

HOUSING PRICES, GOVERNMENT POLICY, AND URBAN DECAY:
A TENTATIVE HYPOTHESIS, A POSSIBLE CONNECTION, AND A POLICY SUGGESTION

by

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ABSTRACT

The development of significantly different housing prices in Canada and the United States was an issue of popular concern in recent years when Canadian housing prices were undergoing almost unprecedented price increases. The purpose of this paper was to determine the underlying causes of the differential in housing prices in Canada and the United States.

The research methodology followed in the preparation of this paper involved the analysis of the housing markets of Seattle and Vancouver to determine what factors might have influenced prices in these two cities. The factors considered include housing stocks and starts, population, income, credit conditions, and the impact of the state.

In general the findings suggest that the price differential has evolved because of a comparatively higher level of housing demand in the Vancouver housing market.

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CHAPTER ONE

PURPOSE AND PROCEDURES

1.1 Introduction

The continuing discussion of the price of housing in Canada and the United States serves to indicate that the current levels of housing prices are a concern in both countries. The majority of articles have tended to deal with housing prices in a national context; however, international price comparisons are now being made more often. These comparisons indicate that homes in Canada are priced significantly higher than American homes¹. This paper deals with the current international housing price differential within the framework of the theories of urban economics. In addition, it extends the analysis to consider and suggest a possible linkage between housing prices, government policies, and the health of urban areas in the two countries. Hopefully, the broad range of factors dealt with in this paper will assist in the development of a better understanding of the complexity of urban areas and will provide a framework for the development of future urban policies and programs.

1.2 Purpose

The principal purpose of this paper was to answer the question - why are houses in Canada more expensive than comparable American homes? This research was undertaken to determine what are the underlying causes of this international housing price differential.

In the process of conducting the research, however, it became apparent that in addition to the housing price differential there was also what might be considered equivalent differences in the impacts of government policies and programs and in the vitality of urban areas in these two countries. The possibility that these phenomena might be inter-related shifted the direction of this paper and these three broad areas, housing prices, government policy, and urban vitality, became its central focus. The purpose of this paper then, while still concentrating on an examination of the housing price differential also included the consideration of a possible connection between prices, government programs, and urban vitality.

The procedure followed in the process of producing this paper involved five steps. One, a theoretical model of the housing market was reviewed to determine the components of supply and demand that are the most important in the establishment of the price of housing. Two, data were collected to measure the impact of each of these components on the respective housing markets. Next, the data were interpreted in an effort to determine the causes of the price differential. From this base, the impacts of governments and the urban conditions in these two countries were reviewed to see what other possible explanations for the housing price differential existed. Finally, all of the above information was used to formulate a number of conclusions and to develop a number of housing and urban policy recommendations.

While the purpose of this paper is to analyse housing markets and urban areas in a national context, much of the information contained herein deals with the metropolitan areas of Seattle and Vancouver which were selected as representative examples of comparable American and Canadian cities.² These urban areas have been selected as comparables because of their many similarities. Geographically, they are only separated by approximately 150 miles. They have similar climatic and topographic conditions. Both are port cities and both function as the corporate, cultural, financial, and service centres of their regions. Although Seattle is somewhat older and slightly larger than Vancouver, both centres are felt to be comparable in that they are representative of highly developed and diversified urban areas.

1.3 Hypothesis

The hypothesis of this paper is:

That the housing price differential between Canada and the United States is explainable by reviewing supply and demand factors. Further, that the price differential is indicative of a weakened urban structure in American cities which has partially resulted from the impacts of American government programs.

1.4 Previous Reports

To set the stage for the subsequent analysis, it is worth briefly reviewing some of the more recent Canadian and American reports which have dealt with housing prices.

The Housing Crisis: Causes, Effects, Solutions, edited by Gordon Soules, reported the comments of a wide variety of urban experts.³ Soules generally concludes that there is a price problem in Canadian housing markets and that the price problem has resulted from a number of factors including:

"the reluctance of local governments to permit new housing developments...control, by a few large development companies of most vacant land ...strong housing demand consequent upon a high rate of population growth...the demand on developers by local governments for extremely high service standards...shortage of mortgage money combined with high interest rates."⁴

Soules reaches the rather far-reaching conclusion that:

"the traditional market mechanism for land and housing in modern-day large urban areas no longer works."⁵

His findings might be summarized that the "crisis" in Canadian housing markets has evolved because an "over-regulated" supply sector has been unable to keep pace with a growing demand for housing.

Housing: It's Your Move, differs from Soules in its interpretation of Canadian housing market problems.⁶ The authors of this publication define housing problems not in terms of price, but rather, in terms of income distribution. In other words, there is only a housing "crisis" for those persons without adequate incomes with which to acquire an acceptable standard of housing. This report suggests that the current high level of housing price is the natural result of market pressures brought about by growing populations and increasing incomes.

In Land and Urban Development, Peter Spurr reaches conclusions similar to those of Housing: It's Your Move.⁷ Although Spurr's study deals mainly with the question of the concentration of ownership of developable land, he does conclude that high Canadian housing and land prices are the result of a number of factors that have allowed Canadians to demand and consume increasing amounts of increasingly expensive housing services.⁸ These factors include population growth through urbanization, economic expansion, and a high demand for home-ownership.

An article in U.S. News and World Report confirms similar price/income problems in the American housing markets.⁹ That report advises that:

"Over the past 20 years, net disposable income of American families has increased only 180%, compared with a 305% increase in monthly housing expenses."¹⁰

and that:

"only about 15% of the population can now afford even a median-priced house."¹¹

Time reports, "The housing market is booming, but prices are out of sight for many who want to buy and straining the budgets of those who still can."¹² In the follow up article, the magazine details a variety of examples of rapidly increasing housing prices in a number of American cities. Time concludes that the high prices are "endangering" the American dream of owning a home of one's own.

John Weicher, in his article, "The Affordability of New Homes", counters some of the previous reports by presenting evidence that demonstrates that "new homes are no more expensive, relative to income, than they have historically been."¹³ Weicher's article, while concentrating on the issue of affordability, provides ample evidence of substantial increases in the prices of American homes.

In summary, articles on housing markets in both Canada and the United States, while offering a variety of causes, effects, and solutions, seem to agree that housing prices in both countries have undergone significant increases in recent years. With this brief introduction, we can proceed with an international comparison of housing markets.

1.5 Format

Chapter 2 begins this paper with a presentation of current and historical housing and land prices in Seattle and Vancouver. Chapter 3 sets out the theoretical framework of the operation of the housing and land markets. Chapter 4 reviews a number of possible theoretical causes of the housing price differential. In Chapters 5 and 6 empirical evidence is presented which details the impacts of supply and demand on the housing markets of the two cities. In Chapter 7, the role of governments is discussed and their influence on housing prices is reviewed. In Chapter 8, the difference in the vitality of Canadian and American urban areas is introduced, the findings are summarized, a possible connection between housing prices, government programs, and urban vitality is suggested, and the conclusions and recommendations are presented.

FOOTNOTES

1. "Why a house priced at \$37,500 in Ohio sells for \$65,000 in Toronto", House and Home, September 1976, p.24; "Why our housing costs so much more," The Vancouver Sun, 11 December 1976, sec. C, p. 13; "Housing: are the Americans better off than we are?", The Province, 22 August 1977, p.5.

2. The definition of metropolitan areas is that used for census purposes in both Canada and the United States. In Canada, a Census Metropolitan Area is a continuous built-up area having 100,000 or more population and where the main labour market area corresponds to a commuting field or a zone where people could normally change their place of work without changing their place of residence. In the United States, a Standard Metropolitan Statistical Area includes a county or counties that are socially and economically integrated with the central city. For the purposes of this paper, these definitions are assumed to define comparable urban areas.

3. Gordon Soules, The Housing Crisis: Causes Effects Solutions (Vancouver: Gordon Soules Economic and Marketing Research 1976)

4. Ibid, pp. 17-18

5. Ibid, p. 19

6. Fred G. Pennance et al, Housing: Its Your Move, 2 vols. (University of British Columbia: Urban Land Economics Division, 1976).

7. Peter Spurr, Land and Urban Development (Toronto: James Lorimer and Company, 1976).

8. Ibid, p. 48

9. "Shopping for a House - Here's What to Expect", U.S. News and World Report, 2 February 1976.

10. Ibid, p. 35

11. Ibid, p. 35

12. "Housing: It's Outasight", Time, 12 September 1977, pp.35-41.

13. John C. Weicher, "The Affordability of New Homes", AREUEA Journal, Vol. 5/No.2 (Summer 1977), pp. 209-226

CHAPTER TWO

HOUSING PRICE DATA

It is first necessary to confirm that the price differentials indeed exist. In this chapter, a number of different current and historical prices and price indices are presented, reviewed, and compared.

2.1 The Classifieds

The real estate section of the April 17, 1977 edition of the Seattle Times enticingly advertised a variety of 3 and 4 bedroom new suburban homes for sale.

TIMBERLANE

Trees-Cul-de-Sacs-Community Center & Pool
Sunken Living Room-Floor to Ceiling Fireplaces-Garage Door Openers-More
PRICED FROM \$29,750

MEADOWCREEK PARK

3 Bedrooms-2 Fireplaces-All Electric Kitchens
PRICED FROM \$36,950

MISTY MEADOWS

Double Wall Construction
\$39,500

TIFFANY PARK

Shake Roof-2 Full Baths-Vaulted Ceiling
NEW MODELS FROM \$40,900

In all cases the advertisements portrayed stunning "artists concepts" of what has come to be accepted as traditional subdivision tract housing.

The April 16, 1977 edition of the Vancouver Sun contained similar advertisements, written in the same flowing language, accompanied by those impressive conceptual drawings, only the prices were different.

WILDWOOD PARK

Country Living-Open Spaces-Backing onto a Green Belt
Double Carport-Large Storage
\$64,000

CASA DELTA

Basement Homes-Brick Fireplaces-Carport-Paved Driveway-Carpeting-Landscaped
\$57,500

PARKSIDE PINES

Landscaped and Treed-Golf Course-Swimming Pool-Civic Arena-Shopping
\$55,900

SILVER BIRCH PLACE

New Improved Design Features
\$51,995

A quick glance through the other classifieds confirmed that the observed difference in new house prices formed a pattern that was consistent in other forms of real estate. Similar scale differences were evident in townhouse, condominium, and residential building lot prices. Even on this unscientific evidence, there is a strong suggestion of the existence of a significant price differential.

2.2 More Reliable Data

The price differential that was apparent after reading the two cities' newspapers can be substantiated by somewhat more objective evidence. The Seattle Real Estate Research Report, Spring, 1977, reported an average sale price for single family homes (on lots zoned single family) for the metropolitan Seattle area to June 1977 of \$40,311.¹ Real Estate Trends in Metropolitan Vancouver, 1977, reported an average Multiple Listing Service transaction price to June 1977 for the metropolitan Vancouver area of \$70,500.² Such averaged data should not be used to make detailed comparisons because the two averages are based on somewhat different price data. The Seattle average price is based on a sample of recorded transactions of single family houses in the metropolitan area. The Vancouver average, on the other hand, is based on all properties sold through the Vancouver MLS. These sales include multiple as well as single family properties and also include some commercial and business properties and the MLS normally excludes sales of higher priced single family residences. In fact, the MLS average is generally considered to place a downward bias on prices in comparison to the Seattle type calculation.³ However, as an indication of the order of magnitude of the price differential, it is probably safe to compare the Vancouver MLS average with the single family Seattle average. Using these figures, in mid-1977 Vancouver houses are significantly higher priced than Seattle's.

2.3 Historical Price Trends

To gain greater insight into the evolution of the above-noted housing price differential, it is worth reviewing the historical development of that differential. Table 1 presents housing price data for Seattle and Vancouver in current and constant (1971) dollars. Figure 1 graphically portrays the changes in current dollar prices.

TABLE 1
HISTORICAL HOUSING PRICES

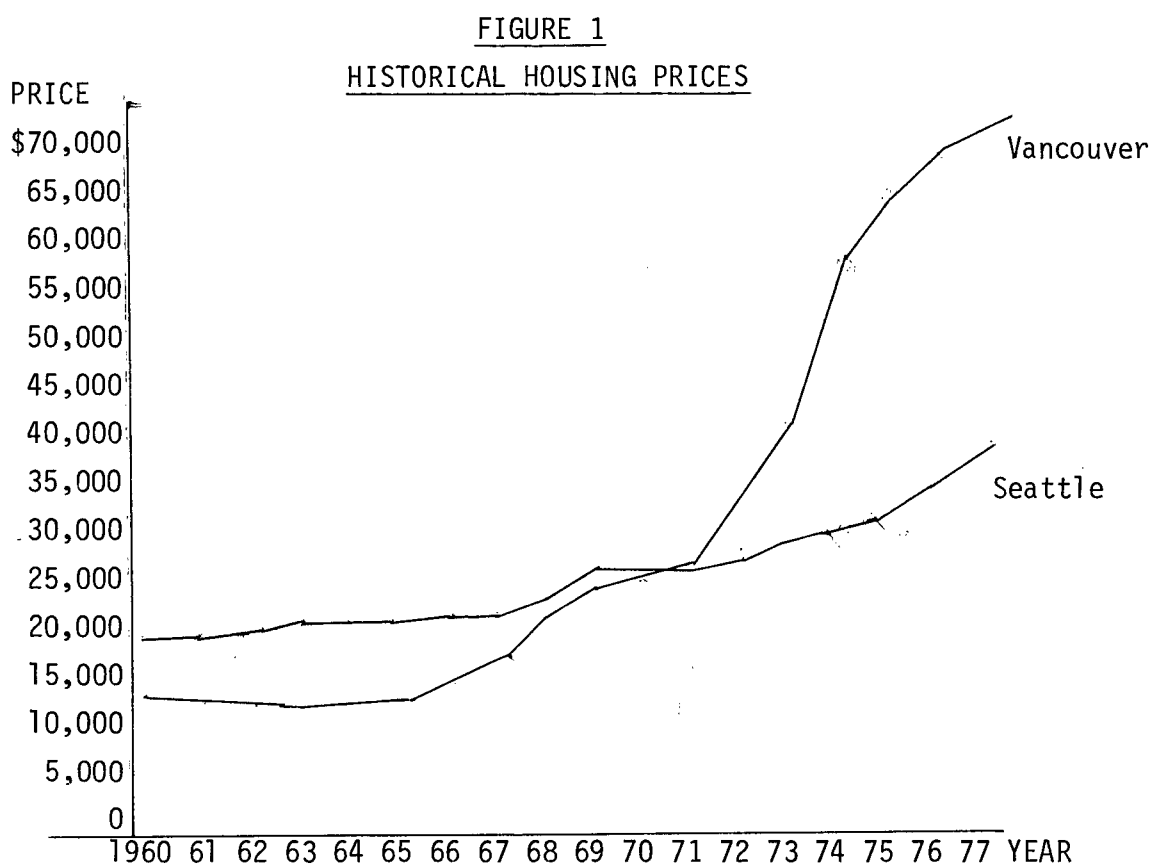
YEAR	<u>METROPOLITAN SEATTLE</u>		<u>METROPOLITAN VANCOUVER</u>	
	CURRENT DOLLARS AVERAGE SALES PRICE	CONSTANT DOLLARS AVERAGE SALES PRICE	CURRENT DOLLARS MLS AVERAGE SALES PRICE	CONSTANT DOLLARS MLS AVERAGE SALES PRICE
1960	\$19,757	\$27,180	\$13,105	\$18,176
1961	19,894	27,026	12,348	17,055
1962	20,892	28,118	12,158	16,564
1963	21,120	27,996	12,636	16,893
1964	21,347	27,879	13,202	17,235
1965	21,347	27,350	13,964	17,654
1966	22,028	27,480	15,202	18,404
1967	22,709	27,440	17,836	20,746
1968	23,390	27,176	20,595	23,219
1969	26,343	29,199	23,939	25,852
1970	26,297	27,637	24,239	25,014
1971	26,343	26,343	26,471	26,471
1972	27,251	26,215	31,465	29,967
1973	28,160	25,556	41,505	36,185
1974	30,430	25,099	57,861	44,135
1975	32,702	24,666	64,471	44,402
1976	35,200	25,186	68,900	43,361
1977*	40,311	27,518	70,500	41,618

*second quarter 1977.

Source: Real Estate Research Report, (various years)
Real Estate Trends in Metropolitan Vancouver,
(respective years)

Note: Average sales prices for the Seattle metropolitan area have only been reported since 1976, however, an average sales price index has been produced for a number of years. The average sales price trend has been calculated by applying the index to the 1976 and 1977 average sales prices. The Seattle constant dollar average sales price has been calculated by using the U.S. GNP deflator. The Vancouver constant dollar average has been calculated by applying the Canadian GNE Implicit Price Index. (Source of indexes: Statistical Abstract of the U.S. and Canadian Statistical Review.)

The information contained in Table 1 demonstrates the evolution of the price differential and points out that there has actually been a reversal in the price differential since 1960. In 1960, the price of houses in Vancouver was approximately 66% of the price in Seattle. In 1977, prices in Vancouver were about 175% of Seattle's prices. It is evident from Figure 1 that the rate of housing price increase in Vancouver was significantly greater than that in Seattle during the period from 1965 to 1975. During this period, Vancouver prices



increased at over 11% per annum while Seattle prices increased at less than 4% per annum.⁴

2.4 Land Prices

Corresponding to the previously noted difference in housing prices is a difference in residential land prices. Based on data contained in Seattle's Real Estate Research Report, 1976 lot prices in that area range from \$8,000 to \$55,000.⁵ The majority of Seattle lots would be priced in a range from \$11,000 to \$18,000. In Vancouver residential building lots sell for between \$17,500 and \$80,000+.⁶ The majority of these lots sell for between \$25,000 and \$40,000. In 1976, residential building lots were significantly, perhaps 100%, more costly in Vancouver than in Seattle. This difference is even more significant when one considers that the size of the average Seattle lot is approximately 20,000 square feet compared to about 7,900 square feet in Vancouver.⁷

2.5 Summary

This chapter has served to confirm the existence of a substantial difference in housing and land prices in the metropolitan areas of Vancouver and Seattle. While it must be recognized that there are deficiencies in the data,⁸ it is clear that the prices in these two cities are substantially different and that the rates of price increase have been remarkably different in the past decade. The search for the causes of this differential can therefore, be concentrated in the 1965 to 1975, and especially 1970 to 1974, time period.

FOOTNOTES

1. Real Estate Research Report, Vol. 28, No. 1 (Spring 1977) (Seattle: Seattle Real Estate Research Committee), p.i.
 2. Real Estate Trends in Metropolitan Vancouver, 1977 (Vancouver: Statistical and Survey Committee of the Real Estate Board of Greater Vancouver), p. A-20.
 3. "MLS house sales underestimate all existing house sales as they do not include realtor-sold exclusive listings," Peter Spurr, Land and Urban Development, p.41
 4. Rates of increase calculated from information contained in Table I.
 5. Research Report, Vol. 27, No. 1 (Spring 1976)
 6. Real Estate Trends, (1977), pp. A-5-A-8.
 7. Research Report, Vol. 27, No. 1 (Spring 1976) and Real Estate Trends, (1977)
 8. It is unfortunate that there is no source of price data that can be used for research and policy development purposes with confidence and reliability. Price and price indices data are required for almost all housing related research and yet, the data that are available are both limited and of questionable validity. To be truly useful, an index must aggregate price data from all types of housing and must account for changes in the composition and quality of the housing stock.
- Professor S. W. Hamilton has recently published two articles dealing with price indexes. In his articles, Professor Hamilton deals with the problems of existing price indices, attempts by others to develop reliable indices, and he explores alternative methods of constructing a meaningful index. If the reader is interested in this thorny problem, he is referred to S. W. Hamilton, "House Price Indices: Theory and Practice", Housing: It's Your Move, Vol. 2, pp. 383-419.

CHAPTER 3

A MODEL OF THE HOUSING MARKET

In spite of the fact that numerous articles have been written explaining the operations of the housing market, many of the reports dealing with the causes, effects, and solutions to the housing crisis fail to deal with the economic theory of this market.¹ In order to ensure that this research does not suffer from the same weakness, this chapter sets out a generally accepted theoretical framework of the economic operation of the housing market. It is upon this framework that the subsequent research will be based. This chapter deals with the housing market from a number of different perspectives. First, the role of individual housing consumers is briefly reviewed. Second, supply and demand is discussed in the context of establishing housing prices. Following this is a brief presentation of the production sector. Lastly, urban land values and prices are discussed.

3.1 The Consumers View

Housing has value because it provides services valued by the consumer. The price a consumer is willing to pay for a dwelling unit is a function of the anticipated benefit or utility that that consumer expects to derive from the consumption of the services provided by that dwelling unit. The primary component of this utility is shelter. However, there are also a number of other benefits

derived from the consumption of housing: privacy, prestige, space, environment, amenities, access, and the possibility for some monetary gain through increased prices. All of these components provide utility and therefore value to housing.

The amount of housing consumed is a function of incomes, the prices of all other goods, and the comparative utilities provided by the consumption of those goods. The greater the level of satisfaction achieved from the consumption of a good, the greater will be the proportion of income spent on that good. Subject to their budget restrictions, consumers trade-off consumption of various goods in order to equalize the marginal utility enjoyed from the last dollar spent on each and every good and thereby, they maximize their overall level of satisfaction.²

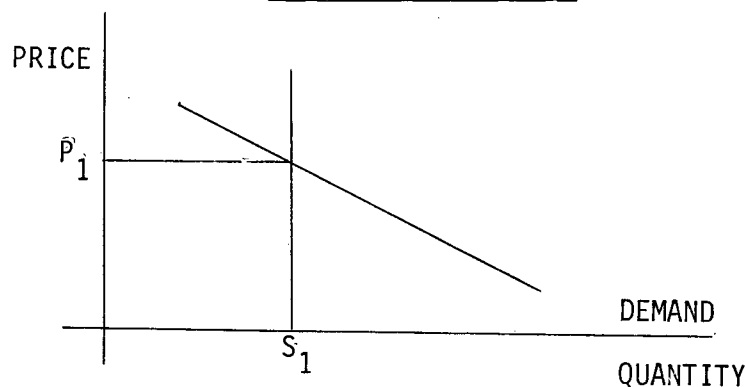
3.2 Supply, Demand, and Price

The economics of the housing market have much in common with any other economic market, however, the durability of structures greatly influences the operations of the housing market in the determination of price. Because housing is a durable long lived product, the standing stock of units comprises the majority of units available (new plus existing) and therefore, the supply of existing houses plays a major role in the determination of price. As new units comprise only 3-4% of the standing stock,³ their influence on the supply/demand function is minimal in a short-run analysis. Over a number of years, new units do have an impact because as they accumulate they comprise an increasingly important component of the

stock of housing. However, for the immediate purposes of this model, it is both accurate and realistic to take a short-run perspective and to accept the stock of housing as the supply.

Figure 2 portrays the supply of housing as a fixed amount (i.e., the stock of units at any given time) and demonstrates that the price of housing is determined where demand meets supply. The function of the standing stock and demand establishing price is an

FIGURE 2
SUPPLY/DEMAND/PRICE



P_1 = Market Determined Price

S_1 = Standing Stock of Housing Units

important characteristic of the housing market model. In the housing market, it is the price paid for the standing stock that determines the price paid for the additions to the stock. The existing units set the price for the new units - it is not the other way around.⁴ Empirical research conducted by Peter Spurr has substantiated that this is, in fact, the way the housing market operates. In Land and Urban Development, Spurr states that his analysis of actual transactions and market values indicates "that current prices of new houses

were more closely related to the increase of existing house prices than to the increase of new houses."⁵ He goes on to point out that this evidence "...supports the indication seen in the general pattern of sales...existing homes are the dominant force in the housing market."⁶ This data substantiates a most important principle of this market - that housing prices are determined by the interaction of demand with the standing stock.

In the short-run, the flow of new units has a relatively minor impact on the total number of available units and therefore, the supply can be considered to be fixed and is said to be inelastic with respect to price. In other words, changes in prices will not prompt moderating changes in supply.⁷ Therefore, changing levels of demand are translated almost directly into changing levels of price. Figure 3 outlines how a shift in the demand curve would cause higher housing prices.

FIGURE 3

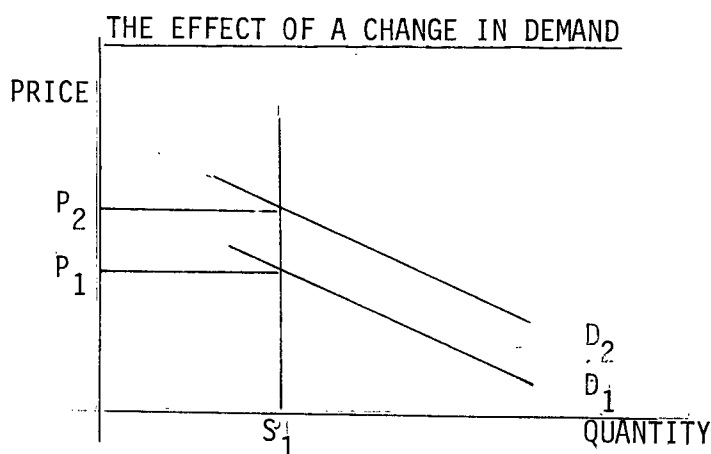
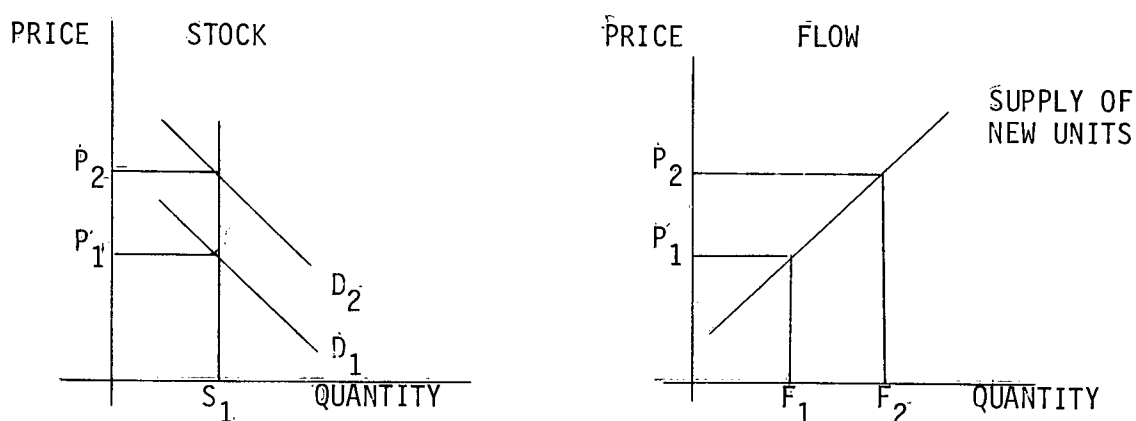


Figure 3 demonstrates that changes in the level of demand are a probable cause of short-run price movements.

3.3 The Production Sector

To this point, only the stock portion of what is the "Stock Flow Model" of the housing market has been discussed. The discussion would be incomplete without a review of the flow portion of this model. Figure 4 presents both the stock and flow components of the housing markets. The slope of the supply curve in the flow portion

FIGURE 4
THE STOCK-FLOW MODEL



F_1/F_2 = Number of New Housing Units Per Year

of the figure demonstrates that the supply of new units is elastic with respect to price. Therefore, the number of new units being constructed will increase or decrease in response to increases and decreases in housing prices. In the example depicted in Figure 4, as demand moved from D_1 to D_2 , price increased from P_1 to P_2 , and in response the amount of new construction increased from F_1 to F_2 .

3.4 The Price of Land

The principle that land prices are a function of the prices of the output of that land was well established by David Ricardo.⁸ In the housing market therefore, residential lot prices are a function of the price of new homes. In the housing construction industry, developers calculate from price backwards, subtracting from the stock determined market sales price of a completed unit their costs for labour, materials, overhead, financing, and profit and thereby, they determine the amount they can pay for land.⁹ Land prices therefore, are the residual amount in sales price/production costs equation and are a function of the demand for residential building lots. In other words, housing prices establish residential land prices and the price of housing is not affected by the price of land.

3.5 Land Values and Location

The role of housing prices in the determination of residential land prices is an important principle in the economics of the urban land market, however, the relationship of land values and location is also an important consideration of urban economics. The requirement of users of land for centrality establishes a hierarchy of land use and, in turn, within each specific land use category, the distance from a site to the "centre" establishes a further hierarchy of land values. The complicated relationship of distance and relative value has been summarized by Richard Hurd as follows:

"Since value depends on economic rent, and rent on location, and location on convenience, and convenience on nearness, we may eliminate the intermediate steps and say that value depends on nearness."¹⁰

This relationship has been discussed at some length by William Alonso in Location and Land Use Toward a Central Theory of Land Rent¹¹ and in "A Theory of the Urban Land Market."¹² In his discussion of the residential location decision, Alonso concludes that "a consumer...will seek to balance the costs and bother of commuting against the advantages of cheaper land with increasing distance from the centre of the city."¹³ Further, that "the price the individual will bid for land will decrease with distance from the centre at a rate just sufficient to produce an income effect which will balance to his satisfaction the increased costs of commuting."¹⁴ Although Alonso deals with a non-complex model of an urban area, his theories demonstrate the basic and important principle that the relative values of residential sites are determined as a function of the varying costs of transportation from a site to the centre of the city.

In discussing the impact on site values of a change in the costs of transportation, Ratcliff concludes:

"Differences in rent reflect differences in accessibility or transportation costs among sites; thus a general reduction in all transportation costs will reduce the amount of these differences and thus tend to equalize site rentals. Better general transportation reduces the differences or relative advantage in convenience of the central business district over outlying districts."¹⁵

Haig,¹⁶ Goldberg,¹⁷ and Alcaly¹⁸ have also analysed the impact on site rents of a change in the costs of transportation and all generally conclude:

"given a general transportation improvement, all other things being constant, there would result a decline in aggregate land values."¹⁹

Figure 5 outlines how an improvement in transportation facilities would alter the residential land rent gradient. This diagram depicts

FIGURE 5

THE EFFECT OF A TRANSPORTATION IMPROVEMENT



the initial situation with the bid-rent curve AB. The steep slope of this curve reflects the high value placed on central city sites in comparison to more distant locations. A reduction in the costs of transportation, effectively brought about by an improvement in transportation facilities, would reduce the locational advantages of the central city sites and shift the rent gradient downward to A'B'. As is evident from the diagram, an improvement in transportation facilities will tend to reduce central city land values. Although it is difficult to determine the magnitude of the impact of a change in the costs of transportation, it is probably safe to conclude,

"that as long as the elasticity of demand for urban land is different from zero a transportation improvement will tend to produce an increase in the value of land at the periphery and a decrease in the value of land at the center."²⁰

3.6 Summary

This review of the economic operations of the housing and land markets has served to establish a number of principles that will be

used in the search for causes of the differential in housing prices.²¹ To briefly summarize the principal characteristics of these markets, housing has value to the consumer because of the utility that is derived from the consumption of the numerous services that housing provides; housing prices are determined by the interaction of the level of demand for the standing stock of units; the volume of new construction is a function of the price of housing; land prices are derived by subtracting from the market price the costs of production; and finally, land values vary with distance from the centre of the city and improvements in transportation will tend to reduce both the value of central city sites and the relative price difference between central sites and outlying sites.

FOOTNOTES

1. Soules, Housing Crisis
2. For a more complete explanation of utility, income and consumer choice, the reader is referred to: Allan Braff, Microeconomic Analysis (New York: John Wiley and Sons, Inc. 1969) pp. 19-45
3. Information on housing stocks and starts is reported in Canadian Housing Statistics (1976), (Ottawa: Central Mortgage and Housing Corporation, 1977). The percentage of starts to stock varied between 2.0% to 3.9% from 1951 to 1976. For additional confirmation see: Housing: It's Your Move, Vol. 1, p.3; and Public Property: The Habitat Debate Continued, (Vancouver: The Fraser Institute, 1977), p. 243.
4. S. W. Hamilton, quoted in Economics of Real Property (University of British Columbia: Faculty of Commerce and Business Administration, 1975), p. 68.
5. Spurr, Land and Urban Development, p. 46
6. Ibid, p. 48
7. It is generally thought that, given a change in the price of housing, the existing stock will be used more or less intensively as households respond to the price change by doubling-up or undoubling. For the purposes of this paper, this effect has been ignored.
8. David Ricardo, On the Principles of Political Economy and Taxation, discussed in William Alonso, Location and Land-Use: Toward a Central Theory of Land Rent (Cambridge: University of Michigan Press, 1964)
9. Economics of Real Property, pp. 67-69
10. Richard Hurd, Principles of City Land Values, as quoted in Alonso, Land-Use and Location.
11. Alonso, Land-Use and Location
12. Alonso, "A Theory of the Urban Land Market", in Internal Structure of the City, ed. Larry Bourne (New York: Oxford University Press, 1971)

13. Alonso, "A Theory of the Urban Land Market", p.157
14. Ibid, p. 157
15. Richard Ratcliff, Urban Land Economics (Westport: Greenwood Press, 1972), p. 372
16. R. M. Haig, Major Economic Factors in Metropolitan Growth and Arrangement (New York: Regional Plan of New York and Its Environs, 1927), "Toward an Understanding of the Metropolis: I", Quarterly Journal of Economics 40; (Feb) "Toward an Understanding of the Metropolis II", Quarterly Journal of Economics 40 (May)
17. Michael Goldberg, "Transportation, Urban Land Values and Rents: A Synthesis," Land Economics 46; "An Evaluation of the Interaction between Urban Transport and Land Use Systems", Land Economics 48.
18. Roger Alcala, "Transportation and Urban Land Values: A Review of Theoretical Literature", Land Economics 52.
19. Haig, as quoted in Goldberg, "Transportation, Urban Land Value and Rents: A Synthesis:", p. 153
20. Alcala, p. 49
21. This review of the economics of the housing and urban land markets is not, nor was it intended to be, an in depth review of the many factors which effect the operations of these markets. For a more comprehensive analysis, the reader is referred to: Fred Pennance, Housing Market Analysis (Westminster: Institute of Economic Affairs, 1969); David Baxter, Speculation in Land (University of British Columbia: Faculty of Commerce and Business Administration, 1974).

The model upon which the analysis of the housing markets of Seattle and Vancouver is based is the Stock-Flow Model. It is a short-run model that effectively explains the operations of the housing market in a static situation. This analysis reviews housing prices over a seventeen year period and therefore, is more applicable to a long-run model of housing markets. The use of the short-run model therefore, reduces the theoretical support for some of the findings of this paper. However, it is felt that the Stock-Flow Model can be used to determine the impact of the factors of supply and demand in two specific market situations (1960 and 1977) and that the theory upon which this model is based can be used to lend support for the findings of the empirical analysis.

CHAPTER 4

SOME THEORIES OF THE PRICE DIFFERENTIAL

To this point in the analysis the existence of a housing price differential between Vancouver and Seattle has been confirmed and a model of the housing market has been presented. In this section of the paper a number of possible theoretical causes of the differential will be presented and reviewed. These theoretical constructs will then be used as a basis for the analysis of empirical data that will be conducted in subsequent chapters.

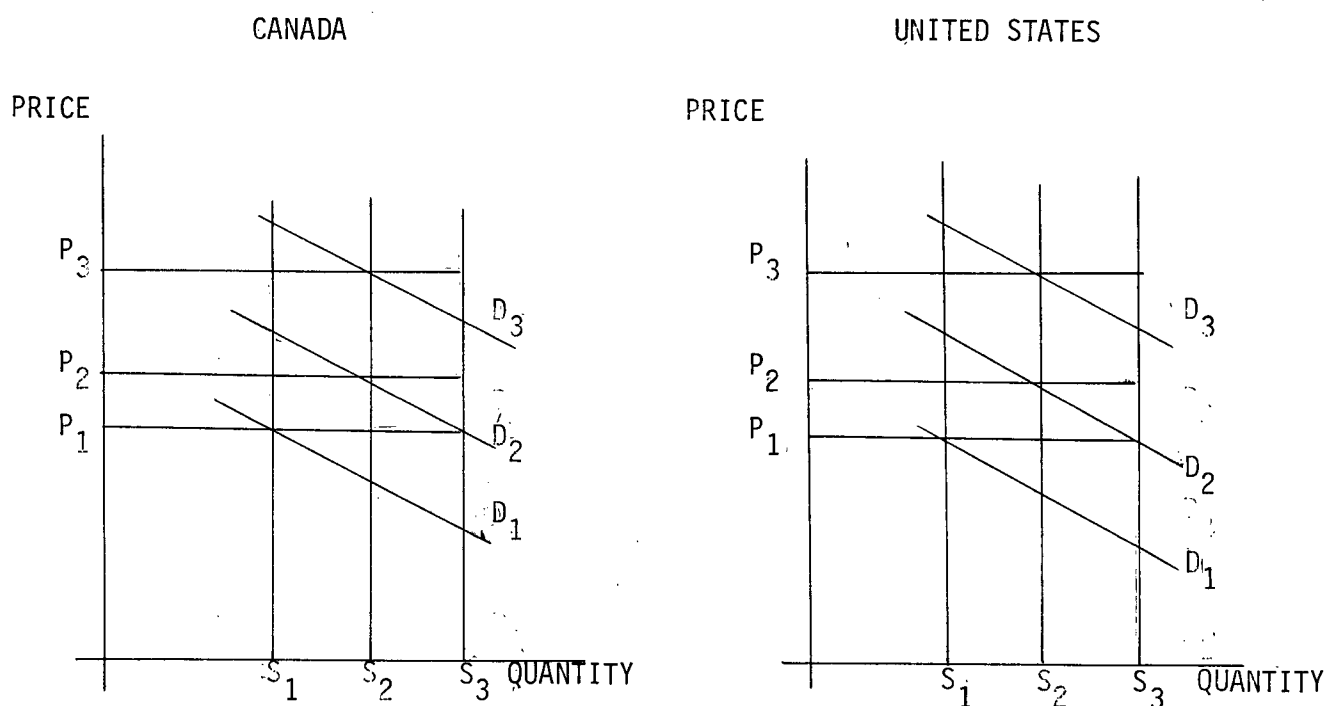
4.1 Supply and Demand

To begin the search for a possible theoretical basis for the price differential, a review of the impact of changes in the supply and demand components must be undertaken. Given an acceptance of the assumption that housing prices were equivalent at some point in time (in the case of Vancouver and Seattle this occurred in 1968)¹, the current price differential can be considered to have evolved as a result of variances in supply and/or demand pressures in the housing markets of the two countries. In other words, the price differential has developed because, (1) Canada has had a relatively larger increase in demand for housing while its supply increased at a rate equal to the United States, or (2) demand could have increased at equal rates in both countries while Canada's rate of increase in supply lagged behind that of the U.S., or (3) a combination of these two phenomena

could have occurred. Figure 6 portrays how variances in supply and demand would interact to create a price differential. For example, if during the period studied, both countries experiences demand growth from D_1 to D_2 and supply increases from S_1 to S_3 ,

FIGURE 6

SUPPLY AND DEMAND SHIFTS



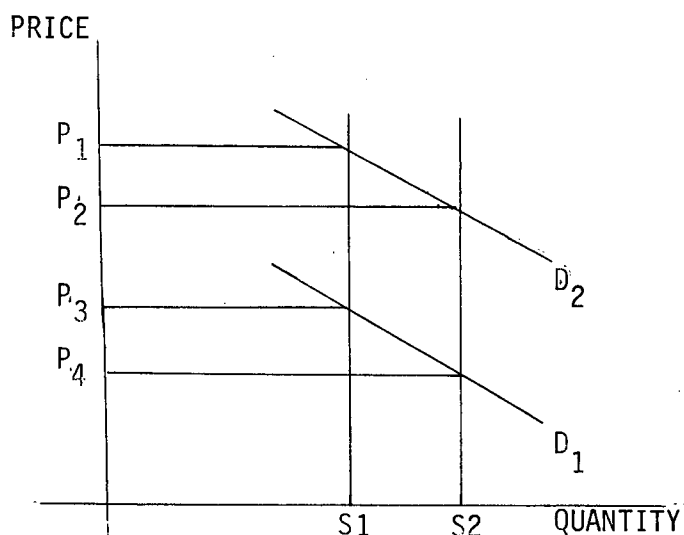
the increase in the stock of housing would offset the demand increase and price would remain unchanged at P_1 in both countries. If in the same demand position however, Canadian supply only increased to S_2 , prices in Canada would rise to P_2 and there would be a price differential between the two countries. Alternatively, if Canadian housing markets experienced greater demand pressure than U.S. markets, D_3 versus D_2 for example, while both markets had supply increases to

S_2 , again a price difference would appear ($P_2 + P_3$). There are a number of other combinations that could cause the price differential but to avoid unnecessarily complicating this example, one can postulate that the price differential has evolved because Canadian housing markets have undergone greater increases in demand, slower expansions of supply, or some combination of these two phenomena.

Although this conceptualization of the interaction of supply and demand indicates some general sources of possible causes of the price differential, it fails to breakdown the problem into researchable components. In order to be able to collect empirical evidence, it is necessary to analyse the potential causes in terms of the components of supply and the components of demand. In the next two sections of this chapter, these components and their impacts on housing prices will be briefly reviewed.

Figure 7 depicts the housing market under a variety of changing supply, demand, and price conditions. This figure will be referred to throughout the following sections to demonstrate how shifts in the components of supply and demand can influence market prices.

FIGURE 7
SHIFTS IN THE COMPONENTS OF SUPPLY AND DEMAND



4.2 Supply Components

The importance of the standing stock of housing in the determination of housing prices was discussed in Chapter 3. It must be remembered that price is determined by the interaction of housing demand with the number of existing housing units. If for example, one housing market is blessed with a relatively large stock of homes (S_2), while a second market has comparatively few existing units (S_1), and both markets have comparable demand levels (D_1), prices in the second market (P_3) would be significantly higher than prices in the first (P_4).

Although the flow of new units onto the market can be considered to have little short run impact, this component of the supply sector is important in the long run because it is through the addition of new units that the stock can increase from S_1 to S_2 and thereby reduce price from P_3 to P_4 (assuming unchanging demand at D_1). Factors that affect the quantity of construction must be considered in a long run analysis.

The relative sizes of housing stocks and flows of the two housing markets in question must therefore be analysed and compared to determine if the supply sector is the source of the price differential.

4.3 Demand Components

Population and its formation into households is probably the most consistently important component of demand. Population growth, changing rates of household formation, and changes in the demographic composition of the population directly effect the level of demand for

the available stock of housing. Any increase in the home buying component of the population, whether this occurs from absolute population growth or a change in the composition of the population, will shift the level of demand and in turn, push prices upwards in the short run. For example, if both markets are in equilibrium at S_1D_1 and one undergoes an increase in population, demand in that market will move to D_2 and price will rise in that market from P_3 to P_1 . Differing rates of population growth and household formation and differences in the demographic compositions must be considered to be a possible cause of the housing price differential.

To most people contemplating the purchase of a home, there is usually the need to ask the question of considerable importance - how much is it? The cost of a home, is indeed a major determinant of the level of demand. The consumer's decision making process was discussed earlier, at which time it was pointed out that consumers trade-off the consumption of various goods in order to maximize their level of satisfaction. In theory, they accomplish this maximization by consuming goods up to the point where the marginal utility of the last dollar spent on each good is equal for all goods consumed. When they have achieved this state, consumers are said to be indifferent to the consumption of any of these goods. An increase in the price of any one good, housing for example, will encourage consumers to attempt to restructure their consumption choices away from housing and towards goods which provide relatively more satisfaction per dollar. Simply stated, they will consume relatively less housing and relatively more of other goods.² If in two housing markets housing prices are

relatively more and less expensive relative to the price of other goods in those markets, the market with relatively higher housing prices should undergo moderating demand which should serve to reduce the price differential.

The level of satisfaction that a consumer can achieve is limited by his or her wealth. As income levels change, consumption of all goods and services, including housing, also changes. An increase in incomes may be followed by an increase in the consumption of housing services. The desire to consume more housing will shift the demand curve from D_1 to D_2 and given an available stock of S_1 will increase prices from P_3 to P_1 . The question of how much of the additional income will be used to purchase more housing services is an often researched and debated issue called by economists "income elasticity".³ Income elasticity research has produced a variety of conflicting results and the issue still remains basically unresolved.⁴ A recent article summarized much of the research that has been undertaken and concluded:

"Thus, the current income approach supports the view that housing is a staple good (for any increase in income, there is a less than proportionate increase in expenditure on housing) and the permanent income approach supports the view that housing is a luxury good (for any increase in permanent income, there is a proportionate increase in expenditure on housing)."⁵

In summary, it is theorized that an increase in income should result in some increase in expenditure on housing services. The increase in housing expenditures will shift demand and increase relative prices.

There are a great many costs associated with home ownership that are incurred in addition to meeting the sales price. Probably the most significant of these costs arises because of the need, by the majority of home purchasers, to finance much of the original purchase price. The cost of capital is a very important factor in the determination of the actual price of home ownership. As interest rates rise and fall, the level of housing demand will rise and fall in response to the changing costs of home ownership. The consideration of the impact of credit conditions cannot be limited to interest rates for credit availability and borrowing terms will also have a significant impact on the level of demand. If for example, credit is not available for home purchasers there will be very little effective housing demand and housing prices will reflect this lack of buyers. Financing costs, terms and credit availability are therefore, important determinants of housing price and hence, demand. Other costs associated with home ownership, taxes, maintenance, utilities, are similarly important.

In summary, the components that affect the quantity of demand (population, price, income, and credit conditions) play a significant role in the housing market place. They must be carefully analysed and reviewed for they contain a number of possible sources of the price differential.

4.4 The Influence of the Government

Thus far, a number of possible market causes of the housing price differential have been considered, it is also important to consider the influence of the governmental sector. Governments can

have a substantial impact on the housing market through national economic policies, housing policies, and even with their general attitudes and philosophies. In a recent publication, L.B. Smith describes the impact of non-housing governmental policies as follows:

"Canadian housing markets were profoundly influenced in the 1970's by policies not specifically designed for the housing sector, such as federal tax revision, the Ontario Land Speculation and Land Transfer Taxes, controls on foreign investment and Anti-Inflation Act regulations." 6

For these reasons, the policies and philosophies of governments must be carefully reviewed as a potential cause of the price differential.

4.5 Summary

The search for the possible causes of the housing price differential has begun to take on some direction which may lead to an answer to our questions. A number of theoretical formulations have been presented and it is now possible to review empirical evidence that might substantiate those suspicions. In summary, supply, demand, and governments all appear to be possible sources of at least part of the differential.

In the next few chapters, empirical data on demand and supplies in the two markets will be presented and discussed.

FOOTNOTES

1. See Table I and Figure 1.
2. Braff, Microeconomic Analysis, pp. 19-45
3. The income elasticity of demand can be simply defined as the increase in housing consumed as a result of an increase in incomes. In practical terms, demand is said to be elastic with respect to income because it is postulated that a consumer who receives an increase in income would spend part of that additional income on additional housing services. Income elasticity is measured by determining the ratio of the percentage change in housing consumed to the percentage change in income.
4. Many of the difficulties that seem to result in differing measurements of the income elasticity of housing demand seem to originate from differing measurements of income. Whether current or permanent income is used to determine change seems to affect the elasticity measurement. See Dale-Johnson and Horwood, cited below.
5. David Dale-Johnson and Peter Horwood, "An Analysis of the Factors Affecting Housing Demand in British Columbia", Housing: It's Your Move, Vol. 2, p. 45.

CHAPTER 5

HOUSING STOCKS AND FLOWS

In this, and the next, chapter the housing markets of Seattle and Vancouver are discussed. This chapter concentrates on the supply sector of the market and reviews, from a quantitative and qualitative viewpoint, the impact on housing prices of the stocks and flows of housing units.

5.1 The Stock of Housing

As has been argued, the standing stock of housing units fulfills an important role in the determination of price. In the short run, it is the interaction of demand with the stock that establishes the price of housing. The size, composition, and tenure forms of the housing stocks of metropolitan Vancouver and metropolitan Seattle are presented in Table 11.

TABLE 11

HOUSING STOCKS

METROPOLITAN VANCOUVER

YEAR	TOTAL OCCUPIED UNITS	SINGLE DETACHED UNITS	SINGLE DETACHED UNITS AS A % OF TOTAL OCC.	MULTIPLE UNITS	OWNER OCCUPIED UNITS	OWNER OCCUPIED UNITS AS A % OF TOTAL OCC.
1951	153,981	114,510	74	32,330	105,445	69
1961	228,598	171,620	75	47,630	159,414	70
1971	345,875	216,445	63	127,200	203,515	59

METROPOLITAN SEATTLE

1950	236,258	173,588	74	77,746	149,382	63
1960	359,814	285,299	79	102,696	240,180	67
1970	473,222	360,970	76	138,770	306,930	65

Source: U.S. Census of Housing, 1950, 1960, 1970
Census of Canada, 1951, 1961, 1971; S.C.#98-151M-5, 95-537,
95-728

It is evident from the data contained in this table that there are some differences in the composition of the stock and form of tenure in the housing markets of Vancouver and Seattle. The Seattle market has a greater percentage of single family dwelling units and a greater percentage of owner occupied units. Although it is difficult to determine the actual effect of this structural difference, it is possible that the comparatively smaller supply of single family units in Vancouver has been one of the factors that has brought about higher prices in the Vancouver market. This possibility is somewhat supported by the decrease in the percentage of single family units that has taken place in Vancouver since 1961. To some extent, this decrease corresponds to the period in which Vancouver prices were increasing.

Table 111 presents housing quality data for the two metropolitan areas. From this data, it is evident that both Seattle and Vancouver have what would be considered a good and improving level of housing

TABLE 111
HOUSING QUALITY
METROPOLITAN VANCOUVER

<u>YEAR</u>	<u>ROOMS PER DWELLING</u>	<u>UNITS WITH MORE THAN 1.0 PERSONS/ROOM</u>	<u>HOUSES OVER 20 YEARS OLD</u>	<u>PERSONS PER UNIT</u>
1951	4.7	9.9%	-	3.3
1961	5.0	8.3	-	3.5
1971	5.2	4.3	43%	3.0

METROPOLITAN SEATTLE

1950	4.4	-	66%	2.7
1960	4.7	4.6%	69	2.6
1970	5.1	3.3	46	2.4

Source: U.S. Census of Housing, 1950, 1960, 1970
Census of Canada, 1951, 1961, 1971; S.C.#93-731

quality. In both cities, the average number of rooms per dwelling is increasing, the number of persons per unit is decreasing, and in both cases over half the stock of existing units is less than twenty years old. Neither city has what would be considered a problem due to overcrowding with only 4.3% and 3.3% of their units having more than 1.0 persons per room. Although Vancouver homes have slightly more persons per unit, it does not appear that there is a significant difference and for the purposes of this study, it is assumed that housing quality is comparable.

In summary, while there are minor differences in the quality of the two cities' housing stocks, these differences are assumed not to be significant. However, there is what could be considered an important difference in the composition of the housing stocks of Vancouver and Seattle and this difference in the percentage of single family units could be considered to be one of the factors behind the evolution of the housing price differential.

5.2 The Flow of New Units

Although the flow of new housing units has minimal impact on price in the short run, over a number of years the accumulation of new units can significantly increase the standing stock of housing units. Consequently, in the long run, new construction becomes an important factor in the determination of housing price. Table IV presents housing start data for the metro areas of Seattle and Vancouver. It is difficult to draw any conclusions using this raw data because of the differing sizes of the housing markets in these two cities.

TABLE IV
HOUSING STARTS
METROPOLITAN VANCOUVER

<u>YEAR</u>	<u>TOTAL UNITS STARTED</u>	<u>SINGLE DETACHED UNITS</u>	<u>SINGLE DETACHED AS A % OF TOTAL STARTS</u>	<u>MULTIPLE UNITS</u>	<u>MULTIPLE AS A % OF TOTAL STARTS</u>
1962	7,387	3,607	49%	3,708	51%
1963	8,941	3,874	43	5,067	57
1964	12,791	4,219	33	8,572	67
1965	11,684	4,095	35	7,589	65
1966	9,138	4,465	49	4,673	51
1967	13,896	6,328	46	7,568	54
1968	15,690	5,658	36	10,032	64
1969	17,690	5,165	29	12,525	71
1970	13,437	4,832	36	8,605	64
1971	15,444	5,674	37	9,770	63
1972	14,126	6,023	43	8,103	57
1973	14,953	7,088	47	7,865	53
1974	12,037	5,451	45	6,586	55
1975	11,832	5,762	49	6,070	51
1976	14,706	6,751	46	7,955	54

METROPOLITAN SEATTLE

1962	12,721	8,709	68%	4,012	32%
1963	11,480	7,355	64	4,125	36
1964	7,452	4,409	59	3,043	41
1965	8,269	5,436	66	2,833	34
1966	13,293	7,458	56	5,835	44
1967	24,137	9,967	41	14,170	59
1968	23,377	10,349	44	13,028	56
1969	13,924	6,359	46	7,565	54
1970	9,598	5,274	55	9,324	45
1971	5,681	4,374	78	1,307	22
1972	6,157	4,890	79	1,267	21
1973	6,990	4,942	71	2,048	29
1974	7,626	5,496	72	2,130	28
1975	11,493	7,616	66	3,877	34
1976	15,383	9,679	63	5,704	37

Source: Real Estate Trends in Metropolitan Vancouver, (respective years)
Metropolitan Seattle Real Estate Research Report, (respective years)

However, to convert this data to a comparable basis, during the ten year period from 1966 to 1976 there were 143,219 housing units started in Vancouver and 137,659 in Seattle. On a per capita basis, using 1971 and 1970 population figures, Vancouver started .141 dwelling units per capita whereas Seattle started .097 units per capita. On a per capita basis the Vancouver housing market has produced approximately 45% more housing units than the Seattle market. Similarly, expressing starts as a percentage of the stock, in the Vancouver market starts increased the stock by approximately 44% whereas, in Seattle the stock was only increased by 29%. These findings are not consistent with the causes that were postulated in Chapter 4. In that chapter it was suggested that one of the possible causes of the price differential could have been that Vancouver's supply sector failed to increase at a comparable rate to Seattle's. The empirical findings however, have demonstrated that this was not the case and in fact, the Vancouver housing supply sector produced a greater number of housing units than Seattle's.

5.3 Summary

To summarize the data collected to this point, it does not appear that the supply sector has been the principal cause of the housing price differential. Although there are differences in the composition of the stocks of housing, these alone would not appear to be significant enough to have created the substantial price variance. Based on the performance of the flow portion of the housing market, one would assume that the substantially greater additions to the stock would have moderated the price differential. Graphically this

difference in the additions to the stock of housing has been portrayed in Figure 7. Given approximately equal housing stocks (S1) and equivalent levels of demand (D1), prices would be comparable (P3). The relatively greater rate of new construction would have shifted the Canadian stock to S2 and created a "reverse" price differential (P3 versus P4). In any event, the supply sectors of these housing markets do not appear to be a major cause of the price differential.

CHAPTER 6

HOUSING DEMAND

The previous chapter dealt with the supply component of the housing market and in this chapter the demand sector will be reviewed. Although there are many factors that effect the level of demand, it is generally accepted that population, income, price and credit conditions are the most important factors in the determination of the level of demand for housing.

6.1 Population

Population growth, via household formation, translates into additional demand for housing units which in turn will create higher housing prices. Tables V and VI outline population figures for the metropolitan areas of Vancouver and Seattle. Table VI presents the

TABLE V
POPULATION
METROPOLITAN VANCOUVER

<u>YEAR</u>	<u>TOTAL POPULATION</u>	<u>AGE GROUP 25-54</u>	<u>AGE GROUP 25-54 AS A % OF TOTAL</u>	<u>HOUSEHOLDS</u>
1951	530,728	227,408	43%	153,975
1961	790,165	316,618	40	228,598
1971	1,082,352	408,765	38	346,215
1976	1,166,348	466,220	40	400,666*

<u>METROPOLITAN SEATTLE</u>				
1950	732,992	324,575	44%	213,575
1960	1,107,213	428,692	39	359,814
1970	1,421,869	463,089	33	418,431
1976	1,425,800	N/A	N/A	N/A

* Estimate based on actual rate of increase in GVRD households
Source: Census of Canada, 1951,1961,1971,1976:SC.#93-702,92-707,92-531,
92-715,92-542,99-526,92-806,92-823.
Selected Statistical Data (Washington State Office of Program
Planning)

the raw population data contained in Table V in annual rates of growth and it is evident from this data that the Vancouver housing market has undergone comparatively greater population based demand pressure than has the Seattle market. The rate of growth in total population in Vancouver was greater than that in Seattle throughout the complete period analysed and during the periods from 1961 to 1971 and from 1971 to 1976 Vancouver's population increased at a much faster rate.

TABLE VI
POPULATION GROWTH RATES

<u>ITEM</u>	<u>METROPOLITAN VANCOUVER</u>		<u>METROPOLITAN SEATTLE</u>	
	<u>PERIOD</u>	<u>COMPOUND ANNUAL GROWTH RATE</u>	<u>PERIOD</u>	<u>COMPOUND ANNUAL GROWTH RATE</u>
TOTAL POPULATION	51/76	3.2%	50/76	2.6%
	51/61	4.1	50/60	4.2
	61/71	3.2	60/70	2.5
	71/76	1.5	70/76	.1
AGE GROUP 25-54	51/76	2.9	50/70	1.8
	51/71	3.0	50/60	2.8
	51/61	3.4	60/70	.8
	61/71	2.6		
	71/76	2.7		
HOUSEHOLDS	51/76	3.9	50/70	3.4
	51/71	4.1	50/60	5.4
	51/61	4.0	60/70	1.5
	61/71	4.2		
	71/76	2.9		

Source: Table V

The age composition of a population has an important influence on the level of housing demand because as people pass through various age related life cycles, their need for housing varies. Rates of growth

of population in the age group from 25 to 54 (an estimation of the age group in which housing demand would be greatest) were substantially higher in Vancouver than in Seattle. This was true for the total period reviewed and especially evident from 1961 to 1971. Finally, Vancouver's rate of household formation was higher than Seattle's for the period from 1951 to 1971 with a substantial portion of the difference accounted for by the period 1961 to 1971. In summary, higher rates of growth in population and its components appear to have created a comparatively greater demand for housing in the Vancouver market in comparison to the Seattle market.

6.2 Income

Greater rates of increases in incomes in Vancouver as compared to Seattle have caused additional demand pressure on the Vancouver housing market. Table VII presents incomes data for the two metropolitan areas and Table VIII presents related data for Washington State and for the province. Unfortunately, there is only a limited

TABLE VII

INCOMES

<u>METROPOLITAN SEATTLE</u>				<u>METROPOLITAN VANCOUVER</u>				
<u>YEAR</u>	<u>AVERAGE FAMILY INCOME</u>	<u>ANNUAL GROWTH RATE AVERAGE FAMILY INCOME</u>		<u>YEAR</u>	<u>MEDIAN FAMILY INCOME</u>	<u>AVERAGE FAMILY INCOME</u>	<u>ANNUAL GROWTH RATE MEDIAN FAMILY INCOME</u>	
1950	\$ 3,974	1950/70	5.2%	1951	\$2,506	N/A	1951/71	6.9%
1960	6,942	1950/60	5.7	1961	5,489	\$5,934	1951/61	8.2
1970	11,032	1960/70	4.7	1971	9,559	10,664	1961/71	5.7

Source: Census of Canada, 1951, 1961, 1971; S.C. #95-728, 98-503,
and Bulletin CT-11
County and City Data Book, 1952, 1962, 1972

TABLE VIII
PERSONAL INCOME PER CAPITA

<u>YEAR</u>	<u>WASHINGTON</u>	<u>BRITISH COLUMBIA</u>
1961	2358	1897
1962	2467	1975
1963	2615	2065
1964	2707	2190
1965	2906	2377
1966	3222	2570
1967	3481	2750
1968	3665	2914
1969	3835	3226
1970	4053	3405
1971	4132	3746
1972	4476	4193
1973	5151	4895
1974	5651	5715
1975	6226	6440
1976	6772	7318

Source: Statistical Abstract of the U.S. (various years)
National Income and Expenditure Accounts: S.C.#13-201

amount of incomes data available for these urban areas and only general comparisons can be made. However, the information contained in Table VII indicates that while average family incomes in Seattle increased by 177% during the twenty year period from 1950, that median family incomes in Vancouver increased by 281%. Similarly, since 1960 average family incomes in Seattle have increased by 59% while in Vancouver they have increased by 80%.¹ The information contained in Table VIII confirms (assuming that incomes in the two cities increased at approximately the same rate as provincial and state incomes) that Vancouver incomes, especially in recent years, have been increasing at a much greater rate than Seattle's. For example, during the period from 1961 to 1970, Washington incomes increased at an annual compound

rate of 6.2% whereas, British Columbia's increased at a rate of 6.7%. During the period from 1970 to 1976, the rates of increase were 8.9% and 13.6% respectively.² It appears therefore that income growth has increased demand pressure in Vancouver to a greater extent than it has in Seattle.

The income growth data is supported by Table IX which contains information on unemployment rates in Vancouver, Seattle, British

TABLE IX
UNEMPLOYMENT RATES

<u>YEAR</u>	<u>METROPOLITAN SEATTLE</u>	<u>METROPOLITAN VANCOUVER</u>	<u>WASHINGTON</u>	<u>BRITISH COLUMBIA</u>
1966	3.0	N/A	N/A	5.1
1967	3.6	N/A	N/A	5.5
1968	4.2	N/A	4.3	6.6
1969	4.8	N/A	4.8	5.0
1970	9.7	N/A	8.3	6.6
1971	12.4	7.1	10.9	8.1
1972	10.8	8.0	9.1	7.5
1973	7.6	6.4	7.9	7.0
1974	6.8	5.3	7.2	6.0
1975	9.1	7.1	9.5	8.5
1976	7.0	8.2	8.7	8.5

Source: Historical Labour Force Statistics, S.C.#71-701
The Labour Force, S.C.#71-001A, 72-002
Real Estate Research Report, Spring, 1976

Columbia, and Washington. It is evident that since the Boeing lay-off in 1969, that the unemployment rates in Seattle and Washington have been somewhat higher than British Columbia's and as Vancouver's unemployment rate is generally lower than British Columbia's,³ there has been an even greater difference between the unemployment figures for Seattle and Vancouver. Higher employment rates coupled with more rapidly increasing incomes seem to have placed greater demand pressure on the Vancouver housing market when compared to Seattle's.

6.3 Prices

It was noted earlier that as housing prices rose relative to the prices of other goods, consumers would shift their consumption away from housing and thereby, moderate the price increase. It is evident by comparing the housing price index and the consumer price index information presented in Table X that housing prices in Vancouver have risen much more rapidly than the prices of other goods.⁴ By comparison, Seattle housing prices have increased at about the same rate as other goods.⁵ The overall inflation rate does not seem to have caused the price differential and in theory, should have tended to moderate demand for homes in Vancouver.

Similarly, the other components of housing price (taxes, insurance, and operations costs) do not appear to be significantly different for these two cities. Table XI confirms that housing expenditures (which includes costs of shelter, furnishings and operations) are approximately equal in the urban centres of Canada and the U. S. It is difficult to compare relative real estate taxes because of differing assessment methods, varying mill rates, and a lack of taxation uniformity within these two metropolitan areas. However, by using average taxation rates and average assessment values it is possible to determine a general indication of the relative burdens of real estate taxes. The average tax rate applied to the average assessment value suggests an average tax bill of \$560 in Seattle.⁶ In Vancouver City, the average tax bill, after deducting the Home Owner Grant, was \$581.⁷ One might expect that there would be a difference in operations cost that would offset the difference in housing sales prices and that the total cost of housing would be comparable, however, as household operations costs and property taxes do not vary significantly

for these two cities, they would not seem to be a cause of the housing sales price differential.

TABLE X
CONSUMER AND HOUSING PRICE INDEXES

<u>YEAR</u>	<u>CANADA CP1</u>	<u>VANCOUVER HP1</u>	<u>UNITED STATES CP1</u>	<u>SEATTLE HP1</u>
1961	75.0	69.0	73.8	88.0
1962	75.9	68.0	74.6	92.0
1963	77.2	71.0	75.6	93.0
1964	78.6	74.0	76.6	94.0
1965	80.5	78.0	77.9	94.0
1966	83.5	85.0	80.1	97.0
1967	86.5	100.0	82.4	100.0
1968	90.0	115.0	85.9	103.0
1969	94.1	134.0	90.5	116.0
1970	97.2	136.0	95.9	116.0
1971	100.0	148.0	100.0	116.0
1972	104.8	176.0	103.3	120.0
1973	112.7	232.0	109.7	124.0
1974	125.0	324.0	121.8	134.0
1975	138.9	370.0	131.3	144.0
1976	148.9	393.0	140.7	155.0

Note: The Vancouver Housing Price Index has been calculated from the MLS sales data.

Source: Canadian Housing Statistics, 1976
Real Estate Trends in Metropolitan Vancouver, (respective years)
Statistical Abstract of the United States, 1977
Real Estate Research Report, Fall and Spring of 1976
Canadian Statistical Review, February 1978, S.C. #11-003E

TABLE XI
HOUSING EXPENDITURE
URBAN CENTRES

<u>YEAR</u>	<u>CANADA</u>	<u>UNITED STATES</u>
1969	\$2,638	-
1970	-	\$2,501
1971	2,886	-
1972	-	2,810
1973	-	-
1974	3,306	3,236

Source: Urban Family Expenditure, S.C. #62-541b, 62-540, 62,537

6.4 Credit Conditions

Financing costs, probably the major component of the price of housing, are significantly different in Canada and the United States. Although down payment requirements and mortgage terms are similar in both countries, the monthly payments required to amortize a mortgage loan vary between Vancouver and Seattle as a result of the differing interest rates in the two countries. Table XII lists the interest rates for conventional mortgage loans in recent years.

TABLE XII
CONVENTIONAL MORTGAGE INTEREST RATES

<u>YEAR</u>	<u>CANADA</u>	<u>UNITED STATES</u>
1965	7.02	5.89
1966	7.63	6.09
1967	8.07	6.34
1968	9.07	6.64
1969	9.84	7.46
1970	10.45	8.19
1971	9.94	7.34
1972	9.04	7.30
1973	9.09	7.55
1974	10.02	8.43
1975	11.81	8.92
1976	11.84	9.05

Source: Canadian Housing Statistics, 1976
Statistical Abstract of the United States (various years)

The higher cost of financing results in Canadian purchasers buying a much lower cost home for an equivalent monthly mortgage payment. For example, a payment of \$400 per month, assuming a 25 year mortgage at 1976 interest rates and a \$10,000 down payment, would buy a Canadian a \$54,000 home whereas an American could purchase a home in the \$61,000 range.⁸ The difference in housing costs is even greater

when one considers that mortgage interest payments in the U. S. are deductible for income tax purposes which further reduces the real cost of home purchase in the U.S. For example, it is estimated that the deduction of interest from taxable incomes reduces the actual cost of housing by approximately \$800.⁹ The relative ability of Canadians to purchase a home is even further reduced relative to Americans when one considers that it is common practise in both countries to require a 25% down payment. To purchase the average Vancouver home requires savings of approximately \$17,000.¹⁰ To purchase the average Seattle home would only require about \$13,000.¹¹ In summary, credit conditions should have operated to depress housing demand in Vancouver vis a vis Seattle and as interest rates became relatively higher in Canada during the period when housing prices were rising, they would appear to have reduced the price differential from what it would have been had credit conditions remained the same in the two cities.

6.5 Summary

To summarize the impacts of the components of demand on housing prices, it appears that there have been both greater and in some cases, lesser demand pressures on the Vancouver housing market when compared to the Seattle market. Additional demand pressure seems to have resulted from population growth, changes in the demographic composition of the population, a higher rate of household formation, and faster rates of increases in incomes. On the other hand, demand pressure would appear to have been moderated by higher housing prices and more costly credit conditions.¹²

FOOTNOTES

1. Due to data availability, it was necessary to compare median and average incomes. While this comparison reduces the usefulness of the information, it is felt that rates of change calculated from these figures are representative of rates of overall income increases.

2. Calculated from Table VIII.

3. The belief that Vancouver rates of unemployment are generally lower than the provincial rate is substantiated by the information in Table IX.

4. The information in Table X is somewhat difficult to make comparisons from as the indexes have different base years, however, the information in this table indicates that in Canada the cost of living has increased by approximately 85% while the price of housing has increased by about 436%. In the United States the respective rates were 78% and 64%.

5. See footnote 4.

6. King County Department of Assessments, 1976 Annual Report.

7. City of Vancouver, Director of Finance, Use-Code Analysis.

8. Monthly payments are from: Financial Amortization Schedules (Boston: Financial Publishing Company, 1974)

9. John Weicher, "Affordability of New Homes", p. 219.

10. Based on requirement for a 25% down payment.

11. Based on requirement for a 25% down payment.

12. One of the weaknesses of analysis conducted at this level is that the findings of the empirical research cannot be used to make detailed conclusions on the "net" effect of the various changes in the factors of supply and demand. While our knowledge of the housing market allows us to make inferences of the direction in change in housing prices, it does not allow the measurement of the magnitude of the effect of changes in supply and demand factors of the housing market.

CHAPTER 7

THE INFLUENCE OF GOVERNMENT

In the process of comparing Canadian and American housing prices, it is necessary to review the influence of government for governments influence housing markets in a great number of direct and indirect ways. They have a direct influence through housing policies and programs. Similarly, monetary and fiscal policies have a direct and immediate effect on supply and demand sectors of the housing market. Indirectly, second and third generation effects of programs, that may not have even been designed to influence housing markets, often alter the framework within which the market operates and in this way, governments can have a substantial although unintended impact on the urban environment and housing market. This chapter will briefly review a number of areas in which the governments of Canada and the United States have had differing impacts on the housing markets of Vancouver and Seattle.

7.1 Monetary and Fiscal Policy

In both Canada and the United States, policies to expand or contract the national economy have an impact on the housing markets through the impact that these policies have on the level of incomes. Table XIII presents historical data concerning the money supplies¹ of Canada and the U. S. It is evident from this table that the Canadian money supply has undergone substantially greater increases than the American money supply. During the period from 1960 to 1975,

TABLE XIII

MONEY SUPPLY (M1)

<u>YEAR</u>	<u>CANADA</u> (millions)	<u>UNITED STATES</u> (billions)
1960	\$6,189	\$144
1965	7,130	171
1970	9,699	220
1975	18,818	295

Source: Bank of Canada Review (various years)
Statistical Abstract of the U.S., 1976

the compound annual growth rate in Canada was 7.7% whereas in the United States the rate of growth was only 4.9%. From 1970 to 1975 the growth rates were 9.6% and 6.0% respectively. This doubtless relates to the greater rates of growth in incomes that took place in Vancouver during these periods. In summary, it would appear that the more expansionary economic program of the Canadian government has encouraged and allowed Canadians to spend more money on housing than their American neighbors and this would seem to be a part of the reason for the evolution of the price differential.

7.2 Urban Renewal

Housing and urban programs of both Canada and the United States have many similarities. From the introduction of FHA and NHA mortgage insurance through more recent ownership assistance programs and varying forms of subsidies for investors in rental housing developments,² the policies of the governments of Canada and the United States often appear to parallel one another. However, in spite of these similarities, there are areas in which the programs of the governments have had significantly differing impacts. Urban renewal is an example of one of these areas of difference.

Legislation and funding for slum clearance programs was introduced in the United States in 1937.³ In 1949 the major urban renewal program was implemented to allow federal funding of large scale land assembly, demolition and development projects.⁴ It is said that urban renewal is one of two programs that have absorbed 90% of federal government expenditures in American cities.⁵ Indeed, the American federal government has made a major, perhaps unmeasurable, investment in the redevelopment of its urban areas. Martin Anderson estimates that from 1950 to 1962 over 2½ billion dollars of federal funds were spent on renewal and in 1962 alone that ½ billion dollars were spent.⁶ Jerome Rothenberg estimates that by 1965 over 6 billion dollars were committed to 1,109 projects.⁷ The HUD Statistical Yearbook reports that by June 1974 approximately 12½ billion dollars had been approved for approximately 2,500 projects.⁸

In comparison to the American program, the involvement of the Canadian government in the redevelopment of its urban areas seems very minor indeed. Legislation authorizing large scale "American" style renewal was enacted in Canada in 1964.⁹ The authority to initiate renewal projects was withdrawn in 1969.¹⁰ because of negative impacts and public opposition to the program. Approximately 66 million dollars were spent on renewal in Canada prior to 1969.¹¹ Clearly, the involvement of the state in the redevelopment of urban areas has been very much less significant in Canada than in the United States.

While I don't think anyone would disagree that the American government has played a major role in the evolution of its cities, there are many conflicting opinions as to the impact that this

involvement has had. There are both critics and supporters of the urban renewal program and both make very strongly worded arguments in support of their beliefs.¹² Goldberg has summarized the renewal program as:

"a symptom-oriented program aimed at physical rehabilitation without a comprehensive understanding of the social, economic and physical dimensions of the problem. It is not surprising that so many of the urban renewal projects appear as shoddy patch jobs on the urban scene. The Pruitt-Igoe experience in St. Louis is a caricature of the large scale insensitive schemes that were all too typical of the heyday of urban renewal in the United States." ¹³

Similarly, Joseph Baker describes the results of renewal as follows:

"...the response to this woeful scene would have been 'slum clearance'...reformers attacked the problem with such gusto that vast areas of North American cities could easily have been mistaken for devastated parts of Dresden and Nagasaki, or the free fire zones of Vietnam."¹⁴

Conversely, proponents of renewal point to the successes in cities like Pittsburgh where:

"Federal aid is being used, for example, in a gigantic project to clear the slums of the Lower Hill. There, in the rise of land above the Triangle, 8,000 persons are living in 100 acres of slums...The improvement contemplates the clearance of the entire area except for one church building, and its conversion into a city centre that will complement the Point development at the other end of the business district. Using Title I funds under the Housing Act of 1949, the Redevelopment Authority plans to acquire the area, raze its structures, redesign and rebuild its street pattern, and make it a splendid addition to Downtown Pittsburgh". ¹⁵

Undoubtedly, there are renewal projects that have worked very well just as there are those that have been failures. However, in spite

of the successes, the sheer size of the program and its projects forces cities to undergo rapid and large scale change in the process of state funded renewal. This change, and of course the accompanying risk for negative results, can seriously alter the basic economic framework of urban areas. In the words of Jerome Rothenberg:

"Not only are the resources involved very substantial, their use affects tens of thousands of people in major localities and millions of people throughout the country in a way that is largely irreversible. Each single urban renewal project can effect large-scale, often radical, changes in land-use patterns in a given city. A combination of projects for any city can significantly influence living patterns there. Such changes tend to ramify, influencing the configuration of transportation, of location of amenities, of decentralization of activities, and of urban-suburban relationships...Because the program is large and may make a deep and not easily alterable difference in urban living, it is important to be reasonably sure it is well conceived." 16

Jane Jacobs describes the magnitude of the impact of the urban renewal program as follows:

"Cataclysmic money pours into an area in concentrated form, producing drastic changes... Putting it figuratively, insofar as their effects on most city streets and districts are concerned, these kinds of money behave not like irrigation systems, bringing life-giving streams to feed steady, continual growth. Instead, they behave like manifestations of malevolent climates beyond the control of man - affording either searing droughts or torrential eroding floods." 17

Clearly, the urban renewal program has the potential to bring about large scale and rapid change to the existing social and economic infrastructure of American cities. This potential did not materialize in the Canadian program.

However, for the two cities under consideration, the difference in the Canadian and American urban renewal programs does not appear to have caused any significant economic differences in either city as neither Seattle nor Vancouver has had much involvement with the programs.¹⁸

In summary, while urban renewal could have had a potentially significant impact on many American cities, its impact on Seattle was minimal and it does not appear to be a factor in the housing price differential.

7.3 Urban Transportation Programs

If Seattle was comparatively unaffected by the urban renewal program, it was not similarly unaffected by the highway construction program that was funded by the American Federal Government. The introduction of federal funding for urban highway construction put in place a program that was to drastically alter the form of American urban areas.¹⁹ It is estimated that 480 billion dollars of public money have been spent on highway development in the U.S. since 1924.²⁰ The more recent versions of the highway development program generally offered 90% federal funding for the cost of highway construction.²¹ Many states and cities took advantage of these 10¢ dollars to develop large urban transportation networks. It takes only one trip to Seattle's metropolitan area (SMSA) to confirm that it was the recipient of a substantial amount of the federal funds. The metropolitan Seattle restricted-access freeway network comprises approximately 370 miles.²²

Large scale truck and automobile oriented transportation facilities, like the one in Seattle, are in place in many American cities. Because they facilitate a reduction in an individual's transportation costs, they encourage decentralization away from the core of urban areas. The Rand Corporation recently described the impact of the highway construction program as follows:

"Although federal policies were not the root cause of urban decentralization, they have overwhelmingly supported it...The interstate highway system, without which decentralization would certainly have proceeded at a slower pace, is perhaps the single most important piece of public investment since World War II."²³

The growth inducing influence of the freeway network has encouraged the movement of residents to the areas outside the city of Seattle to the point where the metropolitan area now covers 4200 square miles with population dispersed at an average density of approximately 340 persons per square mile.²⁴

Vancouver, on the other hand, has received very few funds from any source for highway construction purposes. Federal funds for highways have generally been limited to the development and maintenance of the Trans Canada Highway. Although the provincial government has provided some highway construction funds, until late 1977 these funds have only been available for municipalities and no provincial highway subsidies have been granted to the City of Vancouver.²⁵ At various times the possibility of a municipally financed freeway network was considered. However, perhaps because of the non-subsidy situation, Vancouver was late entering the freeway development era and by the time developments were seriously contemplated, public pressure against freeway construction had developed and this pressure quickly

ended any further consideration of an inner-city highway. As Walter Hardwick described the situation,

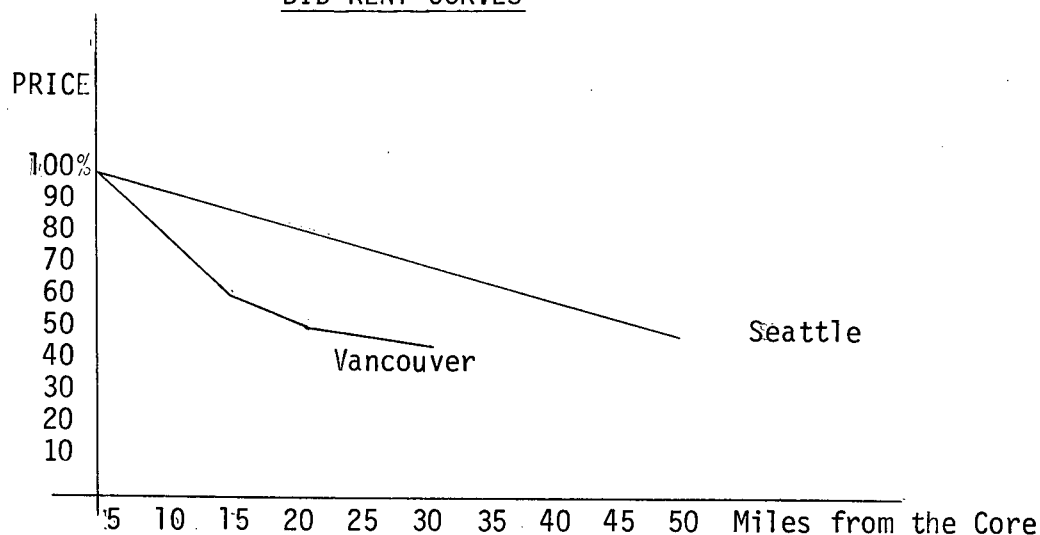
" In the freeway issues, hundreds of people in Vancouver were concerned about their central city being bulldozed by a freeway in the fashion they had seen in nearby Seattle" 26

As a result, Vancouver now has only about 130 miles of four-lane controlled access urban highway in its metropolitan area and much of this barely merits the name highway.²⁷ Restricted transportation facilities have forced Vancouver (CMA) to develop as a small dense metropolitan area which comprises only approximately 1000 square miles at an average density of 1057 persons per square mile.²⁸

In contrast to the rapid and large scale highway construction program that has so influenced the development of Seattle, highway developments in Vancouver took place slowly and on a small scale. The majority of transportation developments involved making incremental improvements to existing systems and very few new transportation facilities have been installed. As a result, a centralized urban form has evolved in conjunction with the limitations of the existing transportation services. Seattle, on the other hand, underwent substantial change with the development of its freeway network which allowed its residents to locate at significant distances from the core area and created a highly suburbanized urban form. Seattle has become a city of long distance automobile commuters.²⁹

In Chapter 3 the effect on land values of a transportation improvement was discussed. That discussion concluded that a transportation improvement effectively reduced the locational advantage of the central city and tended to decrease the value of central sites and increase the value of land at the periphery.

FIGURE 8
BID-RENT CURVES



The bid rent curves represent the decline in value from 100% as distance from the core increases. They were determined by averaging the land values for a number of Seattle and a number of Vancouver areas.

Source: Real Estate Research Report, Spring 1976
Real Estate Trends in Metropolitan Vancouver, 1976

Figure 8 illustrates that the differing quantities of highway facilities in Seattle and Vancouver are accompanied by bid-rent curves that have very different slopes. The steeper slope of the Vancouver curve is indicative of the higher utility of central city residential locations. In the housing market, the value of this additional utility is translated into higher prices for the standing stock of housing units (the majority of which are located in central locations). As outlined in the discussion of the housing market model, when the price of the stock is high, housing prices are similarly high. Conversely, when the utility of central city sites is low, housing

prices in general are reduced. The impact of the Seattle freeway network could have resulted in a reduction in the value of the standing stock and consequently, lower housing prices.

In summary, it appears that government involvement in the Seattle urban area in the form of capital subsidies for the development of their transportation system has reduced the level of demand for the stock of housing and thereby, contributed to the evolution of the housing price differential.

7.4 Summary

Governments in Canada and the United States have had differing impacts on the housing markets of Vancouver and Seattle. The influence of Canadian governments can perhaps be summarized as supportive of housing demand and existing urban structures. Expansionary monetary policies and an avoidance of direct intervention in the development/redevelopment of urban areas appear to have contributed to a high level of effective demand for houses in Vancouver and a high price for this valued commodity. American government programs and policies, on the other hand, may have tended to reduce the level of housing demand and may have contributed to a lower level of housing prices. A comparatively slower rate of economic expansion and government expenditures that have influenced the factors operating in the market have possibly played a role in the establishment of a lower price level for Seattle homes. Governments therefore, do appear to have had a role in the creation of the housing price differential.

FOOTNOTES

1. Money supply is defined as currency in circulation and demand deposits.

2. In Canada these programs were the NHA mortgage insurance program, the Assisted Home Ownership Program, and the Assisted Rental Program. In the United States they were FHA mortgage insurance, Section 235 interest subsidization program, and the Section 236 interest subsidies to developers of rental accommodation.

3. John Weicher, Urban Renewal (Washington: American Enterprise Institute for Public Policy Research, p.5)

4. Ashley Foard and Hilbert Fefferman, "Federal Urban Renewal Legislation", in James Q. Wilson, Urban Renewal: The Record and the Controversy (Cambridge: M.I.T. Press, 1966) p. 93.

5. Edward Banfield, The Unheavenly City (Boston: Little, Brown and Co., 1968) pp. 14-16

6. Martin Anderson, The Federal Bulldozer (Cambridge: M.I.T. Press, 1965),

7. Jerome Rothenberg, Economic Evaluation of Urban Renewal (Washington: The Brookings Institute, 1967), pp.7-8

8. HUD Statistical Yearbook (Washington: Department of Housing and Urban Development, 1974), p. 15.

9. Albert Rose, "Canadian Housing Policy", in Michael Wheeler The Right to Housing (Montreal: Harvest House, 1969), pp 63-139

10. Report of Task Force on Housing and Urban Development (Ottawa, Queen's Printer, 1969)

11. Urban Renewal and Public Housing in Canada, Vol. 9, No.1 (Ottawa: CMHC)

12. For more in depth analyses of urban renewal, the reader is referred to: Anderson, The Federal Bulldozer; Rothenberg, Economic Evaluation of Urban Renewal; Dick Netzer, Economics and Urban Problems (New York: Basic Books, Inc., 1970); Richard Bingham, Public Housing and Urban Renewal (New York: Praeger Publishers, 1975)

Anthony Downs, Urban Prospects and Problems (Chicago: Markham Publishing Company, 1970); Brian Boyer, Cities Destroyed for Cash (Chicago: Follett Publishing Company, 1973); Chester Rapkin and William Grigsby, Residential Renewal in the Urban Core (Philadelphia: University of Pennsylvania Press, 1960)

13. Michael Goldberg and Michael Seelig, "Canadian Cities: The right deed for the wrong reason", Planning: The ASPO Magazine 41(2), March/April, 1975.

14. Joseph Baker, "Rehabilitation", in L. Axworthy and James Gillies, The City: Canada's Prospects, Canada's Problems (Toronto: Butterworth & Co., 1973)

15. Hal Burton, The City Fights Back (New York: Citadel Press, 1954), p. 193

16. Rothenberg, Economic Evaluation of Urban Renewal, pp.7-9

17. Jane Jacobs, The Death and Life of Great American Cities (New York: Random House, 1961) p. 293

18. In neither city has there been any large scale renewal. For further information see: John Mercer and John Huffquist, "National Progress Toward Housing and Urban Renewal Goals", in John Adams, Urban Policy Making and Metropolitan Dynamics (Cambridge: Ballinger Publishing Co. 1976), pp. 112-119; Memorandum Re Urban Renewal and Public Housing For Members of Vancouver City Council Attending the Conference of the Canadian Federation of Mayors and Municipalities (City of Vancouver, June 1969).

19. Rand Corporation, "The Urban Impact of Federal Policies", Practising Planner, December 1977, p. 40

20. R. L. Banks, Vancouver Sun, 25 September 1977.

21. Goldberg and Seelig, p. 40

22. This mileage figure has been determined by scaling the distances of the metropolitan Seattle restricted access freeway network from "Functional Classes of State Highways District 7", map supplied by the Washington State Highways Commission.

23. Rand Corporation, "The Urban Impact of Federal Policies", p. 40.

24. Seattle Department of Policy Planning

25. The recent amendments to the Provincial Revenue Sharing Act will allow, for the first time, provincial grants for some highway development work in the City of Vancouver.

26. Walter Hardwick, Vancouver (Don Mills: Macmillan Canada Ltd., 1974), p. 41

27. This mileage figure has been determined by scaling the distances of metropolitan Vancouver four lane limited access highways from "Existing Development, 1970", map supplied by Greater Vancouver Regional District.

28. Figure calculated from information contained in Municipal Statistics (Victoria: Ministry of Municipal Affairs and Housing, 1977).

29. The Seattle metro system carries only one-half the passengers of the B. C. Hydro system.

CHAPTER 8

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

It might be the safe thing to do to conclude this paper at this point by simply reiterating the findings of our search for causes of the housing price differential. And yet, in the course of researching housing market data, one continually encounters evidence of the crises facing American cities as a result of decayed and decaying core areas. It is not difficult to connect the same government programs that have resulted in lower housing prices by discouraging central city living and encouraging a suburban life-style with the problems that American central cities are currently confronting. In this chapter this basic structural difference in the condition of Canadian and American core areas will be briefly reviewed, the findings of the empirical research will be presented, and a number of conclusions and recommendations will be made.

8.1 Urban Conditions in Canada and the United States

Urban literature frequently presents examples of decaying, depressed and abandoned American central cities. Brian Boyer has described this phenomena as follows:

"There is a part of Detroit called the Lower East Side which visitors, in awed voices, compare with the bombed-out cities of Europe after World War II and, later of Vietnam. Half and more of the houses on any given block

are boarded up with plywood squares.
 One equivalent of this area in New York
 City is known as the South Bronx; another
 is Brooklyn; a third, Harlem...the ruin is
 repeated in North Philadelphia, St. Louis,¹
 Seattle, Los Angeles and Lubbock, Texas."

In similar language, Dick Netzer has commented:

"In this way, large sections, like Woodlawn
 in Chicago, Brownsville and the South Bronx
 in New York, and similar neighborhoods in
 Detroit, Cleveland, Washington, and other
 cities have...become 'zones of destruction',
 abandoned by tenants and landlords alike".²

James and Robert Simmons in comparing on Canadian and American
 cities have noted that:

"In comparable U.S. cities, despite massive
 infusions of federal urban renewal funds, city
 centres are in difficulty...middle-class families
 ...flee to the suburbs...At present, many middle
 and upper-class Canadians still see the centre of
 the city as an attractive place to live." ³

It appears that many American cities are in serious trouble.
 Seattle seems to be experiencing this difficulty and has recently
 undertaken a major advertising campaign in an attempt to convince
 suburban residents to return to its central city residential areas.⁴
 Even Tacoma, a comparatively small town that one would have thought
 might have escaped from many of these big-city ills, is suffering
 from problems in its central core area.⁵

In contrast, few Canadian cities are suffering from the kinds
 of problems that are being experienced in the United States. If
 anything, local governments are seeking ways to shift demand away
 from core areas in an effort to diversify growth and development
 throughout their metropolitan areas.⁶ Canadian core areas still
 function as the heart of their cities and it is the core areas that
 contain the most desirable and highly valued real estate in the city.

While the concern with the health of American cities may be growing, it is not new. In 1954 the Urban Land Institute published a book outlining its involvement in a major effort to correct the many problems from which American central cities were suffering.⁷ One of the cities that the institute was involved with was Pittsburgh. Its condition prior to the corrective measures was described as follows:

"Everything's wrong with Pittsburgh..Traffic is all jammed up, our buildings are out-of-date, and one of our biggest steel companies is talking about relocating because they can't find space for expansion. I tell you, this city is really sick." ⁸

Corrective measures ensued:

"It took a lot of work, a lot of cooperation, and millions of dollars of public and private funds...We're going to have seven new office buildings, a park, and two intersecting free-ways down in the Golden Triangle...Uptown, we have two new office buildings. We're taking a hundred acres of slums in our Hill District and transforming that land into apartment buildings ...We wiped out two hundred other acres of slums along the Monongahela River..."⁹

The institutes book goes on to document comparable problems and similar solutions that have been implemented in a number of other American cities. Given the magnitude of federal investment in urban redevelopment and the existence of problems now facing American core areas, one would wonder how effective these solutions really were and even, whether the interpretation of the problems was correct. In Residential Abandonment: The Tenement Landlord Revisited, George Sternlieb and Robert Bruce note that despite renewal efforts, many cities continue to experience difficulty.

"Today, after enormous renewal effort and expenditure, in an increasing number of metropolitan areas the question is no longer appropriate. Actual abandonment of blighted neighborhoods by landlords has reached shockingly high levels." 10

In The Unheavenly City, Edward Banfield commented on the interpretation of urban problems as follows:

"A great many so-called urban problems are really conditions that we either cannot change or do not want to incur the disadvantages of changing. Consider the "problem of congestion". The presence of a great many people in one place is a cause of inconvenience, to say the least. But the advantages of having so many people in one place far outweigh these inconveniences, and we cannot possibly have the advantages without the disadvantages. To "eliminate congestion" in the city must mean eliminating the city's reason for being". 11

It seems that American core areas are having difficult times. In fact, there are a number of factors, not evident in Canada, which are associated with the problems that American cities are currently facing. Perhaps most important among these is the race situation. Large, poor, non-white neighborhoods are prevalent in many American cities. This situation discourages the white middle class from residing in these areas and promotes suburban residential location for an important component of the population. Similarly, concerns regarding personal safety which originate from high crime rates in central cities also encourages suburbanization. Finally, the financial problems currently facing many central city governments are forcing a cut-back in levels of service which contributes to a reduction in demand for central city residential locations. In any event, it seems clearly evident that many American core areas are experiencing difficult times as a result of problems from which Canadian cities are not suffering.

8.2 Summary of the Findings

The data that has been presented in this paper has indicated a number of causes of the housing price differential. In this section these findings will be briefly reviewed and summarized.

That a housing price differential does indeed exist was confirmed by the housing price data presented in Chapter 2. Current average sales price data indicates that Vancouver houses are 75% more expensive than Seattle homes. Historical price trends suggest that the price differential evolved as a result of a significantly higher rate of housing price increase in the Vancouver metropolitan market beginning in the mid-sixties. Since 1965, Vancouver housing prices have increased at an average annual rate of 11.5% while Seattle prices only increased at a rate of 3.25% per annum during the same period.

The data collected in the course of completing this paper does not support the claim made by some urban experts that the rapid rate of price increase was the result of a breakdown in the housing market mechanisms.¹² Rather, the research indicates that the price increases were the result of what might be termed the "natural" operations of the Vancouver housing market.

Additional demand for housing units in the Vancouver area appears to be the cause of much of the price increase and the source of the price differential. Somewhat greater rates of population growth, a more rapid rate of increase in the home-buying component of the population, and substantially greater rates of household formation have all contributed to a high level of demand for housing units and have brought about high housing prices. Expansionary monetary policies,

and rapidly increasing incomes have supported the ability of Vancouverites to demand housing units and pay high prices in order to obtain them. A high level of demand for housing and a rapidly increasing ability to pay appear to have allowed Vancouver consumers to bid up the price of Vancouver homes to the point where they are now substantially more expensive than homes in Seattle.

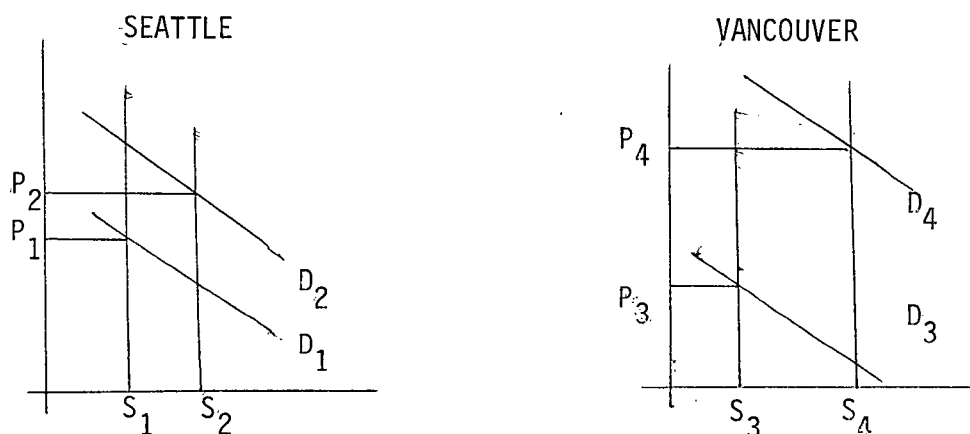
Coupled with a comparatively lower level of demand in the Seattle market has been the demand dampening effects of the federally financed Seattle urban freeway network. The relative size of the housing price differential appears to have been exaggerated by the action of the Federal government in financing the substantial highway system.

On the supply side, although there are differences in the composition of the stocks of housing, the Vancouver flow sector has produced approximately 12% more housing units than the Seattle market on a gross basis from 1966 to 1976 and approximately 45% more units on a per capita basis during the same period. The performance of the supply sector of the Vancouver housing market indicates that it is unlikely that restrictive development policies have caused the price differential.

In summary, the demand sectors of both markets appear to hold the answers to the main causes of the price differential.

In graphic terms, Figure 9 portrays how the factors of supply and demand have shifted price in the Vancouver and Seattle housing markets.

FIGURE 9
MARKET OPERATIONS



This drawing demonstrates how changing levels of supply and demand in the Vancouver and Seattle markets could have caused substantially higher housing prices in Vancouver. At the beginning of the time-series considered in this analysis, the factors of supply and demand had established housing prices at P_1 in Seattle and P_3 in Vancouver (the points where the curves D_1 and S_1 and D_3 and S_3 met respectively). Over time, both supply and demand shifted to S_2 and D_2 in the Seattle market and to S_4 and D_4 in Vancouver. It appears that in spite of the comparatively greater increases in supply in the Vancouver market, these increases could not offset the comparatively even greater increases in demand in the Vancouver market and as a result the price differential evolved with Vancouver prices at P_4 and Seattle prices at P_2 .

In summary, it appears that the Vancouver housing market has been operating effectively with demand pressures pushing prices upward and with the supply sector responding to the higher price

levels. The differential appears to have developed from natural market pressures with possibly a portion of the price difference due to the demand dampening effect of the U.S. Federal Government's highway building program.

8.3 Conclusions

It is not possible to definitively connect low house prices, urban problems, and the impact of state programs and yet, it is possible that the housing price differential is reflective of the relationship between federal government programs and urban problems.

It seems unthinkable that American programs that were designed to improve the quality of urban life could have resulted in less livable cities. However, that is what appears to have happened as a result of programs that have altered the urban structure and weakened the role of the central city. Jane Jacobs, in discussing the impact of urban renewal and the highway construction program, had the following comments:

"There is a wistful myth that if only we had enough money to spend - the figure is usually put at a hundred billion dollars - we could wipe out all our slums in ten years. But look what we have built with the first several billions: low-income projects that become worse centers of delinquency, vandalism, and general social hopelessness than the slums they were supposed to replace, expressways that eviscerate great cities. This is not the rebuilding of great cities. This is the sacking of cities". 13

Clearly Jacobs feels that these programs, rather than improving American cities, have contributed to their problems. Similarly, the Rand Corporation in commenting on the impact of the highway development program had the following comments:

"At best, all one can say of the years since is that policy makers had a very short time horizon and were woefully incomplete in their decision making. For example, many advocates of highways felt that a new, improved road network would actually help cities, that the criss crossing of roads would create bite sized pieces suitable for orderly development. Things did not work out as anticipated." 14

It appears that the findings of this paper, although perhaps only tenuously, support the beliefs that the large-scale government involvement in urban development through its programs of urban renewal and freeway construction have substantially altered the form of many American cities.

It may at first seem difficult to understand why programs could not and cannot be developed to correct whatever problems that American cities were and are suffering from. However when one considers the complexity of the urban infrastructure, it becomes evident just how difficult a task that problem comprehension and program design can be. Alex Robin, in discussing his experience with redevelopment, comments as follows:

"it seems to me that the more experienced one gets in this area, the more one is impressed with the complexities of the problems, with how much one doesn't know about the methods, and whether you are doing the wrong thing or the right thing at any particular time. Redevelopment is still experimental, although it has been under way in the United States for a couple of decades. There are...serious errors being made." 15

It is a difficult task indeed and to date, American programs, rather than solving problems, if in fact the problems were properly defined to begin with, may have compounded them.

The housing price differential and the differences in urban vitality appear to relate to a basic difference in the attitudes and actions of the governments of Canada and the United States. The American government has expended vast sums of money on the development and redevelopment of its urban areas.¹⁶ Canadian governments have not played a major role in the evolution of urban areas. Canadian cities have been developed and redeveloped by individuals in response to the factors of the market place. As a result, Canadian cities have changed slowly in comparison to the rapid change that resulted from American government interventions. Given the current conditions in the condition of Canadian and American cities, it would seem that solutions developed by the market are preferable to those developed by governments.

8.4 Policy Recommendations

In terms of recommendations for future urban policies, I believe this paper has led to two general conclusions. The first deals with the scale of urban programs and policies. The second deals with specific programs and policies.

Mistakes are costly and no policy should be implemented on such a large scale that it could cause irreparable damage. Urban environments are tremendously complex structures and no model can accurately predict the real impact of a program. To ensure that no irreversible mistakes are made, small scale should be the guiding principal of every policy development program. American cities have

been caught in the trap created by well-intentioned but incorrect interpretations of urban needs and the large scale programs that were implemented based on these misinterpretations appear to have weakened the core areas of a number of American cities.

Just as policies should be implemented on a small scale, for the same reasons, so should they be implemented slowly. Going slowly ensures that one does not get too far down the wrong path before an error can be detected. Canadian cities have managed to maintain a slow pace during their processes of redevelopment by relying on the market place to guide these processes. The urban land market is comprised of a large number of individuals all with a different set of expectations, needs, and wants. Allowing these participants to make their own decisions about their own urban environment ensures a diversity of actions and guarantees that change will only be introduced into the urban infrastructure on a small scale and at a slow pace.

Given this basic philosophical belief in the correctness of individual decision making, it seems clear that urban policies and programs should be designed to either work within the framework of the operations of the market or to improve the ability of the market to operate.

There are a number of specific housing and urban programs that could be implemented within this market-oriented policy. Governments should attempt to achieve housing distribution policies through income distribution programs rather than through direct provision. Programs such as the Provincial government's GAIN and SAFER programs allow

individuals to participate in the market place and to make their own housing decisions. Similarly, even though the Canadian financial sector is competitive, there are a number of standard "qualifying" requirements that tend to limit the choices of consumers as to the types of accommodation they can effectively demand. The Federal Government should encourage lending institutions, perhaps by setting the example by revising the NHA mortgage insurance regulations, to provide mortgage loans on a diverse variety of housing types. Such a program would broaden the scope of the market and would allow both consumers and producers to consider a number of alternative housing forms. Similarly, the existing Assisted Home Ownership Program (AHOP) tends to restrict consumer choice because many areas are effectively excluded from this program. This is especially true in central city areas where land costs prevent construction within the price limits. Consideration should be given to revising this program to allow "economical" development within core areas. In the same vein, AHOP is only applicable to new units. A parallel program should be developed to allow comparable subsidies on existing units. Such a revision would allow consumers to consider a greater variety of homes in their purchase decision. The need for healthy core areas has been a principle focus of this paper and in this regard, governments should continue and expand the Residential Rehabilitation Assistance Program. This program gives individuals the ability to upgrade their homes and their neighborhoods and in this way, they strengthen central city areas. Caution must be exercised in the use of these programs for they are in fact, large

scale interventions. However, because they are implemented by individuals (i.e., the RRAP program is dependent on individual property owners choosing to take advantage of its rehabilitation subsidies), it is felt that they are consistent with the principles of the operations of the market. While the programs are large, they are really comprised of a large number of small programs. Finally, program design and implementation should reflect the input of as many opinions as possible. If municipalities, or neighborhood groups, or preferably individuals had strong voices in the development and implementation process, one would be assured of both effective and diverse urban programs.

In summary, policies and programs should be implemented slowly and on a small scale. To ensure that this will happen, they must be designed to operate in conjunction with the forces of the market place and as a result of the decisions of individuals.

FOOTNOTES

1. Brian Boyer, Cities Destroyed for Cash, p.3
2. Dick Netzer, Economics and Urban Problems, p.44
3. James Simmons and Robert Simmons, Urban Canada (Toronto: The Copp Clark Publishing Co., 1969), p. 13.
4. CBC Radio, 2 February 1977, Paul Shell, Director of Seattle Community Development.
5. Vancouver Sun, 2 December 1976, Bill Curtis, Vancouver City Engineer, described Tacoma's attempts to encourage people back into their downtown as follows, "They built a moving sidewalk downtown and a mall to encourage people to come in, but it's virtually deserted".
6. Perhaps the best example of this is the metropolitan Vancouver's Livable Region Program which embodies the principles of decentralization.
7. Hal Burton, The City Fights Back.
8. Ibid, p. 20
9. Ibid, p. 21
10. George Sternlieb and Robert Bruce, Residential Abandonment: The Tenement Revisited (New Jersey: Publishing Centre for Urban Policy Research, 1973), p. xiii
11. Edward Banfield, The Unheavenly City, p. 5
12. Gordon Soules, Housing Crisis: Causes, Effects, Solutions, p. 19
13. Jane Jacobs, The Death and Life of Great American Cities, p. 11
14. Rand Corporation, "The Urban Impact of Federal Policies", p. 40.
15. Alex Robin, in Michael Wheeler, The Right to Housing, p.273.
16. Dick Netzer, Economics and Urban Problems, notes that in the 60's the U.S. Federal Government spent over 3 billion dollars per year on new urban highway, p.57

APPENDIX A

The bid-rend curves which present the change in land value with increasing distance from the central core have been determined by analysing land values in a number of localities in Seattle and Vancouver. In both cities, three rays leading from the central area were constructed and the land values along these lines were noted. In Vancouver, the rays went south (Vancouver, Richmond, Delta), south-east (Vancouver, Burnaby, New Westminister, Surrey), and east (Vancouver, Burnaby and Coquitlam). In Seattle, they went south (Seattle, Renton, Kent), east (Seattle, Bellevue, Issaquah), and north (Seattle, Mountlake Terrace, Edmonds, Everett). The values at approximately every five mile distance were then averaged to determine the approximate change in value with distance. These values were then converted into percentages of the central city value and presented in Figure 8, p. 59.

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