels, jambs and sills surrounding the windows. Sills are to be built out a minimum of three inches (3″) from the outside face of the window sash.
3. Covered entry area with a gable or dormer. Entry area to be a minimum of twenty four (24) square feet in area if it serves one or two entrance doors and ten (10) square feet per entrance door if it serves more than two.

Choose three (3) of the following:

4. Crafted lath ventwork at gables and dormers.
5. Widow's walk or cresting (wood or metal).
6. Turrets or cupolas.
7. Special window shapes and types on twenty percent (20%) of all windows facing a street; bays, half-round, elliptical gothic, oval or palladian shapes, quatrefoils, bull's eyes, and stained glass (geometric, lattice or opalescent).
8. Scalloped shingles in an amount typical with the Victorian style.
9. Crafted open stickwork supports for the entry element.

Fig. 80 San Diego: Golden Hill: Victorian Style Requirements (1989)

Fig. 81 San Diego: Golden Hill: Mandatory Stylistic Elements (1989)

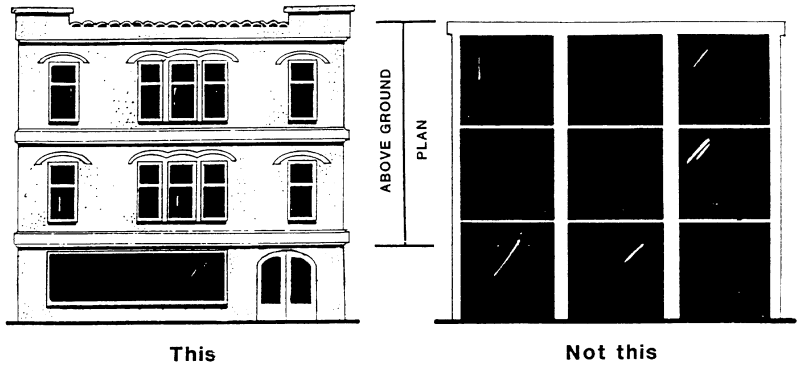
1. Surface materials shall only be those which are in keeping with the traditional materials of the community. These include:
   - — Natural materials such as wood, brick, or natural unpolished stone.
   - — Stucco (all stucco must be painted).
   - — Formed concrete.
   - — Split-faced or slumpstone concrete block.
2. Not more than 40 percent of any exterior building elevation above the first story shall consist of glass or any other material that resembles glass.
3. At ground floor and other pedestrian levels opaque, reflective or dark tinted glass shall not be used for any portions of the building developed for retail uses.
4. Surface materials that are not in keeping with the existing character of the community are prohibited, including:
   - — Metal panels of any kind on walls, roofs or awnings.
   - — Mirrored or highly reflective glass in any quantity.
   - — Glazed tiles covering more than ten percent of any building elevation or on the roof.
   - — Polished marble, granite, or similar materials covering more than ten percent of any building elevation.
   - — Stucco containing sparkling particles, or integral colored stucco.
   - — Plain concrete block.
   - — Plastic materials of any kind except for awnings attached to the building.
5. Surface colors shall be those which are in keeping with the established character of the community. These include:
   - — White.
   - — Natural red-brick tones.
   - — Light earthtone colors (see Appendix C).
   - — Pastel Colors (see Appendix C).

   Bright, excessively dark, and garish colors which are not in keeping with the established character of the community are prohibited. Exception: Dark colors are acceptable on roofs.

BUILDING MATERIALS/COLORS

GLASS

Not more than 40 percent of any exterior building elevation above the first story shall consist of glass or any other material that resembles glass (See SEC. 103.1206, Paragraph G.2).



COLORS

Light colors which enhance shadows and break up the building volume shall be used on facades (See SEC. 103.1206, Paragraph G.5)

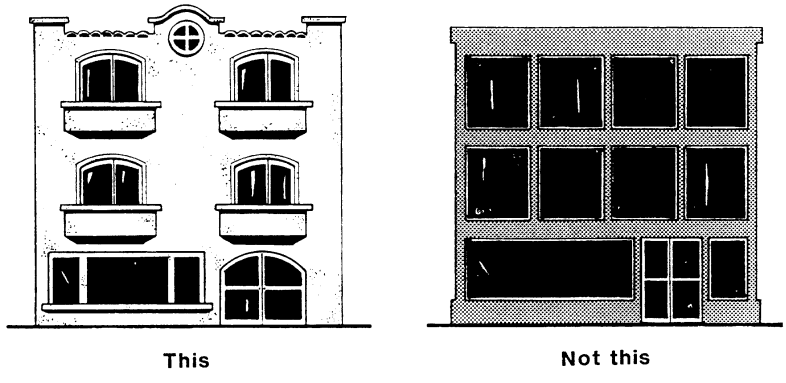


Fig. 82 San Diego: La Jolla Planned District Ordinance: Building materials and colors (1984)

with the neighbourhood, and imposed a 30-foot maximum building height on streets close to the ocean. They set a maximum FAR of 2.0 on new and remodelled buildings, and sought to ensure sign control, bury utility cables, screen building plant, relandscape major streets and introduce stronger aesthetic controls on new development.

The planners took photographs of a range of buildings and asked the community to comment on them and isolate the features they liked and disliked. They then tried to build these preferences into a set of design principles, and used the planned district ordinance to prescribe a set of dimensions to ensure compatible development. Close attention was paid to setbacks and heights, and details like walls and fences, while landscaping dimensions were also prescribed zone by zone. Particular attention was also paid to building materials and colours favouring natural materials, stucco or formed/split-faced concrete. In the design principles the use of glass, including reflective glass, is discouraged (Fig. 82). Colours are also specified, and while there is a wide choice an appendix defines the appropriate colours. A section on streetscape sets out the preferred floorscape and street trees (including preferred species) (Fig. 83). Both landscaping and ocean views are treated with dimensional and area controls in the ordinance.

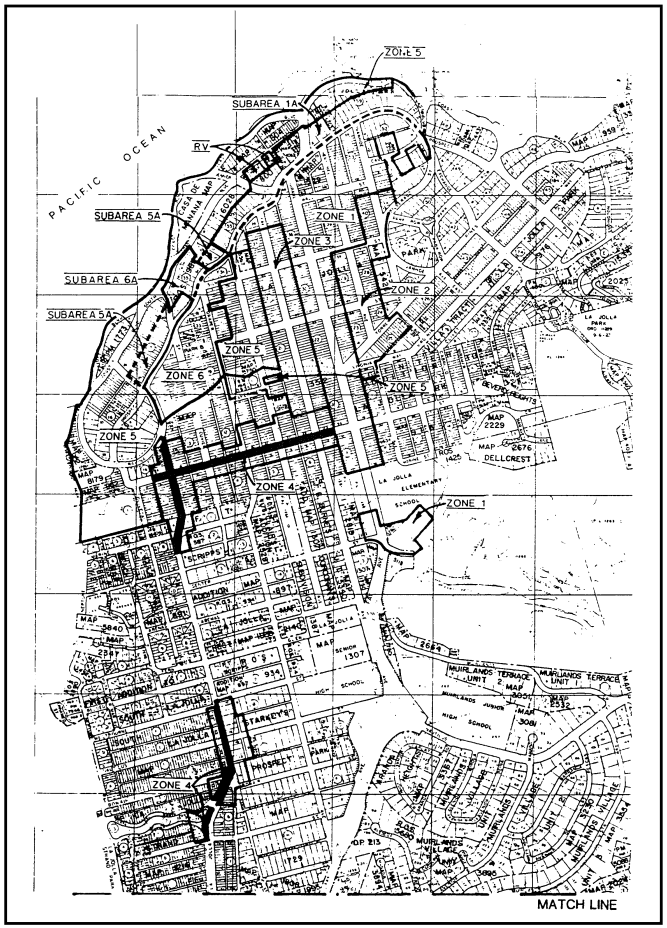
La Jolla's Planned District Ordinance has been tested at appeal three times on design grounds and proved robust. In a suburb that can be enjoyed because of the sheer variety and idiosyncracy of its architecture and the lushness of its setting the controls emphasise the key factors—the street form, landscaping, setbacks and bulk, and a modest range of materials and colours. As might be expected in such a privileged location, the plan and ordinance allow for very limited change and intensification.

(v) University City

By contrast the University Community Plan, for an area immediately to the north and east of La Jolla, tackles the problem of the development of virgin land as a major 'edge city'. The spectacular growth of the University of California at San Diego has fuelled the growth which was inevitable in an area of such high amenity on the Pacific coast, bisected as it is by Interstate 5 and its bypass 805. University City now has 3.5m square feet of office space to emphasise its metropolitan role. An urban design element was added to the plan in 1990, nearly twenty years after its original adoption. The topic now constitutes over a third of the plan, but of course it comes very much *after* the development pattern has been set and when there is little vacant land left.

The plan notes:

> The objectives and recommendations included in this element will apply to all new developments, additions and amendments to previously approved special permits. Requests for community plan amendments, as well as amendments to previously approved special permits may require compliance with this urban design element not only on the amended portion, but also on



JACARANDA – DESIGNATED STREET TREE

LANDSCAPING

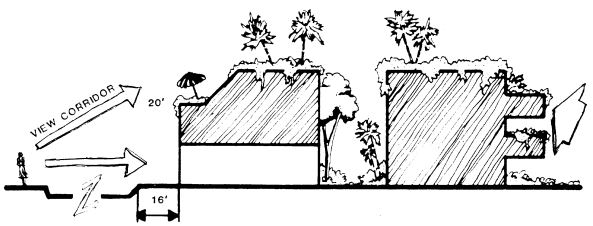
Landscape area is defined as an area made up of *landscape areas* such as pedestrian paved areas; man-made sculptural elements such as fountains or sculpture; and *vegetated areas* containing groundcover, vines, shrubs, trees and/or potted plants. All such areas shall be opened to the sky.

OPTION A:

Combination (Ground and Above Ground) Levels

Zones 1, 2, 3 and 4—A combination of landscaping at the ground and above ground levels shall be equal to 25 percent of the total lot area.

Zone 5—A combination of landscaping at the ground and above ground levels shall equal 50 percent of the total lot area, provided it is visible from the opposite side of adjacent public rights-of-way (streets).



Zone 6—All required yards shall be fully landscaped.

OPTION B:

Ground Floor or Street Level

Zones 1, 2, 3 and 4—At the ground floor or street level the total area landscaping shall equal 15 percent of the total lot area.

Zone 5—At the ground floor or street level the total area of landscaping shall equal 30 percent of the total lot area, provided it is visible from the opposite side of adjacent public rights-of-way (streets).

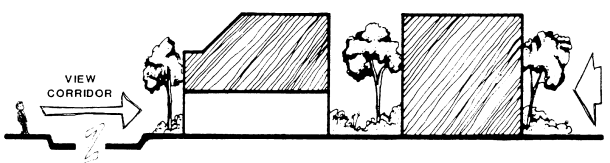


Fig. 83 San Diego: La Jolla Planned District Ordinance: Street trees, landscaping, view corridors (1984)

> portions of the projects approved but not yet built. Major urban design issues in the University community which can still be addressed relate to community coherence and the needs of the pedestrian. Well-defined, multimodal unifying linkages must be provided to integrate the various components of the community. New developments must respect existing natural resources and relate well to adjacent projects. The design of new buildings and spaces must also enhance the pedestrian experience. (p. 29).

The plan opens with a vision statement for the University Community at the turn of the millennium, and it identifies the key problems that design must address—strengthening the character of distinct areas, improving the lot of the pedestrian and cyclist, and investing in 'landscaping' and public art. The design goals emphasise multi-modal linkage systems to improve accessibility, the needs of the pedestrian and the need for an improved public realm, more respect for the natural environment and the promotion of a stronger sense of place.

The first item discussed is street widening in an area already heavily dissected by six- to ten-lane dual carriageways. Although the importance of street landscaping is emphasised the prescriptions are totally inadequate to improve the visual, let alone the environmental, impacts of these highways. Efforts to reinforce the roles of key arterials 'as ceremonial, auto-oriented, landscaped parkways serving as unifying urban design elements, and orientation resources in the community' seem mere palliatives. Major attention is paid to pedestrian ways in a bid to encourage and make safer pedestrian movement (Fig. 84). There is a clear analysis of why there is a problem, and a segregated pedestrian network is proposed running through largely natural settings. Overpasses and street crossings are recognised as a particularly crucial part of this network requiring careful design treatment, and a key objective is to 'retrofit development bordering the network with pedestrian-oriented uses and amenities'. This encourages infill development in parking lots and other residual spaces, the careful placement of building entrances to widen the sidewalk, and articulating buildings to provide a visual break at least every 50 feet (Fig. 85). Particular attention is paid to locating and furnishing transit stops.

University City is a sharp reminder of the problems produced by car dependency, and of the problems of implementing a system of controls and resource planning that will effectively protect habitats and topography. The architecture can be stunning, whether it is the developers' recreation of Spanish pueblo or Sea Ranch shingles, the 'art object' post-modern offices or hotels, or even the commercial kitsch of the shopping plaza. Equally stunning can be the quality of the landscaping, which is recognised as a commercial necessity. There are densities and a compactness that could be effectively served by public transport, but car dependency, the levels of traffic generation, and therefore the space that must be allocated to vehicle parking completely undermines any real potential for design initiatives to offer an alternative version of mobility and urbanity. Retrofitting with new back-of-pavement buildings and surveilled pedestrian routes is unlikely to be effective. Instead the urban experience is concentrated in intensity but dispersed in

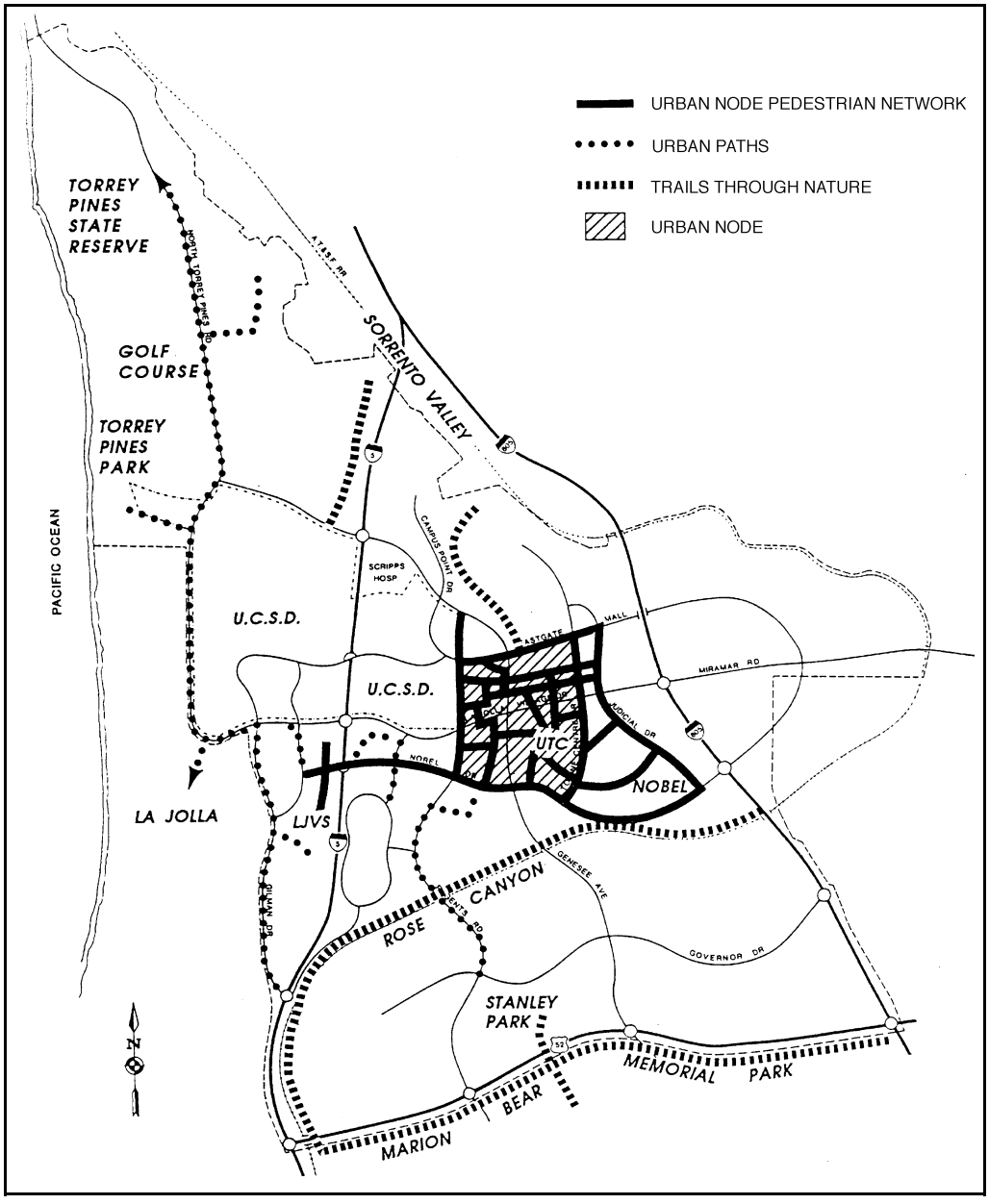


Fig. 84 San Diego: University Community Plan: Primary Pedestrian Network (1990)

location linked by a series of relatively short, often congested, drives. Urban design still has to come to terms with these issues and opportunities, while its deep value systems are almost entirely antithetical to them. It is a dilemma which needs much creative thought.

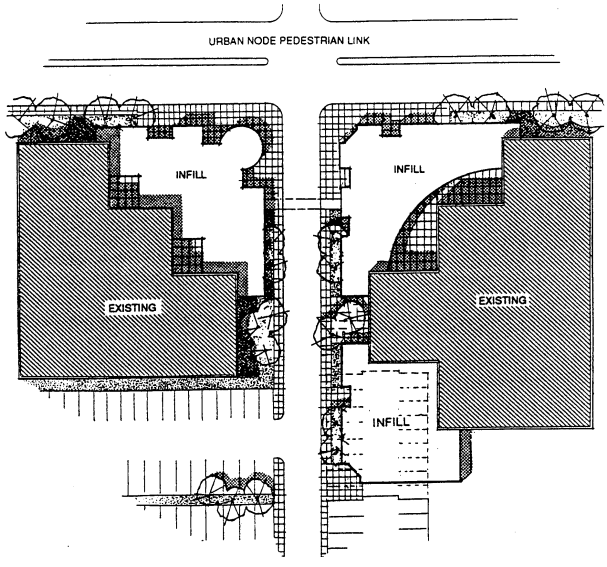
Joel Garreau concludes his analysis of *Edge City* (1990) with a statement of its design laws and the market principles that underpin them. At the outset he notes that developers believe planners and bureaucrats 'have self evidently preposterous ideas about how human nature works in the real world', although he acknowledges that 'human nature has an unsettling habit of appearing rational only in hindsight' (p. 463). The simplification of these laws, presented below, robs them of the irony and inherent contradictions with which Garreau presents them, but it does lay bare the problem for the urban designer.

- the furthest distance an American will willingly walk before getting into a car: 600 feet;
- the furthest distance between a car parking space and the entrance to the destination: 300 feet;
- the annual costs of development to a municipality: residential development costs $1.22 for every $1 of tax revenue, while commercial development costs 32 cents;
- the size of edge city necessary to support cost effective LRT: 14.5m square feet of commercial (= downtown St Louis or Cincinnati);
- space needs of employees: 275 square feet of workspace and 400 square feet of car parking space;
- normal maximum level of density for edge cities: 1.5 FAR;
- level of density at which traffic congestion becomes a political issue: 1.0 FAR;
- level of density at which LRT becomes cost-effective: 2.0 FAR;
- the law of severed continuity and its corollary: you name the development after whatever species are first driven out by construction.—(Garreau 1991, pp. 463–71)

These rules highlight the gap between design ideology and practice in American suburbia that has already been discussed in the context of Irvine, and although there is widespread discussion of more compact, sustainable, pedestrian-oriented developments in American suburbia (Calthorpe 1993; Langdon 1994), car dependency remains the essential stumbling block to sustainable urban design.

A review of community planning

San Diego is putting much effort into making its planning and zoning controls more comprehensible and concise, and is seeking to make its Community Plans the locus of policy rather than the complex zoning regulations. The main characteristic of the plans is their sheer diversity, for they respond to a wide variety of community issues and aspirations and indeed to a very wide range of design issues. Most importantly,



Infill structures containing eating establishments, art galleries and other pedestrian oriented activities are appropriate infill developments on existing street yards abutting the urban node pedestrian network and internal pedestrian paths within superblocks.

OBJECTIVE

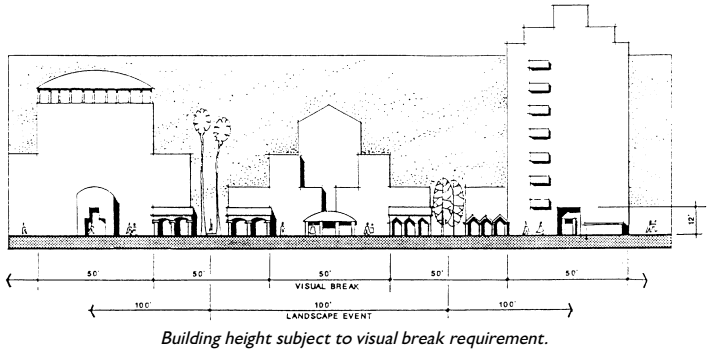
Retrofit development bordering the Urban Node Pedestrian Network with pedestrian-oriented uses and amenities which contribute to street vitality.

ACCOMPLISHED BY:

- Allowing infill development on existing street yards and surface parking lots bordering the Urban Node Pedestrian Network. Examples of pedestrian oriented uses include restaurants, retail shops, hotel lobbies, cafes, cultural institutions, entertainment, etc. Examples of desired amenities include transparent walls, entrances, windows, plazas, seating, special lighting and paving, unique landscaping forms, art and water features, atriums, courtyards, etc. New infill development consistent with the guidelines of this Urban Design element would provide economic incentives to developers in return for their contributions to the public realm and community livability.
- Limiting the height of above infill development to a maximum of fifteen feet.
- Insuring that the new street yard infill development parallels the alignment of the adjacent pedestrian network in order to provide a sense of enclosure and maintain the street wall.
- Avoiding or screening utility boxes, mechanical equipment, and other utilitarian building components from view from the Urban Node Pedestrian Network. Similarly, service areas should not be visible from such pedestrian network.
- Requiring entrances from the public sidewalks into new infill structures bordering the Urban Node Pedestrian Network. There should be maximum visual interest and contact with the infill building's interior from the adjoining sidewalk.
- Restricting the location of new surface and above-grade parking in the Urban Node Pedestrian Network. Such parking including driveways can occupy only thirty percent of this street yard. The remaining seventy percent should be built upon and/or landscaped with soft or hard materials according to the regulations of the City's Landscape Ordinance.
- Requiring "visual breaks" along the street yard bordering the Urban Node Pedestrian Network. Examples of "visual breaks" include setback variations, sculpted facade treatments, changes in color, material, texture and landscaping elements, articulated walls and fences, special features and amenities.

Single treatment of an infill building wall or fence bordering the Urban Node Pedestrian Network should not exceed fifty linear feet. For example, every fifty feet the building or fence should protrude, recess, change in color or texture. Similarly, landscaping or other treatment within this street yard should not exceed one hundred linear feet. For example: every one hundred linear feet, the basic landscaping theme should introduce a new element (form, planting material, hardscape, etc.) to break the monotony and enhance the pedestrian experience. This requirement is not intended to conflict with or prohibit a uniform street tree theme along an entire street.

Parks and natural open space reesource areas are excluded from the "visual break" requirement. The vertical distance of a new wall bordering the Urban Node Pedestrian Network which is subject to the "Visual Break" requirement is twelve feet.



Building height subject to visual break requirement.

Fig. 85 San Diego: University Community Plan: Retrofitting edge city (1990)

they all reveal serious attempts to set clear rules for objective and systematic decision-making whether it be architectural style, building volumes or materials, colours or landscaping. At the root of most key planning controversies is the public's desire for downzoning and reductions in the quantity of development allowed, and it is here that San Diego's planners feel they are fighting a losing battle with councillors and developers (and sometimes exclusionist communities) in the pursuit of more compact, sustainable development.

San Diego was the only city in this research investigation where a second round of discussions was possible with a wide range of planning officers, and where the day-to-day difficulties in planning and design could be discussed at some length. What emerged was a very different set of perceptions and evaluations of design and planning initiatives than has been articulated so far, and a high level of professional dissatisfaction with current trends. A key issue was the sense of emasculation suffered by planners caught between strong exclusionist communities, powerful development interests and local 'Mr Fixit' councillors. The pressures to downzone communities to prevent intensification (apartment building) were immense (a very interesting contrast with Seattle where intensification is part of a comprehensive strategy), while many planners perceived the shift to standards and design rules as robbing them of their professional discretion and skills—a reaction often encountered amongst controllers (Punter and Carmona 1997)). Doubts were also expressed about the representativeness of community groups and the lack of minority group representation in many areas.

Planners were also gloomy about the role of urban design which had suffered major cuts in its programme and languished for six years under an unsympathetic mayor. Urban design in the mid-1980s had been interventionist, and had clearly helped to direct development. A City Architect (an idea copied from Edinburgh) had provided a valuable design input into all aspects of planning, but the development industry had considered such interventions to be too arbitrary, expensive and difficult, and had lobbied for a more relaxed planning regime. However, there are some signs that under the new mayor urban design might make a come-back in San Diego, particularly as part of a city visioning process in which strategic design thinking is indispensable. Clearly San Diego has some way to go to catch up with Seattle and Portland in its pursuit of urban design/compact city objectives.

Taking landscaping seriously

To emphasise the city of San Diego's commitment to sustainable development and quality design the Planning Department has prepared a *Landscape Technical Manual* which spells out the city's expectations with regard to landscaping. The manual establishes the landscape standards, guidelines and criteria for both public and private development.

It starts by setting out the drafting standards required for all landscape plans and the nature of other plans required. These include both a landscape concept plan (with details of planting and landscaping) and landscape construction plans

separating plot, grading, planting and irrigation plans in considerable detail. Also required are written specifications of 'post installation maintenance programs' embracing irrigation, pruning, replacement, weed and erosion control as necessary. Developments on sensitive city properties or adjacent to ecologically sensitive areas are subject to further reviews.

There are detailed guidelines on planting that cover matters of location, screening (which should be 100 per cent within two years) and plant selection. Three categories of plants are defined—preferred, acceptable and prohibited—the preferred plants being those which are water conserving, easily maintained and unproblematic (a bibliography is provided), while there are only nine prohibited plants (pampas grass, tamarisk, etc). Acceptable plants have to meet the standards of the particular landscape zone in which they are located, and lawns should be minimised. There are also site preparation, installation and maintenance criteria. Particular stress is placed on water conservation in irrigation systems, and irrigation systems themselves are very closely specified. Wherever possible, developers are required to preserve native vegetation, but because of the risk of fires special attention is paid to brush management with a series of standards for cleared areas, fire breaks, and cleared/separation zones for plants (Fig. 86).

Along streets and in open spaces the requirements for road safety are set out. Generally, new planting has to match the existing predominate species. The guide is completed with a series of technical appendices with lists of useful sourcebooks, an elaboration of brush management techniques, details on fire-retardant plants (Fig. 87), their utility on slopes and other advantages/disadvantages, and details of irrigation methods. There is also a *Street Design Manual* which provides detailed design guidelines and also covers matters of plant selection, installation and maintenance.

Clearly in San Diego both the risk of fire and the need to both irrigate and conserve water place special demands on landscaping, and require some quite elaborate technical guidance. Such a landscape manual would be valuable in any locality to raise the standards of landscaping, to ensure that it avoids common problems, and above all to ensure that it responds to the natural landscape and character of the locality. The recent deliberations of the District Planning Officers Society in England have highlighted the need to consider not just improved landscaping plans but also the quality of installation, maintenance and management (DPOS 1993). San Diego has tackled this problem directly. Other cities have defined nuisance plants (e.g. Portland) but few have produced clear, ecologically sound guidance on the best species to be used. The San Diego *Landscape Technical Manual* is another example of the technical excellence exhibited in much of the guidance in North American planning.

Economic growth and environmental quality

Most commentators are sceptical about San Diego's ability to manage its growth to ensure that its environmental quality is not steadily eroded. High levels of environmental concern are evident amongst the public, but so too is a desire to

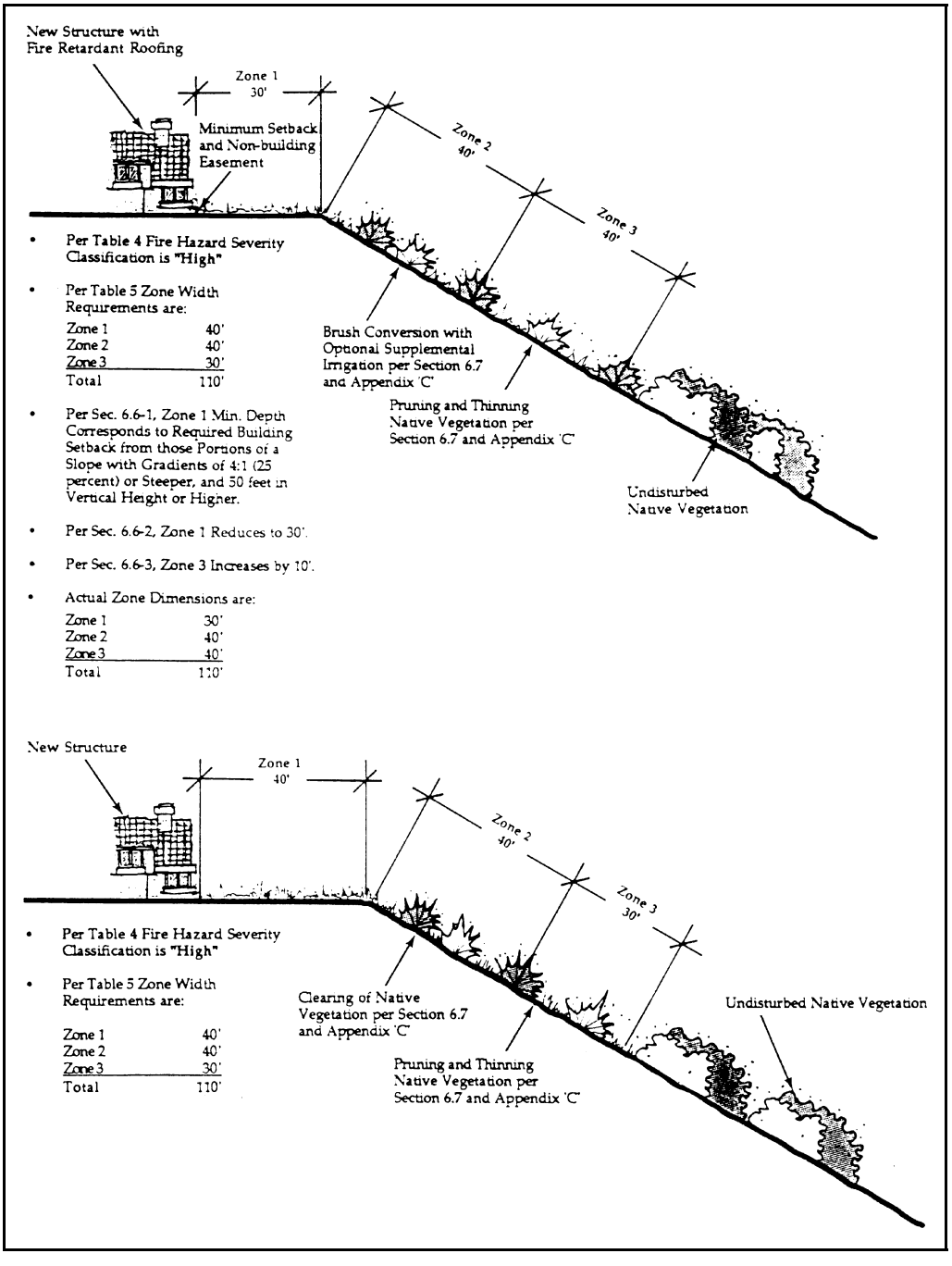


Fig. 86 San Diego: Landscape Manual: Brush Management Requirements (1989)

Type	Effective on slopes			Fire retardance	Water needs	Root depth	Height spread	Spacing	Resprouts	Advantages	Disadvantages
	‹2:1	2:1-1.5:1	›1.5:1								
Ground Covers											
Arctotheca calendula Capeweed	Yes	?	No	High	Low	1′–3′	6″–8″ 3′–4′	12″–18″	Yes	Showy flowers; Spreads by runners	Frost sensitive; Looks "weedy"
Atriplex semibaccata Saltbrush	Yes	Yes	?	High	Very low	3′–4′	‹12″ 3′–4′	Seeded	Yes	Very drought resistant; Easily seeded	Relatively short lived
Gazania rigens 'Leucolaena' Trailing Gazania	Yes	?	No	Mod	Low	‹3′	12″ 3′	12″–18″	Yes	Colorful flowers; Silvery grey foliage	Relatively short lived
Hedera helix English Ivy	Yes	Yes	?	Mod	Avg.	3′–4′	12″ to 10′	12″	If Watered	Excellent for erosion control in sun or shade	Leaves will burn if under watered; Attracts rats & snails
Hedera canariensis Algerian Ivy	Yes	Yes	?	Low-Mod	Avg.	3′–4′	12″–24″ to 10′	12″–18″	If Watered	Excellent for erosion control in sun or shade	Leaves will burn if under watered; Attracts rats & snails
Hypericum calycinum Aaron's Beard	Yes	Yes	No	Mod	Avg.	‹3′	12″–24″ 4′	18″	If Watered	Good for erosion control;	Invasive if well watered; Attracts bees
Osteospermum fruticosum Trailing African Daisy	Yes	?	No	Mod-High	Low-Avg.	3′	‹12″ to 10′	18″	Yes	Showy flowers; Tolerates some foot traffic	Needs regular maintenance; Frost sensitive
Phyla nordiflora Lippia	Yes	?	No	High	Low	‹3′	4″ 2′	12″	Yes	Tolerates foot traffic; Good soil binder	Attracts bees; Unattractive in winter

Fig. 87 San Diego: Landscape Manual: Commonly used fire retardant plants (extract) (1989)

promote economic growth, new centres of employment and new housing. While there is evidence of the creation of much denser nodes of development that can be served by public transport and where facilities are within walking distances (e.g. University City), subdivisions continue to leapfrog into the arid interior.

Even if the Multiple Species Conservation Programme were to be successful there would still be the question of what happens beyond the city's southern border. Here the problems of a fast-growing third world city (Tijuana) are counterposed with the affluence of Southern California. The inability to agree an international airport shared by San Diego and Tijuana, or to develop a sewage treatment works for the latter, are examples of the failure to grapple with the huge problem of trans-border planning exacerbated by illegal immigration and by the huge gap between the two economies. San Diego has a very sophisticated planning system capable of delivering a high quality of built and natural environment, but the reality is that local politics and attitudes to economic growth will continue to prejudice environmental quality and the city's considerable physical assets will be steadily eroded. With the region expected to grow by 45 per cent in the next twenty years, that erosion of environmental quality could be very much faster than San Diegans realise.

Conclusions

San Diego's experience with design control is varied and diverse, but its system is less mature and fully developed than the other major cities of the west coast. On the one hand it provides examples of a very detailed concern with architectural style at the local level, but on the other it illustrates an attempt to develop a strategic approach to urban design that emphasises the key aspects of sustainability. As Lynch and Appleyard noted in their pioneering regional appraisal in San Diego (1974), it is vital to assess carefully the qualities of the land, to conserve its natural amenities and respect its environmental constraints. The city's post-war pattern of growth has largely failed to do this, and the development of Mission Valley in particular was a missed opportunity, although Mission Bay is being developed as a natural and accessible public amenity. However, in the 1979 General Plan and its design policies, in the 1985 Proposition A and its controls on urbanisation, in the 1993 SANDAG growth management strategy, and most importantly in the very recent Multiple Species Conservation Program, San Diego is taking major steps towards protecting its considerable physical assets. It is seeking to ensure that important ecosystems and hydrological resources are protected when development takes place. Worthy of note in this context is the City's *Landscape Technical Manual* which demands a sophisticated response from developers and ensures ecologically sound provision as well as proper maintenance and management.

In San Diego such initiatives continue to be contested by those who seek to promote a more unbridled form of economic growth and pattern of development. The more compact forms of growth being produced have also created opposition

and community tensions in established suburbs, and here communities have sought to resist intensification and development through downzoning. This problem may be partly resolved by the rewriting of the zoning code on a city-wide rather than a community basis, but it would seem unlikely that San Diego will be able to follow Seattle in developing a sustainable city-wide development strategy in the face of such conservative community politics and limited investments in transit systems.

The city's experience with community plans and the tailoring of urban design objectives is instructive. The community plans opt for a high level of stylistic regulation in historic replicas of Spanish, Mexican and early nineteen-century America in Old Town San Diego, and variations of various revivalist styles—Victorian, Craftsman, Spanish or Contemporary in Golden Hill. These preoccupations have been roundly criticised as overprescriptive by some commentators (Delafons 1990; Shirvani 1990), but in the case of Golden Hill, at least, they are important statements about community preferences and aspirations, and residents' desires to reinforce the visual character of their neighbourhoods. In La Jolla the resistance to change has eschewed detailed regulation, but set tight limits on intensification and provided general guidance on bulk, massing, landscaping and the protection of views.

In the Center City the bases for design review are being laid as the programme of urban design studies is being completed. San Diego has yet to convince itself of the political wisdom of design review. It remains a long way behind Seattle, Portland and San Francisco, but it is learning from their experience in the way it is constructing its controls and regulations for a vital and attractive downtown. It is able to pick the best from each in terms of guidelines, controls or investment strategies.

In the University Community Plan the urban design dimension has been added twenty years after the plan was adopted, and the problem is how to undo the mistakes that have been made. How can an edge city be retrofitted to encourage walking and cycling; to create a safe, attractive, lively public realm; to create a multi-modal transport linkage system that will reduce dependence on the car; to reduce congestion and the environmental impact of a highway system that has carved the community apart as the roads have been widened in some cases to ten lanes over the last decades?

San Diego exhibits a quite fragmented approach to design control, but one which has allowed each community a measure of self-determination in design terms, and the results are consequently diverse. Marc Fink, a senior Arizonan planner, has speculated on the possibility of developing a design vision for Sunbelt cities that is distinctive from the neo-traditional suburbs, compact city or urban village visions of the northern USA (Fink 1993). He has identified the preferences for single-family low-density housing, for movement by car, for a sense of openness and for views for open country, and above all of the importance of the street rather than the building as the primary unifying feature of the Sunbelt city. He cites Phoenix's attempts (1993) to develop urban villages and a more polynuclear city with high density nodes of employment, retail and culture as an experiment with a more loose-fit kind of urbanism, an experiment that had to be watered down to respond to existing development interests and residents' rejection of transit funding.

Over the past two decades San Diego's planners have struggled to counter this very kind of loose urbanism that has spread development into the arid interior, driving up energy consumption, increasing air pollution, intensifying traffic congestion and destroying fragile ecosystems. They have come face to face with the realities of Garreau's (1991, pp. 463–71) 'laws of how we live' just as they have come face to face with the resistance of established communities to intensification and diversification. They have, however, maintained a regional growth management system, empowered local communities to produce their own plans, and insisted upon 'full cost recovery—pay as you go' development, even through the recession of the 1990s (Showley 1994, p. 23). There are some signs of much more sustainable forms of development emerging in suburbia. For example the Otay Lakes, a 36-square-mile master-planned development, offer twelve urban villages serviceable by LRT within a 22-square-mile open space system to be managed as part of a conservation programme. There is a single high-density office centre and two are business parks (Lettieri 1994). It is the merging of these neo-traditional concepts with the principles of ecological planning that hold the key to San Diego's future environmental quality.

SEVEN

CONCLUSIONS

Introduction

The task of this monograph was to illustrate and explain 'best practice' American design review to an international audience, providing as many illustrations, plan excerpts, and samples of guidance as possible in the belief that this would stimulate thought and encourage innovation in design guidelines and review processes in countries beyond the USA. West coast cities of the USA were selected to illustrate this 'best practice', four of them major metropolitan areas and two of them suburban municipalities. Collectively these were considered to display a long-standing commitment to design quality; a full range of design visions, strategies, goals, objectives and policies at different scales from city-wide to the neighbourhood; a sophisticated review process; a high degree of public consultation and public ownership of policies; and a wide range of implementation devices and investment programmes.

The evolution of the respective planning and design policies has been discussed and their strengths and weaknesses assessed. Their outcomes have been assessed to a much lesser extent, and it has rarely been possible to assess the effectiveness of policies in any depth. In the opening chapter design review was carefully located in the planning and permit-granting process in the largest cities, and comparisons were made with Canadian, British and French planning systems to illustrate where commonalities exist. It was seen that there are more similarities between American planning and continental European systems than there are between American and British systems; the latter have no zoning controls and no clear development entitlements. Instead, the latters' design controls on all planning applications operated with a very large measure of professional and political discretion (notwithstanding Central Government's strong policy constraints). For the British reader the key observation is that while many of the American design documents look familiar in terms of their goals, objectives, principles, policies and guidelines, it must never be forgotten that these are backed by detailed controls on bulk and use that in themselves exert a major impact on built form. For the continental European, the zoning controls will be familiar, as will the issues about how to make such controls more flexible, more responsive to development interests, and more qualitatively sophisticated. However, the question as to how new guidelines, documents or review processes might be built into a more plan-led system will loom large for the British reader.

Some time was spent exploring the key criticisms of design review in the USA in a bid to provide a conceptual framework with which to review each city's endeavours. It was seen that there were problems with the process, its efficiency and

effectiveness; with the competence of planners, politicians and review boards; with the abuse of power, going beyond legal powers to impose additional constraints and obligations on developers; with issues of freedom in terms of rights to self-expression and cultural identity, and of justice in terms of treating all applicants fairly and reasonably; and finally of aesthetics in terms of the subjectivity of design judgements and the lack of widely agreed principles that can be used as a basis for judgement (Scheer 1994, pp. 1–10). Legal observers focused their criticisms on the process of control and the rules/principles/policies that are applied. Blaesser, in particular, focused on the legality of design review within state planning law; the need to derive policy from analysis of area character, the need to ensure that guidelines remain non-mandatory and non-prescriptive, but detailed and precise rather than vague or visionary; the need to underpin guidelines with both design principles and implementation advice, and to explain the weight to be attached to each (Blaesser 1994, pp. 49–50). Lai took a broader and more general view, on the one hand looking at general weaknesses of American planning and zoning, and on the other arguing that design review must be part of a 'comprehensive co-ordinated effort' to promote design quality in which other public and private agencies participate (Lai 1989).

A framework for synthesis

These criticisms provided the framework for drawing together the findings of the study in terms of the comprehensiveness of the pursuit of design quality; how policies were derived (particularly the analytical studies and consultation that underpin them); their level of precision; their basis in design theory; the extent to which they prescribe solutions; and finally the efficiency and effectiveness of the review process. Particular attention was devoted to the policy hierarchy, to the relationship between urban design at the city-wide scale and the level of the individual plot, and to the relationship between goals, objectives, principles, policies and guidelines.

In these conclusions the findings of the study will be assembled around six issues which can help to organise the key arguments that have arisen in the analysis. The key issues may be encapsulated as politics; public participation; the review process; policy hierarchy, policy generation and levels of prescription; implementation; and comprehensive co-ordination. These are not mutually exclusive issues—politics, participation and policy generation are particularly closely related—and some aspects could be explored under several of these categories, but these issues can help structure the general conclusions of the study.

The politics of urban design

The west coast cities clearly demonstrate that urban design in its broadest sense is a politically contested arena. This is most evident in the citizen revolts against the

1984 Downtown Seattle Plan and the 1985 Downtown San Francisco Plan where there was strong opposition to further large-scale, high-rise commercial development on the basis of its impact on the character of downtown, and its broader effects on congestion, transportation and housing. In San Diego the concern was suburban sprawl and the spread of new communities up the coast and into the arid interior; a balanced growth strategy soon disintegrated when existing suburban communities began to experience intensification, congestion and higher demands on existing services.

Portland provides the most positive example of how urban design goals and strategies have won powerful political support that has ensured their continuous implementation over 25 years. Carl Abbott has detailed the connection between *what* the city has accomplished in design terms and *how* it has accomplished this through its politics. He emphasises Portland's traditions of conservativism, conservation, and consensus politics (non-partisan government) developed through extensive public-private partnerships and thoroughgoing community planning as the platform for a long-term urban growth management and downtown development strategy (Abbott 1997). Others see support for these strategies being built through economic self-interest in higher property values and more stable neighbourhoods, in more profitable development opportunities and more affordable housing, and through widely shared interests in the commercial and cultural vitality of the compact city, and the protection of valuable agricultural land and natural landscapes (Richmond 1997).

The same kind of political consensus building was evident in Seattle with the 1994 Comprehensive Plan and its urban villages strategy, which tried to accommodate growth and maintain housing affordability at the same time as improving neighbourhood amenities, increasing accessibility and reducing congestion, and increasing neighbourhood design control while nonetheless allowing intensification. It remains to be seen if Seattle will succeed where San Diego failed, but certainly the Comprehensive Plan provides the basis for accommodating the growth that San Diego's mature suburbs have resisted.

Another example of the importance of politics is provided by San Diego's failure to build a political consensus for design-led planning downtown, in the face of powerful development interests and a powerful City Center Development Corporation driven by the tax increments provided through redevelopment. A further problem was a political leadership that, at least until recently, regarded design control as arbitrary, expensive and off-putting to developers.

The political complexion of the city, the extent to which it can pick and choose between developers and developments (particularly the level of economic competition between developers), the mutuality of interest between developers and residents, between business and environmental groups are all critical to the effective implementation of long-term design strategies and enhancement programmes. It is remarkably easy for policy to get out of step with public aspirations, particularly in periods of rapid growth (as in Seattle and San Francisco). One of the best ways of preventing this is to develop a very high level of public participation and

neighbourhood/community input into plan making and design development/ regulation, but even this is not an absolute guarantee of harmony.

Public participation in formulating design policy

Issues of the politics of urban design are inseparable from issues of public participation in planning and design regulation. However, the level and extent of this participation constitutes, at one extreme, mere publicity for a plan or guidelines, and at the other extreme genuine empowerment of the community (Arnstein 1969). A wider range of different levels of participation is evident in west coast cities, from extremely limited public involvement in sub-division development and planning in Irvine (land owner planning through market research) to an extremely high level of involvement and devolved resources in Portland.

Portland is the exemplar in terms of its neighbourhood participation programme which funds neighbourhood associations, trains activists, gives associations early notification of impending development, and allows them to participate in development briefing. The 1988 Center City Plan was led by a voluntary citizen steering committee, and both this and the 1993 Albina plan had huge budgets to ensure high levels of public participation. It is noticeable that there were no citizen revolts over the 1988 Downtown Plan in Portland as there were in Seattle and San Francisco, although there was some modification of its content (a refocus on land-use issues) when the Planning Bureau took over from the citizens' committee to complete it.

Other cities have been much less ambitious with their participation initiatives, but there are some interesting experiments in the devolution of both guidance production and design control to the local level in both San Francisco and Seattle. In San Francisco, at least in part, this has been a product of financial exigencies constraining planning department initiatives, so that communities wishing to undertake closer control have had to write their own guidance or finance its production themselves. In Seattle, it is part of a pact that will allow the city to intensify development in a series of urban villages, while allowing the neighbourhoods to control the detailed design of new development, and to participate in pre-development discussions with prospective developers with a firm prospect of having their views incorporated into the final design.

There is a clear trend not just towards public consultation in design matters, but towards the public defining the principles of control and contributing to the administration of the control process itself. Such ventures provide a mechanism for managing disputes between the community and development interests, and for giving the community far greater 'ownership' of the control mechanism. The Seattle experiment in empowering neighbourhood groups will be especially interesting as the intensification process generated by zoning changes in the 1994 plan gathers pace. It will provide an interesting comparison with San Diego's experiences.

The management of neighbourhood change through elected neighbourhood associations and Codes, Covenants and Restrictions is another form of empower-

ment, often dismissed as a purely negative and exclusionary process by those who see design control as a purely public activity. Baab argues that these can be devices for subordinating individual property rights to community values, and is very positive about both their effectiveness in maintaining environmental quality and their ability to translate community goals into action (Baab 1994). Taking the example of Woodbridge in Irvine, it is difficult to see anything but enforced conformity and claustrophobia, but a more positive role is evidenced in Westwood Park, San Francisco, where a less rigid set of CC&Rs has been supplemented by tailored guidelines to ensure the retention of neighbourhood qualities.

With the obvious exception of Irvine, west coast cities have made an especial effort to consult the public on design matters, and a number are now going a stage further to devolve both the production of guidance and first stage design controls to the local community. However, these efforts are at odds with the general trend identified by Southworth (1989, p. 345) to allow less participation, and to concentrate upon élite business and professional interests to capture key decision-makers and to save money. They are also at odds with Habe's research findings which found that only one-quarter of the communities surveyed promoted 'active' participation in design matters (Habe 1989, pp. 204–6). This is one of the reasons why these west coast cities continue to be exemplars of enlightened design control.

The process of design review

Opponents of design review, particularly developers and architects, focus upon the nature of the processes of design review and the extent to which they are subject to professional and political discretion. Lawyers are especially concerned about the abuse of discretionary power (see Blaesser 1994) and the tendency of applicants to succumb to its requirements rather than to challenge it. They have made a variety of suggestions about how the process might be made efficient, fair and effective (Lai 1988). A number of these relate to the way guidelines are developed, their basis in the nature of the locality and public values, their relationship to established principles of design, and their level of prescription, all of which will be discussed in subsequent sections. Some of their suggestions relate specifically to the administrative procedures and the need for written opinions, principles derived from precedents, tests of the reasonableness of the decision and the right of appeal.

Abbott noted how in Portland the city routinised and depoliticised design review early on by establishing clear guidelines, trained officers, treating each case on its merits, and appointing design and landmark commissions to give decisions (Abbott 1997). The review process itself (Fig. 42) has written reports, hearings (on more complex developments) and appeal procedures all with strict timetables that will yield a decision in 11 or 17 weeks depending on the size and complexity of the proposal, even after appeal. A key aspect of Portland's system is that state legislation demands that decisions be based on demonstrable findings, hence the emphasis on clear and precise guidelines and checklists against which an application can be

assessed and can be seen to be systematically evaluated. This same approach is evident in Seattle's neighbourhood design review where it is extended to emphasise pre-application negotiations and community agreement on what the decisive issues are, so that these can be used in a broader evaluation of the eventual planning application. Due process was seen to be lacking in San Francisco where discretionary review could be initiated even where a developer had met all the requirements of the zoning ordinance, and where politicians used the review mechanism to respond to citizen pressures against particular developments.

The evidence from Seattle, Bellevue, Portland and San Francisco is that design review has been fully integrated into the planning process, and it has been systematised, made transparent, democratised and professionalised, the latter by virtue of planning officers' advice and expert design or landmarks' commissions' judgements. In San Diego design review has yet to be fully established, but communities have set out their design requirements in their zoning ordinances and community plans. Meanwhile Irvine demonstrates the power of land owner control that can be exercised on developers when there is a high demand for development, and how these controls can be perpetuated through the imposition of CC&Rs on the title deeds.

The policy hierarchy and the writing of guidelines

At the heart of the examination of the design guidelines used in west coast cities has been the question of how to write policies or guidelines that are clear, meaningful and easy for lay people to understand, and easily applicable to the control of development. Throughout the case studies the relationship between community goals, design objectives and design guidelines has been repeatedly discussed, compared and contrasted one to another in the search for well-articulated, concise and comprehensive policy frameworks. To re-emphasise the importance of the task, a recent court case in Washington State overturned permit refusals which stated that development proposals were 'incompatible' and 'non-harmonious', because such judgements were not based on properly researched and explained policies and guidelines. The court in the case of Anderson v. Issaquah ruled that the use of such adjectives in zoning ordinances was not acceptable, that property owners must know what they are expected to do in advance, and that decision-making cannot just be turned over to a board or committee without clear guidelines being established to support their decisions (Hinshaw 1990, p. 288).

In this section the value of a clear policy hierarchy of goals-objectives-principles-guidelines will be stressed. The need for policy development, to incorporate thoroughgoing appraisal and consultation to help define appropriate objectives and principles, will also be emphasised. The importance of 'urbanistic' design principles will be underlined and the way these can be integrated with the more common architectural principles highlighted. Performance rather than prescriptive guidelines will be recommended. Finally there will be a brief examination of design visions and strategies and how these can best be articulated to express basic goals and build

consensus, and to provide a more strategic approach to environmental change and enhancement.

In the introductory chapter the whole problem of how to state the relationship between goals, objectives and policies was examined, and a model was presented that saw objectives being achieved by principles. These were supported by guidelines specifying how to meet an objective, and advice on how different guidelines, criteria and standards might be interpreted (Fig. 8). This model, derived from recent work on design policy in Britain and the USA (Hall 1996; Lang 1996; Punter and Carmona 1997), is set within the context of the whole process of policy development. This process begins with the setting of community-wide goals and visioning, moves on through analysis of the character of the area and the public's perceptions of its qualities and shortcomings, into a discussion of how objectives, principles, policies and guidance can be developed (and then implemented and monitored (Fig. 9)). The key underpinnings of such a process are discussed below under six headings.

(i) The value of design appraisal

One of the key characteristics of the best American urban design plans is that they are based upon thoroughgoing analysis of the character of the locality. The best example anywhere is provided by San Francisco where the 1968–70 design studies undertaken by the City Planning Department established the character of the city, the key qualities that needed to be protected, and the principles and policies that would help achieve this. Other cities undertook similar appraisals, but not on the same scale—the Lynch and Appleyard study of San Diego being one of the most interesting and comprehensible (Lynch and Appleyard 1974). The Portland studies were among the most participative—involving various architectural and conservation groups, using Kevin Lynch methodologies in the former and identifying all potential landmark buildings in the latter. Portland has been proceeding area by area with detailed analyses of design character through all downtown, inner city and historic districts, developing detailed guidelines from each appraisal (City of Portland 1993). The analyses make particular use of axonometrics and maps at the large scale to distil and communicate ideas, moving on to detailed analysis of architectural and street character at the micro-scale.

Southworth's research reveals that such thoroughgoing appraisals are now much less common than they used to be in the period 1960–73, and further reveals that 20 per cent of the newer design plans surveyed have no such analytical base (Southworth 1973; 1989). Furthermore, he is critical of many professional field surveys which he regards as vague and unstructured. His prescription for a good survey is that it sets 'clear goals and categories of analysis, and establishes a system for covering the survey area so that all areas receive equal attention [and] provides for multiple opinions in subjective analyses to reduce personal biases' (Southworth 1989, p. 376). His research reveals a rich array of analytical techniques that provide a good basis for area appraisals anywhere, but emphasises that significant public consultation remains a vital component in order to establish public, as opposed to professional, values.

Residents' views were an important component of the San Francisco Urban Design Study in 1970. In Portland since 1974 the Office of Downtown Neighborhood Associations has ensured major public inputs into all planning, zoning and guideline reviews, including most notably the 1988 Center City Plan which was largely prepared under the auspices of a citizen steering committee with its own budget. Current initiatives in Seattle attempt to kill two birds with one stone by encouraging communities to conduct their own area appraisals, and thereafter to develop their own objectives and guidelines, thereby ensuring that it is *their* values which are expressed in the controls rather than those of the professionals or specialised amenity or development interests. It has already been seen that quite ordinary communities are capable of writing their own design guidelines, and that these can be quite original, unprescriptive and refreshingly neutral about matters of elevational treatment and architectural style (e.g. Bernal Heights in San Francisco). Certainly Seattle's manual, *Preparing Your Own Design Guidelines*, will be of value to many small communities worldwide as they contemplate the task of expressing what it is about the physical character of their settlement or neighbourhood they wish to maintain.

(ii) Objectives and principles

The appropriate development of goals, objectives, principles, policies and guidelines is problematic in the sense that many of these terms are used interchangeably, and loosely, by different designers and indeed different cities and planners. Figure 8 attempted to clarify each. In the west coast cities the three best examples seem to rely on a few key objectives each split into a number of design principles. The 1972 San Francisco Master Plan relies on four design objectives, each with nine to twelve policies (design principles); the 1985 Downtown Plan is similar but with nine objectives each split into two to five policies (also essentially principles). In the latter, further guidance is offered in a couple of paragraphs on each, with much more detailed guidelines and standards for open space and for pedestrian improvement standards.

Portland's 1988 Downtown Plan has three objectives and 26 principles (called guidelines). They are very broad and general—reinforce the pedestrian system, protect the pedestrian, bridge pedestrian obstacles, provide pedestrian stopping places, make open spaces successful—and are barely elaborated in the four sentences which accompany each guideline. They are brought together in a checklist so that planners can determine whether or not the guideline is applicable to the proposed development or not, and whether it complies or not. A very similar approach has been adopted in Seattle with 27 principles (also called guidelines) for site planning, bulk, architectural treatment, pedestrian relationship and landscaping. These are described as guidelines and the checklist is used to establish which are the priority considerations from the neighbourhood's viewpoint. Both checklists provide valuable ways of briefing developers, or articulating community wishes, or of evaluating proposals, because they can identify which broad but widely supported principles, collectively, will be critical to design quality.

(iii) Urbanistic principles

One of the features of the best design principles is the emphasis they place upon the proposed building's relationship to the public realm and the pedestrian experience. In the most progressive authorities these urbanistic criteria receive more attention than architectural or townscape factors. Payton, relating an experience in Virginia, draws a clear line between these two kinds of factors and makes an important recommendation:

> Urbanistic criteria relate to the relationship of buildings to other buildings (vis-à-vis height relative to street width and other buildings), to set back lines, to parks etc. In essence all of those characteristics that determine the walls of the urban room. Architectural criteria are those that relate to the buildings themselves, or objects within the urban milieu. In an ideal world buildings would be successful urbanistically and architecturally. However, if only one were possible, the greatest effort should be applied to the former, consistently throughout the entire locale. (Payton 1992, p. 238).

Portland's design guidelines clearly illustrate some resolution of these architectural (townscape) and urbanistic (public realm) criteria, seeking to ensure first that a project is consistent with the city's character, and the broad urban design framework; secondly that it makes a contribution to the pedestrian environment; and finally that the detailed design is sensitive to the character of the locality and creates appropriate amenities. All these examples demonstrate the important broadening of the concept of design beyond visual-architectural considerations. They emphasise the importance, stressed by Buchanan, Habe, and other design critics, of employing definitions of context that embrace patterns of use, activity and movement in an area. However, as recent American research demonstrates, such perspectives tend to be more exceptions than the general rule (Southworth 1989)

(iv) Guidelines and their elaboration: appropriate levels of prescription

How then should guidelines elaborate these basic principles? Figure 8 emphasises that guidelines can be divided into two kinds—those that are prescriptive in terms of prescribing the form of the development scheme; and those that are performance related, which seek to ensure that the development 'performs' in a certain way by responding to a particular issue. A good example of the two approaches is provided by the San Francisco Zoning Code which is very prescriptive, and the San Francisco Residential Guidelines (1989) which try hard to be performance related. The Zoning Code specifies the provision of bay windows, their angles and overhangs, the maximum spacing of pedestrian entrances, the maximum proportion of garage doors vis-à-vis the façade, and detailed setback and landscaping provisions. The *Residential Design Guidelines* (1989) articulate a series of detailed design principles and how these might be applied, with key questions that the controller/applicant can ask themselves, and analytical devices to establish appropriate responses. There is

no doubt that the application of these principles places significant constraints on the client and designer; it is obviously the intention of the guide to ensure that new development responds to the quality of townscape that it is placed in, and the less uniform the context the less binding the principles. These guidelines do not prescribe solutions, rather they encourage full consideration of the design issues at stake and demonstrate clearly to applicants what their designs are expected to achieve. Compatibility, not conformity, is the watchword.

The same is true of Seattle's multi-family housing guidelines (1993b). Here, compatibility was defined more broadly to embrace aspects of landscape as well as architecture and urban form. The guidelines directly embrace the relationship to the public realm and seek to retain existing qualities of visibility, surveillance and private/public space, promoting both pedestrian safety and a rich pedestrian experience. In Seattle a concept like human scale is not just interpreted as an aspect of elevational treatment or building size. It embraces the social and functional aspects of the relationship between buildings and space, and in this sense it operates more like a performance standard against which the proposal can be evaluated. Most of the guidelines are similarly sophisticated. The Albina plan in Portland offers developers the alternatives of meeting a set of prescriptive supplemental compatability standards or of submitting the project to a design review process in which the community will play an important role.

The level of prescription in design policies remains a fundamental issue that greatly exercises architects, designers and often clients. Most commentators favour policies and guidelines which do not prescribe solutions or particular built forms, but which set out principles or performance criteria leaving the designer free to use his or her creativity to resolve the design problem. They recognise that without full use of the designer's skills there will be no quality, and even those who wish to write detailed codes to control the form of development still try not to propose architectural solutions.

In the United States it is still quite common for both local government and land owners/developers to become obsessed with matters of style and design detail, rather like the community of Golden Hill in San Diego. Habe's research reveals that architectural considerations are the key focus of control in 98 per cent of all authorities surveyed (Habe 1989, p. 202), while nearly a third of all authorities specify certain architectural styles; others are preoccupied with architectural details often without reference to specific contexts. The west coast cities illustrate a much broader and less prescriptive approach in which architectural issues are integrated with urbanistic and landscape issues to achieve a holistic approach to urban environmental quality. Careful study of the context (broadly interpreted) is required of every applicant, but design principles rather than design solutions still allow the developer and designer the opportunity to respond creatively to the carefully defined constraints.

Legal experts concerned with the potential and actual abuse of discretionary powers have particularly emphasised the need for a clear division between mandatory controls (which are limited to judicially accepted parameters like height, bulk,

density, building line, setback) and design guidelines (Blaesser 1994). Portland and Seattle provide two good examples where this has been achieved successfully.

(v) Visions and strategies—conveying the desired future form

One of the most striking features of the American experience is the way that design thinking has recently come back to permeate planning at the metropolitan, district and neighbourhood levels. Mark Hinshaw (1994, pp. 287–8) has argued that through most of the 1970s and 1980s urban design fell into severe disfavour as planners moved into policy planning. Other relevant factors are likely to have been the deep economic recessions of the 1970s and 1980s, public disenchantment with the results of urban renewal and redevelopment, while increasing competition between cities in the 1990s has tended to revive design concerns. Hinshaw notes that urban design is now making a strong comeback in the United States as community image, community design and environmental quality become more widely discussed, and as its potential to express desired qualities in built form and environmental regulation is realised. He considers urban design to be particularly relevant as growth management is developed in the United States and the reshaping of suburban development becomes an urgent necessity.

In the west coast cities, most notably perhaps in Portland and most recently in Seattle, the importance of thinking strategically in urban design terms is palpable in the attempts to convey city wide future urban form. This embraces the areas for major intensification and concentration of commercial development; the patterns of infrastructure investment especially transportation; the accessible areas for residential intensification; the townscapes to be conserved and the agricultural and natural areas to be protected. Seattle's new urban villages strategy set out in the 1994 Comprehensive Plan is a fine example of how a generalised urban design concept can express a city-wide vision of the future that is comprehensible to the public and the development industry. Developed through two years of debate with broadly-based discussion groups and community forums, the vision expresses with great simplicity what Seattleites want for their city in terms of reduced congestion and improved transit, protection of the environment and neighbourhood quality, living compactly but ensuring housing affordability, improving suburban services and ensuring economic vitality and employment growth.

One might criticise Seattle for not clearly presenting this vision with the kinds of maps, diagrams, sketches and axonometrics that make such ideas accessible to a wide constituency, but no such criticism can be made of Portland's design strategy for its downtown. Established in 1972 and refined in 1988, this design strategy is expressed largely through maps and axonometric line drawings (Portland 1988), starting with a concept plan emphasising the areas of intensive development and infrastructure investment. Then it expresses each planning policy in a spatial way on a map—economic development, river front, historic preservation and, finally, urban design. The latter then attempts to integrate these different aspects into an overall design framework. The key concepts employed, and the notation for the strategy have been the subject of much thought and refinement, but they are still not entirely

satisfactory in the way that they integrate aspects of built form, public space, and activities, both current and projected. They are, however, more complete and more sophisticated than other known examples.

These detailed spatial strategies are backed up by a set of action proposals, and supplemented by a set of programmes with timings and relevant implementation agencies identified. The whole provides a clear framework for private development decisions and acts as a corporate document to guide public investment and initiative. Like the Seattle plan, it sets out a vision for the future of the central city developed in conjunction with business and resident groups. What is striking about the strategy is that the 1988 version, while extended, elaborated and more detailed than its 1972 forebear, is still essentially promulgating the same vision and approach, and it is this continuity which is a testament to the robustness of the original concept and a key to the sustained positive impacts upon downtown itself.

Of course, design strategies necessarily precede the writing of design policies and guidelines, and should emerge from the whole process of visioning and goal-setting city-wide, at the district or neighbourhood levels. They are a key element in ensuring that urban design thought plays a much more prominent role in the co-ordination, integration and modification of systematic planning policies. They provide a spatial framework for developing enhancement programmes and other forms of direct public action to ensure that the various initiatives are mutually reinforcing. While, inevitably, many strategies will be developed to aid regeneration initiatives or major urban restructurings from time to time, the revision of a comprehensive or neighbourhood plan provides the ideal opportunity to inject strategic thinking into the design review process.

(vi) Presenting policies and guidelines in accessible ways

Finally, there is the question of how policy is presented to make it attractive to the designers and public and easy to absorb and use. Many plans, zoning codes and guideline documents are notable for their impenetrability, inaccessibility and lack of appeal to all but the most dedicated professional. Portland has done most work on this issue, with concise, highly illustrated and imaginatively presented plans that do not get bogged down in detail, but allow the reader to grasp the essentials and keep in mind both the 'vision' and the overall policy framework. The presentational quality of Portland's City Center Plan has already been mentioned, but this is now supplemented by a *Developer's Handbook* (1992), very much a state-of-the-art document which assembles the various plans, policies, legal requirements and review processes which control development. The presentation is outstanding, with a minimal use of text and maximum use of maps, checklists, matrices, and flow diagrams that help make the various regulatory procedures comprehensible, and which encourage an imaginative approach to project development. The same kind of innovative thinking went into the presentation of the 1993 Albina Community Plan.

These and other plans will impress any planner or designer with the sheer wealth of technical material for establishing uses and densities, massing and site coverage, building heights, landscape and parking, and even some aspects of architecture and

'pedestrian standards'. They are supplemented by a bonus system for residential, retail, theatres, rooftop gardens, day-care facilities and public art/fountains, all of which are now evident in Portland's city centre. Regrettably, the city would not have the resources to produce such a document again, and few other cities would be able to finance the production of guidance of such comprehensiveness, clarity and imagination. The document is a testament to the sophistication of the control system, and to the city planners' determination to make it comprehensible and accessible to the development industry, the community and business interests. Among the other documents that are exemplary in terms of accessibility and presentational quality are Seattle's *Design Review: Guidelines for Multi-family Residential and Commercial Buildings* with its excellent line drawings, explanations and examples of how to apply the principles, its *Preparing your own design guidelines* manual for neighbourhoods, and San Francisco's *Residential Design Guidelines* (1989) where line drawings and minimal, but very carefully selected, text sets out the key considerations.

Implementation

Much has been written about visions, goals, objectives, principles and guidelines, but very little has been said about implementation. In the opening chapter the nature of development control in west coast cities was explored in outline, and comparisons were drawn with more discretionary systems of control and systems with less overt design review. It is important to remember that design review operates selectively, not universally, as it is by definition focused upon proposals which are likely to have a major impact upon the local environment, by virtue of their size, the activities they generate or the sensitivity of the site and location. It also operates alongside zoning controls which help to fix issues such as floorspace, car parking, open space, land-use mix and the like. Design review may have been designed to overcome a number of the shortcomings of zoning, but it still relies on it to provide strong controls on the amount of development. The zoning system itself has been made more flexible and more effective (and more complex) in a variety of ways. In some instances it has been closely specified and detailed to extend its dimensional controls into the details of architectural form (e.g. San Francisco 1979), but perhaps the most important innovation from a design perspective was the introduction of bonus systems which reward the provision of amenities, facilities, affordable housing and the like. Bonus systems were invented to improve the urban design of cities and to create more public amenities in the form of plazas, pocket parks, accessible atria, retail and catering facilities, as well as more mixed uses. However, they seem to cause as many problems as they solve, as exemplified by the Washington Mutual Building in Seattle, which produced extremes of overdevelopment in the pursuit, if not the achievement, of design quality. Public disaffection with such overdevelopment was very clearly expressed in Seattle, as it was in New York (Whyte 1988). Nonetheless, bonus systems remain an important feature of downtown planning in Seattle and Portland, and an important determinant of design outcomes.

Alongside bonus systems there are sometimes linkage requirements. San Francisco's linkage requirements include contributions to affordable housing, child care, education, parks and transportation, but they also prescribe the required amounts of open space in the commercial development at a floorspace ratio of 1:50. This requirement produces pedestrian amenities downtown and gives the necessary impetus to the extensive guidelines and standards for pedestrian improvement and open space provision. Mention should also be made of Transferred Development Rights to ensure landmark preservation which can be critical to quality townscape and mixed-use in a project.

Design review works with all these 'incentives' are powerful forces for over-development, as well as positive encouragements to the provision of amenities. This tension creates interesting design challenges in terms of creating a pedestrian-friendly and permeable ground floor frontages, a building bulk that can be accommodated in the streetscene, and a three-dimensional form that will not detract from the city's skyline or overshadow open spaces. These incentives give planners something to offer in their design negotiations, ways of encouraging improved design and the provision of facilities and amenities, in exchange for the allowance of extra floorspace. A well-designed bonus system remains an asset to design quality, but its impacts need to be carefully and regularly reviewed. Seattle's bonus system, revised downwards in 1989, was revised again in 1994 to reduce the level of bonuses. In Portland the bonus system has been limited to a maximum of 3.1 FAR, and is mainly directed at housing provision.

Finally, as was seen in Irvine, land ownership controls through development agreements and subsequently through the imposition of CC&Rs provide the ultimate in design control. Their increasing popularity in affluent suburbia is a testament to the public desire to protect property values and to maintain the environmental quality of their neighbourhood. CC&Rs are of course relatively unproblematic in the short term, but in the longer term they pose major questions about the ability of the neighbourhood to change and respond to new patterns of life and accessibility, and thus the ability to reshape urban form at large to new social and economic realities.

A comprehensive co-ordinated effort

There is a general agreement amongst critics that design review needs to be part of a 'comprehensive co-ordinated effort' to raise design standards and promote environmental quality. This phrase used in Supreme Court Justice Brennan's judgement in two cases in San Diego in the early 1980s (Lai 1994, pp. 39–41) emphasises the need for local government to demonstrate a comprehensive plan and programme to provide a framework for design review.

> ... it is only reasonable that a prerequisite for design regulation and review be adoption of a public policy and plan that specify in advance the precise

> urban design objectives and the standards that the community is committed to enforce and against which the design of private development can be gauged without prejudice or arbitrariness. (Lai 1988, p. 319).

These notions might be extended to the observation that cities need to be advancing the cause of urban design and sustainable environmental quality in all spheres of regulation and intervention, so that higher quality design is a clear corporate objective.

One of the key lessons of west coast American experience is the need for good design to be a long-term corporate goal permeating all aspects of municipal enterprise, and capturing the support of both the community and business/development interests. The best example of this in the United States is again provided by Portland, where a coincidence of factors has placed good design high on the political agenda since 1970—some would argue long before. These factors include a century of positive planning initiatives, a non-partisan form of government, a stable and thriving local business community, a less cyclical pattern of urban development, a tradition of public-private partnerships, a strong community/participative planning emphasis since the 1960s, the retention of strong middle-class neighbourhoods in the inner city, and a succession of design-enlightened city officials in a variety of roles including estates, planning and transport.

It is the coming together of all these factors and related initiatives that makes downtown Portland such an attractive and civilised city. While the design guidelines provide the framework for all new development, and ensure that it is visually and functionally consistent with the form of the city, it is the municipal investment in the public realm (sometimes greatly supplemented by development contributions) which sets the standards for the private sector, and raises the tone and quality of the neighbourhood. It is this that provides both the confidence for investment and the standard for design quality.

The decisions a city takes about the architect and budget for its City Hall; about the design team for its LRT system, about the landscape architect for its parks; about whether to put a multi-storey car park underground and create public space, about the design, location and facilities of its performing arts centres; about the design and landscaping of its transit mall—are critical to set the standards of development which it expects the private sector to achieve. Portland, of course, has turned each of these instances into a design triumph and given developers a clear signal about the standards required. Elsewhere there are many examples of corporate decisions which have produced the bland, mediocre or just plain cheap and ugly solutions.

In other cities the experience is not so clear-cut, and corporate commitment to design quality is more intermittent. In San Diego, for example, design was downgraded in importance for years under a previous mayor, partly as a result of the lobbying of the development industry, which undermined any interventionist role by city planners. In San Francisco, where much innovative design thinking occurred in the late 1960s, there is evidence of both the impoverishment of planning as a

result of the city's budgetary crisis, and a change in its agenda to address the city's problems of homelessness, unemployment and economic activity. Design initiatives are no longer a high priority. In Seattle the urban villages strategy in the Comprehensive Plan with its associated experiments in transit provision, rezoning and devolved neighbourhood design control, sets an ambitious corporate agenda for all manner of public investments to create a more sustainable city. Finally, it is important to record that the Irvine Company as large-scale private developers are only too aware of design quality and its relationship to economic attractiveness and long-term development profitability. Would that all developers took a similar view.

The lessons from west coast cities

The general lessons for design control from the experience of west coast cities of the USA lie in a set of interconnected propositions/recommendations that can provide a framework for design control in a wide range of different planning systems. These recommendations are predicated upon a set of assumptions about the importance of thinking about design as a process rather than a product (Fig. 8), and building a hierarchy of guidance that works in two ways: from goals through objectives, principles, guidelines and on to quantitative standards on the one hand (Fig. 9) and from the sub-regional to the city-wide, district and neighbourhood levels to the individual site. They are also predicated upon the assumption that those wishing to practise design control are obliged to set out clearly what broad forms and qualities of development they wish to see in different localities, and what the criteria are by which applications for building permits or planning permission will be assessed. This latter 'assumption' is, of course, firmly insisted upon by the courts and the legal profession who represent development interests. They argue that losses of development rights, or even the loss of the right to freedom of expression in architecture or landscaping or to deal with property as the individual sees fit, must be based upon clear rules that have been democratically and reasonably established, and whose application can be challenged in the event of policy contravention or inadequacies in decision-making processes.

The recommendations require:

- design policies (see below) to be a direct expression of publicly surveyed or expressed goals and objectives for the community;
- design policies to be derived from a careful analysis of character of the locality that embraces visual, social, functional and environmental aspects, all interpolated through public values;
- design policies to consist essentially of a set of design principles that are directly linked to key design objectives, and which do not unnecessarily prescribe design solutions, leaving as much scope as possible for the skilled designer;
- such principles to have more emphasis on urbanistic qualities than on visual architectural factors;

- such principles to be clearly communicated to citizens and the development industry;
- such principles to be applied in as systematic and transparent a system of review as is feasible in terms of development efficiency, with adequate public hearings and appeal procedures, including appeals against the grant of a permit on the grounds of infringement of principles or lack of due process;
- design policies to be developed at the sub-regional scale down to the level of the site scale through a variety of plans and advice documents, but particularly to be expressed in a city-wide design strategy that can be subsequently elaborated in a series of design frameworks to guide policy, direct environmental action, and initiatives in other policy areas;
- design policies to embrace clearly principles of environmental sustainability as an urgent necessity for growth management, large-scale suburban design, retrofitting suburbs and sub-centres, and urban regeneration.

Portland's experience with the compact city, flexible rezoning and a commitment to affordable housing, Seattle's attempt to create a polynucleated urban structure with its villages and hub centres, and San Diego's progress with nature conservation as a guiding consideration in suburban expansion all contribute parts of the sustainability agendas for urban design. They do not constitute a coherent model for wider application.

Lessons for other countries

In the latter respect particularly, European experience probably has a great deal to teach American towns and cities in terms of transit-oriented development, sustainable densities and mixed uses, the conservation of critical environmental capital, the maintenance of biodiversity, and the minimisation of energy expenditure and pollution. However, looking at continental Europe, there are a variety of ways in which they might learn from the west coast cities. For example, Sweden seeks to inject more design advice and guidelines into its comprehensive plans to take advantage of its traditions of consensus decision-making, but also to make sure that developers are fully aware of what is expected of them when they develop in a community (Nyström 1994, pp. 122–6). In the Netherlands the existence of design control committees to provide advice on design control might similarly benefit from the experience of the west coast cities through developing appropriate review processes and guidelines to assist such committees, and limiting their freedom of judgement to key design issues (Nelissen and de Vocht 1994, pp. 147–51). In France there is much debate about zoning controls and the accompanying regulations which can closely govern the building envelope and associated car parking, open space and landscaping. There is a major trend to conduct much more rigorous area appraisals, morphological and historic analyses in order to derive new rules and regulations that are more responsive to place and locality (Samuels 1993; Kropf 1996). There are also interesting developments in the formulation of design strategies that follow in the

footsteps of the *grands projets*, and which attempt to provide direction for the large-scale restructuring of provincial cities. While these have a stronger public sector lead than American cities the comparative development of design ideas and notations can be revealing.

Beyond European examples any zoning-based system is likely to find the American experience valuable. For example, *Urban Design in Australia* (1994), the report by the Prime Minister's Urban Design Task Force, considered the whole issue of the hierarchy of policy from visions through strategies, through briefs, performance codes, prescriptive codes and guidelines, and the value of 'desired future character' statements (pp. 46–52). Similarly the intention was to provide constructive guidance to numerous local authorities across the country struggling to come to grips with the problems of effectively managing urban change and ensuring environmental quality. Meanwhile in cities in Asia, there are concerted attempts to inject design guidelines into zoning systems which have hitherto largely failed to deliver an acceptable level of environmental quality and activity (Cheng Wu forthcoming).

The relevance to British practice

To conclude, however, the author feels duty bound to consider how these 'best practice' ideas might be translated into the British system. Since this issue has been very much the sub-text of the research undertaken, and indeed was in many senses its *raison d'être*, it would be remiss to ignore the opportunity to comment (see Punter 1996). As has been stressed at numerous points in the foregoing, the British system, based as it is upon a discretionary system of decision-making, at both the technical-advice and political decision-making stages, is the exception rather than the rule in the world system, so the applicability of British experience to other countries is severely limited. Nonetheless, looking at the issue the other way round, it is clear that the American system of design review has much to teach the British system of design control.

Many of these lessons are embedded in the critiques of and responses to design control, that have already been reviewed. They embrace the need for clear principles, the need for guidelines to be based on study of the locality, the problems of high levels of subjectivity, lack of appropriate review skills and discrimination against the new, different and minority taste. The British system has attempted to respond to these issues over the last twenty years. Many local planning authorities, especially some of the London Boroughs, larger provincial cities as well as a number of historic cities, have developed a sophisticated range of policies and guidance, other advisory agencies and design initiatives to respond to these difficulties. Since 1994 Central Government has taken a much more positive attitude to design, and the personal interests of the then Secretary of State, Rt. Hon. John Gummer, led to the sponsorship of a number of valuable research projects and experiments which have raised the level of debate and knowledge.

This is not the point at which to explain in any detail recent developments in British practice, though it is important to know that urban design has undergone a

major revival in the 1990s, just as it has in the USA, due to a complex of changes in environmental consciousness (sustainability), European competitiveness, a desire to counter standardisation/globalisation in urban forms and retain local distinctiveness in town and country.

Having miraculously survived the deregulatory tide of the 1980s, design control and urban design were revived by the campaigns of the Prince of Wales and the previous Secretary of State, and eagerly exploited by local planning authorities, design consultants and the Urban Design Group, and now enjoy a position of considerable prominence in the planning agenda. Whether they can retain that prominence, particularly under a new Labour Government, is a moot point, and it depends in no little measure upon the ability of the profession to articulate the kinds of visions, strategies, clear objectives and principles that we have discussed in this book, and to win public support for them. These visions embrace quite different scales of planning from the national questions of where new housing should be located (4.4 m new houses in England by 2015), to the sub-regional questions of suburban expansion and new settlements, down to the local level in terms of intensification, inner-city regeneration and revitalisation.

Unlike most other developed planning systems, Central Government maintains tight control on local initiative in British planning, especially in the area of design where, interestingly, it has maintained a critical eye on 'overprescriptive policies', rooting them out of plans and dismissing them when they have led to an appeal by a developer. Until very recently it has discouraged local authorities from preventing all but the very worst designs ('outrages'), and told them to concentrate upon basic issues of height, bulk, massing, scale, layout, access and landscape. In 1997, however, three new ideas were added to Government advice, at least partly in response to studies of US experience (Delafons 1990; Punter 1996):

- the importance of urbanistic criteria ('the relationship between different buildings; the relationship between buildings and the streets, squares ... and other spaces which make up the public domain' (DoE 1997a: para.14));
- the importance of design appraisal ('policies should be based on a proper assessment of the character of the surrounding built and natural environment (para. A1));
- the public's role in guidance preparation ('the weight accorded to ... guidance ... will be expected to increase where it has been prepared in consultation with the public and those whose work it may affect' (para. A3)).

In his 'Quality in Town and Country' initiative the previous Secretary of State provoked a national debate about how design quality might be promoted through the planning system. The main outcome was an urban design campaign which has led to a wide range of design brief/framework/strategy experiments in towns and cities across the country, and which has particularly encouraged others to think more ambitiously about city-wide design strategies and frameworks as additional documents to the development plan (Cowan 1997).

Whether these initiatives are going to continue depends essentially, as we have seen, on whether local government is prepared, and has the resources, to undertake a sustained effort to put design at the heart of its planning efforts, and to take it beyond into other spheres of corporate activity. That in turn depends on establishing a constituency for good design, political will and a process by which local authorities can continually involve significant numbers of people in the planning process, and win the confidence of local business and the development industry. Local government continues to struggle with minimal resources and often absurd boundaries, factors which work against the kind of initiatives that are necessary to take forward large-scale sustainable urban design initiatives. (Perhaps this is a task for the new integrated Government Regional Offices.)

The lessons from America about resources indicate that major design policy initiatives, thorough analysis, plan and guideline preparation, are very expensive activities. The breadth and depth of Portland's consultation was explained in large part by the huge proportion of the planning budget allocated to plan preparation, neighbourhood group support and the like. Seattle's recent planning efforts have been underwritten by a grant of $500 000 from the Federal Government, while San Francisco's urban design plan was paid for by the Federal Government out of the urban renewal budget. Limited planning budgets mean limited initiatives. Neighbourhood groups can be encouraged to undertake appraisals and develop and operate guidelines, but design initiatives demand money, whether they be staff resources, consultants' expertise, or budgets for environmental enhancement. It is a sign of the times that Portland can no longer afford to produce its *Developer's Handbook* or to update it. As a recent symposium on *The New Agenda for Urban Design* has recognised, resources and funding, and Central Government support for the lead role of the local authority, lie at the heart of more innovative and more strategic design interventions in British cities (Cowan 1997, p. 23).

To return to the relevance of American models to British practice design guidelines, or design objectives and principles as we have come to perceive them, is to enter the complex debate about the nature of British development plans and development control (Booth 1996). In 1990 the Government introduced a new system of district-wide development plans which would be given greater weight than hitherto in the determination of planning applications. References to a plan-led system are somewhat misleading because the plan remains only one, albeit important, consideration in development control decisions in the British discretionary system. Comprehensive plan coverage has yet to emerge—after seven years only half the English local authorities have completed the long and cumbersome process of analysis, drafting, government review, consultation, redrafting, objection, public inquiry, (Government) inspector's report, redrafting and adoption. There are plenty of opportunities for public involvement in this process, but limited resources for focus groups, 'planning for real' and other activities that might generate a true sense of plan ownership.

The design policies in British development plans have two major difficulties from an American perspective. First of all they have to respond to all developments,

not just the major schemes—80 per cent of planning applications are house extensions, minor residential developments, and small alterations and extensions to commercial premises. Secondly the policies are the only controls available to a planning authority, and there are no zoning maps, use or dimensional controls to reinforce the design dimension. Density and plot ratio controls have largely disappeared from plans, driven out by deregulatory tendencies to give more freedom to house builders and developers, and by dissatisfaction with their design outcomes which often frustrate sensitive design. (By 1998 density policies were being re-advocated by Central Government to support more sustainable forms of development.)

Both these 'difficulties' place serious constraints on design policies and invest them with a much weightier and more comprehensive role. This must embrace aspects of density, use, open space, and car parking, etc., as well as issues of site and context, architectural character and relationships with the public realm. Perhaps inevitably it makes the policies more cautious, negative, contested and legalistic, and much more difficult to absorb as a whole.

Neither of these factors should prevent policies from being clearly related to vision statements, design objectives and plan strategy, and from being very well structured and organised with checklists of criteria and considerations against which applications can be evaluated. Nor should it prevent these policies being supplemented by valuable design guidance on common problems such as the design of house extensions, residential layout, shop fronts or car parking. Some plans, particularly those of the London Boroughs which have had twenty years to perfect them, are models of a well-organised and disciplined approach to policy making, but many others, prepared for the first time, are quite the opposite. Almost all the policies suffer from the problems of being inaccessible and unassimilable by the lay person; being too long, too complex, and too poorly presented, so that it becomes better not to contemplate whether anyone (including the control officer) actually reads and uses them (Punter and Carmona 1997).

One of the major questions American practice raises for British planning is whether it should persist with its attempts to offer detailed design control on the minutiae of development. Lewis Keeble once remarked that British planning 'often swallowed the camels and strained at the gnats', by which he meant that it was preoccupied with minor development issues at the expense of major, and often strategic, decisions. Could planners devise 'supplemental compatibility rules' (Portland) to allow minor development to be largely self-regulating? Could they go a stage further and abandon householder control to neighbour agreements? Would the more selective and strategic approach to design intervention and control practised in America be more successful and more effective? Or is design control at this level a vital part of the public expectations of planning as a neighbourhood protection service, and would the myriad of less regulated developments seriously erode the quality of the British built environment?

Thinking the unthinkable is one of the benefits of cross-comparative work, but the new system of development plans with comprehensive, district-wide coverage

should not be abandoned without a proper trial and evaluation of its effectiveness. Perhaps new design documents are already emerging alongside statutory plans to achieve some of those things achieved by American guidelines—quarters studies, design frameworks, city-wide strategy documents, character assessments (for conservation areas) and landscape character assessments on the urban fringes, urban nature conservation strategies, and legibility studies. In the meantime design appraisal, thoroughgoing public consultation, clear goals, objectives and design principles, supported by a wide range of design guidance that is accessible and comprehensible to the average applicant, all consolidated into a clear policy hierarchy, will offer important advances to many local planning authorities. However, the experience of the most design-progressive American and European cities (Portland, Seattle, Barcelona, Berlin, etc.), also demonstrates that the public sector has to lead by example in investing in design quality whenever it builds facilities or infrastructure, and whenever it modifies streets and public spaces.

APPENDIX I

The Secretary of the Interior's 'Standards for Rehabilitation of Historic Buildings 1983'

The Secretary of the Interior is responsible for establishing standards for all programs under Departmental authority and for advising Federal agencies on the preservation of historic properties listed or eligible for listing in the National Register of Historic Places. In particular fulfilment of this responsibility, the Secretary of the Interior's 'Standards for Rehabilitation of Historic Buildings' have been developed to direct work undertaken on historic buildings.

The Standards for Rehabilitation are as follows:

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.
2. The distinguishing original qualities or character of the building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.
3. All buildings, structures and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.
4. Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.
5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.
6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.
7. The surface cleaning of structures shall be undertaken with the gentlest means

possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.
9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood or environment.
10. Wherever possible, new additions or alterations to structures shall be done in such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

APPENDIX II

PERSONS CONTACTED

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Addresses are as in the publications in the bibliography, with the exception of Irvine which is as follows: City of Irvine, Planning and Development Services, One Civic Center Plaza, PO Box 19575, Irvine, CA, 92713.

BIBLIOGRAPHY

This bibliography is organised into three sections as follows:

(i) **General Sources**
Books and articles referred to in the text relating to design issues at large.

(ii) **Plans and Guidance**
City by city lists of plans and guidance reviewed in this monograph, with contact addresses.

(iii) **City Studies**
Specific studies of particular cities.

(i) General Sources

* Indicates a particularly useful source covering many aspects of American experience

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