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**CMHC**  
Canada Mortgage  
and Housing Corporation

**SCHL**  
Société canadienne  
d'hypothèques et de logement

**NATIONAL  
CONDOMINIUM  
MARKET  
STUDY**

**SUMMARY**

PART V REPORT  
RAPPORT PARTIE V

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**NATIONAL  
CONDOMINIUM  
MARKET  
STUDY**

**SUMMARY**

**Prepared for  
The Research Division  
Policy Development and Research Sector  
Canada Mortgage and Housing Corporation  
by  
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Vancouver**

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**December, 1984**

This study was conducted by A. Skaburskis and Associates for Canada Mortgage and Housing Corporation under Part V of the National Housing Act. The analysis, interpretations, and recommendations are those of the consultants and do not necessarily reflect the views of Canada Mortgage and Housing Corporation or those divisions of the Corporation that assisted in the study and its publication.

The complete National Condominium Market Study consists of eight Working Papers, the names of which are listed below. These Working Papers, in English only, are deposited with the Canadian Housing Information Centre at CMHC and are available to those wishing to read the entire study or any part of it.

- Working Paper 1 Literature Review
- 2 Review of Condominium Legislation
- 3 Analysis of CMHC Claim and Approval Data
- 4A Demand Assessment Methods
- 4B Guide to Local Market Demand Assessments
- 5 Survey Methods, Response Rates and Data File Descriptions
- 6 Risk Analysis: Survey Results
- 7 Determinants of Condominium Demand: Survey Results

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**NATIONAL CONDOMINIUM MARKET STUDY**  
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**NATIONAL CONDOMINIUM MARKET STUDY  
SUMMARY REPORT**

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## CHAPTER ONE INTRODUCTION

### 1.1 OBJECTIVES

This study aims to develop information that can help improve decisions on mortgage insurance applications for new condominium projects. The condominium sector is still relatively new in Canada and our understanding of the operations of the market and the nature of the demand for condominium units is limited. This study seeks to expand our general knowledge of condominium markets. It is generic in nature and seeks to help market analysts and mortgage insurance underwriters expand and direct their own inquiries regarding the insurance costs associated with proposed projects.

This study examines project related factors and demand assessment issues as distinct components affecting mortgage insurance risk. The main focus is on condominium demand. The CMHC market analyst's ability to assess demand for condominiums will affect risk in two ways. The first relates to CMHC's ability to determine whether or not the units in a proposed project will sell. The second affects the analyst's ability to determine the likelihood that a default, occurring as a result of occupant related problems, will lead to a mortgage insurance claim. If the demand for a particular type of unit is high relative to supply, the chance of a foreclosure occurring is diminished by the owner's propensity to sell before proceedings are terminated. When prices are increasing, the net cost of the foreclosures that do occur is reduced and the likelihood the lender will register an insurance claim diminishes.

The improvement of mortgage insurance decisions is an important goal because it affects not only the cost-effectiveness of mortgage insurance operations but also the efficiency of housing markets. A mortgage insurance claim reflects the inefficient use of resources. An insurance claim is, in part, due to the market determining that the true value of the dwelling unit is lower than the amount for which it was mortgaged. Since mortgage amounts will usually be set at or below project costs, the registration of an insurance claim is an indication that the value society places on the unit is below the value of the resources used to produce it. Improved mortgage insurance decisions affect the value society can gain from the use of its fixed resources.

Knowledge of mortgage insurance risk need not increase the number of rejected applications. An increase in our understanding of the nature and magnitude of insurance risk will reduce uncertainty and can lead to an increase in approved policies by allowing the insurer set their price equal to their true cost. When improved risk assessment techniques lead to marginal cost pricing, the insurer can turn the project's "go ahead" decision back to the entrepreneur who determines whether or not to take the risk and pay its cost.

## 1.2 METHODOLOGY

This study was undertaken in a number of stages. The first stage reviewed previous Canadian and U.S. empirical studies of condominium occupants. The second stage examined provincial condominium legislation. The third analyzed CMHC mortgage insurance claim and approval data to estimate claim rates and identify the main factors explaining higher risk associated with condominiums. The fourth phase of work focused on the development of hypotheses and key questions regarding the nature of the condominium market and delineated methods for assessing the demand for condominiums in different types of markets. The last major phase of work involved two separate surveys: a survey of the chairpersons of condominium councils (or the resident manager), and a survey of condominium occupants. The surveys were carried out in nine cities including:

- Halifax
- Quebec City
- Trois Rivieres
- Toronto
- Mississauga
- Saskatoon
- Calgary
- Kelowna
- Vancouver

The chairperson survey was used to develop the data base for assessing the nature of the problems that are unique to condominiums and the extent to which these problems affect mortgage insurance costs. The occupant survey was designed to answer questions regarding the characteristics of

condominium occupants, the reason they decided to buy a condominium unit and the substitutes they considered. It leads to an assessment of the determinants of condominium demand.

### 1.3 REPORT STRUCTURE

The literature review, macro analysis of risk and the survey research results are presented in separate working papers entitled:

- WP1 Literature Review
- WP2 Review of Condominium Legislation
- WP3 Analysis of CMHC Claim and Approval Data
- WP4A Demand Assessment Methods
- WP4B Guide To Local Market Demand Assessments
- WP5 Survey Methods, Response Rates and Data File Descriptions
- WP6 Risk Analysis: Survey Results
- WP7 Determinants of Condominium Demand: Survey Results

This paper summarizes the findings developed throughout the study. The summary chapter in this report presents a short description of the study's key findings.

**CHAPTER TWO**  
**LITERATURE REVIEW**

**2.1 INTRODUCTION**

The review of findings and methods used by previous empirical studies of condominium occupants and markets help answer the following questions.

1. Who buys condominiums?
2. Why do they buy them?
3. Is the condominium market segmented?
4. What are the dynamics of the condominium market?
5. To what extent are absorption rate projections made by extrapolating past trends reliable?

**2.2 WHO BUYS CONDOMINIUMS?**

The more recent studies show the age distribution of condominium owners to be bi-modal. The younger pre-child households and the empty nesters have higher propensities to buy condominiums than families with dependent children. Condominium units tend to be in higher density projects than non-condominium home ownership units and the higher densities discourage families with dependent children.

The age distribution of condominium owners in both Canada and the United States has changed since the early 1970s. The occupants of Canadian condominiums in 1970 tended to be the younger households. The bi-modal split developed as a large number of empty nesters entered the condominium market in the last part of the decade. In the United States, the early condominium population tended to be older and the younger households entered the market somewhat later in the evolution of the condominium market.

The shift in age profiles does not necessarily reflect a change in the structure of demand for condominiums. It may be the result of changes in the type of units and projects that are offered for sale. The shift in demographic profiles shows a market expanding to meet broader housing needs and satisfying the latent demand of households who were excluded from the condominium market as a result of the nature of units that were supplied. The shift is a part of the process by which supply and demand initially achieves its equilibrium.

In both Canada and the United States, the early condominium owners had an average income that was approximately the same as that of other home owners. As the decade progressed, the average incomes of condominium buyers increased slightly faster than that of other home owners in both countries. In Canada, the shift is explained by the increasing number of empty nesters entering the market. This slight increase in average income does not suggest that condominiums are a "superior" good or service for which demand increases as incomes rise and drops as incomes decrease. The slight increase in average income levels is due to changes in the nature of the increase in income and may be due to developers opening new sub-markets that include more luxury units and tap the latent demand of the older and wealthier households.

The average size of condominium households is smaller than that of non-condominium home owners and the size appears to have decreased with time. The average household size of all condominium owners in Canada in 1970 was 3.15. In 1977, it was 2.29 in British Columbia and in 1982, the average was 1.73 in the city of Toronto. In the United States, a HUD analyst observes that "the average condominium unit is approximately 30% smaller than the average single family home, the average condominium household is also 30% smaller than the average single family household."

A review of the demographic data developed by previous surveys show that condominium owners can not to be strictly stereotyped as being the young, the empty nesters, the families, the poor or the rich. All household types and income levels are represented in the condominium population. Differences in household propensities to buy condominiums differ in a matter of degree rather than in absolute categorical terms. The younger pre-child couples, singles, and empty nesters have the highest propensity to buy condominiums. The previous studies do not show that condominiums are primarily attractable to those who can not afford single detached houses. As with the demographic profile, all income groups are represented in the condominium sector.

### 2.3 WHY DO PEOPLE BUY CONDOMINIUMS?

At the beginning of the 1970s the most frequent reason (30% of respondents) households gave for their decision to buy a condominium was their desire to

become a homeowner. The second most frequent reason was their need for more space (17.7%). The owner's desire to build up their equity was the third most frequent reason given (15.0%) for buying a condominium. Rent increases motivated 12% of the households to leave their previous residence. The desire for home ownership was a factor affecting the decision of almost half the 1970 Canadian condominium owners to leave their previous residence.

The most frequent reason cited in earlier surveys for choosing a condominium rather than a non-condominium unit was its affordability. The second most frequent reason related to the ease of maintenance condominiums offered. The third was the low down payment. In the early 1970s, the condominium owner tended to be younger than average and price was a key factor influencing the household decision to buy condominiums.

By 1977 the type of reasons owners gave for their decisions changed. In British Columbia, affordability concerns were still the most frequently mentioned factors affecting the household's decisions to buy a condominium. Location, however, was the second most frequently mentioned factor. Project and unit features became the third most frequently mentioned. With increases in the demographic diversity of the condominium population and slight increases in average incomes, factors describing housing attributes enter as important determinants of condominium demand. As the profiles of condominium owners became more representative of the general population, the reasons for buying condominiums became more diverse.<sup>1</sup>

#### 2.4 WHAT ARE THE COMPONENTS OF CONDOMINIUM DEMAND?

In 1970, Blankstein concluded that condominium owners tend to be the young households having one child and higher than average income because their spouses work.<sup>2</sup> Most townhouse units were occupied by families while high-rise units were owned by households without children.

<sup>1</sup> A 1975 United States study (HUD) showed that the main reasons people bought condominiums was due to the convenience and the freedom from maintenance offered. Later US studies focussing on condominium conversions give affordability, prefer ownership, investment, tax shelters as the main reasons.

<sup>2</sup> M. Blankstein, National Survey of Condominium Owners. (Contominium Research Associates, Toronto, 1970).

Hamilton's 1978 study supported the "horizontal/vertical" division but defined another market segment created by differences in the buyer demographic characteristics.<sup>3</sup> These three sub-markets are:

- a) Young (under 40) apartment condominium dwellers, usually without children, with above average family income, with both adults working. They purchased to establish equity and will move to a single detached dwelling when incomes and family size increase.
- b) 30-39 year old townhouse dwellers, having the highest number of children. One-half of these people will move to single detached dwellings.
- c) over 40 year olds, empty-nester apartment dwellers. These people do not intend to move (p. 91).

The Hamilton findings are important for they show the relationship between the households' commitment to condominiums and their demographic and housing attributes. The aging of the population cause a decline in the demand for condominiums within one sub-market while a broad set of other factors increase the aggregate demand for condominiums in other sub-markets. As the population ages, the demand for apartment condominiums is expected to increase while the demand for row or townhouse units may drop. Further empirical work is needed to determine if the units currently aimed at the "young household" market have characteristics that make them acceptable to the older condominium buyers.

## 2.5 WHAT ARE THE CHARACTERISTICS OF CONDOMINIUM MARKETS?

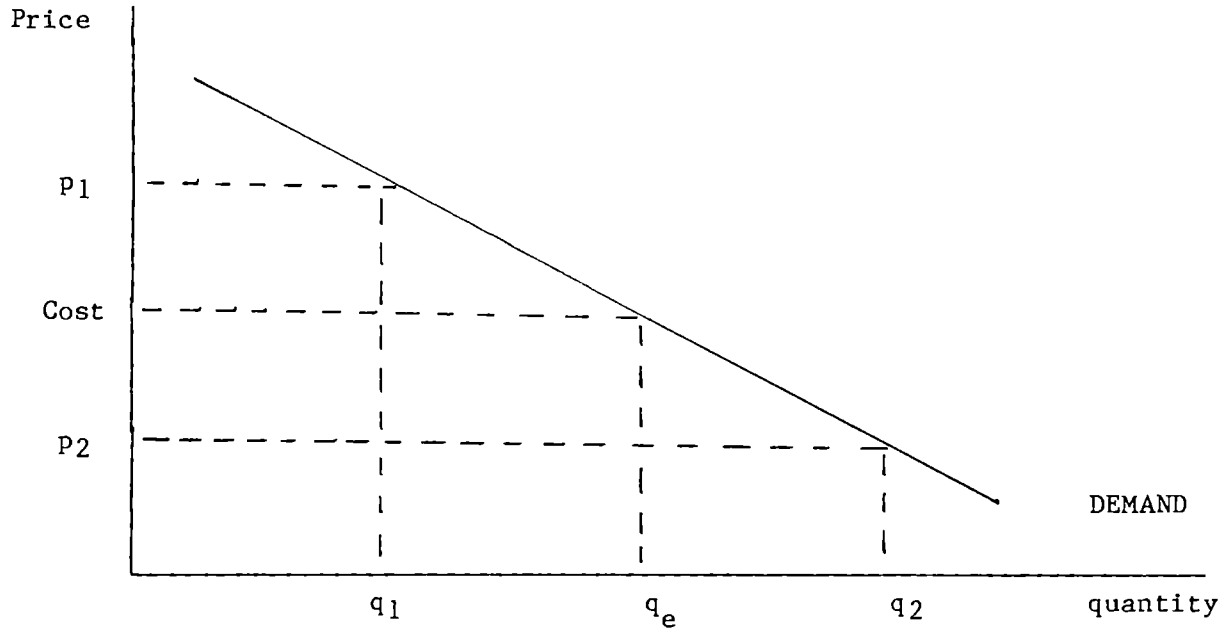
Studies in the United States have observed a pendulum like swing between under- and over-supply until such time as an equilibrium is achieved. Developers entering new markets within which the concept of condominium living proves to be acceptable, find that demand for their units is high and can, therefore, sell their stock at prices well above costs. In Figure 1 their position is represented by  $q_1$  and  $p_1$ .

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<sup>3</sup> S.W. Hamilton et al, Condominiums: A Decade of Experience (B.C. Real Estate Association, 1979).



FIGURE 1  
ADJUSTMENT PROCESS IN NEW CONDOMINIUM MARKETS



High profits encourage the initial developers to expand their production of condominium units. Their work often leads to an over-supply because most do not account for the fact that other developers are also expanding their supply and that new developers are entering the market. The result is an over-supply of condominiums, past the equilibrium level at  $q_e$  in Figure One to a level of  $q_2$ . Given that the market demand has not changed, the over-supply of units will be cleared at price  $p_2$  which is below cost plus normal profit. With time, an equilibrium is established, the demand for condominiums grows and the schedule depicted in Figure One shifts to the right.

The main relevant characteristic of the condominium market is its newness. This may cause a period of apparent market instability with large variations in price and absorption rates.

## 2.6 THE MEANING OF OBSERVED TRENDS IN ABSORPTION RATES

The newness of the condominium market has another side-effect which can affect market stability. The mis-interpretations of past trends in absorption rates have led to an over-supply of units in some United States condominium markets. A number of United States developers and analysts observed that the proportion of housing starts that were condominiums was 5.4% in 1970 and the proportion rose each year to 16.1% in 1974. The statistics yield a trend extrapolation showing the relative size of the condominium sector increasing dramatically and becoming the major housing form by the late 1980's.

The mistakes made by the analysts who used the trend extrapolation were due to their failure to recognize that the dramatic increase in the condominium starts was part of a market adjustment process caused by the introduction of this tenure form. The large increase in the proportion of condominium starts reflect the rate at which supply adjusted to satisfy the latent demand of those who want this new housing/tenure option. The housing starts statistics and absorption rates show the rate at which supply expanded to establish the initial equilibrium. The statistics do not show the rate of increase in the size of the population wanting condominiums. They do not show the rate at which demand for condominiums was growing and can, therefore, not be used to develop trends showing future condominium demand.

Housing starts and absorption rate statistics taken during the introductory period reflect the rate at which the market has moved in its path towards an equilibrium and not the rate at which the equilibrium point expands. After the long-run equilibrium position is achieved, condominium absorption rates should drop to the rate at which the market demand schedule expands. The factors affecting absorption rates in the pre- and post-equilibrium periods will differ and the nature of the factors will be discussed in Chapter Five of this summary paper.

## 2.7 SUMMARY

Previous surveys show that condominiums attract a broad spectrum of households. They show the young childless couples, empty nesters, and smaller households to have the highest propensities to buy condominiums. The market for condominiums appears to have three components: one caters to the under forty year old apartment dweller without children who eventually plans to buy a single detached house; the second consists of the young family households buying ground oriented units, and; the third is created by the empty nesters seeking apartment condominiums.

Review of past market behaviour and trends shows a pendulum like swing between over- and under-supply until a long-term equilibrium between demand and supply is reached. Past absorption rates may reflect the movement towards the equilibrium position and may not provide an accurate indication of the market demand for condominiums. Projections based on such trends can lead to a gross over-estimation of the future demand for condominiums.

**CHAPTER THREE**  
**CONDOMINIUM LEGISLATION IN CANADA**

**3.1 INTRODUCTION**

The purpose of this chapter is to review the current provincial legislation pertaining to condominiums. The primary focus will be to examine those sections of the various provincial Acts which are most likely to either directly affect the demand for residential condominiums or affect the security of a mortgagee. To this end, particular attention is focused on those provisions which:

- (1) Regulate the behaviour of the developer, particularly relating to the initial marketing phase.
- (2) Regulate the rights and responsibilities of both condominium owners and occupants and the board (or council) of the condominium corporation.
- (3) Regulate the financial responsibilities of owners and the condominium board (or council).
- (4) Determine the status of a mortgagee in terms of priority of the mortgage relative to other claims against a property and in terms of protecting the interests of a mortgagee.

The first three points are considerations which will influence the demand for condominiums from first time buyers and the probability that existing condominium owners (and tenants) would remain in the condominium tenure option in the future. The fourth point relates to the risk associated with mortgage lending, with a particular focus on the long term ownership mortgages. The focus of this section is the protection of the mortgagee's position and the effect of condominium laws on the security position of and remedies available to the mortgagee.

The next section of this chapter outlines the principle provisions governing the developer - first time purchaser relationship. Section three reviews the rights and obligations of the owner, occupant and board. Section four reviews the laws pertaining to the financial relationships and section five reviews the rights and remedies of the mortgagee.

### 3.2 CONTROL OF CONDOMINIUM DEVELOPER

Purchasers (and occupants) of units in newly constructed or converted condominium projects are required to depend, to a large extent, on the reputation of the developer. The provincial Acts have produced varying degrees of protection for the original purchasers of the units, protection in the form of disclosure requirements, statutory requirements for performance and restrictions on the options available to developers.

The two major sources of protection for the initial purchasers are the provisions in the condominium Acts and the commitments made by the developer in the "plan" or "declaration" filed at the time the condominium becomes registered. The Acts provide extremely strict controls relating to the declaration or plan (generally unanimous approval of all owners) and to subsequent amendments. As a consequence, potential purchasers can rely upon this information when making their purchase decision.

One element of uncertainty facing potential purchasers relates to the amount of money necessary to operate the condominium project. An over-zealous developer may want to under-estimate common area expenses to promote sales and the provinces have adopted a range of requirements to protect purchasers. Three provinces (B.C., Ont., P.E.I.) have strict provisions requiring the developer to estimate an initial annual budget. If the budget is too low, the developer is required to pay the shortfall for all units in the project. One province (Alta.), requires the developer to disclose the estimated monthly costs and one (Sask.) provides for the budget to be set at the first general meeting (within three months of registration). The remaining provinces have no mandatory requirement that the developer prepare an initial annual budget.

One major source of concern for potential purchasers is the possibility that a developer may elect to maintain ownership of a number of units for rental purposes, or sell units to investors who intend to rent the units. Four provinces have mandatory disclosure requirements governing a developers intention to lease units (B.C., Alta., Ont., P.E.I.). Three provinces provide that such disclosure may be included in the declaration (Man., N.B., N.S.) and the other provinces provide for no such restriction.

### 3.3 RIGHTS AND OBLIGATIONS OF OWNERS AND THE BOARD

At the time the condominium project is registered, the initial rights and responsibilities for owners, tenants and the condominium board are established. In general terms, the owners have reasonable freedom to use their unit as they see fit, providing the use does not interfere with the enjoyment of other owners or occupiers. The unit owner has exclusive use of the unit and may generally transfer, mortgage, or rent the unit, subject to any provisions in the Act or plan (declaration). Moreover, the owner of a unit may enjoy the reasonable use of the common properties (but not exclusive use of common property assigned to other units).

The unit owners also assume a number of responsibilities: to pay their share of common area expenses, to adhere to the by-laws and house rules, and to conform to any requirements set out in the Act or the plan (declaration). In all provinces an owner has a right to resort to the courts if the obligations appear either unreasonable or discriminatory.

Given that a potential owner, mortgagee or occupant has a right to obtain information concerning the plan (or declaration) and the by-laws prior to making a commitment to purchase, finance, etc., everyone has an opportunity to become familiar with the "state of rights and obligations" at the date of purchase (or the date of occupation or granting a mortgage). The second major step is to be aware of the rules which direct changes beyond this initial point of purchase.

In condominium projects, the board of the corporation is responsible for the management of the corporation, the common properties, the financial management and the enforcement of the by-laws.

The provinces generally provide for different levels of approval (votes) for decisions of varying degrees of importance. At the one extreme, changes to the plan (or declaration) generally require approval by all owners. Changes in the plan or declaration are considered to be a decision of great consequence as they may significantly alter the original rights and

obligations of owners, occupants, mortgagees and the Board. At the other extreme, all Acts provide for a simple majority vote of the quorum present at regularly scheduled meetings.

One obvious concern to many owners is the possibility that their project may become tenant-occupied. Some provinces restrict the rights of a developer to rent units (and require disclosure of this fact to potential buyers).

However, owners, other than developers, may elect to rent their unit and, in general, owners have such a right unless specified otherwise in the Act.

Four provinces appear to permit such restrictions (N.B., N.S., Nfld., B.C.).

### 3.4 FINANCIAL ARRANGEMENTS

Ownership and occupation of a condominium unit gives rise to a number of financial considerations beyond the acquisition of the unit. All provinces, except Quebec, include provisions in their Act and regulations to set a framework for the handling of these important financial considerations. While the details vary from province to province, the similarities are greater than the differences.

All provincial Acts provide that owners will share in the annual costs associated with the common areas. The allocation of these common properties expenses is set out at the time the condominium is registered.<sup>4</sup>

All provincial Acts provide for strong remedies against owners who fail to meet their obligations regarding the payment of common area expenses. In every province the condominium board has the power to register a lien against the unit, a lien which generally takes priority over other registered liens. Moreover, four provincial Acts provide that owners will lose their right to vote if they are delinquent in their payment of common area expenses.

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<sup>4</sup> British Columbia is the only province which prescribes the allocation (unit entitlement).

In an attempt to protect against unexpected expenditures, the provinces are generally moving towards mandatory reserve funds for the condominium corporations. At the present time four provinces (B.C., Alberta, Saskatchewan, and Ontario) provide for mandatory reserve funds.

The reserve funds will shelter owners from unexpected capital costs for replacements and repairs but it will not protect against a major disaster such as a fire. As a consequence, all provinces, except Newfoundland, provide for mandatory insurance on the structure and common areas, excluding improvements made by owners to their unit. In all provinces the board may carry other insurance, such as liability insurance, respecting the common areas.

The annual cash flows associated with condominiums may represent a significant amount of money. It is surprising to find that these funds are not subject to compulsory annual audits. Ontario is the only province in which annual audits of the financial affairs of the condominium corporation are mandatory.

All provincial statutes have anticipated the possibility of termination of condominiums. In most cases provision is made for both voluntary and involuntary termination. The termination provisions generally provide for the protection of interests and liens, then for the allocation of the remaining proceeds amongst the owners of the units. The general pattern provides for a distribution of proceeds to the owners in proportion to their share of common areas and, in most cases, provides for an appeal to the courts concerning the allocation.

### 3.5 MORTGAGOR - MORTGAGEE RELATIONSHIP

A mortgagee may be involved in a condominium project at two quite distinct stages: At the development stage providing the construction financing and as a supplier of the long term mortgage for purchasers. It is the latter role that is of interest in this paper. In some cases the same mortgagee may provide both construction financing and long term financing (to qualified purchasers).



A mortgagee (or mortgage insurer) must, in the first instance, be concerned with the value of the underlying security and the ability of the mortgagor to service the loan. The valuation of the underlying security, the condominium unit and the share of common property and amenities, is the first step in order to determine the maximum possible loan (based on the loan to value criteria). While the valuation of condominiums may present some unusual problems (the first units in an emerging market, the contribution to the market value of unusual amenities, the impact of unusual reserve accounts on value, etc.), these problems are not unique. Most new tenure/structure options would create similar problems for the appraiser. As the local market for condominiums matures, the valuation data base for appraisers will expand and these appraisal problems will be overcome.

In terms of the qualification of the potential borrower, a mortgagee will employ some gross debt to service ratio. In all loan applications, the mortgagee must look first to the borrower's income (current and future) and second to the housing costs which form part of the debt service ratio. In the case of condominium applicants, the mortgagee must also consider the common area fees payable by the owner as these also constitute a prior claim.

To the extent that mortgagees explicitly consider the common area expenses, loan underwriting for condominiums introduce this additional element of concern. Mortgagees must be concerned not only with the current level of common area expenses but also the possibility that these fees may increase substantially after the loan is granted.

The concern with future increases in common area expenses relates, in part, to the general increase in operating costs. Of perhaps greater concern is the possibility that the owners of the units in the project may vote to undertake some major improvement which will dramatically affect common area expenses.

In order to provide the mortgagee with some degree of protection respecting their security (the unit and common property) and protect the ability of the borrower to meet future common area expenses, all provinces, except Quebec,

have explicit provisions permitting a mortgagee the right to exercise the owner's vote.

This voting right is of importance to the mortgagee for several reasons. The mortgagee may elect to vote against new capital expenditures that would adversely affect the gross debt service ratio of their mortgagors. In addition, in those provinces which permit the Council to dispose of common assets, the mortgagee is in a position to vote against the proposed sale if it appears to dilute the market value of the underlying security. The voting power is important in several other respects: the appointment of property managers, the decision on the reserve funds and the annual operating budget and the maintenance of the common property. In these cases, the mortgagee can exercise the vote to protect the value of the security and maintain a reasonable debt service ratio for the borrower.<sup>5</sup>

Mortgagees must be concerned with two possible defaults: default on payment of the common area expenses and default on the mortgage payments. In the event the owner defaults on the common area fees, the condominium board has the authority to register a lien against the individual unit. Moreover, this lien for unpaid common area fees generally has priority over the registered liens (i.e., mortgages).

In the event a mortgagor defaults on the mortgage payments, a mortgagee has the normal remedies available to recover on the debt. The various provincial condominium Acts do not adversely affect these traditional rights. In all provinces, the mortgagee acting against a delinquent mortgagor has the right to receive notice of all major proposals of the condominium corporation.

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<sup>5</sup> The right to exercise the vote of the mortgagor is perhaps more significant than it first appears. The various provincial Acts require at least two-thirds of the votes for the passage of major decisions (Ontario) and more generally 75% or 80% of the votes. As a consequence, a small minority of mortgagees exercising their votes could block most major financial decisions.

### 3.6 SUMMARY OF LEGISLATION

Since the time the first Condominium Acts were introduced in Canada in 1966, the provinces have had ample opportunities to share their experiences, problems and solutions. As a consequence, the current provincial Acts have more in common than was initially the case.

In the important area of consumer protection, the current Acts appear to provide at least a framework for ensuring that the consumers, both owners and tenants, have full disclosure of the relevant facts. Moreover, aside from Quebec, the various provincial statutes provide ample means of resolving conflicts and protecting the rights of minority groups of occupants.

In terms of creating a favourable environment for mortgage lending, the combination of voting and disclosure rights for mortgages and the widespread use of mortgage insurance appear to have overcome the initial resistance towards lending for condominium units.

Two important areas seem to require further attention. The absence of audit requirements (except Ontario) appears to be a matter of some concern. As operating expenses increase, common area budgets increase. As the absolute amount of money involved increases, the opportunities for significant fiscal mismanagement also increases. Given the level of many current budgets, the need for some external review or audit seems paramount.

The other important area in need of further attention is that of controlling the rental of condominium units. On the one hand, owner-occupants expect to be involved in an ownership environment. At the same time the developer and/or current owners may find that market circumstances dictate rental, not sale. If the laws are too lax, owners who expect to be part of a owner-occupied complex may be disappointed. On the other hand, if the laws are too rigid, the developer or subsequent owners may find that market circumstances combined with rigid laws result in significant financial hardship.

In the overall context, it appears that the various provincial statutes (and regulations) provide for a satisfactory level of disclosure, provide adequate protection for minority groups and provide a viable system for mortgages.

**CHAPTER FOUR**  
**ANALYSIS OF CMHC CLAIMS AND APPROVALS DATA**

4.1 INTRODUCTION

This stage of the study examined condominium mortgage insurance risk from a macro viewpoint. It reviewed CMHC claims and approvals data to answer the following questions:

1. Is condominium mortgage insurance risk higher than the risk associated with other home-ownership options?
2. Can the differences be accounted for in terms of owner and general project characteristics?
3. Is there a risk component that is unique to condominiums?

Answers to the first two questions were sought by examining CMHC data on claims and approvals. Ratios of condominium claims to approvals were eliminated for different components of the population and compared with corresponding statistics for other home ownership options. The "other" options comprise the control group against which condominium risk was assessed. Answers to the third question, asking for the relationship between condominium attributes and mortgage insurance risk, will form the basis for investigating risk by using survey research techniques.

4.2 ARE CONDOMINIUM MORTGAGE INSURANCE RISKS HIGHER THAN THE RISK ASSOCIATED WITH OTHER MORTGAGE INSURANCE OPTIONS?

A total of 47,851 new NHA mortgage approvals were made for condominiums in the 1976 to 1978 period. As of November, 1982, these approvals generated over 8,077 (16.88%) claims. The claim statistic is expected to be close to the eventual number of claims generated by mortgages approved during the 1976-78 period despite the fact that some 1977 and almost all non-defaulted 1978 approvals were still in the CMHC insurance portfolio at the time the data were gathered. The under-estimate of claims due to the policies still being in effect is compensated for by the erroneous inclusion of some claims made on mortgages issued on existing housing and on non-condominium housing.

Table 1 presents the approval and claims data for condominiums and other house ownership options. It provides a breakdown by regular lending and social categories. The percentage of recorded condominium claims to approvals in the 1976 to 1978 period is 16.88%. The corresponding percentage for other home ownership options is 5.28%. A part of the difference may be the result of some non-condominium claims being erroneously recorded as condominium claims. It is unreasonable, however, to expect that errors will account for the whole difference. The difference is too large and is consistently found across all sub-categories. Mortgage insurance risks are higher for condominiums than for other home ownership options.

#### 4.3 ACCOUNTING FOR THE DIFFERENCE IN RISK LEVELS

The CMHC approvals and claims data for condominiums and other home ownership options were examined in an effort to account for the higher risk associated with condominium mortgage insurance policies. The procedure involved breaking down the approvals and claims by the NHA program under which the unit was insured, the owner's age category, loan to value ratio, gross debt service ratio and a number of other variables.

The procedure was started by simply applying the other home ownership claim rate (.0528) to condominium approvals (47,851) and gaining an estimated 2,527 claims. Should condominium risk be the same as that associated with other home ownership mortgage insurance policies, the 1976 to 1978 condominium approvals would have yielded 2,527 claims. The residual ( $8,077 - 2,527 = 5,550$ ) claims would have to be explained by other factors. A quest for this explanation is the subject of this stage of work.

The analysis shows that a larger proportion of condominium policies were issued on AHOP units than was the case for non-condominium housing. Condominium insurance policies issued for regular mortgages yield a claim rate 3.1 times higher than the rate for the other home ownership options indicating that program mix is not a major factor explaining claim rate differences. Accounting for the higher proportion of AHOP's in the condominium sector would account for an additional 116 claims.

Condominium and other home ownership claim rates were computed for different types of households. Owners earning less than \$20,000 a year had a 10% greater chance of registering a claim than higher income households. Income differences, however, do not account for claim rate differences because condominium households tend to earn more than other homeowners taking out NHA insurance.

Debt service ratios for first mortgages were examined for the two groups of owners but no difference was found that could explain the higher condominium loan rates. Loan to value ratios were examined and again no systematic differences could be found. Average lending values were examined and the conclusions would not allow us to attribute condominium risk to it being a "cheaper" form of housing. Indeed, the average condominium price for each building type was higher than the average for the other home ownership options. The average lending value for condominiums increased over the 1976 to 1978 period for all building types showing that this sector was not experiencing any pendulum like swings between under- and over-supply. The newness of the condominium sector is, therefore, not a factor explaining the higher risk in condominium mortgage insurance. With the exception of row housing, the increase in prices appears to be greater for condominiums than for the other ownership options. Price levels and average price changes do not account for the higher condominium claim rates.

Claim and approvals data for each province and CMHC branch office were examined and the claim rates were found to differ among the provinces. In 1976, Ontario received 70% of the condominium applications which generated 82% of the nation's claims for that year. While Ontario has an above average claim rate on condominiums, it has an average claim rate on other home ownership insurance policies issued during the three year period.

The other home ownership claim rates for each province and year were applied to the corresponding condominium approvals to control for possible differences in the provincial distribution of condominiums. Accounting for spatial distribution would also account for differences in overall market performance. Fewer than 100 condominium claims would be accounted for by differences in the spatial distribution of condominiums. Furthermore, the small differences may well be due to differences in program mix or building

type distributions and the effect of spatial differences can be ignored in this crude attempt to reconcile the two claim rates.

The review of approval and claim statistics (Table One) by building type showed risk to increase with project density. The use of the "other" home ownership rates to estimate the "explainable" condominium claims for single, detached, semi-detached and row housing would account for an additional 2438 claims. A residual of 2,946 or 36% of condominium claims do not appear to be accounted for by the same factors that affect the risk in other home ownership options.

TABLE 1  
COMPARISON OF CONDOMINIUM AND "OTHER" HOME OWNERSHIP CLAIM RATES  
BY BUILDING TYPE: 1976-1978

	Condominium	"Other" Home Ownership
SFD	10.36	4.01
Semi-detached	9.20	7.75
Row	19.51	10.30
Apartment	12.85	-
Other	0	2.52

#### 4.4 SUMMARY

Table 2 summarizes the main findings of the analysis. A substantial proportion, 36%, of condominium claims arising from policies issued in the 1976-1978 period are not explained by the factors determining risk in non-condominium home ownership insurance policies. Condominiums appear to have a unique component of risk. Condominium mortgage insurance policies cost more than policies issued on other home ownership options.

Three hypotheses explaining the additional risk associated with condominiums can be advanced. The first suggests that the finding is generated by errors in the data. Further work on assessing the nature of the errors and the distribution of the missing cases is recommended. This work can lead to the development of a small but clean data base that can be used to develop estimates of the unique contribution of household and project characteristics to the cost of mortgage insurance policies.

TABLE 2

BREAKDOWN OF CONDOMINIUM INSURANCE RISK IN TERMS OF FACTORS  
DETERMINING THE RISK INHERENT IN OTHER HOME OWNERSHIP INSURANCE POLICIES

	<u>No.</u>	<u>%</u>
1. Total condominium claims on 1976-1978 approvals	8,077	100%
2. Claims accounted for by the factors affecting the other home ownership options	2,527	31%
3. Claims accounted for by differences in the proportion of social housing mortgages	166	2%
4. Claims accounted for by differences in the proportion of single family, detached, semi-detached and row housing	2,438	30%
5. Residual unaccounted for claims	2,946	36%

The second source of additional risk concerns the unique attributes of condominium projects. Unlike other housing options, condominium owners were required to interact with each other, with managers, councils, developers, tenants. Joint operating budgets, developer transfer issues, construction defects, and warranties raise issues that affect risk and are unique to condominiums. This source of risk will be examined by means of a survey of condominium chairpersons and the results are summarized in Chapter Seven.

The third source may be due to proportionally larger mistakes being made by market analysts and developers when assessing the demand for condominiums. Incorrect assessments may lead to an over-supply of units within particular sub-markets and, thereby, increase the rate of development stage failures or reduce condominium prices in particular projects to levels below mortgage amounts. The newness of the condominium concept provides the basis for the belief that condominium demand assessment processes could be less reliable than that for other housing options. The survey of owner-occupiers will yield information on the determinants of condominium demand and the conclusions of this analysis are presented in Chapter Eight.



**CHAPTER FIVE**  
**DEMAND ASSESSMENT - METHOD & THEORY**

5.1 INTRODUCTION

Condominiums create the potential for joint ownership in multi-unit projects. Joint ownership imposes the costs of collective decisions making. In return for accepting the unique costs associated with condominiums the owners expect to gain particular housing attributes that are of value to them and can be found only in condominiums. The owners pursuit of these attributes creates the demand for condominiums.

The attributes intrinsic to condominiums are their ability to provide facilities and services close to home and their ability to offer homeownership at higher densities. The higher density, in turn, increases the range of trade-offs the homeowner can consider. It allows them to buy less land, but to buy it in a preferred location. The higher density may be accepted in return for better amenities, facilities or services. The higher density can be of value to some by reducing costs and therefore the price of entering the ownership market. The main attributes that may create the demand for condominiums are:

- (i) amenities, services or facilities;
- (ii) location, accessibility;
- (iii) lower threshold price for homeownership.

This stage of work develops hypotheses regarding the factors affecting the level of demand for condominiums and the rate at which condominium units are absorbed in new and in mature markets. It develops a general approach for assessing the demand for units in proposed projects.

The first part of this chapter describes factors affecting condominium absorption rates. It discusses the rate at which markets respond to the introduction of condominiums. The discussion of factors continues with an examination of mature markets. The second part of this chapter describes methods for assessing the demand for units in proposed condominium projects. The methods will differ for mature markets, new expanding markets, for the first project in a town or city, and, for projects aimed at new sub-markets.

## 5.2 FACTORS AFFECTING ABSORPTION RATES IN NEW MARKETS

A developer entering a new market with his first condominium project may find that he can either sell the proposed units very quickly or discriminate among buyers by holding back on sales and gaining unusually high profits. In other cases, the first developer may find sales to be slow and the project to take a long time to sell out. The project's success depends on the existence of a demand for condominiums and the rate at which the demand develops. The take-up rate for new projects is dependent on the rate at which developers can build to meet the existing latent demand for condominiums and the extent to which new projects help the public develop its awareness of the attractive attributes of condominiums. In new markets, the absorption rate for condominiums will be determined by the following factors:

- 1) The rate at which the public develops an awareness of the attributes that can be offered within condominiums and the type of image created by the first condominium projects.
- 2) The development in industry's response to a perceived demand for condominiums.
- 3) The price and supply response within non-condominium housing.
- 4) The mobility of the local population and variation in the perceived cost of moving house.
- 5) Condominium conversion policy and the ease of converting the existing stock.

### 5.2.1. Growth of Consumer Awareness

The rate at which the public awareness will develop depends on at least the following factors:

- (i) the households' willingness to consider new options which may, in turn, be a function of their education, age, and the condition of their present housing;
- (ii) the developers' marketing strategy and luck in finding the right market the first time. Errors can lead to projects that don't sell and create the impression that condominiums are bad investments and stigmatize the concept;
- (iii) the households' exposure to condominiums which depends on the extent developers, mortgage underwriters and insurers are willing to take a chance and, on their luck or ability, to predetermine household preferences.

The rate at which the public develops its awareness of the condominium option will differ across different types of markets. The rate at which acceptance develops will not be uniform across time but will show discrete jumps as successful new projects stimulate market acceptance, or, problematic projects stigmatize the concept.

#### 5.2.2 Competition and Developer Response

Developer response affects the rate at which the public becomes aware of the option. It also affects the rate at which supply is expanded and prices stabilize. A slow response by a developer who does not face competition can lead to high initial prices that eventually decline to a level that covers cost plus normal profit.

#### 5.2.3 Price and Supply Response in the Non-Condominium Stock

The start of the shift to condominiums reduces the demand for non-condominium units. The initial shift to condominiums will be affected by the ease with which owners can sell their previous homes and the rate at which vacant rental units are absorbed. If the aggregate housing demand within the local market is not expanding, high vacancy rates and slow sales in the non-condominium sector will reduce the condominium absorption rate. Conversely, an expanding aggregate demand for housing will reduce the time it takes the condominium market to reach maturity.

#### 5.2.4 Mobility

The cost of moving house will deter many from seriously considering the condominium option until other factors make them decide to move and consider a new housing option. The rate of the initial shift to the condominium sector will depend on the household mobility. It depends on the rate at which households move and enter the condominium sector and the rate that condominium owners leave strata-titled units. The higher the mobility rate the less time it takes the condominium market to reach maturity.

### 5.2.5 Condominium Conversion Policy

Condominium conversions can increase the rate at which the equilibrium is attained in two ways. The first is by reducing the size of non-condominium stock and, thereby, avoiding the price reductions that would otherwise be induced by the shift to condominiums. The second is by temporarily reducing the moving costs of the households buying their own unit. The avoidance of moving costs, however, is eventually eroded as a factor affecting condominium demand as the households enter new life-cycle stages and adjust their housing consumption. Condominium conversions can increase the initial absorption rates within new markets and reduce the time it takes the market to reach its long-term equilibrium.

### 5.2.6 Summary

- 1) Condominium legislation increases the set of feasible housing options. Provided some households within a local market value the condominium attributes more than their cost, the condominium sector can be established and condominium units will be absorbed even should the aggregate demand for housing remain constant.
- 2) The eventual number of condominiums that can be absorbed within a local market depends on the households' preference and on the costs associated with condominiums. After the introduction of condominiums within a competitive market, a new equilibrium between demand and supply and between the condominium and non-condominium sectors will evolve. The equilibrium is characterized by the re-allocation of households across the two housing sub-sectors in such a way that everyone valuing a condominium by an amount that covers the added cost of building and living in condominiums has moved to a condominium.
- 3) The costs associated with condominium living, and the price charged for condominium attributes, are the only relevant costs that determine the number of units that can be absorbed before a stable equilibrium is reached and the local market attains maturity.

- 4) The evolution of the condominium market can be seen as having four stages:
  - a) The first stage is the EMBRYONIC stage and involves the growth of consumer awareness of the condominium option. The absorption rate at this time is affected by cultural considerations such as the households' willingness or ability to accept high density living, collective decision making and collaboration among homeowners. It is affected by pre-conceptions regarding what condominiums are really like, and the stigmas and the effect these may have on how the households' social status is perceived. The rate of growth of awareness is also affected by developers' willingness to build condominiums, the images created by past condominiums, their investment performance and the developers' marketing strategy.
  - b) The second stage, the RAPID GROWTH stage, may be characterized by a rush to condominiums by those most valuing their attributes. The cost of moving and the price response in the non-condominium market slows down the market adjustment process.
  - c) The third stage, the SHAKEOUT stage, is characterized by a slower rate of growth of the condominium sector than experienced in the previous period. The eventual rate of shift to condominiums is governed by the rate at which the supply of non-condominium stock adjusts to re-establish the old price of these units, and, then, the rate at which the net stock losses occur within non-condominiums. The net stock loss rate is the final rate at which the shift to condominiums occurs.
  - d) The fourth stage is that of MARKET MATURITY, and is characterized by a stable growth in demand and supply of condominium housing units.
- 5) As the condominium market matures it becomes more diverse as developers differentiate their products in attempts to attract a broader range of potential buyers to the condominium sector.

- 6) The characteristics of the local housing industry can affect the rate at which the supply of condominiums expands to meet demand. The response will be quicker in a competitive market than in one with only a few developers. A rational developer enjoying monopolistic powers will curtail the rate of supply and thereby gain a larger share of the consumers' surplus. Supply curtailment increases the mortgage insurers repayment risk while decreasing market acceptance risk.
- 7) Condominium conversion policy can increase the rate of the shift towards condominiums in the short-term, but will leave the size of the mature condominium market unaltered.
- 8) An over-supply of condominiums at one point in time does not necessarily mean that the long-term equilibrium level of supply has been passed or that the market has attained maturity. Temporary inventories of unsold or vacant units can result as the market seeks to re-establish equilibrium after the introduction of the condominium option. Consumers' errors in assessing the costs associated with condominiums, households' initial reluctance to move from units that are converted to condominiums, slow price adjustments in non-condominium housing, overly optimistic developers can explain the temporary oversupply of condominium units.
- 9) Forecasts of mid- and long-term condominium demand based on trends observed during the rapid growth period will lead to over optimistic forecasts of condominium demand. Estimates of the number of condominiums a market can absorb before attaining maturity are best made by examining comparable towns with a long history of condominium development. Since the comparable towns will not be identical, it is necessary to account for differences in their characteristics. Controlling for their differences involves consideration of the factors similar to those determining the growth of condominiums within mature markets.

Figure 2 shows the growth rate of the condominium sector during the first three introductory phases leading to a mature market. The key words at the bottom of the figure describe the main determinants of growth and the general levels of risk inherent in mortgage insurance policies issued during each phase.

FIGURE 2

STAGES IN THE EVOLUTION OF A CONDOMINIUM MARKET

STAGE	1 EMBRYONIC	2 RAPID GROWTH	3 SHAKEOUT	4 MATURITY
<b>GROWTH RATE</b>	<b>Unknown</b>	<b>Fast</b>	<b>Slow or Negative</b>	<b>Steady</b>
<b>MAIN FACTORS AFFECTING GROWTH RATES</b>	Growth in Consumer Awareness	Developer Competition Population Mobility	Degree of Oversupply Extent of Price Inflation	Population Growth Rates Population Characteristics Housing Price Levels
<b>MARKET SEGMENTS</b>	Few	Some	Some	Many
<b>MARKET RISK</b>	High	Low/High	Very High	Low/Medium
<b>REPAYMENT RISK</b>	High	High	Low	Low

### 5.3 DETERMINATES OF ABSORPTION RATES IN MATURE MARKETS

#### 5.3.1 Characteristics of Mature Markets

A market becomes established, or mature, when its' constituent households have developed an awareness of the various options and have had a chance to act on their assessment. An equilibrium is attained when the initial shift from other housing options to condominiums is complete and all households valuing the condominium attributes by more than their cost have obtained them. The equilibrium is attained by a process of interaction between developers and potential buyers. Households considering a move from their previous dwelling learn about condominium attributes and consider this option. Developers try to determine the kind of housing that will sell and their pursuit of profits increases supply and eventually drives prices down to a level covering construction costs plus normal profit.

After the initial equilibrium is attained, additional condominiums will be absorbed only if prices drop or the demand schedule shifts. Prices may decrease as long term interest rates drop, as construction technology improves or as changes in building codes or conversion policy reduce costs. A price drop will initiate a move along the existing demand schedule and more units will be absorbed until the market establishes a new equilibrium. Price decreases due to technological improvements, long term interest rate changes or code changes are not major factors affecting condominium demand or future absorption rates. Two other types of factors will shift the demand schedules and create the demand for new units: one set increases the overall market size and the other changes the condominium sector's market share.

#### 5.3.2 City Growth Rates and Market Size

The main factor that will affect the demand for new condominium units in a mature condominium market is population growth. A continuously growing market will maintain a continuous shift in the condominium demand schedule and help ensure the continual absorption of new units. The source, as well as the rate of the population growth, is important as it determines the characteristics of the households that are entering the local market and the preferences underlying their demand schedules. Natural population growth due to an increase in fertility means a larger proportion of children in the



population and a lower market demand for higher density projects. Families with children are less likely to make the trade-offs described above in favour of homeownership at higher densities. Growth due to reduced mortality rates, however, may increase condominium demand by increasing the length of time older owners occupy their units. The impact of in-migration depends on who the in-migrants are and the places they come from.

To determine the effect of changes in migration rates, the market analyst needs to know their household characteristics, income levels, and place of origin. In-migrants coming from large cities are expected to have had more exposure to higher density housing and the condominium concepts than in-migrants from smaller towns and, therefore, have higher propensities to buy condominium units. The in-migrants propensity to buy condominium units may also be affected by the extent of available housing options. The in-migrants demand for housing is immediate; they can not postpone their purchase until either prices change or vacancy rates increase. In-migrants, faced with high housing prices and wishing to gain entry to the homeownership market may decide to buy a smaller condominium and wait before buying a single family house.

In-migration and population growth are the main but not only factors increasing the size of the local market. Changes in urban and regional structures may also increase the market size for projects in a particular location. Improvements in the region's transport system may, for example, make the development in some particularly attractive areas feasible. The net increase in the market demand for condominiums would be the result of people who, wanting to own their dwelling unit in the particular location, have no other affordable option.

Increases in market size can also affect condominium demand by increasing the potential for product differentiation: in larger markets, developers can increase the overall size of the condominium sector by catering more closely to the needs of households with special interests and life styles. The larger market size would also encourage the development of the condominium sector by reducing the risk faced by individual developers and, thereby, reduce the cost of the risk that is eventually passed on to the consumer.

In summary, new condominium units will continue to be absorbed while the aggregate demand for housing is expanding. Increases due to in-migration are expected to favour the condominium sector more than increases in natural population growth. The extent and nature of the future demand for condominiums generated by in-migrants will be influenced by their household type, age, income characteristics, the housing options they face, the type of housing they eventually want, the reasons they came to the town or city, and their expectations regarding their length of stay in the city. In-migrants may bring with them the benefits of their experience with condominiums and be the first occupants of new condominium projects. The in-migrants' characteristics can change the character of the market, help change the characteristics of the city and, thereby, have an indirect impact on the demand for condominiums. Larger cities may offer more specialized projects at a lower risk to the developer and be better able to draw consumers away from the non-condominium sector. Larger cities tend to be more cosmopolitan and will have proportionally more people willing to experiment with life styles and housing options. A city's growth rate is the main determinant of continuing condominium absorption rates in established, mature markets. Differences in the city size can explain differences in the proportion of their stock that is in condominiums.

### 5.3.3 Factors Affecting the Condominium Market Share

The primary determinants of condominium demand in established markets stimulate the aggregate demand for all housing options. Another set affects the share of the market going to condominiums. Changes in households' preferences, demographic characteristics and income as well as changes in the environment that affect the households relative valuation of condominium attributes are determinants of the share of the aggregate demand for housing going to the condominium sector. Knowledge of these factors is important to the market analyst trying to assess the market demand for condominiums in new markets by means of cross-sectional analysis. It is important for long range forecasts of condominium demand in markets with changing characteristics.

a) Housing Preferences

Preferences change in response to changes in economic and urban environments that force households to accept higher density housing, smaller units or locations closer to work and urban services. These changes may, at first, be the result of the households making trade-offs within their old utility maps in response to changes in prices or real incomes. The gradual acceptance of higher density housing will bring about a shift in the market demand for condominiums that offer better locations or more amenities in return for increases in density and reductions in unit sizes.

b) Household Compositions

Household profiles may change as a result of in-migration or as a result of more basic cultural and life style changes and these changes will affect the demand for condominiums. Markets having a higher proportion of small households are more likely to have a higher demand for condominiums than markets composed primarily of families with children. Young couples intending to start families will have a greater propensity to trade land against price and consider a condominium as a starter home and may consider units in less expensive suburban locations. Empty nesters are more likely to accept higher density in return for better access, security, convenience and amenities. Retired households are more likely to want access to urban facilities and services and accept higher density. Increases in the number of young couples may signal an increase in the demand for low priced condominiums on less expensive land outside the inner city. Increases in the number of empty nesters and retired people may signal increases in the demand for inner city condominiums offering amenities and access.

b) Income

Higher income households tend to spend proportionally larger shares of their income on housing than lower income households.<sup>6</sup> They tend to accept higher commuting costs in return for more, but less expensive, land. Higher income households tend to value the land component that condominiums trade away to gain amenities, location or low prices. Higher income homeowners are, therefore, expected to have a lower propensity to buy condominium units as their primary residence. Increases in income levels of home buyers will tend to reduce the market demand for condominiums with two exceptions. Increases in overall income levels will increase the number of people who can afford to buy their first home and also increase the demand for recreational units, second homes and downtown luxury condominiums.

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<sup>6</sup> This is not surprising given other studies have noted that higher income people spend proportionately more on housing.

d) Land Values

Higher land values will make the trade-offs between land and amenities or location appear more attractive. Increases in land values should favour the condominium sector by increasing the relative value of location, facilities and lower threshold prices for homeownership. Cities with rising land prices can be expected to have a growing demand for condominiums.

e) Housing Prices

Increase in the overall level of housing prices will favour the condominium sector. Increase in the overall level of housing prices will reduce the quantity of housing services households would want to consume and have an impact on their spatial equilibrium. Inflation in housing prices would increase the demand for inner city locations and, thereby, favour the condominiums offering better access or more amenities for higher density.<sup>7</sup> Increasing housing price levels would make the ownership of single detached housing less affordable and, thereby, cause the demand for the lower-priced starter home condominium to expand. The effect of increasing housing prices on the demand for the amenity rich condominiums is a question for empirical research.<sup>8</sup> Increasing housing prices will also stimulate condominium demand by increasing the value of real estate as an investment.

f) Interest Rates

In the long run, the market demand schedule for condominiums is expected to shift with rising interest rates for the reasons discussed above. The shift in the condominium demand schedule is expected to be slightly more pronounced as a result of long term interest rate changes than due to overall housing price increases because a larger proportion of condominium buyers will have built up an equity in their previous houses and be less affected by interest rate changes.

g) Urban Characteristics

Urban characteristics can explain differences in the relative size of condominium markets. Changes in urban characteristics can have a small gradual impact on condominium demand. The following hypotheses describe relationships between condominium demand and urban characteristics:

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<sup>7</sup> The analytic basis for this conclusion is found in Richard Muth's book, "Cities and Housing," Chapter 2.

<sup>8</sup> Increasing prices will make people cut-back on housing and perhaps substitute quality common facilities for unit size and density. Increasing levels of housing prices may cause the cost of producing the amenities to rise and thereby reduce the amount consumed.

- 1) Large cities will have proportionally more condominiums than small cities because they permit more specialization in projects and because their inner-city land values are higher.
- 2) The more centralized cities will have a proportionally larger condominium sector than less centralized cities because:
  - i) more households in highly centralized cities value downtown access,
  - ii) higher density projects are already acceptable to a large proportion of the population,
  - iii) the downtown is more likely to offer the amenities and services wanted by the luxury condominium buyer.
- 3) Cities with more, but concentrated, natural amenities will have a stronger condominium market than cities with fewer natural or with more generally accessible amenities. The amenities create pockets of high land values that favour the trade-offs offered by condominium developments.

h) Housing Stock Characteristics

A city's housing stock affects condominium demand in two ways. It affects the cost of condominium conversion and, therefore, the eventual number of condominiums that will be absorbed. The nature of the existing stock determine the extent that condominiums must compete with rental housing. The demand for luxury condominiums, for example, will be higher in cities with few luxury rental units than in cities with an established high priced rental sector.

i) Investment Opportunities

Factors affecting the households' propensities to buy rather than rent their dwelling units will affect condominium demand schedules. The relative value of real estate as an investment will affect the demand for condominiums by investors. Factors affecting the degree investors want to diversify their real estate holdings and their liquidity preference will also affect condominium demand. Condominiums offer more diversity within investment portfolios and constitute a more liquid land investment than traditional multi-unit rental projects.

#### 5.3.4 SUMMARY

The main determinants of condominium demand in established markets are the factors stimulating growth in the aggregate demand for owner-occupied units. Factors affecting the general rate of growth in housing demand affect the rate at which condominiums will continue to be absorbed in mature condominium markets. The main underlying determinants are the factors that affect the urban area's long-term economic prospects. Conditions generating growth in exports and local job opportunities, for example, are the key factors affecting the long-term absorption rates for condominiums.

Changes in preferences, demographic, economic and urban characteristics will change the market share of condominiums. Differences in these factors explain differences in the relative size of condominium markets. The main factors effecting shifts in the market share going to condominiums are summarized in Figure Three.

#### 5.4 METHODS FOR ASSESSING DEMAND

This section describes the general approaches for assessing demand in:

- (i) well established markets,
- (ii) new but rapidly expanding markets,
- (iii) markets with no condominiums, and
- (iv) new sub-markets within cities that have a developing condominium sector

The demand assessment approach presented here is general and the recommendations are based on a review of the dynamics of condominium markets and on the type of data that can easily be made available. The methods described in this section will help inform decisions regarding condominium loan and insurance applications but recommendations regarding the general use of the methods can be made only after a cost-effectiveness analysis has been carried out.

FIGURE 3

THE EXPECTED IMPACT OF DEMOGRAPHIC, ECONOMIC AND URBAN  
CHARACTERISTICS ON THE DEMAND FOR THE AMENITY, ACCESS OR  
PRICE ATTRIBUTES OF CONDOMINIUMS

	Amenity	Access	Price
<b>A. DEMOGRAPHIC CHARACTERISTICS</b>			
1. Increase in in-migration	+	+	
2. Increase in natural population growth	-	-	
3. Decrease in average household size	+	+	-
4. Increase in pre-child couples			+
5. Increase in families with children	-	-	-
6. Increase in empty nesters	+		-
7. Increase in retired households		+	
<b>B. ECONOMIC CHARACTERISTICS</b>			
1. Short-term increases in interest rates	-	-	-
2. Long-term increases in interest rates	?	+	+
3. Increase in overall housing prices	?	+	+
4. Increase in land values	+	+	+
5. Increase in average income levels	+	-	?
6. Increase in middle income households	-	+	
<b>C. URBAN CHARACTERISTICS</b>			
1. Increase in city size		+	
2. Increase in degree of centralization		+	
3. High level of downtown amenities/services	+		
4. High level of natural endowments	+		
5. High proportion of convertible stock		+	
6. Large number of luxury rental buildings	-		
7. Constraints on developable land	+	+	+

#### 5.4.2 Classifying the Market

The first step in the analysis requires a decision regarding the kind of market the project is entering: i.e., is it an established market showing a relatively close match between supply and demand? Is it a new market still in search of equilibrium? Is it a new sub-market within a city that already has considerable condominium development?

In most cases, markets can be easily classified: Toronto, Ottawa, Vancouver, Calgary, Edmonton, Montreal, and Hamilton have well established condominium markets. Halifax, Quebec City, Saskatoon have sub-markets that are established but may have the potential for developing new market segments. Trois Rivieres and Saint John are new markets. Determining whether a market is new or established is a matter of judgement based on the following considerations:

- (i) Length of time condominiums have been present in the market. At least ten years of exposure to condominiums is needed before a local market can be considered established.
- (ii) Comparison of the number of condominium units in the market of interest with the number of units in similar markets that are clearly established.
- (iii) Review of condominium prices and price trends. In established markets and sub-markets the price of new condominiums should be close to their costs of production. If prices are well above costs, an equilibrium has not yet been achieved and the market is clearly a new one within which prices will drop as supply expands.

#### 5.4.3 Demand Assessment in Established Markets

In established markets, the analyst may take the following general steps in assessing the demand for a particular project.

- a) Monitor Absorption Rates: Locate the project within its sub-market and review the rate at which past units have been absorbed. Determine if the absorption rate has been increasing, staying the same or dropping and make simple projections.
- b) Monitor Supply: To determine if there is going to be a demand for the units in a proposed project, the analyst needs to know what the likely competition is going to be. In established markets, supply and demand should be expanding at approximately the same rate. The analyst will



need to know past completions within the relevant sub-market, current starts, inventory of unsold units and the number of units about to come on stream. This step predicts the rate at which supply is expected to expand.

- c) Estimate the Market Clearing Period: The analyst, can estimate the time it will take for the proposed project to sell out by using the projected absorption rate on the unsold inventory and the supply coming on stream.
- d) Check the Assumptions: The above estimates will hold provided everything else remains constant. The analyst should determine whether or not the projections of demand and supply are likely to hold for the future by trying to answer the following questions:

- (i) Is a market turn around imminent?

This question is highly relevant but cannot be answered precisely. A major change in interest rates or a surprise announcement regarding an undesirable situation within the local economy can cause the market to drop-out. If times are uncertain, the mortgage underwriter or insurer will either implement strategies for containing risk or proceed as usual. The choice depends on policy and not on the analyst's deductions. All the market analyst can do with regard to market turn arounds is to be aware of the state of the local economy and advise the decision makers as to its stability and prospects.

- (ii) Does the past absorption rate reflect the growth in demand for condominiums?

Answers to this question determine the likelihood that past absorption rates will hold for the near future. To answer the question, the analyst determines whether the past absorption of condominium units is the result of growth in demand, or, simply an adjustment along the old demand schedule. If the past absorption rate is primarily the result of a move along an unchanging market demand schedule, the rate will slow down and then stop as the market achieves a new equilibrium. The analyst may determine the extent to which past absorption rates reflect market adjustments rather than expanding demand by monitoring price changes.

If condominium prices have been dropping or interest rates changing, then the absorption rate may be inflated and reflect an adjustment along a demand schedule. The manner in which this rate is adjusted downward to project future take-up depends on the characteristics of the buyers in this market and on practical considerations such as the quality of available data and the analyst's ability and time to run simple regressions explaining absorption rates in terms of prices, interest rates, population growth rates or other proxies that account for changes in market size.

- iii) Has supply been expanding at the rate of growth in demand?

This question is answered by comparing the absorption and supply rates and by monitoring the unsold inventory. If supply has been expanding faster, the analyst may want to revise the estimated project sell-out date to account for increasing competitions and a larger volume of unsold inventory.

- iv) Is the belief that demand will continue to expand supported by evidence?

This question asks for empirical evidence supporting the belief that past absorption rates will continue to hold in the future. Population growth, sustainable net in-migration, reduced vacancies in substitute housing, continuous reductions in average household size, increasing household formation rates, aging heads of households, increasing land values are factors on which data can be gained to support beliefs regarding a continuing growth in the demand for condominiums.

Answers to the questions regarding local economic prospects, the determinants of past absorption rates, the likely competition the proposed project will face and the empirical basis for the belief that market demand is expanding will not eliminate uncertainty from mortgage underwriting or insurance decisions but will reduce its extent and help improve the analyst's judgement regarding the future state of condominium markets.

#### 5.4.4 Demand Assessment in New and Expanding Markets

The method used in established markets can be modified and used in new markets. New markets with rapidly expanding condominium sectors will eventually reach an equilibrium and the past absorption rate will eventually drop to the rate at which the demand schedule shifts. No analytic method will yield a reliable estimate of the date the equilibrium is reached. Cross-sectional analysis, or the review of comparable towns can yield only rough estimates of the relative size of the condominium sector that may be expected should a number of conditions and assumptions hold true. The only convincing test of the assumptions involves the marketing of another project.

In new expanding markets, the analyst can follow past absorption and supply rates and build caution into projected rates and use short planning horizons. The analysts main contribution to the reduction of uncertainty in mortgage underwriting can be achieved through price monitoring and cost analysis. The equilibrium price of condominium units will eventually be set at cost plus normal profit. The analyst can reduce risk by estimated equilibrium prices and limiting mortgage insurance coverage to construction plus land costs.

#### 5.4.5 Assessment in Markets Without Condominium Projects

Decisions regarding the first condominium project to be constructed in a town can be assisted through survey research:

- a) project specific;
- b) general survey research directed at current condominium owners in comparable markets;
- c) review of claims and approvals; and
- d) experimentation.

(a) Survey Research: Project Specific

Market research can be used in an attempt to assess condominium demand but the approach is not recommended because:

- i) It is very expensive and the sample must be large if it is to have any meaning. At best, 5% of the population would be interested in condominiums and the sample would have to be large enough or sufficiently well directed to identify this small proportion of the population.
- ii) The method may be unreliable for purchases as important as a house. It asks for snap judgements on hypothetical issues.
- iii) The approach may not be appropriately carried out by the public sector. The analyst may insist that the prime beneficiary, the developer, carries out the work.

(b) Survey Research: General

Market research that tries to identify the determinants of condominium demand, can yield information that will help inform decisions regarding the likely viability of the first condominium project in a local market. The approach is less expensive than project specific market research because the information it yields is generic in nature and can be applied more broadly. The size of survey is smaller due to the possibility of limiting the sample universe to condominium owners within other market areas. The market analyst may ask the following questions:

- i) Who are the condominium buyers in smaller cities? What are their occupations, incomes, housing expenditures? What are their family and household types?
- ii) What type of condominium units do people in smaller cities buy? Why did they select a condominium rather than the more traditional single detached houses? Were there particular events or circumstances that influenced their decision to buy a condominium? To what extent did shortages of other types of housing influence their decision to buy a condominium?
- iii) How long do the condominium owners plan to stay in their units? Are they satisfied? What type of housing will they look for next?

Survey research can inform the analyst as to the characteristics of the condominium buyer, the reasons they bought and the stability of the market. The information permits the analyst to draw inferences regarding the likely demand for condominium units in untried markets.

(c) Reviewed Approvals and Claims on Comparable Projects

The analyst can search for comparable projects in other housing markets and review their success rate. This approach requires accurate data on approvals and claims and the facility to retrieve data on condominium projects rather than just dwelling units.

(d) Experiment:

At times the analyst will not be able to gain information on comparable projects and will have to make a recommendation based only on judgement. The analyst may recommend a proposal be financed or insured on grounds that the project is innovative, will be successful, and contribute substantially to social welfare. The acceptance of the experimentation as the basis for issuing a mortgage loan or insurance policy requires a system for monitoring the experiment and disseminating the results.

5.5 ASSESSING DEMAND FOR PROJECTS AIMED AT NEW SUB-MARKETS

Evaluating loan and insurance applications for projects in a new sub-market can use the procedures described for new markets. The method can be augmented by a review of absorption rates in the next closest sub-market in the same city. Survey research results can be reviewed to see if, indeed, there are no projects aimed at this sub-market. A review of price changes within the older existing stock can develop information on the demand for units within existing sub-markets that may have seen few recent additions.

Survey research can develop profiles of condominium owners within one city and compare the profiles to other cities. Major differences can rescue untapped sub-markets. Discrete gaps or sharp drops in a profile may identify the type of condominium for which a latent demand exists.

**CHAPTER SIX**  
**SURVEY METHODS AND RESPONSE RATES**

6.1 INTRODUCTION

The survey of condominium occupants was carried out in nine cities selected by Canada Mortgage and Housing Corporation. The set of cities includes the established inner city markets within the municipalities of Toronto and Vancouver. The Calgary sample was drawn from the entire metropolitan area, a market characterized by rapid increases in the aggregate demand for housing during the late 1970's followed by a decline. Mississauga provides an example of a large, but new, suburban market within which a large number of government assisted condominiums were built during the mid-1970's. The Quebec City, Halifax, and Saskatoon markets represent medium size metropolitan areas with relatively new condominium sectors that have probably not yet achieved a stable equilibrium between the supply and the demand for condominiums. Kelowna and Trois Rivieres were selected as representing smaller cities, showing how the condominium concept has been adapted.

Although these markets can be classified and grouped together according to some criteria, a sufficient number of other criteria can be raised that point to relevant differences that warrant the treatment of each local market as though it were unique. Analysis for this study that is carried out at the local market level will, therefore, be carried out at the city level without any further aggregation according to its size or market maturity.

6.2 SAMPLING METHOD

Land registry records listing the civic address, date of registration and number of units within all registered condominiums in each city were obtained. These were used as the initial population from which samples were to be drawn. In the six largest cities, samples of approximately 400 potential respondents (condominium unit occupants) were drawn. In Saskatoon and Kelowna samples of 300 units were selected. In Trois Rivieres, with a total of 72 completed condominium units, all occupants were contacted. The sample size was determined primarily by budgetary considerations and with an

aim of gaining at least 200 completed questionnaires from each of the major cities. This number would allow reasonably powerful statistical tests for interrelationships among variables at the local market level. A two stage sampling procedure was used to increase the cost effectiveness of survey administration. The first stage involved the selection of a sample of condominium projects. The second stage involved the selection of individual condominium units within the projects.

All condominium projects in Halifax, Trois Rivieres and Kelowna (excluding recreation oriented projects) were included in the original sample. In the other cities, a systematic sampling procedure was used to select projects from lists organized according to the date the condominium was registered. The list was then divided into projects with fewer than 40 units and projects with more units.<sup>9</sup> Systematic random samples were then drawn separately for the "small" and the "large" projects in Quebec City, Toronto, Calgary and Vancouver. To further increase the efficiency of survey administration, the sampling interval for the "small" projects was generally twice that used for the large projects. The bias towards the larger projects was removed in the second stage by sampling units within the smaller projects with an interval half as long as that used in the larger projects.

The Mississauga sample frame did not show the large variation in project sizes that were observed for the other four major cities listed above. The Mississauga sample frame included condominium projects registered before mid-1978, classified by date of registration and according to the building (or structure) type, row or apartment, and, whether or not the project involved NHA financing. The Mississauga sample was stratified by year of registration, building type and CMHC involvement. A search of projects registered after 1978 was carried out and 16 additional projects were added to the initial list. These projects were not classified by building type or NHA involvement and were included as the "other" category.

The systematic samples ensured that projects were representative of those built at different points in time. To permit the separate analysis of responses from occupants living in the newer projects, efforts were made to

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<sup>9</sup> The number 40 was selected to distinguish between "small" and "large" projects reflecting the generally recognized need for projects of 40 or more units to employ "professional" management.

ensure that at least one third, approximately 70 observations, came from projects registered in the post-1978 period. Except for Vancouver, this ratio was achieved by a random systematic sample of projects. In Vancouver the sample was weighted to ensure that post-1978 projects had a slightly greater chance of being included.

Table 3 lists the total number of condominium projects within each market area and the number of projects and units that were included in the sample.

TABLE 3  
SAMPLE PROPORTION BY CITY AND PROJECT CATEGORIES

<u>CITY</u>	<u>PROJECT CATEGORY</u>	<u>TOTAL PROJECTS*</u>	<u>TOTAL IN SAMPLE</u>	<u>TOTAL UNITS</u>	<u>TOTAL IN SAMPLE</u>	<u>PERCENT UNITS SAMPLED</u>
Halifax	All	25	25	1,623	408	25.1%
Quebec City	1. 40- units	16	9	345	96	27.8
	2. 40+ units	<u>13</u>	<u>13</u>	<u>1,228</u>	<u>311</u>	25.3
		29	22	1,573	407	
Trois Rivieres	All	2	2	60	60	100.0
Toronto	1. 40- units	56	16	948	59	6.2
	2. 40+ units	<u>34</u>	<u>15</u>	<u>5,724</u>	<u>318</u>	5.6
		90	31	6,672	377	
Mississauga	1. Row NHA	92	14	7,088	176	2.5
	2. Apt. NHA	37	5	2,184	48	2.2
	3. Row Other	36	5	3,172	49	1.5
	4. Apt Other	24	3	4,828	96	2.0
	5. Other	<u>16</u>	<u>3</u>	<u>1,412</u>	<u>59</u>	<u>4.2</u>
		205	30	18,684	428	2.3
Saskatoon	All	10	10	659	255	38.7
Calgary	1. 40- units	455	16	3,915	108	2.7
	2. 40+ units	<u>204</u>	<u>14</u>	<u>17,154</u>	<u>333</u>	1.9
		659	30	21,069	441	2.1
Kelowna	All	72	20	1,716	323	18.82
Vancouver	1. 40- pre 1978	162	18	3,225	151	4.7
	2. 40+ pre 1978	66	9	4,077	185	4.5
	3. 40- 1978+	255	3	2,946	108	3.7
	4. 40+ 1978+	<u>45</u>	<u>5</u>	<u>3,017</u>	<u>121</u>	<u>4.0</u>
		528	35	13,265	565	4.25

\* Excludes duplex projects.



The sample for Saskatoon included 10 of the 13 projects registered. One project was excluded as it was just in the stage of initial sale and fewer than one-half the units were sold; one project was exclusively rental and excluded and one project was excluded because it was not "market oriented". The total of 72 projects for Kelowna included a number of recreational oriented properties but these could not be identified in advance. To the extent these recreational properties were drawn in the sample, they were replaced.

The Vancouver population of 528 registered condominiums included all residential condominiums except duplex projects. This population included both owner-occupied and exclusively rental projects registered as condominiums. Supplementary data suggest that a significant share of apartment and row condominium projects registered in Vancouver in the post-1977 period are exclusively rental (tax shelter syndicates). The post-1977 sample of eight projects for Vancouver reflects the lower proportion of owner occupied units developed in the more recent years.

### 6.3 ADMINISTRATION OF SURVEYS

The two surveys were delivered by hand in each of the nine cities. The interviewers were instructed to first contact the chairperson (or resident manager) of each project, first to get their agreement to complete the Chairman's questionnaire and second to get permission to distribute the occupant questionnaires to the pre-selected sample of units. Strictly speaking it is not necessary to obtain permission to distribute to the individual units since these constitute private dwellings, however, having the cooperation of the Chairperson or resident manager was considered to be an important first step.

At this stage of the interview process arrangements were made to call back to pick-up the completed Chairman's questionnaire. If approval was obtained to distribute the occupants questionnaire, these were then distributed to the selected units and a time was scheduled to call back for the completed questionnaires. If necessary, a return call was made in order to deliver the questionnaires to the occupant. The interviewers then called back to pick up the completed questionnaires. If the completed questionnaires were not available at the scheduled call back date, a second call back was made.

If the questionnaires were not available at the time of the second call back, a memo was left requesting that the completed questionnaire be returned by mail.

In some cases the Chairperson or resident manager preferred to distribute the questionnaires and/or act as a collection point. The interviewers were instructed to make every effort to accompany the Chairperson or manager, but if this did not seem possible, the questionnaires were left with the Chairperson and a scheduled pick up date was arranged.

In some cases the Chairperson or resident manager either refused to cooperate or suggested the building was primarily renter-occupied. In these cases the interviewer advised the principal researchers and a substitute project was identified.

One major distribution problem occurred in the high-rise projects. Access to the building is generally restricted and the interviewers frequently found they had to introduce the survey using an intercomm system. This lack of face to face contact proved to be a major handicap as occupants found it easier to refuse to participate. In contrast, access in the low-rise, row and townhouse projects was generally door to door and the interviewers were better able to "sell" the idea of participating in the survey.

#### 6.4 RESPONSE RATES

The responses for the two surveys in each of the nine markets is shown in Tables 4 and 5.

Two points should be noted concerning the distribution of questionnaires and the response rates. In some markets it was necessary to substitute for projects in the initial sample. These substitutes occurred for three reasons:

- (i) Some projects in the initial sample were exclusively tenant-occupied.
- (ii) Some projects were still in the early stages of the initial marketing period; and
- (iii) Some project managers (or chairpersons) refused to cooperate in the survey and refused entry to the building.

In each case a replacement project was provided to the interviewer.

TABLE 4  
CHAIRPERSON SURVEY RESPONSE RATES

<u>AREA</u>	<u>PROJECTS SURVEYED<sup>1</sup></u>	<u>PROJECTS RESPONDING<sup>1</sup></u>	<u>NET REPLACEMENT</u>	<u>PROJECTS SURVEYED<sup>2</sup></u>	<u>RESPONSES</u>	<u>% RESPONSE</u>
Halifax	25	23	0	23	18	78%
Quebec City	22	20	1	21	17	81
Trois Rivieres <sup>3</sup>	2	2	0	2	2	100
Toronto	31	22	7	29	26	90
Mississauga	30	24	7	31	20	64
Saskatoon <sup>3</sup>	10	10	0	10	7	70
Calgary	30	21	6	27	15	56
Kelowna	20	16	2	18	16	88
Vancouver	<u>35</u>	<u>31</u>	<u>4</u>	<u>35</u>	<u>19</u>	<u>54</u>
	205	169	27	196	140	71.4%

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1 Initial Sample

2 Final Sample

3 All existing projects which were not primarily renter occupied.

TABLE 5  
SAMPLE PROPORTIONS FOR OCCUPANT SURVEY

<u>CITY</u>	<u>PROJECT CATEGORY</u>	<u>UNITS IN UNIVERSE</u>	<u>RESPONSE</u>	<u>% RESPONSE</u>
Halifax	All	1,623	268	16.5%
Quebec City	40- units	345	77	22.3
	40+ units	<u>1,228</u>	<u>186</u>	<u>15.1</u>
		1,573	263	
Trois Rivieres	All	60	41	68.3
Toronto	40- units	948	51	5.4%
	40+ units	<u>5,724</u>	<u>133</u>	<u>2.3</u>
		6,672	184	2.7
Mississauga	Row NHA	7,088	60	0.85
	Apt NHA	2,184	38	1.74
	Row Other	3,172	57	1.82
	Apt Other	4,828	24	0.50
	Other	<u>1,412</u>	<u>4</u>	<u>0.28</u>
		18,684	183	0.97%
Saskatoon	All	632	142	22.5
Calgary	40- units	3,915	32	0.8
	40+ units	<u>17,154</u>	<u>173</u>	<u>1.1</u>
		21,069	205	0.97
Kelowna	All	1,716	158	9.2
Vancouver	40- Pre-1978	3,225	101	3.1
	40+ Pre-1978	4,077	123	3.0
	40- Post-1977	2,946	21	0.7
	40+ Post-1977	<u>3,017</u>	<u>46</u>	<u>1.5</u>
		13,265	291	2.2

The experience of the interviews varied from city to city. In general, the interviewers experienced no serious problems in Halifax, Quebec City, Trois Riveries, Saskatoon or Kelowna. The factors causing project substitutions in these communities were the fact that some buildings were too new (and still in the stage of primary sales), some were exclusively rental, or, in the case of Kelowna, some projects initially selected were recreation oriented.

In the major cities (Toronto, Mississauga, Calgary and Vancouver) the interviewers experienced two major problems. First, a number of substitute projects were necessary to replace exclusively renter-occupied buildings. This was particularly true in Calgary and Vancouver and tended most often to occur with the newer (post-1977) buildings. Second, the interviewers experienced greater resistance, especially in the high-rise projects and, in some cases, were refused access to the building. As a consequence, the greatest sample replacement occurred in these major cities and the lowest response rate was experienced.

The overall response rate for the chairpersons questionnaire was 71.4% (Table 4) and varied from a low of 56% in Calgary to a higher percent of 90% in Toronto and 100% in Trois Rivieres. The low response rates to the chairpersons questionnaire in Vancouver and Calgary (relative to the other large communities) is surprising since the interviewers experienced few outright refusals. Ironically the response rates for the occupant questionnaires in Vancouver and Calgary exceed those for other major centers.

The average response rates for the occupant questionnaires was 54.4%. The responses fell somewhat short of the 200 completed questionnaires desired for Toronto and Mississauga but in general provided a good cross-section of responses for each market. The lowest sampling proportions occur in the Calgary and Mississauga markets (0.97%). In general terms, those sample proportions tend to understate the representativeness of the results since the "units in the universe" include some units in rental occupied structures. This is particularly a problem in Vancouver (the newer projects), Mississauga and Calgary. The sample for Kelowna (9.2% of the

universe) likely represents closer to 25% of the units in projects that are strictly non-recreational and not renter-occupied.

#### 6.5 BIASES AND SAMPLE WEIGHTING

The survey results give rise to two concerns regarding the representativeness of the sample. The interviewer noted, that in a number of cases where the chairperson refused to cooperate, the projects dropped for the sample may have been experiencing some problems. Therefore one suspects that the projects in difficulty are likely under-represented in the sample.

The second concern relates to the sample for larger (+40 units) high-rise projects. These projects are under-represented in the sample, particularly in Mississauga, Toronto and Calgary. The extent to which this sample size will bias the results depends on a number of factors but, in general, this is not considered to be a major flaw in the sample results and no adjustment or weighting is used to compensate for this.

#### 6.6 QUESTIONNAIRES

The two questionnaires used in the survey were pre-tested in four projects involving 72 occupant surveys. The results of the pre-testing prompted a number of changes in the form of the questions and the presentation of the questions (questionnaire layout).

The questionnaires were designed to minimize the time required to complete them (the occupant questionnaire is rather long). The use of technical terminology was minimized in the expectation that most condominium occupants would not be familiar with the technical terms.

A number of questions included in the chairpersons' and occupants' questionnaires were overlapping. This overlap enables the researchers to confirm the accuracy of the answers and acts as a check in evaluating the quality of the answers. Open ended questions were avoided to the greatest extent possible because of the difficulty of interpreting and comparing results.

A review of the survey results would appear to confirm that all questions were sufficiently clear and straightforward. No individual question appears to have prompted answers that were contrary to the intent of the question.

#### 6.7 DATA EDITING

The data for the two surveys were entered to the computer file using two fixed screen input formats. Whenever possible, these input screens are supported by an edit check to ensure the responses fall within a proper range. Once the primary data were entered, a second set of data checking was undertaken on each file.

In the Chairman's Survey file, checks were made to ensure that the number of units in the project was correct; to ensure the "high original price" equalled or exceeded the "low original price"; to test the reasonableness of their operating budgets to the per month common area fees; and to test the reasonableness of the stated management fees and common area monthly fees.

In the case of the Occupants file, preliminary edit checks were undertaken to check the plan number (using postal codes as a means of cross-reference); the year they moved in (cross referencing with the Interviewer Project Sheet); size of the unit (cross-referencing with the Chairman's Survey whenever possible); and the number of persons in the household (internal check against age and sex question).

Attention was focussed on the responses concerning household income and expenditures. Common area fees were cross referenced with other responses from the same project and then with the responses to the Chairman's Survey. If the differences between one particular occupant and others in the same project were extensive, the data from the Chairman's survey was assumed to be correct. If the total monthly housing costs exceeded 50% of the available income, a visual check was made of the questionnaire in an effort to reconcile differences. Property taxes and heating expenditures were cross checked with other respondents.

In the final analysis, if the responses to the financial questions (income, cost, monthly costs) were suspect, the responses were not used in the analysis.

## CHAPTER SEVEN

### 7. RISK ASSESSMENT: SURVEY RESULTS

#### 7.1 OBJECTIVES

This chapter addresses the following questions:

- (1) What is the claim rate on CMHC mortgage insurance policies issued to condominium units?
- (2) Are the CMHC insurance policy holders the high risk sub-set of the condominium universe?
- (3) To what extent are project characteristics associated with insurance claim rates?
- (4) To what extent are insurance claim rates explained by market acceptance problems?
- (5) What is the nature and prevalence of the problem that are unique to condominiums and to what extent are they related to mortgage insurance claim rates?

This study examines the relationship between CMHC mortgage insurance claim rates and project characteristics, market acceptance and particular problems that are unique to condominiums. The findings were developed by the analysis of data gained from a survey of the condominium council chairperson that was carried out in nine Canadian cities during the summer of 1983. This chapter focuses on the risk created by the possibility of claims arising after a project has sold-out and taken over by the permanent condominium board. It does not directly deal with failures that occur in either the development or the initial marketing phase of a project's life.

#### 7.2 SAMPLE SIZE, RESPONSE RATE AND VARIABLE CONSTRUCTION

One of the major aims of this study is to identify the characteristics of residential condominiums that affect the risk associated with mortgage underwriting and loan insurance. In an effort to better understand the factors contributing to the higher claim rate for condominium loans, a questionnaire was used to gather data for a sample of condominium projects in nine cities across Canada. The purpose of the survey was to collect information on condominium projects: information which may reveal the sources of risk differences.



A total of 196 questionnaires were distributed and a total of 143 responses were received, yielding a response rate of 73%. The 143 projects contain 9,558 units. While mortgage insurance applies to loans on individual units, all units within a project share the same amenities, financial commitments and problems. It is, therefore, necessary to consider the distribution of claim and approvals across both projects and units when analyzing risk. To this end, it should be noted that the distribution of dwelling units is relatively more heavily weighted to favour the eastern cities (Toronto, Mississauga and Halifax) which tend to have the larger projects.

The data show CMHC to have insured one or more units in 25.2% of the projects. This nine city average is misleading in that the responses for Quebec City and Vancouver include no projects which have CMHC insured mortgages. In contrast, 85% of the responses in Mississauga involved CMHC insured loans.

The review of claims statistics show that 9.1% of the responding projects experienced one or more claims. In Saskatoon, only 2 of the 7 responding projects had any units with CMHC insurance and one claim was experienced in each project. Hence the claim rate and CMHC approval rate are identical. In contrast, no claims were experienced in any of the responding Calgary projects with insured loans.

CMHC has insured mortgages for 2,220 units (23.2% of sample) across the nine cities. The distribution of CMHC insured loans reveals the relatively heavy concentration of insurance activity in Mississauga. While this city had 16.7% of the units in the sample, it contained 59.6% of the CMHC insured loans: 82.7% of Mississauga condominium units were CMHC insured. The responding projects from Quebec City, Trois Rivieres and Vancouver had no CMHC insured loans.

The overall claim rate in the responding projects was 6.2%. Only 9.1% of the projects in the sample had one or more claims. In terms of dwelling units, 137 units or 6.2% of CMHC approvals led to a claim. The highest claim rates were found in Kelowna (13.6%) and Halifax (10.3%). Mississauga experienced a 6.0% claim rate. Toronto has a claim rate of 3.2%. The small number of CMHC insured loans within the responding Saskatoon and Calgary condominiums preclude the estimated claim rates for these cities.

For the purposes of this study, high risk projects were defined as projects having three or more claims, and Halifax, Toronto and Kelowna stand out as having the largest proportion of such projects. Toronto has 8.8% of all claims but 15.4% of projects with 3 or more claims. Halifax has 20.4% of all claims and 23.1% of all projects with 3 or more claims. Kelowna has 10.9% of all claims but 15.4% of all projects with 3 or more claims. Mississauga with 58.4% of all claims had only 46.2% of the projects with 3 or more claims. Halifax, Kelowna, Mississauga and Toronto appear to be the high risk cities.

### 7.3 PROJECT CHARACTERISTICS, CMHC MARKET SHARE AND RISK

This section examines CMHC market share and insurance risk as affected by:

- (1) Project age and market maturity.
- (2) Phased development.
- (3) Building type.
- (4) Predominant unit characteristics.
- (5) Amenities and Services.
- (6) Predominant household type.
- (7) Price of units.
- (8) Proportion of tenant-occupied units.

#### 7.3.1 Project Age and Market Maturity

The hypothesis relating project age with claim rate is supported by two reasons. First, the older projects reflect the type of condominiums built during a period of time when knowledge concerning design and market demand was minimal. As a consequence, the earlier units are least likely to effect a good match between supply (in terms of amenities, room size, design etc.) and demand. The second reason to expect project age and claim rates to be related is due to the older projects having policies that have been exposed to risk for a longer period of time.

The sample contains projects from different stages of market maturity. The average age of the condominiums exceeds 5.6 years in Halifax, Vancouver, Mississauga, Calgary and Toronto. These represent the larger cities where one expects the most rapid integration of such new concepts. The smaller cities, Quebec City, Saskatoon, Kelowna have condominiums of much more recent vintage and these projects reflect the emerging state of these markets.

No significant relationship was found between claim rates and market maturity and project age. Kelowna, with the highest claim rate, has the newest projects. Halifax has the second highest claim rate has the oldest projects. Saskatoon with one of the lowest claim rates has the second lowest average age. Mississauga is ranked third in terms of the average age of the project and has a claim rate almost equal to the nine city average.

### 7.3.2 Phased Development

The hypothesis suggesting "phased condominiums" result in a higher risk is supported by two reasons. First, the amenities for a phased project may be postponed to a later phase and the initial buyers can only judge the worth of the promised, not the actual amenities. If the amenities subsequently provided are not as plentiful or as attractive as the initial promotion suggested, the initial buyers are likely to express dissatisfaction which, in turn, may create problems and a reduction in prices.<sup>10</sup>

The phased project may affect risk in a second, but related manner. Most buyers in the initial phases would not be able to comprehend the impact of further development on a fixed site. While a developer may fully disclose an intention to develop future phases and even provide plans and a model, most buyers will not fully appreciate the impact until construction is underway.

The survey results show that only 26.6% of the responding projects were constructed in separate phases. CMHC has a proportionally low number of insured loans in phased projects: 23.8% of CMHC insured loans are in

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<sup>10</sup> Most provinces adequately protect against the risk that the developer will not provide the promised amenities, however the statutes cannot protect against errors in perceptions.

projects developed in phases but 33.3% of all units are in phased projects. Project phasing was found to be not related to claim rates.

### 7.3.2 Building Type

Building type and risk may be related. The building type will influence the type of households attracted to the project (e.g. households with children are less likely to buy units in high-rise structures) and different types of households are likely to incur different levels of risk. Structure type will reflect the zoning within a city and this spatial consideration may affect risk.

Row and townhouse projects account for half the responding projects and the other half is equally divided between low-rise and high-rise projects. Building type distribution however, varies considerably across the cities. Calgary, Mississauga and Halifax have a high percentage of row/townhouse projects (77.8%-95%) while Toronto and Quebec City have the highest percentage of high-rise structures. In contrast, Vancouver and Kelowna have the highest percentage of low-rise.

CMHC insured loans tend to be concentrated in row/townhouse structures: 75% of the loans in the surveyed projects are in row/townhouse projects while 49% of all responding projects are of this structure type. In terms of units, 58.6% of CMHC insured loans are in row/townhouse structures, 7.0% in low-rise and 34.4% in high-rise buildings. This compares to 39.1%, 18.5% and 42.4% of all units.

The highest claim rate occurs in low-rise structures (12.8%) while row/townhouse projects have a claim rate of 7.9% and high-rise have a claim rate of 1.8%. The difference in claim rates among building type can partially be explained by the fact that buyers in high-rise projects tend to be the older retired couples with the greatest equity, largest downpayments and smaller mortgages. Ground oriented buildings tend to attract younger households, with smaller downpayments and with a greater inclination to use condominiums as a first step towards owning a single detached house.

#### 7.3.4 Unit Size Distribution

The CMHC market share, measured both in projects and units, is concentrated in projects with units having three or more bedrooms: CMHC has insured 40.9% of all units in the 3+ bedroom projects, but only 13.5% of bachelor/one bedroom and 12.1% of two bedroom projects. The distribution for all units is 42.5%, 7.7% and 46.1% across the three categories.

CMHC has experienced a higher claim rate (7.9%) on the 3+ bedroom dominated projects and a below average claim rate (4.6%) on the predominantly two bedroom projects. The difference may be explained, in part, by the fact that the projects which are predominately two bedroom units are directed toward the older households with higher downpayments.

#### 7.3.5 Services And Amenities

The range of services and amenities provided in a project will determine, to some degree, the type of household attracted to the project. The absence of play areas, for example, may discourage households with pre-school or school age children, while extensive athletic facilities may attract younger households. The number and quality of amenities provided may indicate the degree of "luxuriousness" of the project and, therefore, the extent that the households buying units have discretionary income. Furthermore, projects which initially provide a larger range of services may find them to have a positive affect on future sales prices.

The CMHC market share is characterized by having a large proportion of projects with minimal services. CMHC has one or more insured loans in 42.9% of the minimal service projects but only 9.8% and 15.8% of the medium and luxury service projects. Expressed in terms of units, the CMHC market share of units with minimal services (36.6%) is twice that of other units (16.4% of units with medium services and 16.7% of units with luxury services).

Projects with minimal services have a higher than average claim rate (9.4%) while units with a high number of services and amenities have a low claim rate (0.3%). This difference can be explained in part, by the price of the units and the incomes of their buyers.

### 7.3.6 Predominant Household Type

The most common household type found in the responding projects is the older, pre-retirement couple: 30.8% of projects and 34.8% of all units in the manager survey are occupied by older households. Households with children are the second most common (26.5% of projects and 29.9% of units) followed by young childless households (23.2% of projects and 18.8% of units) and retired couples (18.1% of projects and 16.4% of units).

The CMHC market share varies systematically across projects housing different household types. CMHC insures a larger proportion of units in projects aimed at households with children (47.2% of such units). CMHC also has a relatively higher share of units occupied by retired households (37.9% of such units). CMHC is under-represented in projects mainly aimed at the "childless young" couples and the "older pre-retirement" households.

Claim rates are higher in the projects housing families with children (8.8%). The claim rate for other project types is 3.0% for young childless household type, 0.8% for retired couple households and 0.0% for pre-retirement couples.

### 7.3.7 Renter/Owner Interface

It is often argued that a high percentage of renter-occupied units in a project will adversely affect its marketability and appeal to potential owner-occupiers.<sup>11</sup> Four provinces have adopted legislation to control rentals by the developer or subsequent investors.

Renters occupy 20% or more of the units in 45.0% of the projects. The variation among cities is, however, very large. Kelowna (78.6%), Saskatoon (66.7%), Toronto (52.2%) and Calgary (50.0%) have the highest percentage of renter dominated projects. Quebec City (15.4%) and Halifax (25.0%) and Mississauga (33.3%) have the lowest percentage.

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<sup>11</sup> While this is a popular perception, the evidence is less clear. In most surveys the occupants identify little evidence to show that renters behavior differs significantly from owner-occupiers. However if buyers believe this to be true, it will influence behavior.

CMHC has insured 24.9% of the units in projects with less than 20% of the units rented and only 18.1% in other projects. This is not surprising since CMHC is less inclined to insure loans for investment purposes.

The claim rate experienced on units in projects which have 20%+ rented units is approximately double (6.7%) the claim rate for units in projects with a lower percentage of rented units (3.3%). This does not imply that renters cause higher claim rates: a high percentage of renters in a project may be an effect, not a cause, of declining market acceptance. It does, however, suggest that writing new insurance policies on units in projects which have a higher percentage of tenant occupiers will be a riskier undertaking.

#### 7.3.8 Unit Prices

The average price of units insured by CMHC are consistently lower than the average price for non-insured units. This is true for categories based on number of rooms, structure type, household type and level of services. No statistically significant relationship was found between unit price and claim rate due to the small number of available observations on price.

### 7.4 MARKET RESISTANCE, APPROVALS AND CLAIMS

#### 7.4.1 Introduction

In an effort to identify indicators of insurance risk, respondents were asked whether or not their project originally encountered sales resistance and whether or not they are currently encountering sales and/or rental resistance. If sale resistance was encountered, respondents were asked for their opinion as to why it was occurring. To the extent that such resistance occurs, it may well be a predictor of subsequent insurance risk. A total of 21.7% of the projects experienced initial sales resistance and 52% of these projects appear to have overcome the resistance. In contrast, 39% of the projects which experienced no resistance initially are now experiencing market resistance. It appears, therefore, that the current sales resistance is in large part a general market occurrence and is not limited to projects which encounter difficulty at the start.

Across all nine cities, 41.3% of the projects (representing 35.9% of all units) are currently encountering sales resistance. CMHC has proportionally

more loans in those projects facing resistance than in other projects: 52.9% of the projects in which CMHC holds insurance policies are facing resistance compared with 41.3% of all projects. Expressed in terms of units, 48.6% of CMHC insured loans are units in projects facing resistance but only 35.9% of all units are in such projects. Moreover, 62.6% of CMHC claims are for units in projects facing resistance. While the sample of claims is small, the claim rate for projects facing resistance (7.0%) is nevertheless much greater than the claim rate for projects not facing sales resistance (3.9%).

#### 7.4.2 Reasons For Resistance at Time of Original Sale

The fact that condominium tenure is a relatively new concept is the most commonly cited explanation for the initial sales resistance. This response is most frequently given in Saskatoon, Halifax and Kelowna, the three cities where the condominium tenure was introduced later. The second most frequently mentioned reason is price related: the units are too expensive, relative to alternative choices. The third ranked reason is that current interest rates are too high.<sup>12</sup> Poor location, design problems and high density are the fourth, fifth and sixth ranked reasons.

The price and interest rate considerations are most often expressed by chairpersons of projects mainly attractive to the younger households who are just entering the ownership sector. Successful condominiums aimed at this sector must offer clear price advantages over other housing options. The concerns for location, design problems and density problems are concerns that bear further investigation by means of case studies as they represent project specific problems which may explain a part of the higher claim rates associated with condominiums.<sup>13</sup>

High common area fees and lack of amenities are ranked last as factors affecting sales resistance. The fact that lack of amenities is ranked last is surprising since the claim rate is high in projects with the least amenities.

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<sup>12</sup> The "other" category is tied to the third position, but the write-in answers do not suggest a clear consensus as to the problem.

<sup>13</sup> This suggests a case study approach involving those projects whose design problems are ranked number one.



#### 7.4.3 Current Sales And Rental Resistance

At the present time, 43.1% of projects are experiencing some form of market resistance (compared with 21.7% when the projects were originally developed). Kelowna and Saskatoon are experiencing the greatest resistance (73.3% and 71.4%), two markets where condominiums currently represent a small market share. In contrast, the least resistance occurs in Vancouver, Halifax and Toronto. Mississauga, where condominiums are a familiar form of housing, is experiencing considerable resistance.

High price and interest rates are the main reasons cited and the newness of the concept is ranked third. Newness of the condominium concept was the first most frequently offered reason for resistance occurring at the time projects were first offered. Poor location and design problems are the fourth and fifth most commonly cited reasons for current resistance.

#### 7.4.4 Vacancy Rates And Turnover

The proportion of units currently offered for sale or rent is an indicator of the level of market acceptance. Given the currently low vacancy rate in most urban centres and the low level of new construction, a high percentage of units for sale or rent is indicative of market resistance. In 14.1% of the projects, the developer currently has over 5% of the units for sale. Given the projects in the sample were all built prior to 1983, this suggests that some of the projects have been facing serious market resistance. The resistance is most evident in Saskatoon, Quebec City, Kelowna and Mississauga. Sales resistance experienced by the developer however does not help explain the claim rate experienced by CMHC: only 7.1% of CMHC loans are in projects where the developer has units for sale.

The percentage of units for sale and rent by their current owner (not the developer) are determined from the questionnaire. If 10% were considered a "normal turnover" rate, then 35.1% of the projects have unusually high turnover rates. This high turnover rate is most critical in Kelowna, with 76.9% of its projects having more than 10% of their units on the market. The percentages in other cities are: Saskatoon (42.9%), Calgary (42.9%) and Quebec City (36.8%). CMHC's share in projects with high turnover rates is 30.3%.

The condominium chairperson's perception of market resistance is borne out by the high turnover rates. The higher the level of resistance perceived, the larger the percentage of units for sale or rent. The resistance is also reflected in claim rates: Projects with more than 5% of the units for sale or rent account for 75% of all projects having 3 or more CMHC claims.

Respondents indicated that 21.7% of all projects encountered resistance when their units were first offered for sale. In contrast 41.3% of the projects are currently encountering sales and/or rental resistance. This suggests that the current economic conditions have increased the level of market resistance experienced by condominiums. The projects identified as facing resistance have a higher percentage of units currently for sale or rent, both by the developer and by the owners.

The reasons for market resistance indicate two general problems. The newness of the condominium concept is the most frequently identified reason in cities where condominiums have been introduced recently. Once the concept becomes known, price, interest rate and design considerations are the prime causes of resistance.

The locational and design problems are in need of further study. Case studies of projects facing resistance due to design problems may extend our understanding of the risks associated with loans for condominiums and develop standards or design concepts that will both reduce risk and increase the marketability of future condominium projects.

## 7.5 RISK AND CONDOMINIUM PROBLEMS

### 7.5.1 Introduction

There are a number of issues unique to condominium tenure that may affect insurance risks. These may include problems associated with the transfer of control from the developer to the Board, the warranties offered by the developer (a proxy for quantity of construction), the nature of the operating budget and reserve accounts and the management of the project. These areas will be briefly examined to determine whether or not particular issues are associated with higher risk projects.

### 7.5.2 Developer Transfer Problems

Serious problems and delays in transferring control from the developer to the permanent board were encountered in 30% of the cases. The projects were transferred on time in only 79.4% of the cases. In projects encountering delays, the average delay was 14.8 months. The incidence of transfer problems was lowest in Vancouver and Kelowna (reflecting the strong provisions in the B.C. Act governing this stage in the life cycle of condominiums). The most serious transfer problems were in Toronto which also had the longest delay.

The reasons for the delays in transfers are summarized as follows: Sales resistance, extended marketing periods and unrealistic developer expectations are ranked second behind "other".<sup>14</sup> Financial difficulties experienced by the developer is ranked third while construction delays and escalating costs follow.

Since most long term mortgages are committed after construction is complete, the critical issue is whether or not projects experiencing delays in transferring control subsequently encounter greater problems. The answer would seem to be no: CMHC insured loans on 25.0% of the projects which experienced transfer delays and 26.2% of the projects which experienced no delays. In contrast, 22.2% of the insured loans projects encountering transfer delays result in 3 or more claims per project while 45.5% of the insured loans in projects which do not experience transfer problems result in 3 or more claims! This suggests that original transfer problems do not necessarily result in any lasting problems which lead to higher claim rates. This is not surprising since most provinces have legislation to ensure that the permanent Board is not made responsible for development related problems.

### 7.5.3 Marketing Program And Disclosure

The answers to a number of questions concerning the disclosure of information by the developer show that most developers have provided satisfactory degree of disclosure. No evidence was developed to suggest

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<sup>14</sup> The write-in responses for "other" provide no useful information which can be generalized.

that projects originally or presently encountering sales resistance or experiencing higher levels of claims had problems due to marketing or disclosure provisions.

A total of 77.9% of the respondents indicated that their developers provided all the features promised in the sales literature (and of those who said the developer did not provide everything promised, the current level of market resistance is no greater than for other projects). In those cases where the developer did not provide everything promised, the principal problem was the fact the units were smaller than promised.<sup>15</sup>

Respondents were also asked if the number of units in the projects and the "density" was adequately disclosed: 92% of the respondents indicated the disclosure was adequate and accurate. For the 8% who indicated the disclosure was inadequate, the concern centered on the number of people, not the number of units.<sup>16</sup> This element of higher density of people appears to be a source of some problems as significantly more of the units with poor disclosure are facing resistance.

#### 7.5.4 Operating Budgets And Reserve Accounts

The operating budget appears to have been adequately disclosed in 73.9% of the cases and reasonably accurate in 78.3% of the cases. Respondents indicated the budget was too low in 21.7% of the cases. The failure to adequately and accurately disclose the operating budget appears to be a matter of some lasting concern. Those projects for which the budget was too low are twice as likely as other projects to currently face market resistance: 60% of the projects which had a low budget face current resistance and only 34.7% of projects with an accurate budget face market resistance. An understated budget is not a cause of market resistance. It is more likely symptomatic of other problems that affect the marketability of units in the project.

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<sup>15</sup> A surprising comment since all provinces carefully regulate the unit size disclosure.

<sup>16</sup> Once again this is reasonable since the provincial Acts carefully govern disclosure of units, common area etc. but not the number of potential occupants.

The level of the current reserve budget is not a major consideration as no correlation was found between the level of the reserve and the likelihood the project faces market resistance. Currently, 31.6% of the projects have a reserve between 0% and 20% of the annual operating budget; 29.5% have reserves between 21-40%, 17.9% have reserves between 41-60% and 21.1% of the projects have reserves in excess of 60%. There is, however, no evidence correlating the reserve with resistance claim rates.

#### 7.5.5 Developer Warranty

A total of 78.6% of the projects have either a developer warranty or a HUDAC warranty. Those projects which do not have a warranty are more likely to face market resistance (52.4% of projects with no warranty face resistance while 46.2% of projects with a developer warranty and 33.3% with a HUDAC warranty face resistance). It would appear that the existence of a warranty improves market acceptance, but only marginally.<sup>17</sup>

#### 7.5.6 Project Management

The quality of project management is not related to either market resistance or insurance risk. A total of 96% of the respondents expressed satisfaction with the current management, not too surprising given that half of the projects are managed by the Board and a further 44.3% are managed by a professional firm selected by the Board.<sup>18</sup>

#### 7.5.7 Corporate Administration

Respondents were also asked to indicate the level of involvement by unit owners in the corporation affairs. As expected, the level of involvement is generally low: 37.5% indicated low and 39.2% indicated average involvement. It is surprising, however, to find the level of owner involvement is lower for projects facing market resistance. One would expect owners in projects facing market resistance to become more, not less involved.

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<sup>17</sup> It should also be noted that many of these warranties are as yet untested.

<sup>18</sup> And either the manager or chairperson completed the questionnaire.

## 7.6 SUMMARY

The following conclusions can be drawn:

- (1) CMHC has one or more insured loans in 25.2% of projects and 23.2% of all condominium units in the sample.
- (2) CMHC has experienced one or more claims in 9.1% of all projects in the sample. The overall claim rate is 6.2%, a high rate considering that the sample is biased in favour of the more successful projects and that many insurance policies are still in effect and may give rise to future claims.
- (3) The highest CMHC claim rate occurs in Kelowna (13.6%), Halifax (10.3%), Mississauga (6.0%) and Toronto (3.2%). Moreover, these four cities have the highest incidence of 3+ claims in any given project.
- (4) Conversion of existing buildings to condominium tenure is not a common occurrence: 95.2% of all projects were built as condominiums. The evidence does not suggest any higher risk associated with converted projects.
- (5) The average age of condominium projects is 6.11 years. In Halifax, Vancouver, Mississauga, Calgary and Toronto (the larger cities) the average age exceeds 5 years, while the smaller cities have an average age of less than 5 years. There is no strong correlation between risk and the average age of a project.
- (6) Projects developed in phases represent 26.6% of all projects and 33.3% of CMHC insured projects. The claim rate (7.2%) for phased projects is slightly, but not statistically significantly, higher than for non-phased projects (5.9%).<sup>19</sup>
- (7) Row and townhouse projects represent half of all projects, while low-rise and high-rise projects each represent one-quarter of the sample. Seventy-five percent of CMHC insured loans are in row or townhouse projects, 11.1% in low-rise and 13.9% in high-rise projects. CMHC insured loans are significantly over-represented in row/townhouse projects. The highest claim rate is experienced in low-rise projects (12.8%) while the claim rate for units in townhouses is 7.9% and for high-rise units is 1.85%.
- (8) CMHC has a larger share of units in projects predominated by 3+ bedroom units: 44.5% of projects in the sample are characterized as 3+ bedroom projects and 72.1% of CMHC insured loans are in such projects. In contrast 11.7% of all projects (representing 7.7% of all units) are mainly bachelor/One bedroom projects and 4.4% of CMHC insured

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<sup>19</sup> The legislation governing phased projects appears to have provided adequate protection for consumers.

loans are in such projects. The claim rate experienced on policies for units in projects that are primarily 3+ bedroom projects is higher than average (7.9% compared to 6.2% overall).

- (9) CMHC has a relatively larger share of projects providing minimal services: 44.1% of all projects (representing 33.3% of all units) are classified as having a "minimal" number of amenities and services while 52.5% of CMHC insured loans are in such projects. Only 13.3% of the projects containing 35.7% of the units are "luxury" and only 16.7% of CMHC insured loans are in this category. The claim rate experienced for units in projects with minimal services is 9.4% compared to 0.3% for luxury units.
- (10) A review of the predominant household type within projects indicates that 23.2% of the sampled projects (18.8% units) are occupied primarily by young childless households: 26.5% of the projects (29.9% units) by households with children; 30.8% of the projects (34.8% units) by pre-retirement couples; and 18.1% of the projects (16.4% units) attract mainly retired households.

CMHC has a relatively larger share of the units occupied by households with children (51.5% of insured loans) and retired household (22.7%). In contrast, CMHC is less active in projects aimed at the young childless households (8.8% of insured loans) and pre-retirement couples (17.1% of insured loans). The lowest claim rates are experienced in units occupied by older households (0.0% for pre-retirement and 0.8% for retired household categories) and the highest claim rate is experienced in projects categorized as households with children (8.8%).

- (11) CMHC has a smaller share of insured loans in projects with a high percentage of tenant-occupied units. Forty-five percent of all responding projects, representing 45.4% of units, have more than 20% of the units occupied by tenants but only 37.7% of CMHC insured loans are for units in such projects. The claim rate for units in the high tenant-occupied projects is 6.7% compared to 3.3% for other projects.<sup>20</sup>

- (12) Respondents indicated that 21.7% of all projects encountered sales resistance when the units were first offered for sale. In contrast 41.3% of the projects are currently encountering sales or rental resistance. This suggests that the current economic conditions have increased the level of market resistance experienced by condominiums. The projects identified as facing resistance have a higher percentage of units currently for sale or rent by the developer or owners.

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<sup>20</sup> For purposes of this analysis, projects are categorized as + or - 20% tenant-occupied units.

The reasons cited for market resistance identify two general problems. Lack of familiarity is a major cause of resistance in relatively new markets. Once the concept becomes known, cost and design considerations are the prime source of resistance. The cost considerations include both the price and mortgage interest rate. The interest rate will influence all forms of tenure, not just condominiums. The price of condominiums, presumably relative to other other forms of housing, will eventually adjust to an equilibrium.

The locational and design problems cited as a source of resistance are a problem in need of further study. Detailed case analysis of projects facing resistance due to design problems may extend our understanding of the risks associated with loans for condominiums and show how the risks can be reduced through planning and architectural work.

- (13) The following issues unique to condominiums were examined:
- the formation of a permanent Board
  - developer transfer of control
  - the operating budget
  - the reserve account
  - the developer warranty
  - marketing programme.

While these problems are found within condominiums our analysis could not relate them to CMHC activity or risk. The problems, we believe, are not severe due to most provincial legislations having regulations affecting the timing, disclosure, budget planning and management of the project are all covered in the statutes.<sup>21</sup>

The statistics developed by this study further indicate that CMHC's market share is not disproportionately distributed to projects that suffer serious management, fiscal or developer problems. As a consequence, these "condominium problems" do not provide any major contribution to the cause or nature of the CMHC claim rate.

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<sup>21</sup> Or in the mandatory plans and declarations.



**CHAPTER 8**  
**CONDOMINIUM DEMAND: SURVEY RESULTS**

8.1 INTRODUCTION

The analysis of data developed through the survey of 1410 condominium owners shows the demand for condominium units to be generated by two quite distinct groups. One is composed primarily of empty nesters leaving their single detached houses to buy smaller and more luxurious condominium units. The other group consists primarily of younger and larger households buying their first homes.

The empty nesters buy condominiums to gain freedom from maintenance and upkeep while maintaining their homeownership status. They value the security offered by condominiums and the common facilities. The empty nesters are satisfied with their purchase and should they have to move many say they would look for another condominium. The first time buyers are improving their housing conditions by buying a condominium but most will move to single detached units when they can afford to so do. They buy condominiums because they can not afford single detached houses.

Households within the two sub-markets look for different types of condominiums. The younger couples and families with children prefer ground oriented and larger units. They buy less expensive units than do the empty nesters but gain larger number of rooms by accepting fewer amenities and facilities. The first time buyers consider the broadest range of housing options and, unlike most empty nesters, they consider suburban locations.

Changes in the cost of home ownership will have the greatest impact on the condominium market created by the first time buyers. Price changes will affect the type of condominium bought by the empty nesters but the survey results show these households to be committed to the condominium sector.

The survey data document the shift from a predominantly young condominium population in the early 1970's to a population with 70% of heads of households being over forty years of age. The shift is in part due to differences in the rate at which the two sub-markets reach maturity. The first time homebuyers are more mobile than empty nesters and can, therefore,

experiment with the condominiums more freely and more often have the chance to seriously consider this option. In most cities, condominiums have been available long enough to give this cohort a chance to reveal its demand for condominium units. Half the first time buyers will have moved within a five year period and half the cohort will have had a chance to demonstrate their demand in a five year old market. Half the over forty-five year old previous homeowners will have moved during a thirteen year period and once they move to a condominium most plan to stay. Most condominium markets in Canada are not this old and most will, therefore, keep expanding without requiring concomittent increases in the aggregate demand for housing. The shift from the non-condominium to the condominium sector within the empty nester sub-market is not yet complete.

This chapter summarizes the findings developed through the analysis of the data generated through the survey of condominium occupants. It briefly describes the two sub-markets by answering the following questions:

1. What are the main characteristics of condominium housing?
2. Who buys condominiums?
3. What do condominiums cost?
4. What kind of housing do condominium buyers come from?
5. Where do they come from?
6. Is the condominium market saturated? Have condominium markets reached maturity?
7. Why do condominium buyers decide to move from their previous homes? Are there particular indicators or events that would signal changes in the demand for condominiums?
8. What other options do condominium buyers consider? What are the substitute housing forms?
9. Why do people buy condominiums? How committed are the buyers, how stable is the market? What factors will affect the long term growth of the market?
10. What housing attributes do buyers most often look for?
11. Are condominium owners satisfied?

The answers presented here are brief and devoid of statistics. The text of Working Paper Seven develops the statistics that support the more general conclusions developed here.

## 8.2 WHAT ARE THE CHARACTERISTICS OF CONDOMINIUM HOUSING?

Very few Canadian condominium projects contain single detached houses. A large number of condominium duplexes were found in some cities and the type was excluded from the survey. Approximately one-third of all condominium units are in row or townhouse projects. One-third of the remainder are in low-rise structures with three or fewer floors and the remainder are in high-rise buildings. The proportion of units in high-rise buildings and in row or townhouses is higher in the condominium sector than in the rest of the multiple unit housing stock.

Most condominium units contain two or three bedrooms plus a den. Few respondents live in one bedroom or smaller units. The average unit has 1288 square feet and the average size varies little across building type: row house and townhouse units have 1380 square feet compared to 1260 for the average high-rise unit. Condominium units tend to be larger than other units within similar building types.

Project type and unit size distributions differ among the nine cities and a part of the variation is explained by their spatial and demographic characteristics. Higher density projects tend to be located closer to city centres and the needs for higher densities are greater in the larger cities. A part of the variation in building and unit type distribution across markets is due to the developers' beliefs regarding buyer preferences. A part is due to differences in the age of the nine surveyed markets coupled with differences in the rate at which the two sub-markets reach maturity. Because the first time homebuyer sub-market is established more rapidly than the other sub-market, the cities with less condominium experience will have a higher proportion of units built for and occupied by this population. More established and older condominium markets will have a higher proportion of its stock built for the empty nester sub-market. A part of the variation in unit and project types that is found across the nine cities will diminish with time as condominium markets approach maturity.

Peculiarities in unit and project type distributions within particular market areas may indicate the presence of an untapped latent demand for particular types of condominiums. The level of analysis needed to reveal

such possible gaps was well beyond the scope of this study. The market analyst may wish to access the data base to examine, compare and identify the peculiarities of his or her local market area.

### 8.3 WHO BUYS CONDOMINIUMS?

The main overall characteristic distinguishing condominium owners from others is their age: 70% of the current population is over forty years of age. In 1970, 80% were under forty years of age. The dramatic shift in the age composition of the condominium population and, therefore, in the household characteristics is due largely to differences in the time it takes each of the two sub-markets to reach maturity.

Condominium owners have smaller than average families and have fewer children. The smaller household size, however, will not be observed by the market analyst until after condominiums have been built and the demand has been revealed. The size of the condominium buyers' households at their previous address is average for the entire population. The buyers household size tends to diminish at the time of purchase as a result of children leaving their parents home to buy a condominium, parents having their children leave home and marital separation.

Condominium owners are, as a group, distinguished from other homeowners by having a much higher proportion of single person households. Approximately 10% of all Canadian homeowners are single person households compared to 22% of all households but one out of four condominium units is owned and occupied by a single person household. An increase in the proportion of single person households in a local market will increase condominium demand. The proportion of retired or elderly people is high in condominiums: 22.2% of current owners are sixty-five years of age or over. At the time of purchase, only 20% were over sixty-five years of age.

As a result of the high proportion of singles and the large number of elderly among condominium owners, the proportion of households with dependent children is small. Only 26% of condominium owners have dependent children living with them. This proportion varies across cities: Mississauga and Halifax have 56% and 43% of households with dependent

children showing that there is a strong potential for family housing within the condominium sector. The smaller proportion of households with children in most local markets is, in part, due to the high density of the condominium projects. It may, in part, be due to the relatively lower price of single detached houses in the other market areas.

The average current household income is \$38,343 but the average varies significantly among the nine surveyed markets. Younger households were increasing their incomes faster than the rise in the Canadian consumer price index and their housing purchase may in part have been influenced by expectations regarding future earnings. Households with rising incomes tend to spend more on housing each month than do households with stable or declining incomes. Households, in which the chief wage earner is retired, dropped their income to an average of \$30,000 per year. The two components of condominium demand, the two sub-markets, are not distinguished by the average income of the buyers: previous home owners and first time buyers have similar average incomes. The range of income, however, is greater for the previous home owners due to the larger proportion of retired people within this group. The average household income of the traditional worker/homemaker families within condominiums is the same as that for the two or more worker households.

Household and housing characteristics are related. Single person households and the retired more often buy units in low-rise buildings and less often in row or townhouses. While unit and household sizes are positively correlated, single person households tend to buy one bedroom plus den or two bedroom plus den units. Households with children tend to buy larger units in row or townhouse projects. Older or smaller households favour high-rise projects. Upper income households have a greater propensity to buy high-rise units.

#### 8.4 WHAT DO COMDOMINIUMS COST?

The average condominium purchase price was \$91,257 (in 1983 dollars), high-rise units averaged \$102,998, low-rise \$72,494 and row or townhouse units sold for \$91,169. Spatial variation in prices is great: the average cost of Toronto condominiums was \$143,979 compared to \$93,867 for Trois

Rivieres. The average price per square foot is \$75.60 in 1983 dollars. High-rise units were the most expensive at \$82.90 per square foot.

The average downpayment was 41% and this proportion varies significantly across household types. The over-sixty-five age group of households paid 76% of the purchase price as a downpayment while households with pre-school children bought their units with 22% downpayment. The over-forty-five year category who owned their previous units bought \$114,227 condominiums compared to \$78,904 for the other categories. The first time homebuyers spent \$785 per month on housing immediately after their purchase compared to \$593 for the older households with built up equity. Most households increased their monthly housing expenditures after buying their condominiums.

The average gross rent multiplier is 121 and this ratio varies greatly across building types and cities. The over \$100 per square foot condominiums yield a multiplier of 152 compared to 106 for the under \$50 per square foot units.

Families with children and younger heads of households tend to buy less expensive units having larger number of rooms. They have the lowest downpayments. The floor area of these units is not necessarily greater than found in the more spacious condominiums bought by empty nesters. Price is related to household income and to increases in income. The first time homebuyers buy less expensive units than do the empty nesters. The empty nesters buy more luxurious units and pay the highest per square foot prices. A careful review of income and housing expenditure data suggests that a small proportion of the condominium units occupied by the elderly "homeowners" are bought or are being paid for by others.

The size of the downpayment is the main financial factor distinguishing the two sub-markets: the empty nesters use their equity built up in their previous homes to buy the more expensive and luxurious condominiums. The average size of downpayments increase with age and is highest for the pre-retirement households.

Monthly housing expenditures are higher for the first time buyers than for the empty nester groups. Since the average income levels of the two groups are similar, the first time buyers have higher monthly expenditure to income

ratios. Monthly housing expenditures and the proportion of income spent on housing increase substantially with household size and number of children but increase only a little with unit sizes. Monthly expenditures are higher for row or townhouse owners who tend to buy their units with lower downpayments. Monthly expenditures increase with the purchase price while the expenditure income ratios decline with price. Price per square foot shows a stronger correlation with income than does the unit sales price suggesting that higher income households buy more luxurious, rather than larger, units.

Most households increased their monthly housing expenditures as a result of the condominium purchase. Households do not use the equity gained on the sale of their previous house to reduce monthly outlays. Differences in wealth rather than in income explain expenditure differences between the first time buyers and empty nesters. Previous homeowners use their built up equity to buy more expensive and more luxurious units and, thereby, limit the increases in their monthly housing outlays.

#### 8.5 WHAT HOUSING TYPES DO CONDOMINIUM OWNERS LEAVE?

Half the surveyed buyers owned single detached houses before buying their condominiums and half rented units in multiple-dwelling buildings. Eleven percent lived in a condominium and 14% had some member of the household with condominium experience. This proportion is high given that half the units in the sample had been resold since being first built and occupied. Half of the previous condominium occupants were renters.

Half the buyers select smaller units than they previously occupied and half larger units. The change in size reflects the changing needs of the households within the two sub-markets. The previous renters tend to be the younger households who are entering the condominium sector not only to become homeowners but also to gain larger and better quality units. The empty nesters need less space and buy smaller but more luxurious units.

The two sub-markets defined in the introduction to this chapter have been characterized as consisting of empty nesters and first time home buyers. The previous tenure status of a prospective buyer is the best single indicator of which sub-market the person will enter, but it is not an

absolute indicator. Nor is the boundary between the sub-markets always discernible. Some first time buyers lived in single detached houses. Some empty nesters were renters. Many retired persons who owned modest houses buy units similar to those sought by the first time homebuyers.

The review of previous housing suggests that the demand for smaller more luxurious units in higher density projects will grow in markets having an aging population living in single detached units. Cities with young households renting in multiple-unit buildings will have a good potential for larger, ground oriented condominiums. One component of condominium demand will emerge from households currently renting a unit in a condominium project.

#### 8.6 HOW LARGE ARE PROJECT CATCHMENT AREAS?

Approximately 20% of condominium buyers previously lived in the neighbourhood of their current condominium. Forty percent lived within three miles of their condominium and over half lived within a five mile radius. Twenty percent lived outside the CMA. Increases in in-migration will increase condominium demand.

Seventy percent of the households with members working outside the house buy condominiums within a twenty minute trip to work and 30% spend ten minutes or less on their commute. Increases in middle income jobs will increase the demand for condominiums.

Catchment areas differ in size. Buyers of units in high-rise buildings tend to come from denser but smaller catchment areas. Higher income households tend to buy condominiums that are closer to their place of work than do lower income commuters. Row and townhouse buyers sacrifice travel time to gain lower density. Families with children and households spending larger proportions of their income on housing, travel further to work and buy the less dense and less expensive, ground oriented units.

Market analysts can count on a good proportion, 10 to 20% of proposed units to be bought by in-migrants. The higher the in-migration rate and the greater the local job opportunities the higher will be the demand for new condominiums. When assessing the viability of a proposed project, the



analyst can focus on the project's neighbourhood. The condominium should be quite close to jobs. The immediate neighbourhood should have a compatible population capable of yielding twenty percent of the project's future owners. The analyst should try to determine the type of households likely to buy the proposed units found in the project's neighbourhood, within a three or five mile radius.

The actual parameters used to delineate catchment areas and define the geographic extent of local markets will depend on the city, project type and the sub-market the project is aimed at. The analyst can improve his or her assessment of project viability by using the developed data base to estimate the parameters for the particular characteristics of the project that is being considered.

#### 8.7 HAVE CONDOMINIUM MARKETS REACHED MATURITY?

Most of the condominium markets surveyed are still expanding. The expansion will occur primarily in the empty nester sub-markets. On average, empty nesters lived thirteen years in their previous dwelling. Most say they will look for another condominium should they have to move. Most condominium markets have not been established long enough to give all members of the older cohort a chance to seriously consider the condominium options for the first time. The rate of entry into this sub-market will remain higher than the rate at which households leave. The shift from non-condominium housing has not finished for this sub-market and demand for the higher priced units will continue to expand more rapidly than the growth in the aggregate demand for housing.

The first time homebuyers lived an average of five years at their previous dwelling and plan to leave the condominium sector relatively soon. Most condominium markets have been established long enough to give the full cohort a chance to seriously consider a condominium purchase and thereby reveal their demand for condominium units. Future growth in this sector will occur as a result of population growth or changes that increase the number of households wanting and able to enter the home ownership markets.

#### 8.8 WHY DID CONDOMINIUM BUYERS DECIDE TO MOVE FROM THEIR PREVIOUS HOMES?

Approximately 40% of condominium buyers left their previous dwellings to become home owners. Factors affecting the household's propensity to change tenure status are the main determinants of demand in the first time buyer sub-market.

Increases in average income levels, increase in savings and RHOSP funds, reduction in interest rates and developing optimism regarding the value of real estate investments are among the factors indicating growth in demand for starter home condominiums.

Most of the households mentioning their quest for home ownership as the main reason for leaving their previous housing also mentioned their desire for larger units, better quality dwellings and neighbourhoods. The quest for homeownership is also a search for improved housing conditions. Thirty percent of condominium buyers recently experienced a change in their household size. Children leaving home and marital separation are the two most common reasons for the change. These households left their previous dwellings because they wanted to be free from maintenance and have more security. They left their previous dwellings to gain the attributes most often found in condominiums. The reasons households say they left their previous dwelling are key distinguishing characteristics between the two sub-markets. The reasons the empty nesters give for having left their previous homes relate to the availability of the housing attributes most often found in condominiums. They suggest that condominium developers entering new markets will, if successful, increase mobility and generate demand by the presence of their projects. The initial condominium absorption rate is higher than the rate at which prospective buyers moved house before condominiums were introduced to the local market.

#### 8.9 WHAT OTHER HOUSING OPTIONS DO CONDOMINIUM BUYERS CONSIDER?

Few condominium buyers considered rental alternatives at the time they bought their unit. Rental units are therefore not a substitute or a competitor to the condominium sector.

Most first time buyers considered single detached housing. Most of the empty nesters did not and most limited their search to condominiums. Households buying high-rise units tended to consider lower density condominium options. Households buying row or townhouses tended to not consider high-rise options. The ground oriented condominiums are substitutes for high-rise condominiums while the reverse does not hold true.

Households buying row or townhouses most often considered sub-urban locations. Few high-rise owners looked outside the inner city suggesting that the buyers prime focus was on location rather than building type. The first time buyers will sacrifice location for lower prices and ground oriented units.

The two condominium sub-markets are distinguished by the options and locations the households consider. First time buyers usually look at single detached houses and suburban locations. They consider the broadest range of options before buying their condominiums. The older condominium buyers tend to limit their search to the condominium sector and inner city locations. The empty nester sub-market is most committed to the condominium sector and the market demand by this group is least likely to be affected by changes in the price of other housing options, income levels or interest rates.

#### 8.10 WHY PEOPLE BUY CONDOMINIUMS

The first time home buyers most often buy condominiums because they cannot afford a single detached house. They also buy condominiums to gain the use of their facilities and to improve on their previous housing.

The desire for reduced upkeep, security and facilities are the reasons the empty nesters buy condominiums. Most think condominiums are at least as good investments as single detached houses and perceptions of the investment value did not differ across the two groups of buyers.

Changes in housing prices would have affected primarily the first time home buyer market, not the empty nester sub-market. Overall price reductions would increase the number of people buying their first single detached house. Price increases would have caused a larger proportion to stay at their previous dwelling.

#### 8.11 WHAT HOUSING ATTRIBUTES DO CONDOMINIUM BUYERS LOOK FOR?

Location is the prime factor buyers consider. Expected investment value is next in importance to condominium buyers and this is followed by unit and then project characteristics. Proximity to work is the main locational attribute buyers seek. Unit construction quality and plan are the main unit features. Appearance, landscaping and finances are the main project features buyers consider.

#### 8.12 ARE CONDOMINIUM BUYERS SATISFIED?

Ninety percent of the condominium owners responding to the survey claim their experience with condominium living was either as good as or better than they expected at the time they bought their unit. The proportion of people indicating a high level of satisfaction is greater among high-rise occupants than among others. Some of the people who were not satisfied would buy a condominium again indicating that the dissatisfaction is project or unit specific rather than a reflection of the respondents' attitude towards condominiums. A much larger proportion of high-rise owners, 78% compared to 48.3% of row or townhouse owners, would buy a condominium again. The main reason that would cause them to leave would be their ability to buy units in better locations.

Condominium owners are, as a whole, satisfied. The first time home buyers say they will move to single detached housing when they can afford it. Empty nesters will move to other condominiums at better locations. The high-rise component of the empty nester sub-market shows the greatest level of satisfaction with condominium living and the most commitment to the condominium sector. The high-rise sub-component is the stablest component of the condominium market since the initial demand for high-rise units have been served.