

DOWNTOWN URBAN DESIGN POLICY :
THEORY, PRACTICE AND PROCESS

by

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UNIVERSITY OF MANITOBA
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A thesis presented to the University
of Manitoba in partial fulfillment of
the requirements of the degree of
Masters in City Planning .

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ABSTRACT

This thesis analyses the causes of downtown decline, focusing on the relationship between the built environment and those administrative policies that have a direct impact on the quality of such environment. The purpose has been to develop an urban design strategy by which policies directed towards the improvement of the physical environment may be created.

Three broad areas of inquiry were developed. The first area deals with the different theories of urban design and the nature of central business districts. The second area examines the role of municipal governments, four case studies are presented in this area; New York, Seattle, Vancouver, and Toronto. The third area of the thesis presents the findings and recommendations.

The recommendations are grouped in three sections. The first section defines the essential principles that make urban design effective and understandable for the community at large. The second section identifies 175 urban design elements and their policy status. Finally, the third section of the recommendations contains A General Model for Urban Design which, when combined with the other two sections of the recommendations, serves as the basis to develop urban design policy for the downtown area.

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BIBLIOGRAPHY

Books

Articles

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City of Seattle-Reports

City of Vancouver-Reports

City of Toronto-Reports

CHAPTER ONE

INTRODUCTION

1.1 PROBLEM

The decline of the physical and social qualities in innercity areas has become one of the worst problems to be faced by our society in the years to come; it is important to mention that the deterioration of the social web of urban places which used to give "social life" to a city is more active in its downtown area.

The downtown area still remains the heart of the city, where a variety of activities provides a rich mixture of lifestyles; it is the only place in a metropolitan area where human contact is appreciated, where people sometimes go to see and to be seen, to make off-the-record business transactions, and where one can even find highly specialized products to satisfy one's needs. However, some downtown areas are in complete decline or are struggling to survive, and there are different reasons for this phenomenon, such as a decrease in economic investment or a lack or population base; but above all, the main reason given to explain downtown decline is in how people perceive the quality of the downtown environment.

Quality in the built environment is the degree with which a place attracts or discourages use. For instance, if the central area is perceived to have a high incidence of crime rate, and/or simultaneously, presents poor microclimatic conditions, very few people will choose central areas as places to live or shop. Crime and poor environmental concerns are just two of the many reasons for which people consider downtowns just an office and commercial area, a secondary shopping choice, and definitely not a place for raising a family. But the reasons are far more complicated and quality of the built environment is just one factor affecting our perception of people and their places as Kevin Lynch in his book, "A Theory of Good City Form," states:¹

"What makes a good city?" might be a meaningless question. Cities are too complicated, too far beyond our control, and affect too many people, who are subject to too many cultural variations, to permit any rational answer. Cities, like continents, are simply huge facts of nature to which we must adapt . . . Anyone knows what a good city is, the only serious question is how to achieve it."

Regardless of the reasons given to explain environmental quality and character of development in central areas, Lynch points out the most important of those reasons, "cultural variations." Social and cultural values are the modifying factors of the physical environment which represents the

socio-economic strata of our society; however, social values have not been the only modifying forces in downtowns. Economic, physical and administrative constraints have played important roles in the quality of the built environment.

1.2 Focus

This thesis will focus only on the relationship between the built environment and those administrative policies that have a direct impact on the quality of the environment. Governments are mandated to protect and enhance the physical environment in central business districts to offer a better place to live for all citizens, regardless of their socio-economic circumstances.

1.3 Hypothesis

Certain municipal governments have not achieved such livable environments. Poor urban quality is the result of two problems at municipal level: city administrations do not have policies to achieve such goals, or, if they do, they are not administered correctly. The hypothesis of this thesis is that urban design policies will improve the quality of the built

environment. Thus, higher social and economic goals will be easier to implement.

1.4 Statement of Purpose

The purpose of this thesis is to develop an urban design strategy for municipal governments by which policies directed toward the improvement of the physical environment may be created.

1.5 Urban Design Definition

Urban design is the process by which municipal governments achieve an overall strategy to implement a design framework for the urban area in which function, form, and aesthetics are integral parts. Local governments focus on the process itself which is considered more important than the final product. This process aims at the creation of livable urban places by relating a building or a group of buildings to their urban context: i.e., pedestrian, the block and city form and function.

Urban design is civic-oriented; one of the main principles of urban design is the protection and/or creation of an environment which gives a sense of place and belonging. These characteristics are of primary

concern in planning the physical environment for citizens of all classes, present and future.

The process of urban design evolves over time. It is impossible for any local government to improve the built form and its quality in one or two years. It is dependent upon economic changes and social values and lifestyles, thereby making urban design a continuous process directly related to the planning of the city. Since urban design is both a civic and lengthy process, it requires the participation of many different groups so that the outcome will respond to peoples' various needs, not only at inception, but also during the implementation period. These needs cannot be answered just by any one profession, but by multidisciplinary approach.

Urban design is a relatively new profession called upon to bridge the gap between its parent professions, architecture and planning. Architecture has become a profession almost generally less concerned with social concerns, while planning has moved towards the physical component that gave birth to planning itself.

Michael Pittas², Director of the Design Arts Program of the National Endowment for the Arts, presented "five refining characteristics of the profession we call Urban Design." First, urban design deals with the enabling of the environmental change

process through the promulgation of mechanisms and rules. Usually urban designers are generally the initiators of such a process. Being more than initiators, urban designers are responsible for the quality of the environment achieved in any project, responsible not only to the local government but to the citizens at large. Urban designers working for municipal governments are supposed to protect and enhance such quality. The degree by which they succeed in this task is dependent upon their ethical values and skills.

Second, the urban designer deals with several alternatives, as in the planning process, and not with just one product from beginning to end as an architect when presenting a project before municipal governments. Also, some architects often think of their design as a piece of art independent of any kind of constraint from the real social world. In contrast, urban designers are the people who translate people's common concerns into reality; again, it is a complex process that requires a multidisciplinary approach.

Third, urban design deals with uncertain "futures and indefinite periods, not with the finite endeavours and certain products of architecture."³ Urban design projects take many years to build, and it is for this reason that a system of continuous change must be

inherent in the design process.

Fourth, urban designers are part of the process from beginning to end in contrast with architects whose entry into the process occurs later, or planners whose jobs finish when architectural design begin. There is a clear differentiation at this point, architects and planners are problem-solving elements, while urban designers are problem-defining and problem-solving individuals at the same time. Thereby, urban design becomes a profession with a more comprehensive scope with no defined limits; it is beyond planning and architecture themselves, it combines both.

Fifth, the primary concern of urban design is the four-dimensional characteristics of space and society; time being the fourth. This gives the urban designers the necessary understanding to correlate process with final product and their effect on the life of the city.

The degree of public responsibility of an urban designer has grown to the point that, very soon, we will see them "recognized by both private and public sectors as the conciliator, co-ordinator, mediator and regulator of the built environment."⁴ What, then will happen to planners who care only for abstractions of the environment, or to architects concerned solely with individual projects? Very likely, local governments will replace them for urban designers; a movement that

will improve the architectural profession since governments will demand more socially responsive designs from architects in the private and public sector. On the other hand, if planners do not come to understand and define the physical environment, physical planning will be moved aside to accommodate urban design which embodies as many or more disciplines as planning.

Urban design processes in local governments are necessary to advance more livable environments and to secure that the quality of future projects will enhance such environments. The formulation of comprehensive urban design policies will be an important step towards the achievement of a downtown of which a city can feel proud, and one that can become the real centre of activities, so that other social and economic objectives may be easier to implement. Comprehensive urban design policies are simultaneously tools and providers of solutions to human needs.

1.6 Methodology

The method employed to achieve the expected research results and recommendations started with a process in which information from thirty American and seven Canadian cities was collected. At the same time,

a review of present literature on urban design was conducted. From the evaluation of the information and literature, augmented by personal interviews, three broad areas were developed: (1) the first area deals with the different theories of urban design and the nature of central business districts, (2) the second area examines the role of municipal governments focusing on four case studies, and (3) the third area describes the findings of previous analyses and presents a proposal for an urban design strategy.

1.7 Structure

Chapter Two examines different theories of urban design and from there Chapter Three analyzes current issues which affect downtown areas. Chapter Four is a study of the various forces affecting development in the central business districts (such as office and retail development) and how these forces have shaped the physical environment.

Chapter Five deals with the role played by municipal governments when trying to shape new developments. This role evolves from traditional zoning by-laws to special districts where regulations are either overly sophisticated or merely simple concepts to guide new development. Chapter Five is a

theoretical background to Chapter Six, where we explore four case studies, two in the United States and two in Canada. New York and Seattle where practical urban design was formulated for the first time. In addition, New York and Seattle are two of the few areas where urban design has achieved a very high level of performance and acceptance from the part of citizen groups and governments. The two cities in Canada, Vancouver and Toronto, have accomplished similar results and are cities in which urban design is considered a civic responsibility. In this chapter, the focus is on the process by which those cities have attained livable urban spaces.

Chapter Seven summarizes the findings of the analysis of the case studies and urban design literatures. From those findings, recommendations are drawn and a theoretical model for urban design is developed. The model will take the form of a diagrammatic chart of organization and techniques to be performed by local governments. Part of the same model will be a matrix of the different elements that urban designers should consider when dealing with different projects.

CHAPTER ONE FOOTNOTES

¹Ellen B. Perry, " Seeking an Agenda for Urban Design," American Institute of Architect's Journal, (February 1980), p.76.

²Perry, Ibid., (1980), p.76.

³Ibid., p.77.

⁴Ibid.

CHAPTER 2

URBAN DESIGN THEORY?

The intent of this chapter is to make a critical analysis of the different theories of urban design and also to study how these theories have had any impact on the practice of urban design as is applied by municipal governments. However, it is not the intention of the author to develop a new theory of urban design, since this would be out of the purpose for which the thesis is being developed.

Until now, urban design has been suffering from the same problems as planning has, a lack of a defined theory. From Lynch we quote the following paragraph to show the multiplicity of disciplines a designer is involved with in the practice of urban design.¹

"City Designers make proposals for the form and management of the extended spatial and temporal environment. They judge that environment for its effects on the everyday life of its inhabitants and seek to enhance that daily experience. In essence, this is a return to that old-fashioned field of physical city planning, but is both more focused and also more connected to other concerns. It deals primarily with people acting and sensing in the four-dimensional physical environment, and yet it is familiar with all we have learned about institutions, processes, and social consequences."

As Lynch says in his article, urban design encompasses many tasks and skills, not only those

related to architecture or planning, but also those related to management, public administration, real estate, psychology and geography, to mention only a few, the principal reasons for which it has not been possible to define a coherent theory for urban design. Even though, it would be possible to understand what urban design is all about from what is being done in municipal governments. He continues explaining that "city design is no longer confined to the public regulation of private action, it expands to include programming for activity and character, creating prototypes, making framework plans, engaging in environmental education or participatory design, thinking about the management of places, using incentives and building the institutions of ownership and control."²

Urban design then becomes a continuous and cyclical process without end-state solutions but always looking beyond present considerations. And also, as Jonathan Barnett points out, Urban designers in municipal governments deal with the design of the city and not with the design of buildings.³

After this brief introduction to what urban designers do, the rest of the chapter will be devoted to three areas, the first reviews some "general theories" of urban design, the second explains the

foundations of urban design in the public sector, and the third explores the relationship between theory and practice in urban design policy.

2.1 GENERAL THEORIES OF URBAN DESIGN

The theories considered here deal with the interpretation of city form and its meaning rather than the historical theories of how city form came about; Lynch offers a good classification of such theories:⁴

- A. Planning theory
- B. Functional theory
- C. Normative theory
 - C.1. Cosmic theory
 - C.2. Machine theory
 - C.3. Organic theory

A. Planning theory

Planning theory is studied here in generalistic terms making emphasis on its relation to the urban design process. Modern planning theory has shifted from a physical orientation to being more policy-oriented; how and when decisions are taken is now the focus of planning theory. The trend has been to put aside the physical components which gave birth to planning itself. This tends to be more a problem of planning education than of planning practice, since in the latter, planning is still closely related to the physical dimensions of our cities.

Planning theory defines four components in the configuration of our cities. A private profit-oriented leadership, politicians, citizens and government administration. In some cities, the power is distributed more unequally than in others. In general there are two streams to planning theory. The first proposes that planning is better applied if a study of the "structure and morphology" of urban forms and activities is undertaken. The second stream states that planning is more usable when it deals with the process to achieve desired goals.⁵ Both streams are important in urban design, especially if they are taken as a unified theory. A study of the structure and morphology of the city is a means by which a planning process becomes more responsive to real conditions in order to achieve desired goals, or as Webber points out:⁶

"I understand planning to be a method of reaching decisions, not a body of specific substantive goals . . . Planning is a rather special way of deciding which specific goals are to be pursued and which specific actions are to be taken. The Planning Method is largely independent of the phenomena planned."

The dilemma of planning theory then is between plan versus process. Plans that project themselves into the future with physical forms are now shelved thanks to their lack of flexibility. Plans cannot determine the future form and behavior of our society.

This is done by the members of society, and since those members and their attitudes are changing, plans that do not reflect this change accordingly are useless. On the other hand, planning process (or process planning) is more relevant to urban design and it is possible to create a flexible process directed towards the achievement of urban design goals. It is here where the importance of planning for urban design lies. It has been stated that urban designers are more interested in the process of designing a city than in the final product of architecture or master plans; as a result, planning theory offers the designers the opportunity to develop strategies to implement urban design policies as planning and urban design become process oriented to achieve better results.

B. Functional Theory

This theory deals with the subject of how cities were formed - for what purpose - and how cities work, and it considers that the city is always performing a function for the benefit of a group or set of groups. Cities then are designed to perform those functions efficiently and with the least disturbance of the social structure which supports the coexistence of the city itself.

Some academics propose three areas of research to study functional theory and its relevance to urban design policy. The first area sees the city as a historical process, as a cumulative and unique arrangement of actions taken by individuals and groups; policy should be developed in the light of such historical process. However this stand does not consider that some of the changes that have occurred within the city have been consequences of decisions taken in other cities, action upon which the city affected has no or very little control. Another shortcoming of this theory, and of importance for urban design, is that there is a danger when designers project past trends; by doing this, they are largely emulating those planners of the past. Projections of the past are like old master plans. They assume that conditions will remain as projected and leave very little room for flexibility. However, historical processes have an important say in urban design. It shows us the way places have been used, changed, or appropriated by the users; it also provides us with a socio-psychological profile of the people who lived and are living in the city for whom designers are working. The important aspect to keep in mind is that trends are necessary to understand the socio-spatial process but they are not necessarily established rules. People, as

well as places, change continually. Urban history is the description of results but not of processes.

The second area of analysis regards the city as an "ecosystem of human groups."⁷ Some of the best theories in this area were presented by Robert Park and Ernest Burgess in Chicago in 1925, whose theory sees the city as an "ecological arrangement" of classes and land uses, and use techniques such as sectoral growth, ethnic succession and waves of density, and lately, factorial ecology. Factorial ecology analyzes the process of movement of employment, office and residential location, type of structures and changes of densities; however, this theory falls short when social and psychological patterns are discarded because of the impossibility of quantification in these areas. As an analysis of measurable characteristics of the city, it serves its purpose for urban design. On the other hand, the lack of non-measurable elements in the analysis makes it an integral part of a needed holistic approach.

The third theory is the analysis of the city as an economic spatial facilitator. The city is seen as the space where economic transactions take place, and for such a motive, the design of the city should be "the most efficient" to reduce the cost of those economic transactions. This theory plays an important role in

urban design, since it clearly demonstrates that the group or groups looking at the design of the city as a means to increase their profit have powerful political influences that in the end will have a direct result in city form and structure. However, those economic groups represent a powerful minority, and the citizenry at large look to the government to protect the public interest but not to the detriment of the minority, a rich and powerful group. It is of great importance for the urban designer to understand these economic forces and protect them as they give "life" to the city; the real and difficult task of the urban designer is to achieve a balance, providing equity without stifling economic initiatives.

C. Normative Theory

In general, the Normative Theory goes beyond any of the other theories in the way planners "subject both the ends and means of public policy to rational consideration. It suggests the planning profession can combine scientific analysis with reform and change and thus be true of its intellectual roots."⁸ From this assumption, three theories of city form are identified: cosmic, machine, and organic theories.

C.1 Cosmic Theory

In ancient times this theory stated that the form and structure of the cities should represent the cosmic world, that of God, in order to create a relationship between the universe and the earth which intended to protect humanity from unknown forces. This theory has evolved and now we see it as a symbolic theory. The city as a symbolic mechanism is understood as the organization of space to reinforce dominant groups' influence through spatial arrangements. This influence is performed via psychological perception of the built environment; the physical form and structure of the city are continuously sending a message - meaning - and the receivers subconsciously record it. They sometimes act or behave accordingly, as long as receiver's cultural values are part of such meaning. This does not mean that physical design modifies behavior significantly. What it means is that it does so as long as the physical meaning is part of the cultural values of the recipients the "message" is directed to. It also means that when the receiver becomes conscious of the manipulation, the symbolic meaning is no longer useful; thereby, the sender (form and/or physical arrangement) become lost. This is the case when physical parts of a city are designed to provide a

meaning to certain groups of people, but since following generations have different values, those parts of the city turn obsolete to continue performing the use for which they were built, or they acquire a new meaning and therefore a new social use.

C.2 Machine Theory

Machine theory has almost the same theoretical foundations as the functional theory. The city is created to perform a function such as military, trade, or services. The difference lies in the assumption that each part of the city performs a vital function to the "well functioning" of the city as a whole; as Kevin Lynch explains:⁹

"The machine model lies at the root of most of our current ways of dealing with cities: our practices of land subdivision, traffic engineering, utilities, health and building codes, zoning. The motives articulated are those of equity of allocation, good access, broad choice, smooth technical function, productive efficiency, material well-being, physical health, and the autonomy of parts (which means individual freedom, but also the freedom to exploit space and to speculate in it.)"

C.3. Organic Theory

In contrast with the former theory, the city is seen as an organism rather than a machine. The parts are not static but on continuous change as well as the city as a whole, and any change in one of the parts affects the others and the organism as a unit; this theory is the same as the ecological theory, the city is related to natural processes and not to exclusively economic activities. Ecologic and geographic analysis play important roles in the development of the city. The city is an artificial object made by man who should respect the general rules of coexistence among the different ecological systems. For example, land subdivisions could have environmental consequences on the underground water, which later goes to rivers and at the end is consumed by humans in the city. Trees are not considered aesthetic objects but ecological features that improve the microclimatic conditions on a street and the city at large. In short, the city and its parts form a coherent environment within it together with its surroundings, which is changing, reproducing and discarding parts as an organism. Radical changes are not made in order to keep a natural balance, and if a big change is required, it is done progressively through processes that allow the city

(organism) to assimilate such change.

In conclusion and theoretically normative, functional and planning theory should give the urban designers the necessary tools to translate theory into practice, but merely as intellectual forces. It is worthwhile to mention that these theories have evolved from different disciplines and that their application to urban design practice should be examined carefully. Urban design policy in municipal governments is done mainly by architects and planners with little input from academics. The theory behind urban design policy is that of the practitioner, and sometimes it is quite different from what we consider urban design theory as developed by academics.

2.2 Practice of Urban Design

Practitioners have not defined a theory of urban design; the theories explored before only deal with the city and how the city is organized and how it functions. As well, all of the theories present ways to achieve a good city; the problem is how to translate theory into practice. A problem that concerns of practitioners, however, is that those theories rarely consider the realities of the city. It is impossible

to have a theory that explains political, economic, and social forces all at once; thereby, urban designers find themselves borrowing from a variety of disciplines not from just one academic theory. Another important factor is that urban design practice emerges from the concerns of the general public, from how people perceive and want their city to be, and contributes in this way to the distinction between academic theory and practice of urban design.

Two of the main exponents of contemporary urban design practice, J. Barnett and A. Shirvani, prefer a more pragmatic and comprehensive approach to urban design than those of the planning, functional and normative theories. Both authors argue that urban design encompasses as many fields as planning. Shirvani considers eight elements central to urban design:¹⁰

1. Land Use
2. Building Form and Massing
3. Circulation and Parking
4. Open Space
5. Pedestrian Ways
6. Activity Support
7. Signage and Preservation

While Lynch's approach is similar to Barnett's, he draws on a more direct influence from the practice of urban design, always emphasizing that academic

curriculums should derive themselves from practice and not from theory. Practice defines theory, theory redefines practice, and the cyclical process of practice-theory-practice never ends in urban design. Lynch presents the following educational basis of an urban design theory:¹¹

1. Constant practice in graphic communication, drawing, seeing and basic design (writing, speaking, listening and mathematics)
2. Laboratory and studios
 - A. The holistic analysis and evaluation of real city-places in the field; their sensory quality, behavior, history, economy, politics, sociology, technical structure.
 - B. Site Planning - a realistic program, a real site, and possibly some real clients.
 - C. Community or area design on a participatory basis with a real client.
 - D. City design proper, a real problem again.
3. Courses in Allied Fields.
 - A. Land Use and Real Estate economics
 - B. Microsociology of the environment
 - C. Environmental psychology and behavior
 - D. Traffic and site engineering
 - E. Urban landscape design and urban ecology
 - F. Project organization, initiation and management
 - G. Urban history; the physical city in relation to its politics, sociology and economics.
4. Seminars in city design.
 - A. Case study of city design processes, models and outcomes
 - B. Land-use and transportation analysis and planning
 - C. The techniques of team and participatory analysis and design
 - D. Environmental programming and evaluation
 - E. The analysis and management of environmental quality
 - F. Theory and history of city design.

With this list, Lynch supports the idea that urban design education should reflect the realities of urban design practice. In conclusion, Shirvani and Lynch clearly state that if there is going to be a theory of urban design, it should come from the practice of urban design; theory that could later help improve the urban design process. However, this area of pragmatic research is just at its beginnings.

2.3 CONCLUSION

Because of the variety of knowledge required to practice urban design, it has been impossible to define just the theory of urban design. It is not necessary to have a theory of urban design in order to practice urban design. Urban design has been practiced without a truly unique theory; it has rather been the aggregation of various fields. Although some theories, such as planning, functional and normative theories, could serve as intellectual motivators, there is a clearly defined gap between those theories and the practice of urban design. Through this thesis, the reader will find that practical urban design policy and theory has been, and is, emerging from the public at large; it is the public who determine the kind of environment they want to live in and their legacy for

future generations.

The following chapter deals with the theories of downtown decline. In contrast with some theories of urban design, this theory sees different real socio-economic forces as the propelling force behind downtown decline or rejuvenation. This second chapter and the next are the necessary first steps to understand urban design policy.

CHAPTER TWO FOOTNOTES

¹Kevin Lynch, "City Design: What It Is and How It Might Be Taught," in Education for Urban Design, (New York: Institute for Urban Design, 1982), p.105.

²Ibid.

³Jonathan Barnett, An Introduction To Urban Design, (New York: Icon Editions, 1982), p.241.

⁴Kevin Lynch, A Theory of Good City Form, (MIT 1981), p.72.

⁵Thomas D. Galloway and Riad G. Mahayni, "Planning Theory in Retrospect: The Process of Paradigm Change," Journal of The American Institute of Planners, Vol. 43, No.1, (Jan. 1977), p.63.

⁶Melvin Webber, in Urban Condition, ed. Leonard J. Dahl, (New York, 1963)

⁷Lynch, Ibid., (1981), p.328.

⁸Richard E. Klosterman, "Foundations for Normative Planning," Journal of The American Institute of Planners, Vol. 4, No. 1 (Jan. 1978)

⁹Lynch, Ibid., p.86.

¹⁰Hamid Shirvani, The Urban Design Process, (New York: Van Nostran Reinhold Company, 1985)

¹¹Lynch, Ibid., (1982), p.110.

CHAPTER THREE

DOWNTOWN: AN AREA UNDER STRESS

The importance of the downtown area in North America has been declining progressively in the last twenty-five years. This decline has resulted in a rapid deterioration of the physical and social environment as well as a tremendous impact on the economic base of the area.

Residential neighborhoods in the innercity and the office centre used to be the setting of the most important activities of the region. Even now, many people feel that the downtown remains the "best" multifunctional area of a city, with a mix of land uses and opportunities for businesses and corporate headquarters or any other kind of activity that can benefit from the agglomeration of people. This is based on the actual infrastructure of services which can be found in the area. If this were true, the downtown area would not be in decline and we would suppose that any city could have only one nucleus centre of activities, cultural, residential, retail, sports, office and to a minor degree, industrial. Other factors contribute and are of great importance in the location decision process. Larry Bourne describe

these as "push-pull factors in innercity-suburban competitions." (See Table 3.1.)

All of these factors vary in importance, according to time and place. In some cities, for instance, light industry is located in innercity areas where a cheap labour force can be found, while a high-tech industry seeks a suburban area, since its management is interested in providing better services for its white-collar workers who are highly paid and who are likely to be living in suburban areas. Table 2.1 is not quantified to give a ranking of the different factors: however, it can be deduced that the competition between innercity, downtown included, will continue in the years to come. This debate will almost certainly continue to the next century.

We are presently witnessing a change of life styles, or as Robert Cook¹ notes:

". . . changing tastes, a need for energy conserving land-use patterns, and a lower economic growth are bringing new life to the downtowns of large and small cities. Business and government have invested huge sums in downtown revitalization. Some efforts have succeeded; some have not".

The success or failure of the various attempts to revitalize a downtown area depends on many intangible elements: administrative and political leadership, public support, quality of design and economic stability, to mention only a few. The important factor

Table 3.1

<u>Criteria</u>	<u>Push Factors (from inner city)</u>	<u>Pull factors (to suburbs)</u>
Population base	declining	growing
Environmental quality	deteriorating inner city	suburban amenities
Jobs	declining	growing
Racial balance	increasingly black or ethnic	homogeneous and white
Densities	high	low
Initial construction	often poor	more recent/subject to tighter controls
Infrastructure	aging	incomplete but new
Housing stock	old, often deteriorating	new
Income level	decreasing	increasing
Financing (mortgages)	restricted/expensive	abundant/inexpensive
Property taxes	high	lower, but increasing
Pollution levels	high	lower
Social services/schools	deteriorating	new
Highways	destructive	improved accessibility
Crime	high and obvious	high, but less obvious
Industrial capital	obsolescent	new
Land use competition	severe	limited
Redevelopment	extensive (or threat of)	minimal
Public covenants	building code enforcement/fire regulations	sometimes relaxed but buildings new

These factors emphasize the problems faced by inner-city areas, particularly those in American cities.

Source: "Modern Metropolitan Systems"
Charles M. Christian and Robert A. Harper ed.

is that people and governments are beginning to appreciate and realize that it is costly to under-utilize the downtown area. At this point a question arises: How is the downtown defined or how are the boundaries defined?

3.1 DEFINITION:

Many authors use the term "Downtown" in an informal way to refer to the largest business centre of a metropolitan area, which is usually characterized by urban form: skyscrapers, and parking lots (Bourne, 1982). Another term is the Central Business District (or CBD), of which the boundaries are usually defined by a mathematical index of land use, by designation of census tracts, or by political decision making which disregards any scientific base.

One of the best methods to define the Central Business District is given by R. Murphy based on land use analysis.² The definition uses two criteria:

1. Number of floors on a block in central business uses (height index)
2. Proportion of all floor space on a block devoted to central business uses (intensity index)

Here, he has made a differentiation between now central business and central business uses:

Non-Central business: Wholesaling
Factories
Residential Neighborhoods

Central Business: Office
Retail
Cultural activities

The method provides a system for:

1. Describing land use in C.B.D.
2. Monitoring land use changes
3. Comparison of urban forms, especially volume, with surrounding areas

There are some complications as to how to draw the boundary lines; for instance, we can say that the boundary of the downtown area starts where the building heights start increasing from one to any number of floors to the set of highest buildings in the central area having a starting point where the difference between the next index of intensity, two floors, three, four, or five is markedly different from index 1: That is to say where the change from index 1 starts increasing in shorter and shorter geographical areas.

This method implies that data collection must be kept up-to-date. Problems arise since only a handful of planning agencies have the manpower to do so. A census is conducted every five or ten years and cannot give the necessary information for changing policies according to variations in land use in the Central

Business District. This is why the definition of downtown boundaries is so difficult. The best method, more practical than scholarly, is to start from the existing boundary and make an environmental survey of land uses with changes made to the old boundaries accordingly. The importance of the definition of the downtown area is that, when the time of implementing urban design policies comes, government must have a clear understanding of where to target programs, and of what standards will be applied to different sub-areas within the Central Business District. (Hereafter I will use the term Central Business District to refer to Downtown and vice-versa.)

3.2. THEORIES OF DECLINE

Having understood how to define a downtown area, it is now important to focus on why some areas are declining. Various elements, socio-economic and political in nature, have accelerated the declining process.

1. Change of population base: There has been outward movement of the population with higher incomes, which contributed greatly to the tax base of the innercity. The quality of services delivered by the government has been diminished and the customer-rate per store in the Central Business District reduced.

2. Competition from chain stores which usually locate in suburban areas which have higher volume buying power and can offer cheaper products of the same quality.
3. Widespread use of the automobile and better transportation systems - roads, highways - allows people to shop in regional shopping centres. This is in sharp contrast with the downtown area where parking rates act as deterrents to potential customers.
4. A very poor environmental quality: noise, visual, air pollution, and especially lack of urban spaces.

Bourne³ summarizes the majority of the reasons for downtown decline in six broad areas:

1. The "Natural" Evolution Hypothesis

An ecological theory whose greatest exponents were Burgess and the Chicago School of Urban Ecology. The main point of the argument is that low-income, poorly-educated immigrants choose to live in older areas near the CBD. These areas have been abandoned by higher income groups. Inevitably, these low quality areas expand to adjacent residential and commercial areas farther out. This process is called "ecological succession, with the spatial result being an urban area stratified into concentric zones of increasing social status outward from the city centre." (Bourne, 1982)

2. Cultural Theory

Brian Berry's theory of "cultural predispositions" of Americans is based on the argument that people prefer the new over the old, private over public spaces, low density over high density and mobility over stability. This theory is becoming out-dated due to the changing lifestyles and new trends in the American (including Latin-American) people, in which the old is regarded as an important part of our culture, and thereby, worthwhile to conserve, and protect.

3. The Obsolescence Hypothesis

Bourne presents another theory of downtown decline which is based on the assumption that some cultural values and physical characteristics of the CBD stop being of any economic use for the city:

- A. Functional: An existing structure is no longer economically usable because of design, location or demand
- B. Physical: deterioration of the environment
- C. Cultural values have changed

As we can see this theory does not apply today, since to build new is sometimes more expensive than recycling. According to Lisa Taylor in her interesting

book The Phenomenon of Change:⁴

"Recycling cities as we recycle garbage if another import means to achieve self-reliance. Our cities are full of empty buildings, buildings with poor quality to be inhabited. We can reuse these old structures and accomplish neighborhood and sectors revitalization. In our cities and towns the oldest buildings are being rehabilitated: the oldest districts containing these buildings are fashionable again. Recycling is the phenomenon in which an old object is remade into a new object. An abandoned railroad station is recycled into a restaurant: nineteenth-century wall paneling from a demolished house is re-used on the wall of a modern apartment or is made into a folding screen. Housing rehabilitation is replacing the renewal planning idea of demolishing the old. But when demolishing is necessary objects that demolition companies could not give away fifteen years ago, now bring handsome prices. There have been two important reasons: the first is more economical to re-use than to build new; the second, a consequence of the first, is that the old represents values that have shaped the present, we need to look at the past to look at future.

4. Policies: Side Effects

There are two examples of side effects of policies that still lessens the significance of the Downtown. First, transportation policies at all levels of government have increased the mobility of people; although not intended to affect urban areas, its side effects can be seen in the proliferation of new suburban areas outside CBD. Transportation policies that favour private use of automobiles will always be a detriment for Downtown

revitalization, and a way to ease the flow of people to other municipalities where taxes are lower. This brings us to the second point.

Tax Policies have been static and policy makers use them more to attract business and investment in the Central Business District. Rather than residential development in the innercity, causing that land occupied by single families to become so expensive that the only economic alternative is to build towers of apartments; the dilemma is that one finds high taxes in the innercity and lower taxes in the suburban areas, thus favouring low-density development and accelerating the outflow of capital investment to other areas or even other cities which offer more economic incentives. Tax policies , one of the most powerful tools, not only to attract investment, but also to achieve excellence of design, will be studied in more detail in Chapter Five.

5. The "Power" Theory

The main question here is: Who holds power? Here I would like to quote Bourne⁵ who expresses this theory in terms that do not leave any doubt of its importance:

"This approach explicitly raises the question of who benefits and who pays for uncontrolled economic growth. The argument is that private landowners, business and

financial institutions are the major beneficiaries of innercity decline, aided by governments, which are dominated by property and business interests. The costs are borne, in general, by society as a whole, through its tax base trapped by such changes in declining regions or inner cities".

6. The Global Economy

This theory postulates that international economic policies affect cities, especially innercities. Changes in the global economy are felt especially in the industries that traditionally have located in innercities, and in the office sector which locates downtown, as auxilliary service to those industries. These forces are shaping urban form in extraordinary ways. For instance, we find multi-story buildings used before in manufacture industry, now converted to apartments and/or offices. The other way changes in the economy are being expressed in Urban Form is in the highrise office towers that represent multi-national corporations.

3.3 Conclusion

As we have seen, different explanations are given for the decline of the downtown area. They are grouped in different areas; all of them are inter-related and

one or more are applicable to each city.

The lesson is that it is impossible to determine with certainty the real causes of a Central Business District decline, and any analysis needs to embrace many variables. Despite the emphasis on decline, attitudes towards the innercity, especially downtown, are changing. Citizens are beginning to demand a better environment. Unfortunately, people who return to downtown are not finding the amenities or the public spaces that are necessary to capture that movement. Urban decline has eroded the social web of the city through the quality of the physical environment.

After having analyzed the causes of decline, it is important to explore the future land uses of the Downtown area before any kind of urban design policy can be recommended. It would be naive to try to develop a legislation intended to achieve a physical structure of urban spaces without examining the land uses which in relation to the values of our society, determine urban form.

CHAPTER FOUR

Forces Shaping Urban Form

The purpose of this chapter is to analyze those social and economic forces that have a direct impact on the physical form of our cities. To understand urban form, Urban designers need to know first how the city works. Both architecture and planning must work together to comprehend how cities work and how it is possible to improve the urban environment. Planning has developed better analytical tools for the realization of this task, although there is the need for a physical relationship. The urban environment, physical and social, must address people's needs. Therefore, the main goal of urban design is to achieve an environmental quality which is worthy of any human being.

In this chapter an analysis will be made of the different socio-economic forces that, through their interactions, affect the environment of the city, and that in the end, they are the factors which create urban form. It is argued here that the particular shape of our cities in terms of distribution of land uses and building form reflects the present structure of the local social networks and individuals. Three

general factors account for the spatial regularity of activity patterns.¹ They are: (1) "The interdependence among population members involved in various activities, (2) The dependence of activities on specific characteristics of the physical environment, and (3) The friction of space." The interdependence of activities requires that different individuals, with different social, economic, or physical needs, could use the services of the other individuals with little or no difficulty. Also, each one of the services offered to fulfill these necessities requires some physical standards to make the delivery of those services more efficient and profitable, economically as well as socially, with its psychological consequences of satisfaction. Most of the services located downtown rely on interpersonal contact, and on a "good relation" between the individual looking for those services and the physical environment. These human contacts are what gives life to any city. However, they need to overcome what Schwirian² calls "friction of space" which is not measured "in linear distance but in time/cost ratio incurred in moving between points." Improvements in the transportation and communication systems are the main mechanisms to reduce the time cost of the movement of people and goods. As time cost becomes an important location decision factor, the

agglomeration of activities in the C.B.D turns out to be efficient and economical. Furthermore, office development has a spin-off effect on the vitality of the Central Business District.

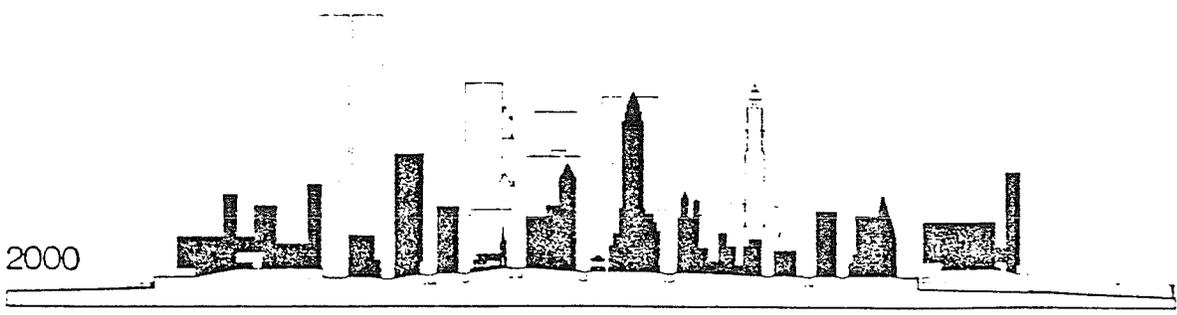
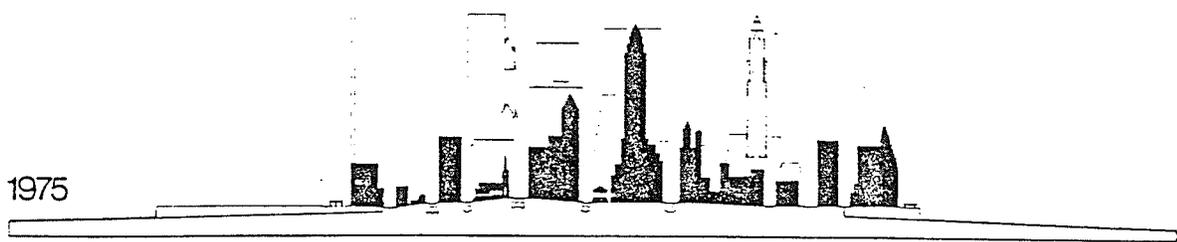
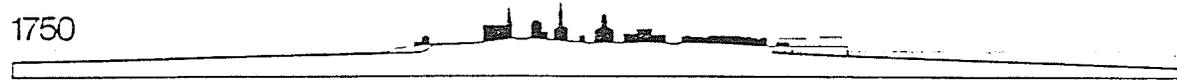
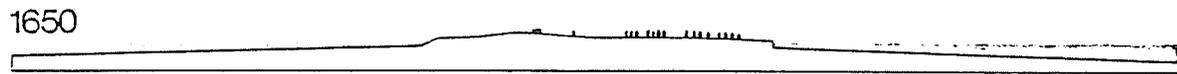
4.1 Office Development

Office development is the keystone of Downtown. It provides employment, which supports retail activities; it also increases the tax base of the innercity. But its influence is much greater in the urban form of Downtown than any other kind of development. It is the force behind the skyline of our cities, where the tallest buildings are office buildings, be it Toronto or New York. (See Figure 4.1.1) Every city is always renewing or replacing its office space.

The skyscraper is the product of land market values and of the increasing need of "proximity" of services and persons. Prior to the turn of the century, there was little need to separate the office from its industry. The technological capability for doing so did not exist. With the development of communications, especially computers, it is now feasible to have management and production in different places or even different cities or countries. Since

VALL STREET - 1650 TO 2000

Figure 4.1.1.



(Source: 'Lower Manhattan Waterfront' City of New York 1975)

the office function is closely related to communications, any innovation in the field of communications has a tremendous impact on office location. Some theorists argue that, with the introduction of computers, it would be possible for some services to leave the high rental market of downtowns and locate elsewhere (suburbs). However, the C.B.D. (Central Business District) is still seen by information-intensive enterprises as the prime location.

Central business districts are strong poles of attraction for higher level corporate, financial, and specialized services activities. This is directly related to the quality of the environment, as outlined by Babcock:³

"We should pause here for a moment to emphasize that an interest in quality of design in a city's commercial centre appears to be directly related to the structure of the local business establishment. Architectural excellence is often a reflection of the ego of the person who is paying the architect's fee."

Corporate headquarters are not the sole source of office development builders in Downtown; certain business and professional offices will continue to locate in the central area. For instance, optometrists and medical groups, financial institutions and individual professionals need direct contact with other

functions to "work" efficiently, even though the individual performance of these people have little effect on the urban form of the C.B.D. Thereby, large financial institutions or corporations become the artifacts of urban structure.

Whether or not firms are attracted to the C.B.D., depends on the advantages and mix of alternatives of central locations. The benefits of agglomeration are lessened by including higher business taxes, crime, pollution, and poor quality of pedestrian networks and social urban spaces. Just as the deficiencies of Downtown are the advantages of the suburbs, problems in the suburbs become, in equal manner, the benefits of the C.B.D. One of the main advantages of the C.B.D. is the exchange of information done by personal contact re-emphasizing the need for proximity. Face-to-face contact is greatly preferable when, according to Brodsky:⁴

- (1) Several people have to exchange information with another at the same time, as when a conference or a seminar is held
- (2) The exchange of information contains an element of uncertainty or secrecy
- (3) One anticipates that that exchange of information will lead to a chain of serendipitous new situations requiring still more information
- (4) Elements of the exchange require problems solving or complex planning

- (5) The purpose of the exchange of the information is to negotiate, convince, or establish trust

The face-to-face exchange of information and its supporting office network are important determinants of the strength of the C.B.D. Psychologically, one's increasing contact with technology augments the need for personal "touch" with other persons. Big business is not conducted by telephone or in conference rooms. A large number of business transactions are concluded over lunch, at meetings, or in consciously planned "encounters".

Another office component is the one formed by government services traditionally located in Downtown. There is a strong linkage between the private and public sectors due to the quantity of "unofficial trade-offs" required by the business and political systems likewise. Public services also attract many people from all over the city and even the region. So now the physical structure of the Central Business District must thus offer an environmental quality which will facilitate business transactions and delivery of services.

The office sector is and will be the most important force behind downtown development. Urban design must, therefore, acknowledge the needs of the business establishment while bearing in mind that

public interest should prevail without detracting from business goals. There is fierce competition among office firms to build unique structures which become corporate images. The best example is the Transamerica Building in San Francisco (Fig. 4.1.2). This building imposes a feeling of pre-eminence over the city. This raises the question of what should symbolize the city - the public or the private sector? Although the building has become a symbol which helps to identify its urban setting, the other part of the question still remains. This shows how the socio-economic forces shape our physical environment. From face-to-face contact at pedestrian level, to the delivery of services and the skyline of cities: office buildings are presently the best expression of our society. Other forces - retail and housing - act as complementary parts, not less in importance but with a lesser effect on the urban form of the C.B.D.

4.2 Retail

The decline of Downtown as the retail centre is even more accentuated than its decline as an employment centre. Even though, there are some central Business Districts that have maintained their retail supremacy over other areas of the city. Some large metropolitan



Figure 4.1.2.

(Source: A. 'MAKING CITY PLANNING WORK' p175)

areas with nodal points to attract people - such as good environmental quality, museum, cultural activities, and sound transportation and parking policies - have withstood the competition from suburban shopping malls and "mini-centres" in outer areas.

Retail activity is closely associated with the office sector, and its vitality depends on white-collar workers who become "day-customers" and occasional visitors. During evenings or weekends, retail activities are reduced by almost 80% due to the lack of permanent customers usually provided by residential areas within the Central Business District. We must therefore recognize that retail-office-residential activities are closely linked to each other. Urban design, as the design of the city, should analyze the trends of those activities and the real planning issues that arise when changes in our society occur.

One of the main planning issues to explore is the efficacy of current retail policies. As has been demonstrated through years, some city policy makers have favored suburban development at great scale, especially shopping malls without realizing the consequences on the C.B.D. The absence of policies to attract and maintain employment and residential sectors as main supports of the retail activity has had a direct effect on Downtown.

In any case the major past, present and future threat to downtown retail activity are the suburban shopping malls. There can be only two ways to decrease the spread of those shopping centres. One is the public acceptance by policy makers (planning staff and city council) that retail activity in central areas must be re-inforced to prevent the decline of the whole city. The second viable alternative is to build citizen participation upon innercity problems as an initiator of change. These two policies are highly political, but are at the centre of the problem. Urban designers need to get involved in politics if an overall design policy is to be achieved.

Besides planning policies, what about the physical environment? Architectural styles have changed from the average eight-floor department store to a new "Downtown Mall" which is mainly the downtown answer to the suburban shopping mall. These downtown malls are characterized by their enclosed environment, and consist of a variety of specialty stores, usually anchored by a "big-name" department store or by office, residential or hotel activities (mixed-uses which will be studied later in this chapter). These new types of architectural designs and shopping trends are helping the revitalization of the downtown area. As an example, we cite here the retail development in Philadelphia

(Fig. 4.2.1) the design features of which have attracted much of the retail activity in the city.

Security is a key factor in retail development. The problem is not one easily solved by physical design; it is also part of the psychological perception of people. The image or the perception of the area is one of the key factors in the success or failure of any activity in the Central Business District. Comfort to realize shopping activities is closely related to the pedestrian environment. What for the pedestrian could mean comfort, for the developers is a decrease in profit. But developers are not the ones to blame if pedestrians do not find a desirable comfort level in the area. There are social problems that play an important role in environmental perception and retail activities. The Urban Land Institute in a recent study on Downtown Retail Development points out:⁵

"Another factor in improving safety and comfort is increased sidewalk activity. Studies of the use of public space have shown that the most effective way of keeping 'undesirables' (bums, drunks, etc.) away from an area is to make the area busy. Busy streets also increase user's sense of security. This is one reason why a number of retailers and developers say it is extremely important to orient downtown retail projects toward the street, in contrast to internally oriented suburban malls . . . centres open to the street, however, are more difficult to control and secure . . . security in a downtown centre . . . is an art form. Imaginative management and design capability is a must."

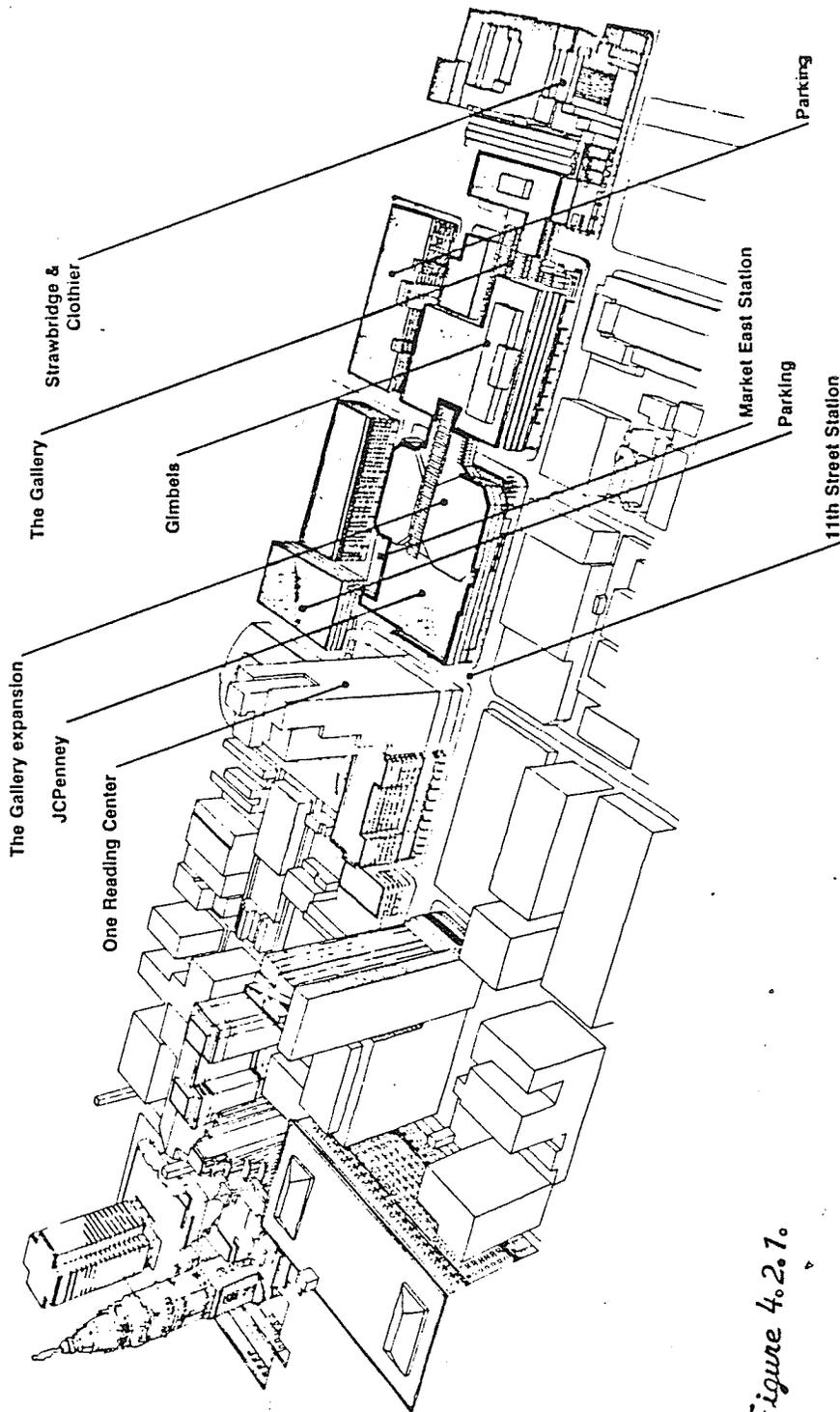


Figure 4.2.1.

The success of The Gallery has contributed to a substantial upgrading of the Market Street area, Philadelphia's traditional retailing corridor. New projects, including The Gallery expansion, which will double the number of stores and add another department store, are now being developed in the area.

(Source: DOWNTOWN RETAIL DEVELOPMENT, The ULI 1983 p33)

Management and design need to combine efforts to improve the downtown image. It is important to "market" the downtown area through the media in order to promote its image. Once the image is almost changed, more people will likely go downtown and it is at this moment when accessibility and parking become of capital importance for the retail activity. To conclude this analysis of the retail activity and its importance for urban designers a quote of Jaquelin Robertson from his article "The Current Crises of Disorder"⁶ offers a helpful insight for urban designers:

"Commercial concerns are design information: necessary working data for the urban designer which he ignores at great risk. How the city works commercially will determine how the city will be able to survive and work aesthetically. The urban design task is to maximize opportunities for healthy commercial activity and to extract from this public amenity urban design enjoins art and commerce and urban designers who do not welcome, understand, and enjoy this relationship miss the point of their work entirely."

4.3 Residential Development

As stated previously, any healthy central business district requires a residential population base either to generate downtown vitality when office workers leave downtown, or to provide retail activities with a stronger customer activity at any hour. Residential areas can be located within the C.B.D. or near to it in

the innercity. The following analysis will concentrate on both, since it is impractical and unrealistic to study just the downtown as an independent entity.

If residential areas are inhabited by middle or high income households, Downtown will revitalize faster. However, during the 50's and 60's there was an exodus of these groups to the suburban areas, leaving behind poorer groups that, instead of contributing to the retail activity or the tax base, have become a burden of social services. Low income groups in innercities are usually tenants, having no control over the physical condition of their residential structures. Landowners generally do not invest in rehabilitation unless there is a strong demand by middle-income households returning to the city due to changing lifestyles and tastes. The result is displacement, higher rents and land values. Displacement of poor people is a major social problem facing Municipal Governments. The fact that higher income persons contribute more to the economic development of the Central Business District does not mean that lower-income groups should be displaced. However, the government can easily protect the rights of lower-income groups by offering and helping them find housing alternatives in the innercity, and by developing special programs to renovate those

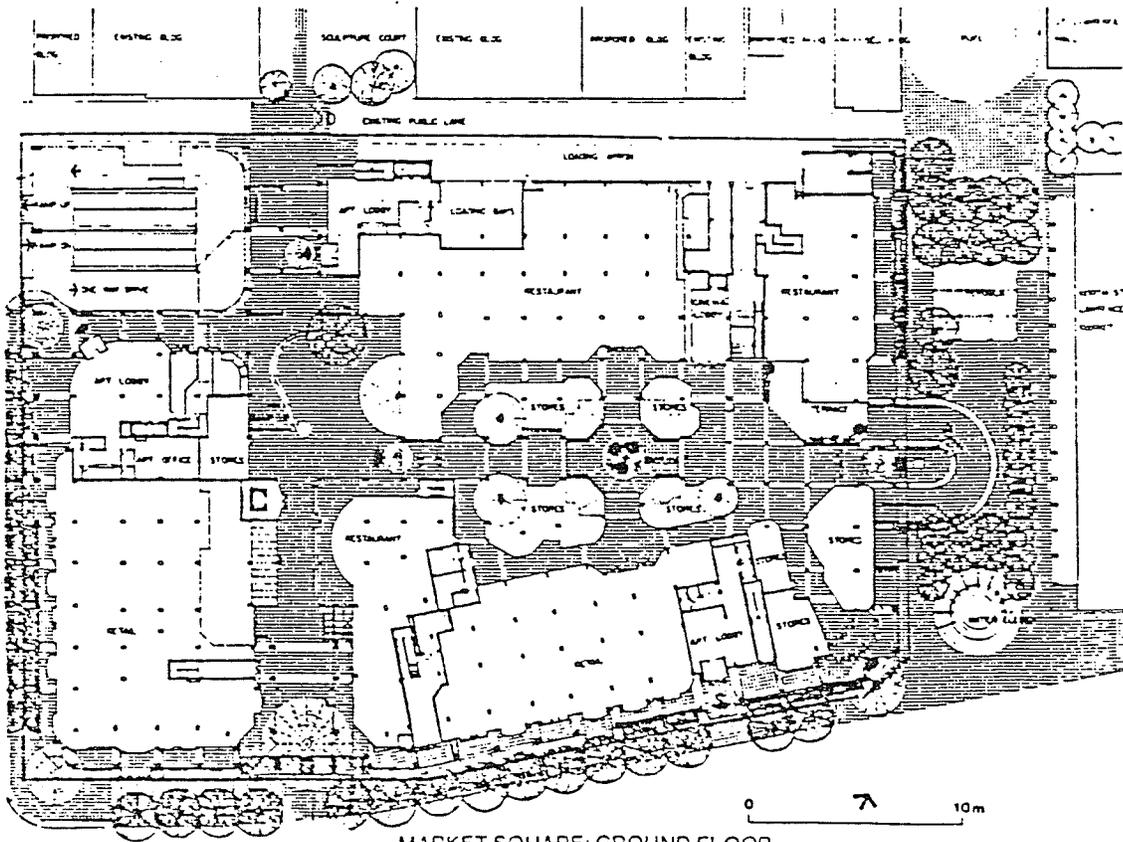
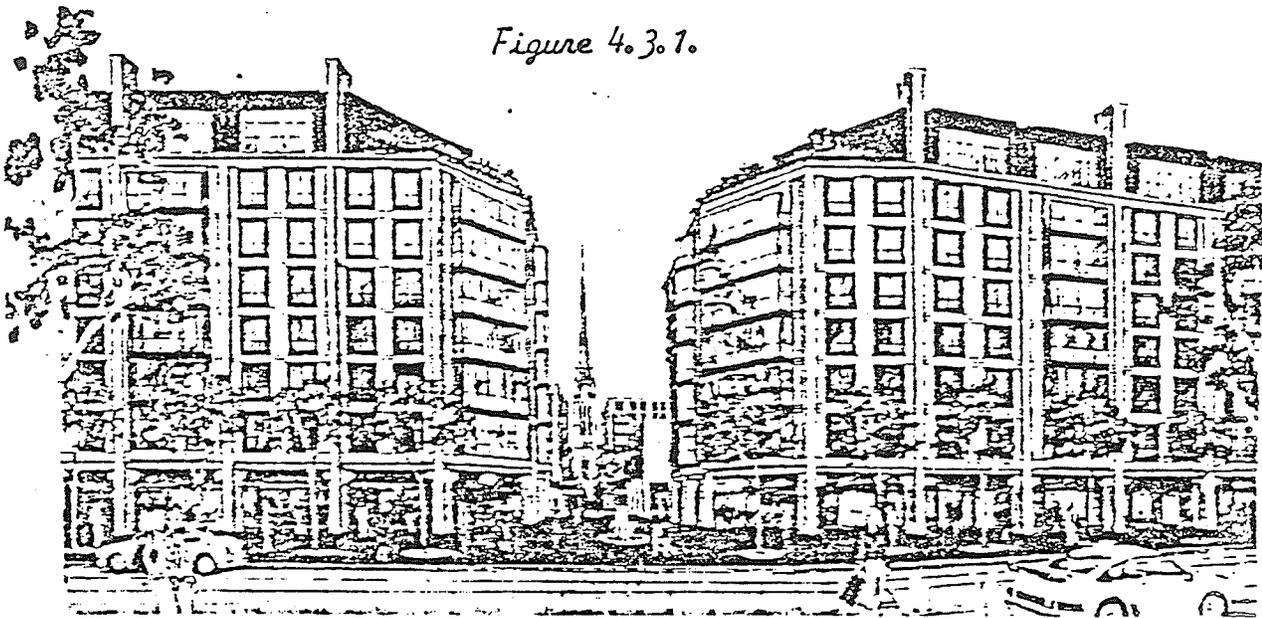
neighbourhoods for current residents; thereby avoiding displacement and social tension. The in-migration of higher-income households to the innercity is a positive one in the sense that it improves the quality of the environment of some neighbourhoods, (Fig. 4.3.1), and brings about more respectability and imaginability to the area.

Families are not likely to locate in Downtown, since the only choice the housing market offers there is high-rise buildings. One of the reasons is exposed by W. Michelsen:⁷

"When a child leaves his home to play many stories below, his actions cannot be followed from the apartment. He could go to China just as easily as to the store, as far as his parents are concerned. It is no place to raise a family. A mother can't look out for her kids if they are fifteen floors down in the playground."

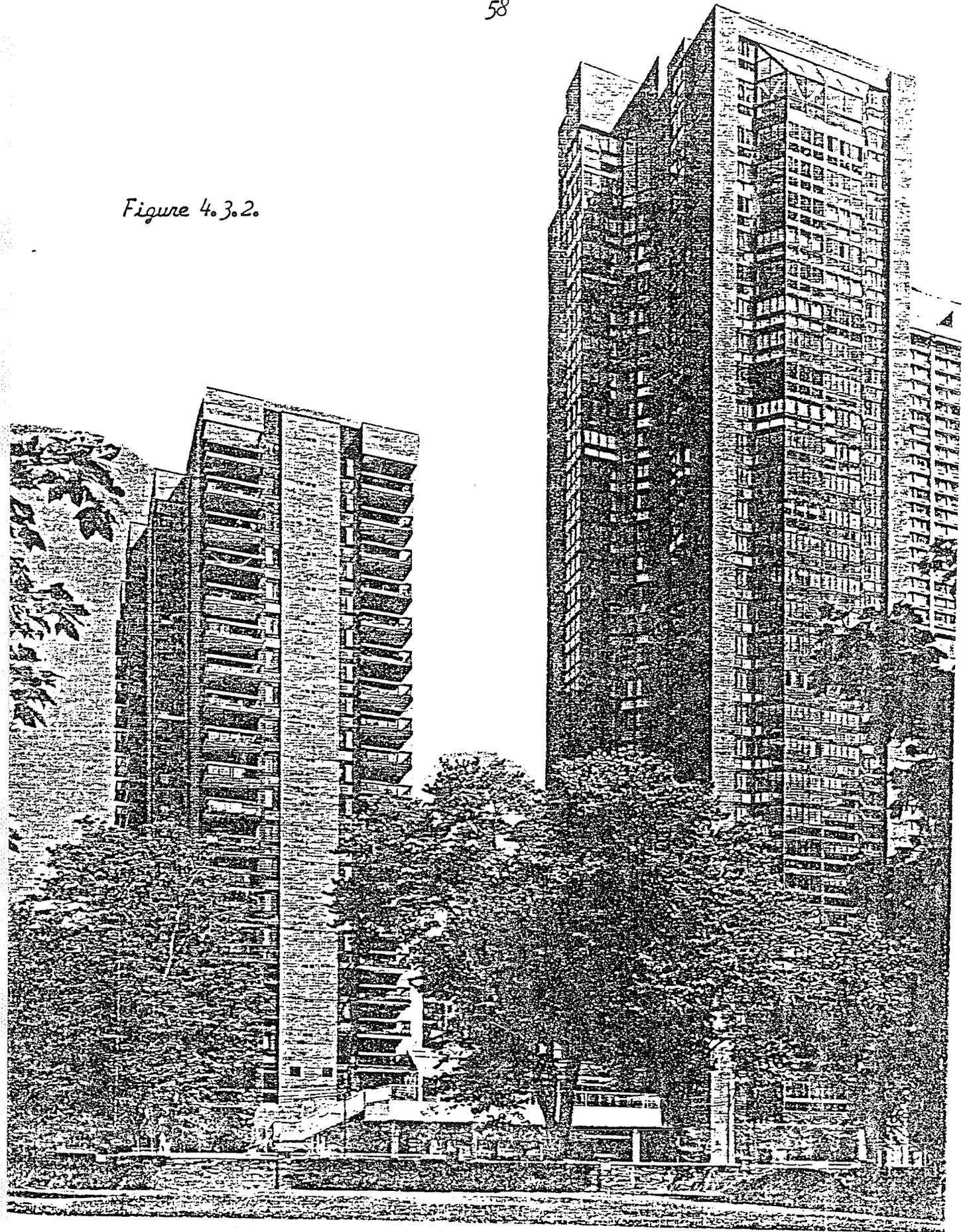
There are very few neighborhoods in the innercity with sufficient environmental qualities to be a residential alternative for families. Hence, downtown housing appeals to other groups - Yuppies, couples and bachelors, the elderly, and grownup parents without children. These groups open better possibilities of design, help any project to realize the higher densities that can be accomplished, and can more readily adjust psychologically as well as physically to those densities. (Fig. 4.3.2)

Figure 4.3.1.



(Source: CANADIAN ARCHITECT, October 1981, p20)

Figure 4.3.2.



However, the presence of high-income people in city centres is not a new phenomenon. A study by C. Hammet⁸ shows how cities in Europe and in North America share this characteristic, and that many high income groups are the ones who really can afford to live in the downtown areas. Hammet says that:

"Taste or preference for space are possibly words too weak to denote what it is really meant by this key variable of the structural theory. Rather the nature of the demand for space in this country seems to be a deeply engrained cultural value . . . a shift in middle class norms regarding the values of access to Downtown could be more significant than all the urban renewal to date."

Urban design needs to answer those cultural values to achieve a mix of urban activities and housing types. A combination of work-residential uses can be achieved to keep Downtown as the principal activity centre of the city. An architectural typology rediscovered since the early 70's in downtown areas is the so called "Mixed Use Development," whose main characteristic is that it contains office, residential, hotel and commercial space, all interconnected through concourses and/or skywalk systems. One of the best examples is the South Nicollet Mall in Minneapolis, U.S.A. (Fig. 4.3.3)

A third type of downtown residential development is the conversion of older commercial and industrial buildings to residential use. Older buildings usually

First Phase Project

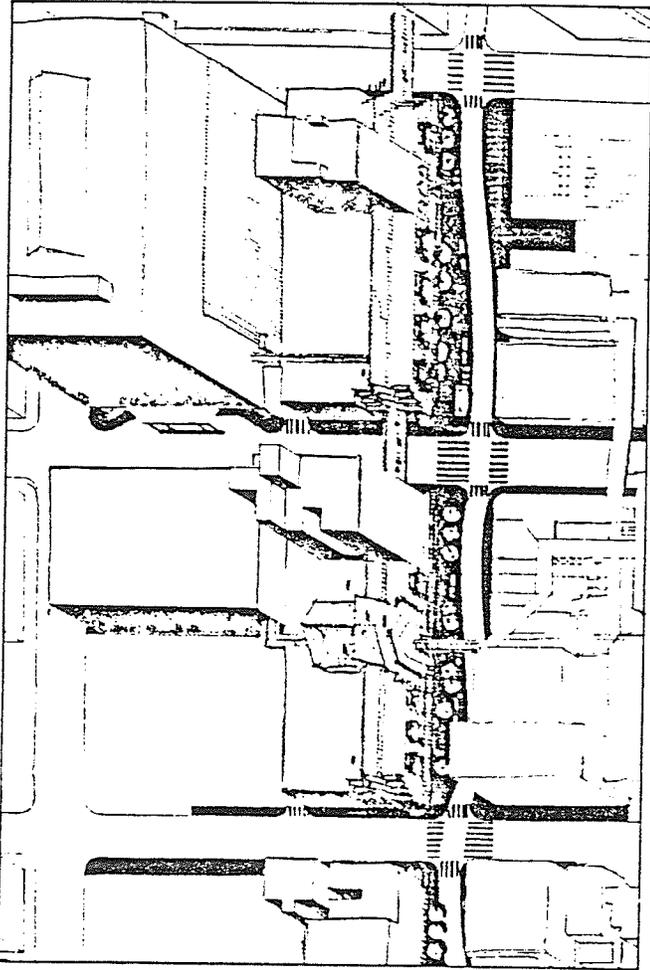
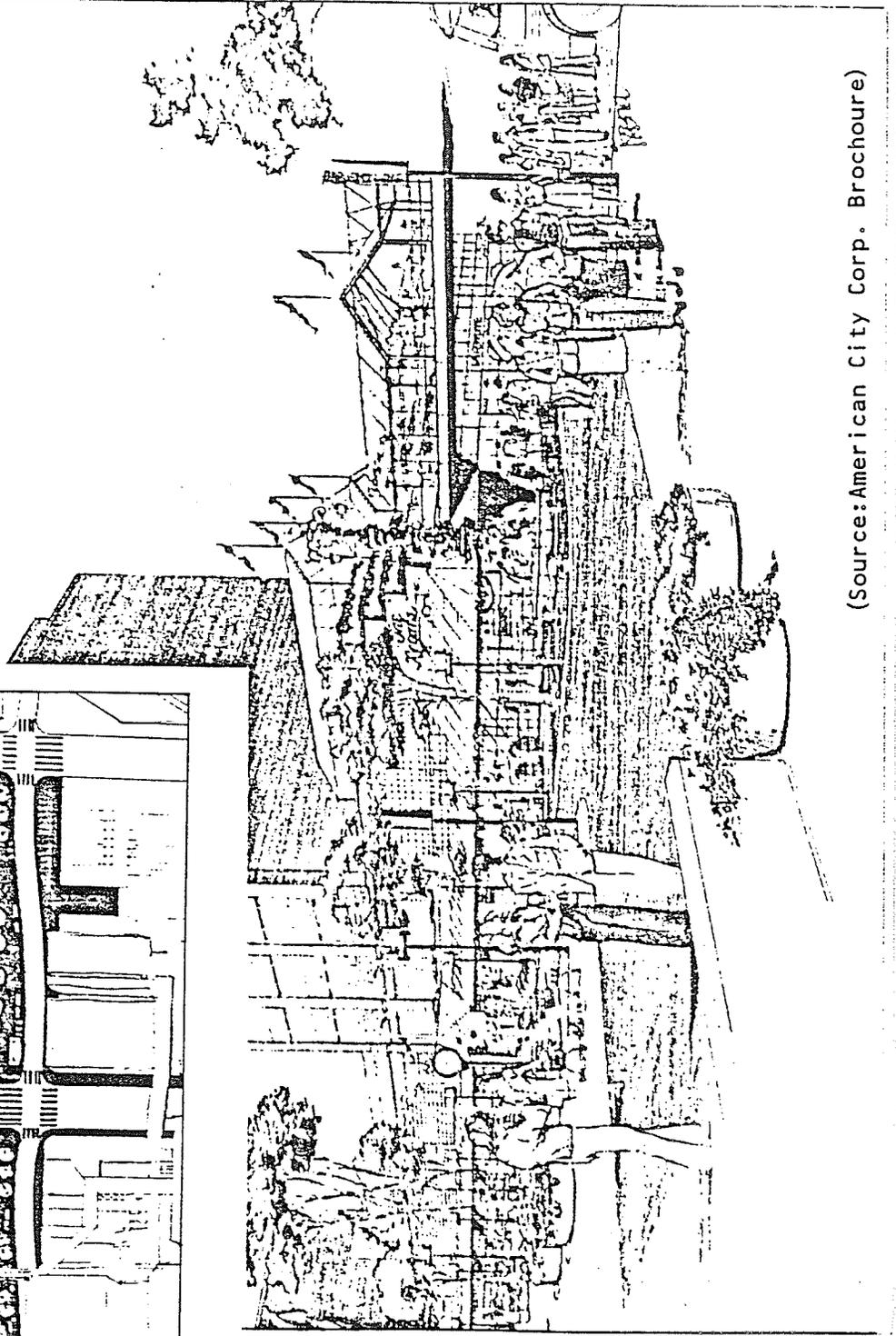


Figure 4.3.3.

New Retail Pavillion



(Source: American City Corp. Brochure)

offer the advantage of a easily redesigned interior space, coupled with the benefit of a durable structure that otherwise would be very expensive to build. The trend is to convert these buildings into units for the elderly and young urban professionals. This implies changes in zoning practice and administrative procedures. One problem is that these mixed use developments can become "fortresses" in Downtown as has happened in the case of the Renaissance Center in Detroit, designed inwards without relation to the urban context.

Mixed-use developments can have a greater impact on community development than single use projects. Mixed-use projects are seen as a way to achieve overall economic development, hence expanding the tax base of innercities. They are a tool for planners and urban designers to improve and achieve stated goals, but above all, to improve downtown livability.

Mixed-use developments are only part of a complex solution, and are not the only fiscal or social problem-solvers of the community. Cultural and recreational policies and their physical infrastructure, both independently and as part of those mixed use developments, can make Downtown a place of interest and vitality.

4.4 Tourism and the Imagibility of the City

It was said before how people's perception is an important factor to attract customers and residents to Downtown. This statement is also true when planning for tourist facilities in the C.B.D. There are two important elements for urban designers. First, the environmental quality of the area, either actual or perceived, must be in continuous improvement and change with a focus on pedestrian amenities. Tourists take bus tours to know other areas of the city but they prefer to walk Downtown. The design of a single corner is as important as the design of a skyscraper, since intersections become, combined with social gathering places, points of attraction. This applies not only to tourists, but also to those residents of the city living in outer areas. They are tourists, too, looking for excitement and lively places.

The second point, not less important for urban designers, is that physical characteristics alone do not produce "good" places. Places need people if they are to perform the social function for which they were designed. A program of cultural and recreational activities goes hand-in-hand with physical planning.

Let's review some statistics of Canadian tourism to reinforce the importance of this relationship. In

1980, the tourism sector of the economy generated revenues estimated at more than \$13 billion dollars for the country - five percent (5%) of the G.N.P. (Gross National Product) - including more than \$3 billion dollars in foreign exchange. Although the economic benefits are the focus of attention, tourism also contributes to non-economic goals of a social, cultural, and political nature. Tourism has generated a construction boom of hotels and convention centres all over the country. Sometimes they are built as an integral part of a mixed-use development, as in Toronto, and others independently as is the case of the Convention Center in Montreal. (Fig. 4.4.1)

Hotels and Convention Centers are some of the most important types of development, in design and function, that cities have undertaken to boost their image and to attract business and trade conventions. Gail Garfield Schwartz points out:⁹

"Hotels serve both businesses and individuals. They are considered premier investments by local economic development . . . because they contribute to the community's export base. That is the pull in dollars to be spent in the community that are earned outside the community. The more such foreign expenditures a community can attract, the better. Convention centres complement hotels in providing an assured demand for hotel rooms, restaurant services, and ancillary meeting facilities. Communities too small to support a convention centre encourage construction of hotels that include substantial meeting areas."

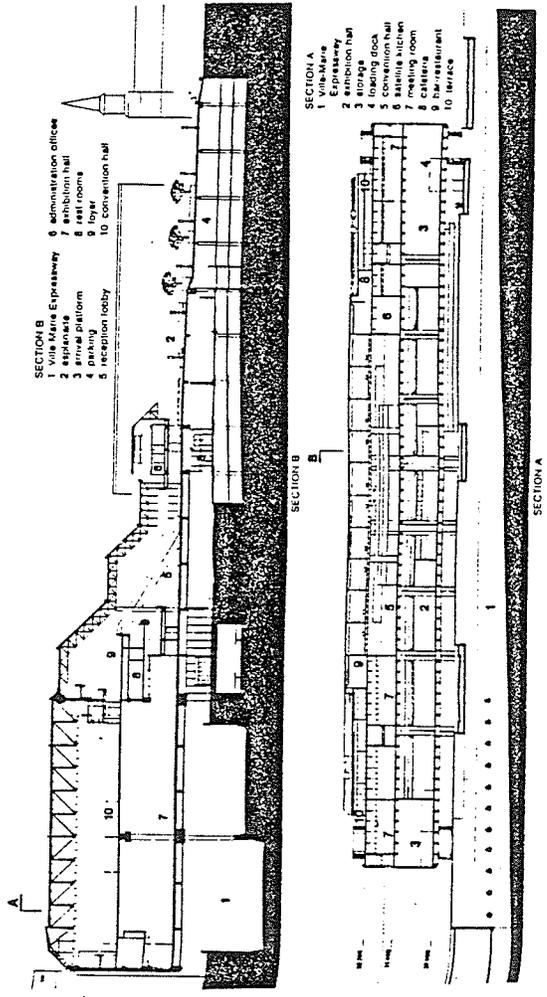
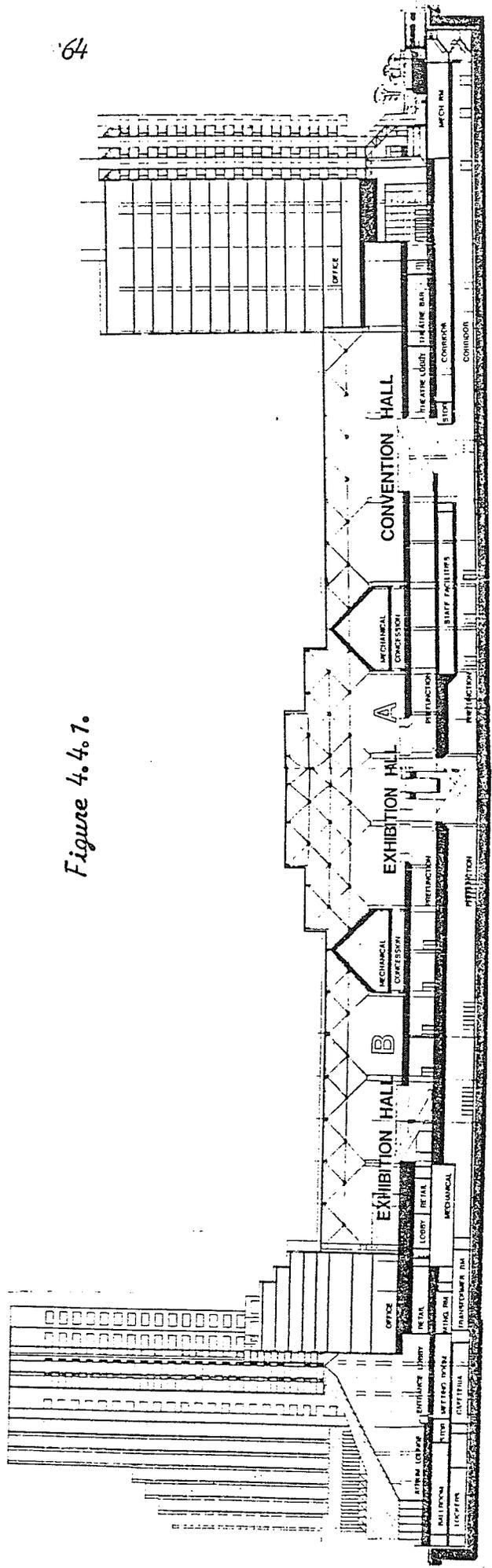


Figure 4.4.1.



(Source: CANADIAN ARCHITECT, October 1981, p19-p27)

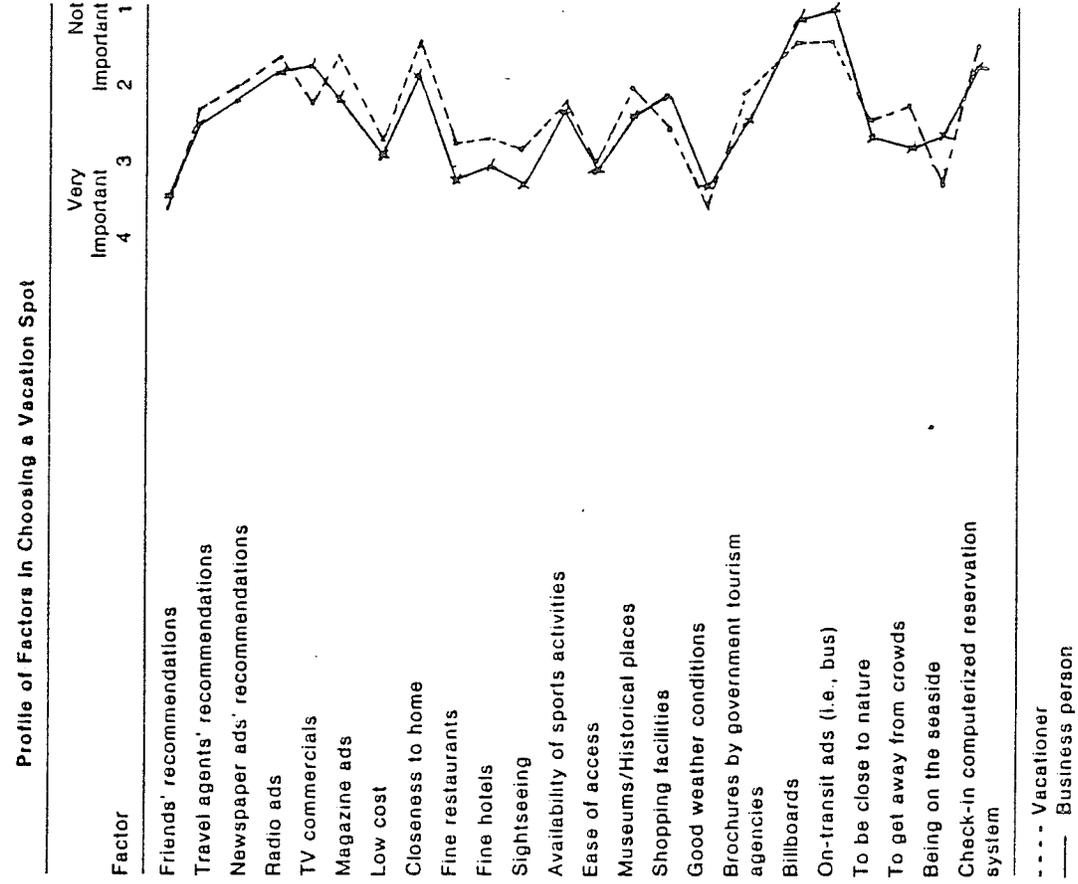
Municipalities must be careful, however, since convention centres are always subsidized and their impact is not measured in the profit they make but on the economic spin-off effects. Many cities have built or are building convention centres, increasing competition amongst them. Each city seeks to appear more attractive than its rivals. In addition ". . . to the basic facilities, cities will try to increase bookings by marketing their sports events, cultural events, eating establishments, scenery and recreational activities."¹⁰

As urban designers we should study what tourists demand. Kaynak offers the following list of amenities which tourists take into account not to choose a vacation spot but to mark the city as satisfactory or dissatisfactory:¹¹

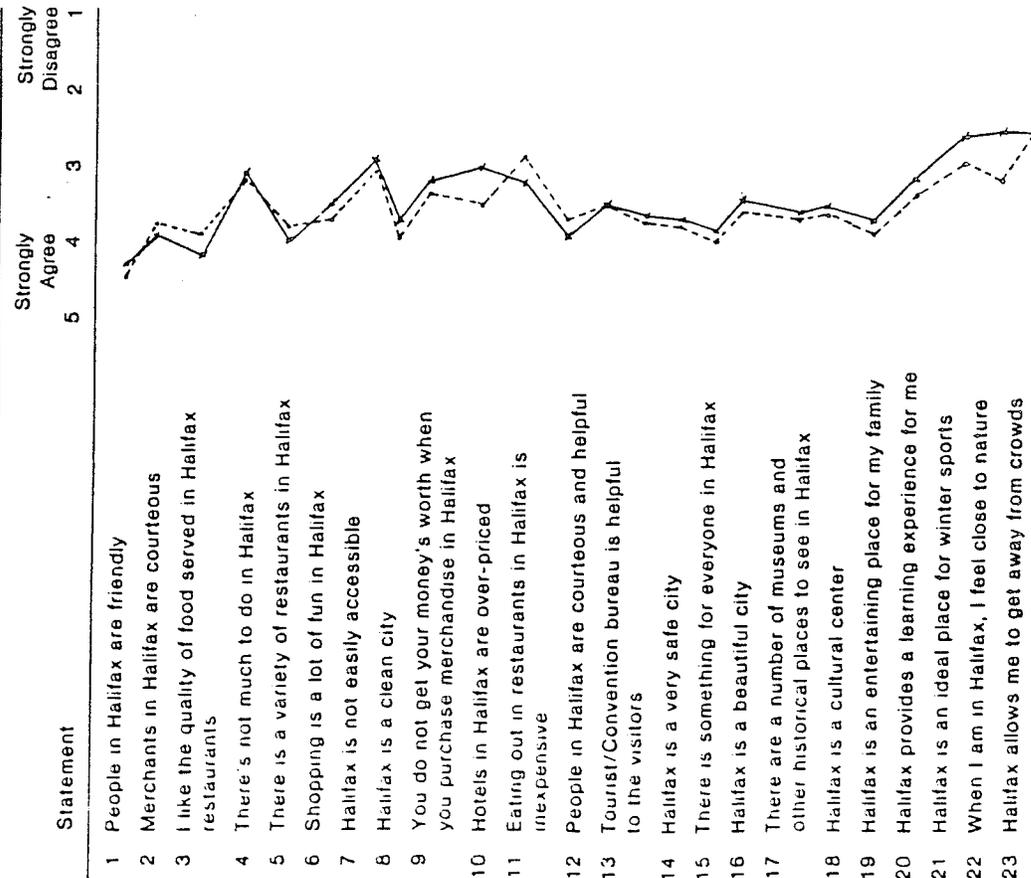
- Accommodation Facilities
- Cleanliness of the City
- Restaurants
- Cab Service
- Sightseeing
- Museums/Historical Places
- Services Offered/Tourism Bureau
- Attitudes of local people towards visitors
- Safety of the City
- Entertainment Facilities
- Outdoor Sporting Facilities
- Natural beauty of the city
- Shopping facilities

The researchers have summarized their findings and their applications in public policy in Table 4.4.1.,

Table 4.4.7.



Profile of Factors in Choosing a Vacation Spot



--- Vacationer
 — Business person

which describes the factors that influence the choice of vacation spots. If we overlap both tables we find that the main reasons are the physical attractiveness of the city (image) and the facilities it offer, especially for business transactions.

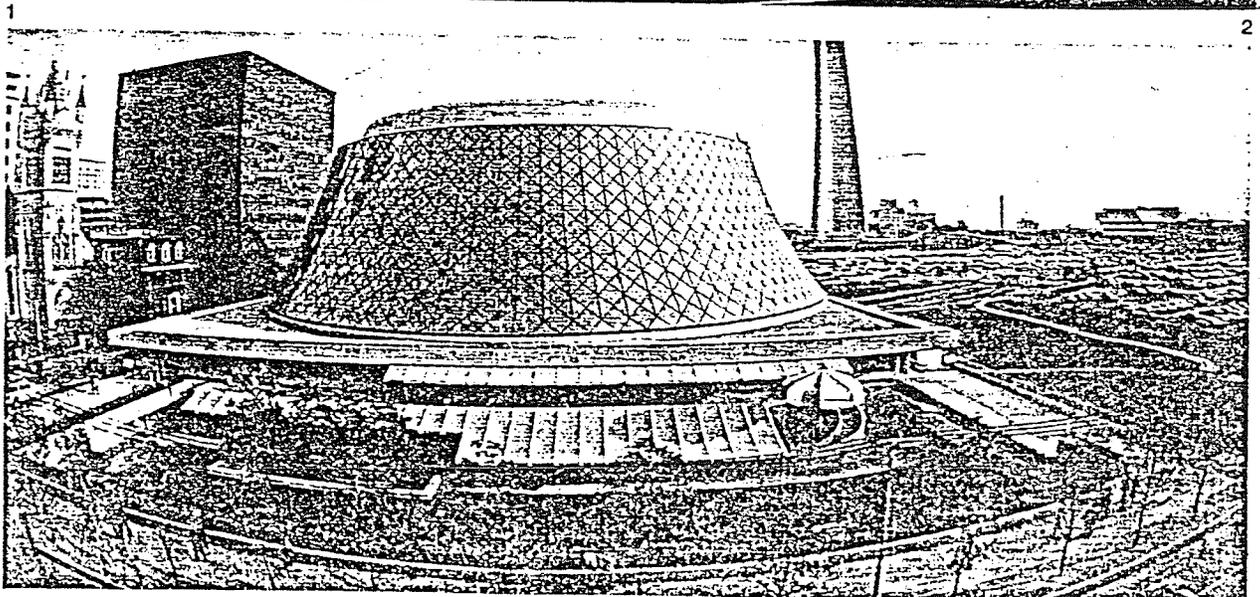
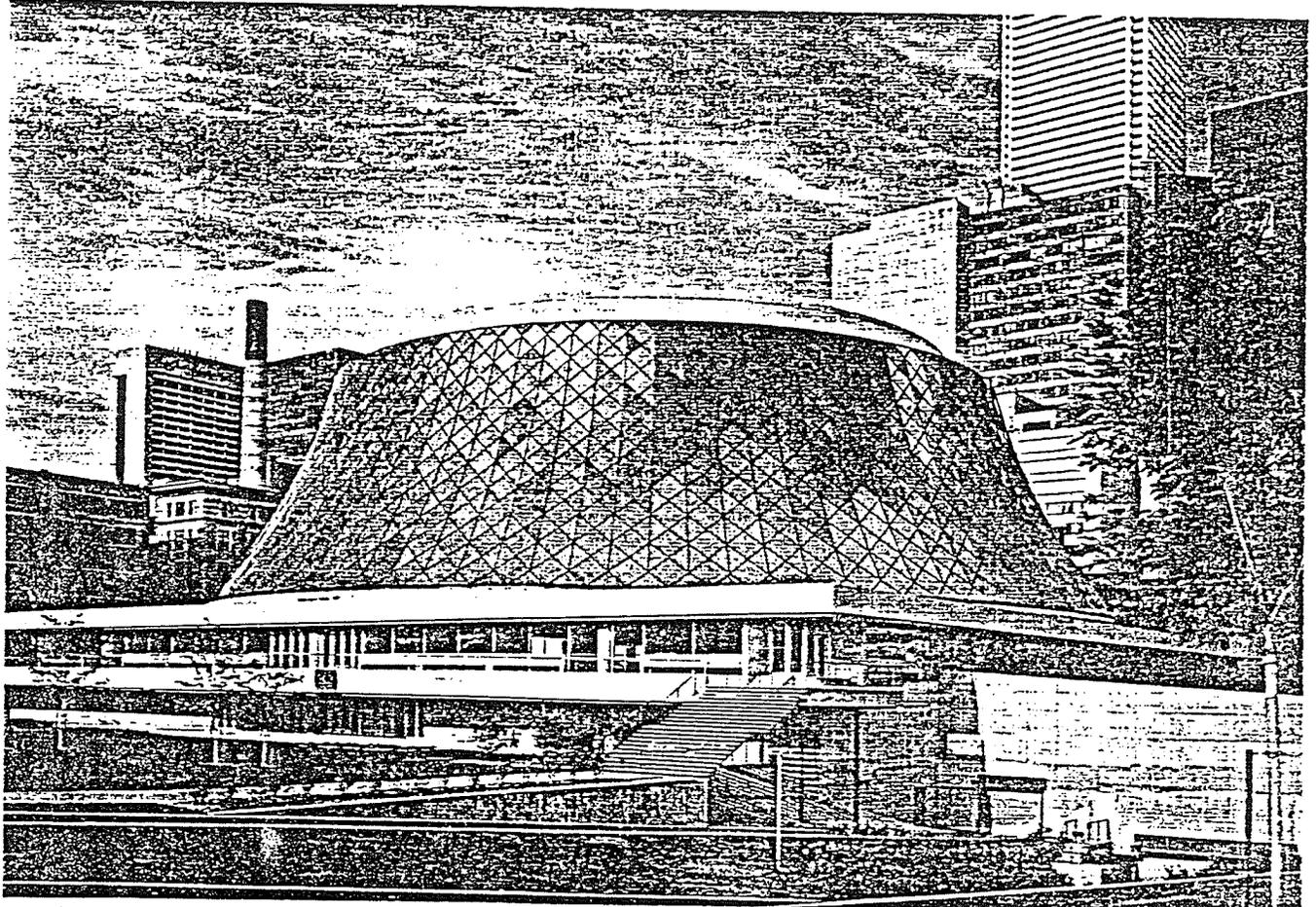
Tourism will be one of the largest industries in the world by the year 2000, thanks to improvements in transportation technology. One of the most important characteristics of a city for tourism from "within" and outside it, is its function as a place to meet and visit. The physical structure of the downtown can be its most important asset. Downtowns can become again the nucleus of the city through the introduction or reinforcement of cultural and tourist attractions. In addition to the activities mentioned before - office, retail and housing - the central area could increasingly meet the leisure time and entertainment needs of residents and visitors. The downtown area may easily "be developed as a centre of social activity in the community, and cultural and tourism facilities are excellent means of drawing people together for recreation."¹²

4.5 Cultural and Recreational Facilities and Activities

In ancient cultures, cultural and recreational facilities were an important part of the social life of the community, usually located in the central square. In the affluent societies of the western world lavish buildings are designed either for economic reasons or for symbolic ones. The natural location of these buildings has usually been the Central Business District for its convenient centrality, and ancillary services located in the area act as a complement to cultural activities.

There are excellent examples of such buildings - one is the Concert Hall in Toronto and the other is Faneuil Hall Market Place in Boston. (Figs. 4.5.1 and 4.5.2) Both buildings were chosen for the social function they perform. The Concert Hall in Toronto, an excellent building in interior design as well as in how the architect addressed the Urban Context, usually attracts people of high incomes and is the social gathering place of very few people. By contrast, the Marketplace in Boston is performing a better social function. It has the characteristics of urban spaces of the past, combined with the social values of the present, and attracts people from different social

Figure 4.5.1.



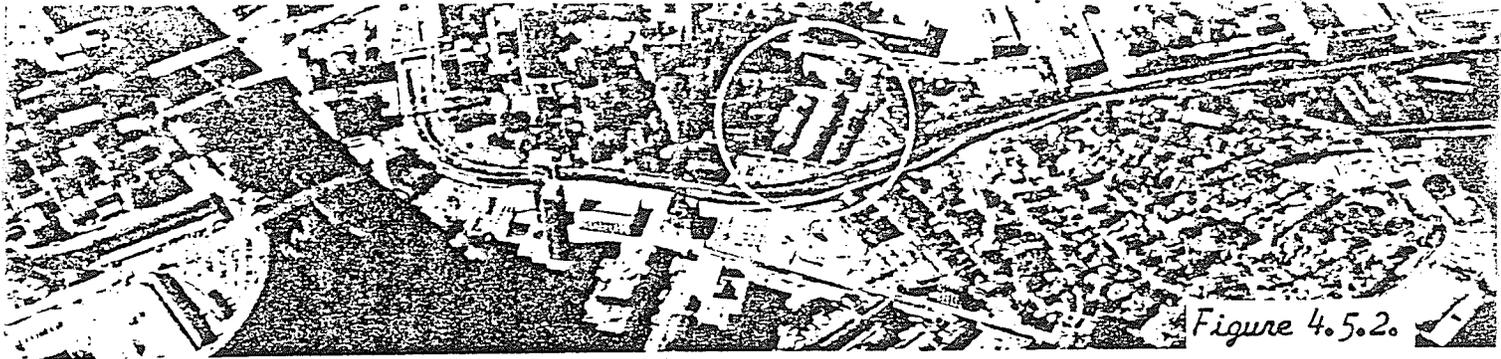
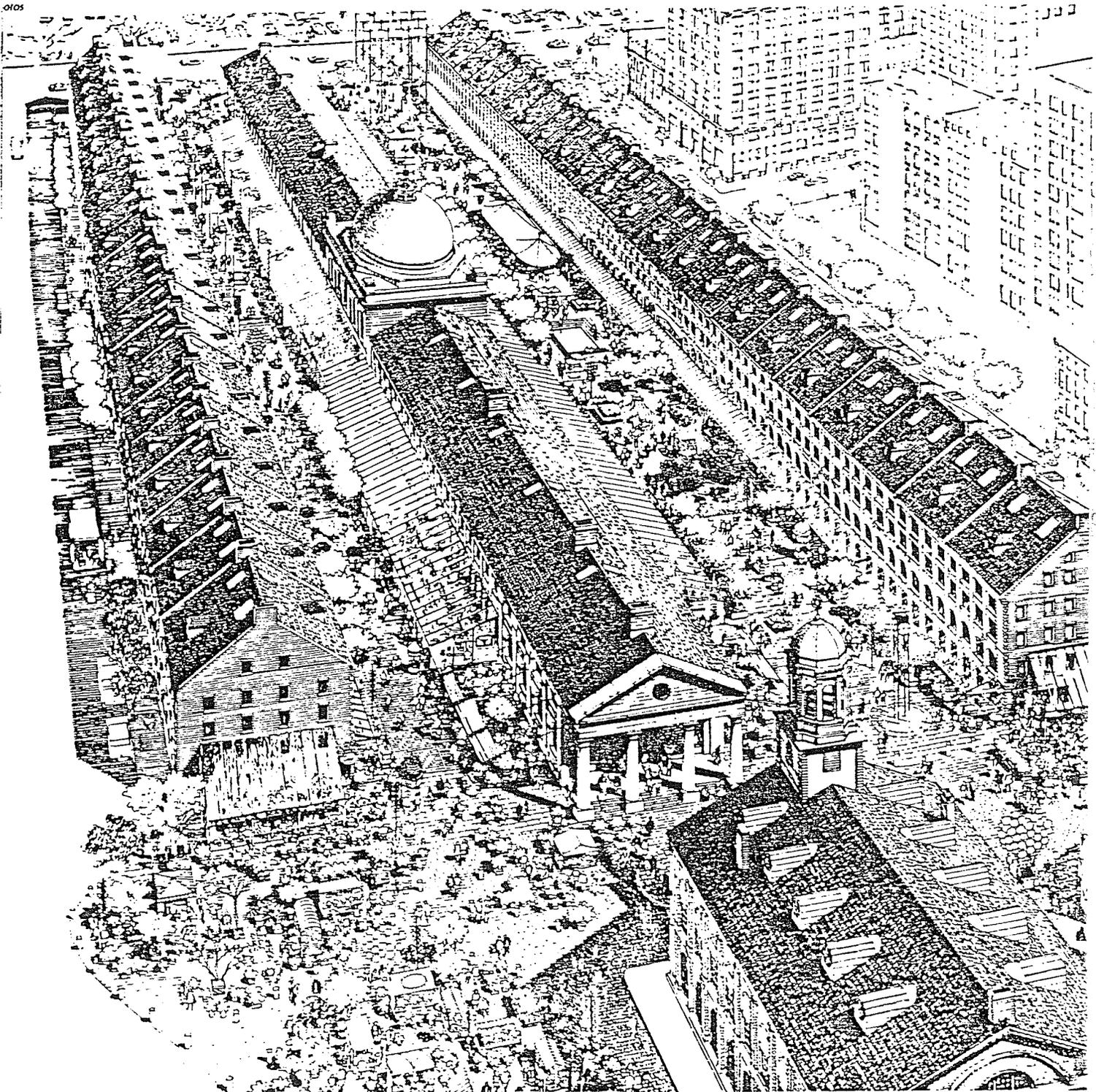


Figure 4.5.2.



strata.

Besides concert halls and marketplaces, other buildings play important roles in the cultural advancement of the citizens and tourists alike. Museums, planetariums, art galleries and many more form a rich mosaic from which the city achieves social and economic goals. A strong central business district depends to a great extent on the variety and vitality of these attractions.

Cultural and recreational facilities support all the activities mentioned before. Such facilities foster business and tourism by drawing people to the C.B.D. This happens in strong central business districts, but there are many cities that lack the communications network to make it happen. In the latter, cultural facilities are found scattered all over the central area without any possibility of pedestrian connection.

Architectural typology, or its effect on urban form, is usually one of the most important elements to explore. Buildings for cultural and recreational activities are usually "low" and have very little or no consequence on the skyline of the city, but it is at pedestrian level where they have the most favorable or devastating effect. Two examples are cited. First, the Winnipeg Art Gallery whose design was intended to

make the building a landmark, and at the same time to enhance the built environment, but did not achieve either. (Note: when the term design is used it refers to the exterior design and its relation to its setting. It is not the intent of this thesis to examine the social consequences of architectural interior design.) The architect(s) of the Winnipeg Art Gallery did not consider the impact of the design. A pedestrian impact study was not carried out, and now some people remember it "as the building with a corner that tells you this is not your place." Regarding the revitalization of the area, it is sufficient to look at the west side of the building to see what is happening. The west facade is a blank wall. Buildings across the street are in very poor condition, and contextually, the street is just the back alley of Memorial Boulevard. By contrast, the second and contrasting example is the Pompidou Center in Paris. Although the size and culture of the cities are different, in Paris how design addresses the urban context is one of the most important determinants of form. Being a building "open" in all its facades has helped revitalize the whole area which surrounds it. It has become a trendy place for cultural entertainment, and one of the "magnets" for citizens and tourists. The design of public buildings could easily be controlled by governments, without the need for urban

design legislation. In Paris, Winnipeg, or Bogota, these buildings address pedestrian environments and their interaction with each other. Governments could use these focal points as generators of activities to accomplish a physical and socio-economic revitalization of the central business district.

Changing focus, it is necessary to introduce some thought about accessibility of cultural and recreational facilities. As supporting services, cultural activities carry a financial cost either from part of the government or from part of the users. It is important to keep prices low and quality of service high so that these activities continue fulfilling their social purpose. Of course, the vitality of office, retail, housing and tourism sectors is directly proportionate to the vitality of cultural and recreational activities. Vincent Papsidero of the Department of Community and Economic Development explains:¹³

"Arts and cultural activities contribute handsomely to the economy of American cities and towns, attracting dollars, residents and jobs. According to the International City Management Association, economic impact studies have shown a close relationship between expenditures in the arts and economic developments . . . culture and recreation may become less single business enterprises and more techniques for the success of urban redevelopment projects."

The physical infrastructure for redevelopment is there - warehouses could be converted into theaters, huge parking open space could be built up - but what urban designers must keep in mind is how all of these attractions remain an integral part of a more general concept. This concept advocates a mix of functions and land-uses.

Thus far, all relevant functions of the downtown have been outlined except for the industrial function which was one of the determinants of urban structure in the central business district and in the innercity, at the beginning of the century. Nowadays it plays a less important function, but has great potential.

4.6 Industrial Activities

Manufacturing firms have left central locations for other areas or cities, leaving behind a set of buildings that are being renovated for residential or office uses. Light industry is an asset to downtown urban design, as it provides opportunities for social integration when combined with other activities. Rehabilitation of older industrial buildings is a matter of reinforcing their historical value and capitalizing on structural possibilities to create a historical continuity.

Light industrial activities are educational resources besides having economic function. Newspapers and small crafts manufacturers, if located in central areas, contribute to the rich mixture of land uses, supported not by one or two economic sectors, but by many of them. However, some environmental complications emerge. Visual pollution and contamination were regarded as the "stop" arguments when light industrial proposals were rejected by city planning departments ten years ago. Thanks to advances in technology, it is now possible to "clean" these manufacturing services and to have different activities in the same building. Examples of this trend are more common in Europe where light industry is considered an integral part of central area revitalization. As Philippe Panersi and Catherine Bruant point out when describing their architectural position in the design of a project of this kind:¹⁴

"In order to define our approach we took the following points into account: consolidation of the built environment, increasing the density, improving the means of access and reshaping the groups of buildings. We have deliberately shelved all considerations of style and form in favour of a more urgent demonstration, that of urban consolidation. We are not proposing 'finished architectural objects' for sale. Our approach . . . is first and foremost the hope that we can start a dialogue with the public."

These principles are applied to new development. Large mixed-use developments could include facilities for "clean" and small craftsmanship co-operatives. However, the future of such proposal is obscure given the present expectations of our society, and it will be reserved only and partially for new uses when required by the conversion of building. An illustration of the latter alternative is given by Panersi and Bruant, explaining the same project in Lille, France that consisted of the reconversion of the Leblau Textile Mills into a multifunctional building. (Figs. 4.6.1 and 4.6.2)

All kinds of activities located in the central business, regardless of their nature, need to be complemented by communication systems. Transportation of people and goods is, for the C.B.D., a matter of life or death. Transportation policies can create a paradise for pedestrians or a jungle for cars. The pedestrian and the automobile are natural antagonists. It is up to the urban designer and the planner to try to achieve a balance between their interests.

4.7 Transportation

Transportation and its infrastructure - roads and highways - are the determinants of urban structure;

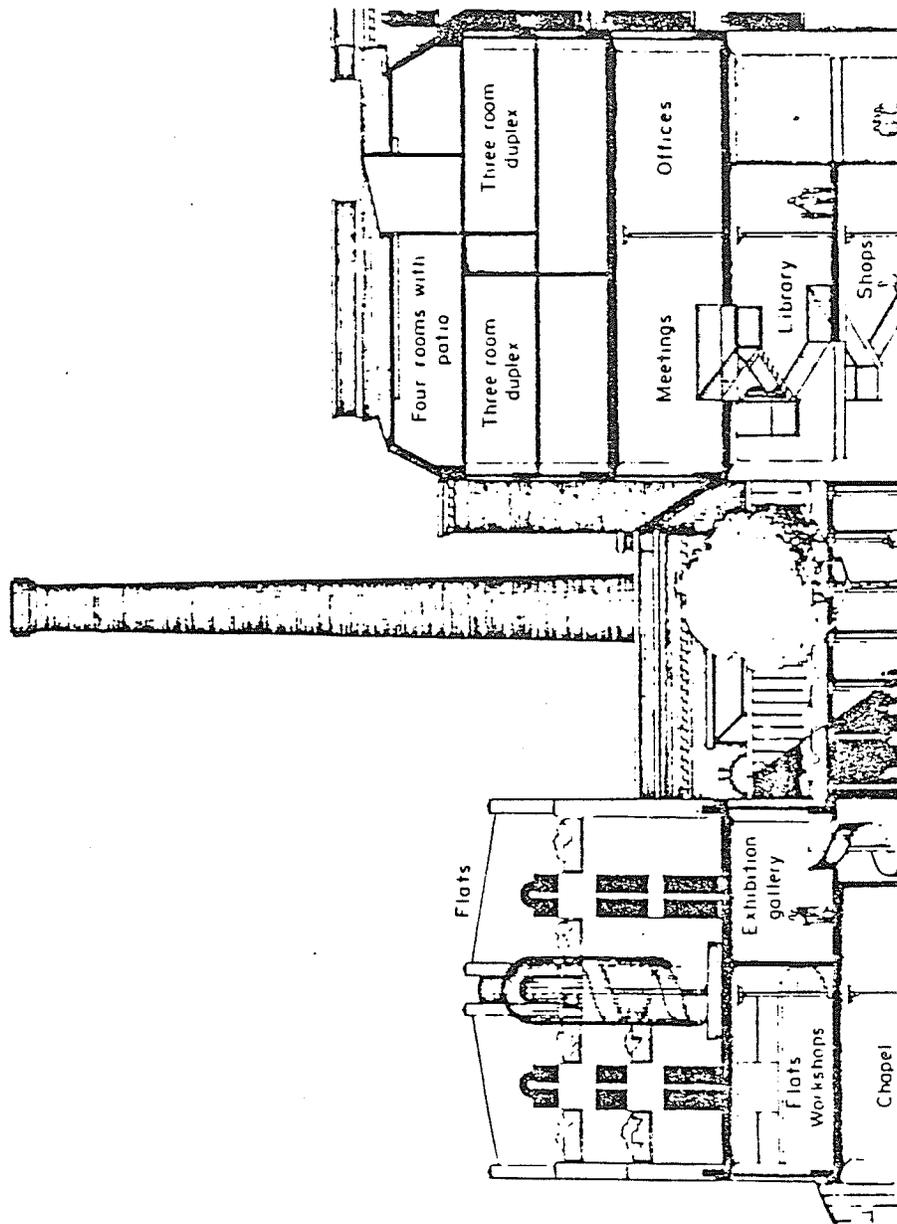
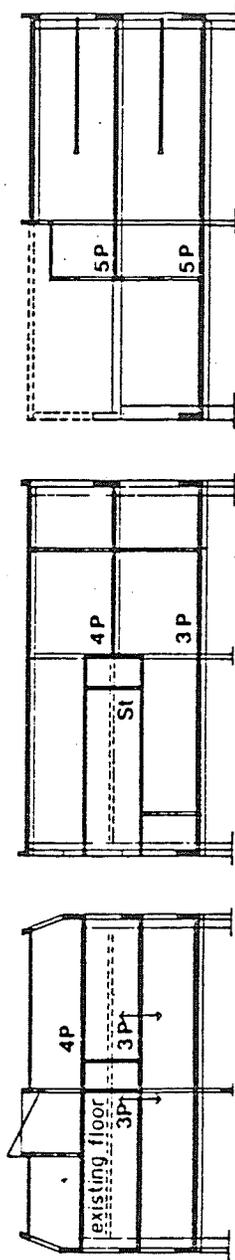


Figure 4.6.1.

(Source: J. Tanghe 'LIVING CITIES' 1984, p)



Configuration 1

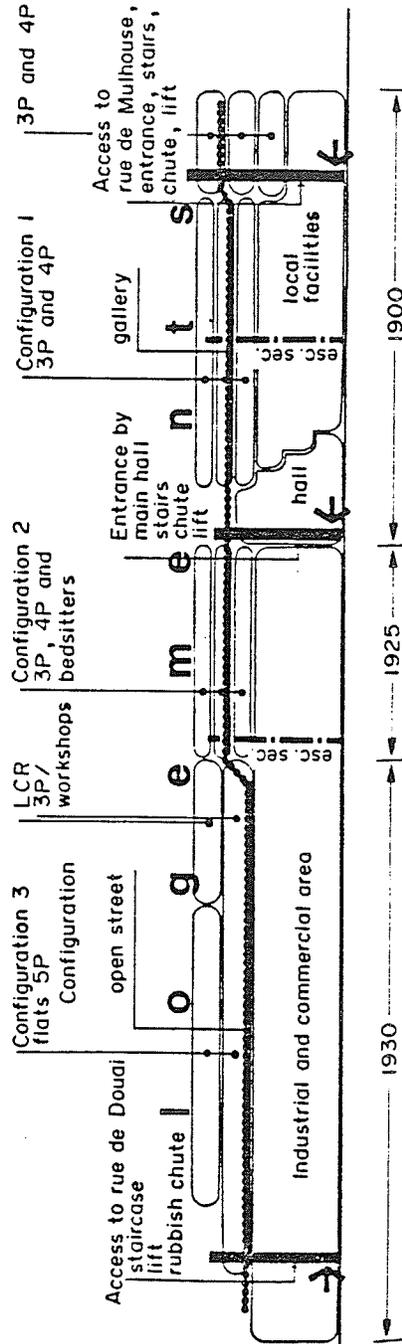
Part dating from 1900. Two new floor slabs have created 3 floors, height: 2.7m floor to ceiling. The upper level which is 17m deep has been converted to a 4-room flat, the central zone of which is lit by a lay-light.

Configuration 2

Part dating from 1925. Two new floors have been created over only half of the building, giving 2 transverse flats (one of which is on 2 floors), having set-back living rooms (height: 4.25m floor to ceiling), plus 1 bed-sitter. Balconies have been created in the set-backs of external walls.

Configuration 3

Part dating from 1930. Nothing has been demolished and light-construction floor slabs have been placed over that part of the area which now comprises the bedrooms. The average floor to ceiling height is 2.70m. The living rooms give onto open-air balconies (on flat roofs).



Configurations of the Leblan Building, architects: Reichen and Robert, engineer: Ove Arup.

Figure 4.6.2.

(Source: J. Tanghe 'LIVING CITIES' 1984, p159)

radial cities or gridiron patterns are responses to the need for engineering efficiency that has characterized the twentieth century. Access to the multifunctional Central Business Area has been one of the biggest problems planners and urban designers have to deal with. Congestion, accidents, and air pollution reduce accessibility by customers and visitors who consider their going downtown as a necessity and not as an enjoyable experience. A.D. May outlines the factors to be considered by planners and urban designers:¹⁶

- (A) Efficiency: less cost and less time involved in the journey are the objectives of efficiency, applied both for the user and the provider.
- (B) Resource Conservation: conserving those resources, and in particular energy, which are used in the provision, operation, maintenance and use of the transport system, and which are in particularly short supply.
- (C) Finance Conservation: limiting the demands of transportation policy on the budgets of the authority responsible.
- (D) Environmental Protection: Minimizing the impact of transport facilities and their use on both users, including pedestrians, and non-users such as some residents and city centre employees.
- (E) Safety: reducing the loss of life, injury and damage to persons and property resulting from the use of transport facilities.
- (F) Accessibility: improving the accessibility to facilities required by business and by individuals and hence reinforcing the land-use plans of the city centre.

- (G) Equity: endeavouring in not to worsen any of the above factors for any group of people and, ideally, ensuring that benefits are either equally distributed or made available particularly to those with special needs.

Some municipal governments will emphasize some of these objectives, others will focus on just one; it all depends on the political will of the participants in the planning process. It is important to clarify that some of these conflicts are on opposite sides, and any direction taken will mean a compromise between the problems solved and the problems generated or worsened by the decisions. Whatever the decision, it is expected that private automobiles will remain the most viable form of transportation in and around downtowns. Hence, governments should endeavor to create a physical and psychological separation between car traffic and pedestrians in order to achieve some of the goals stated above.

With the increase of land values, energy costs, and most important, environmental and financial costs, many cities are exploring the possibility of discouraging the use of the private automobile, emphasizing pedestrian, bicycle, public transit and car pools as modes of travel for people who go to or within the central area. One of these examples is the Metro 2000 Concept for Minneapolis (Fig.4.7.1) where transportation and parking are an integral part of the

METRO 2000 CONCEPT

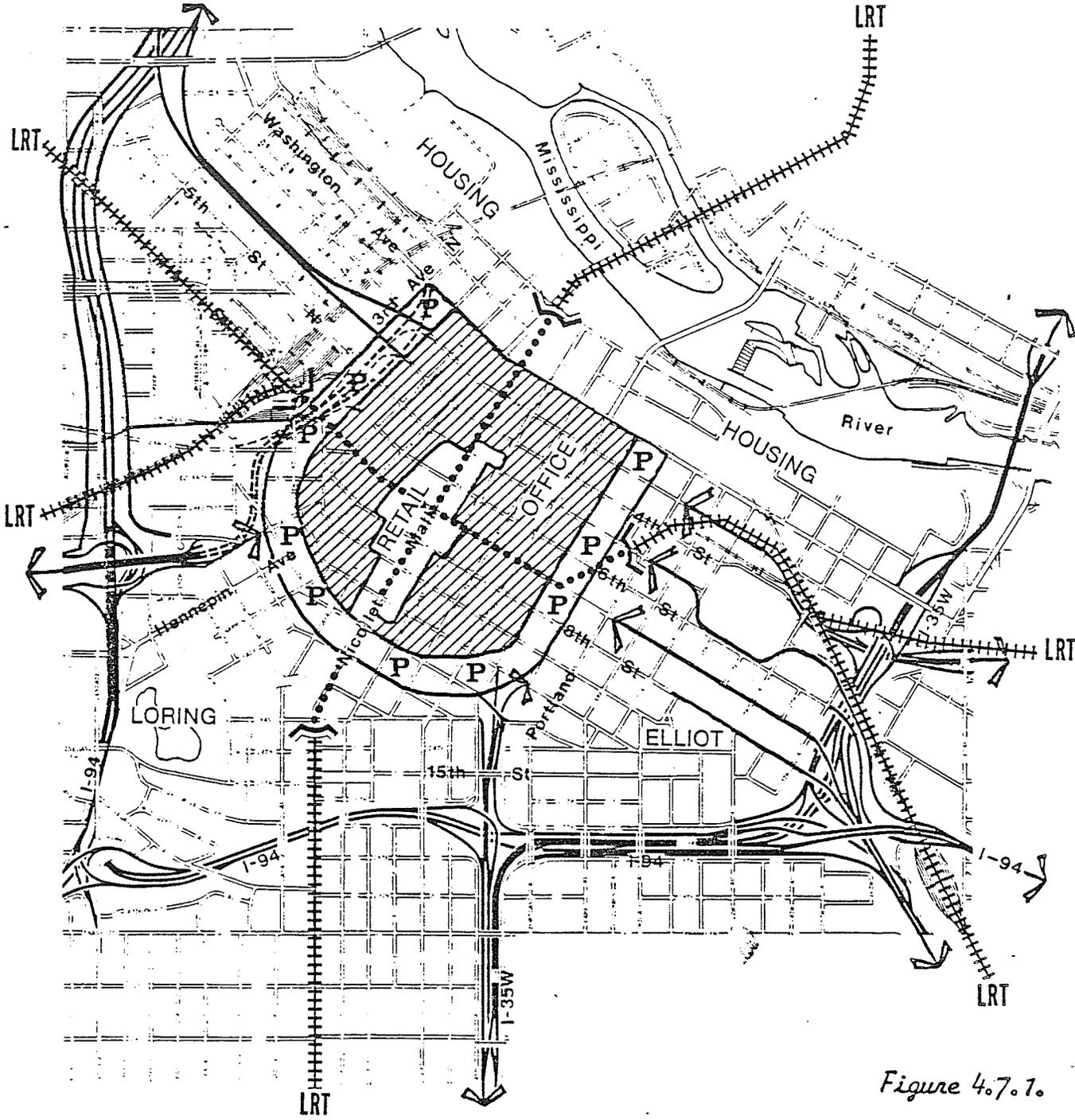
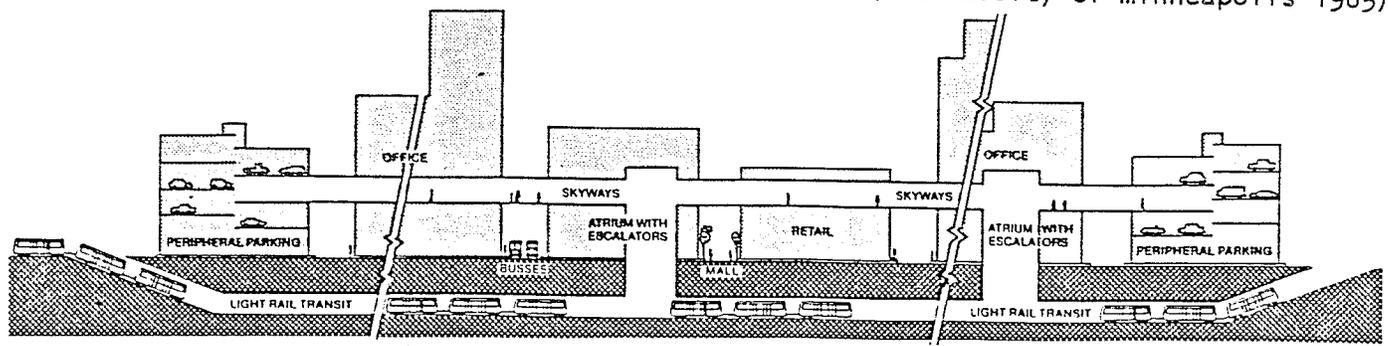


Figure 4.7.1.

(Source: City of Minneapolis 1985)



development process, reducing congestion and improving the pedestrian environment.

Policies to reduce the number of automobiles in Downtown are directly related to development activity. The more development, the more vehicles coming to the central area. The more development, the greater the number of people working and/or living downtown. Therefore, there is a conflict between the land and space required for the even greater number of people and the increasing number of cars. Parking aggravates the problem of the limited land available.

On-street parking and surface lots are detrimental to the visual quality of the city. Block after block offers the pedestrian "arid" areas full of cars during the week, and in the evenings and weekends huge empty spaces where the pedestrian only feels isolation and discomfort. The problem, however, is not only of the off-structure parking. In the majority of cases, parking structures are an "assault" to the pedestrian, they do not become part of the urban context and usually spoil the image of the city. "The Bay Parkade" in downtown Winnipeg is a good example. It faces one of the most important Avenues of the city, Memorial Boulevard, but its design does not address the ceremonial style of the boulevard. It is a parking structure "open" completely in its facades.

Urban design parking possibilities in Downtown and the physical consequences are analyzed by Thomas Feagins as follows:¹⁷

- (A) Is the parking garage beneath the building, adjacent to it, or simply nearby? Below-building parking is the first choice of most drivers, and few are willing to walk farther than 500 feet (approximately two blocks) although this amount vary from city to city.
- (B) Are spaces near elevators or stairways?
- (C) If the parking garage is not below the building are pedestrian walkways available to the building - tunnels or overhead bridges? (Fig. 4.7.3)

Transportation in Central Business Districts is one of the most difficult problems facing urban designers. Although transportation is not an independent function itself, it is closely related to the land uses, densities and services of the Central Business district.

4.8 Conclusion

Thus far, these different socio-economic forces that shape urban form and environmental quality have been studied from the perspective of their implications on urban form and how they affect the pedestrian environment. Almost everyone starts or finishes a trip as a pedestrian in any downtown area, and it is to the

pedestrian environment that urban design must relate. The image of the skyline is important. However, the image of the city at human scale is much more important if a city is to achieve a pedestrian network where people walk along not because they are forced to do so, but because they want to do it. They are "invited" by the network.

A pedestrian network means the relationship between buildings; how they connect and how these connections provide social urban spaces in which to gather, to see and to be seen. Different networks are found in our cities today, sidewalks, shopping malls, and underground concourses but very few are related to each other. They do not provide social gathering places since their main purpose is commercial. Municipal governments should intervene in order to achieve an overall design framework, so that different public spaces and buildings become a pleasant part of city life, as well as a protection measure for future users. The role played by Municipal Government is the decisive factor in implementing urban design policy. Municipal governments have tested different mechanisms to better the urban setting, but the most traditional, and the one which has had a greater impact on modern urban environmental design is zoning.

CHAPTER FOUR FOOTNOTES

¹Schwirian, Kent P., "Urban Spatial Arrangements as Reflections of Social Reality," Remaking the City, ed. John Pipkin, Mark E. LaGory, Judith R. Blau, pp. 121-122.

²Ibid., p. 123.

³Babcock, Richard F. and Weaver, I. Clifford, City Zoning (Chicago: Planners Press, 1979), p. 61.

⁴Brodsky, Harold, "The Changing Role of Downtown," Modern Metropolitan Systems, pp. 212-213.

⁵Black, Thomas et al, Downtown Retail Development (Washington: Urban Land Institute, 1983), pp. 10-11.

⁶Robertson, Jaquelin, "The Current Crisis of Disorder," Education for Urban Design (New York: Institute for Urban Design, 1982).

⁷Michelson, W., Man and His Urban Environment (London: Addison-Wesley Publish Co., 1970), p. 96.

⁸Kaynak, Erdener and Yavas, U., "Visitors Perception of Halifax," Planning and Administration, Vol.9N (Spring, 1982), p.46.

⁹Schwartz, Gail G., Where's Main Street U.S.A? (ENO Foundation for Transportation, 1984), p.35.

¹⁰Ibid., p. 37.

¹¹Kaynak, Ibid., p.55.

¹²State of Ohio, Main Street Ohio (Ohio, December, 1981), p.121.

¹³Ibid., p.119.

¹⁴Panerai, P. and Braunt, C., Living Cities: A Case for Urbanism and Guides for Re-urbanization, ed. Tanghe, T. and Vlaeminck, S. and Berghoef, (Pergamon Press, Oxford, 1984), p. 254.

¹⁵Ibid., pp.255.

¹⁶May, A.D., "Future Traffic Problems," The Future for the City Centre, ed. Davies, R.L. and Champion, A.G., (London: Academic Press, 1983)pp. 166-167.

¹⁷Feagins, Thomas J., "Downtown Parking: Prevailing Popularity Defines Planning Practices", Urban Land, (February), p. 23.

CHAPTER FIVE

The Role of Local Governments

In the urban renewal era of the 60's and early 70's the primary role played by the government was that of making plans, mainly physical plans of how the city centre should look. Urban designers were the "artists" behind these efforts to "modernize" the city, and their enthusiasm usually ended when plans were approved, or when at the last minute a politician decided that the project was not worthy of implementation.

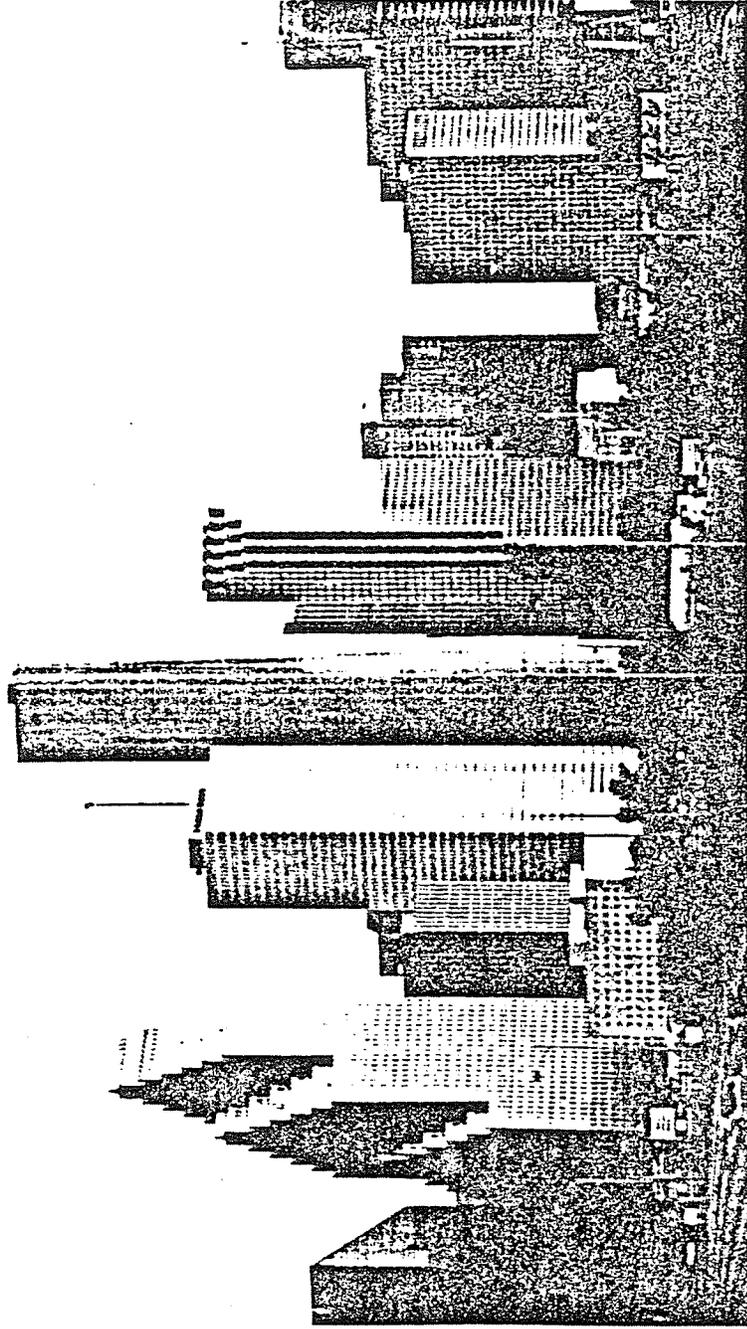
The urban renewal era was the "lost opportunity" to create a meaningful environment in great scale. Today, with increasing economic constraints, the private sector is decreasingly willing to provide the public with the necessary public spaces of high quality unless given incentive or forced to do so by the government.

Piecemeal development, however, presents more opportunities than large-scale projects as far as the government is involved to secure the public interest.¹ The intervention of local governments in the design process have evolved from purely zoning to policy formulation. There is no city in North America without controls or policies which attempt to direct the

development of downtown areas. Even Houston, Texas that claimed to be the only city without such controls has realized that the piecemeal development without coordination has resulted in an urban environment that it is only famous for the architectural image of its skyline and not for its achievements at pedestrian level. This has forced the local governments in Houston to prepare an interim design plan for Houston's central business district² (Fig. 5.1) Zoning has been the traditional tool to control development in all the other central business areas of other cities. It is important to describe the zoning process to understand the basis of present urban design practice.

5.1 ZONING

Zoning legislation implies the control of development by part of the government over private property. Governments have been supporting zoning as a means to protect the public interest. Zoning underlines the assumption of defining what cannot be developed in a specific property because of its possible negative impact on the neighboring properties. However, it is important to mention that zoning usually looks to control the quantity, bulk and height, of the new developments, but rarely focus on the quality of



An Interim Design Plan for Houston's Central Business District

Figure 5.1.1.

(Source: Central Houston Inc. 1984)

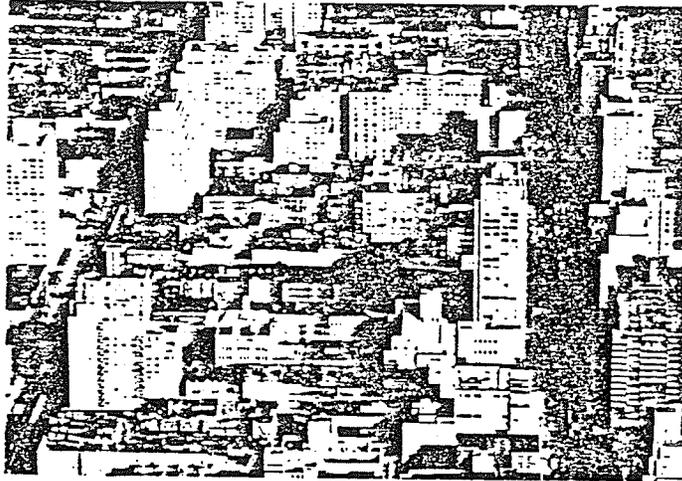
it, functionally and aesthetically. Functionally in relation to the communication systems, either pedestrian or automobile, and in how to achieve a "balance" between these two important elements. Aesthetically, some zoning by-laws are enacted to protect the visual environment, such in the case of signs or colors but they do not address the visual-aesthetic values of urban spaces. Zoning also regulates land use and development density, in order to promote an orderly urban structure according to infrastructure capacities and growth policies. (See Fig. 5.1.2)

Some contend that zoning has become a "suburban tool"³ to the detriment of innercity areas, a radical turn-around from the purposes of the first zoning by-laws enacted in the North American context. These by-laws have as a principal goal the imposition of minimum standards of light and air for streets, particularly in central business areas.

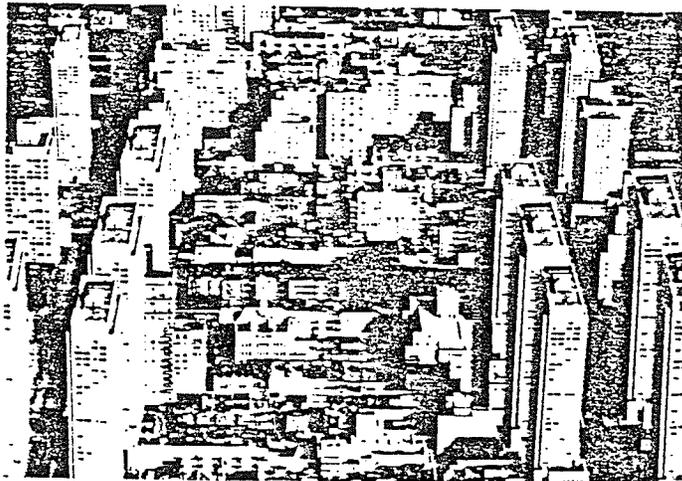
The most common method of regulating building form is the application of some mathematical formulae. Four simple geometric restrictions that were and are still in use are: setback, lotcover, height and angular planes such as those shown in Figures 5.1.3. Even though, zoning has evolved and become more sophisticated as it will be described in the next

"If a city can get the buildings it asks for, why can't it get the buildings it wants?"

A Manhattan block as it is today . . .



. . . as it would look if it were fully developed in accordance with the zoning



. finally, what would happen if the highest-density zoning were extended to the middle of the block, as many developers wish.

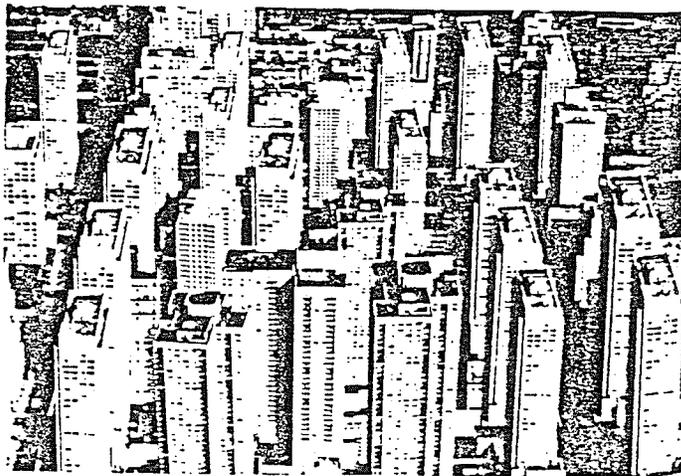


Figure 5.1.2.

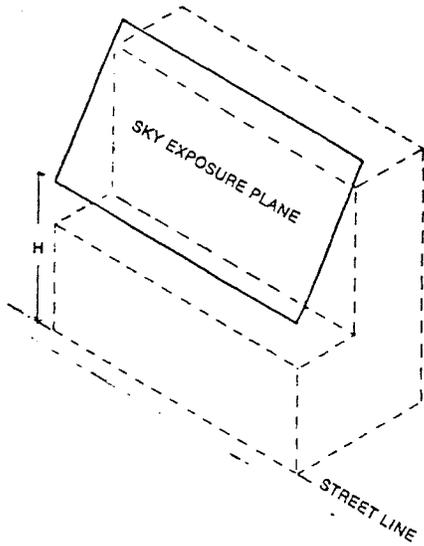
(Source: J. Barnett 'AN INTRODUCTION TO URBAN DESIGN' 1982, p64)

Figure 5.1.3.

SKY EXPOSURE PLANE

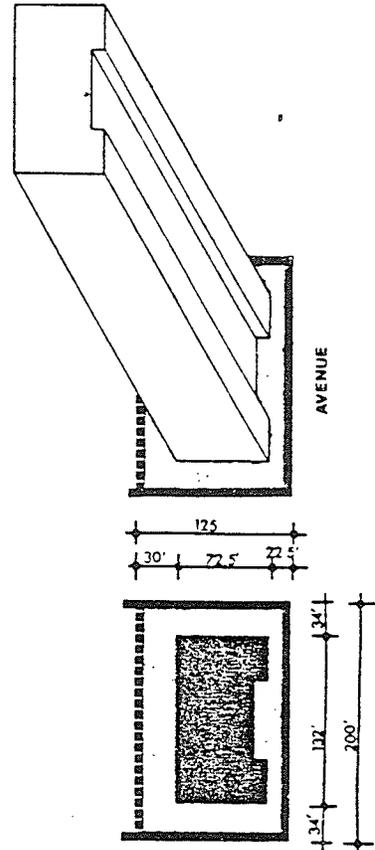
A sky exposure plane is an imaginary inclined plane:

- (a) Beginning above the street line (or, where so indicated, above the front yard line) at a height set forth in the district regulations and
- (b) Rising over a zoning lot at a ratio (of vertical distance to horizontal distance) set forth in the district regulations.

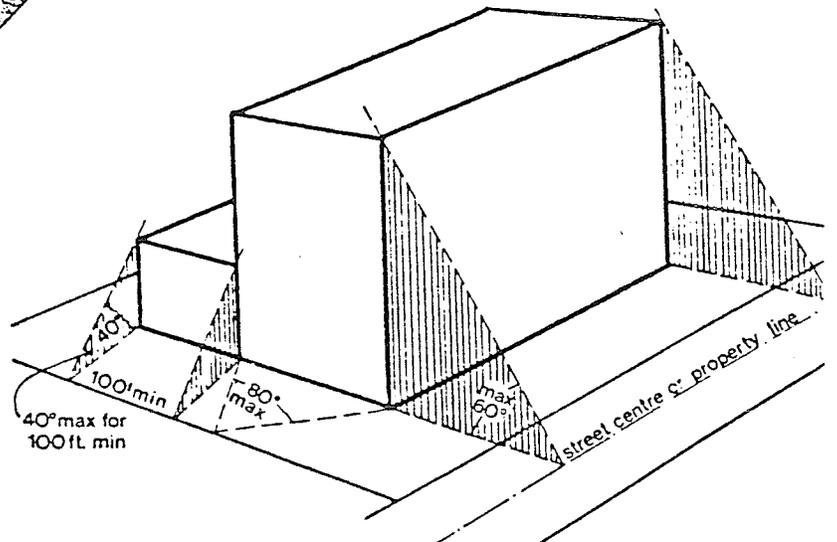
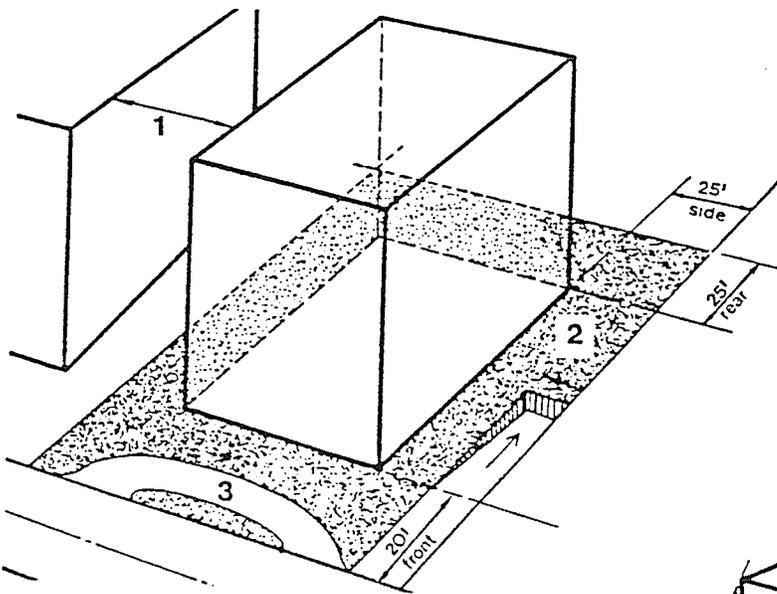


H = maximum height of front wall and starting point of sky exposure plane

Another illustration of the way zoning requirements shape design. The black area is the only permissible place on the lot for the building.



(Source: J. Barnnet 1982)



chapter. What is really necessary now is an analysis of zoning and the theories for or against it.

Zoning is regarded as one of the best mechanisms to protect property values by a proper designation of land uses. Two values of the property must be taken into consideration and zoning in the central business district will vary accordingly to the political pressures to maintain those values. The first is the value of the land itself, which changes in the downtown depending of the use of land; land values in Downtown are generally high due to the possibilities of increasing the density of a small area designated by zoning legislation. The second is the value of the structure that occupies the specific piece of land. Usually this value depends upon the use of the building and the value of the land. When a structure value is less than that of its zoning potential, the first step would be demolish and built up to what it is possible by zoning by-laws, although this limit can be reduced if the change is supported by politicians or the citizens. In cities where public support is minimal, zoning favours private development. However, in cities with strong public participation, zoning is a very legal tool to fight "negative" development from part of the citizenry represented by community groups. These debates tend to focus on the general planning concepts

with little attention to urban design aspects This is why we may find parking structures without any aesthetic appeal, hence reducing land and aesthetic values of both the property and its neighbouring properties.

Another argument put forth, which is especially true in historical districts, is that zoning preserves city character. It also protects urban character through height and bulk controls combined with form standards. What is even more important, from a point of view of urban design in local governments, is that zoning is an instrument to control private developers and bring them to the table of negotiations, where techniques such as incentive zoning and design standards can improve any project, to the benefit of all.

On the other hand, zoning is static and zoning maps do not reflect the variety of uses and activities of the central business district. Zoning as a tool of the traditional comprehensive plan does not keep pace with changes in society. This problem is due to the absence of a system to modify zoning by-laws in the light of new events in the city. Although in practice, the case can be totally different as Babcock points out:⁴

"From Minneapolis to Atlanta from Seattle to Boston, the refrain was the same: 'Zoning is meaningless downtown!' You wouldn't waste your time on zoning, 'You could build the Empire State Building under our ordinance.' 'Our F.A.R is 25 and that can be waived.' The IDS Tower in Minneapolis soars over all other downtown structures, and it did not consume all the F.A.R permitted . . . If . . . controls in the business centre are tough, that appearance may be misleading."

Zoning in the central business district has been as flexible as it can be; developers argue that any new development will bring new revenues and new employment to the city, this could be true, but there must be an emphasis on the quality of the environment. Excessive F.A.R (floor area ratio) that allows too much, decreases the bargaining power of local governments.

Another problem of modern zoning practice is that zoning now dominates the planning functions of local planning departments as a whole.⁵ Some local planning agencies are almost dominated by zoning administration and by building inspection functions. Planners responsible for the quality of development focus only in the preparation of a report stating the conformance of the project with the current zoning by-laws. However, in cities like New York and San Francisco, zoning is a tool to achieve high urban environmental quality and other different development goals, such as a reduction of vacant office space or direct growth in

the Central Business District.

Zoning, for its legal basis, offers a great variety of alternatives for the implementation of urban design policies. In the majority of cities, zoning has been an underutilized mechanism for urban design. This brief analysis of zoning shows us that the arguments in favor of zoning overcome those against it, and that urban designers should be knowledgeable of zoning techniques, especially architects.

It is necessary to understand some zoning techniques before going into the detailed analysis of case studies, where zoning has been the principal tool to develop and implement urban design policy. Incentive zoning and the creation of special districts are the two most important of these techniques.

5.2 INCENTIVE ZONING

The concept of Incentive Zoning was used for the first time in a zoning by-law in the comprehensive revision to the Chicago ordinance in 1957. Incentive zoning implies that the value of downtown land is a function of zoning regulations. It is a technique developed by local governments to tell developers that in exchange for certain public amenities, they can get more developable area, recognizing with this the rights

of owners over their properties. And the bonus provision has been the respond to this exchange, or better known as the F.A.R. bonus.

Incentive zoning also challenged the traditional process of development, in which one owner could only apply his development rights on that property. The technique known as Transfer of Development Rights (T.D.R.) was developed.

The success of both techniques depends greatly on the political will of the participants in the planning process, since it is often necessary to "downzone" present zoning by-law limits. If everything is allowed, these incentives would be ineffectual.

5.2.1 F.A.R. Bonuses

Zoning bonuses are given to a developer in exchange for public amenities, urban furniture or urban spaces which the local government consider important to improve the environment of the Central Business District. As a result, an increase of densities in the area takes place reason for which it is important to determine the physical capacities of the infrastructure, sidewalks, and transportation networks. In theory, the profit for developers, after increasing density with bonus, should be equal or slightly higher

than to the costs incurred by the developers when providing such amenities. Fig. 5.2.1 represents such a system.

In legal terms, there have been very few cases of municipalities being challenged in court to prove the validity of the bonus system. The legal basis for zoning bonuses stems from two traditional concepts: the concept of externalities, and the concept of the general welfare.⁶

The legal analysis of externalities considers the consequences of any structure in downtown, such an increase in traffic congestion, blockage of light and air. These externalities are measured in cost-impacts on the city, thereby forcing the developers to compensate for these impacts. However, given the political structure of our society, bonus incentives create less friction and stimulates development opportunities. "There must be a clear relationship between the density, bonuses granted and the amelioration of the externality, provided by the required amenity. If the increased density that is given as a bonus is clearly balanced with the amenity which will partially ameliorate that externality, the externalities analysis can be used to justify the trade-off."⁷

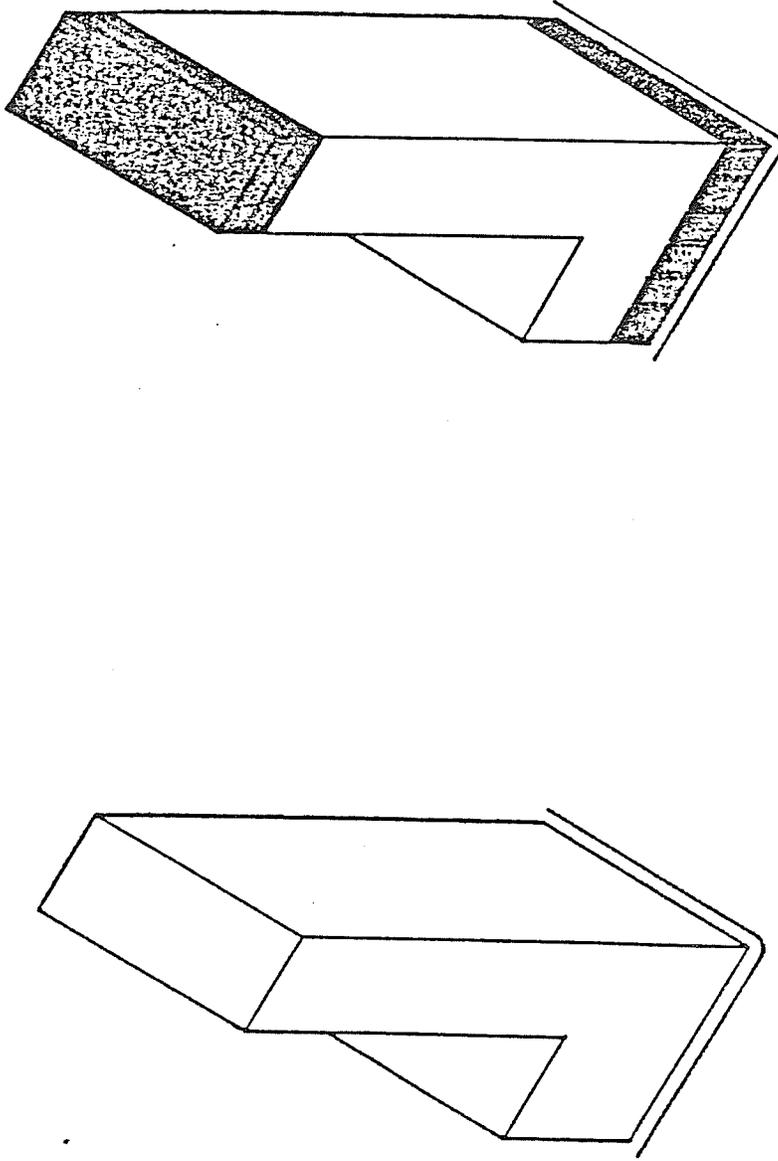


Figure 5.2.1.

A Typical Zoning Bonus°

A. Office building utilizing maximum FAR with no bonus B. Office building with an amenity (arcade) for which a zoning bonus of additional floor area is awarded.

(Source: J. Coston's 'SPACE ADRIFT' 1969, p31)

The general welfare concept argued to support the provision of bonuses suggests that regulatory measures can "require actions to enhance the environment."⁸ It is an extension of the concept expressed in terms of protection of the health, safety, and welfare of all citizens of the community; as stated by Michael Heyman:⁹

"Essentially a developer, under the broader interpretation, may be asked to absorb a reasonable cost for the benefit of others. Regulations may induce particular developments to be undertaken because it is in the general interest that this be done. Consequently, an indication that the regulation is based on broad social objectives will add considerable support to the general welfare rationale. In these cases, ameliorating external harm is not the issue, as it is in the externalities argument; rather it is the limitation of the use of one's property or a portion of it and the request to absorb certain costs for the benefit of others."

Usually, in the cities where "good administration" is part of the planning process, developers accept the requirements as a right of the city, in as much as the city offsets development costs with bonuses incentives. The externalities and welfare concepts, give the bonus technique its *raison d'être* before the courts. As it will be seen in the next chapter, this technique is both valid and useful to city planning agencies where urban design is an important component.

Some of the typical purposes of bonus provisions are outlined by Mary Brooks as follows:¹⁰

1. Improve pedestrian circulation
2. Improve access to transportation facilities
3. Increase light and air, including view protection and enhancement
4. Increase pedestrian amenities
5. Increase construction of desirable uses in the area

The San Francisco Downtown Zoning Study provides a definition of the purpose:¹¹ "The primary purposes of these development bonuses are: provision of good access to buildings, and improvement of access to properties, from the various forms of transportation serving the downtown area; improvement of pedestrian movement into and out of buildings, along streets and between streets; provision of pedestrian amenity by means of ground level open space; arrangement of buildings to provide light and air to streets and to other properties; and protection and enhancement of views."

Philadelphia is modernizing its zoning code to accommodate present development proposals which equal more the six million square feet of new development in its downtown area. An analysis done by the staff of the planning department found that the system of floor area bonuses rewards dull, lifeless ground floors while

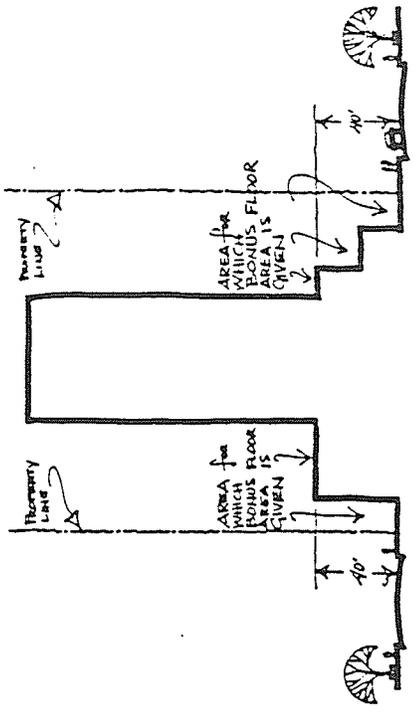
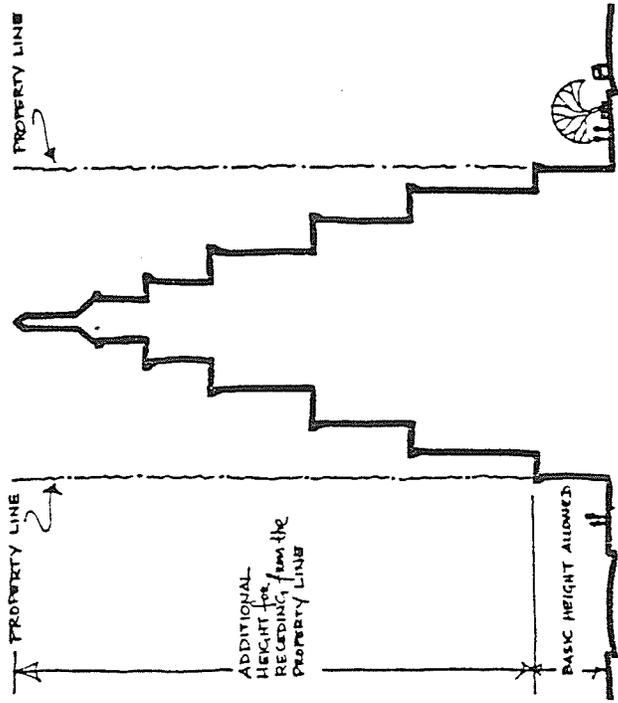
penalizing designs with such pedestrian amenities as skylighted open areas, atriums or greenhouses.¹² Planners sometimes have applied this technique, but without going into the detail of the quality of the amenity provided by the developer. The Philadelphia system concentrated mainly in the concepts of "recession plane zoning" and open area bonuses (Fig. 5.2.2) of individual buildings, although its zoning by-laws falls short of proposals when dealing with the way individual projects relate to each other. Bonuses should not be thought as substitutes for sound planning principles and architectural quality.

Bonus Provision Technique have a very important role in urban design, for being both flexible and a bargaining tool that if well administered will have as a result the direct of Downtown as an urban element of the city.

5.2.2. Transfer of Development Rights

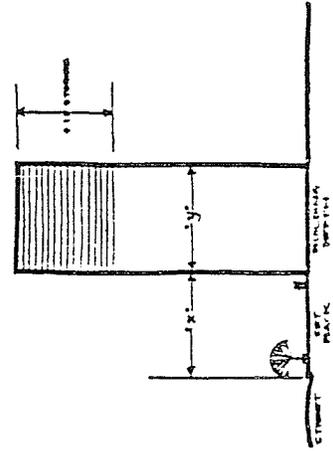
The transfer of development rights from one property to one or more different properties is far more complicated than the bonus system. The purpose of this transfer is to relieve the market pressures that threaten low-density uses, such as landmarks and open space. (Fig. 5.2.3)

Figure 5.2.2.

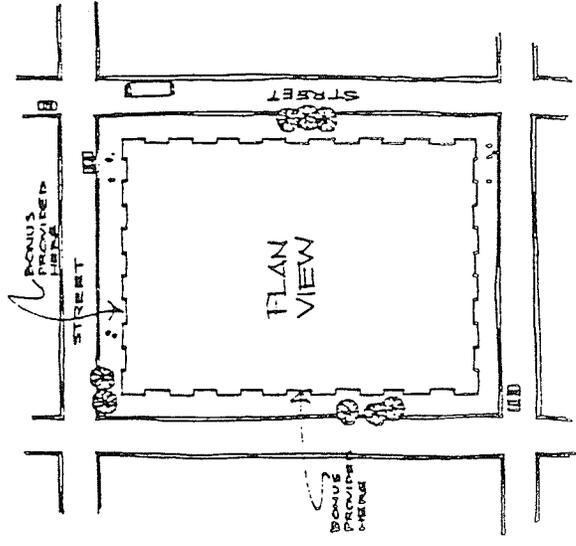


OPEN AREA BONUSES

RECESSION PLANE ZONING



IF x IS GREATER THAN 10' AND IF y IS EQUAL TO 4' 15" STORIES ADDITIONAL IS ALLOWED.



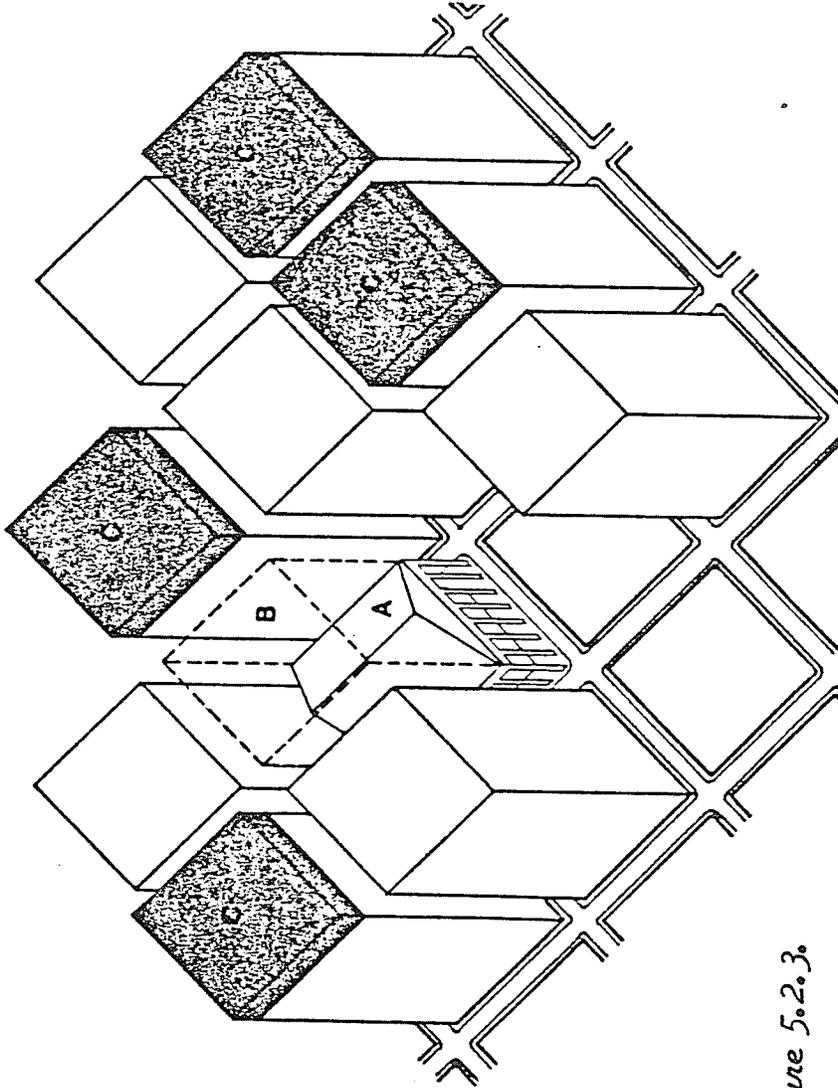


Figure 5.2.3.

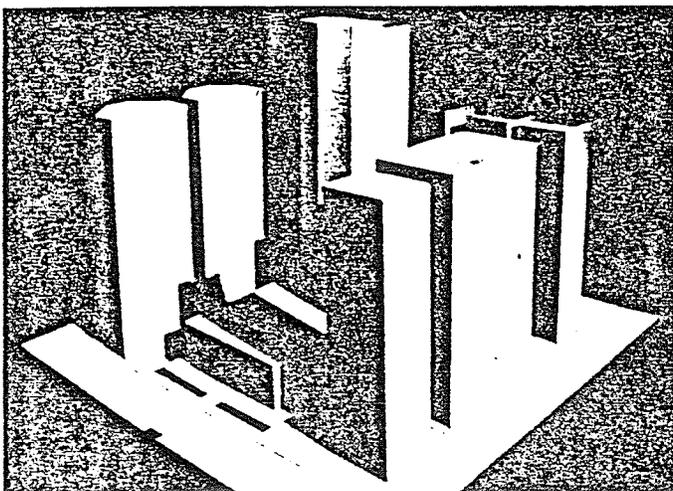
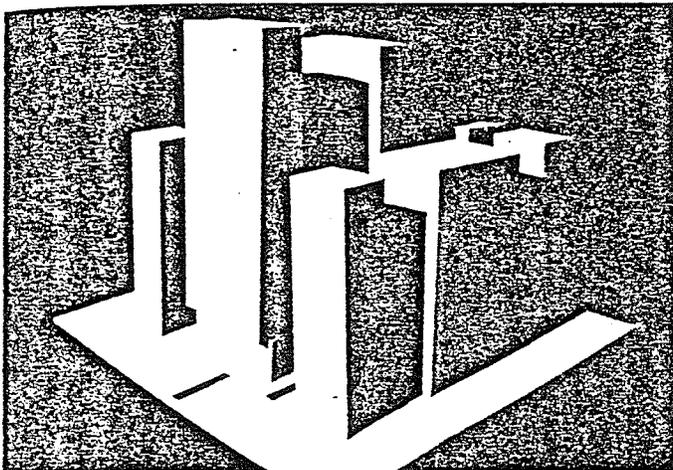
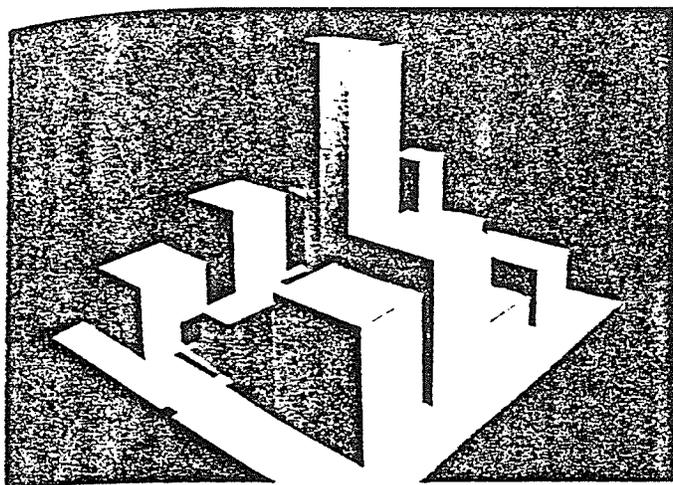
Development Rights Transfer

The landmark building (A) utilizes only a fraction of the development rights of the site, the remainder of which (B) are transferred to various other sites within a transfer district and appear as additional bulk (C) on neighboring buildings.

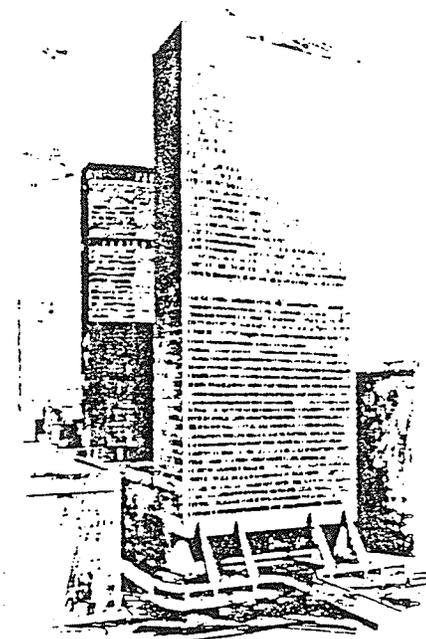
Professor John Costonis is the principal exponent of the theory of transferability of development rights. In his words, "Development rights transfer breaks the linkage between particular land and its development potential by permitting the transfer of that potential or development right, to land where greater density will not be objectionable."¹³ The concept of transferable development rights is increasingly becoming a tool of municipal governments to achieve urban design, preservation, and land use goals, thereby underlying the principle that the development potential of privately held land is in part a community asset that government may allocate to enhance the general welfare.¹⁴ This was the case in New York where the Grand Central Station was designated as a landmark in 1967; However it was proposed to develop the air rights of the structure in such a way that the landmark building would not conserve those characteristics which were crucial to the designation. Fortunately, the urban design group of the city of New York proposed a system of Transfer Development Rights - T.D.R - which was adopted to preserve the identity of the structure. (Fig. 5.2.4)

Usually local governments establish conservation areas and transfer areas. New development is not allowed in conservation areas, while transfer zones are

Figure 5.2.4.

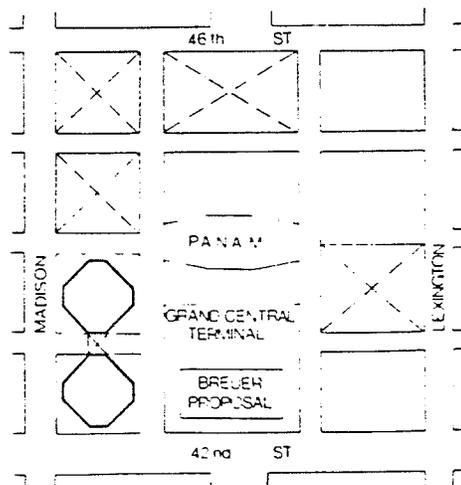


(Source: J. Barnnet, 1982 pp41-43)



One of the proposals by Marcel Breuer for a building over Grand Central Terminal. This version would have removed much of the principle facade and obscured the rest.

The top block model shows the area around Grand Central Terminal as it is: Center: as it would have been if the Breuer proposal had been built and other nearby blocks also redeveloped: the third model, bottom, shows the Urban Design Group proposal to use the air rights to redevelop two sites to the west, also shown in the site plan below right.



the receivers of the development potential. These transfer areas are suitable to increasing densities due to their infra-structure and service capacities. As in the bonus system, these areas have a density limit that can be exceeded by the purchase of development rights from conservation zone landowners; this transference allows the marketplace to "compensate the owner of land where development is restricted by allowing him to sell that density to transfer zone landowners."¹⁵

Air Rights Transfer is maybe the most used technique in downtown areas. Air rights market results from the designation of landmarks, open space, in addition, cities are now selling air rights over streets, sidewalks either for skywalk bridges or for high rises that need large parcels which usually are not found in some areas. The two major types of air transfer are:

- (1) When the owner has not built anything yet and sells his air rights to those who seek to keep the land as open space.
- (2) Those instances where there has been development, but it is such that additional use of the site's air rights can be made. Prime examples are the construction of buildings above railroad lines and highways.¹⁶

The basis of transfer of development rights arises mainly out of a concern that zoning controls confer

substantial benefits on some owners while restricting others.¹⁷ Michael Meshenberg summarizes the arguments in favor of T.D.R as follows:¹⁸

- (1) Reduction of arbitrary and inequitable 'windfalls' and 'wipeouts' which frequently accompany governmental use of zoning ordinances
- (2) More effective preservation of environmentally sensitive areas, open space, and historic buildings; and more efficient use of land for earmarked for development
- (3) Unification of plans and programs for development and environmental protection
- (4) A shift of the larger share of the total social cost of new development to the developer and ultimate consumer; and
- (5) Recoupment of a portion of private gains created by public investment

On the other hand the following are some of the constraints in the T.D.R. planning process:

- (1) The system must be legally defensible
- (2) The formula for issuing development rights must
 - (a) fully reflect the loss and values of those who are denied the right to develop their lands and
 - (b) easily administrable
- (3) The supply of development rights and the demand for them must be such that (a) their value does not fall below their value when issued and (b) developers will be encouraged to or can be required to make use of them because they can make a reasonable profit in doing so.
- (4) A Transfer of Development Rights system must have safeguards against fraudulent issues and transfers, hoarding, dumping, etc.

- (5) The establishment of a Transfer of Development Rights system must not result in an overall loss in tax revenues.
- (6) The Transfer of Development Rights must be politically acceptable.

The impact of this zoning technique on urban design is mainly concentrated in the administrative stage of the planning process. Usually, instead of affecting or modifying, built form affects the intensity of use in the area. Besides being a "fair" process to private owners who have lost their rights to develop their properties, transfer of development rights is also a bargaining tool; however, the applicability of this concept depends in great manner on the political will of the participants with interest at stake; since it is possible to augment the density of a property many times, governments must look for an equitable process to protect the public interest.

To provide developers with incentives, bonus and transfer of development rights, cities have been designating some areas as Special Districts where zoning requirements are either flexible or very strict.

5.3 SPECIAL DISTRICTS

The first kind of Special Districts to emerge were those dealing with historic preservation. It was an

answer to the current zoning ordinances that did not provide the "protection" required in such historic areas. They have become known as: "Special Public Interest District" which emphasizes the public interest as the main concern. Such districts focus not only on historic preservation but also in areas under great development pressure. In the latter case, special Public Interest Districts are formed when actual zoning ordinances are too strict to permit and promote new development, or on the other hand, when new development is not controlled at all. In both cases, the creation of such districts is directed towards more flexibility in the development process as well as towards a more comprehensive analysis of the area.

Some of the characteristics necessary to provide flexibility and comprehensive analysis are:¹⁹

- (1) The statement of intent. Setting forth the nature of the special and substantial Public Interest to be served by the regulations.
- (2) The effect of the regulations. Special Public Interest Districts can either substitute completely previous zoning regulations that are in detriment of desirable new development in the area, or can modify present legislation, all depends on a previous analysis of the need for the Special District in consideration.
- (3) Procedures. Administrative procedures should streamline the process of development applications, but being careful of not sacrificing the public interest for the "speed" of such process.

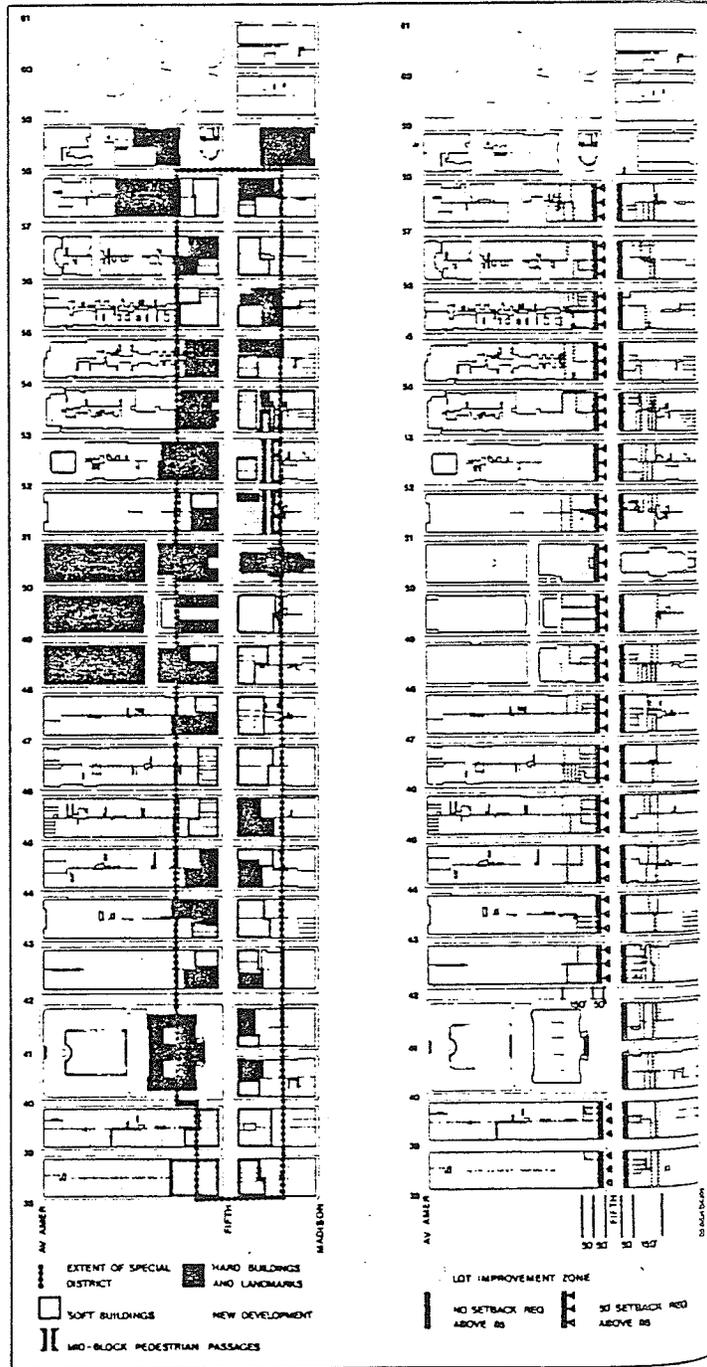
The above areas of analysis have been applied in the creation of the special district, especially in central business districts, although its use is not only confined to downtowns.

Downtown special districts are also regarded as implementation techniques which really allow municipal governments to facilitate or build planned projects that otherwise, would have been shelved. In other words, special districts are created due to the desire the development activity carried out in a more business-like manner than is true of governmental action.¹⁹

Downtown Districts now embody all of the new components of urban design process including bonus provisions, transfer of development rights, design review, and tax mechanisms. Local governments define such special districts as the areas from which economic and social benefits can be derived to the city as a whole. Such is the case of the Fifth Avenue Special District in New York (Fig. 5.3.1) enacted after department stores and other retail businesses reacted to the lack of protection applied to new development. Barnett, in his book "Introduction to Urban Design", points out:²⁰

Figure 5.3.1.

Maps describe some of the provisions of the Fifth Avenue Special Zoning District. The buildings outlined as "soft" are those judged likely to be redeveloped at some time.



(Source: J. Barnnet, 1982 p82)

"To a visitor strolling along Fifth Avenue, the substantial limestone buildings may seem of the most permanent things imaginable. To a real estate developer, the view is quite different. With a map of the underlying zoning in mind the developer knows that many sites along the avenue are "soft"; that is, the zoning would permit a far larger building than is there right now. Although Fifth Avenue is midtown's most expensive land, the demand for office space makes it economic to redevelop, which had not been anticipated when the underlying zoning map was drawn in 1961 . . . If real estate considerations not related to retailing were to dictate that a substantial portion of the street become plaza space, or banks and airline ticket offices, there would be a powerful adverse effect on the rest of the stores."

The intent to create the Fifth Avenue Special District was to consolidate the traditional retail function of the area. At the same time, planners realized the importance of having a mix of residences, offices and shops in the same building to increase the livability of Fifth Avenue. This piece of legislation became the first of its kind in the United States²¹, establishing precedent for other cities.

Minneapolis has created the Mills District that represents a different kind of Special District in this case. The Mills District is intended to integrate the development into the downtown and is the product of a public-private partnership. The development will contain a mixture of condominium and apartment units, office space, hotel space, and retail and restaurant

space. (Fig. 5.3.2) The plan for the Mills District was developed in consultation with different interest groups. The land use plan of the area, is in conformance with the objectives stated in the Minneapolis Plan for the 80's where it is specified that "land uses should be residential and commercial, and the mixing of land uses should be encouraged but controlled so that a residential environment is maintained.

A third type of special district is found in Memphis where the Biomedical Research Zone was created to play a significant role in the economic development of the city, being the health care industry a significant factor of the city's economic structure. The idea emerged with the realization that the medical field was an excellent means by which Memphis could capture a share of the growth in high technology employment. The focus of this redevelopment is to be the expansion of the area's employment base through the location of medical businesses near the focal point, of the district. The Plan will designate suitable uses and their general location, as well as the simultaneous definition of transportation and urban design programs.

These three examples give us an idea of the variety of purposes for which special districts can be created. The Urban design process has benefited from

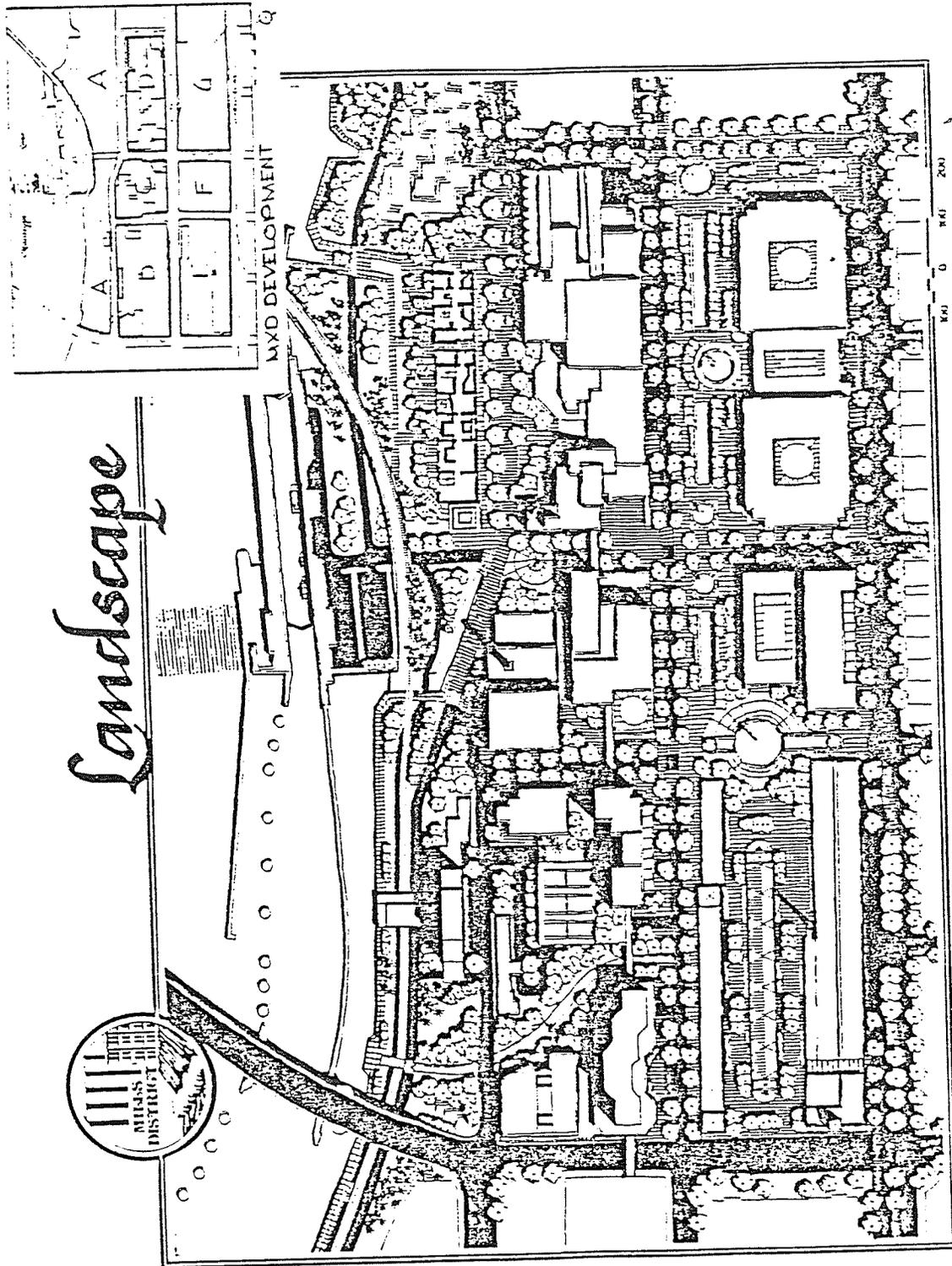


Figure 5.3.2.

(Source: City of Minneapolis 1984)

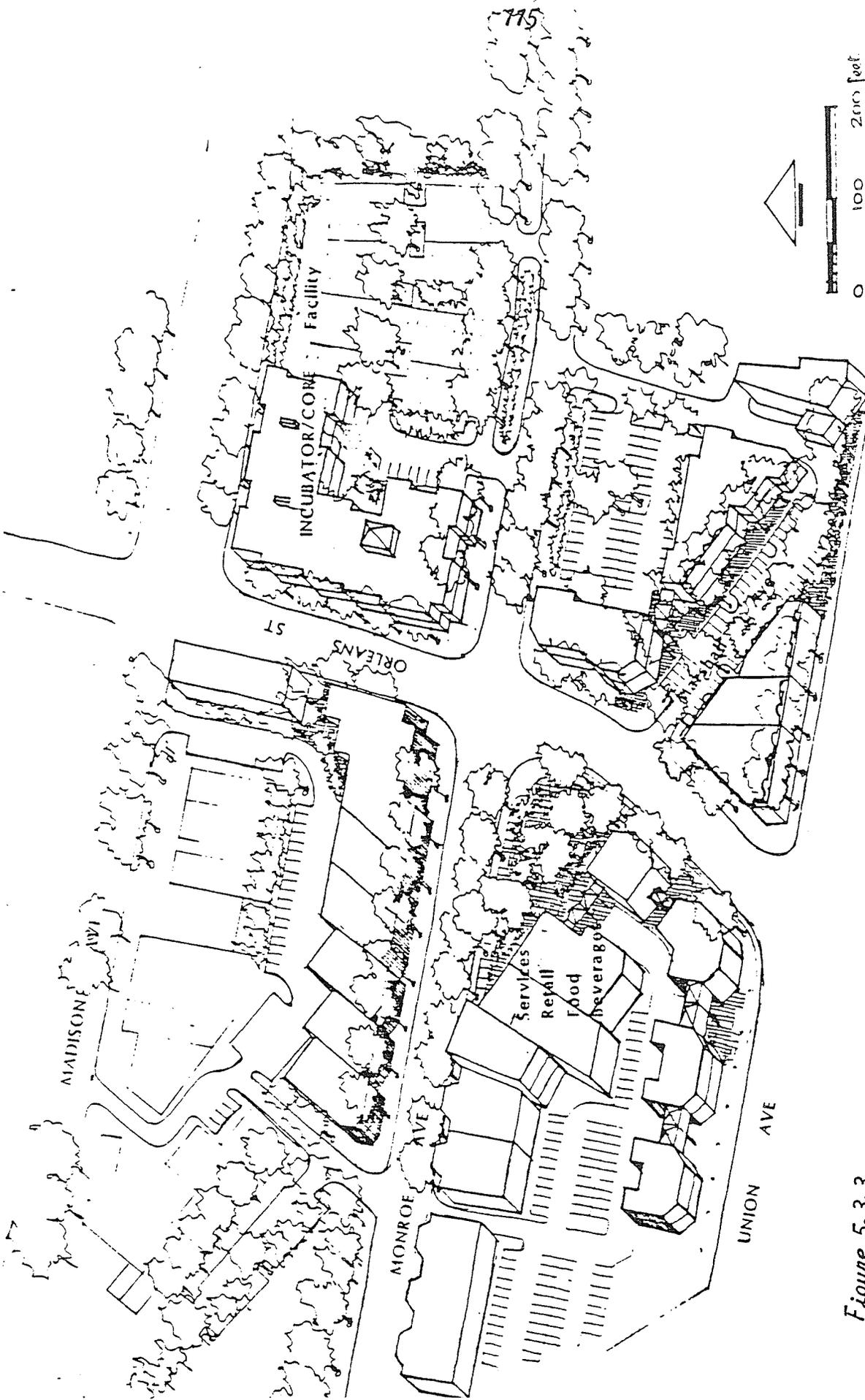


Figure 5.3.3.

BRZ ALTERNATIVE B,1

FROM: B Alternative for Target Area's Commercial Center

1 Alternative for BRZ Incubator/Core Facility

Memphis & Shelby County
Office of Planning & Development

(Source: City of Memphis 1985)

these techniques thanks to their flexibility. Special districts are a responsive zoning technique which, if well administered, can improve the life and built form of our cities.

This chapter studies different techniques to implement urban design policy both in the United States and Canada. The focus is on how those mechanisms do have a direct impact on urban design and on the overall development of the city. Financial incentives are becoming an integral part of any design policy, and without any doubt they are excellent tools to manage the physical and economic development of the Central Business District. However, the idea is that financial mechanisms implement plans and not the other way around; many cities that use financial incentives to attract investment without a coherent plan for development have found that the economic return has been less of what was expected, and even worse, the physical environment has not improved with higher economic investment.

The following techniques range from public-private partnerships to loans for rehabilitation and preservation of significant structures. The study covers only those techniques most significant for urban design and leave aside those that are more directed towards economic development. This does not mean that

they are independent of each other; on the contrary, they are closely related but for the purposes of the thesis, only those financial techniques with an effect on the physical development of Downtown are considered.

5.4.1 Public-Private Partnerships

Public-Private Partnerships have emerged from the realization that neither the government nor the private sector could rebuild and improve the economic, social and physical environment of the city. Alone there had been an increasing need for a close co-operation to facilitate the process of achieving redevelopment objectives in the Central Business District. Partnership "entails participation by (1) an entrepreneurial city government, (2) a resourceful developer, and (3) local business leadership."¹⁷ There are three important steps for the urban designer: feasibility and planning, construction and leasing, and operation. However, his role will vary according to his expertise (architectural design and planning, and through the whole process, management and evaluation of the project.) Urban designers are involved from the beginning of the project even before a development partnership is agreed upon, and they are found in either of the three sectors described above, in the

government, in the development sector, and in the business community.

These three groups have always worked together. However, in the eighties, three trends have marked a breakdown of their traditional roles, especially when the government sees itself no longer as a facilitator but as an investor. The trends are outlined by Will Fleissig as follows:¹⁸

1. Political Realities - the move away from urban-related programs in federal priorities: funds and personnel for planning, community development, and urban design which will continue to be severely cut as basic city services (fire, police, sanitation, sewer and water) consume most of the money. The competition for public money will increase dramatically as human services, education, welfare and social security fight to maintain their share of the pie.
2. Economic Realities - the costs and associated risks of financing real estate projects will continue to skyrocket. The pressure on small and medium-sized developers, coupled with the high interest rates of the past four years, have focused the majority of development opportunities toward large companies with thick wallets. For those firms with substantial financial power and the ability to hang on during the lean years, the rewards can be substantial, and therefore, warrant the risks of public approval and swings in market demand for their products. While the smaller developers will survive and even thrive in some instances, the basic trend will be toward the involvement of a small group of large developers, institutions, and businesses in most new construction projects.
3. Design Realities - The increasing control that zoning, building and energy regulations exercise on the design of all buildings. Architects are losing control over some of the basic elements of design due not only to government regulations but also to economic realities imposed by developers.

In public-private partnerships, the government usually relies on the private sector for the development of a site owned by the government. Gross explains as follows the objectives of the government agency and the private sector:¹⁹

Public Objectives:

- (a) obtain construction of its building without being obligated to contribute monies
- (b) obtain monies for value of their lands, either by way of monies at the outset or annual cash flow
- (c) the ability to participate in future growth in value
- (d) no obligation to provide funds
- (e) no responsibility for loss
- (f) an element of control over public aspects of the project
- (g) retain ultimate ownership of land if possible
- (h) structure a project which will be of interest to private industry and which is easily financed

Developer Objectives:

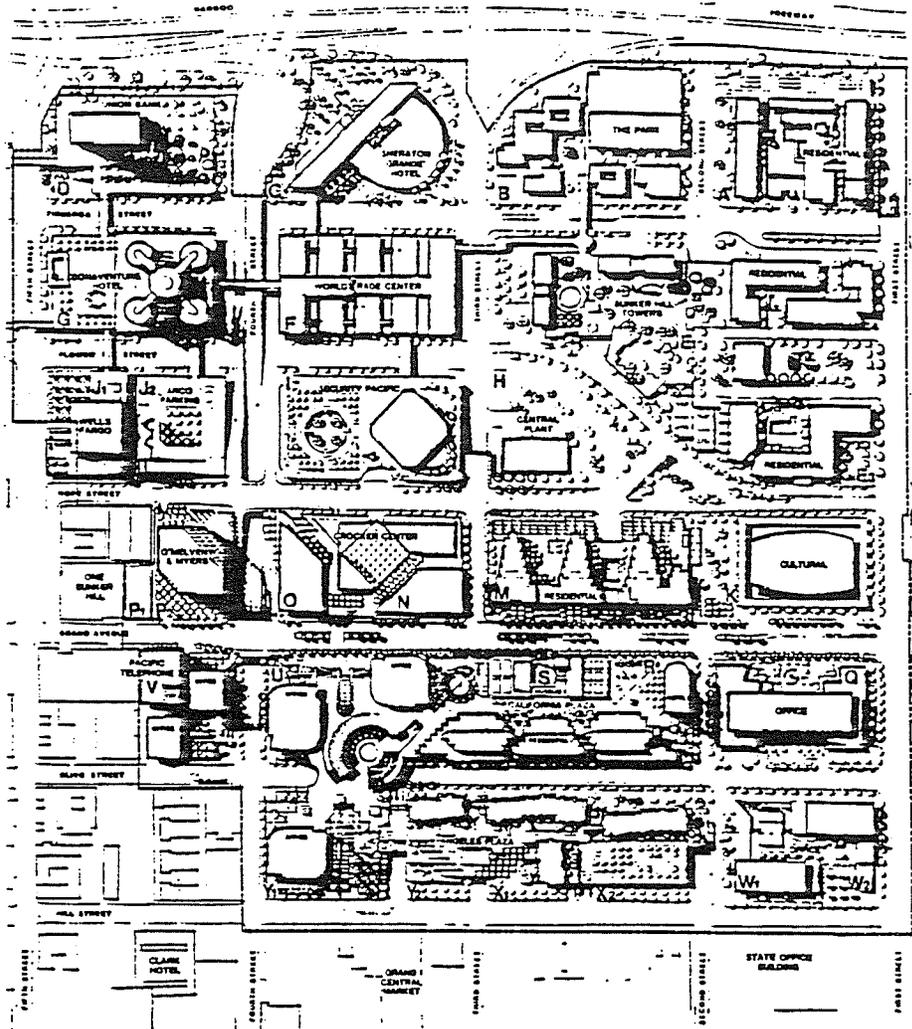
- (a) long term profit and annual cash flow on retail-commercial
- (b) more immediate profit on condominium
- (c) utilization of a government covenant on lease to assist in financing
- (d) retain as much control of the project as possible
- (e) assure ability to finance project and subsequently dispose of project if desired
- (f) preference for land ownership, but acquiescence to long-term lease if necessary

Governments and developers put together a financial package and a legal agreement in which considerations of public access and design are clearly defined. Joint development takes place when a very large project is to be undertaken. An example of the complexity and magnitude of the projects for which public-private partnerships are created is the Bunker

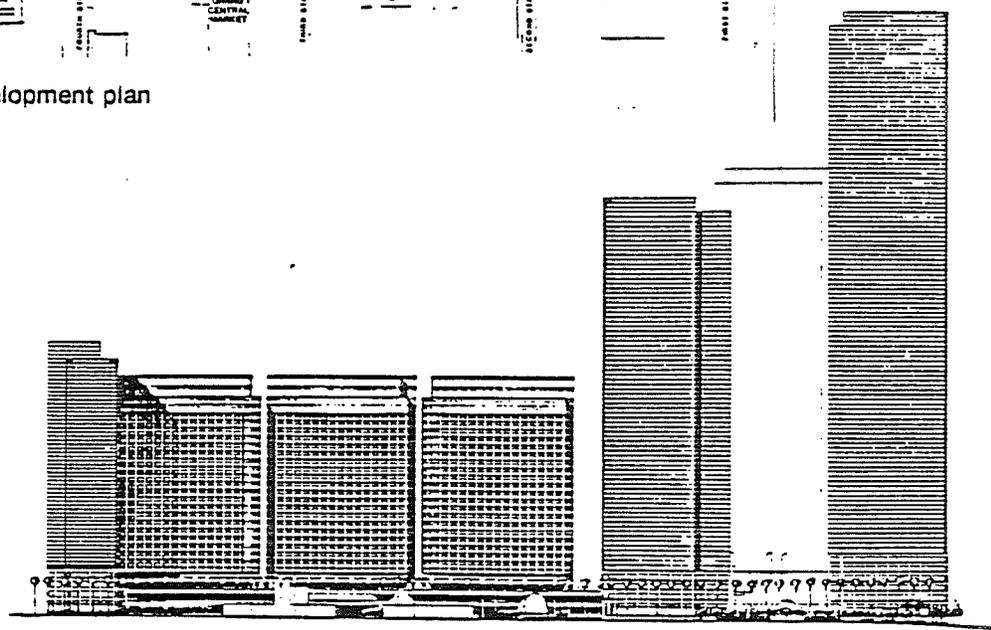
Hill Development Project in Los Angeles (Figure 5.4.1), where new mechanisms provide opportunities for public participation and public risk sharing with the developer. In addition, the developer had to meet some condition imposed by the government such as use, density, design review, fine arts contribution and equal employment opportunity.²⁰ Thanks to the multiplier effect of the development, the government has acquired more adjacent land, expanded its public benefit requirements and increased the revenues for the city while sharing, in a lesser degree, some of the risk. The income generated from land sales and lease payments are being used to carry out redevelopment objectives in many other areas of Los Angeles, and through the use of tax increment monies, the city is providing housing units for low and moderate income families.

This analysis of public-private partnerships and the case study of Bunker Hill in Los Angeles, clearly demonstrates that joint ventures will continue to shape the physical form of our cities for many years to come; and, even more important, partnerships bring to the table of negotiations all the different forces, that before were working separately to achieve a consensus which satisfies all the groups with interests at stake and for the benefit of the city and its people.

Figure 5.4.1.



Bunker Hill development plan



Grand Avenue Elevation

(Source: URBAN DESIGN INTERNATIONAL, Vol. 4 No. 2 Fall 1982, p17)

Now it is necessary to review other financial techniques which are an integral part of joint ventures and sometimes are applied individually or in groups but always as part of a more general policy.

5.4.2 FINANCIAL TECHNIQUES

Their main purpose is to secure sound and stable financing for a development project and also to attract investment into compatible land-use activities. Some of the most important techniques were studied by the Department of Housing and Urban Development (D.H.U.D.) in the United States, and were published in 1983 under the Urban Environmental Design Program, recognizing the importance of financial mechanisms and Urban Design Policy. The report cites thirteen techniques:²¹

1. General Obligation Bonds: The sale of general obligation bonds by a city government allows the city to assemble the capital necessary to pay for major physical improvements. The bonds are backed by the city's full faith and credit and the city is able to put together a large amount of money for important capital-intensive projects and to spread the cost impact over time.
2. Revenue Bonds: Tax-exempt revenue bonds are traditionally applied to development, public parking structures, and self-liquidating infrastructure. Today they are used as the basis for low interest mortgages for single homes, business area revitalization, public land banking and renovation of structures for private office and commercial use.
3. Transient Occupancy Tax: A significant proportion of the tax is made available for downtown projects enhancing the attractiveness of the area to visitors.
4. Special Assessment: The establishment of a special assessment district enables a city to support the cost of a physical improvement by taxing those who will benefit by it most directly.
5. Tax Increment Financing: In this case, the government issues bonds in its own name, anticipating the increased tax revenues from improved properties that will allow it to pay the bonds.²²

6. Innercity Value Estimation Models: This technique focuses on two areas. The first one deals with the actual perception of financial institutions and developers regarding innercity areas, the objective is to create mechanisms to change those values. The second area is designed towards the creation of a new appraisal system based on future values instead of traditional ones such as physical condition and environmental perception.
7. Tax Abatements: Taxes are either partially reduced or ²³totally eliminated for a specific period of time.
 - 7.A Tax Exemption: Property is eliminated from the tax rolls by a special action of local government.
 - 7.B Tax Exclusion: Property is placed in a classification outside the definition of taxable property.
 - 7.C Income Assessment: Taxes are based on the income of the redevelopment project and not on the property value itself.
8. Buy Back Land Fund: The city sells the land to the developer, but if the developer/market conditions make the project uneconomical, the city buys back the land at a rate not to exceed the original purchase price.
9. Community Investment Funds: It is a federal fund for saving and loan institutions. By making money available to associations at a reduced interest rate the program aims to encourage viable investment strategies emphasizing community base specialists, co-operation between private and interests and support of low and moderate-income housing.
10. Equity Participation Loans: The city may become a "partner" in owning the house, benefiting from appreciation at the point of sale, rather than through interest charges.
11. Municipal Loans for Rehabilitation: The government provides loans below the market rate, and are usually targeted to a specific area identified by its poor physical structures and social problems.
12. Revolving Loan Funds: The concept is: a fund is established by a preservation foundation, using contributions, grants and loans to provide a pool of funds. This pool is then used to buy buildings

for sale or in danger of demolition. The foundation restores the building and sells it; the monies from the sale go back to the initial fund and cycle starts again.

13. Capitalizing Non-Profit Groups: It relies on the premise that non-profit groups, if well funded, contribute to the improvement of the physical environment as much as the government or private developers.

These financial techniques are used throughout North America. However, each one has unique characteristics according to those of the city where they are applied. Urban designers could use such mechanisms to promote specific land uses and direct growth in the Central Business District. Examples of their use are found in the next chapter, especially in New York and Seattle.

5.5 Conclusion

Zoning has given local governments the legal basis to protect the urban form and quality of central areas as it was supposed to do since its beginnings. However, zoning in some cities has become obsolete, while in other cities is one of the most sophisticated tools to control and guide private development.

The administration of urban design criteria in municipalities is one of the most difficult tasks an administrator, either architect or planner, has to deal with; it is difficult not only in the application of

technical criteria, but also in the inherent complexity that any urban design project brings with it. Political, economic and social factors are taken into consideration when trying to improve the quality of life in downtown. However, it is such the speed of change of these factors that often renders urban design policies obsolete before they are implemented. Reason for which urban design policies should also be accompanied by economic incentives. Financial incentives are of the utmost importance for the implementation of urban design policies, being the most important the trend to form Public-Private Partnerships backed by tax mechanisms to speed up the implementation process. Zoning and financial incentives are the two most useful tools for urban designers but not the only ones, as it will be seen in the next chapter where we will analyze the urban design policy in four of the leading cities in this field.

CHAPTER FIVE FOOTNOTES

¹For the purpose of this thesis, public interest is defined as the governmental process directed towards the preservation and achievement of an environment which addresses the social, physical and psychological needs of the citizens at large without favouring a special group.

²An Interim Design Plan for Houston's Central Business District, (Central Houston Inc, May 1984).

³Babcock, Richard and Weaver, Clifford, City Zoning Planners, (Chicago: APA, 1979), p.3.

⁴Babcock, Ibid., 1979, p.57.

⁵Goldberg, Michael and Horwood, Peter, Zoning: Its Costs and Relevance for the 1980's, (Vancouver: The Fraser Institute, 1980), p.27.

⁶Marcus, N. and Groves, M., The New Zoning: Legal Administrative and Economic Concepts and Techniques, ed. Marcus, Norman, (New York, 1970), pp.23-65.

⁷Marcus, N., Ibid, 1970, p.45.

⁸Marcus, N., Ibid, 1970, p.46.

⁹Heyman, Michael in Marcus, N., Ibid., 1970, p.55.

¹⁰Brooks, Mary, "Bonus Provisions in Central City Areas," Planning Advisory Service Report, No.257, May 1970.

¹¹From: San Francisco Downtown Zoning Study, Department of City Planning, December 1966, p.6.

¹²Proposed Interim Changes to Centre City Zoning Districts, Philadelphia City Planning Commission, June 1985.

¹³Constanis, J., Space Adrift, (Chicago: University of Illinois Press, 1974), p.32.

¹⁴Hagman, D. and Misczynsky, D., Windfall for Wipeouts, (Chicago: APA Press, 1978), p.532.

- ¹⁵Hagman, D., Ibid., 1978, p.539.
- ¹⁶Hagman, D., Ibid., P.546.
- ¹⁷Robert Witherspoon, Co-Development: City Rebuilding by Business and Government, (Washington, D.C.: The Urban Land Institute, 1982), p.1.
- ¹⁸Will Fleisseg, "16th Street Zoning Project: Lessons From Denver on Establishing Policy," Urban Design International, Vol.4, No.2, (Fall, 1982), p.23.
- ¹⁹Morton Gross, "Various Ways to Package and Finance a Deal," in New Strategies in Urban Redevelopment, a two-day symposium proceedings, (Toronto: October, 1985), p.16.
- ²⁰Edward Helfield, "Bunker Hill Redevelopment Project: Generating Income for L.A.," in U.D.I., Ibid., (1982), p.16.
- ²¹Urban Environmental Design, (U.S. Department of Housing and Urban Development, 1983), pp.102-106.
- ²²Shirvani, Ibid., 1985, p.185.
- ²³Improving Your Waterfronts: A Practical Guide, U.S. Department of Interior, p.6.

CHAPTER SIX

CASE STUDIES

This chapter will describe the urban design techniques used by four cities - New York, Seattle, Vancouver and Toronto - during the late 1970's and early 1980's, techniques that are still an integral part of the planning process. The focus of the studies is on how these cities attempt to control new development either through mandatory requirements or discretionary measures. The techniques range from simple statements of goals to sophisticated mathematical formulas to guarantee a minimum time of solar exposure.

Case studies are important, since from their analysis it is possible to define key elements for successful urban design. However, the success or failure of any technique depends greatly on unique local characteristics - political and socioeconomic, or even on personalities - reason for which any adoption of a technique which is being "imported" must be modified to suit local needs and characteristics.

Each one of the four cities is well known for its degree of sophistication and flexibility at the same time; and maybe, their successes in urban design are due to the balance achieved between strict and flexible urban design policies.

At the top of the list are New York and Seattle, two American cities that are part of the special group of cities where urban design is of primary concern. The other two cities, Toronto and Vancouver, represent the urban design vanguard in Canada.

6.1 New York

New York City has been in the forefront of zoning and urban design since it enacted the first comprehensive zoning ordinance in 1916. Since then the city has been characterized by being one of the most innovative cities when dealing with the quality of the environment in the area of Manhattan. It would be too extensive to review the urban design process since its beginnings in New York. The analysis that follows concentrates on those issues that are significant for the future improvement of the urban design process.

The city's current zoning was enacted in 1961; since then, it has been amended thousands of times. One of the most important elements of the zoning code

was the plaza bonus. As originally enacted, the zoning only prescribed a higher density when developers agreed to provide a plaza space, although it did not contain anything about the quality and design elements of such plaza space. This created public spaces without sunlight or seating facilities, just plain open space designed to avoid future costs of maintenance and upgrading. Another direct consequence of bonus provision for plazas was the disruption of retail continuity and space enclosure in some areas of the central business district. These pitfalls came to be the main criticisms of the urban design achievements of the city; however, the planning department has tried to correct those shortcomings by enacting new legislation. For this purpose, they hired William H. Whyte to study plaza usage in order to recommend design changes. Whyte's results were incorporated into the zoning by a 1975 amendment. The proposals were based on direct observations of the way people use plazas and streets. The purpose of the new plaza urban design guidelines was stated by Whyte as follows:¹

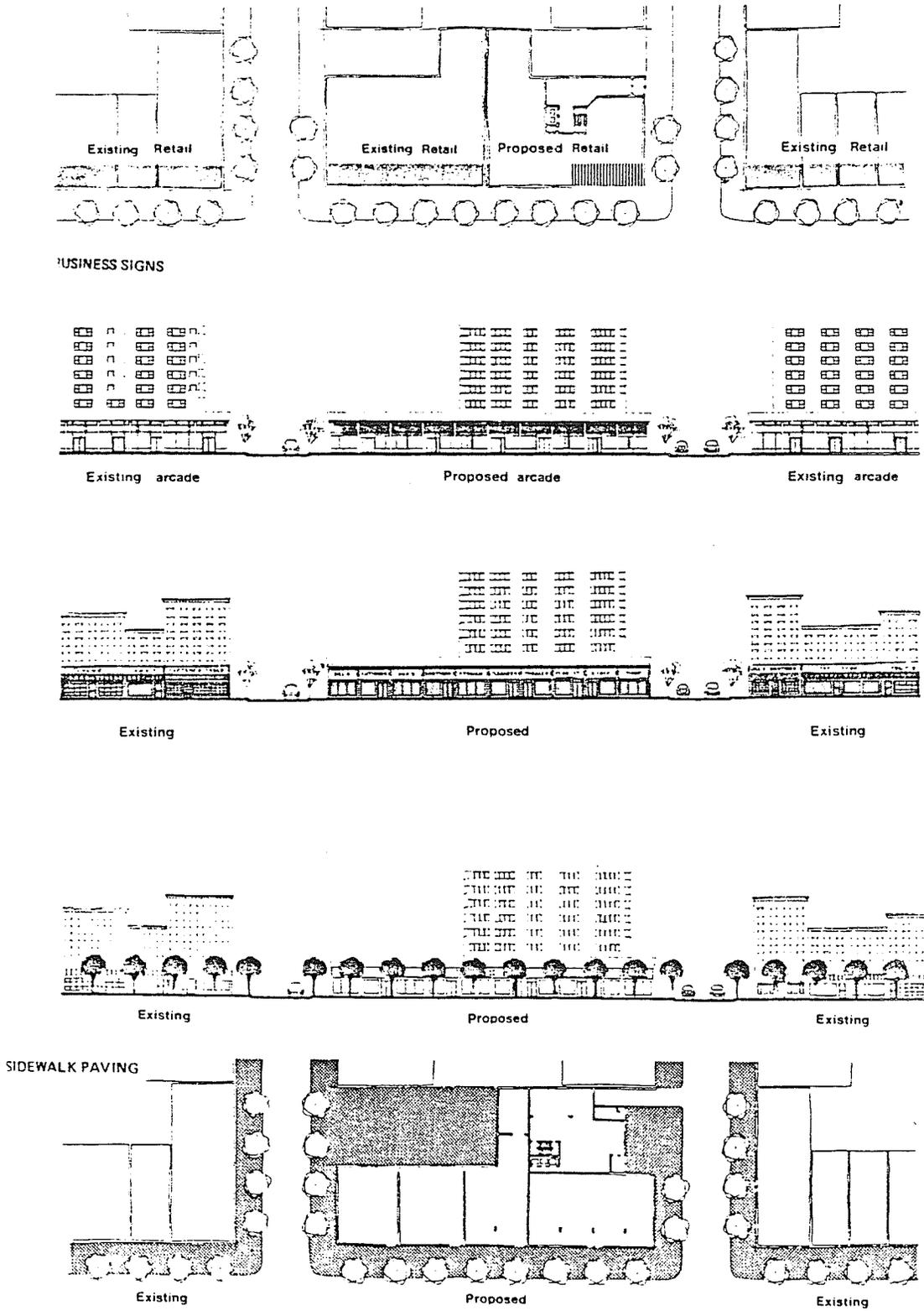
"There is a delicate balance to strike. We have tried to accomplish this by mandating basic provisions such as orienting plazas toward the sun, and including in them trees, seating, and lighting. In the way seating is provided, trees planted, fountains designed, there are unlimited choices and combinations. At the same time, we encourage wide freedom of choice in design and individual architectural expression."

Some of the main goals of the guidelines were to emphasize the importance of pedestrian experiences and perceptions from the street as well as to strengthen the relationship of new developments with existing ones at the street level. Under the guidelines, new developments of differing scales "are integrated with existing buildings to maintain visual continuity, and to continue street activities and shopping. New arcades are continuous rather than interrupted by walls. Blank walls facing the street are treated, so as to be visually pleasing. New trees continue the existing line of trees along the street, and pedestrians are separated from vehicular traffic through curbcuts and paving."²

The following is a list of the different urban design elements taken into account for the development of the guidelines:

- A: Streetscape
 - Horizontal continuity (Fig. 6.1.1)
 - Retail continuity
 - Arcades
 - Business signs
 - Street tree planting (Fig. 6.1.1)
 - Sidewalk paving
 - Streetwall articulation
 - Curbcuts
 - Central refuse storage area
- B: Residential Plazas
 - Primary space (Fig. 6.1.2)
 - Residual space
 - Northern plaza
 - Primary Space
 - Types: Corner plaza
 - Mid-block plaza
 - Through-block plaza
 - Mandatory requirements:
 - Size
 - Proportions
 - Height of adjoining building
 - Orientation
 - Access for the disabled
 - Treatment for adjoining walls
 - Lighting
 - Paving
 - Retail frontage
 - Mandatory amenities:
 - Tree planting
 - Seating
 - Bicycle parking facilities
 - Drinking fountain
 - Additional amenities:
 - Grass and other ground-cover planting
 - Gametables
 - Artwork
 - Fountains and Pools
 - Play equipment
 - Kiosk
 - Open-air cafe
 - Optional amenities: flagpoles, public telephones, awnings
 - Residual space:
 - Visual residual space
 - Usable residual space
 - Maintenance:
 - Maintenance requirement
 - Plaque
 - Vehicle and refuse prohibition
 - Performance bonds

Figure 6.1.1.

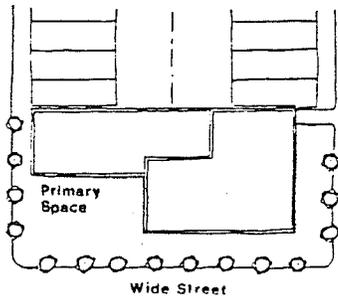


(Source: 'Plazas for People' City of New York 1976)

Figure 6.1.2.

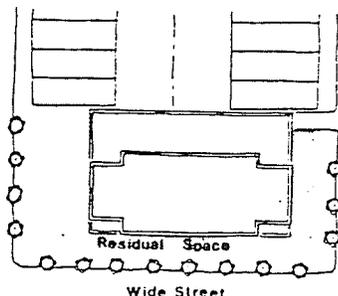
■ PRIMARY SPACE

A primary space is the larger portion of the residential plaza. It is where major recreational activity and public use occurs and occupies at least 60 percent of the plaza area.



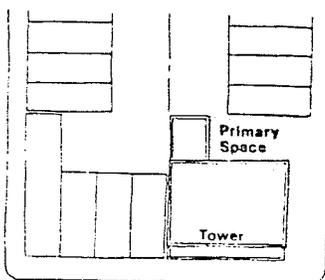
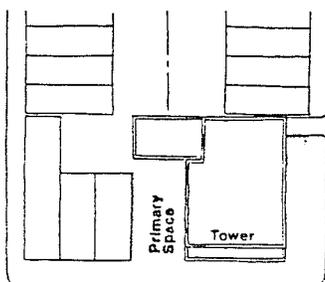
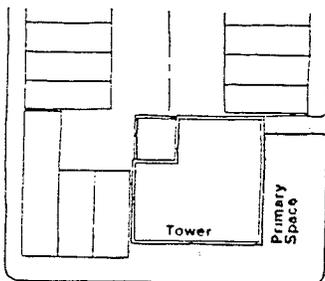
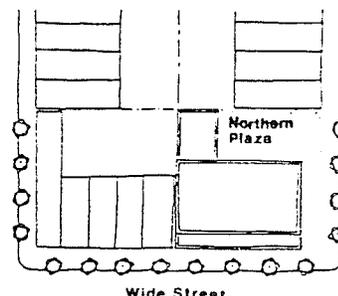
■ RESIDUAL SPACE

A residual space is the remaining portion of a residential plaza. It usually surrounds a building and may be used as a visual landscaped amenity. It comprises not more than 40 percent of the total plaza area.



■ NORTHERN PLAZA

A public space which has no other exposure except a northern exposure is called a "northern plaza" and has a special set of standards for landscaping and seating.



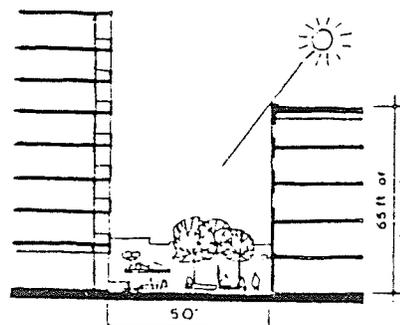
■ PROPORTIONS

Proportional requirements govern the relationship of plaza width to length in order to guarantee the maximum amount of visible plaza space. Following are the proportional requirements for sites with one side that fronts the street:

Zoning Lot Size	Length of Street Frontage	Depth
12,500 square feet or more	X	2X
12,499 square feet or less	X	2-1/2X

■ HEIGHT OF ADJOINING BUILDING

Mid-block and through-block public spaces are permitted only when one of the adjacent buildings abutting the public space is not more than 65 feet in height or 5 stories high. These requirements guarantee that plazas surrounded by other buildings do not become dark alleys, obscured from natural light and air. Public space with street frontage 80 feet wide or more shall be exempt from these height regulations.



The list gives us the idea of how complex are the characteristics which give a plaza a real sense of place and make it a usable urban space. It is necessary to mention that the applicability of these guidelines depends on the qualifications of staff members and it also requires a monitoring system.

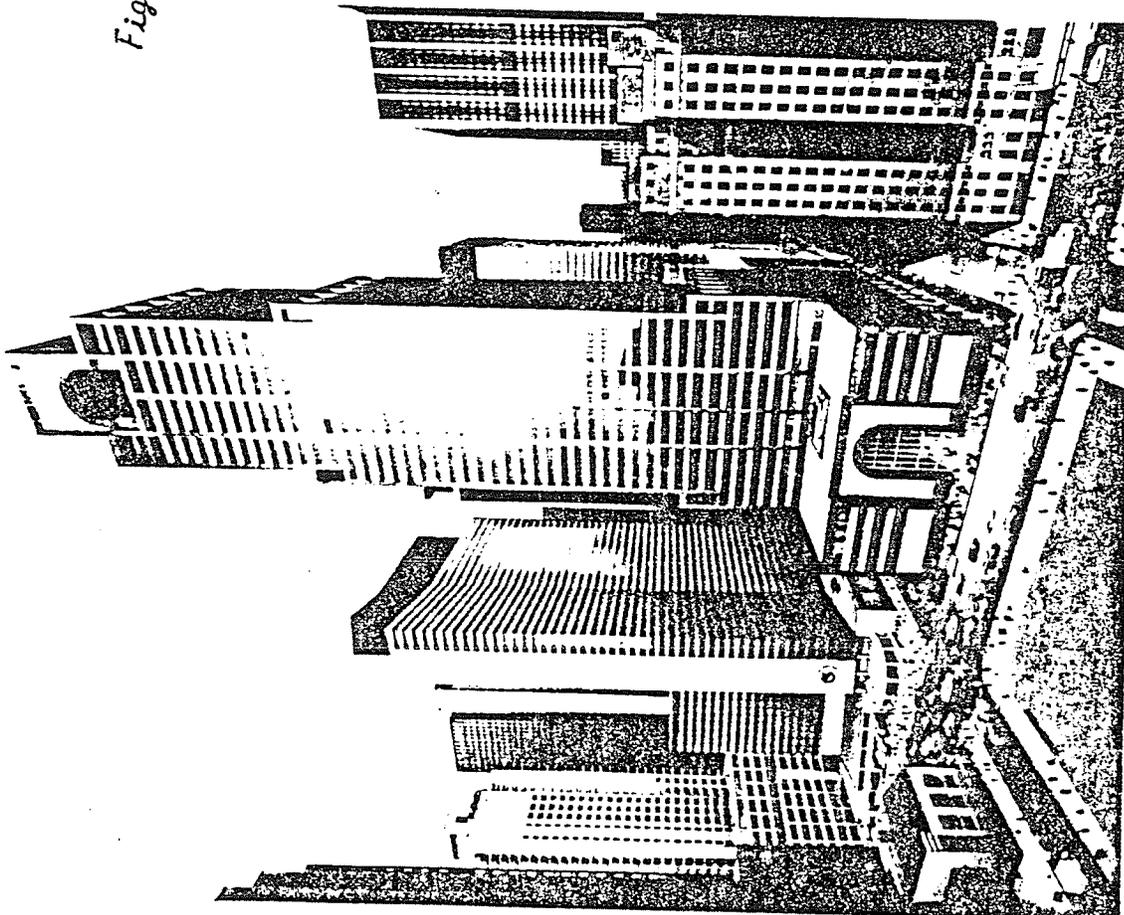
Another important aspect of New York's urban design has been the bonus for plazas, which has been a means by which developers could maximize densities rather than provide a useful public space. The requirements above stated are a more simplified version of an earlier sophisticated attempt and it emphasizes passive recreation. Lately, the requirements have been amended to make plazas accessible to the public at all times. Simultaneously, plaza bonus that could give a developer a F.A.R. (floor area ratio) increase up to twenty percent has been decreased to six square feet (0.56m^2) of floor area for each square foot (0.0929m^2) of plaza up to a maximum of one F.A.R., and the bonus must be certified for compliance with requirements.

Another modern contribution of the city of New York has been the integration of art for people. Art, in urban design terms, was only part of a plaza for which a developer could increase even more the F.A.R., when he usually provided a sculpture. But now, this trend has changed with New York's Equitable Centre

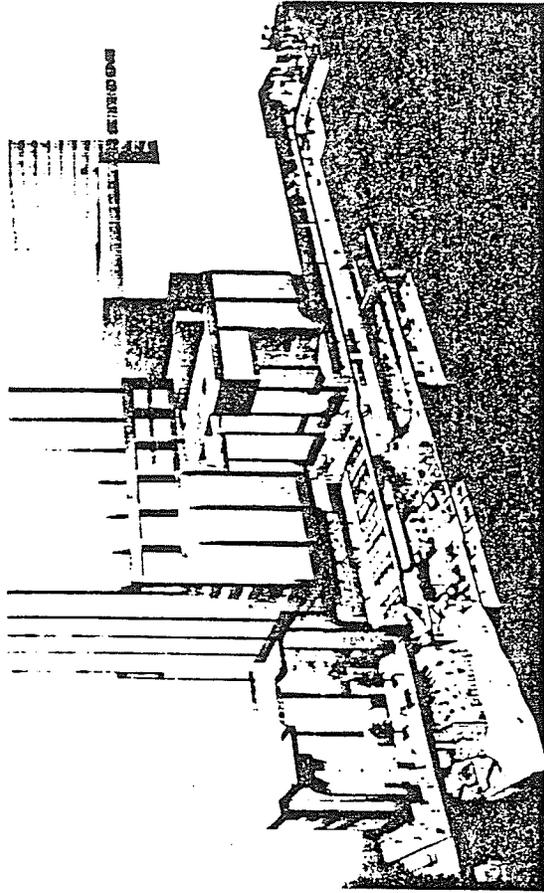
(Fig. 6.1.3). Rather than decorating its plazas, lobbies, and pedestrian areas with single pieces of art, the Equitable Life Assurance Society formed a commission for art works which was in charge of selecting different artists who would design for a particular space in the Equitable Centre. They encouraged "fresh approaches for public areas - lobbies, plazas, and arcades - whose aesthetic value had so often been neglected in recent office development. Monumental sculpture, the traditional filler for such spaces, seemed inadequate."³

The Equitable Centre Building became the first building to locate west of the Avenue of the Americas following changes in zoning regulations to avoid a "density congestion" on the East Side. The floor area ratio for the site was 16.5. It was increased later "as of right" to 17.18 because of such incentives as the through-block galleria. Additional F.A.R. bonuses were permitted because of the company's commitment to upgrade existing urban plazas on the north and south sides of the Avenue of the Americas building by new planting and trees. The zoning also mandated retail and storefront line continuity along Seventh Avenue.⁴ The Equitable Centre is considered the "ideal" answer to the zoning for Midtown Manhattan, and one that fulfills all of the requirements for plazas as

Figure 6.1.3.



A model of Equitable Tower as it will appear from Seventh Avenue. The 54-story skyscraper, projected to cost \$200 million and due for completion this fall, was designed by Edward Larrabee Barnes & Associates.



An extensive underground concourse will link Equitable Tower with the Equitable's present headquarters at 1285 Avenue of the Americas. The full-block complex will include a Galleria, two art galleries, and a theater.

(Source: URBAN LAND, July 1985 p20)

explained before. But they not only increased the F.A.R. because of bonuses for plazas and galleries; they also got bonuses for an arcade of shops, a theatre, an underground concourse to Rockefeller Centre, an atrium lobby, two art galleries and a museum. All these pedestrian amenities are open to the general public, and the benefits achieved for the pedestrian and the city are obvious. The success is due to the good administration and flexibility of the Midtown Development Guidelines which enounced what a developer must "give" and what can be negotiable.

The Midtown Development Report has as its principle objectives:⁵

1. A strengthened framework with the three types of strategy areas - growth, stabilization and preservation - providing an explicit base for planning and zoning recommendations
2. The proposed creation of a New York City Economic Development Corporation to provide assistance in site assemblage, by condemnation if necessary
3. An incentive package for the West Side with tax exemption, public projects, public service and zoning elements
4. A mid-block zoning strategy that will help stabilize the East Side while providing growth incentives for the West Side, and that will help keep the impact of zoning lot mergers within predictable and acceptable limits
5. A theatre district program to implement our strategy or preserve existing theatres
6. A specific floor area ratio (F.A.R.) differential between the East and West Side which includes mapping the avenue frontages in the West Side growth area for F.A.R. 18 as of right subject to a "sunset" provision
7. A sharp cut-back in the bonusable amenities system with more planning elements, such as widened sidewalks, mandated without bonus

8. A simplified system of as-of-right bulk regulations

This brief list of action-objectives demonstrates and supports the theory of urban design which contends that urban design has evolved to become a more comprehensive approach to the physical environment, not just architectural detail and function. To expand this aspect, it is necessary to study the different implementation policies developed to achieve the urban design objectives in Midtown Manhattan.

The implementation policies are grouped into six areas:⁶

1. The development strategy
2. Special incentives
3. Public investments and services
4. Zoning
5. Zoning - planning and urban design controls
6. Zoning - bulk regulations

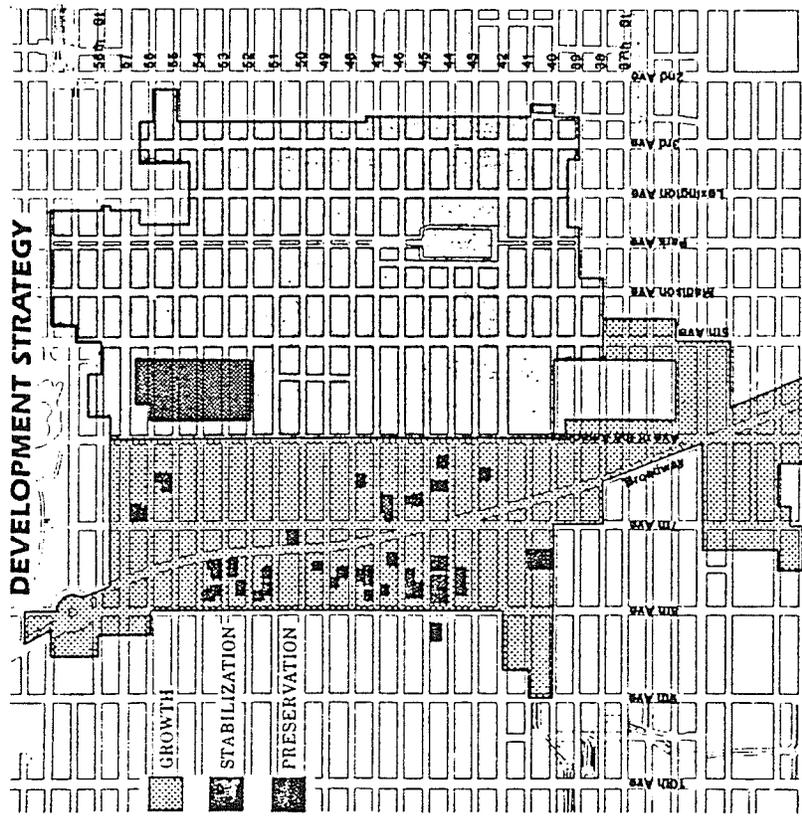
Before each one of these areas is explored, a quotation from Herbert Sturz's Comments is appropriate to clarify the government role in trying to protect the public interest through urban design:

"We recognize that not all our recommendations will please everyone. We have tried to balance two concerns: that developers are entitled to a fair return on their investments; and that it is in the public interest that there be adequate light and air, and streets that are not overly congested. We believe that it is a role of government to attempt to reconcile these sometimes competing interests."

The six implementation areas are directed towards the "protection" and "betterment" of the physical environment for the citizens at large. These implementation policies are some of the broadest in scope in the United States, and for the first time tax incentives are directly integrated to urban design policies.

The first area of implementation, the Development Strategy, defines the goals, areas, and boundaries of the Midtown Zone. The goals state clearly that controlled growth is necessary to safeguard and improve the quality of the environment threatened by the rapid growth of the East Side; at the same time, the goals are the starting point, so that planning and urban design policies are designed to direct growth in order to provide more jobs and to strengthen the tax base. Three areas were defined to target the different implementation programs (Fig. 6.1.4): (1) Stabilization, (2) Growth and (3) Preservation Areas. Although different in scope, a common goal was devised for zoning certainty and predictability. Different interest groups had expressed their need for clear workable as-of-right regulations with firm limits. This problem arose from the general concern that the price "paid in land speculation, costly delay, aggravation, suspicion of the public process and

Figure 6.1.4.

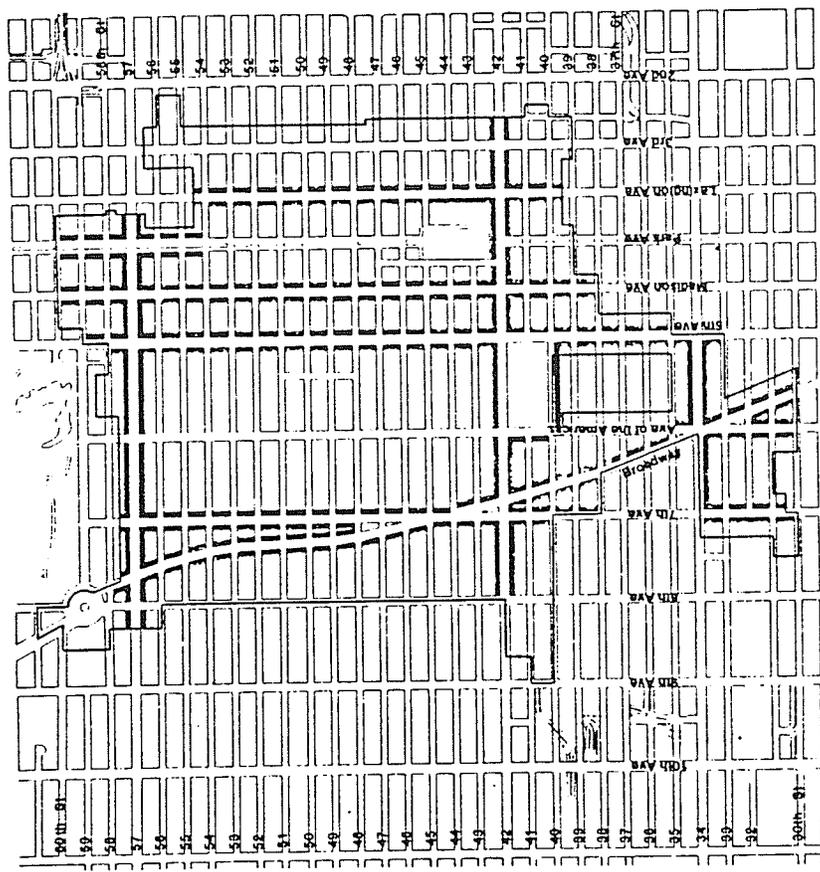


To encourage Midtown to grow west and south, special incentives are proposed. They include an ICIB as-of-right tax exemption for pioneer builders, site assemblage assistance through a new NYC Economic Development Corporation, and projects to turn the area around such as the 42nd Street Development Project, the Portman Hotel and Broadway Plaza. In addition, to stimulate the West Side and protect and stabilize the East Side office core, we propose higher West Side than East Side zoning densities; West Side avenue frontages up to FAR 18 as-of-right with midblocks remaining at FAR 15; East Side avenue frontages kept at FAR 15 with midblocks lowered to FAR 12.

To assist appropriate development throughout Midtown, help stabilize land costs and shorten the approval process, we propose direct and predictable as-of-right zoning regulations. Bonusable amenities would be reduced and emphasize midblock open space and subway station connections. Planning features to ease sidewalk congestion and protect Midtown streets would be required without bonus. In the Special Use District, to preserve existing theatres we propose to require a special permit for their demolition; to bonus their reconstruction; and to facilitate shifting their air rights to avenue development sites.

Figure 6.1.5.

Retail and Street Wall Continuity



Retail and Street Wall Continuity Required
Street Wall Continuity Only Required

oversize buildings as a result of the special permit and exception game that zoning has become in recent years, has been too high. The benefits received in public amenities or architectural quality have not been worth it."⁷ Predictability and certainty of urban design policies are key factors to reduce discretionary-subjective-mechanisms that did not contribute anything to the quality of the environment in Midtown; on the contrary, they had become so discretionary that Manhattan was losing some of its livable characteristics.

The second area of implementation, Special Incentives, starts with tax incentives to promote growth, stabilization and preservation in the defined areas. The first tax incentive is an as-of-right fifty percent tax exemption, declining five percent annually over a period of ten years after which full tax will be paid, and it is targeted to selected growth areas only. The second tax incentive program is the modification of the 421-A which offers substantial tax benefits for new multi-family housing. Thereby, since it is counter-productive in competing for scarce commercial sites, it is proposed that it be excluded from the growth area, and apply only to those buildings which combine substantial residential use with commercial use. In addition to tax incentives, the city is

counting on what they name "turn-around" projects, such as the 42nd Street Development (it will be described later in this chapter) and the Equitable Centre, plus different projects of public investment. Another very important incentive is the creation of an Urban Development Corporation to expedite site assemblage and development, by condemnation if necessary, and through co-ordination of related public improvements and significant reduction of red tape.

Zoning incentives are presented in the form of higher densities (F.A.R.'s) on the West Side than on the East Side. They also proposed zoning regulations that should return zoning to a "predictable, largely as-of-right basis from the uncertain, costly and time consuming negotiated zoning of recent years."⁸

The third area of implementation, Public Investments and Services, relies on the public sector projects which are:

<u>Projects</u>	<u>Cost (In Millions) U.S.\$</u>	<u>Canada (Rate Nov 1985)</u>
Convention Centre	375	525
Port Authority Bus Terminal	200	280
LIRR Layover Yard	168	235.2
Portman Hotel (2,000 RM 1st Class)	21.5	30.1
Herald Square Subway Station	16.0	22.4
Grand Central Subway Station	14.0	19.6
Broadway Plaza	12.5	17.5
42nd Street Subway Station	10.0	14.0
8th Avenue Revitalization	.2	.28
Bryant Park Revitalization	.2	.28
	<u>817.4</u>	<u>1144.48</u>
	(Millions)	

These kinds of incentives are of primary importance for urban design. It is of a very important nature to understand that public expenditures can be co-ordinated to achieve urban design goals. Public works have been an important determinant of the shape of our cities as well as of their visual quality. And developers are ensured that the government will do its part of the "deal" on time and with a quality that will enhance private and public realms likewise.

The fourth area of implementation is zoning, with four main goals:⁹

1. To help stabilize the prime East Side Core Area and to provide directions and incentives for its growth and expansion to the west and to the south
2. To make zoning regulations as predictable and as-of-right as possible, reversing the practice of negotiated zoning (special permit)
3. To emphasize that zoning's underlying planning concern is with the impact of buildings on the streets and avenues of Midtown - not only in terms of their openness to light and air, but in how well the streets serve the movement of people,

- define Midtown as a special place, and enhance its role as the world's pre-eminent downtown
4. To protect the theatre district and any other structure of historic significance for the community

After having stated the goals clearly, some recommendations were made in six categories:¹⁰

1. Density limits
2. Mandated planning and urban design requirements
3. Bonusable amenities
4. Special districts
5. Bulk regulations
6. Administration

From this area of implementation, areas Five and Six - planning and urban design controls and bulk regulations - are derived. The main features of planning and urban design controls are:

- Mandated:
- A - Retail continuity
 - B - Street wall continuity (Fig. 6.1.5)
 - C - Relocation of adjacent subway stairs from street to within development site
 - D - Curbcut prohibitions on specified streets
 - E - Alleviating sidewalk congestion
 - F - Continuing through-block circulation networks
- Bonusable:
- A - Urban plaza
 - B - Urban Park - with a development right transfer to a maximum of twenty percent of the allowable base F.A.R. on the site being developed
 - C - Through-block galleria
 - D - Special subway entrances
 - E - Atriums - public or quasi-public
 - F - Galleries
 - G - Theatres

The bonuses given for these amenities have been reduced from previous regulations, but still they emphasize the direct relation between the developer's

willingness and the cost to provide them and the city with bonus mechanisms to promote such amenities.

Bulk regulations are intended to provide light and air, and to improve the comfort index on the streets of Midtown Manhattan. It is important to point out that aesthetic considerations are not considered either for being very subjective or a secondary consideration applicable only at the final stages of the design review process. The city also proposes a two-tier set of regulations. Architects and developers are free to choose from the first or second tier according to their own requirements.

The first or daylight compensation tier was developed in the early 1980's. It establishes a simple set of trade-offs to compensate for any portion of a building that extends beyond the daylight curve by retracting an equal or larger portion behind the curve. This first tier of the proposed new bulk regulations "guides the placement of buildings on their sites, establishing daylight requirements within sky exposure curves for new buildings."¹¹ (See Fig. 6.1.6) The second tier, or better known as the daylight evaluation chart, which is a modified version of the Waldram Diagram developed in England during the 1930's to aid in daylight analysis.¹² The system offers a near "real" measure of how much daylight or sky is blocked

by a new building. In order to be approved, the building must provide an average of seventy-five percent daylight. The design process to achieve such a rate is up to the developers and architects. Zoning regulations only provide slight ideas of what the bulk should be like, leaving to the architect complete freedom for design. (See examples Fig. 6.1.7 and 6.1.8)

Thus far, we have reviewed the different urban design mechanisms adopted by the city of New York for the Manhattan area. However, these mechanisms do not apply to lands owned by the state or federal government, lands that could have a great impact in the form and quality of the urban scene in Manhattan. In addition, some projects have been turned over to the New York Urban Development Corporation, which has the power to operate completely outside the framework of the city's zoning laws.¹³ This movement could have meant that controls would not have been applied, but the state leadership was well aware of the damaging consequences of not having design controls. For these reasons they called private consultants Cooper-Eckstut to design development controls for the two most important projects: the World Financial Centre being developed by Olympia and York, and the 42nd Street Redevelopment Project. The development controls turned

CASE NO. 4	
Lot Size	67,500
(FAR 18 Zone)	(27,500)
(FAR 15 Zone)	(40,000)
Basic Floor Area	1,095,000
Bonus Floor Area	67,500
Total Allowable Floor Area	1,162,500
Density (FAR)	(17.2)
Allowed Mechanical Floor Area	69,750
Total Allowed Gross Floor Area	1,232,250

ACTUAL BUILDING - FIRST TIER.

Base:		Square Feet
1-6 floors	6 × 42,729	= 256,374
Tower:		
17-43 floors	37 × 26,375	= 975,875
Total:		1,232,249
Height of Building: 550 feet		
Number of		
Stories: 44 (including mechanical)		
Tower Size:		26,375

ACTUAL BUILDING - SECOND TIER.

Base:		Square Feet
1-6 floors	6 × 30,700	= 184,200
7-3 floors	2 × 7,500	= 15,000
Tower:		
7-44 floors	38 × 27,060	= 1,028,280
Total:		1,227,480
Height of Building: 560 feet		
Number of		
Stories: 44 (including mechanical)		
Tower Size:		27,060

OVERALL SCORE	Percent
Score on N. Street	81.38
Score on S. Street	72.50
Score on Avenue	84.60
	99.80

Figure 6.1.6.

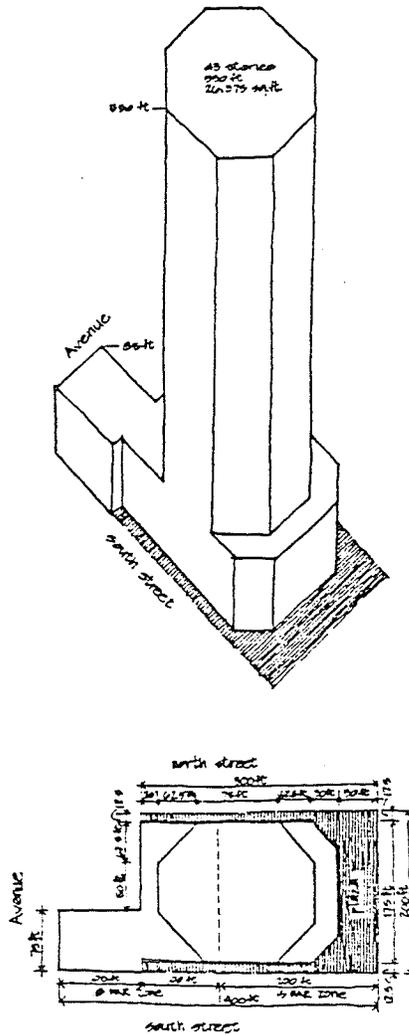
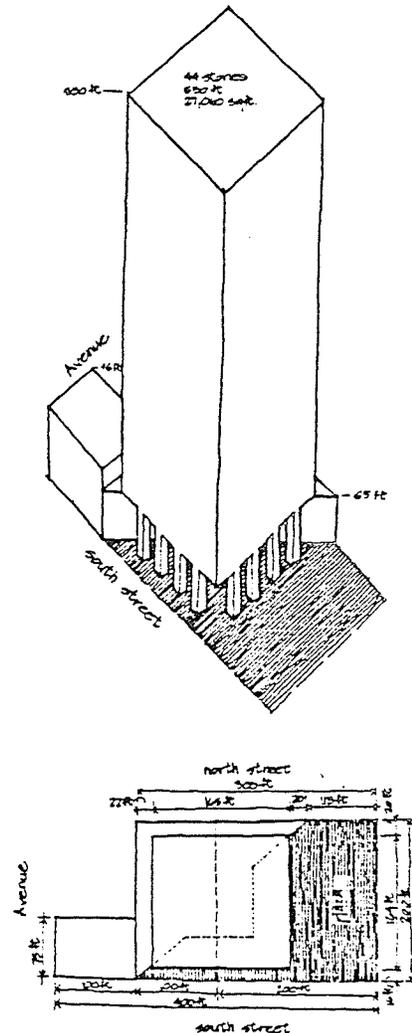
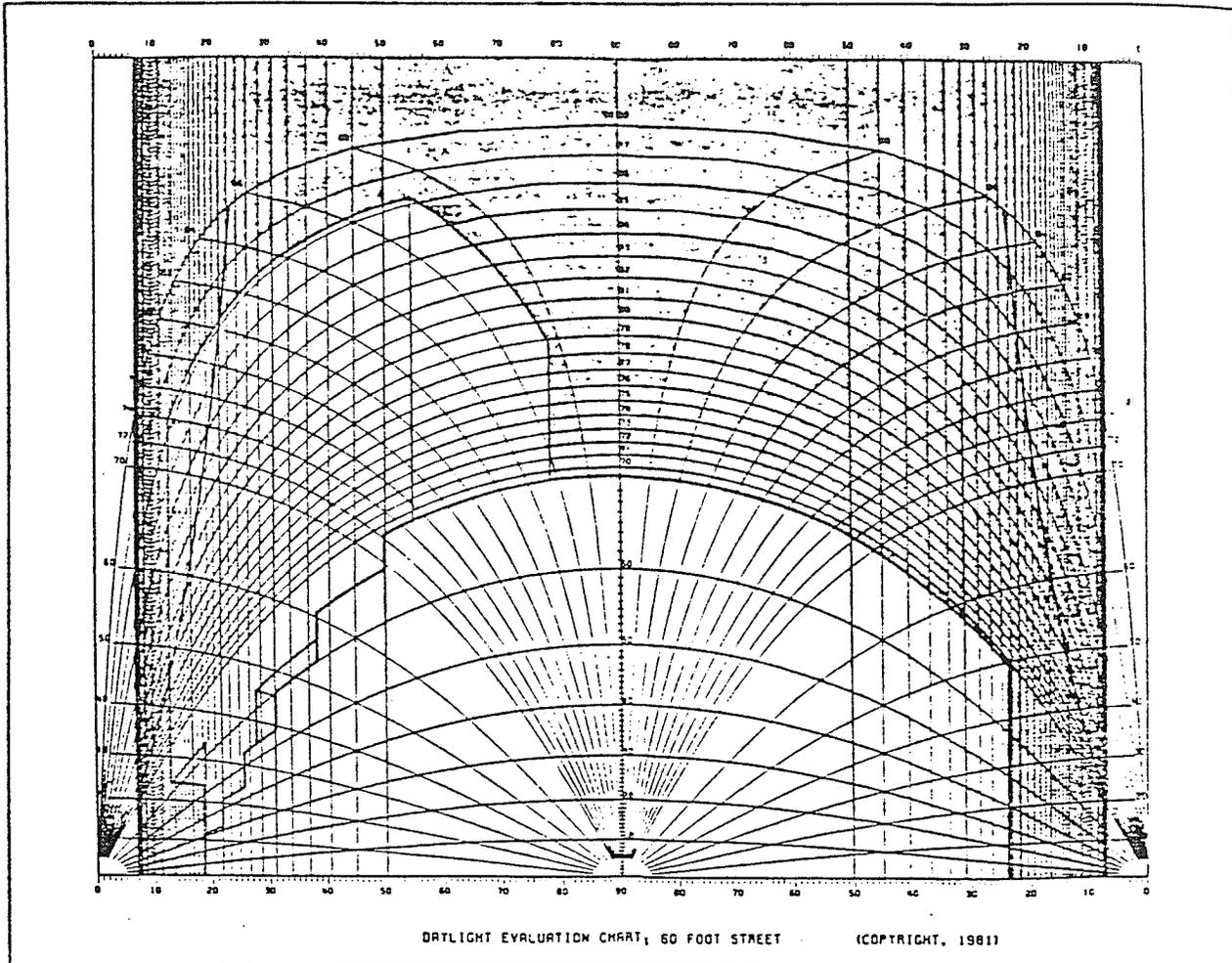


Figure 6.1.7.





DAYLIGHTING TEST

Figure 6.1.8.

The daylighting performance test attempts to quantify the amount of natural light that will reach the street after a proposed project has been built. Light to the street is measured on a Daylight Evaluation Chart, which is a modified version of the Waldram diagram developed in England during the 1930's to aid in daylighting analysis. The modified diagram is a graphic representation of a three-dimensional view of a building; it presents a slightly distorted version of a proposed project as it would be seen by a pedestrian standing at either end of the street fronting the building. The variable grid pre-stamped on the diagram helps quantify lighting levels. Each square represents two vertical degrees of sky and 25 feet of lot frontage at the street line, so that for a site occupying 250 feet of street length, a full 100 available daylight squares would become the basis for evaluating daylight performance. The consultants distorted the grid to give

greater value to daylight coming from higher in the sky realizing that "below the range of prevailing street walls in midtown, there is little expectation of seeing the sky." They determined that the average street wall height presently found in Manhattan occurred at approximately a 70° angle above the ground measured from the center of the fronting street. Therefore, they divided their diagram at the 70° point. Above this level, the grid is divided into 100 blocks whose size varies in relation to the "quality" of the light coming through these areas. Unobstructed blocks above the 70° line are multiplied by their weighted value, totaled, and subtracted from 100. Blocks below the 70° line are similarly multiplied, but their weighted values are less. These values are also totaled and added to the original figure; the sum of the two figures represents the building's final daylighting score.

Citicorp Center Score

Available Daylight Squares	128
Squares Blocked Times Value	-42.3
Squares above 70° blocked	13.6
Squares below 70° open	-16
Total blockage	-42.3

Daylight Score
 $128 - 42.3 = 67\%$

128

Using reflectivity to increase score R, (reflective rating) of the building:

aluminum = .85 (60% of building surface)
 solar ban glass = .38 (40% of building surface)

Reflectance

$$.85 \times 60\% + .38 \times 40\% = .662$$

Then determine building face orientation:

36 squares face S. SW

423 squares face E. SE

orientation value S. SW = .93

orientation value E. SE = .72

Formula:

$$\text{reflectivity} = (R - .15) \times (O, \times \text{number of squares})$$

Reflectivity for S. SW = $(.662 - .15) \times .93 \times 36$

squares = 17.14

Reflectivity for E. SE = $(.662 - .15) \times .72 \times 423$

squares = 15.6

Total 18.70

Now apply reflectivity adjustment to original score

$$128 - 42.3 + 18.7 = 104.4$$

Therefore, light materials increase the score for the building 14.5%.

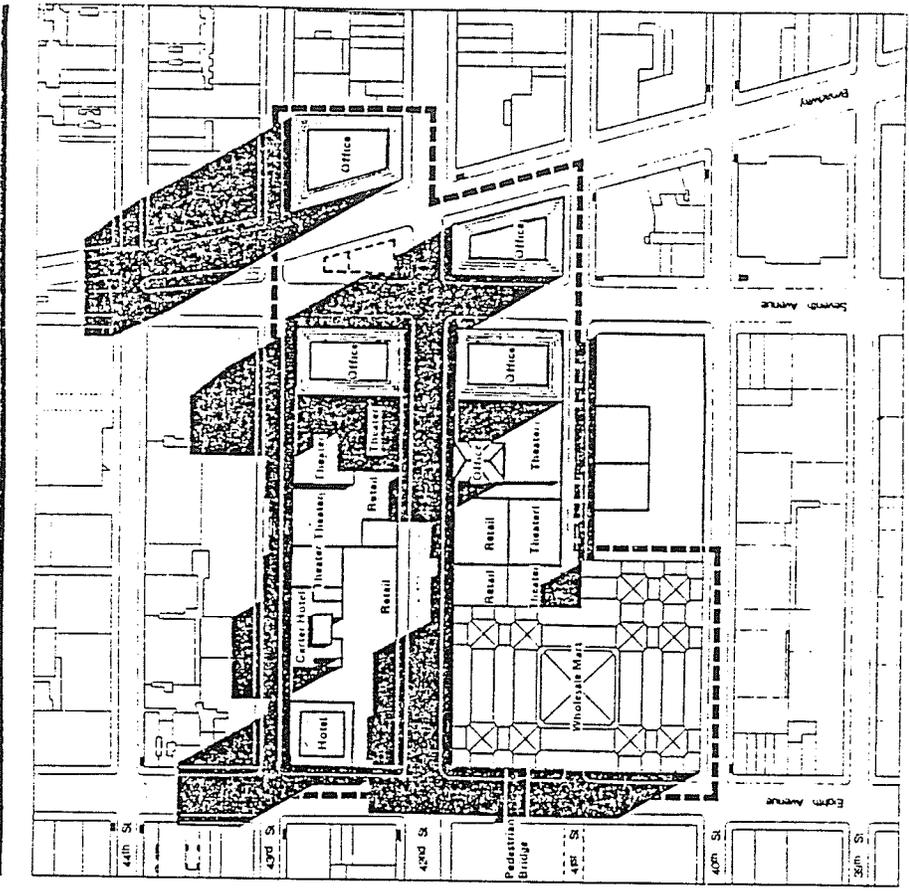
(Source: SOLAR AGE, December 1981, p34)

out to be stricter than the city's zoning regulations.

The design guidelines were prepared to assist developers in bidding on sites proposed for development. For the 42nd Street Development Project, guidelines were designed to incorporate "the best qualities of New York's Commercial District and preserve the unique character of the Times Square Area. The requirements are not discretionary, and proposals must conform to them to be considered."¹⁴

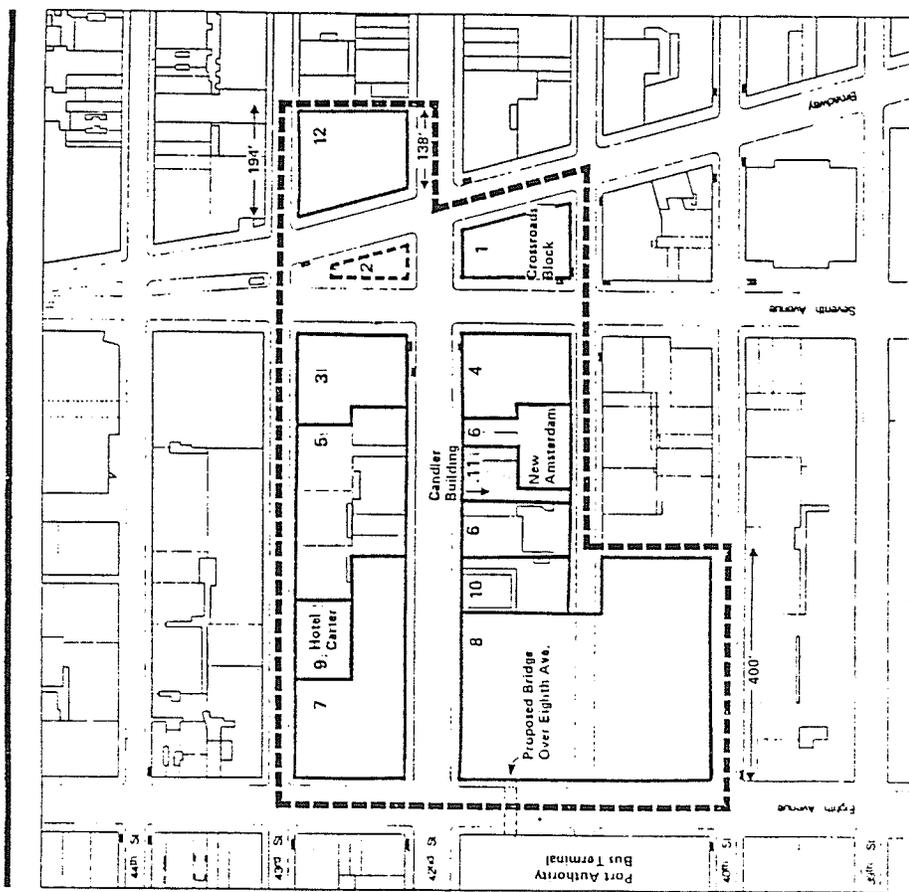
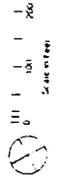
The 42nd Street Development project area is about thirteen acres, and when completed will have four new office towers, a 550-room hotel, and a wholesale mart as main uses for the area. The project will cost about 1.6 billion American dollars. As with any other big downtown redevelopment project, different architects and developers will design the different sites. (See Fig. 6.1.9) To illustrate the guidelines we will focus on site number 8, the wholesale mart. The types of uses to be accommodated in the building under the wholesale option include: wholesale showrooms, exhibits, office and retail space, public circulation and building services. Bulk regulations (Fig. 6.1.10) are intended to preserve the five-storey street wall in the project area. The guidelines also provide detailed regulations as to the location of different uses, circulation and transit easements (depicted on Figures

Figure 6.1.9.



Project Area Site Plan

- Project Area Boundary
- New Buildings
- Existing Buildings to be Retained or Renovated
- Building to be Replaced, Modified or Replaced

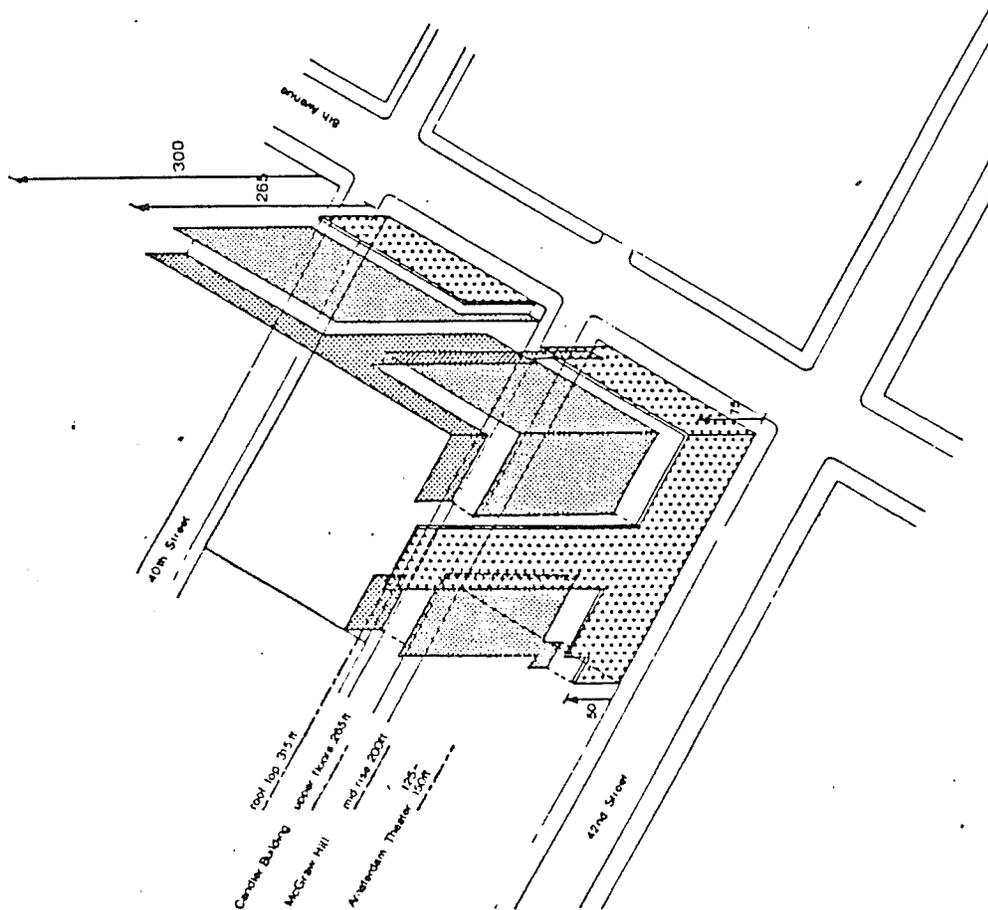


Project Area Development Sites

Site	Predominant Future Use	Land Area (Sq. Ft.)
1	Office	22,300
3	Office	29,000
4	Office	27,200
12	Office	33,300
5	Theaters/Retail	58,500
6	Theaters/Retail	39,600
7	Hotel	57,500
8	Hotel	138,250
10	Theater/Retail	19,800

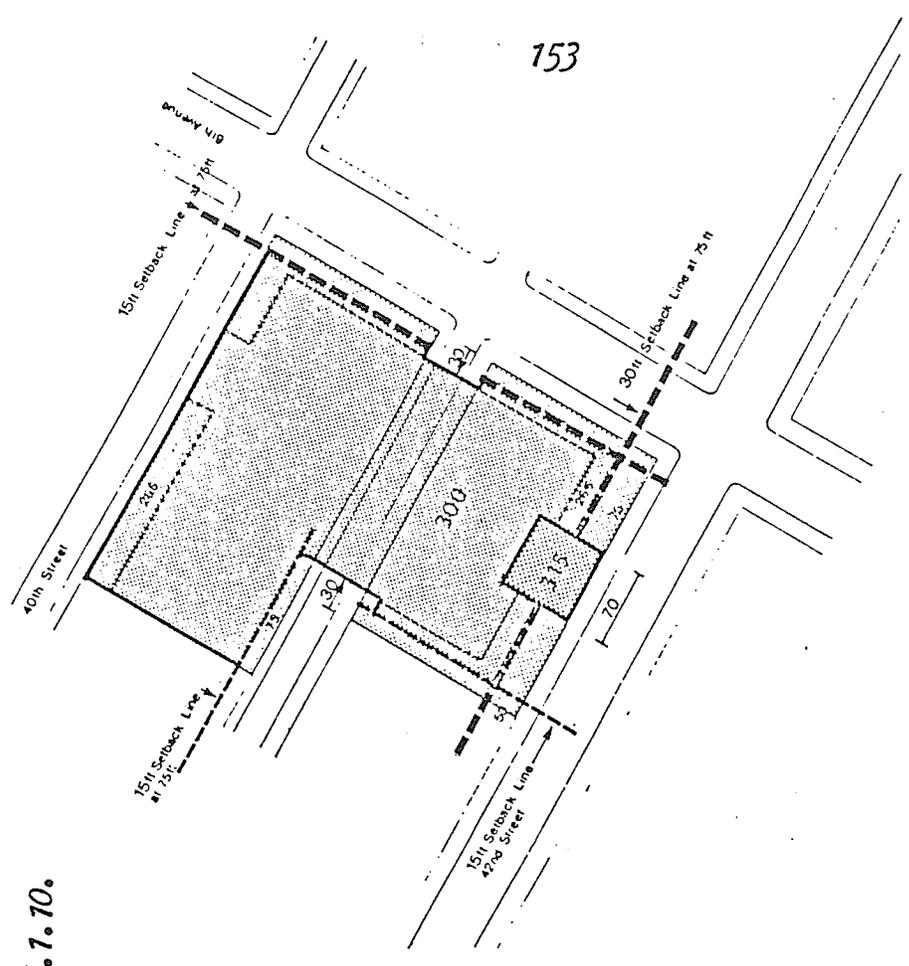


Figure 6.1.10.



Required Bulk Controls Site 8

42nd Street Development Project
Cooper, Eckstut, Associate



Required Bulk Controls Roof Plan Site 8

42nd Street Development Project
Cooper, Eckstut, Associate

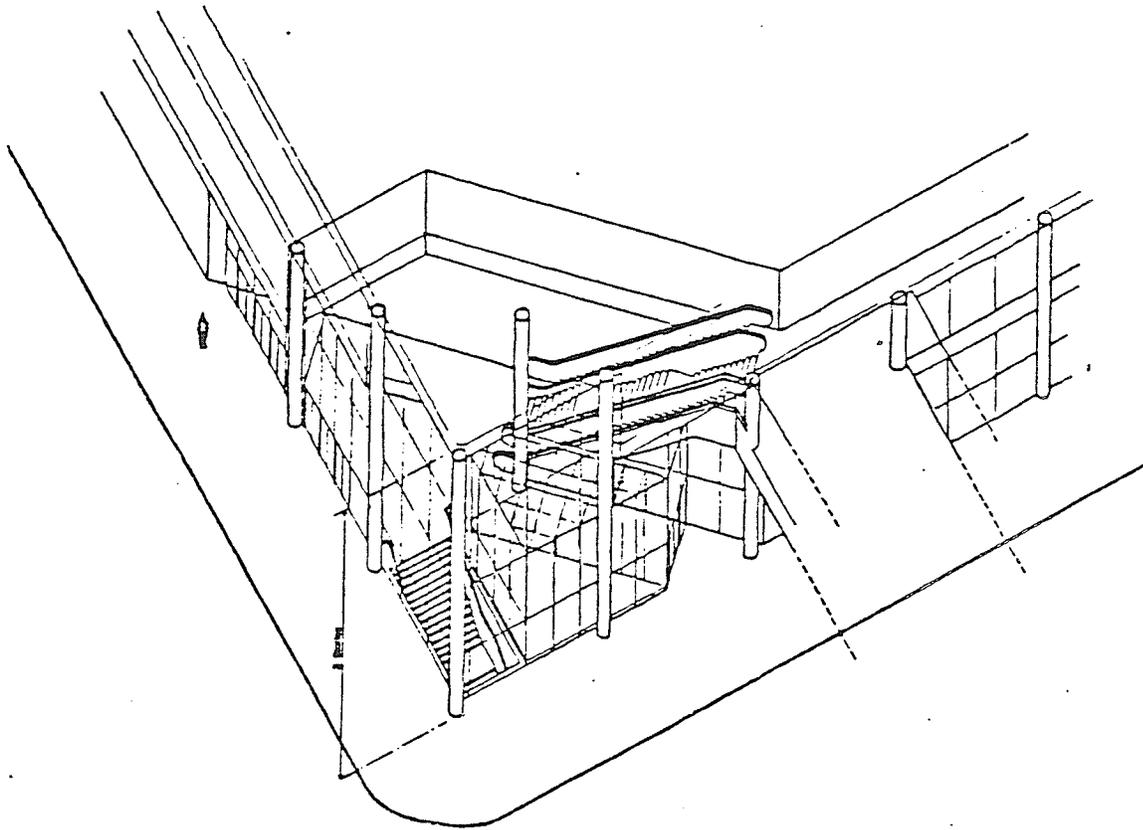
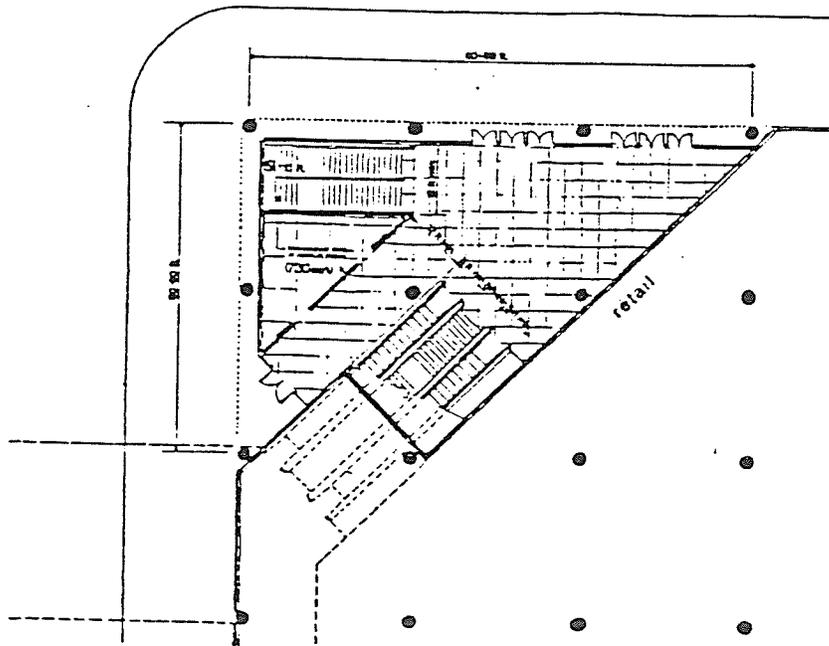


Figure 6.1.11.



Transit Easement

Site 8



Map 1801

42nd Street Development Project
Cooper, Eckstut Associates

(Source: New York Urban State Development Corporation 1984)

6.1.11).

The 42nd Street Development Project also serves as an example of public participation in the planning process. William J. Stern, Chairman and President of the New York State Urban Development Corporation said, "Public review is a crucial part of the approval process for any project. When a development on this scale is planned, it is essential that public comment be heard and taken into account." However, public participation in New York is a very complex process. Public review of the 42nd Street Development Project began with the release of the Draft Environmental Impact Statement and continued through the public hearings, a subsequent 30-day period for written comment, release of the capital Final Environmental Impact Statement, and additional 15-day period for written comment and, finally, public hearings before the New York City Board of Estimate. In addition, hearings were necessary to satisfy the requirements of the State Environmental Quality Review Act, The Eminent Domain Procedure Law, and The Urban Development Corporation Act.

Regardless of the process complexity, public participation is regarded as one of the most important steps towards the implementation of any project. Moreover, public participation is not considered as an

obstacle, rather it is considered the crucial part that will definitely decide the success or failure of the project.

6.1.1 CONCLUSION

These guidelines tell us that in New York, ownership of land or agencies in charge of development, either federal, state or municipal, will not affect the development quality of the Manhattan area. This is due not only to the excellence of processes and techniques used, but also to political leadership and community participation.

Urban design in Manhattan is maybe the best example of the complexity of urban design. However, it is necessary to look at other geographical areas with different social context to understand what the innovations in urban design can teach the new generation of urban designers, architects and planners. Seattle, Washington is considered to be one of the most innovative cities in the west of the United States, and its successes and failures exemplify the role played by local government when dealing with the quality of the physical environment to promote the public health, safety and welfare of its citizens.

6.2 Seattle

In contrast to New York, Seattle does not have an independent planning agency to direct urban design or even planning. The office of planning policy was eliminated in 1981 and some of their members were transferred to the mayor's office to work on the Land-use and Transportation Project. Planning and urban design tasks are spread over many departments and centralized planning is practically non-existent in Seattle.

For years many citizen groups have advocated that Seattle should not become like any other American city. They want to "hold on to the unique qualities, physical and social, that are so much a part of this place."¹⁵ Projects like the 76-story Columbia Centre and the 48-story First Interstate Centre have compelled citizen pressure to limit building heights, and simultaneously, to tighten control of development along the shoreline and urge public access and recreational facilities on the waterfront. In Seattle, the ideas of incentive zoning or incentive urban design mechanisms for the creation of low-income housing and other social public spaces are based on the same assumptions as those of New York. It is a means to "pay" the developer for any loss incurred when giving away areas for such public

amenities. However, in 1982, city council refused to impose interim height limits until the new downtown plan was finished. As a result, one of the main concerns of citizen groups was that housing for low-income households was disappearing under the speed and changes in land uses of new developments, reason for which a housing conservation ordinance was enacted to require developers to replace the housing units removed to facilitate new development. Some groups considered that removal of housing units, usually low rent for the elderly and the poor, is detrimental to social policies, and those units will not be replaced, since new housing units built to replace them are targeted for higher income groups. On the other hand, other groups favour the last approach to clean up the central business district of a lot of rundown, unfit, and dangerous structures; new housing for higher income groups provides more jobs, and more important, increases the tax base of the city and support, in a better manner, the commercial development thanks to the high purchasing power of the individuals belonging to these higher income groups. Housing and the quality of new development were the issues behind the creation of the Land-use and Transportation Project. However, there are other circumstances which influenced the urban design regulations and policies contained in the

downtown plan.

Besides the pressure for citizen groups, the State Environment Policy Act (SEPA) applies to areas "such as the core where urban design review through zoning has not been possible, and which addresses issues not dealt with in fixed zoning standards or brought under the aegis of discretionary review."¹⁶ The SEPA requires the preparation of an E.I.S. (environmental impact statement) for any project, and it is concerned with the external effects of development. Elements such as bulk, scale, view blockage, shadows, light and glare should be included in the E.I.S. The E.I.S. is becoming a very important urban design tool, as important as zoning, in Seattle and in many other cities in the United States. The problem is how to combine zoning and E.I.S. to achieve urban design goals; Seattle's approach is to enable just one agency to administer both. Zoning analyzes the project on what is permitted and on what should not be built, while the E.I.S. refers to the consequences of the project. In this way, planning and urban design policies are less discretionary in the sense that they set standards to evaluate new developments. Without these standards, the process would be too discretionary; and as a consequence, subjective judgments and personal biases would prevail regardless

of the quality of project designs. Another way to improve the E.I.S. was developed in Seattle. It consists of an Environmental Review Committee (E.R.C.) which reviews the city's environmental review/impact process.

The (E.R.C.) Environmental Review Committee is formed by five residents and two city representatives. The committee serves as a link between residents and city departments and provides advice to the mayor, city council and departments regarding environmental matters of concern to the city.¹⁷ In addition, there are two other committees with political power to affect urban design in Seattle.

The first one is the Seattle Design Commission, which advises city officials on environmental and design aspects of capital improvement projects,¹⁸ and acts in an advisory capacity to the mayor, city council, and city departments. The Seattle Design Commission includes two architects, an urban planner, a landscape architect, two engineers, and an artist. The commission's powers and duties are specified by ordinance and include:¹⁹

1. Recommending project designers and/or design teams for specific capital improvement projects to be undertaken by the city
2. Formulating and recommending aesthetic, environmental and design principles and objectives that should be sought in the development of the project (these recommendations are made prior to

- the beginning of design work)
3. Reviewing projects during the design period; recommending approval of work at the completion of the schematic design phase, the design development phase and the construction document phase

The second committee is an ad-hoc interdisciplinary team organized with the Department of Community Development. The terms can be short-term (such as for review of developers' proposals for city surplus land) or long-term, such as for a special office created to co-ordinate public and private development and design in the central business district.²⁰

Review committees are complemented by two other useful urban design techniques: Special Review Districts and Local Improvement Districts. Special Review Districts are allowed to provide land use and development controls and incentives "above and beyond those provided by the zoning ordinance."²¹ Two such districts have been created, Pioneer Square and the International District. The creation of the district requires a separate set of policies and regulations for each area similar to those of New York (Fifth Avenue Special District or Union Square Special District.) The new legislation amends the zoning ordinance and has as principles the following:

A - State the unique values of the district

B - Define the district's purpose and intent

C - Modify bulk, use, design, and densities

The legislation of special districts permits the creation of a special review board for each special district (a step beyond New York's special districts.) The review board is composed of property owners, district residents, and business operators or employees. Five members are chosen in district elections and two are appointed by the city. The committee can develop design guidelines, control development, and recommend policies to city council and administration.

The second kind of district is the local improvement district. These are special taxing districts created to finance public improvement projects through the sale of city bonds which are repaid from special property tax assessments. Traditionally, these districts focus on streetscape projects in the downtown core. If any project is accepted by seventy percent of the property owners, bonds are sold, the city's front money for design is reimbursed and project construction begins. Bonds are returned in ten to fifteen years by the property owners' special taxes.

Thus far, we have examined some of the main techniques developed in Seattle to address urban

design: Zoning, Environmental Impact Review, Environmental Review Committee, Seattle Design Commission, Ad-hoc Committees, Special Review Districts and Local Improvement Districts. However, there was not a defined urban design process until the city approved the New Land Use and Transportation Plan in June of 1985. William J. Duchek, manager of the Downtown Project points out:²²

"Seattle has no special urban design review process. In the downtown the design rules, to the extent that there is public design regulation, are in the zoning code and design criteria for the public benefit features of the Floor Area Bonus System. Only on large public projects such as the new West Lake Park or the Washington State Trade and Convention Centre does the city conduct a design review as part of the overall development review. These are usually done by ad-hoc interdepartmental teams of the city staff and the project is of a nature that requires by city council. The usual large office building or other private project would not be subject to special review or design criteria."

Even though, each project is reviewed so as to determine conformity with the New Land Use and Transportation Plan for downtown Seattle. The new plan is the result of a process that started in 1973 with the "Goals for Seattle 2000." The downtown plan takes a comprehensive look at the issues of importance, emphasizing public participation as has been traditional in Seattle. To understand the impact on the built environment of the new policies, it is

necessary to focus first on the overall-general-recommendations and later on the particularities of the Floor Area Bonus System of the new Land Use and Transportation Plan for downtown Seattle.

The Land Use and Transportation Plan for Seattle (LUTPS) is one of the most comprehensive in the United States. It contains policies that embrace areas such as Seattle as a regional center, transportation, human services, housing, urban form, and so forth (see Table 6.2.1.)

It is a set of policies designed to direct future growth in Seattle's downtown area; and in contrast with the traditional plan, it only gives directional guidelines for the successful accomplishment of the plan which presents Seattle's possibilities in the future, up to twenty years. Another important characteristic of the plan is that each policy is accompanied by implementation guidelines, aspect-which marks a contribution to city planning processes of American cities. Implementation is carried out through new zoning regulations and the creation of incentives for housing, public services and the environment. (Although all the policies are strongly interrelated, the following descriptions of the LUTPS will concentrate on those with a direct relation to urban

TABLE 6.2.1

Framework Policies

- A- Pre-eminent Regional Centre
- B- Growth
- C- Transportation
- D- Housing
- E- Human Services
- F- Urban Form
- G- Culture and Entertainment
- H- Areas of Varied Character
- I- Office and Commercial Concentration
- J- Retail Concentration
- K- Residential Neighbourhoods
- L- Mixed Use Neighbourhoods
- M- Shorelines
- N- Incentives

Land Use and Transportation Policies

Policy 1- Land Use Area Regulation

Policy 2- Uses

Transportation

- 3- Regional Transit Access
- 4- Transit Circulation
- 5- Vehicular Access and Circulation
- 6- Pedestrian Circulation
- 7- Bicycle Circulation
- 8- Street Classification System
- 9- Parking
- 10- Transportation Project Priorities

Housing and Human Services

- 11- Housing Preservation
- 12- Housing Development
- 13- Human Services

Urban Form

- 14- Historic Preservation
- 15- Building Height
- 16- Building Scale
- 17- Street Level Views
- 18- Street Level Development Standards
- 19- Uses at Street Level
- 20- Use of Street Space
- 21- Signs
- 22- Open Space

Incentive System

- 23- Floor Area Bonus System
- 24- Transfer of Development Rights

Land Use Districts

- 25- Downtown Classifications and Overlay Districts
- 26- Downtown Office Core - 1
- 27- Downtown Office Core - 2
- 28- Downtown Retail Core
- 29- Downtown Mixed Commercial
- 30- Downtown Mixed Residential
- 31- Pioneer Square Mixed and Special Review District
- 32- International District Mixed and Special Review District
- 33- International District Residential and Special Review District
- 34- Downtown Harborfront-1 and Shoreline Environment
- 35- Downtown Harborfront-2
- 36- Pike Market Mixed

Implementation and Administration

- 37- Community Development Programs
- 38- Belltown
- 39- Harborfront
- 40- Westlake Boulevard/South Lake Union
- 41- North - Kingdoms
- 42- Union Station Corridor
- 43- Non-conforming Uses
- 44- Existing Public Benefit Features
- 45- Rezones
- 46- Planned Community Development
- 47- Programmatic Actions

All the case studies - policies - zoning to back up

design as it is seen and explored in Seattle.)

Land-use determination is of great importance for urban design, since in Chapter Three it was demonstrated how different socio-economic forces have corresponding and different urban forms and land uses. For instance, retail and office development have skyscrapers and enclosed shopping malls as their physical configuration of their function in the city. So it can be stated that a right mixture of land uses is important to achieve good urban design. In light of this fact, the LUTPS outlines the following uses:²³

Commercial	Light-manufacturing
Residential	Public facilities and institutions
Hotels	

These uses are acceptable as general guidelines for the downtown area, however they go beyond this general land use classification and propose land-use districts within downtown and are intended to provide detailed bases for the regulation of development. In Graphic 5.2.1 we see three general aspects of the plan: (1) the height concept, (2) general "city volume" and (3) the different land-use districts. It is important to note that the plan promotes mixed-use developments in all of the districts.

The plan also requires that at least ten percent of all new housing units be targeted for low-income people defined as being households with incomes less than fifty percent of the median for the Seattle area.²⁴ The following is a list of the implementation guidelines for housing in downtown Seattle:

1. A commitment of the city to maintain a minimum number of housing units for low-income households.
2. A monitoring program to register any changes in the housing market to make the necessary administrative and legislative adjustments.
3. A housing preservation ordinance that requires the replacement of downtown housing demolished or changed to non-residential use.
4. Bonuses will not be given to projects which will result in a net loss of housing units.
5. Transfer of development rights will be approved for any project whose floor area exceeds fifty percent in low-income housing.
6. The normal bonus incentives for mixed-use developments with residential components.

Briefly as they seem, these implementation guidelines leave room for a powerful discretionary administration of such policies. However, they are very clearly defined so as to avoid any misinterpretation from part of planners and developers alike. And it is following this line that policies for urban form are established:²⁵

"The framework policies establish (discretionary) direction for a high quality man-made physical environment. The urban form policies provide (self-administering) detailed guidance for those features on the built environment critical to achieving this objective . . . these policies address a complex set of factors, which together influence how people feel about downtown.

Throughout, the need to provide flexibility for variety and change has been balanced with the goal of predictability."

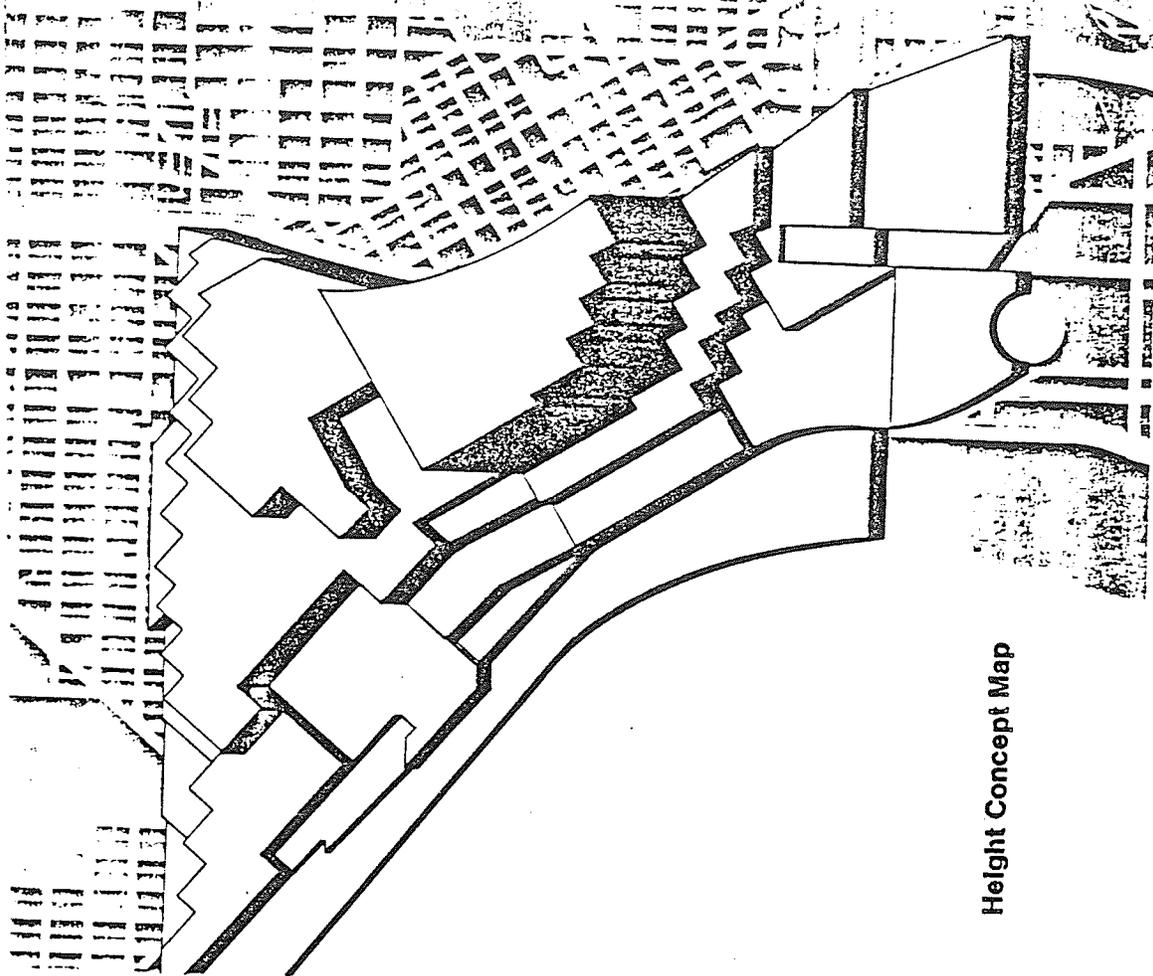
Policy 14, Historic Preservation, is the first of the series of policies that address the concerns stated above. Historic Preservation guidelines are more intended to maintain present regulations than to make drastic changes; in the presence of the success of zoning by-laws and landmarks designation, the state has enacted regulations to protect the present legislative process and to promote more incentives and regulations from part of the municipal government so that some structures with historic value be maintained and preserved in order to enhance the character of the area.

Policy 15, Building Height, regulates the height of all districts in the downtown area (see Graphic 6.2.1) based on the following principles:

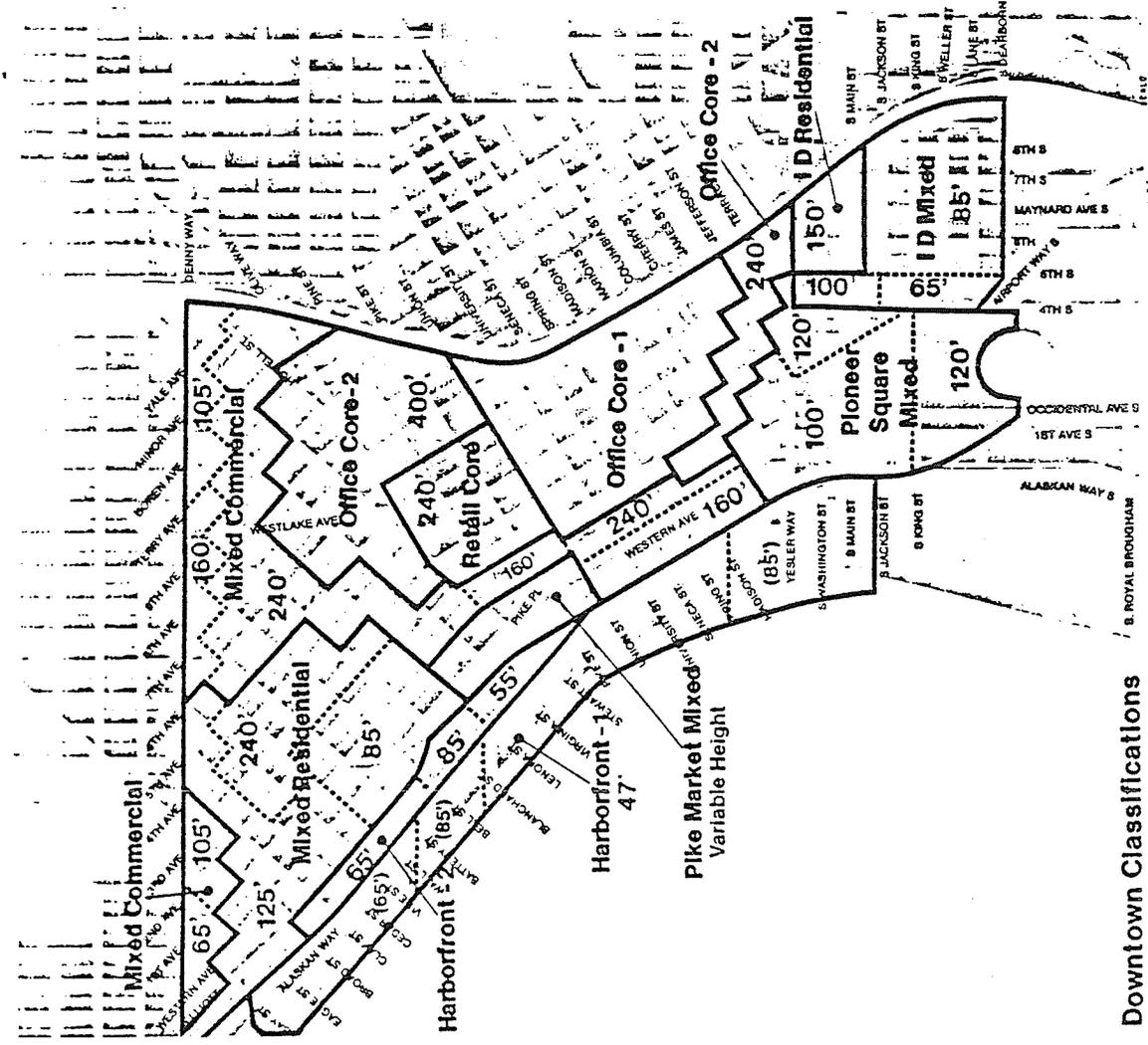
1. To communicate the intensity and character of development in different parts of downtown.
2. To protect the light, air, and human scale qualities of the street environment in areas of distinctive physical and/or historic character; and
3. To provide transition to the edges of downtown to complement the physical form of the area.²⁶

This Height Policy also recommends bonuses for projects with sculpted tops of buildings, so the skyline of the city could become more recognizable and characteristic of Seattle.

Figure 6.2.1.



Height Concept Map



Downtown Classifications

(Source: 'Downtown Land Use and Transportation Plan' City of Seattle, 1984)

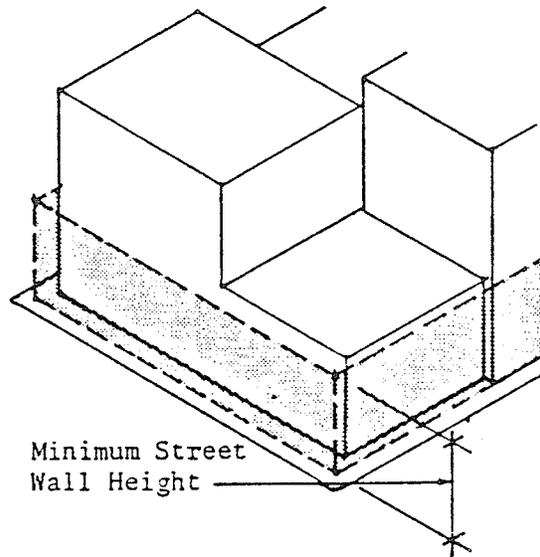
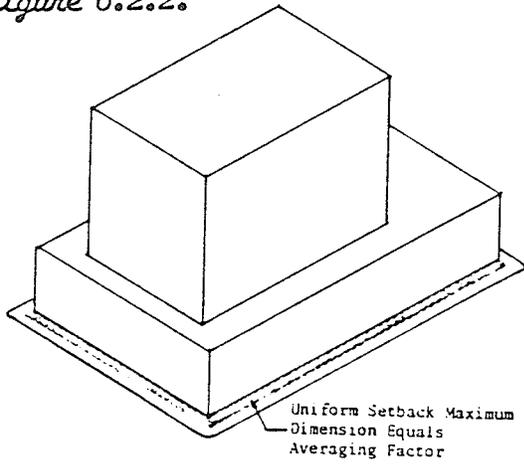
Policy 16, Building Scale, is intended to reduce shadow and wind impacts at the street level and to promote a strong physical and human relationship with the pedestrian environment, acknowledging the possible impact of large buildings on the surrounding buildings, open space, and any other kind of urban spaces. They take into account the following physical urban design elements:²⁷ (See Graphic 6.2.2)

1. Limitations of site coverage
2. Maximum wall dimension
3. View corridor setbacks
4. Street wall height
5. Street park setbacks

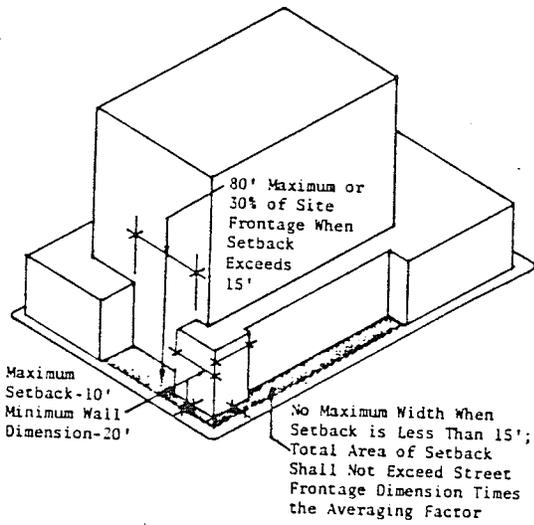
Policy 17, Street Level Views, deals with the protection of important street views-view corridors (Graphic 6.2.3). Mostly, this policy is implemented by the adoption of zoning by-laws controlling street vacations and encroachments as well as setbacks and heights on the determined view corridors.

Policy 18, Street Level Development Standards, is intended to: (a) provide visual interest for the pedestrian, (b) provide a comfortable sense of enclosure along the street, (c) integrate individual buildings within the streetscape, (d) bring the activity occurring within buildings into direct contact with the street environment, and (e) provide strong edges to clearly define open spaces.²⁸ The physical design elements (Graphic 6.2.4) of the Street Level

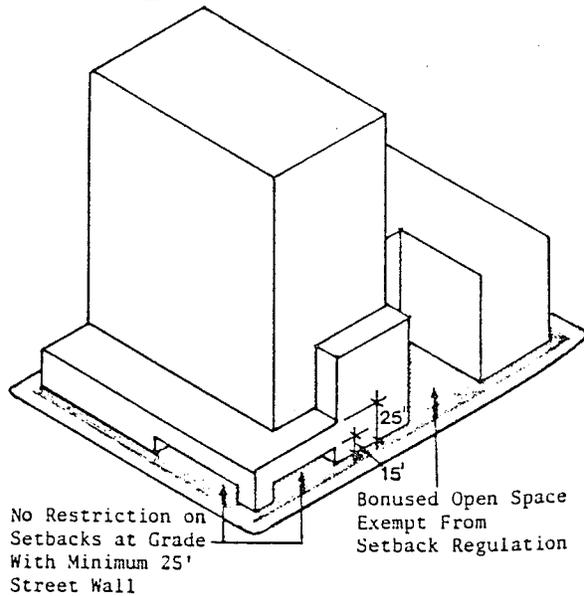
Figure 6.2.2.



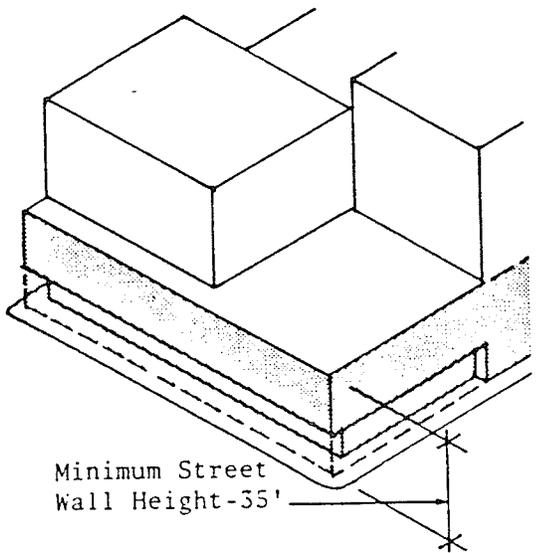
GENERAL STREET WALL MINIMUM HEIGHT



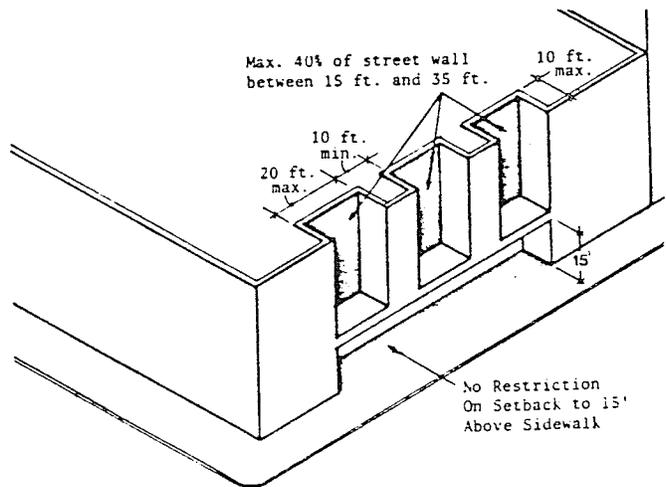
SETBACK REQUIREMENTS



EXCEPTIONS TO SETBACK REQUIREMENTS

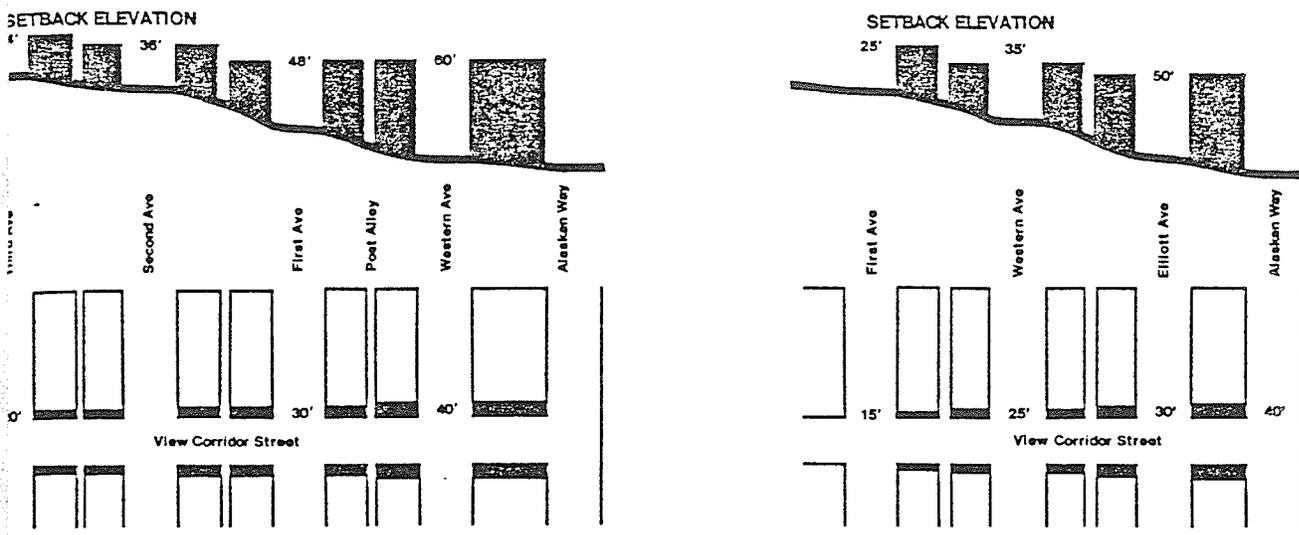


PROPERTY LINE STREET WALL MINIMUM HEIGHT



FACADE MODULATION EXCEPTION

Figure 6.2.3.

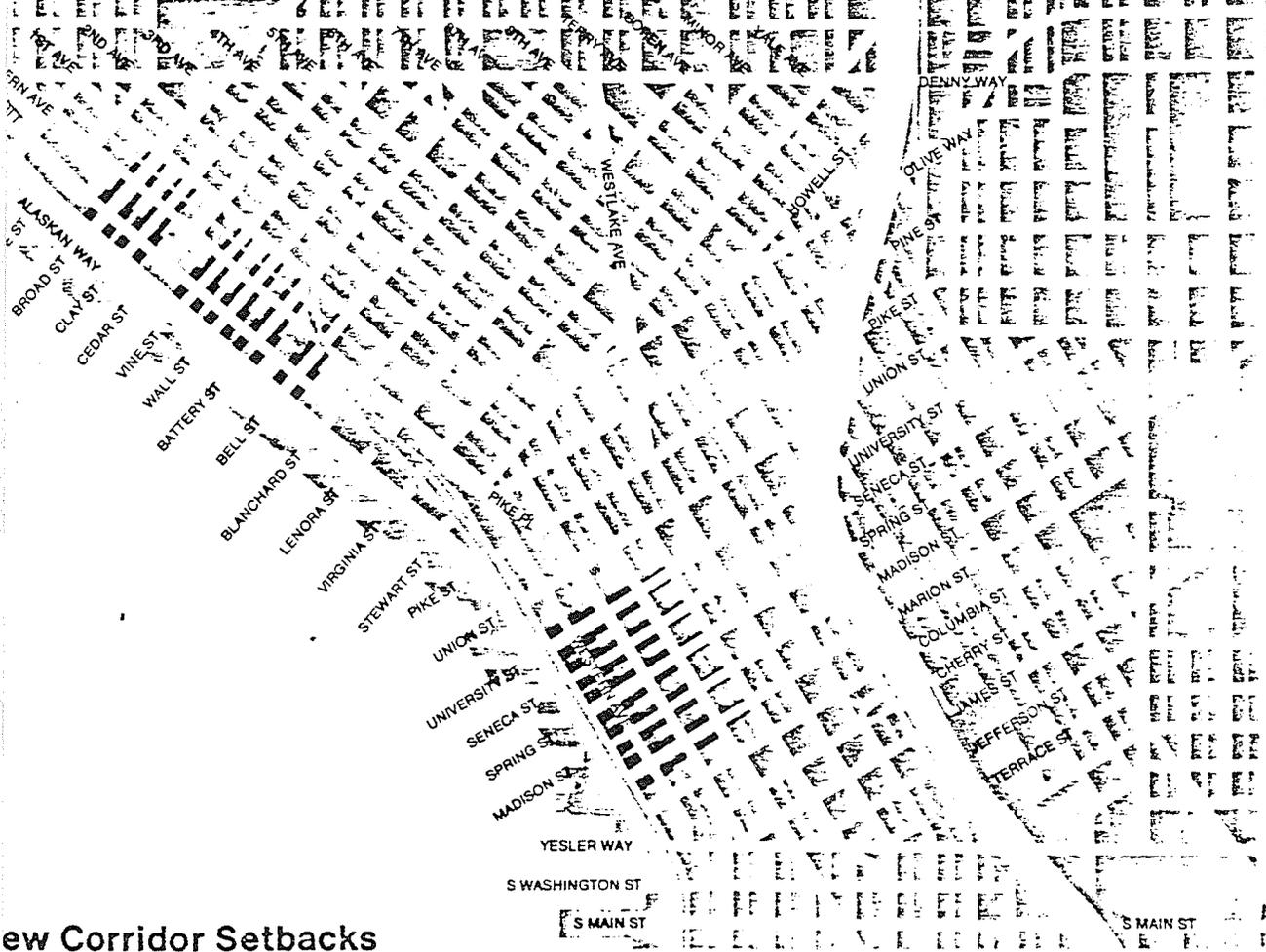


SETBACK DIMENSION

SETBACK DIMENSION

Schedule A

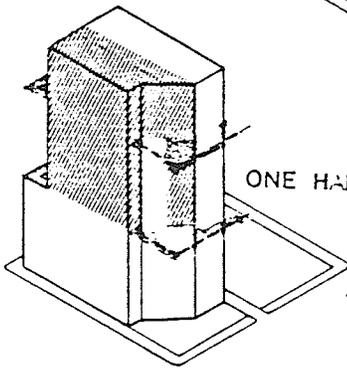
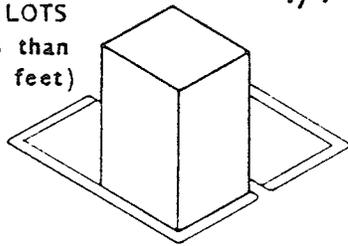
Schedule B



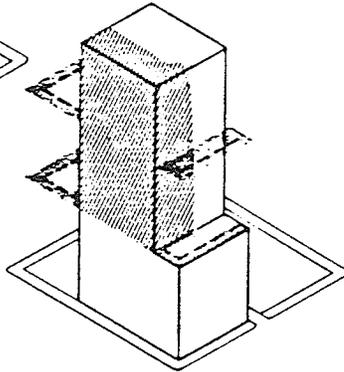
View Corridor Setbacks

(Source: City of Seattle 1984)

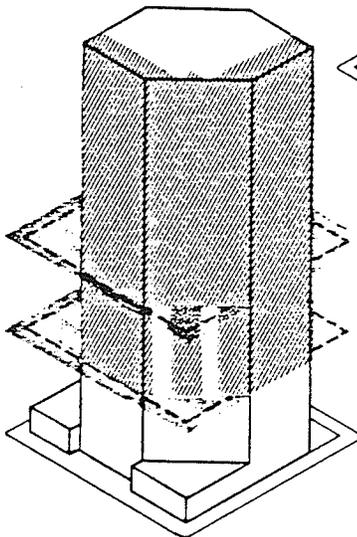
TWO LOTS
(Site exempt; less than
15,000 square feet)



ONE HALF BLOCK



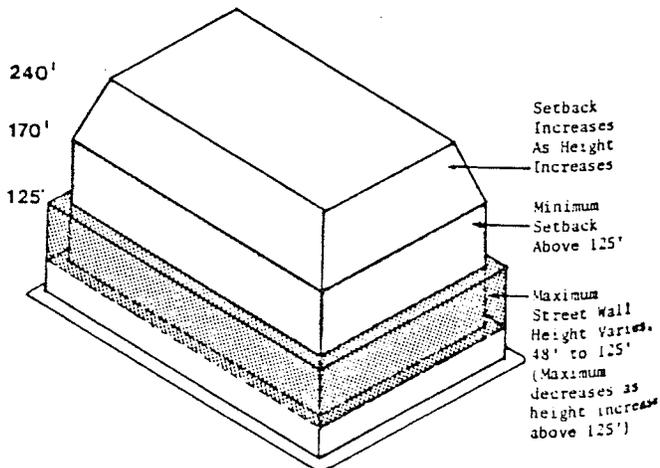
ONE HALF BLOCK



FULL BLOCK

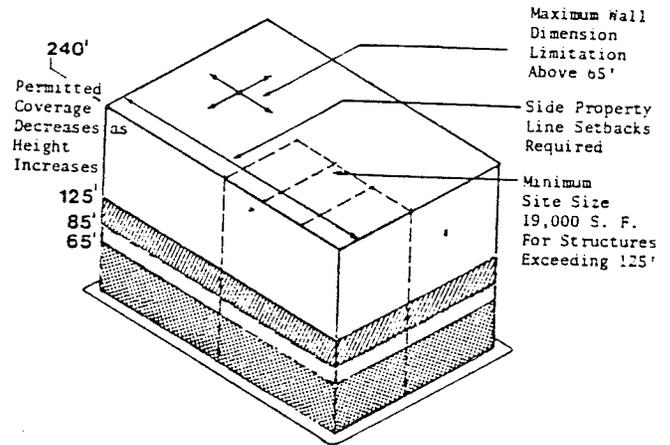
- Wall Dimension Limited
- Coverage Limitation Area
- ▨ Portion of Building Allowed in Coverage Limitation Area

EXAMPLES OF UPPER LEVEL DEVELOPMENT REGULATION

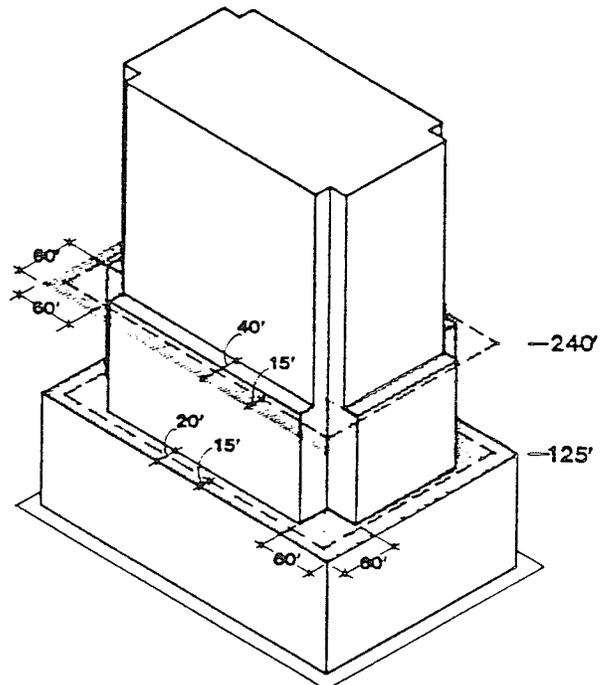


RETAIL AREA
UPPER LEVEL DEVELOPMENT REGULATION

Figure 6.2.4.



MIXED RESIDENTIAL AREAS
UPPER LEVEL DEVELOPMENT REGULATION



- Wall Dimension Limited
- ▨ Coverage Limitation Area
- No Coverage Limitation

OFFICE AND COMMERCIAL AREA
UPPER LEVEL DEVELOPMENT REGULATION
(Sites less than 15,000 square feet
exempt from regulation)

Development Standards are:

1. Street walls - heights, dimensions
2. Facade transparency
3. Limitations on blank walls
4. Screening of parking
5. Street landscaping
6. Overhead weather protection

Policies 19 (Uses at Street Level) and 20 (Use of Street Space) complement the last two policies by setting guidelines on the uses at street level. They have mandatory requirements and also a bonus mechanism for the adoption of uses which increases the quality of pedestrian networks (Figure 6.2.5). These policies are very similar to those of New York Fifth Avenue Special District where retail and wall street continuity are considered two of the most important elements either to protect or create urban enhancement.

In addition, the New Land Use and Transportation Plan for Seattle has developed an incentive system with two broad areas: Floor Area Bonus and Transfer of Development Rights (T.D.R.). The latter one has the following priorities: (a) retention and rehabilitation of low-income housing throughout downtown, (b) production of affordable housing in mixed-use areas, (c) preservation of landmarks, (d) compatible infill development in historic districts, and (e) small site development in areas of highest permitted densities.²⁹ (Table 6.2.2) The criteria to evaluate T.D.R.

Table 6.2.2.

TRANSFER OF DEVELOPMENT RIGHTS SCHEDULE

	Office Districts	Retail Districts	Mixed Use Commercial Districts	Mixed Use Residential Districts	Historic Districts
WITHIN BLOCK	Permitted from any structure	Permitted from any structure	Permitted from affordable housing only	Permitted from affordable housing only	Not permitted
BETWEEN BLOCK					
Sending site	Low Income housing and Seattle Landmarks only	Low Income housing and Seattle Landmarks only	Low Income housing and Seattle Landmarks only ¹	Low Income housing only	Low income housing and in-fill sites only
Receiving site	Permitted	Not Permitted	Permitted	Not Permitted	Not Permitted

¹ Limited to Seattle Landmarks south of Virginia Street only.

proposals is based on transfers within blocks and between blocks. However, the Floor Area Bonus System remains as the most effective Urban Design (UD) Tool when dealing with new development in the C.B.D.

The LUTPS outlines very clearly the criteria of the different "public benefit features" for which bonuses can be awarded. Bonuses are granted only in additional floor area space "in conformance with the downtown policies and the density regulations of the appropriate land-use district classification."³⁰ The amount of floor area space increased by the bonus system represents the public interest-priority and the cost for developers when providing a public benefit feature; however, the total F.A.R. is limited regardless of the number of bonusable design elements found in a project. The office of the mayor explained how the new bonus system differs from the existing system:³¹

1. The number and types of incentives are increased trying to cover all those needs expressed by different citizen groups and those of importance to achieve a "good" environmental quality in the C.B.D.; even though, the new system only establishes design criteria, it gives a sense of predictability which is of primary consideration for the success or failure of the system
2. The incentives are selectively targeted to areas where they are most likely to provide a public benefit
3. Incentive features are broadened to allow actions located off the project site

4. Smaller sites are able to use incentives to a greater extent; thus, facilitating design and continuity in the process, and
5. There are options for voluntary agreements resulting in contributions to funds in lieu of directly providing some incentive features

The system also promotes the integration of various design elements, as well as a monitoring system which evaluates the list of public benefit features every five years. The intent of evaluation is to assure (a) the feature is still desired, (b) the criteria and standards are providing the desired results, and (c) the bonus values reflect the cost of the feature and land as well as public priority. Citizen participation is encouraged in the evaluation process so the list can be modified accordingly to changing circumstances in the real estate market and in changes in the lifestyles and society trends. Tables 6.2.3 and 6.2.4 list the different public benefit features and establishes areas in which projects can be eligible for bonus.

Public benefit features are grouped in three areas: general criteria, special criteria and council conditional use. In the general criteria group, public benefit features are considered more important than those in the other two groups, and bonuses are given automatically to any project containing such public design elements. The second group, special criteria,

LAND USE DISTRICT FLOOR AREA BONUS SCHEDULE

PUBLIC BENEFIT FEATURE	DOWNTOWN OFFICE CORE-1	DOWNTOWN OFFICE CORE-2	DOWNTOWN RETAIL CORE	DOWNTOWN MIXED COMMERCIAL	DOWNTOWN MIXED RESIDENTIAL	DOWNTOWN HARBORFRONT-1	DOWNTOWN HARBORFRONT-2
	BONUS RATIO ^A						
GENERAL CRITERIA							
1. Human Services	7	9	3.5	6	4.5	-	-
2. Cinema	7	9	3.5	6	4.5	-	-
3. Shopping Atrium	8 - M	8 - M	8	8 - M	-	-	-
4. Shopping Corridor	6 - M	6 - M	6 - M	6 - M	-	-	-
5. Retail Shopping	3 - M	4 - M	-	2.5 - M	3 - M	-	-
6. Parcel Park	5	6.5	-	4	-	-	-
7. Residential Parcel Park	-	-	-	-	3	-	-
8. Street Park	-	6.5 - M	-	4 - M	3 - M	-	-
9. Rooftop Garden - Street Accessible	2.5	3	-	2	-	-	-
10. Rooftop Garden - Interior Accessible	1.5	2	1	1.5	-	-	-
11. Hillclimb Assist	1 FAR - M	1 FAR - M	-	1 FAR - M	-	-	-
12. Hillside Terrace	5 - M	6.5 - M	-	4 - M	3 - M	-	-
13. Harborfront Open Space	-	-	-	-	-	-	3
14. Sidewalk Widening	3 - M	3 - M	3 - M	3 - M	3 - M	-	-
15. Overhead Weather Protection	3 - M	3 - M	3 - M	3 - M	3 - M	-	-
16. Voluntary Building Setback	-	-	-	-	3 - M	-	-
17. Sculptured Building Tops	1.5 ^B	1.5 ^B	-	-	-	-	-
18. Short Term Parking							
Above Grade	1 - M	1 - M	1 - M	1 - M	3 - M	-	-
Below Grade	2 - M	2 - M	2 - M	-	-	-	-
19. Small Site Development	2 FAR ^C	1.5 FAR ^C	1.5 FAR ^C	2 - M	-	-	-
SPECIAL CRITERIA							
20. Performing Arts Theatre	12	12	-	-	-	-	-
21. Public Display Space	5	6.5	-	4	-	-	-
22. Urban Plaza	5	6.5	-	-	-	-	-
23. Transit Tunnel Access	D - M	D - M	D - M	-	-	-	-
24. Public Atrium	6	8	-	-	-	-	-
25. Housing	E	E	-	-	-	-	-
COUNCIL CONDITIONAL USE							
26. Major Retail Store	-	-	2.5	-	-	-	-
27. Major Waterfront Use	-	-	-	-	-	F	-

M - Features bonused only at mapped locations.

A Ratio of additional square footage of floor area granted per square foot of amenity provided.

B Value represents additional number of square allowed for each square foot the area of a floor is reduced

C Additional floor area.

D 15,000 square feet additional floor area allowed.

E Value varies; subject to Administrative Guidelines.

F Additional development regulation flexibility allowed.

Table 6.2.4.

FLOOR AREA BONUS SCHEDULE

PUBLIC BENEFIT FEATURE	LOCATIONS ELIGIBLE FOR BONUS			
	Office Areas	Retail Areas	Mixed Use Commercial Areas	Mixed Use Residential Areas
Human Services	X	X	X	X
Cinema	X	X	X	X
Shopping Atrium	M	X	M	-
Shopping Corridor	M	X	M	-
Retail Shopping	M	-	M	M
Parcel Park	X	-	X	-
Residential Parcel Park	-	-	-	X
Street Park	M	-	M	M
Rooftop Garden, Street Accessible	X	-	X	-
Rooftop Garden, Interior Accessible	X	X	X	-
Hillclimb Assist	M	-	M	-
Hillside Terrace	M	-	M	M
Harborfront Open Space	(Waterfront only)			
Sidewalk Widening	M	M	M	M
Overhead Weather Protection	M	M	M	M
Voluntary Building Setback	-	-	-	M
Sculptured Building Tops	X	-	X	-
Short Term Parking	M	M	M	-
Small Site Development	X	X	-	-
Special Evaluation				
Performing Arts Theater	X	-	-	-
Public Display Space	X	-	X	-
Urban Plaza	X	-	-	-
Transit Tunnel Access	M	M	-	-
Public Atrium	X	-	X	-
Housing	X	-	-	-
Council Conditional Use				
Major Retail Store	-	X	-	-
Water Dependent Incentive	(Waterfront lots only)			

KEY

- Does not apply

X Bonused throughout area

M Bonused in accordance with map only

are not automatically granted and are subject to a special design review to determine the extra area to be granted and also projects conformance with district design regulations as stated in the Land Use and Transportation Plan for Downtown. The third group, Council Conditional Use, considered certain bonuses that shall be "subject to review and approval by city council. Since these bonuses allow exceptions to density, height and development standards in highly sensitive areas of downtown, they may be granted outright, granted with conditions or denied."³³ In addition to the criteria classification, Seattle Bonus System states four conditions that apply to all public benefit features:

1. Time Commitment: It establishes that the use of public benefit features should remain for the life of the building which includes the additional floor area. The public benefit feature may only be diminished or discontinued if the additional floor area allowed in return for the specific feature is permanently removed from use; however, this condition has aroused some controversy, since some public benefit features such as parking and major retail stores are dependent on market conditions or on decisions taken by head offices usually located in different metropolitan areas. Another problem is the lack of definition of private and public urban spaces which has direct relation with the time for which the project can be open during the day and evening; in this respect, it has been considered that some kind of agreement be reached so as to ensure public access to interior spaces.
2. Access: This condition relates to the physical access to public spaces more than the "social access" of such spaces. Any public benefit feature shall provide access in accordance with

the Washington State Rules and Regulations for Barrier Free Design to guarantee access for the elderly and physically handicapped. Social access is a more complicated issue ignored in the new urban design plan. However, the government is arguing that since some area has been given away to the developers from part of the city, this can be considered as a trade-off and public access cannot be denied, as long as this "public access" does not mean a violation of the constitutional rights of the commercial/residential owners of the areas surrounding such public spaces.

3. Maintenance: It is stated that the owner of the project is responsible for the maintenance of the public benefit feature; although the plan does not contain any penalty policies for owners who will not comply with maintenance requirements.
4. Art: Artwork is required in the majority of the bonused public spaces, but the plan does not mention any process to determine what artwork is, or what kind of art will be on display, leaving these conflicting questions to the discretion of developers.

Conclusion

Seattle's Urban Design policies, are comprehensive in the way that they are not independent but a part of a more general plan. Urban design policies are stated clearly at downtown level as well as at district level, so in this way, little discretionary power is left to administrators, and developers can find a higher degree of predictability. Citizen participation in Seattle is considered a major achievement thanks to the creation of various civic committees which have a direct impact in the urban design process. Another important success is the flexibility of the bonus system which allows a

greater creativity on the part of the architect. Public benefit features are totally related to Seattle's unique characteristics, so that architects address the physical context and the public is assured that those unique physical characteristics will be protected and enhanced.

After having studied the American context, New York and Seattle, the second part of this chapter deals with two Canadian cities where urban design is a major issue in the fields of planning and architecture. In Vancouver and Toronto, urban design has been considered a responsibility of municipal governments and have developed urban design policies which fit the unique Canadian conditions.

6.3 Vancouver

Vancouver is the third largest metropolitan region in Canada, and without doubt, the city has the best urban design mechanisms to be found in Western Canada. In addition, the citizens of Vancouver have seen their city improved by projects such as B.C. Place and a new ALRT system which have augmented the quality of living in the city as a whole, especially in the core area. The present study will focus on those Urban Design mechanisms of Vancouver which deal directly with the core area (Figure 6.3.1). The most important element of the urban design process can be summarized as follows:

- The Core Area Plan
- Downtown/core policy and design guidelines, and
- Zoning and Development permit process

Urban design in Vancouver has been part of the planning process since the late 1950's, when public participation demanded protection of the unique characteristics of Vancouver's natural setting; even now in the eighties, public interest in the city's physical qualities are at the top of community's concerns, the three most important being: (1) views of the mountains and water, (2) city with an attractive appearance, and (3) resident participation in

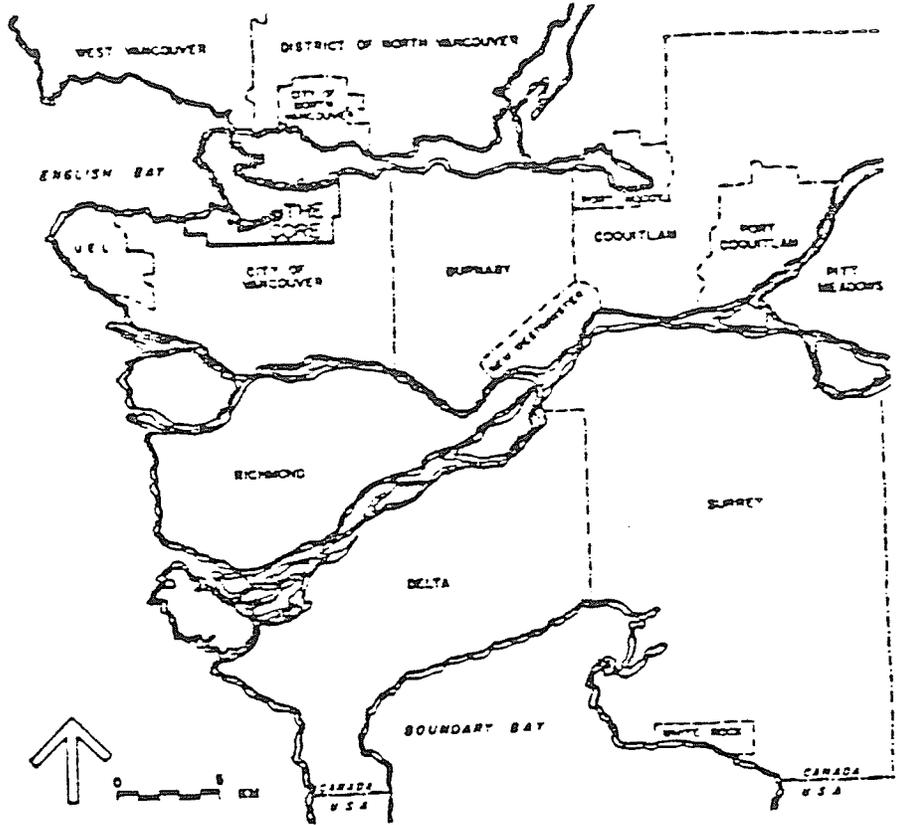
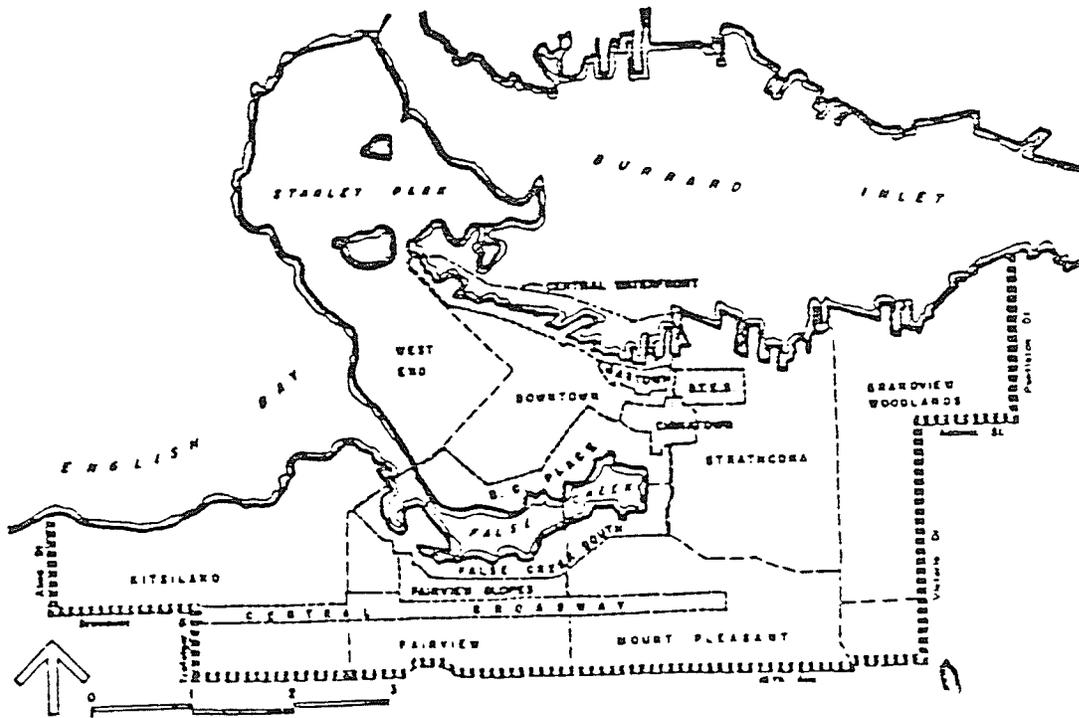


Figure 6.3.1.



(Source: City of Vancouver 1982)

government. The surveys which identified what Vancouverites wanted their city to be were part of an extensive search undertaken for the preparation of the core area plan, Coreplan.³⁴ The Coreplan has four areas of strategy for action: (a) core employment growth, (b) city housing, (c) transportation, and (d) urban environment. These four strategies represent what has become one of the most important trends in city planning: plans must be the answer to people's needs and concerns, as has been done in Vancouver.

The Coreplan outlines the urban design features of various past attempts to influence the outcome of urban development projects in the core area, and it is worthwhile to present them in order here to acquire a better understanding of the urban design process in Vancouver. Among the most significant features of these plans were:³⁵

- A- A discretionary development control process which provided developers with more flexibility to respond to the unique problems and opportunities of their sites and permitted the city to negotiate neighbourly and high-quality development based on guiding principles rather than rigid rules (e.g. the Downtown Development District, Central Broadway Urban Design, West End Planning Policies and Design Guidelines, and the Urban Design of the Georgia/Robson Corridor)
- B- The provision of floorspace bonuses for the private provision of social, cultural, and recreational amenities in new developments
- C- The identification of area character objectives and of design guidelines to achieve and maintain that character

- D- Beautification of significant streets and areas through local improvement projects and other public investment
- E- The acquisition and enhancement of public access to the waterfront
- F- The preservation of significant public views
- G- The acquisition and development of new urban parks
- H- The encouragement and construction of new cultural resources
- I- The designation and legislated preservation of significant heritage structures, and
- J- The preservation, restoration and enhancement of heritage areas

At this point in time, there is a general consensus that past urban design policies in Vancouver have in fact improved the physical environment with obvious psychological consequences such as better environmental perception and higher levels of satisfaction; however, the Coreplan identifies five areas of concern which could be the subject of future planning department initiatives. The five areas are:³⁶

- A- While bonusing for amenities is provided for some significant new facilities, it is not clear that these ad hoc opportunities necessarily provide the facilities which the city needs most. A greater sense of relative public priority, coupled with a public program to initiate facility provisions would help.
- B- Public funds for amenity preservation and provision are apt to remain scarce over the next several years while the economy searches for a recovery. This could frustrate the fulfillment of some plans and prompt the search for other more creative means of amenity provisions.
- C- As there is not a full inventory of significant landmarks and natural features, some significant aspects of Vancouver's quality may be lost through oversight and only appreciated through their absence

- D- Some long-standing amenity deficiencies - particularly in innercity residential areas - have been worsened by recent development and their correction made more difficult by rising land costs.
- E- There is a continued need to improve the efficiency of the administrative processes used by the city to obtain high quality development and negotiate for the provision of new amenities.

As it is concluded for these problems, the main interest now is in the social amenities offered by private developments, not anymore in the form and function which are becoming secondary considerations. This could be due to the increasing public participation and possible political aspirations of the planning-director. However, there are some design guidelines that ensure design review in terms of form and function. But before studying such guidelines, it is important to see how the city is trying to solve some of the problems mentioned above. The city recommended three actions:

1. Establish priorities for public amenity provision and direct public investment accordingly. (See Table 6.3.1)
2. Complete over-all identification of significant public and private views, natural features, water areas, landmarks, heritage areas and structures, other urban design attributes, and cultural resources requiring preservation and enhancement, and
3. Design and implement a program of incentives, regulations, and fiscal mechanisms for amenity preservation and enhancement.

Table 6.3.1.

POSSIBLE WAYS TO PROVIDE AMENITIES

- Development bonuses for the provision of social, cultural, or environmental amenities;
- Transfer or sale of density potential from sites to achieve heritage conservation, open space provision, or the preservation of significant views;
- Local improvement districts or development levies for the provision of open space, cultural and recreational facilities, public art, beautification, or the preservation of heritage in public or cooperative ownership;
- A requirement that capital projects include a small percentage budget for the provision of public art works on site;
- Joint public/private investments and joint use agreements, like the city park above the B.C. Hydro substation on Block 32;
- Extension of amenity bonuses for off-site or pooled provision of public facilities at developer expense;
- Design competitions and awards to recognize exceptional achievements in neighbourliness;
- Environmental assessment and review procedures for large projects or projects at particularly sensitive locations.
- Maximization of opportunities provided by senior government projects and funding.

These recommendations, as well as the Coreplan, are too general. The Coreplan is practically a policy discussion paper that lacks clear identification of issues in a more comprehensive way; even though, this disadvantage is overcome, in part, by policy and design guidelines. Many groups raised questions regarding this lack of specificity in the Coreplan, and as a result, the Director of Planning recommended the creation of a civic committee "to explore a city-wide amenity inventory, priorities for amenity investment, and environmental regulations and incentives."³⁷ Besides, the director expanded the urban environment strategy by including social concerns directly related to new development in the core area. Such social concerns are faced for a greater number of cities in North America due to the shift of the Central Business District towards a more service-oriented sector with a higher number of white-collar employees wanting to live and work close to the CBD. (See Chapters Two and Three.) As a result, the criteria to evaluate development proposals are:

1. Prosperity
2. Vitality
3. Efficiency
4. Equity
5. Beauty
6. Security
7. Health
8. Openness

This criteria is recommended to evaluate new development as well as to be taken into consideration when developing guidelines. The downtown design guidelines were developed in the early seventies and were approved on September 30, 1975, but they are exclusively for reference and do not form part of the zoning by-law or the official development plan. On the other hand, the Downtown District Official Development Plan is the only legal reference for developers. Both documents are similar to the Coreplan in terms of generality. The first document, Design Guidelines, is theoretical principles with no relation to defined physical areas; however, it sets the terms of reference for design. While the Downtown Development Plan focuses on a specified area, it also outlines general principles.

The Development Permit Board is the only administrative body with the power to relax the provisions of the Development Plan. However, the plan also gives authority to the Planning Director to influence any development, as can be seen from the following quotation regarding the calculation of the FAR:

"Balconies, canopies, or other architectural features which in the opinion of the director contribute to the amenity and/or environment of the downtown district . . ." (may be excluded from the FAR calculations).

This clue of the director's discretionary power can be seen throughout the Downtown District Official Development Plan, but it is said that his leadership has been important for the urban design movement in Vancouver. In any instance, the Development Plan does not address character areas within the downtown. It specifies density and height policies (see Figure 6.3.2) for the area, but it does not make a direct relationship between density and height zones, as this is a big mistake that is only appreciated in the implementation process. The Downtown District Official Development Plan (DDODP) also contains the standard criteria for CBD areas, such as retail continuity, parking, social and recreational amenities and facilities, and bonus for provision of such facilities.

There are two points that need clarification. First, social and recreational amenities and facilities refers to those spaces designed to provide fitness, recreation, and service to the public. The following is a list of those amenities and facilities that are excluded from the calculations of the Floor Space Ratio, as explained before:

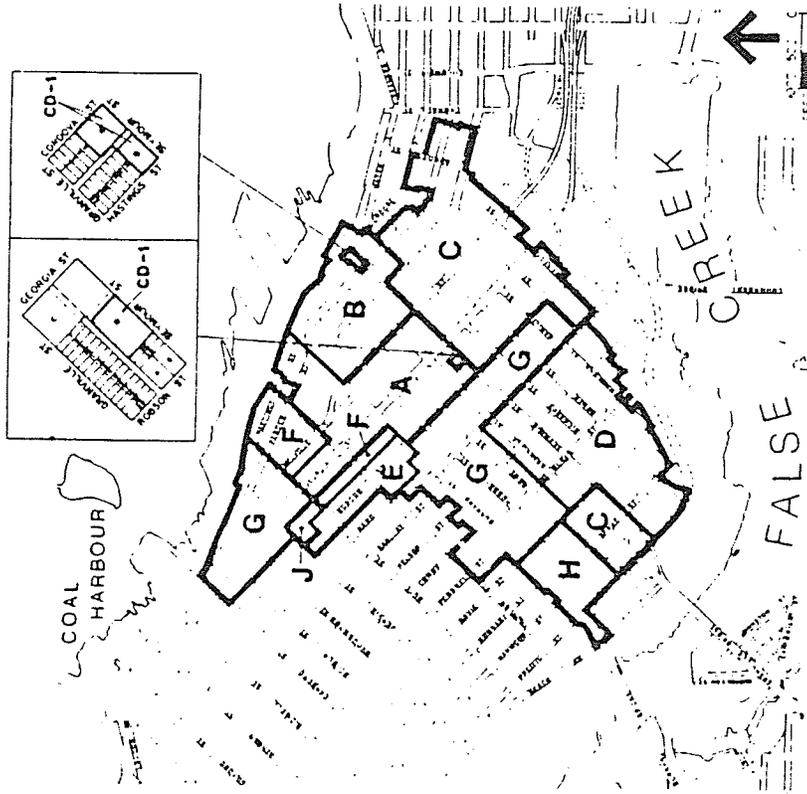
1. Saunas
2. Tennis courts
3. Swimming pools
4. Squash courts
5. Gymnasiums and workout rooms
6. Games rooms and hobby rooms

632

Figure 6.3.2.

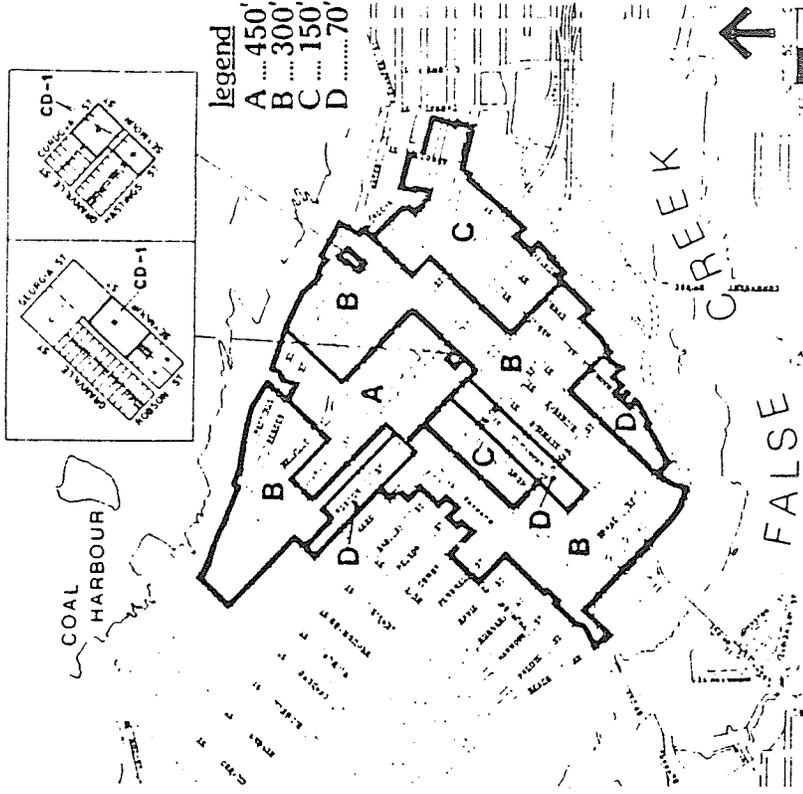
Density

Height of Buildings



City of Vancouver
Official Development Plans

DD
December 1984



194

Legend
 A ... 450'
 B ... 300'
 C ... 150'
 D ... 70'

City of Vancouver
Official Development Plans

DD
December 1984

(Source: 'Downtown Development By-law' City of Vancouver 1984)

7. Day care centres
8. Libraries
9. Any other uses which in the opinion of the Development Permit Board (DPB) are similar to the above.³⁸

Increases in the permitted floor space ratio are authorized by DPB subject to prior approval by city council. Even though, urban design features such as gallerias, arcades, atriums and the like are not bonusable and are considered part of the design of the building.

Thus far, two characteristics of the urban design process have been identified. First, legal documents such as the Coreplan and the DDODP in general leave room for discretionary processes from part of the administration. Second, this discretionary power is in the hands of the Planning Director, the Development Permit Board and, to a lesser degree, city council. Let's deal with the first, and later on, with the development process. Unpredictability and too much discretion are some of the problems inherent to any document which relates to real estate development in just statement of purposes, as is the case in some of the Vancouver publications related to urban design (Coreplan, DDODP, and Policy and Design Guidelines for Downtown.) The planning department, through consultants, has tried to fill the gap by developing

design guidelines for specific areas. Three of the most outstanding guidelines are:

1. West End: Planning Policies and Design Guidelines
2. Central Broadway Urban Design
3. An urban design study of the Georgia/Robson Corridor

The West End is mostly a residential area, which has witnessed an apartment boom construction. Between 1960 and 1970, some 13,000 dwelling units were added (118 percent increase), while only 3,000 units between 1970 and 1981 (12.5 percent increase.) The intent of the guidelines does not take into consideration densities of the area, and is only directed towards "pure" architectural design.³⁹

"The design guidelines contained herein are intended to encourage high standards of design and development throughout the West End. They are also intended to create an increased awareness, in the preparation and approval of development proposals, of the immediate and overall environment.

The design guidelines replace the yard requirements, the light angle controls and daylight obstruction angle requirements associated with regulatory Zoning District Schedules. Greater flexibility, variation and interesting design is thus facilitated. The design guidelines are intended to go further than this insofar as they represent a quality control basis upon which to base design decision and judgments.

The Design Guidelines do not require literal interpretation in whole or in part. They will, however, be taken into account, within their generality in the consideration of development permit applications. The Development Permit Board may, in its discretion, refuse or require modification to a development permit application proposal,

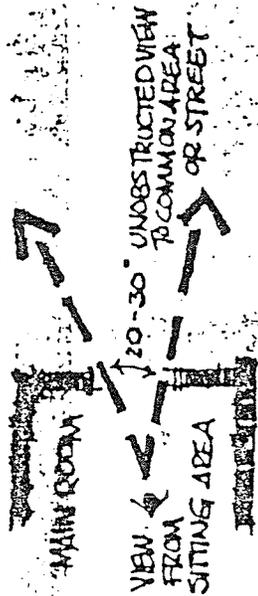
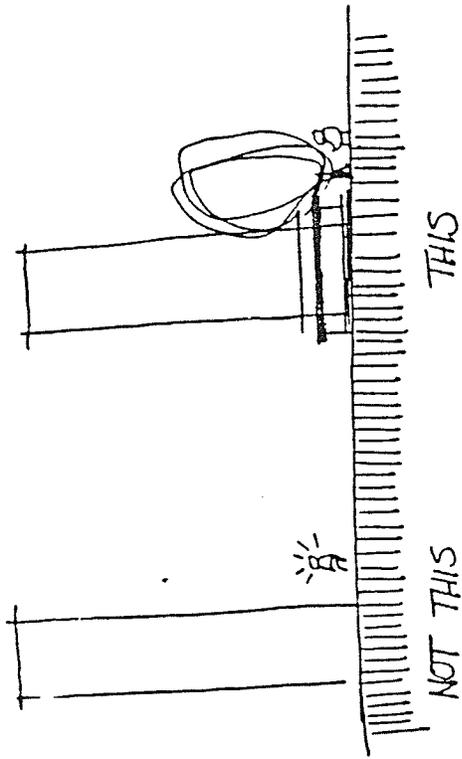
for failure to meet the standards of these guidelines in whole or in part. In the exercise of its discretion, the Development Permit Board shall first take the advice of the Urban Design Panel into account.

Design guidelines are not adopted through the full legal process or public hearing. Experience may prove the need to bring in new guidelines, or to revise guidelines found ineffective."

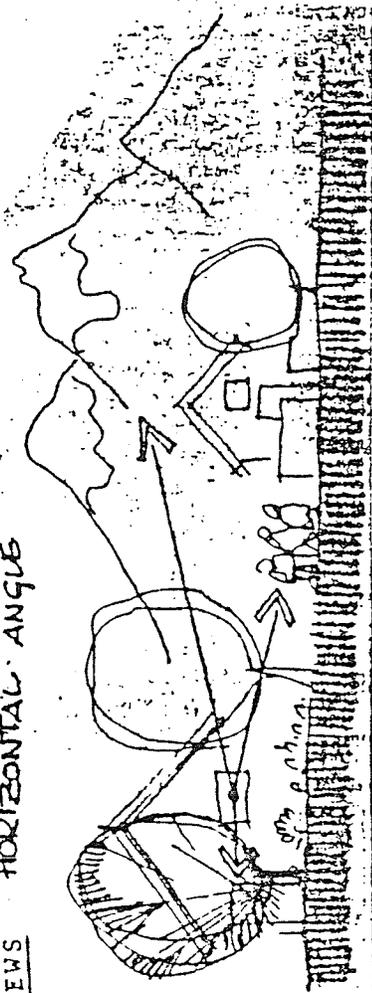
With such an intent, it would be assumed that the guidelines are very particular to the area, but this is not the case. These early guidelines, 1975, are in the same line as those documents described above, too general and too much room for discretion. The guidelines are broken down into three areas: building design, retail stores and open space. The design guidelines are just sketches with some text in the form of principles. (See Figure 6.3.3) Graphics and principles do not relate to a specified area within the West End District, they have not been of much help for architects and developers. Another fundamental shortcoming of these guidelines is that public participation is sacrificed for the sake of bureaucratic laziness (see last paragraph of Intent.) However, if there have been some design achievements in the area, it is not due to the guidelines, but to the development review process (Urban Design Panel) and the quality of the architects.

Figure 6.3.3.

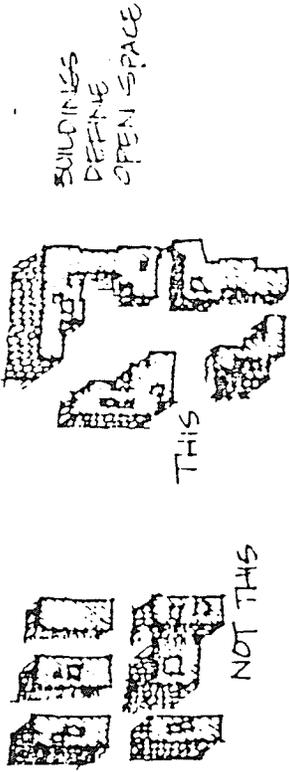
LOWER LEVEL TREATMENT OF TALL BUILDINGS



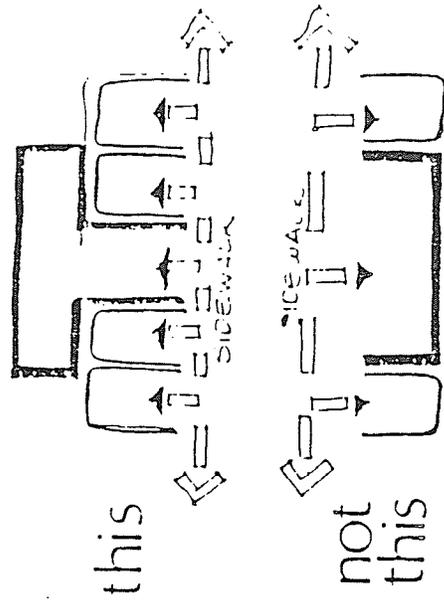
VIEWS HORIZONTAL ANGLE



GROUPING OF BUILDINGS

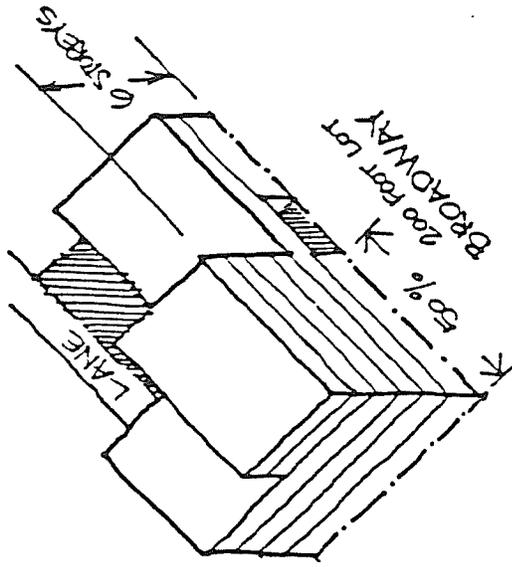


LOCAL SCALE SHOPPING STREETS

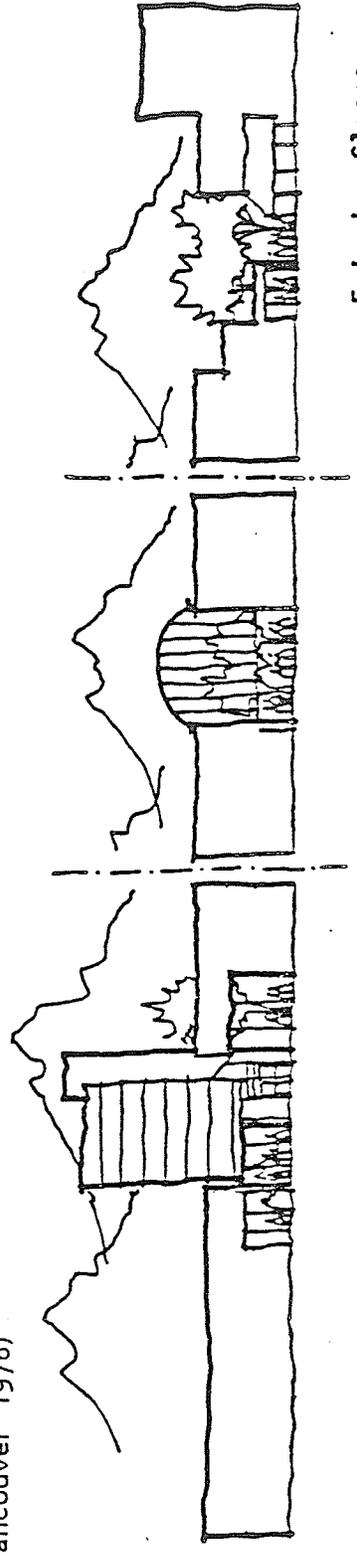
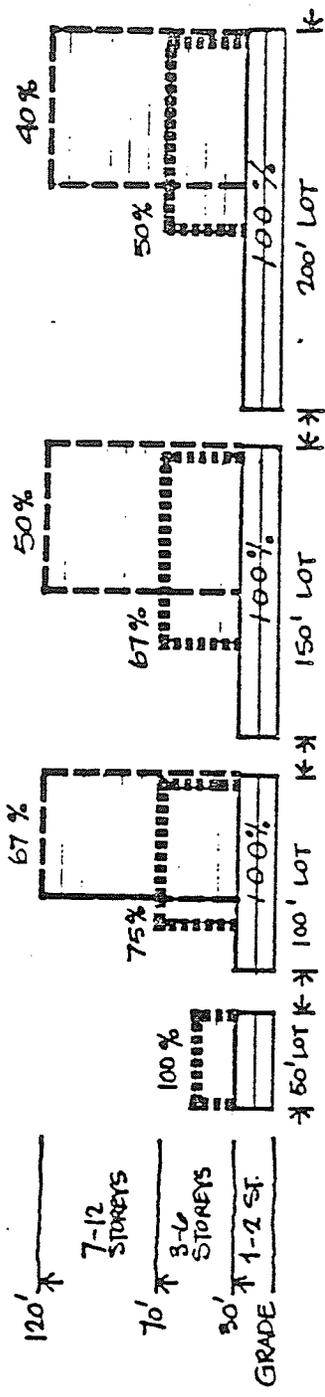
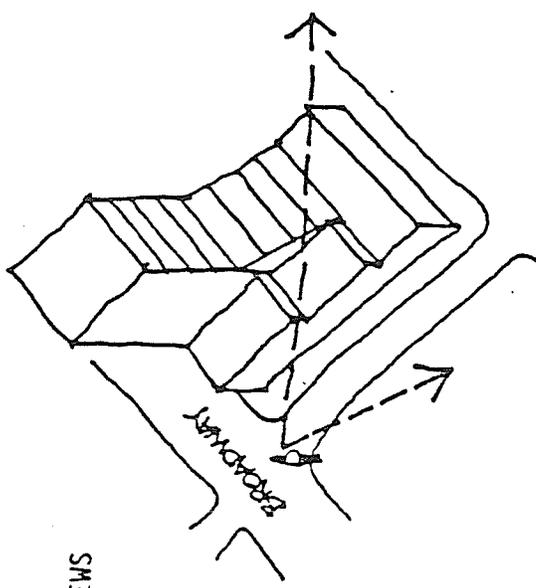


(Source: City of Vancouver 1972)

The Central Broadway Urban Design Guidelines (1980) are more comprehensive and do relate to defined areas of the district. (Note that the West End Guidelines were prepared by Norman Hotson Architects, Consultants.) The guidelines have a bottom-down approach - from city links to sub-areas within the district. First they develop general principles for the area (Figure 6.3.4) and later for each one of the sub-areas (Figure 6.3.5). The comparison between these two sets of guidelines shows that guidelines developed by city governments sometimes lack an understanding of the needs of architects and developers. This may be due to the absence of urban designers with a deep knowledge of the professional practice of architecture and real estate needs. The guidelines developed by consultants relate even to "real" streets and blocks, increasing the predictability variable so important for architects and developers in order to know what the city really wants to achieve. But let us not forget that guidelines in Vancouver are only for reference and do not imply a legal commitment from part of the city, and the DPB has the right to accept or refuse such guidelines as see fit. So now, the unpredictability is not found in the guidelines themselves, but in the bureaucracy. The third set of guidelines, the Urban Design Study of the Georgia Robson Corridor, was



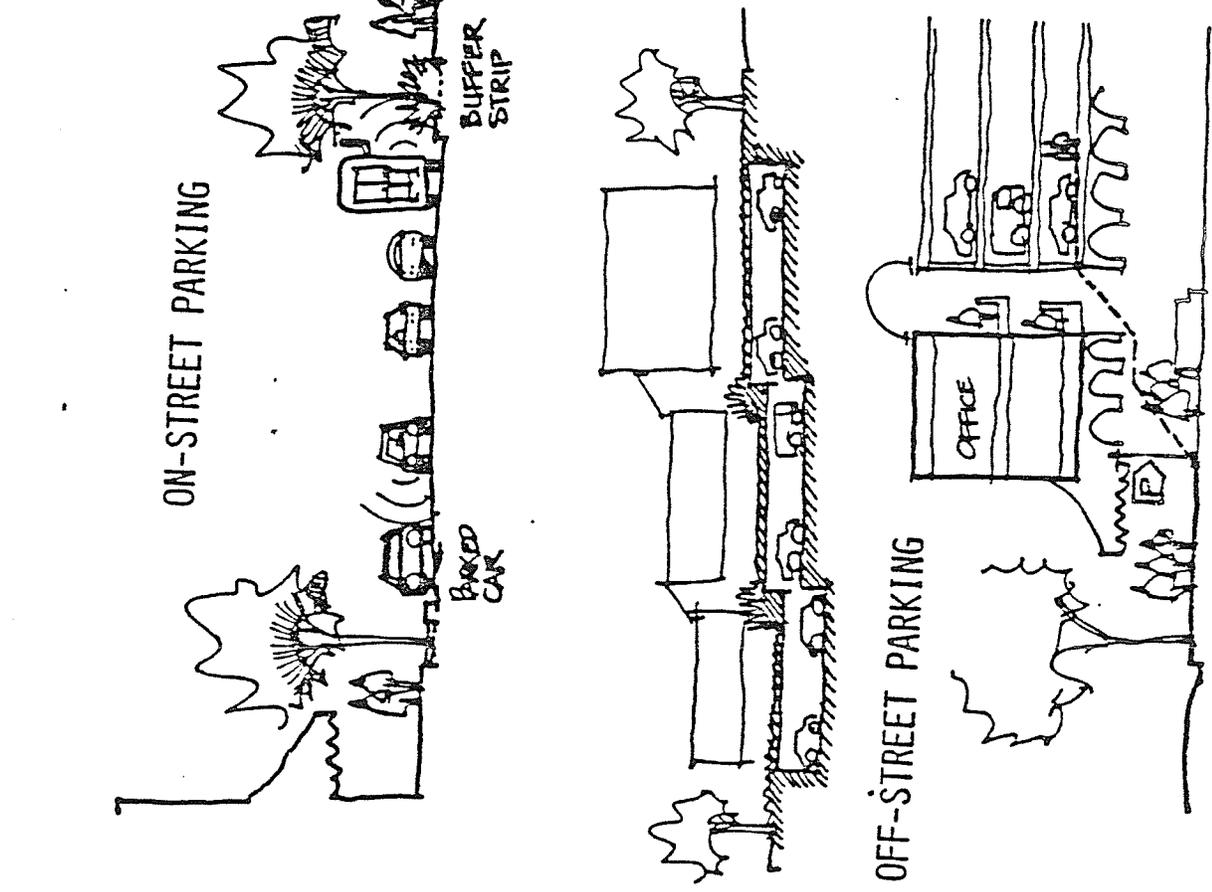
MASSING EXAMPLE: F.S.R. - 3.0
 winter sun over 50% of
 the street wall,
 off-street open space.



VIEWS

Figure 6.3.4.

(Source: City of Vancouver 1978)



CLIMATE CONTROL

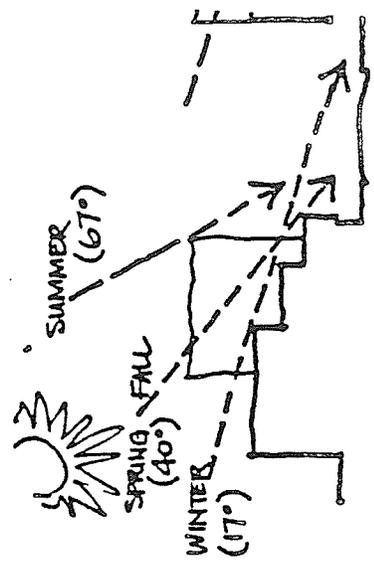
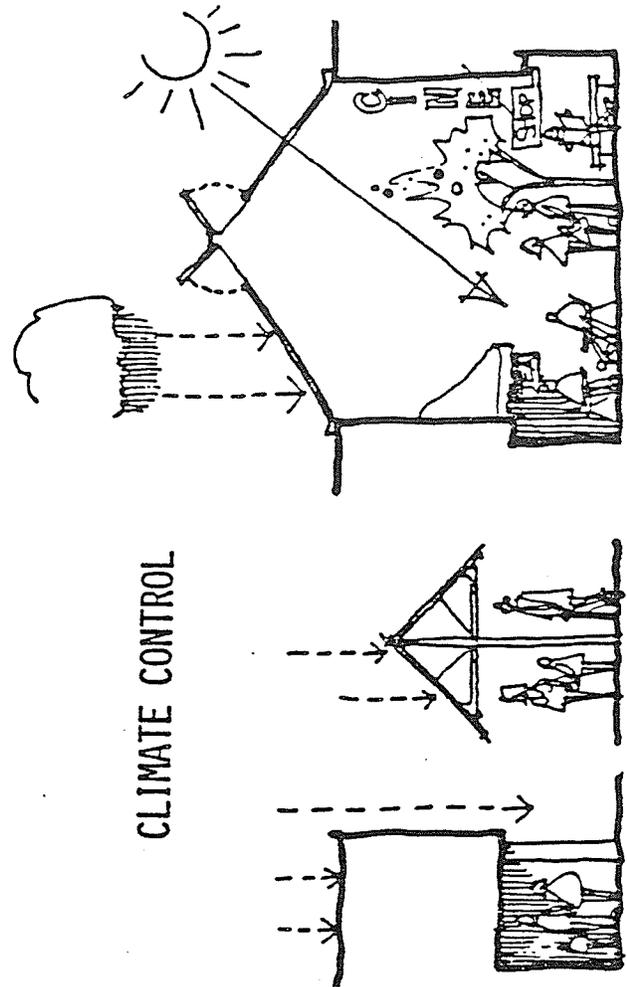


Figure 6.3.5.

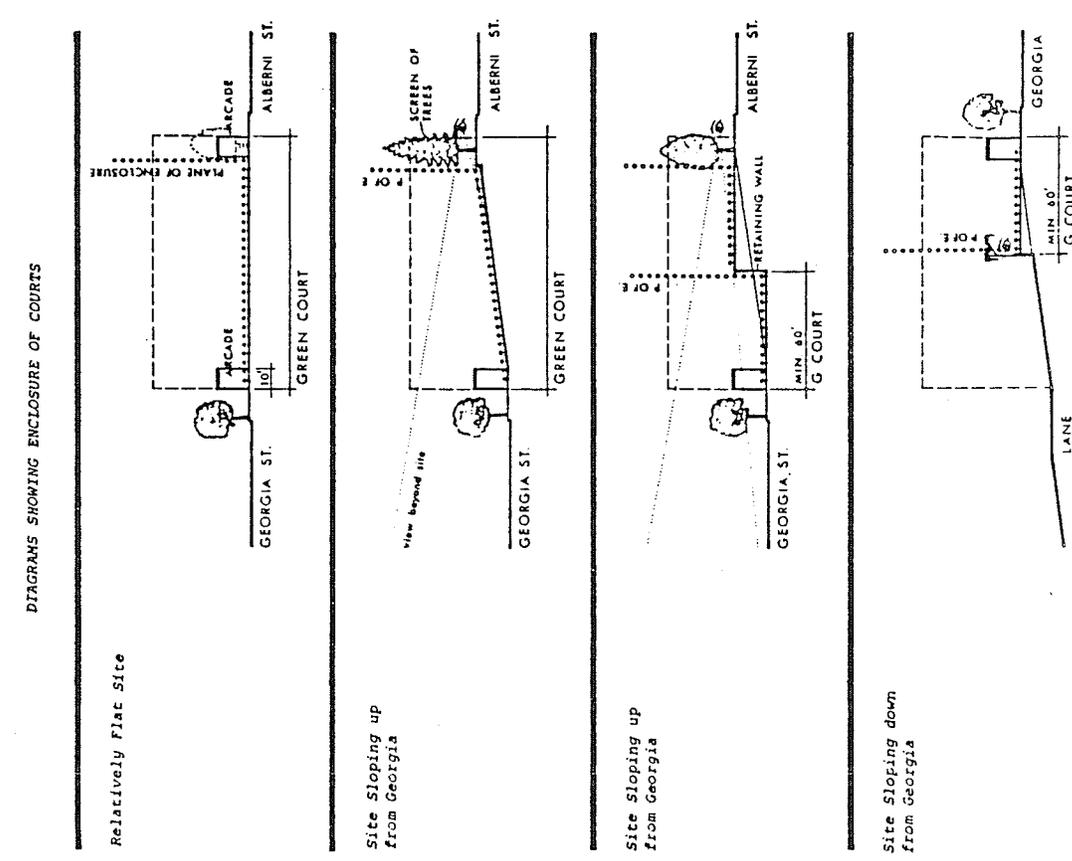
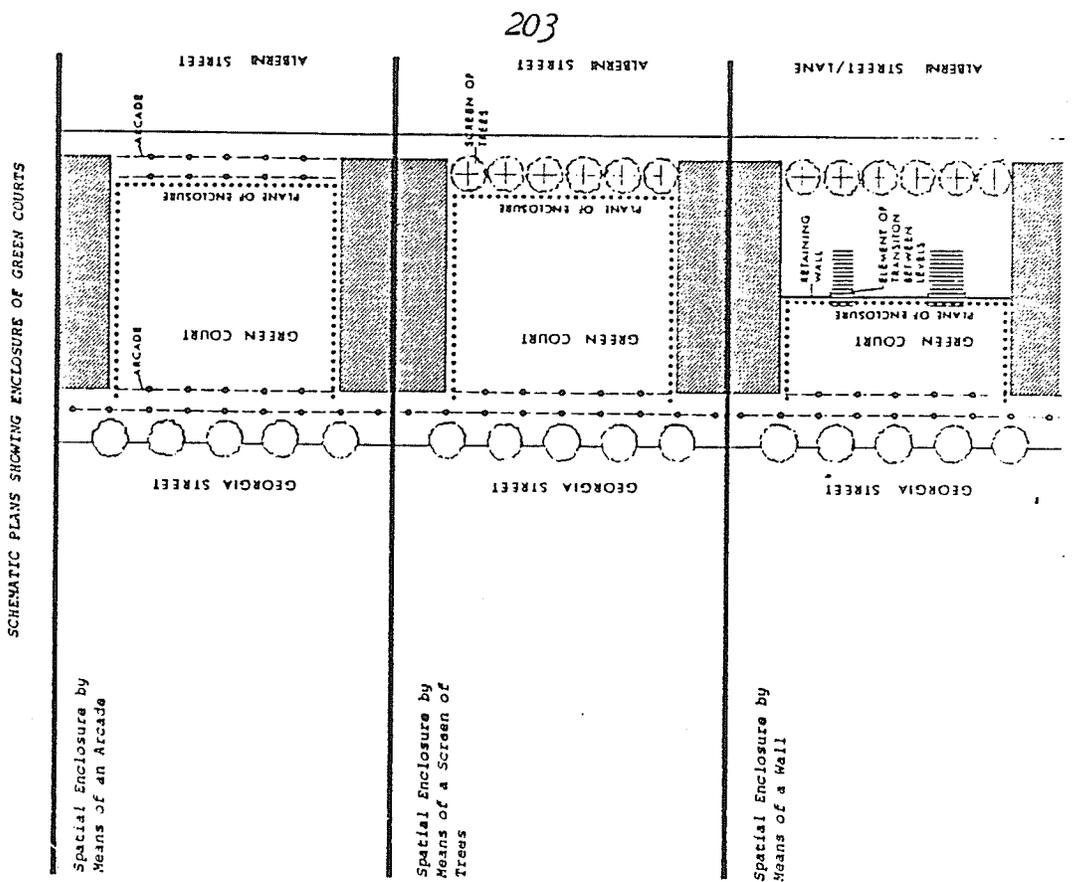
(Source: City of Vancouver 1978)

prepared by Baird/Sampson Associates, Architects (1982). The first part of the guideline deals with general urban design principles that include:

- A- Towers in open space
 - The greening of Georgia
 - Building types
 - Continuity of weather protection
 - Retention of significant views
 - Height limits
 - Retail Street frontage
- B- A continuous streetwall of buildings
- C- A hybrid of streetwall buildings and landscaped promenades and courts (Figure 6.3.6)

The second part of the study contains the Character Area Guidelines. It is broken down into sub-areas, and in addition, it considers future developments and their implications for the area. However, the guidelines are intended for areas of about ten blocks each, building sites in a block are not identified, and there is not a general plan for the area where it would be possible to appreciate the overall design framework. The only intent to do so focuses just on landscape elements of the guidelines (see Figure 6.3.7). The study also proposes building forms for new development, but there is not an understanding of how the architect came up with such forms, or the relationship of proposed form to existing ones.

Figure 6.3.6.

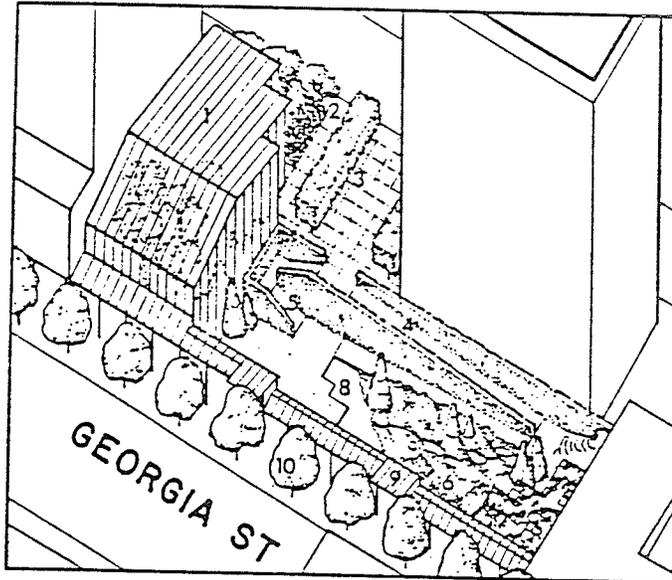


(Source: City of Vancouver 1982)

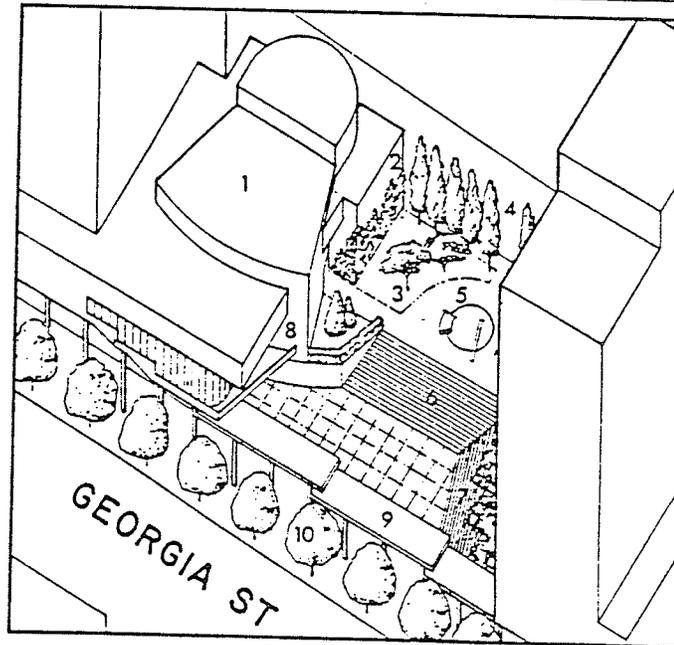
Figure 6.3.6.A.

Examples of Green Courts

1. Greenhouse
2. Flowerbeds
3. Clipped Trees
4. Ramp
5. Stairs
6. Botanical Garden
7. Trellis
8. Reflecting Pond
9. Continuous Arcade
10. Street Trees



1. Theatre
2. Vines
3. Garden
4. Tree Screen
5. Fountain
6. Amphitheatre/ Stairs
7. Trellis
8. Balcony
9. Continuous Arcade
10. Street Trees



(Source: City of Vancouver 1982)

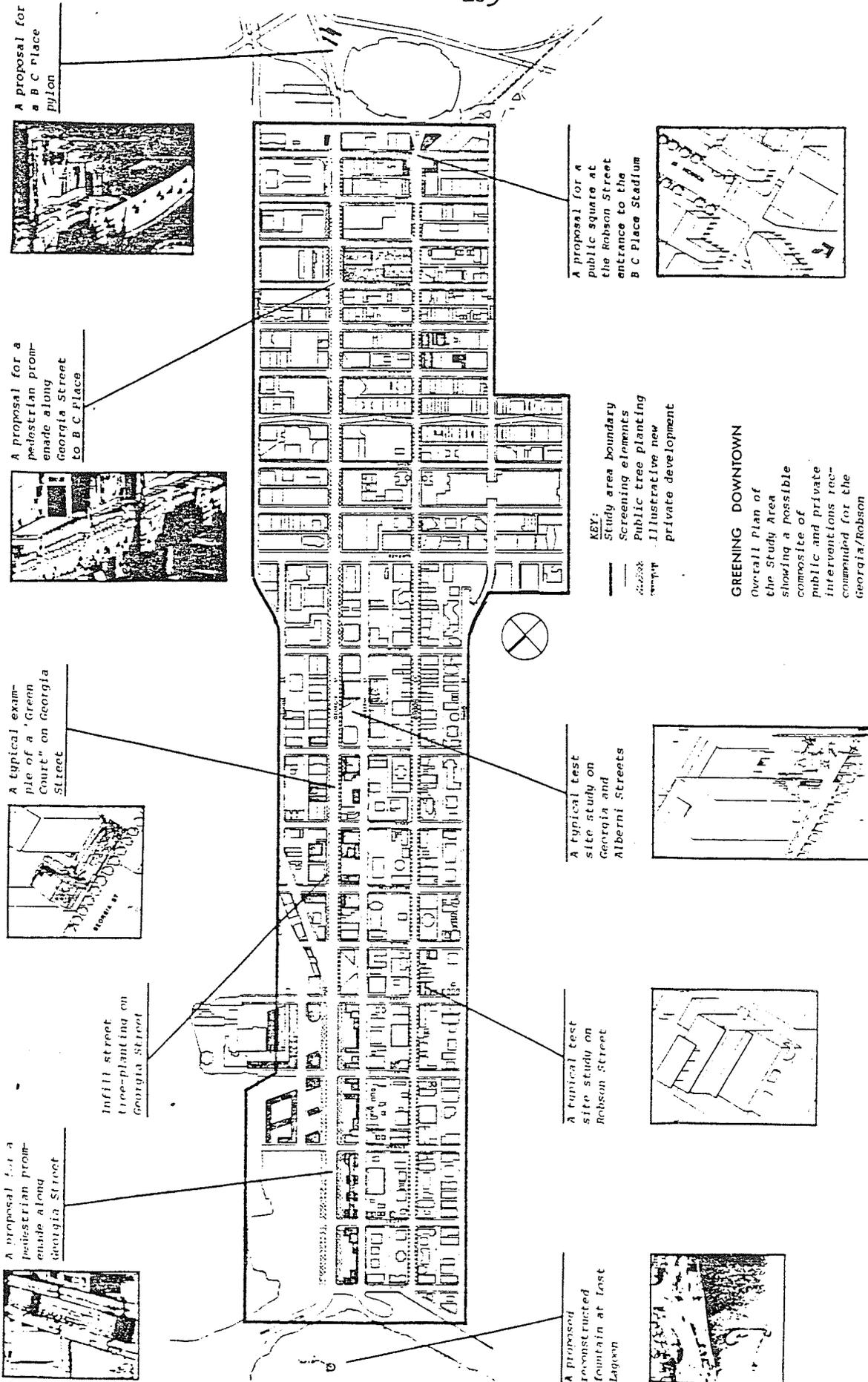


Figure 6.3.7.

(Source: City of Vancouver 1982)

From the analysis of these three sets of guidelines, we can see that there is not a general design criteria for the city in order to develop guidelines for different districts within the core area. As a result, all guideline criteria are different and are not co-ordinated to achieve city-wide objectives. It may be that guidelines are not important for architects and developers alike, since conformance to them does not guarantee approval; it is more important to get approval of development permits through discretionary methods (friendships, design modification advised by the planning director or the urban design panel, and the like.) Guidelines have shown to be ineffective, since even the DPB does not have to abide to them.

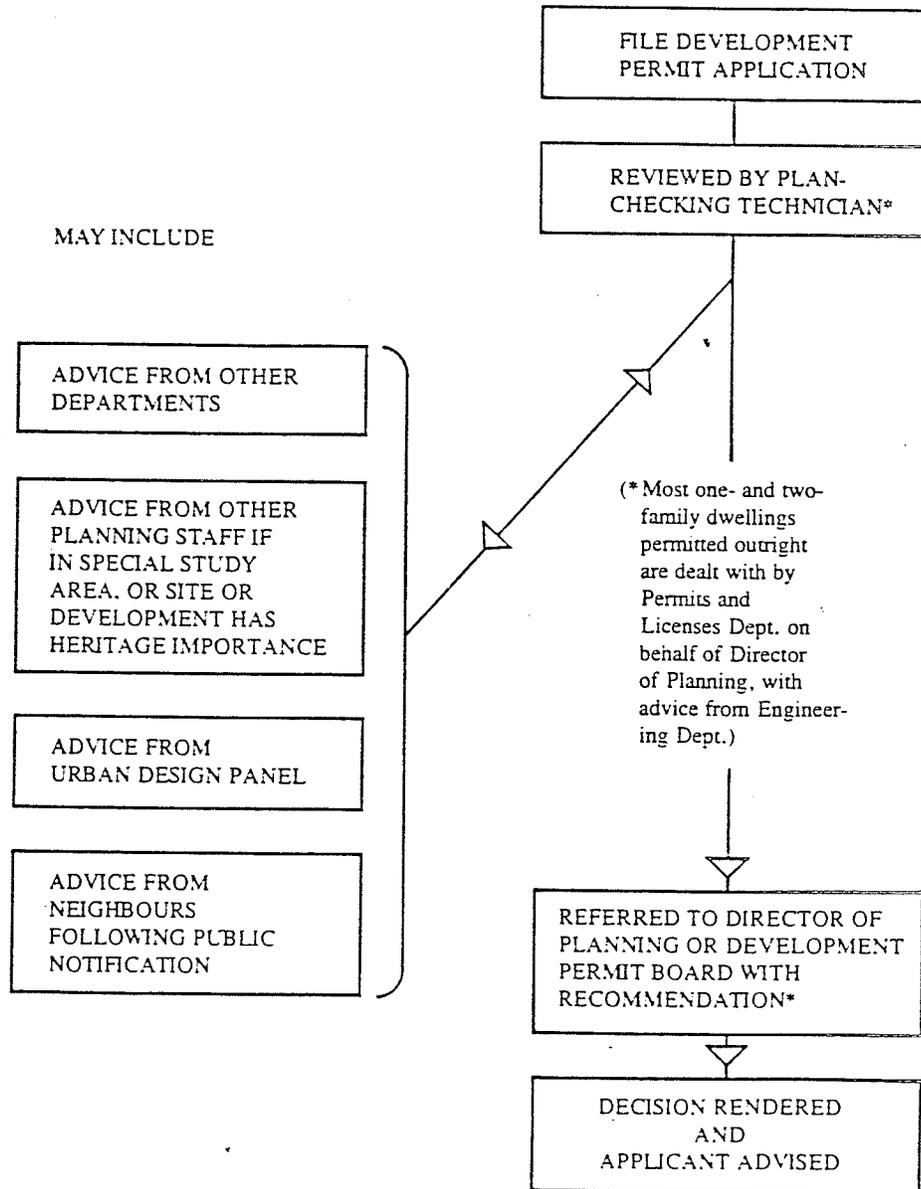
Design guidelines taken independently are useless unless an administrative procedure is developed to assure conformance with those guidelines. In the case of Vancouver, the development process (see Figure 6.3.8) is considered one of the most discretionary in Canada as expressed by the planning department:⁴⁰

"Some regulations may be varied or relaxed . . . conditions of use and limits of relaxations are usually stated in the by-laws but are set specifically by those city officials charge by Council with deciding upon development permit applications - the Director of Planning or the Development Permit Board. Major applications are ordinarily subjected to a preliminary design conference and may be decided by the

Figure 6.3.8.

HOW IS MY APPLICATION PROCESSED?

The process which most applications go through is shown in simplified form



(*Many simple applications are referred directly to the Supervisor, Development Permit Group, for decision (on behalf of the Director of Planning). Certain of these applications, including simple changes of use not requiring parking or loading relaxations, are expedited through the process. Applications for large-scale or contentious developments are referred to the Development Permit Board for decision).

(Source:City of Vancouver 1985)

Development Permit Board, although the board, once having given approval in principle to a preliminary application, may, on occasion, delegate the final decision on the complete application to the Director of Planning. There exists the right to appeal to the Board of Variance of Vancouver."

Mr. F. Bowers, City Manager, presented a report to city council on March 2, 1984, where a Review of the Development Process in Vancouver is evaluated. It is summarized in the following terms: "The most common and significant concern of architects and developers is the degree of uncertainty in the process to respect to what the city's requirements might be, the degree to which requirements might change throughout the process, the length of time to resolve all the issues and what the city might eventually approve." The planning director answered that it was impossible to reduce the present time (six to eight weeks) and that it would recommend more specific by-laws and guidelines. However, these measures do not reduce discretion from the part of the Planning Director or the DPB; even more when the planning director is himself the Chairman of the Board, reducing in this way the possibility of public complaints from the part of architects and developers.

In the same report, the planning director agreed to formalize a pre-design conference. The main purpose of the conference is for the applicant to discover all

the relevant by-laws, regulations and guidelines applicable to the proposed development. Any other planning device may have to be accompanied by a caution about possible reversal of that advice by the DPB, and the information given must be recorded. The pre-design conference is not a design meeting to identify the design issues of site development, it is merely an information exchange meeting. All matters relevant to design are left to be reviewed by the Urban Design Panel.

The Urban Design Panel was formed in 1956, introduced by council and concentrated on architectural design. In 1973 the emphasis changed to include Urban Design; "the public had an interest in more than the exterior appearance of buildings that went on to include the collective impact of buildings on each other, on the neighbourhood, and on the city at large."⁴¹ The panel is composed of thirteen persons: six registered architects, two landscape architects, and two engineers (all of whom are nominated by their respective professional associations), a representative of the Vancouver City Planning Commission, and one member each representing the Director of Planning and the Director of Permits and Licences. The role of the Urban Design Panel is advisory to the DPB and the Director of Planning; there are not forceable

guidelines to follow, as a result, subjective judgments are the only basis for recommendations.

In October, 1984, the City Manager proposed the abolition of the Urban Design Panel, since it was identified by architects and developers as one of the main impediments in the permission process. In addition, the discussions of the panel were "In Camera" and dealt mainly with aesthetic considerations. It was argued that the Director of Planning and his architecturally trained staff are capable of providing this information. In the end, the City Manager lost, and as a consequence, the power of the Planning Director and the Urban Design Panel was reinforced.

Other concerns raised by the private sector is that the Director's personal taste have too much influence, and that his judgments are very subjective, and what is even more bothersome is his unwillingness to delegate authority. It is also contended that many of the by-laws and design guidelines are poorly written and do not represent the reality of private development. These two worries are expanded by Western Management Consultants based on surveys undertaken to evaluate the Development Permit Process in Vancouver.⁴²

There is almost unanimous agreement that the Director of Planning has too much power. The current director is viewed as having a pervasive influence in

the process and is perceived to use the full extent of the power available. The perception of the community is that development in the city reflects the personal taste and changing moods of the current director. The general view is that if the Director of Planning does not like it, a project will not get approved.

Many of the guidelines pursuant to the by-laws do not give a sufficiently clear understanding of the requirements to be satisfied or explain why they need to be satisfied. Guidelines are treated as regulations subject to relaxation at the discretion of the city. To many applicants, it appears that anything is open to negotiation.

Therefore, it is the impression of the private sector that in Vancouver there is too much and concentrated discretion, and that city staff appear to be insensitive to costs and what is achievable in the "economic realities of the business world."

6.3.1 Conclusion

In Vancouver, design guidelines are most of the time superficially conceived, thereby, increasing the discretionary or subjective analysis of development proposals. However, strong personalities such as the Planning Director, have overcome, in part, the poorness

of the guidelines.

Political leadership and insight knowledge of aesthetics do not guarantee good urban design, so part of the pride for achievements must be shared with the private sector. A powerful planning director in urban design issues acts as just a "critic", not as the designer. Architects in Vancouver are among the best in North America, and maybe without the present director, the results would have been the same. Even though, leadership is important to maintain urban design at the forefront of public policy.

The urban design process in Vancouver needs a reduction of discretionary measure to be more effective. A powerful planning director and good architects are not going to stay forever, the reason for which it is important to develop an urban design process that protects and enhances the environment when these two forces are not present.

6.4 Toronto

Toronto is the largest metropolitan area of Canada, and in appearance is not very different from New York or Seattle; however, each city has a very unique downtown. And in Toronto, the central area has not lost population as its counterparts in the United States and even in Canada.

Urban design policies in Toronto have evolved in the last fifteen years to become some of the most effective tools in dealing with private developers and architects; besides, Toronto's CBD is still the favorite area for corporations to locate, and as a result of the corporations strive for image, the design quality has been improved greatly to become the heart of a metropolitan area of which Torontonians feel very proud.

The contributions of Toronto to urban design are not in the field of "master plans" but in the process itself. Urban design policies can be studied in the light of the following areas:

1. The Ontario Planning Act of 1983 - Zoning
2. On Building downtown - design guidelines
3. Downtown Plan Review, and the
4. Civic Design Program

The Ontario Planning Act of 1983, the legislation provides a "clear distinction" between the various purposes for which zoning is used. It provides a

variety of zoning techniques from which municipalities can choose, and are grouped in longterm and short-term.

"The long-term zoning provisions enable local municipalities to zone existing uses that are stable and to prezone lands to future uses where the uses can be predetermined. These provisions include standard zoning . . . as well as holding and bonusing provisions . . . the short term provisions include interim control by-laws and temporary use zoning by-laws, both of which imply a time related control."⁴³

Section 36 of the Planning Act enables a municipality to award increases in density and height of development "in return for meeting specific municipal planning objectives" such as the provision of special or assisted housing, the preservation of building with historical or architectural value or the provision of additional space or other service. Two examples of bonus policies in Toronto are the density bonus for open space in apartment development, and for underground pedestrian connections in the downtown business district.⁴⁴ The act also reduces the administrative procedures to grant bonuses. And it specifies that the bonus policies be clearly stated in the official plan and by-law, and if all the requirements are met by a developer, the density and/or height bonus must be granted without requiring a rezoning to permit the additional density and/or height, and Toronto planning department can require an

agreement to address access to facilities, public and private domains and so forth.

The objectives in Toronto to provide bonus are (among others):

- A- Provision of a wide range of housing types including family type housing or assisted housing
- B- Preservation of the unique character of certain parts of the municipality containing buildings with historical or architectural significance
- C- Encouraging innovative building designs
- D- Provision of community and open space facilities such as small parks, day care centres, community centres, and recreational facilities

The act considers that it is important for any discretionary process, as that of bonus provisions, to be implemented through zoning by-laws so citizens and private interests can know what the developments options are. Therefore, the official plan's implementation policies "should require that the by-law:"

- A- contain the detailed development standards that would apply when the bonus is awarded. If the bonus is not awarded, the standards of the basic zoning category assigned to the site would apply. These standards, of course, must comply with the policies in the official plan for Toronto.
- B- set out how these bonus standards relate to the conditions ("facilities, services or matters") that are required to be met in order for the bonus standards to apply to the site.
- C- address the matters to be dealt within the agreement. The reference in the by-law should not make the bonus award conditional on entering into

the agreement. Rather, it should be clear that as part of the bonus being awarded and the bonus standards applying, the agreement will be entered into.

- D- be written in such a way as to ensure that discretion can not be applied. If the conditions to be met and the bonus to be awarded are all agreed to and set out in agreement, a rezoning should not be necessary.

In determining appropriate sets of bonus standards, several points should be kept in mind:

- The extent of the increase in height/density should be compatible with adjacent development
- The bonus density and height proposed must conform with Toronto's official plan
- The municipality's expectations of the developer in terms of services to be provided or conditions to be met should be realistic, in terms of marketability, general economics and the needs of the municipality
- Specific and unique local needs and expectations should be taken into account

In this way the act provides for a bonus system that is guaranteed against "discretion" since it is based on standards; even though, discretion is implied when the developers ask for such bonus provisions, and the planner in charge evaluates the design proposal to study project's conformance with such standards. The Planning Act emanated from federal government and administered by the Ontario Municipal Board has deeper implications, as Cook outlines:⁴⁵

"One significant departure from American practice is the Ontario Municipal Board, a creation of the all-powerful provincial government. The board must pass on municipal debt, financing plans, zoning, development controls, and amendments thereto. Ontario cities (included Toronto), with the Municipal Board looking over their shoulders, have less leeway than American cities. The effect may not only to confine a city's options but also to make discretionary-review processes less vulnerable to political considerations or to shift the political bargaining to the provincial level."

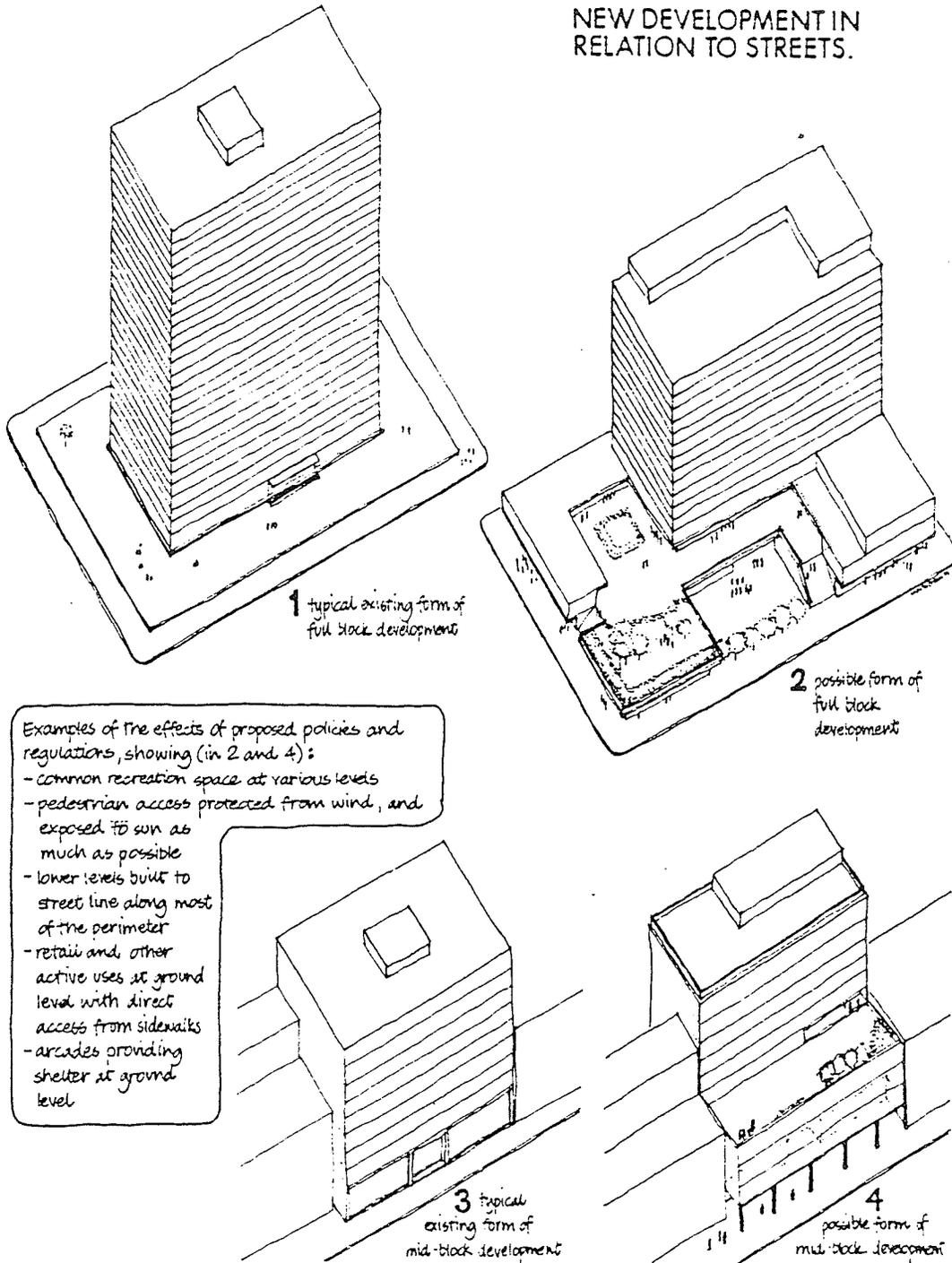
The provincial government has also included in the Planning Act a policy that has an indirect effect on the urban form and structure of CBD's. Section 39, cash-in-lieu of parking allows the municipality the option of entering into an agreement with the owner or occupant of a building site exempting that person from the parking requirements set out in the by-law, and requiring that cash-in-lieu payments be made to the municipality. This option would likely be used in a situation where the municipality is prepared to reduce or eliminate the parking requirement on a particular site and to provide the required number of parking spaces in a municipal parking facility on another site with the funds obtained in lieu of the parking.⁴⁷ However the act does not establish criteria for the implementation of Section 39, leaving it to the discretion of the municipality.

Another zoning technique used in Toronto is the site-plan-by-law. It is intended to exercise development control (design review) of development proposals. Since the planning act does not give the power to municipalities to do so, the by-law would contain a plan for the plot and perhaps also elevation drawings and some specification of materials (Figure 6.4.1). This approach has been criticized for two negative effects. The first, is that in order to make changes in the site a new by-law is required and a rezoning process. This is conducive to delay and the real estate market is very sensitive to time considerations. The second negative consequence "gives no guidance" of what the city expects, and very little predictability is found since only very few standards can be specified. On the other hand, it presents more flexibility than the traditional zoning by-laws; du Toit points out:⁴⁸

". . . instead of requiring that the development merely fits generalized geometric formulae or providing incentives to include specified and, therefore, limited extra facilities, the total development design is subject to approval prior to construction. This allows trade-offs between public benefit and developer advantage, which are generally too variable and subjective to regulate by standardized formulae. The dependence is on evaluation rather than on prescription."

Figure 6.4.1.

NEW DEVELOPMENT IN
RELATION TO STREETS.



(Source: 'Coreplan' City of Toronto 1976)

These zoning techniques in Toronto are usually nondiscretionary and only relate to buildings themselves but not to their impact on neighbouring properties and on the city's liability, reason for which the city planning department developed a set of guidelines published under the title "On Building Downtown" that is a reference guide for developers and architects. Zoning prescriptions are arithmetic and more convenient legally, and performance standards are more responsive to design issues.⁴⁸ The document adopts the performance standard approach. It tends to be similar to the Environmental Impacts carried out in the United States. Du Toit groups possible impacts in four areas:⁴⁹

1. Climatic Impact: the orientation, shape, size, number and relationship of buildings affect the local climate. This can be measured positively or negatively in terms of wind or air stagnation, sunlight or shade, heat, storage or glare, and protection or exposure to rain and snow.
2. Ecological Impact: the site, works, built form, paving, location, lighting, waste disposal and energy systems of a development affect both the regional and local ecology. This occurs in terms of drainage (runoff, water table level and flooding), vegetation and wildlife systems, air ground and water pollution, and use and dispersal of energy.
3. Service Impact: the new development will make demands on roads, utilities, waste disposal, public transport, open space, school and other services.
4. Social Impact: the surrounding community will also be affected. This may occur in terms of hazards and restrictions of pedestrian movement

caused by increased traffic; noise, dust, dirt and fumes; the perception of building bulk; the scale and attractiveness of new development; the loss of natural areas, or the gain of landscape; the increase of commercial and public transportation amenities and the increased employment and municipal tax revenue generated.

An environmental impact study for each proposal would be too extensive and economically not viable, so it is important just to prioritize issues, and from there, evaluate a development proposal. The following is a list of the design guidelines of the city of Toronto:⁵⁰

A- Downtown Pattern

- A1 Sun and Shade (Figure 6.4.2)
 - open spaces
 - streets surrounding new buildings
 - existing residential buildings surrounding new buildings
- A2 Wind and Calm
- A3 Noise and Quietude
- A4 Air Pollution
- A5 Water Pollution Control
- A6 The Rectangular Street and Building Grid
- A7 Buildings to be retained
- A8 Special features
- A9 Public views
- A10 A variety of activities

B- Areas of special identity

C- Public Realm

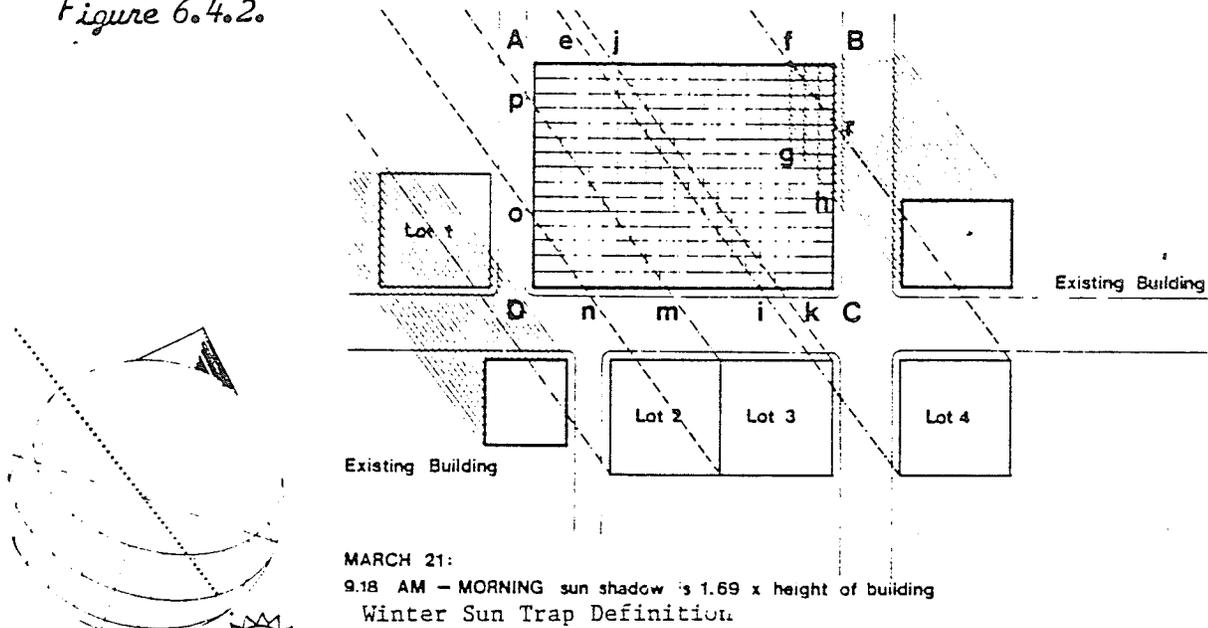
- C1 The street hierarchy
- C2 Major and minor streets for pedestrians and vehicles
- C3 Streets for pedestrians
- C4 Routes and facilities for bicycles
- C5 Street design
- C6 Entrances, concourses and platforms at subway stations

- C7 Open space in the public realm
- D- Public Parts of the Private Realm
 - D1 Pedestrian walkways
 - a- at ground level
 - b- below ground level
 - c- above ground level
 - D2 Linkages
 - D3 Arcades Overhangs and transit shelters
 - D4 Public open space in the private realm
 - a- at ground level
 - b- below ground level
 - c- above ground level
 - d- at level low roof
 - e- at level high roof
 - D5 Construction and Construction phasing
 - D6 Loading and Servicing

Each guideline starts with goals followed by some good (do) and bad (don'ts) examples (Figure 6.4.3) and at the end, outlines the requirements to be satisfied. The city also proposed a review process in which participation of interest groups is the vital force behind any decision (Figure 6.4.4). The design guidelines are only for reference (as in Vancouver.) In recent years, some of the guidelines have been introduced in the official plan for Downtown Toronto, where early design review is advised. The success of a design review process "depends on the ability of developers and the city to enter into discussion with respect to the aspects to be reviewed at an early stage in the design process. It is often very difficult and costly to alter substantially a development design when design and drawings have reached a very advanced stage.

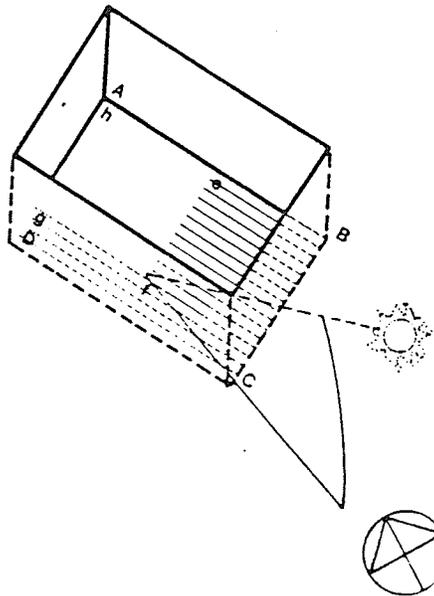
A range of different building lots have the potential to maximize or minimize sunlight conditions on open space ABCD. Moreover, during the day, the responsibility for maximization or minimization of sun on that space shifts among that range of different building lots.

Figure 6.4.2.



Plane ABCD must be enclosed/ sheltered on 80% of its total periphery. As tested against sunlight conditions at NOON on February 19, at least 40% of the enclosed ground plane must receive direct sunlight. (i.e. Area efgh must be greater than 40% of the area of ABCD.)

Shade



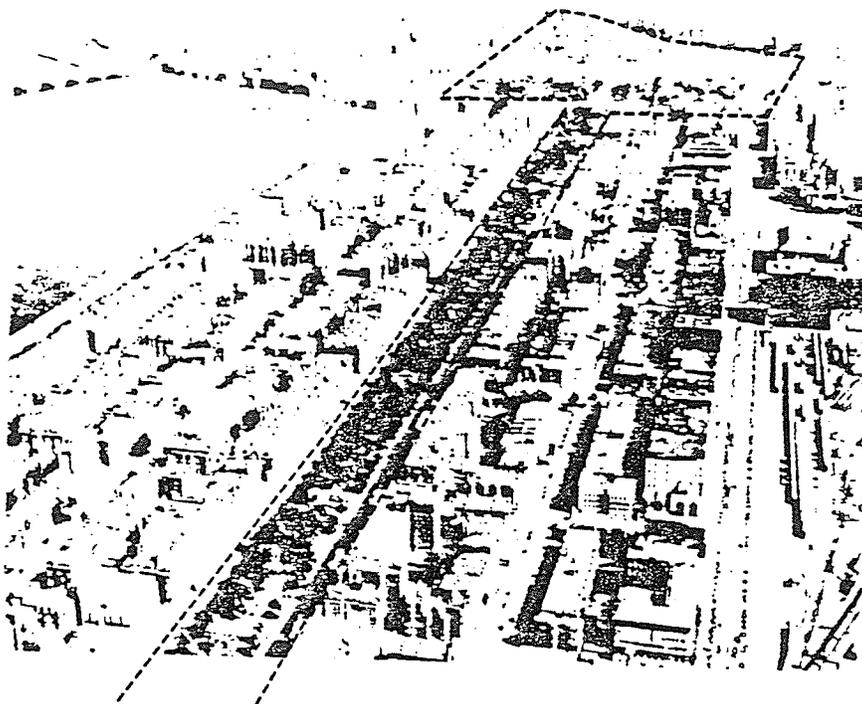
Note: Axonometric drawing simulates Lothian Mews' sun trap.

(Source: 'Onbuilding Downtown' City of Toronto 1974)

Precedent:

The Parkways (e.g. Commonwealth Avenue) in Boston, designed by Fredrick Law Olmstead, are good examples of physical devices which ensure the continuity and accessibility of public open space. The Parkway shown below leads from the Boston Commons to the Fenway.

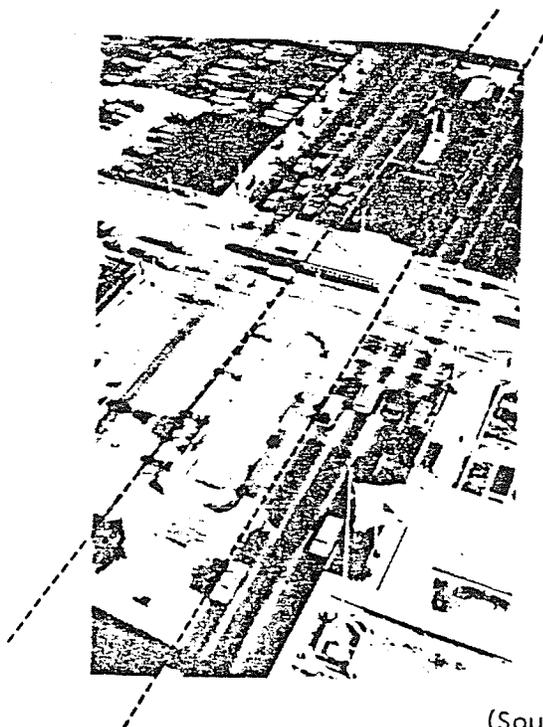
Figure 6.4.3.



Precedent:

The median strip of University Avenue is an underutilized public open space.

(Condition to be avoided.)



(Source: City of Toronto 1974)

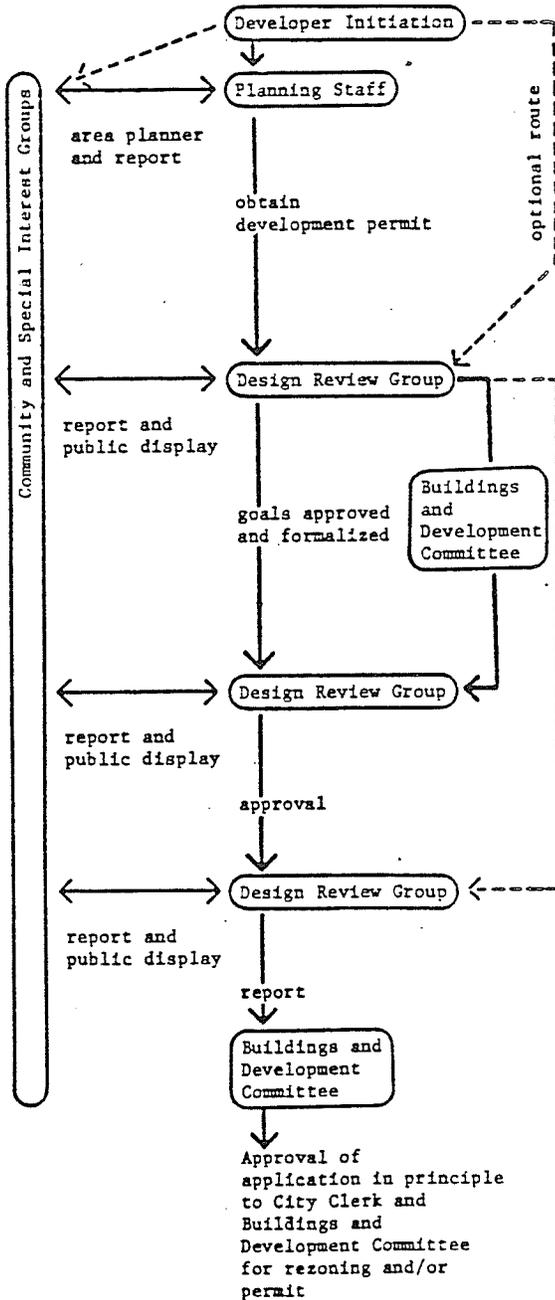
Figure 6.4.4.

Pre-submission (exploratory)
 -status of part II and other relevant studies in area
 -community attitudes
 -elaboration of design guidelines and process
 -discuss probably impact area
 community needs - physical
 - social
 -community resources

Programming (goals established)
 -developer presents
 - use
 - mix
 - size
 - impact area
 - community needs
 - community resources
 - design guidelines conformity

Schematic Design
 (concept and general arrangement)
 -review and confirm goals
 -demonstrate conformity with guidelines (this could be a series of meetings)

Final Design
 (design drawings and model)
 -demonstrate conformity with goals and design guidelines



The Review Process

(Source:City of Toronto 1974)

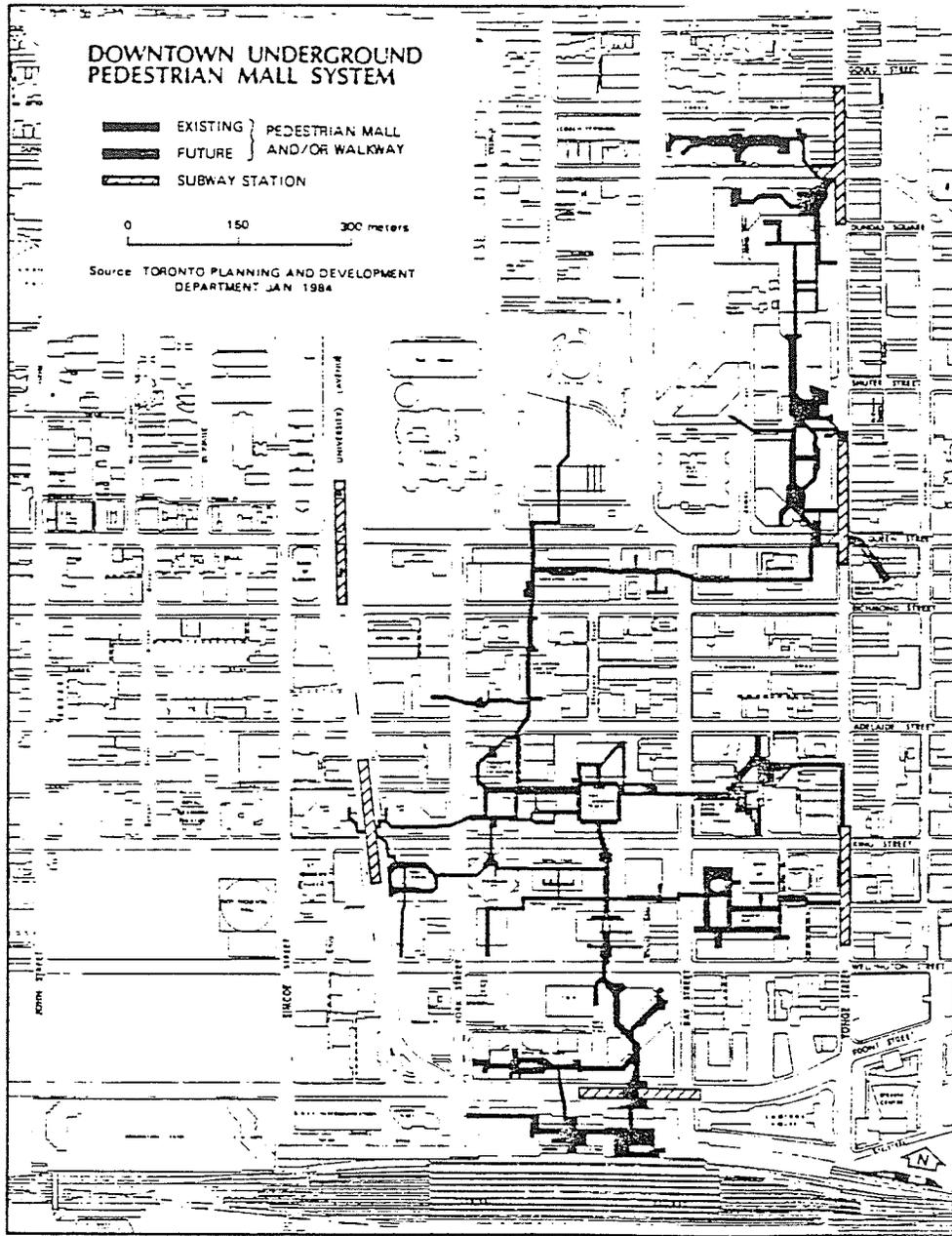
The Design Guidelines Document should note that the city encourages discussion with respect to a development's form and amenity at the early possible stage in the formulation of a development.⁵¹

The plan identifies various subdistricts, for instance the financial district with two areas of special identity: the Bay Street Canyon, and Front Street (Figure 6.4.5) and simultaneously the underground network (Figure 6.4.5).

In the early seventies, the underground network had been accepted by developers since its area did not count in the total FAR, and a connection to the underground system would increase the marketability of the project as well as an extra commercial revenue. However, political changes in city council (anti-development) promoted the city planning department to withdraw the bonus previously given for the underground retail shopping area and transferred to street related retail. And financial participation from part of the city was also withdrawn. There was a fear that the underground network was drawing away people from the streets.

It is important to cite how city policies related to density affect urban design. In 1978, the city of Toronto Planning Board proposed an amendment to that portion of the central area plan that limited

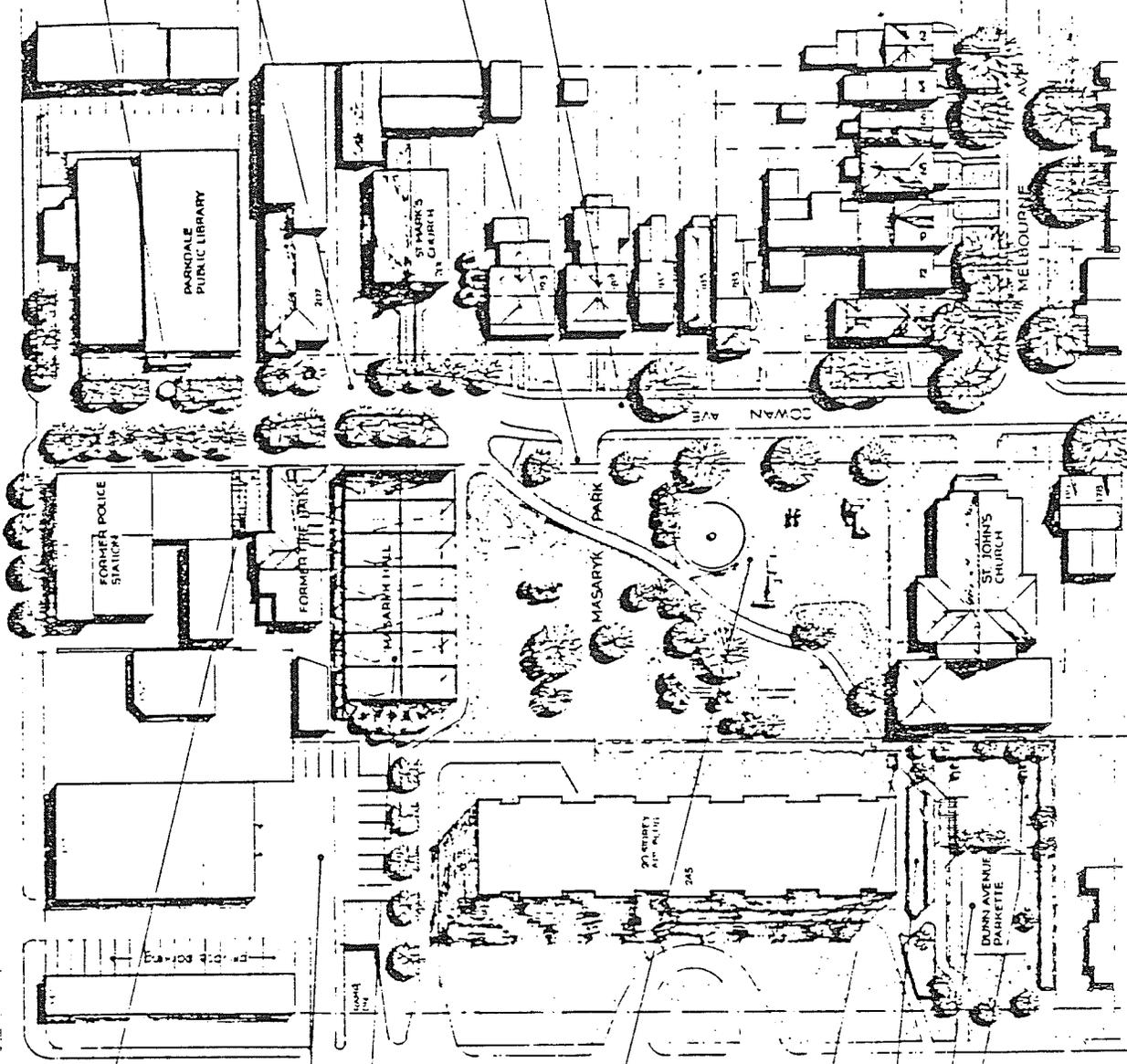
Figure 6.4.6.



(Source: City of Toronto 1984)

commercial density other than street-related retail and service uses to 0.3 times less than the maximum commercial density permitted. The purpose was to revise the means of encouraging street-related retail and thereby allocating full commercial density. Density incentive, "it was felt," should relate to the amount of street frontage occupied by street-related retail and service uses rather than to the provision of up to 0.3 times the lot area. The planners proposed that the maximum amount of street frontage required for street-related retail be limited to sixty percent. If the developer included sixty percent of his street frontage for retail, he would be granted the full commercial density allowed for the lot with no restrictions as to where, how or for which uses the density would be allocated. If less frontage was used for retail, the maximum commercial density was to be reduced by an amount up to 0.3 times less than the commercial density permitted for the area. Thus, the total allowable commercial density would be determined more directly by the amount of street-related retail space included in the project.⁵² Even though, the popularity of the underground system, now connected to interior commercial arcades is increasing and is one of the best urban design elements of Toronto of which the most outstanding is Eaton's Place. (Figure 5.4.7)

QUEEN STREET WEST



link former fire hall and Police Station buildings for combined Community Centre Facilities
Cafe on Queen street

new Public Parking lot
remove cladding retain brick facade and steel trusses
install translucent roof with multi use hard play surface below for basketball, volleyball, ball hockey and winter floor-ling

install new play equipment and wading pool
regrade, install new trees and new pathways

cut new access for path through retaining wall

install rose beds, pergola
install shuffle board courts
homesite pits

new entrance and canopy on west side of Public Library for community information centre

close portion of Cowan Avenue install planters, trees and pedestrian pavement
reserve limited on-curb lane for deliveries, fire trucks and special events

hammerhead turn around for local traffic

parking on one side of street

NOTE: information taken from Preliminary Plan of Development for the site, prepared by the City of Toronto, Department of Planning and Development, dated April 23, 1979.

CONCEPT FOR MASARYK COMMUNITY RECREATION AREA
CITY OF TORONTO PLANNING BOARD
CIVIC DESIGN GROUP

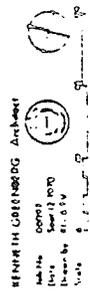


Figure 6.4.7.

(Source: City of Toronto 1979)

Major developers who have included retail arcades in their complexes seem to find the concept very attractive "because retail malls represent one of the ways of achieving a quality image, an image that attracts a higher rent."⁵³ Goodman explains the advantages for developers when providing underground retail arcades which offer the developers something that is not available to them with on-street retail stores: a large amount of authority and control in determining exactly what activities may or may not occur in their domain. A public issue that will arise many questions of public interest vs. private intentions; however, many of the activities prohibited by private enterprise are in benefit of the government as well. Loitering, picketing, bag ladies, and drunks act as negative elements in the perception of customer behaviour, thus reducing sales of stores and ancillary activities; and as a consequence, taxes are reduced as well as a reduction of the environmental quality of the area.

Many are the issues the urban designers have to deal with, but some are very political in nature and the designer must define what the public interest requires and address such concerns accordingly. There is no such thing as "apolitical design" and the designer is required to understand people's and

government's expectations. The city of Toronto, through various zoning techniques, as we have seen, has tried to provide architects, planners and developers with a clear understanding and very little discretion of what the city wants to achieve. But Toronto's government has realized that only private initiative will not address all the problems, reason for which the city created a Civic Design Program.

The term "Civic Design", as used in Toronto, embraces those works aimed at improving the use, appearance and safety of the city's public spaces and places. Such works cover a wide spectrum and include the continual maintenance and upgrading of city streets, sidewalks, paving of existing lanes, and occasional opening or extension of new ones. In addition, the city has an ongoing program of parks acquisitions, development of outdoor recreational areas and including new communities and recreational centres. At the broadest level, civic design is concerned with the planning and programming of a group of related improvements for a large area such as the St. Lawrence Historic District or the design solution for the Masaryk Community Recreation Area (Figure 6.4.8). At a more detailed design level, "Civic Design" is concerned with the form and location of specific elements ranging from the design of a park or mall arising from a street

closing, to the location and design of paving, trees, planting, street furniture, fences, fountains, water features and sculptures and the like.⁵⁴ The programs of the Civic Design Program are expected to be derived from general policies such as the Official Plan and Local District Plans; a top-to-bottom approach, where program implement plans.

It is an experience from which many other cities can benefit; the Civic Design Program has defined functions, as follows:⁵⁵

- A- Assisting the area planning sections in the preparation of Civic Design Improvement Plans as an element within the planning process.
- B- The development of a comprehensive city-wide program of civic design, improvements in consultation with area planning sections and other city departments.
- C- Detailed design and co-ordination of selected civic design improvements in conjunction with the appropriate city departments.
- D- The promotion of participation by private individuals, companies, organizations and other levels of government in funding design improvements to public lands and public elements of private lands and buildings.
- E- The establishment and administration, with the city clerk, of a program of awards for excellence in civic and urban design.
- F- The preparation for distribution of information on the civic design program, its policies, objectives and programs.

The Civic Design Program of Toronto is the most ambitious project to co-ordinate various departments to

promote better environmental design. Since it is a new experiment, the results are to be seen in the years to come.

CONCLUSION

Toronto's Urban Design Techniques are established to avoid discretion from part of the government, and at the same time, to reduce political leverage from part of politicians.

The Federal Government, through the Ontario Planning Act, sets out the general criteria by which municipalities should develop zoning and urban design policies, emphasizing clarity of terms of reference and public participation in the majority of the steps of any planning process. The conventional zoning is straightforward with clear and precise objectives that make it easy to administer and apply, and what is important in Toronto is in how different urban design programs are developed to implement general plans. Addressing the need for an approach which has cyclical character: general-particular and from particular to general. Another important contribution of Toronto is in the two ways it addresses urban design. Public works through the Civic Design Program, and private development through traditional zoning and innovative techniques such as site-by-law and the contrasting examples (good/bad) of the design guidelines.

FOOTNOTES CHAPTER SIX

¹"Plazas for People," New York City Planning Commission 1976, p.5.

²Ibid, p.7.

³Snedcof, R. Harold, "New York's Equitable Centre," Urban Land, July 1985, p.20.

⁴Midtown Development, (City of New York: June, 1981).

⁵Ibid., p.8.

⁶Ibid, p.8.

⁷Herbert Storz was the Chairman of the Department of Planning of the City of New York by the time the Midtown Development Report was published in 1982.

⁸City of New York, Ibid., 1981, p.41.

⁹Ibid.

¹⁰Ibid., p.76.

¹¹Ibid., p.54.

¹²Moore, James A., "Daylight in Manhattan," Solar Age, December 1981, p.34.

¹³Barnette, Ibid, 1982, p.112.

¹⁴"42nd Street Environmental Impact Statement Summary," New York State Urban Development Corporation, August 1984, p.12.

¹⁵Ryan, Dennis, "Lay of the Land," Planning, February 1983, p.18.

¹⁶Cook, Robert, Zoning for Downtown Urban Design, Lexington Books, 1980, p.82.

¹⁷Ray, Genivieve, City Sampler, Community Design Exchange, Washington, 1984, p.30.

¹⁸Ibid, p.34.

- ¹⁹ Ibid.
- ²⁰ Ibid, p.18.
- ²¹ Ibid, p.34.
- ²² Personal Communication.
- ²³ Mayor's Recommended Land Use and Transportation Plan for Downtown Seattle, p.105.
- ²⁴ Ibid, p.59.
- ²⁵ Ibid, p.64.
- ²⁶ Ibid.
- ²⁷ Ibid, p.69.
- ²⁸ Ibid.
- ²⁹ Ibid, p.101.
- ³⁰ "Floor Area Bonus System Standards and Criteria for Public Benefit Features," City of Seattle - Land Use and Transportation Project, June 1984, p.2.
- ³¹ Ibid, p.4.
- ³² Ibid.
- ³³ Mayor's Recommended Land Use and Transportation Plan for Downtown Seattle, p.98.
- ³⁴ The Vancouver Coreplan: A Proposal for Discussion, May 1983, City of Vancouver Planning Department.
- ³⁵ Ibid, pp.76-77.
- ³⁶ Ibid, p.78.
- ³⁷ Planning Department Recommendation from the Planning Director Regarding the Coreplan Implementation, 10 May 1984, p.3.
- ³⁸ Downtown District Official Development Plan, City of Vancouver, February 1984.
- ³⁹ West End Planning Policies and Design Guidelines, City of Vancouver, Planning Department, June 1975, p.1.

⁴⁰Zoning and Development Permits in Vancouver, Planning Department, May 1985, p.7.

⁴¹Vaugh, Michael, "Eyes on Urban Design," Quarterly Review, Vol.11 No.4, October 1984, p.7.

⁴²Manager's Report to City Council, 2 March 1984, p.14, City of Vancouver.

⁴³The Planning Act: Guideline No.8, Ministry of Ontario, Municipal Affairs and Housing, October 1983, p.1.

⁴⁴du Toit, Roger, "Architects, Zoning By-Laws and Design Controls," The Canadian Architect, March 1977, p.52.

⁴⁵Ibid, p.7.

⁴⁶Cook, Ibid, p.143.

⁴⁷The Planning Act, Ibid, p.9.

⁴⁸du Toit, Ibid, p.55.

⁴⁹du Toit, Ibid, P.53.

⁵⁰On Building Downtown, Toronto Planning Department, 1974, p.111.

⁵¹Central Area Plan Review Part 1 - General Plan - Proposals, City of Toronto Planning Board, October 1976, pp.B6-11.

⁵²"Central Area Plan, Amendment 3.A.5," in Lindy Goodman's, Streets Beneath the Tower, Department of Geography, York University Discussion, Paper No.31, November 1984, p.35.

⁵³Goodman, Ibid, p.42.

⁵⁴Civic Design Program," City of Toronto Planning Board, September 1978, p.2.

CHAPTER SEVEN

FINDINGS AND RECOMMENDATIONS

The purpose of this chapter is to present the principal findings of urban design policies which were derived from literature reviews and case studies as well as from interviews with experts in urban design. These findings are common characteristics shared by the different municipal governments studied, and serve as general principles from which recommendations are drawn. The sets of principles and recommendations can easily be followed by any municipal government in order to improve the urban design process. Following these framework principles, matrixes of urban design evaluations are presented. The intent of the evaluation matrixes is to offer a tool for urban designers so that they are able to evaluate the impact of a development proposal in a more comprehensive way. This last part also focuses on the physical elements that must be considered when new development is going to take place.

7.1 Role of Urban Design in Municipal Governments

Urban design is considered to be the process by which a municipal government protects and enhances the downtown physical environment in order to facilitate the achievement of higher social and economic goals. And since Downtown is thought of as the part of the city which belongs to the community as a whole, the urban design process is intended to protect the rights of the public by controlling individual rights of development. Thus, urban design is a political process, and in order to accomplish its goals, urban designers must:

Recommendation 1

Encourage citizen participation in the design process with two objectives: (1) to ensure that community needs and minority groups are met, and (2) to build public support so that urban designers have political leverage with politicians who are the decision makers. However, it is necessary to look for council political support before recommendations are presented.

Recommendation 2

Make urban design as open as possible. They must also develop mechanisms to complement public participation by the creation of ad hoc committees as well as using the media as a tool to inform and educate the community.

7.2 Role of Higher Levels of Government

Increasingly higher levels of government, either provincial or federal, are pressing local governments for more coherent urban design policies in order to diminish the possible negative impact of development projects at regional scales. Therefore:

Recommendation 3

Develop environmental review techniques to analyze and forecast the impact of development proposals at city and regional levels. Such an environmental review should focus not only on physical impacts, but also on the socio-economic consequences of development.

Recommendation 4

Use urban design policies to manage growth within the Downtown. By doing this, implementing city and regional plans becomes a goal for urban design in order to produce area-wide analysis.

Recommendation 5

Understand that downtown urban design is part of a more comprehensive design policy which includes suburbs, industrial areas, and any other land-use classification in the city and its metropolitan area.

7.3 Urban Design As a Partial Solution

There is a general understanding that society's problems are not solved by redesigning the physical environment. Urban design is seen as an integral element of set policies in which land use, transportation, tax policies, economic development, housing and equity are as important as urban design. Physical, economic and social problems are closely related and it is useless to treat each independently. Therefore:

Recommendation 6

Practice urban design as a field of action in which many disciplines have a direct influence. Urban design is not the practice of one profession, rather it is the practice of many, and for just one individual it is impossible to cope with the multitude of areas with which urban design deals.

Recommendation 7

Try to create a committee to co-ordinate the different departments (disciplines) that have a direct impact on the physical and socio-economic environment of the city.

7.4 Aesthetics and Function
in the Urban Design Process

The pedestrian environment is central to urban design, and aesthetics and function are its two main components. Function in urban design is the integration of cultural, psychological, social and economic dimensions into the design process. For this reason, and due to the subjectivity of aesthetic judgment, aesthetics are second to function. Therefore:

Recommendation 8

Focus on the pedestrian environment as the central concern of downtown urban design. Any project should address pedestrian needs and be designed accordingly.

Recommendation 9

Having the pedestrian as focus, urban design should also be applied to create a positive image of the city at a pedestrian level as well as at skyline levels.

Recommendation 10

Develop aesthetic criteria based on the cultural and psychological characteristics of the public; do not make aesthetic judgment based on personal criteria. Aesthetic values are as important as function when shared by the community.

7.5 The Role of Zoning in Urban Design

Zoning is a very important tool for urban design and is employed to form a legal basis for design decisions. This legal basis enables urban designers to use zoning as a bargaining tool. Zoning is widely accepted, and it is through its use and interpretation that urban design policy has achieved some of the best results, especially when zoning is combined with other policies such as taxes and/or land use, and transportation. Therefore:

Recommendation 11

Ensure that any urban design policy is backed by legal mechanisms, especially zoning, in order to ensure special interests to comply with stated policies.

Recommendation 12

Use Zoning to implement policies, not the other way around. Zoning produces better results when it is part of design policies which give direction to zoning. Zoning is a tool, a legal basis, and as such it must be flexible enough to guarantee necessary changes through time.

Recommendation 13

Design a zoning agreement where the developers and the city clearly state their position and terms to be agreed upon. Also include in the document definitions of public spaces, their maintenance, and social access to them.

7.6 Discretionary and Non-Discretionary Zoning

Non-discretionary but flexible zoning focuses in particular on quantifiable elements such as glare, light, noise, and the like, and leaves little room for discretionary review on the part of the government. On the other hand, discretionary zoning has been found to be unpredictable and subject to "personal" implementation regardless of defined policies. Therefore:

Recommendation 14

Avoid complete discretionary zoning. Instead, develop a combined zoning technique which clearly defines the mandatory quantifiable standards, and ensures a discretionary review in which non-quantifiable quality elements are considered. However, these quality elements must be shared by the community at large and should not be personal judgments.

Recommendation 15

Prioritize the different elements, both discretionary and non-discretionary, in order to clarify the urban design process, and in this way improve the predictability of the process. This hierarchy of elements should emerge from what the community considers to be most important for its present and future development.

7.7 Incentives

In order to achieve urban design goals, the provision of incentives plays a very important role. Provision of incentives is necessary to induce developers to provide certain public urban spaces that otherwise would not be built, spaces that the city as a whole is in need of. Therefore:

Recommendation 16

Create a system of bonuses to award additional floor area in exchange for a public space. The amount of floor area should reflect the public interest, and the cost of providing it should be incurred by the developer. (F.A.R.)

Recommendation 17

Develop a transfer of development rights and air rights system to encourage the preservation of buildings and uses that are important for the city.

Recommendation 18

Design economic incentives to implement T.D.R. and F.A.R. increases as incentives for urban design. Economic incentives range from tax policies to public-private partnerships where the government shares the cost of development.

7.8 Human Services

The future of the downtown area depends, in part, on the quality and quantity of human services that are located in the area. However, due to fiscal constraints, the quality of such services in innercity areas is declining, especially for low-income households. Therefore:

Recommendation 19

Elaborate a system that includes incentives and policies to provide the physical support in order for human services to function accordingly to the special needs of innercity dwellers.

Recommendation 20

Define the specific areas for the incentives and locations of human-service facilities based on a previous analysis of income and need. Human services for high-income families and individuals will be provided by "natural" market forces. The low-income groups are the ones in need of such facilities.

Recommendation 21

Target human service programs to special need low-income areas and throughout downtown. The elderly and handicapped are also special groups in need of services in the downtown area regardless of their economic status.

7.9 Affordable Housing Preservation
and Development

One of the issues common to practically all downtown areas in North America is the provision of low-income housing; housing for higher-income groups is usually provided by developers without the intervention of governments. However, in some circumstances, government intervention is necessary to provide incentives for middle-income and upper-income housing units in order to make a "24-hour Downtown." The real problem is, without doubt, the number and quality of low-income housing units in the downtown area. Therefore:

Recommendation 22

Develop T.D.R. and F.A.R. incentives for the preservation and development of affordable housing units as well as for the preservation of housing for various income groups.

Recommendation 23

Persuade council to pass a by-law requiring developers to replace any low-income housing units that have been demolished, and also to establish and maintain a minimum number of housing units within the downtown area.

Recommendation 24

Co-ordinate public improvements and code enforcement agencies to strengthen the character of residential areas and to bring up to code standards those units which present any danger to their occupants.

7.10 Historic Preservation

Historic Preservation is becoming more important than ever thanks to the realization that buildings of the past are part of our heritage. This trend toward historic preservation is reinforced by the unique architectural style of these buildings, and by the way they address human scale. These are aspects that modern architecture has been able to achieve in very few instances.

Recommendation 25

Encourage the preservation and restoration of individual buildings scattered all over Downtown. When groups of buildings to be preserved are found, create a special district and develop design guidelines to fit the district's particular characteristics.

Recommendation 26

Ensure that the design of new developments are compatible with historic buildings in character and scale. For this, it is necessary for regulations to be flexible enough to take into consideration the multiplicity of elements inherent to the urban design process.

7.11 Monitoring and Evaluation

It is important that developers comply with the terms of reference agreed upon with the city. In many cities this has not happened, and as a consequence, the environment has deteriorated. And when the developers do comply, there has been found to be no evaluation of the accomplished results. Therefore,

Recommendation 27

Develop mechanisms to inspect project sites to ensure that projects are being built according to the plans presented for which approval was granted. However, inspection should also be carried out after project completion, to ensure that maintenance and access standards are being met.

Recommendation 28

Devise penalty mechanisms for those developers who do not follow design standards, or who do not keep the access and maintenance regulations causing detriment to a special group or the population at large. On the other hand, reward developers and architects who have achieved a meaningful built environment

Recommendation 29

Design an evaluation process of the different urban design policies, as well as of the usage and behaviour of public urban spaces, in order to re-evaluate design policies and make the changes necessary to assure that urban design policies change a la par with socio-economic conditions.

MATRIX OF FINDINGS AND RECOMMENDATIONS

	Public Participation	Political Activities	Environmental Review	Growth Management	Area-wide Analysis	Multidisciplinary Activity	Pedestrian Needs	City Image	Community Health/Alerts	Government Coordination	Legal Basis	Implementation Plans	Zoning Agreement	Reduce Discretion	Process Predictability	Floor Area Bonus	T.D.R.	Economic Incentives	Target Areas	Target Population	Protection Incentives	Replacement By-Law	Character Enhancement	Design Review	Awards-Penalties
<u>RECOMMENDATIONS</u>																									
<u>FINDINGS</u>																									
Role of Urban design -Municipal Government	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Role of Higher Levels of Government	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Urban Design as Partial Solution	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Esthetics-Function in Urban Design	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Zoning and Urban Design	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Discretionary-Non-discretionary Zoning	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Incentive for Urban Design	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Provision of Human Services	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Housing Preservation and Development	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Historic-Character Preservation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Monitoring and Evaluation	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○

RELATION



HIGH



MODERATE



LOW

<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)	
LAND USE	<input type="radio"/>					
Single	<input checked="" type="radio"/>					
Mixed	<input type="radio"/>					
Compatibility		<input checked="" type="radio"/>				
TRANSPORTATION		<input type="radio"/>	<input type="radio"/>			
PARKING	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>			
Structure	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>			
Screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
DENSITY	<input type="radio"/>		<input type="radio"/>			
Infrastructure Capacity	<input type="radio"/>		<input type="radio"/>			
HISTORIC PRESERVATION	<input type="radio"/>	<input type="radio"/>				
CHARACTER PRESERVATION	<input type="radio"/>	<input type="radio"/>				
CIRCULATION	<input type="radio"/>	<input type="radio"/>				
Pedestrian Circulation		<input type="radio"/>	<input checked="" type="radio"/>			
Auto Circulation		<input type="radio"/>	<input checked="" type="radio"/>			
Circulation Conflicts		<input type="radio"/>	<input checked="" type="radio"/>			
Access	<input type="radio"/>	<input checked="" type="radio"/>				
Loading	<input type="radio"/>	<input checked="" type="radio"/>				
<u>DEVELOPMENT CONTROLS POLICY:</u>		<input checked="" type="radio"/> Highly Recommended <input checked="" type="radio"/> Advisable				

<p><u>POLICY STATUS</u></p> <p><u>URBAN DESIGN ELEMENT</u></p>	<p>Mandatory</p>	<p>Design Review</p>	<p>Performance Standards</p>	<p>Public Priority</p>	<p>Weight (Points)</p>
STREET FURNITURE		<input type="radio"/>	<input type="radio"/>		
Cross-walks			<input type="radio"/>		
Curb-cuts		<input checked="" type="radio"/>			
Sidewalk width			<input type="radio"/>		
Sidewalk Materials	<input checked="" type="radio"/>	<input type="radio"/>			
Street Lighting		<input type="radio"/>	<input checked="" type="radio"/>		
Poles		<input type="radio"/>			
Info-regulatory Signs °	<input type="radio"/>	<input type="radio"/>			
Bus Stop Area	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
Traffic Control Box		<input type="radio"/>			
Waste Receptacles	<input type="radio"/>	<input type="radio"/>			
Mail Boxes	<input checked="" type="radio"/>	<input type="radio"/>			
Newspaper Vending Machines		<input type="radio"/>			
Public Phones	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
Awnings		<input type="radio"/>	<input checked="" type="radio"/>		
Canopies		<input type="radio"/>	<input checked="" type="radio"/>		
Building Overheads	<input checked="" type="radio"/>	<input type="radio"/>			
Weather Protection	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
<p><u>DEVELOPMENT CONTROLS POLICY:</u></p>	<p>● Highly Recommended</p>				
	<p>◐ Advisable</p>				

<div style="text-align: center;"><u>POLICY STATUS</u></div> <div style="text-align: left;"><u>URBAN DESIGN ELEMENT</u></div>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
Uses Pedestrian Level	<input type="radio"/>	<input checked="" type="radio"/>			
Handicapped Access	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>		
LANDSCAPE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Planter		<input type="radio"/>			
Vegetation		<input type="radio"/>	<input type="radio"/>		
Climatic Resistance			<input type="radio"/>		
Shape	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
Foliage		<input type="radio"/>			
Massing		<input type="radio"/>			
Flowers		<input type="radio"/>	<input checked="" type="radio"/>		
Colors	<input checked="" type="radio"/>	<input type="radio"/>			
Growth Rate			<input type="radio"/>		
SIGNAGE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Facades	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
Rooftops	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
Temporal	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
<p><u>DEVELOPMENT CONTROLS POLICY:</u></p> <p> <input checked="" type="radio"/> Highly Recommended <input type="radio"/> Advisable </p>					

<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
OPEN SPACE	⊗	○	○		
PLAZAS		○	○		
Orientation	○	⊗	○		
Size	○		○		
Handicapped Access	○	⊗	○		
Furniture	○	○	⊗		
Activities	○				
Adjacent Uses	○		⊗		
Maintenance	○				
ACCESS	○	○	○		
Public	○	○	○		
Quasi-public		○	⊗		
Private		○			
Time	○	○	○		
Elderly-Handicapped	○	○	⊗		
<u>DEVELOPMENT CONTROLS POLICY:</u> <input checked="" type="radio"/> Highly Recommended <input type="radio"/> Advisable 					

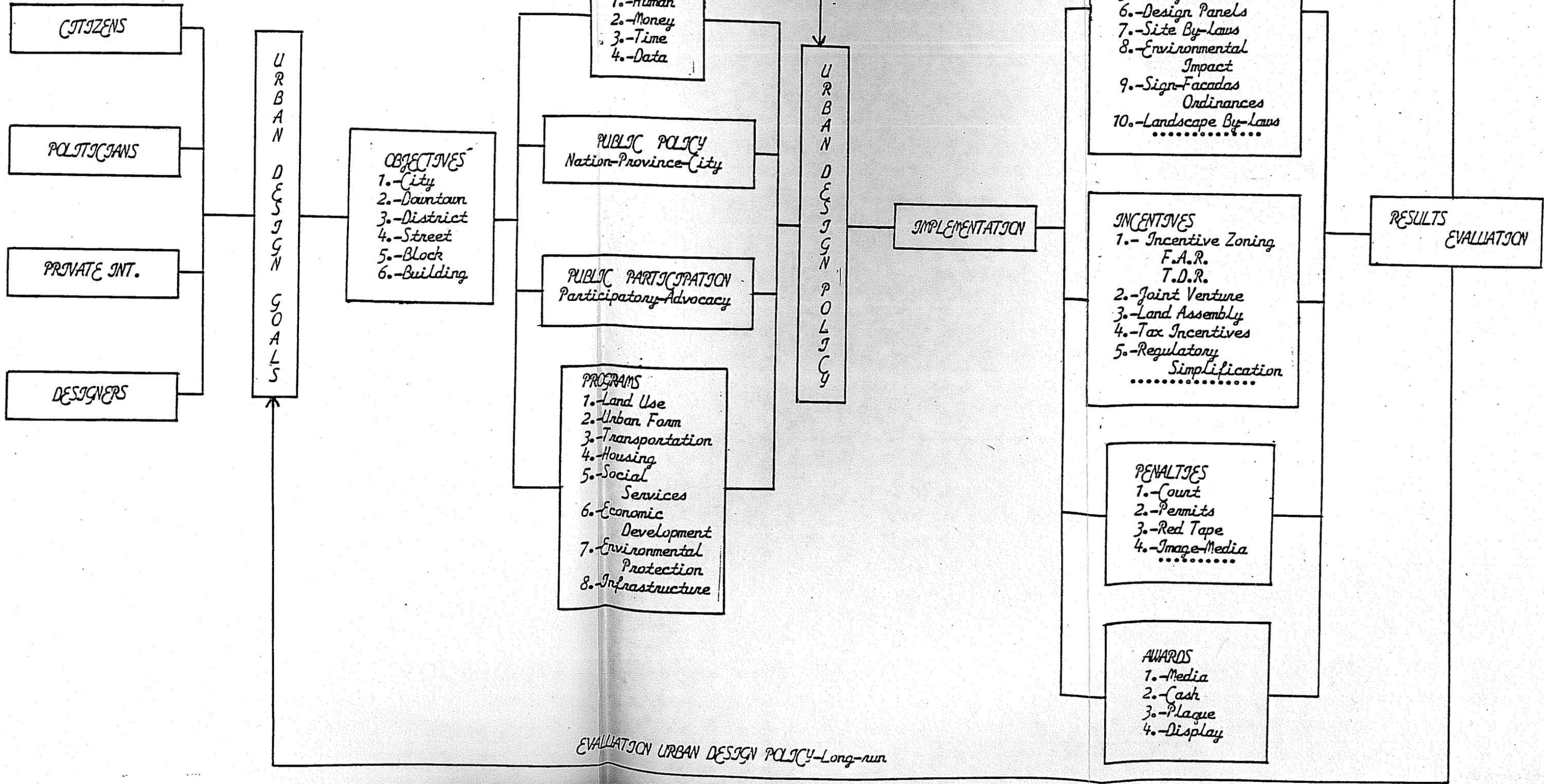
<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
GALLERIA	⊘	○			
Natural Light	○	○	⊘		
Proportions	⊘	○	⊘		
Street Orientation	○	○	⊘		
Graphics	○	○			
Multiple Levels		○			
High Visibility		○			
Active Water Features	⊘	○			
Natural Landscape	⊘	○	⊘		
Children Play Areas	⊘	○	⊘		
Quiet Places	○	○			
Retail Mix	○	⊘	⊘		
Access	○	⊘			
Places to Eat	○	○	⊘		
Performing Arts Areas	⊘	○			
Display Areas		⊘			
<u>DEVELOPMENT CONTROLS POLICY:</u>					

<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
SKYWALK	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Width		<input type="radio"/>	<input type="radio"/>		
Grade Changes		<input checked="" type="radio"/>			
Hidden Recesses		<input type="radio"/>			
Elevation			<input type="radio"/>		
Transparency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Energy Efficient Design			<input checked="" type="radio"/>		
Climatic Control	<input type="radio"/>		<input type="radio"/>		
Finishings		<input checked="" type="radio"/>			
Style-Visual Sensitivity		<input type="radio"/>			
Uses	<input type="radio"/>		<input type="radio"/>		
BUILDINGS	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
Pedestrian Scale	<input type="radio"/>	<input type="radio"/>			
Public Access	<input type="radio"/>				
Vehicular Access		<input type="radio"/>			
Image		<input type="radio"/>			
Visual Impact	<input type="radio"/>	<input type="radio"/>			
Skyline Impact	<input type="radio"/>	<input type="radio"/>			
<u>DEVELOPMENT CONTROLS POLICY:</u> <ul style="list-style-type: none"> <input checked="" type="radio"/> Highly Recommended <input type="radio"/> Advisable 					

<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
<i>BUILDINGS..</i>					
<i>Visual Obstruction</i>		○	○		
<i>Shadow Patterns</i>	○	⊗	○		
<i>Orientation</i>	⊗	○			
<i>Wind Effects</i>	○	⊗	○		
<i>Building Configuration</i>		○			
<i>Overall Building Form</i>		○			
<i>Conner Treatment</i>	○	⊗			
<i>Directional Emphasis</i>		○	⊗		
<i>Facade Modulation</i>		○	⊗		
<i>Proportion Openings</i>		○	⊗		
<i>Compatibility</i>	○	○			
<i>Adjacent Structures Style</i>	⊗				
<i>Uses</i>	○		⊗		
<i>Building Features</i>	⊗	○			
<i>Materials</i>		○	○		
<i>Color</i>	○	○			
<i>Texture</i>	⊗	○			
<u>DEVELOPMENT CONTROLS POLICY:</u> <ul style="list-style-type: none"> ● Highly Recommended ⊗ Advisable 					

<u>POLICY STATUS</u> <u>URBAN DESIGN ELEMENT</u>	Mandatory	Design Review	Performance Standards	Public Priority	Weight (Points)
<i>BUILDINGS...</i>					
<i>Density</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
<i>Height</i>	<input type="radio"/>		<input type="radio"/>		
<i>Bulk</i>	<input type="radio"/>		<input type="radio"/>		
<i>Coverage</i>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>		
<i>Skysposure</i>	<input type="radio"/>		<input type="radio"/>		
<i>Setbacks</i>	<input type="radio"/>		<input type="radio"/>		
<i>Streetwall</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>		
<i>Blank Walls</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
<i>Rooftop Shape</i>	<input checked="" type="radio"/>	<input type="radio"/>			
<i>Public Spaces</i>	<input checked="" type="radio"/>	<input type="radio"/>			
<i>Galleries</i>	<input type="radio"/>	<input type="radio"/>			
<i>Arcades</i>	<input checked="" type="radio"/>	<input type="radio"/>			
<i>Atrium</i>		<input type="radio"/>			
<i>Day-care</i>	<input type="radio"/>		<input type="radio"/>		
<i>Arts Space</i>	<input checked="" type="radio"/>	<input type="radio"/>			
<i>Others....</i>					
<u>DEVELOPMENT CONTROLS POLICY:</u> <input checked="" type="radio"/> Highly Recommended <input checked="" type="radio"/> Advisable					

A GENERAL MODEL FOR URBAN DESIGN POLICY



EVALUATION URBAN DESIGN POLICY-Short-term

EVALUATION URBAN DESIGN POLICY-Long-run

BIBLIOGRAPHY

Books

- American Regional Urban Design Assistan Team (R/UDAT).
Urban Design News from the Front, A.I.A.
- Beazly, E. Design and Detail Space between Buildings.
London: Architectural Press, 1977.
- Babcock, Richard F. and Weaver, Clifford L. City
Zoning the Once and Future Frontier.
- Blumenfeld, Hans. The Modern Metropolis. Cambridge:
The M.I.T. Press, 1977.
- Barnett, Jonathan. Urban Design as Public Policy. New
York: Architectural Record Books, 1974.
- Barnett, Jonathan et al. Making Cities Available:
Lessons for the United States from Europe. Ohio:
Charles F. Kettering Foundation, 1980.
- Carr, James H. and Duensing, Edward E. Land Use Issues
of the 1980's. New Jersey: Center for Urban
Policy and Research, Rutgers University, 1983.
- Canter, D. The Psychology of Place, New York: St.
Martins Press, 1977.
- Christian, Charles M. Modern Metropolitan Systems.
Edited by Robert A. Harper. Columbus, Ohio:
Charles E. Merrill Co.
- Clay, Grady. Alleys: A hidden Resource. Louisville:
Grady Clay and Co., 1978.
- Cook, Robert S. Zoning for Downtown Urban Design.
Toronto: Lexington Books, 1980.
- Cutler, Laurence and Sherrie. Recycling Cities for
People: The Urban Design Process. Boston: Cahners
Books Int. Inc., 1972.
- Downtown Development Handbook, U.I.T. Washington,
D.C.:The Urban Land Institute, 1980.
- Education for Urban Design. New York: Institute for
Urban Design, 1982.

- Davis, L.R. and Champion, A.G., Ed. The Future for the City Center. London: Academic Press, 1983.
- Greater London Council. The Design of Urban Space. Department of Architecture and Civic Design, Greater London Council, 1980.
- Goslin, David and Maitland, Barry. Concepts of Urban Design. London: Academy Ed./St. Martins Press, 1984.
- Jacobs, Allan B. Making City Planning Work. Chicago: American Planning Association, 1980.
- Krueger, Ralph R. and Bryfogle, R. Charles, Ed. Urban Problems: A Canadian Reader. Toronto: Holt, Rinehart and Winston of Canada Ltd., 1971.
- Lessons from Local Experience. Washington, D.C.: U.S. Department of Housing and Urban Development, DHUD, 1983.
- Lynch, Kevin. Good City Form. Cambridge: The M.I.T. Press, 1981.
- Lynch, Kevin. The Image of the City. Sixth Edition. Cambridge: The M.I.T. Press, 1970.
- Pipkin, John and La Gory, Mark E. Edited by Judith Blau. Remaking the City: Social Perspectives in Urban Design. Albany: State University of New York Press, 1983.
- Pipkin, John and La Gory, Mark E. Edited by Judith Blau. Professionals and Urban Form. Albany: State University of New York Press, 1983.
- Rapoport, Amos. The Meaning of the Built Environment. Beverly Hills, California: Sage Publications, 1982.
- Rapoport, A. Human Aspects of Urban Form: Towards a Man Environment Approach to Urban Form and Design, Pergamon Press. New York, 1977.
- Robinette, Gary O. How to Make Cities Livable. New York: Environmental Design Press, 1984.
- Sack, R.D. Conceptions of Space in Social Thought: A Geographical Perspective. New York: MacMillan, 1980.

Schwartz, Gail Garfield. Where's Main Street U.S.A.?
Westport: Eno Foundation, 1984.

Spirn, Anne Whiston. The Granite Garden: Urban Nature
and Human Design. New York: Basic Books Inc.,
1984.

Tanghe, Ian, Vlaeminck, Sieg, and Berghoef, To. Living
Cities: A Case for Urbanism and Guidelines for
Re-urbanization. London: Pergamon Press, 1984.

Tencks, C. Skyscrapers - Skycities. London: Academy
Editions, 1980.

Articles

- Burns, Leland S. and Wing Ning Pang. "Big Business in the Big City." Urban Affairs Quarterly, Vol. 12, No. 4. June, 1977. Pp.533-543.
- Sanders, James. "Toward a Return of the Public Space: An American Surbey." Architectural Record, April, 1985.
- Phillips, Patrick. "Urban Environmental Design: What Future Direction?" Urban Land, July, 1985. Pp.36-37.
- Kaplan, McLaughlin, Diaz. "Celebrating Urban Gathering Places." Urban Land, May, 1985. Pp.10-14.
- Phillips, Patrici. "Sidewalk Solar Access: Downtown Zoning for Sun and Light." Urban Land, February, 1985. Pp.36-37.
- Feagins, Thomas T. "Downtown Parking", Urban Land, February, 1985. Pp.22-23.
- Snedcof, Harold R. "New York Equitable Center." Urban Land, July, 1985. Pp.16-26.
- Merry, Sally I. "Defensible Space Undefined: Social Factors in Crime Control through Environmental Design." Urban Affairs Quarterly, Vol. 16, No. 4, June, 1981. Pp.397-442.
- "Retail Growth." Town and Country Planning, July/August. Pp.214-232.

Reports

An Interim Design Plan for Houston's Central Business District. Central Houston Inc., May, 1984.

New York, City of

42nd Street Development Project. Executive Summary of the Final Environmental Impact Statement. New York State Urban Development Corporation, August, 1984.

Union Square Special Zoning District Proposal (Draft). Manhattan Office: Department of City Planning, June, 1984.

Zoning Handbook: A Guide to New York City Zoning Resolution. Department of City Planning, October, 1981.

Planning the Future of New York City. Department of City Planning, January, 1979.

42nd Street Study. Urban Design Group, Department of City Planning, January, 1978.

Far Rockaway Beach 20th Street Revitalization. Urban Design Group, Department of City Planning (Queens), December 1977.

Little Italy Special District. Urban Design Group, Department of City Planning, December, 1976.

Signs of Life. Arrowstreet Inc. for the Office of Lower Manhattan Development, City of New York, June, 1976.

Water Street Access and Development. Office of Lower Manhattan Development, Office of the Mayor, City of New York, June, 1976.

China Town: Street Revitalization. Department of City Planning, May, 1976.

Union Square: Street Revitalization. Department of City Planning, May, 1976.

Lower Manhattan Waterfront. Office of Lower Manhattan Development, Office of the Mayor, June, 1975.

City of Seattle

Summary of the Mayor's Recommended Land Use and
Transportation Plan for Downtown Seattle. City of
Seattle: Office of the Mayor, May, 1984.

Mayor's Recommended Land Use and Transportation Plan
for Downtown Seattle. City of Seattle: Office of
the Mayor, May, 1984.

Appendix A: Floor Area Bonus System, Standards and
Criteria for Public Benefit Features. City of
Seattle: City of the Mayor, 1984.

City of Vancouver

Leung, Henry. "Urban Design in Vancouver." Quarterly Review. Vol.11, No.4, 1984. Pp3-6.

Vaugh, Michael. "Eyes on Urban Design." Quarterly Review. City of Vancouver Planning Dept. Vol.11, No.4, 1984. p.7-8.

Leung, Henry. "What is Happening to the Urban Environment?" Quarterly Review. City of Vancouver Planning Department. Vol.12, No.2, April, 1985. Pp12.13.

Zoning and Development Permits in Vancouver. City of Vancouver Planning Dept. May, 1985.

Cunningham du Toit. Downtown South: Urban Design. City of Vancouver, May, 1982.

By-Law No.4911. City of Vancouver Zoning and Development By-Law. August, 1983.

Downtown Guidelines - Design Guidelines. Vancouver City Planning Department, 1980.

Downtown Guidelines - Planning Policies. Vancouver City Planning Department, 1980.

Reports to Council. City of Vancouver Planning Department, May 10, 1984.

The Vancouver Core Plan: A Proposal for Discussion. City of Vancouver Planning Department. May, 1983.

Reports to Council. City of Vancouver Planning Department, October 5, 1984.

Reports to Council. City of Vancouver Planning Department, March 2, 1984.

Central Area Pedestrian Weather Protection. Vancouver City Planning Department, January, 1979.

Changes in the Built Form of the Core: A Coreplan Background Report. Vancouver City Planning Department. September 1982.

Norman Hotson Architects. Central Broadway Urban Design. Vancouver City Planning Department, November, 1980.

West End: Policy Guidelines. City of Vancouver: City Planning Department. August, 1972.

West End: Planning Policies and Design Guidelines. Vancouver City Planning Department, June, 1979.

South Granville.

Baird Simpson Associates, Architects. Greening Downtown: An Urban Design Study of the Georgia/Robson Corridor. Vancouver City Planning Department, June 9, 1982. Vol.1: General Urban Design Principles. Vol.2: Character Area Guidelines. Vol.3. Test Site Studies.

City of Toronto

Leman Group Inc. "Civic Design Analysis of Toronto."
Ekistics. No.256, March, 1977. Pp.136-139.

du Toit, Roger. "Architects, Zoning By-Laws and Design
Control." The Canadian Architect. March, 1977.
Pp.51-56.

Goodman, Lindy. Streets Beneath the Towers: The
Development of Toronto's Downtown Underground
Pedestrian Mall System. Department of Geography,
York University Discussion Paper No.31, 1984.

Discussion Paper on Public Participation in Planning.
Toronto Planning and Development Department,
January, 1982.

Central Area Plan Review Part 1 - General Plan. City
of Toronto Planning Board, October, 1975.

Central Area Plan Review Part 2 - Area Plan for
Downtown. City of Toronto Planning Board,
October, 1975.

Ongoing Downtown: Design Guidelines for the Core Area.
A Report to the Toronto Planning board.

Civic Design Program. City of Toronto Planning Board,
September, 1978.