

Residential Renovation in Québec

Segmented Analysis
of Activities

Société d'habitation du Québec

Direction de la planification, de l'évaluation et de la recherche

**Residential Renovation
in Québec**

Segmented Analysis
of Activities

**Paul Forest
Claude-Rodrigue Deschênes
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SUMMARY

This study presents the results of an analysis of survey data collected on residential renovation activity in Québec for the period June 1996 to May 1997.

Because 96% of total expenditures by Québec households on renovation and maintenance work can be attributed to homeowners who spend \$100 or more, the homeowner market segment alone may be considered as representative of the residential renovation market as a whole.

Households that renovate are most often headed by middle-aged educated homeowners with higher disposable incomes and they tend to be larger in size than average. While the year of construction of their dwellings does not influence the rate of renovation activity, their occupancy period is a significant factor.

An overview of renovation expenditures shows that the largest amounts spent on renovations are mainly devoted to projects valued at \$5,000 and over carried out by a small number of homeowners. Furthermore, the average renovation expenditure decreases with age. Geographically, the average expenditure in the Québec City census metropolitan area (Québec City CMA) is higher than the average expenditure in the Montréal census metropolitan area (Montréal CMA) or in the other regions of Québec combined.

As far as the type of work is concerned, spending on “renovations-alterations-improvements” work is slightly higher than spending on “additions-expansions-landscaping” work. These two types of work account respectively for 33% and 31% of all expenditures. “Renovations-alterations-improvements” work also ranks first in terms of the average expenditure. Finally, total expenditures for contracting vs. materials purchases is about equivalent. However, in terms of expenditure per renovation project, the average expenditure for contracting is twice as high.

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The most important types of renovation projects in terms of dollars spent are landscaping, exterior windows and roofing projects. When the year of construction is taken into account, it is observed that spending on additions, expansions and landscaping is higher for recently built homes. Expenditures for renovations and alterations are higher in the case of older homes. When taking occupancy period into account, it is found that the longer the occupancy period, the less the amount spent on renovations. When the occupancy period is less than 6 years, expenditures involve mainly additions, expansions and landscaping. The study also shows that the older the household members, the less the amount spent on renovations. Finally, the occupants of more expensive homes tend to spend more on renovations.

In terms of expense category, the average expenditure for contracting is higher in the Montréal CMA, while the average expenditure for materials is higher in the “Other Regions” of Québec (which excludes the Montréal and Québec City CMAs). While the year of construction has practically no influence on the expense category, the occupancy period does; the longer the occupancy period, the less homeowners spend on materials. The older the household maintainer, the higher the contracting expenditure. The study also shows that contracting expenditures increase with dwelling value.

The data collected has also enabled identification of various residential renovation market segments in Québec. These segments are defined according to type of renovation project, region in which the work is carried out, dwelling value, year of construction, homeowner occupancy period and age of household maintainer.

INTRODUCTION

Economic activity involving the maintenance and improvement of the current housing stock in Québec has seen continual growth in the last number of years and has overtaken new housing construction. In addition, demographic trends - which show a progressive decline in the creation of new households - are such that the relative growth of this sector can be expected to continue. It is thus important to have available quality information on the renovation market in Québec.

At present, only fragmentary information is available concerning both the nature and rate of activity in this sector. According to Statistics Canada, nearly \$4.6 billion was spent on renovation and maintenance work in Québec in 1996 (\$3.6 billion on renovation and \$1 billion on maintenance and repairs¹).

In response to this lack of renovation market information, the Société d'habitation du Québec in association with Canada Mortgage and Housing Corporation, the Ministère des Ressources naturelles du Québec and the Association provinciale des constructeurs d'habitations du Québec hired a consortium of firms including Ad hoc Recherche, Panache and Pierre Bélanger Plus to conduct a study aimed at providing much more detailed data on the residential renovation market in Québec. The terms of reference of the study were to analyse currently available information, develop a methodology to measure renovation activities and gather the data needed for detailed quantification of these activities².

¹ Source: CANSIM, matrices 439, 441 and 442.

² Readers will find a brief description of issues related to the measurement of residential renovation activities in Appendix 1.

For more detailed information about the methodology involved, please refer to the report *L'industrie de la rénovation au Québec (document de réflexion pour l'élaboration du volet de mesure de marché)*, Ad hoc Recherche, December 1996. In addition, an initial analysis of the survey results can be found in the report *Enquête majeure sur la rénovation résidentielle au Québec*, Ad hoc Recherche, February 1998.

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This study on residential renovation in Québec presents the results of an analysis of data gathered in the survey phase of the study. The data concerns spending from June 1996 to May 1997. It is worth noting that all the results presented in the study are from the SHQ's compilations using raw survey data³.

Given that a primary concern of this study is to better understand the economic activities related to residential renovation, the amount spent on renovations is of major importance. For this reason, the study focuses mainly on the monetary value of renovation work rather than on its frequency.

In order to provide a general profile of renovation activity in Québec, the study first examines the sociodemographic characteristics of households that renovate. To complete the profile, the study provides an analysis of renovation work completed and its value according to a conventional typology of renovation activities.

Subsequently, the study takes a more in-depth look at the nature of renovation expenditures according to type of work and expense category. All these aspects enable the identification, in the fourth part of the study, of a number of niches in the Québec residential renovation market. The purpose of this market segmentation is to attempt to provide answers to the questions of those involved in the renovation sector.

³ For the purpose of this study, a stratified sampling plan was established taking into account both the regional distribution and tenure of households that renovate. To this end, the Québec territory was divided into three regions: the Montréal CMA, Québec City CMA and the rest of Québec. The two tenure types used in the study were ownership and tenant occupancy.

Moreover, we used a weighting method for our compilations based on the age of household maintainers. As 1996 household tenure statistics were not available at the time of compilation, data were weighted using the total number of households enumerated in the 1996 census and a distribution by age group of household maintainers and tenure from the 1991 census. Since this weighting method was not used by the firm hired to perform the initial data analysis, it is possible that some results are different from those of this initial analysis.

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PROFILE OF HOUSEHOLDS THAT RENOVATE

A profile of households that renovate can give us a general picture of residential renovation activity in Québec.

Households

In 1996, there were 2,822,225 households in Québec. Of these, 37% did not spend any money on renovations. Figure 1 shows the distribution of households according to renovation expenditures.

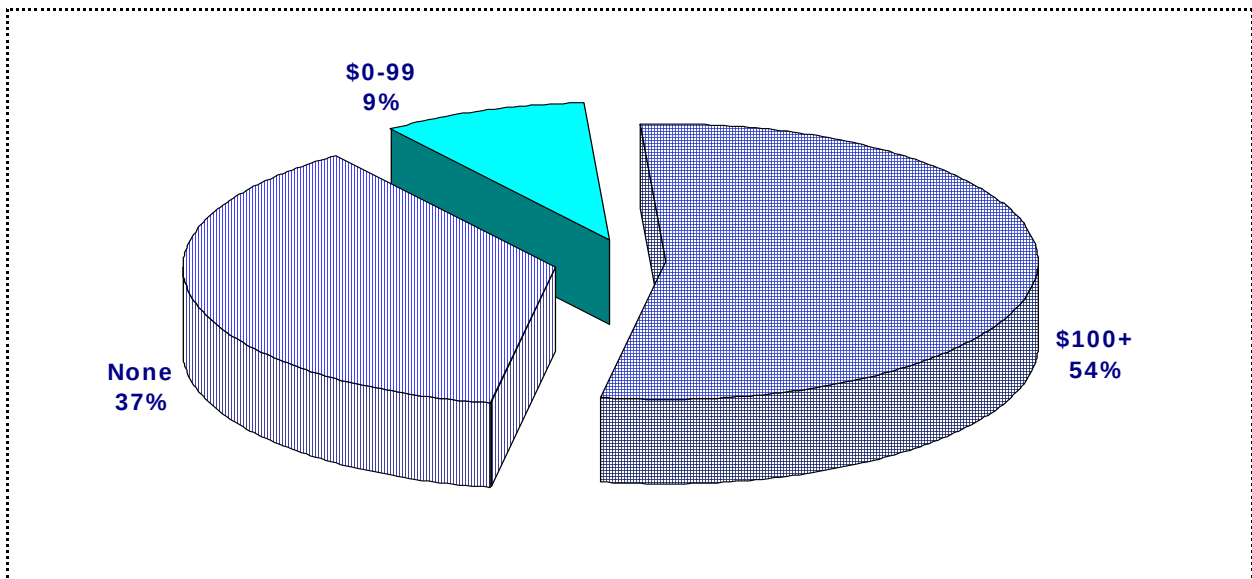


Figure 1
Distribution of Households According to Renovation Expenditures in Québec, 1996 (%)

It can be seen that 54% of households spent \$100 or more, and 9% of households spent under \$100. Hence, a majority of households (63% or nearly 1.8 million households) invested in the maintenance and renovation of their homes.

Tenure

In examining households according to tenure, it is useful to recall that a majority of households (56%) were homeowners in 1996 comprising a total of 1,593,600 households. Figure 2 shows that 74% of homeowner households spent at least \$100 on renovations, while only 29% of tenant households spent this amount.

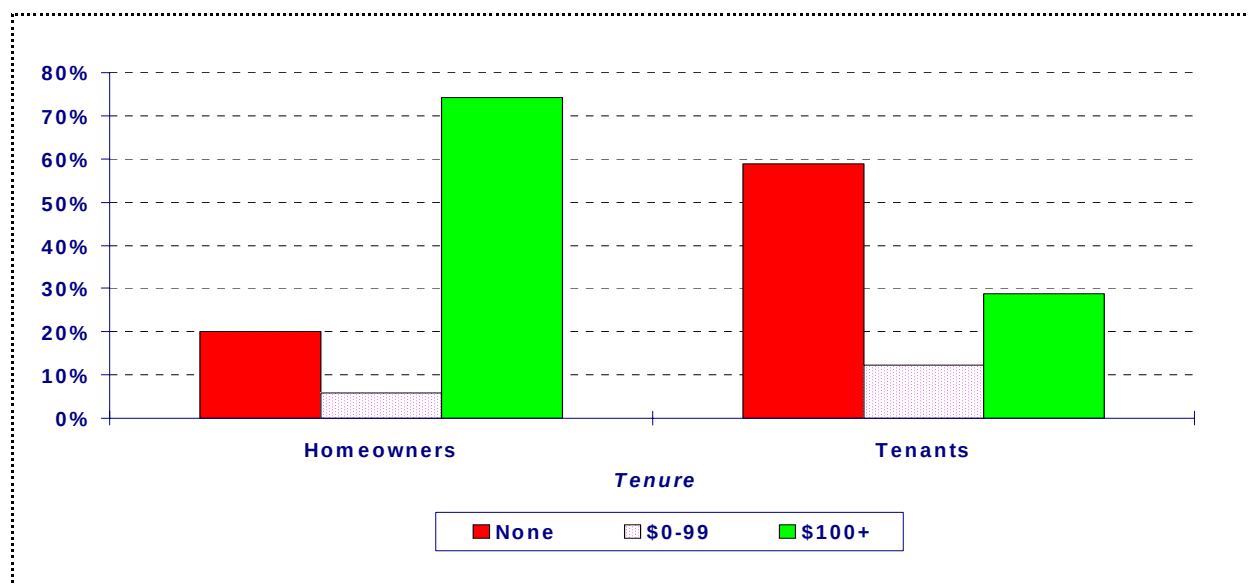


Figure 2
Distribution of Households According to Tenure and Renovation Expenditures in Québec, 1996 (%)

The low propensity among tenant households to invest in renovations is also illustrated by the fact that 59% of tenants did not spend any money on renovations and maintenance. It can, therefore, be asserted that residential renovation in Québec is primarily the concern of homeowners.

Figure 3 shows the distribution of renovation expenditures according to tenure.

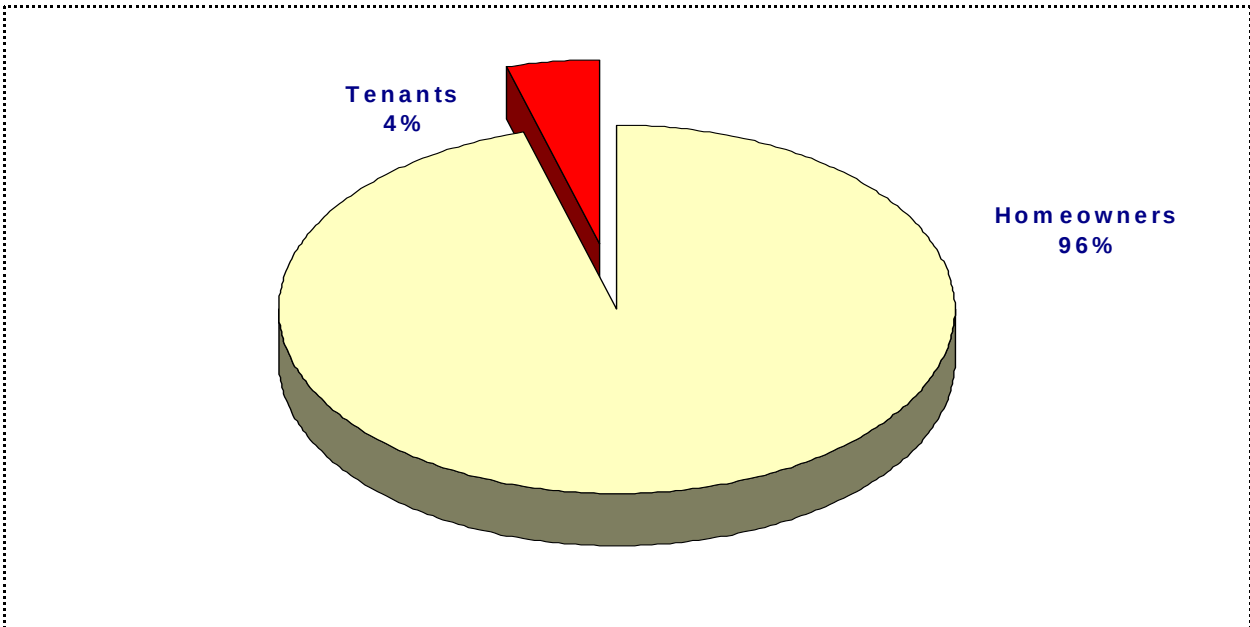


Figure 3
Distribution of Renovation Expenditures According to Tenure in Québec, 1996 (%)

While a good number of tenant households do renovate their homes, they spend only small amounts of money and, as a result, the total renovation expenditure by this group is negligible. The study shows that in 1996 renovation spending in Québec reached \$4.9 billion. Of this amount, \$4.7 billion, or 96% of total expenditures, was spent by homeowners; leaving a mere \$200 million attributable to tenants.

Figure 3 clearly shows that residential renovation activity in Québec is mainly the concern of homeowners. Moreover, given that households spending less than \$100 account for only a small part of total home renovation expenditures (only a few million dollars), **the remainder of the study will focus exclusively on homeowner households that invest \$100 or more in renovations.** Accordingly, the term “homeowners who renovate” will refer to these households.

Homeowner Households That Renovate

This section describes homeowners who renovate based on various socioeconomic characteristics. As the analysis is bivariate only, it does not presume to identify precisely the determining factors underlying the presence of households on the renovation market. The purpose is to sketch a portrait of the renovator.

Age of Household Maintainer

It is often said that the “life cycle” of a household is an important factor in explaining its renovation needs. The age of the household maintainer is a telling variable in this regard as it allows a household’s evolution and the various stages it goes through during its “life cycle” to be identified.

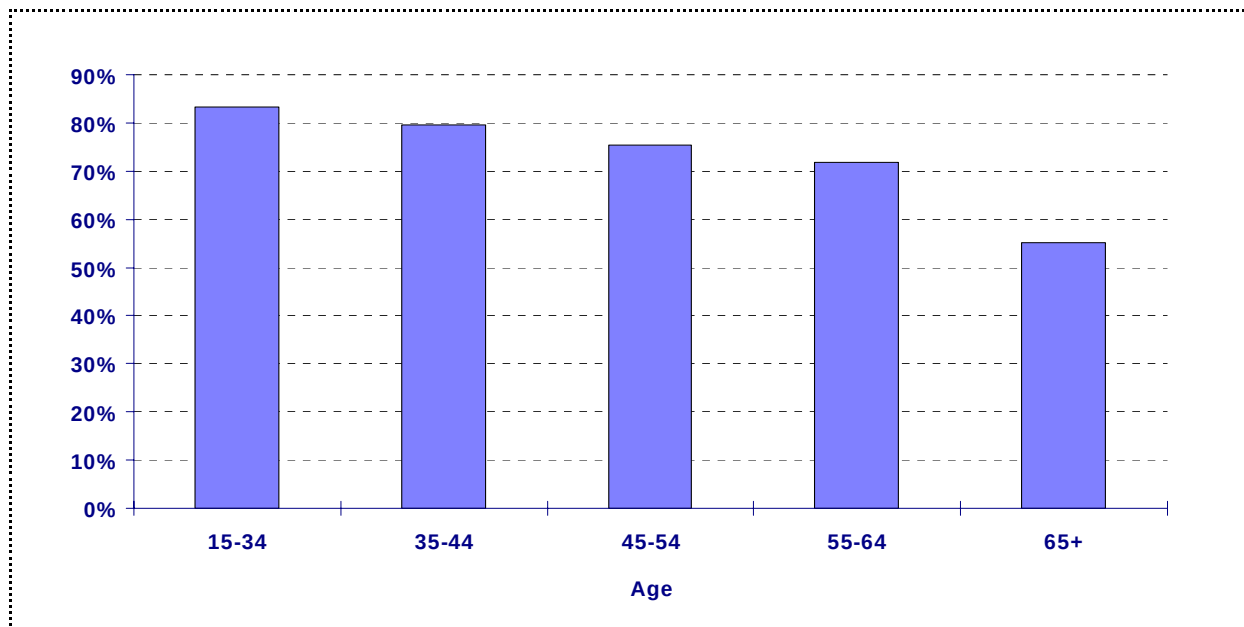


Figure 4
Proportion of Homeowner Households That Renovate According to Age of Household Maintainer
in Québec, 1996 (%)

Figure 4 shows homeowner behaviour according to the age of the homeowner household maintainer. It can be seen that the percentage of households that renovate tends to decrease according to the age of the maintainer: the older the maintainer, the lower the percentage. At the high end of the range, 83% of households whose maintainer is 15 to 34 years of age renovate, while at the low end, 55% of households whose maintainer is 65 years of age and older renovate.

In effect, the percentage decreases progressively until age 65. Overall, it decreases from 83% for households whose maintainer is 15 to 34 years of age, to 79% for households whose maintainer is 35 to 44 years old, then to 75% for households whose maintainer is 45 to 54 years old, down to 72% for households whose maintainer is aged 55 to 64. At retirement age, the percentage drops to 55%.

Region

An examination of homeowner households that renovate according to region (Figure 5) shows that the propensity to renovate varies little from one region to another. The respective percentages are 73% for the Montréal CMA, 76% for the Québec City CMA and 75% for the rest of Québec.

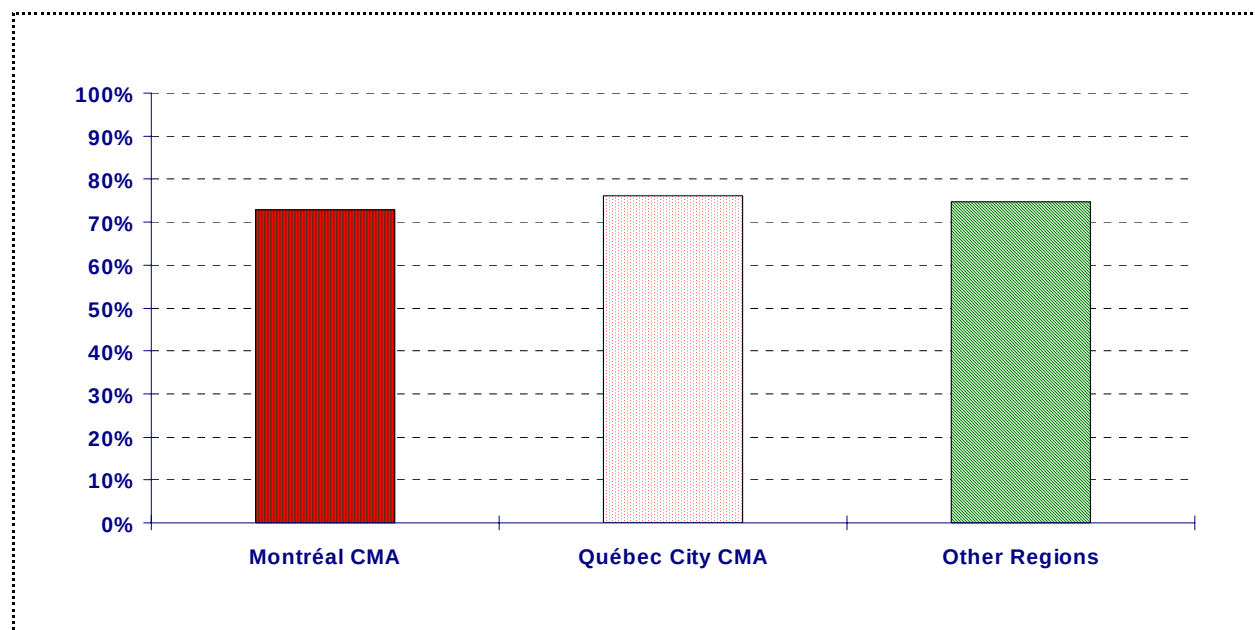


Figure 5
Proportion of Homeowner Households That Renovate According to Region of Québec, 1996 (%)

Level of Education

The higher the level of education, the greater the propensity to renovate among homeowner households. Table 1 illustrates this tendency. The propensity to renovate among homeowners having attended primary school is 62%, while nearly four out of five homeowners who attended college or university completed renovation work.

Table 1
Proportion of Homeowner Households That Renovate According to Level of Education in Québec, 1996 (%)

Level of Education	Renovate	Do Not Renovate
Primary School	62	38
Secondary School	72	28
College	79	21
University	78	22
Total	74	26

Income

In terms of income and the propensity to renovate, households fall into two groups. Table 2 shows that modest income households, i.e., homeowners whose income is less than \$30,000, have a propensity to renovate of 62% to 65%; whereas the propensity among homeowners whose income is over \$30,000, is around 80%.

Table 2
Proportion of Homeowner Households That Renovate According to Income
in Québec, 1996 (%)

Income (\$)	Renovate	Do Not Renovate
Less than 10,000	62	38
10,000 - 19,999	65	35
20,000 - 29,999	64	36
30,000 - 39,999	80	20
40,000 - 49,999	81	19
50,000 - 59,999	85	15
60,000 - 79,999	77	23
80,000 - 99,999	79	21
100,000 or more	88	12
Total	74	26

Household Size

The larger the household, the greater the propensity to renovate. As shown in Table 3, the percentage of homeowners who renovate follows an even progression relative to household size. The propensity to renovate according to this variable ranges from 64% in the case of single person households to 85% in the case of households composed of 5 or more members.

Table 3
Proportion of Homeowner Households That Renovate
According to Household Size in Québec, 1996 (%)

Household Size	Renovate	Do Not Renovate
1 member	64	36
2 members	69	31
3 members	77	23
4 members	81	19
5 or more members	85	15
Total	74	26

Dwelling Value

Because the value of a dwelling is often related to a household's income, there is an assumption that the owners of more expensive houses are more inclined to renovate. Table 4 confirms this in part. In the case of dwellings valued at under \$75,000, the propensity of homeowners to renovate is less than 75%. The propensity is 69% among those whose dwellings are valued at under \$50,000 and 72% among those whose dwellings are worth \$50,000 to \$74,999. In the case of dwellings valued at \$75,000 or more, the propensity to renovate is 75% and over. No clear trend can be observed, however, within this last group. As in the case of income, the value of the dwelling with respect to renovation activity appears to divide homeowners into two groups.

Table 4
Proportion of Homeowner Households That Renovate
According to Dwelling Value in Québec, 1996 (%)

Dwelling Value (\$)	Renovate	Do Not Renovate
Less than 50,000	69	31
50,000 - 74,999	72	28
75,000 - 99,999	78	22
100,000 - 124,999	76	24
125,000 - 149,999	80	20
150,000 - 199,999	81	19
200,000 or more	75	25
Total	74	26

Occupancy Period

The propensity to renovate among homeowners increases as the occupancy period becomes shorter. Thus, Table 5 shows a much higher renovation rate among homeowners with a short occupancy period. For example, homeowners who occupy their dwellings for less than 6 years show a propensity to renovate of 80%. At the other end of the spectrum, only two out of three homeowners (66%) who occupy their dwelling for over 20 years renovate.

Table 5
Proportion of Homeowner Households That Renovate
According to Occupancy Period in Québec, 1996 (%)

Occupancy Period	Renovate	Do Not Renovate
0 - 5 years	80	20
6 - 10 years	76	24
11 - 20 years	74	26
21 years or more	66	34
Total	74	26

Year of Construction

Contrary to a number of the other variables examined, a dwelling's year of construction does not exert any particular influence on the propensity of homeowners to renovate. Hence, households will renovate in order to make changes to their dwelling regardless of its age. Table 6 illustrates this finding.

The owners of older homes are just as inclined to renovate as those who own homes of more recent construction. The propensity of homeowners to renovate is 74% for dwellings built before 1947, 75% for those built from 1967 to 1976 and 76% for those built since 1987.

Table 6
Proportion of Homeowner Households That Renovate
According to Year of Construction in Québec, 1996 (%)

Year of Construction	Renovate	Do Not Renovate
1987 - 1996	76	24
1977 - 1986	79	21
1967 - 1976	75	25
1947 - 1966	72	28
Before 1947	74	26
Total	74	26

In short, households that renovate are most often headed by middle-aged educated homeowners with higher incomes and they tend to be larger in size than average. While the year of construction of a dwelling does not affect the propensity to renovate, the occupancy period plays a determining role.

RENOVATION EXPENDITURES

Given that a primary concern of this study is to better understand the economic activities related to residential renovation, the amount spent on renovations is of major importance. Thus, the remainder of the analysis will focus primarily on the monetary value of renovation work rather than on its frequency.

In 1996, Québec homeowner households spent a total of \$4.7 billion on renovation work. How was this amount distributed in terms of various socioeconomic characteristics of households and types of expenditures?

Homeowner Households and Renovation Expenditures

Figure 6 shows the distribution of homeowner households and that of renovation expenditures according to the level of renovation expenditures. It can be seen that the number of homeowners is relatively the same in each of the renovation expenditure levels. However, the major part of total renovation expenditures is related to renovations costing over \$5,000.

Less than one in five households (16%) account for more than two thirds (69%) of total renovation expenditures. Hence, most renovation spending is generated by a small number of homeowners each investing substantial sums on major renovations⁴.

⁴ When all households including homeowners and tenants are taken into consideration, it is found that 9% of households account for 67% of renovation expenditures.

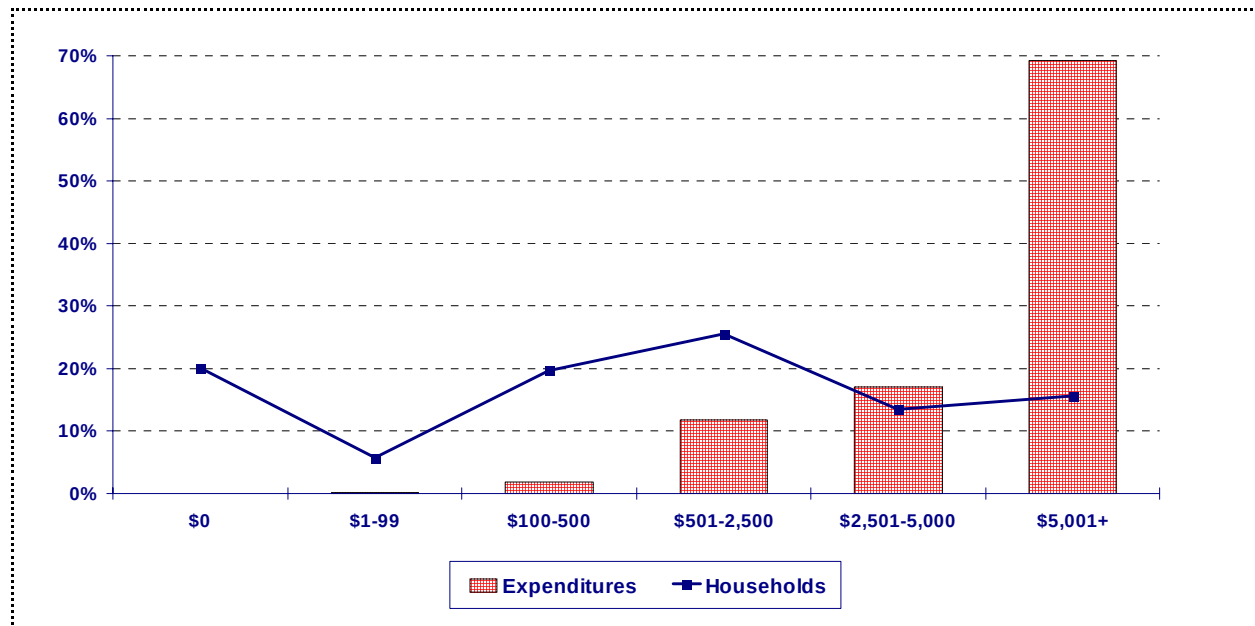


Figure 6
Distribution of Homeowner Households and Total Expenditures According to Level of Renovation Expenditures in Québec, 1996 (%)

Average Renovation Expenditure and Age of Household Maintainer

It is often said that household life cycle is a variable that should not be overlooked when explaining renovation needs. In this regard, the age of the household maintainer may be an important factor. Figure 7 illustrates this point.

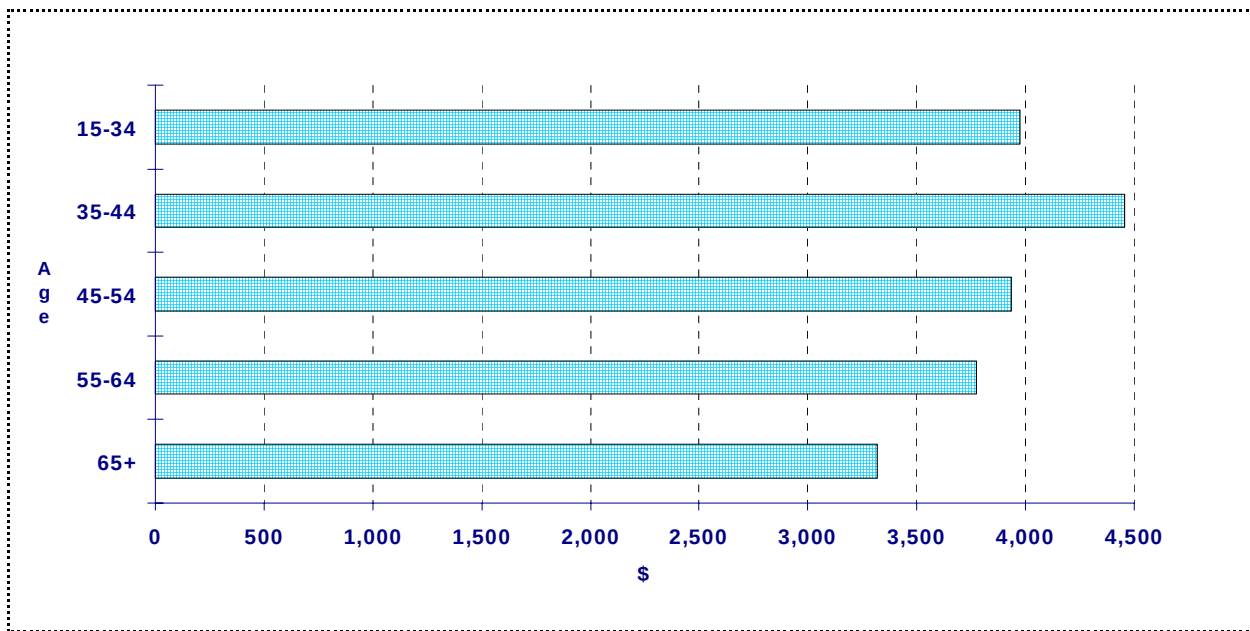


Figure 7
Average Renovation Expenditure According to Age of Owner Household Maintainer Who Renovates in Québec, 1996 (\$)

If the household maintainer is aged 35 or more, it is found that, with regard to households that renovate, the average renovation expenditure decreases as the age of the household maintainer increases. Even though the renovation rate for homeowners 35 to 44 years of age is slightly less than for those aged 15 to 34 (see Figure 4), it can be seen that the older group spends more on renovations. Their average expenditure is the highest (\$4,457) of the five age groups.

A steady decrease in spending according to the age of the household maintainer follows. Households that renovate whose maintainer is 45 to 54 years old spend an average of \$3,935. For those aged 65 and over, the average renovation expenditure is only \$3,318. In short, the older we are, the less often we renovate and when we do renovate, we spend less.

Region

The study also found that households that renovate are distributed evenly throughout Québec (see Figure 5). It is first useful to note the macroeconomic importance of renovation activity in the various regions of Québec. Figure 8 shows that 40% of renovation expenditures occurs in the Montréal CMA (\$1.9 billion) while 10% occurs in the Québec City CMA (\$0.5 billion).

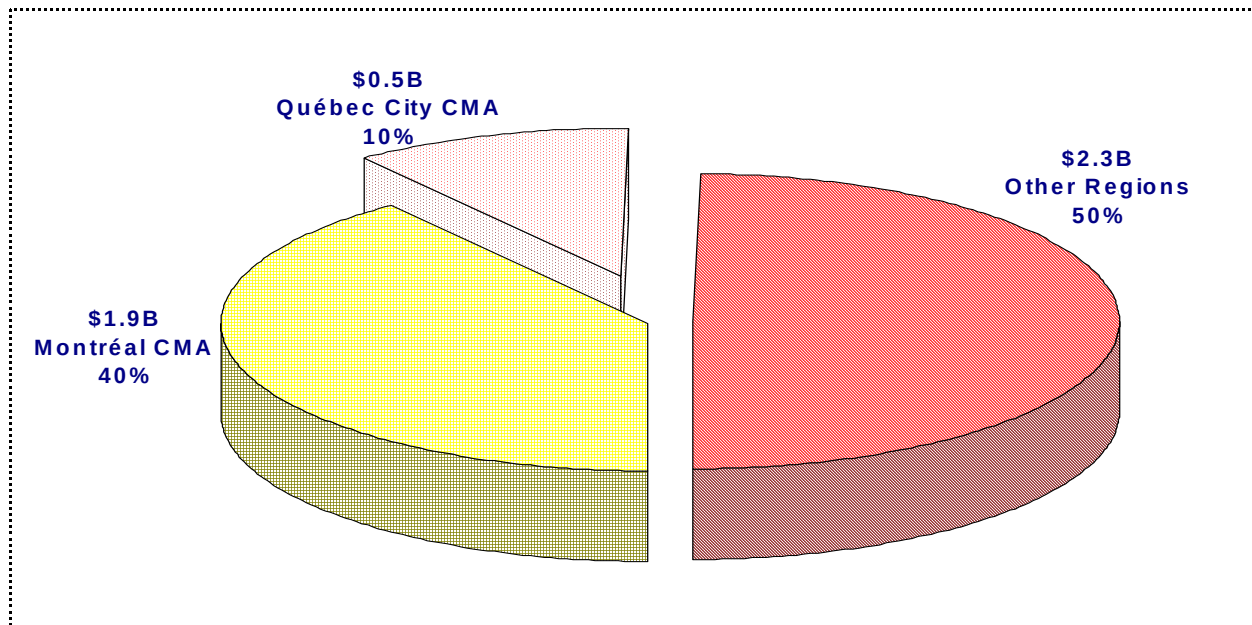


Figure 8
Distribution of Homeowner Renovation Expenditures According to Region in Québec, 1996 (\$ Billions)

It can thus be seen that spending on residential renovation is divided evenly between the two major urban areas combined and the rest of Québec where renovation expenditures are approximately \$2.3 billion.

The average renovation expenditure per household that renovates allows us to discern regional variations. As can be seen in Figure 9, the average expenditure per household that renovates is highest in the Québec City CMA where it reaches \$4,397. In the Montréal CMA, the average renovation expenditure is \$4,102 and in the rest of Québec it drops to \$3,846.

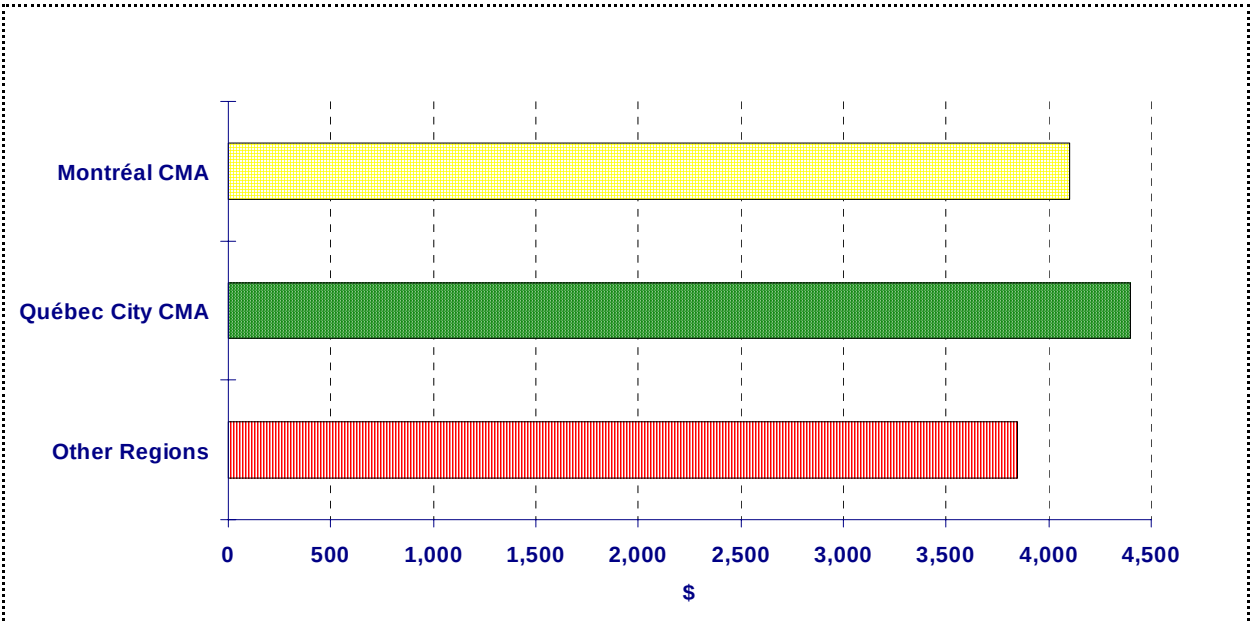


Figure 9
Average Renovation Expenditure Per Homeowner Household That Renovates
According to Region in Québec, 1996 (\$)

Type of Renovation Work

The distribution of expenditures according to type of renovation work (Figure 10) shows that “renovations-alterations-improvements” work accounts for 33% of all work, or \$1.5 billion, followed closely by “additions-expansions-landscaping” work which accounts for 31% of all expenditures (\$1.4 billion). Next, “equipment replacement-new installations” work accounts for 21% of renovation activity and entails expenditures of \$1 billion. Finally,

“repairs-maintenance” work accounts for 15% of activity and entails expenditures of nearly \$700 million.

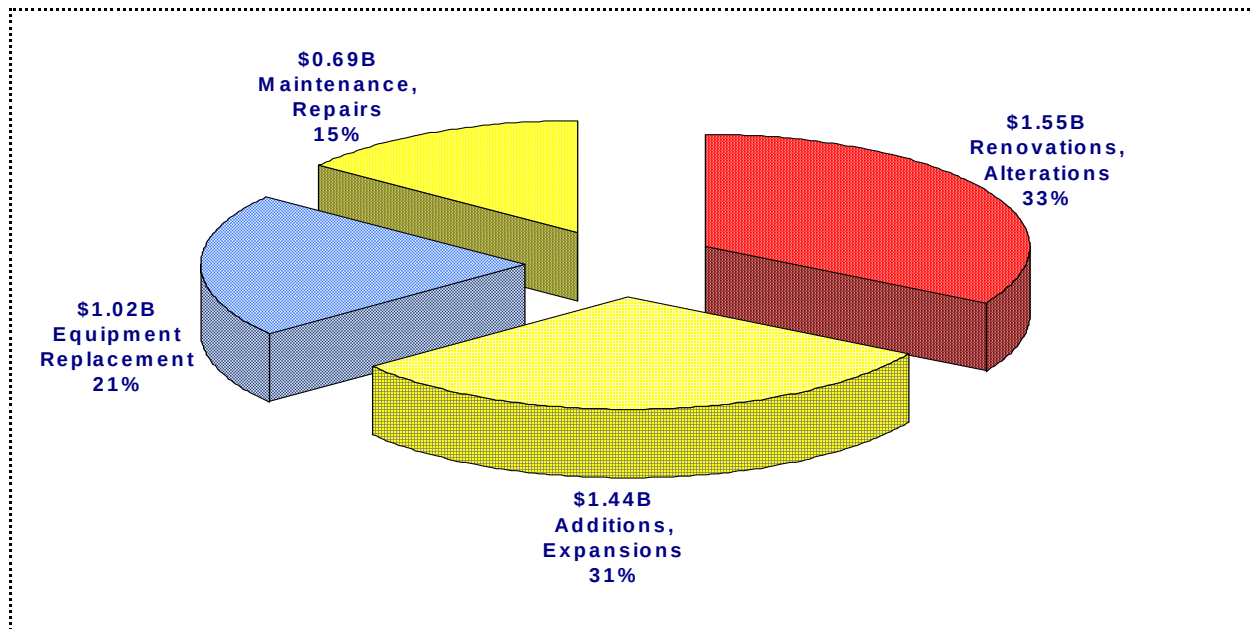


Figure 10
Distribution of Homeowner Renovation Expenditures According to Type of Work in Québec, 1996 (%)

Within the framework of a general analysis of renovation expenditures, it is also useful to take a look at spending on a per-project basis. An examination of projects, as listed in Appendix 2, provides a detailed picture of the nature and importance of renovation activity. Using this categorization, it can be seen that each household that renovates carries out, on average, 2 to 3 projects a year.

Furthermore, Figure 11 shows the average expenditure per renovation project according to the type of work performed. The highest expenditure per project, \$2,724, is for “renovations-alterations-improvements” work. The average expenditure per project for “additions-expansions-landscaping” work is \$2,243.

As for “equipment replacement-new installations” work, the average expenditure per project is \$2,278, while the average expenditure per project for “repairs-maintenance” work is \$651.

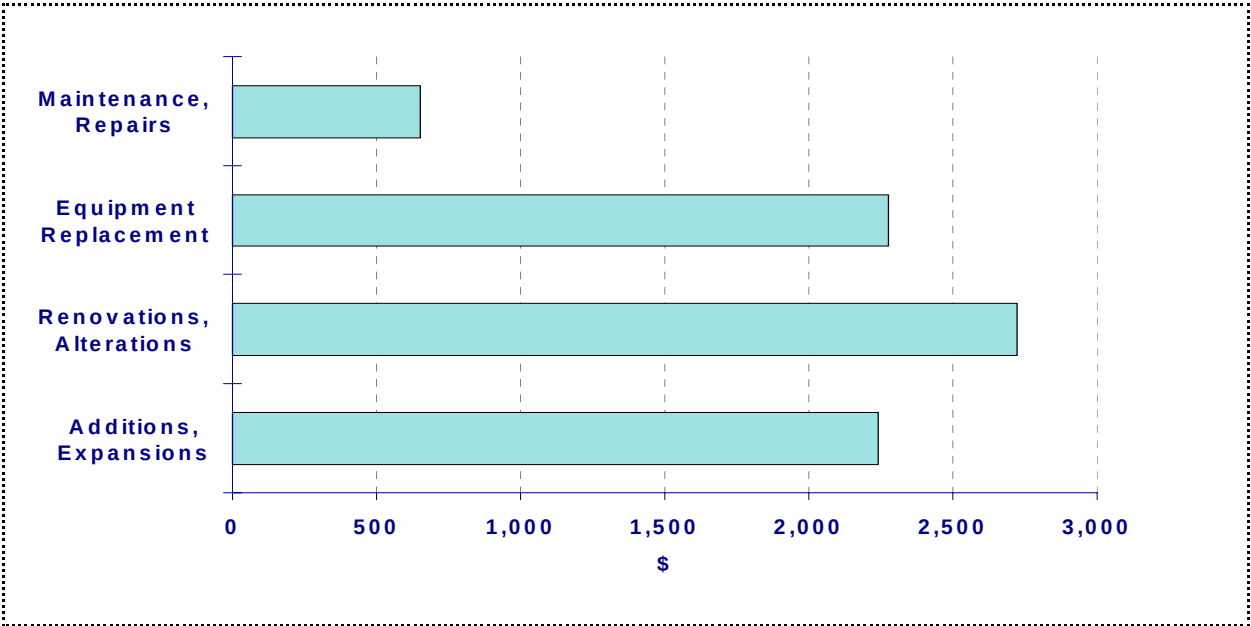


Figure 11
Average Expenditure by Homeowner Households Per Renovation Project According to Type of Work in Québec, 1996 (\$)

Expense Category (Contracting vs. Materials)

In order to discern the “supply side” of the renovation market, households were asked to divide their renovation spending into two expense categories: materials and contracting. The contracting category covers work performed by contractors, whether of a general or specialized nature, and work performed by professionals.

Figure 12 illustrates the distribution of total expenditures according to these two categories. It was found that just over half of total expenditures (53% or \$2.5 billion) goes to materials, while 47% or \$2.2 billion goes to contracting.

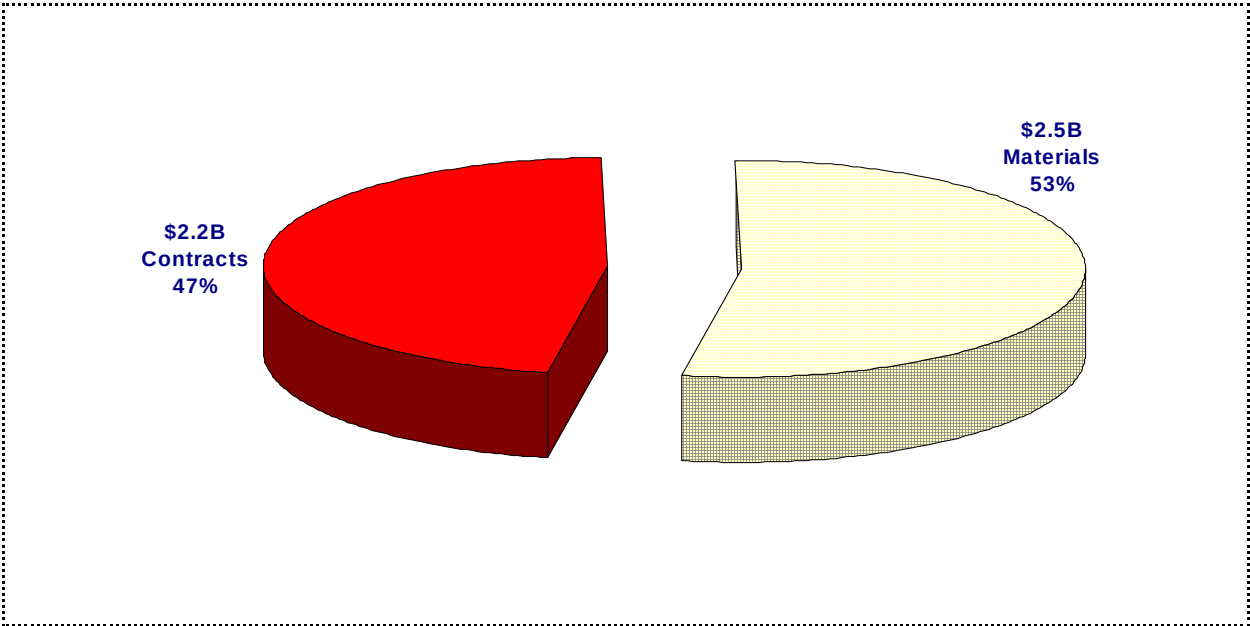


Figure 12
Distribution of Homeowner Renovation Expenditures According to Expense Category in Québec, 1996 (\$ Billions)

This information is useful in that it corrects an overly common assertion, namely that 75% of renovation activity is performed without hiring a third party (contractor or professional). It is true that if the analysis was limited to a simple counting of renovation projects, it would be found that the large majority of renovations are performed without the help of professionals in the sector. As Figure 12 shows, however, the situation is quite different when expenditures are taken into account.

Still looking at the situation in terms of projects, when the average renovation expenditure per expense category is taken into account, it can be seen that the amount spent on contracting is twice the amount spent on materials. As Figure 13 shows, the average

expenditure per contract is \$2,286 while the average value of materials purchased is \$1,185.

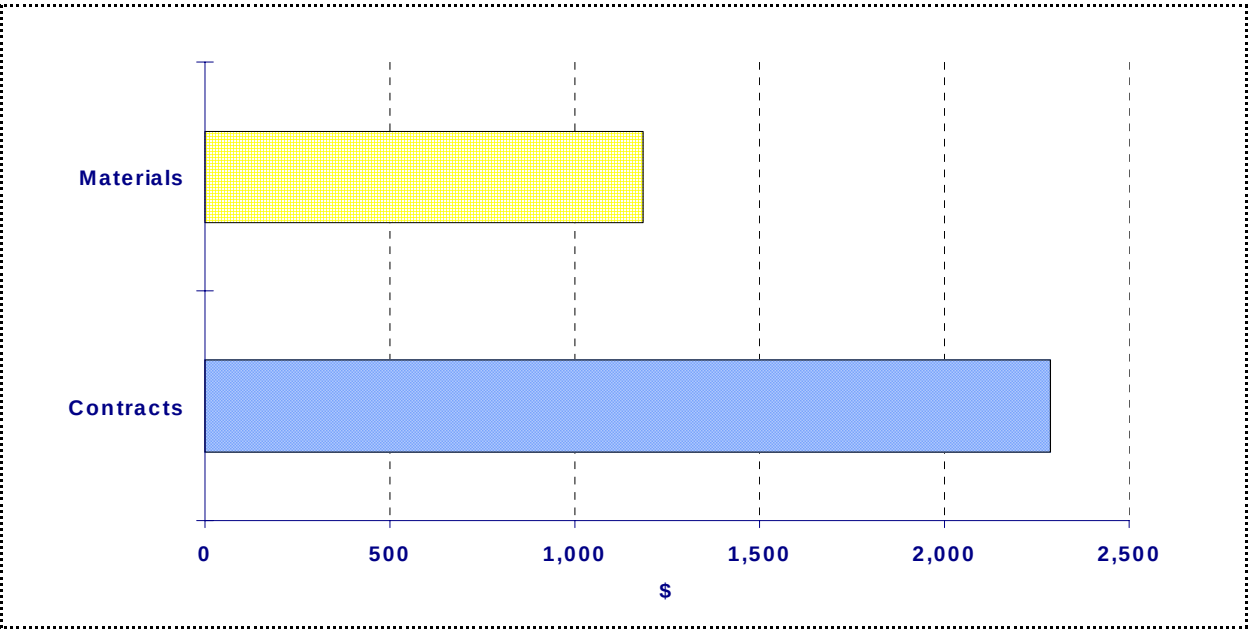


Figure 13
Average Expenditure by Homeowner Households Per Renovation Project According to Expense Category in Québec, 1996 (\$)

This overview of the “expenditure” aspect of residential renovation shows, on the one hand, that the largest part of expenditures involves mainly work valued at \$5,000 or more carried out by a small number of homeowners. On the other hand, the average renovation expenditure decreases with age. As far as geographical distribution is concerned, the average expenditure in the Québec City CMA is somewhat higher than that in the Montréal CMA, and also than that in the Other Regions of Québec combined.

In terms of type of work, the “renovations-alterations-improvements” expenditures are slightly higher than the “additions-expansions-landscaping” expenditures. These two types of work account respectively for 33% and 31% of all renovation spending. Moreover, “renovations- alterations-improvements” work also ranks first in terms of average expenditure. Finally, contracting and materials expenditures are more or less equal in terms of total spending. However, contracting accounts for double the amount in terms of average expenditure per renovation project.

NATURE OF RESIDENTIAL RENOVATION EXPENDITURES

It is now useful to take a closer look at renovation expenditures in terms of types of work and expense categories. A number of factors will be considered and this more detailed examination will focus on various aspects related to the demand for renovations.

Types of Work

As stated previously, homeowner households in Québec spent a total of \$4.7 billion on renovations. This amount is divided according to four types of work. Each of these types of work has a number of characteristics which should be considered.

Main Renovation Projects⁵

Under the category “renovations–alterations–improvements” work, the largest expenditures are for *exterior windows* (\$338 million), *adding insulating materials* (\$230 million) and *remodeling bathrooms* (\$225 million). These projects alone account for 50% of expenditures for this type of work. The projects carried out under “additions-expansions-landscaping” work consist mainly of *landscaping* (\$415 million) *adding terraces, patios and gazebos* (\$157 million), and *putting in driveways and walkways* (\$114 million).

Under “equipment replacement-new installations” work, the main projects are *roof repair* (\$313 million) and *laying floor covering* (\$228 million). Finally, “repair-maintenance” work comprises for the most part a whole series of small maintenance projects.

⁵ Projects for which only a small amount of data was collected have been excluded owing to the much lower reliability of the statistics compiled.

Table 7 provides a summary of the principal renovation projects as well as total and average expenditures for each type of project.

Table 7
Main Home Renovation Projects According to Type of Work in Québec, 1996 (\$)

Type of Work	Expenditures (Millions)	Average Expenditure
Renovations, Alterations		
Exterior windows	338	3,777
Adding insulating materials	230	3,451
Remodeling bathroom	225	3,847
Additions, Expansions		
Landscaping	415	1,421
Terrace, patio, gazebo	157	2,205
Driveway, walkway	114	2,187
Equipment Replacement		
Repairing roof	313	4,136
Other types of floor covering	228	2,830

Distribution of Expenditures by Region

An examination of renovation expenditures by region according to type of work completed, shows that the largest expenditure is for “renovations-alterations-improvements” work in the “Other Regions” where spending on this type of work amounts to \$757 million (see Figure 14). This is followed by expenditures for “additions-expansions-landscaping” work

which total \$717 million. In the Montréal CMA, “renovations-alterations-improvements” work also ranks first reaching \$629 million. Next comes “additions-expansions-landscaping” work which totals \$561 million.

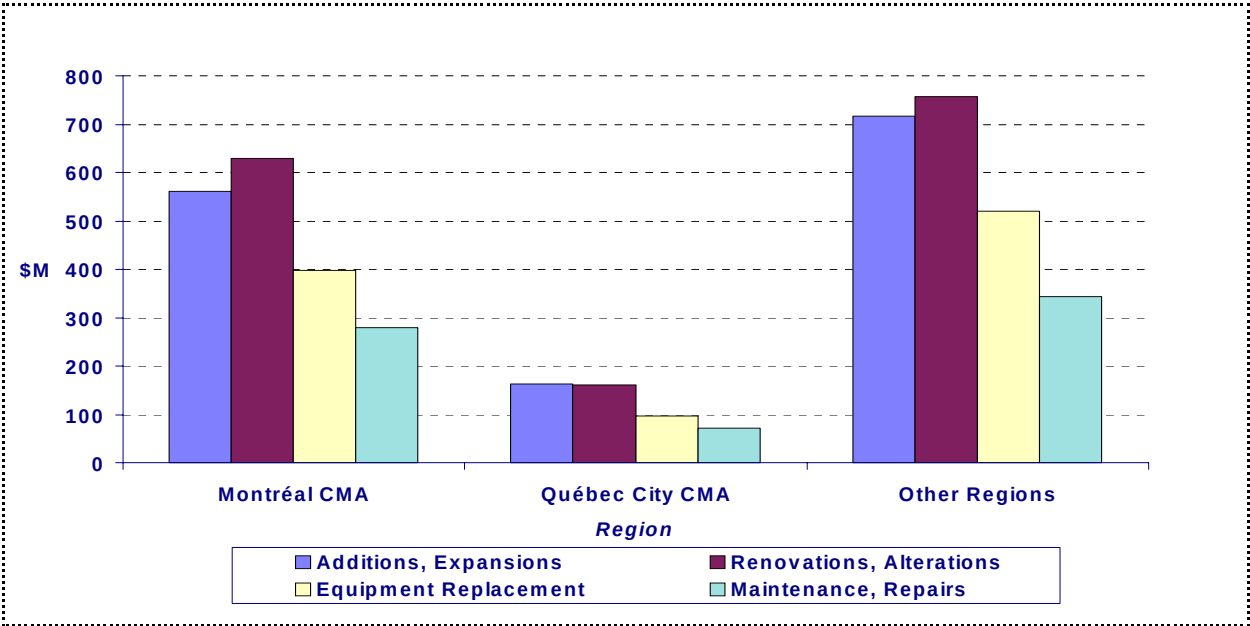


Figure 14
Distribution of Homeowner Renovation Expenditures According to Type of Work and Region in Québec, 1996 (\$ Millions)

Total spending in the “Other Regions” on “equipment replacement-new installations” work reaches \$520 million, while spending on “repairs-maintenance” work totals \$341 million.

In all three regions, “renovations-alterations-improvements” work ranks first in terms of dollars spent, while “repairs-maintenance” work ranks last.

An examination of the average expenditure per household that renovates allows us to distinguish regional differences with regard to renovation. Figure 15 illustrates that the two highest average expenditures per household are in the Québec City CMA for “additions-

expansions-landscaping” work (\$1,456 per household) and “renovations-alterations-improvements” work (\$1,441). Next in order of dollars spent is “renovations-alterations-improvements” work in the Montréal CMA (\$1,382 per household) and in the Other Regions (\$1,247 per household).

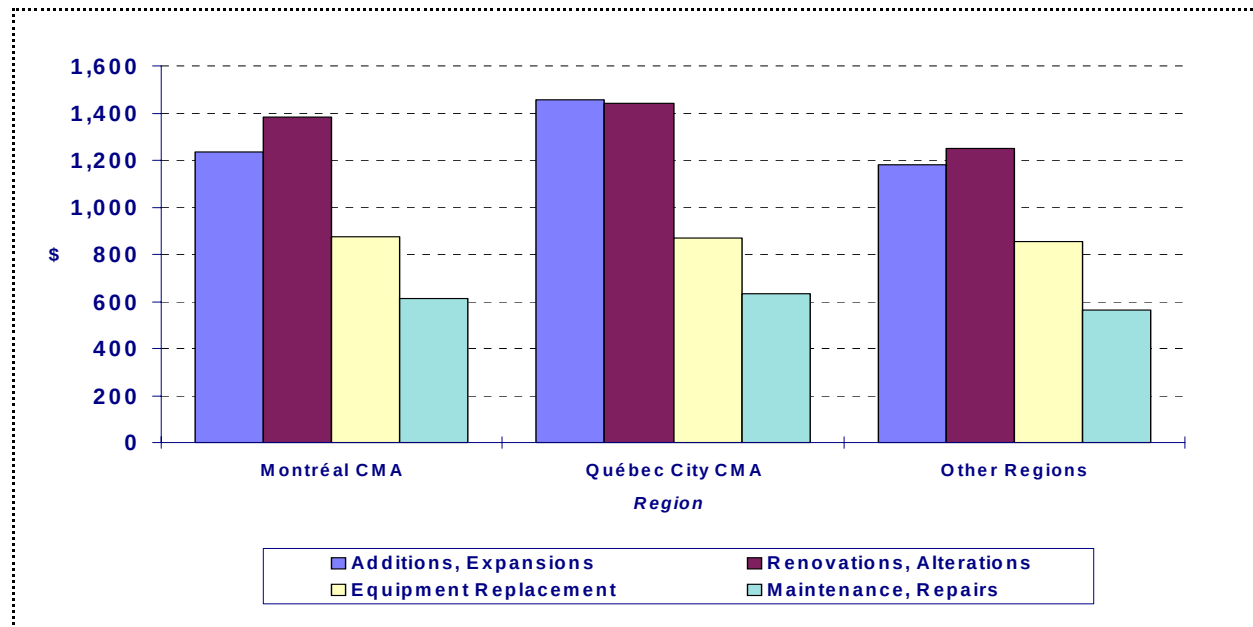


Figure 15
Average Renovation Expenditure Per Household that Renovates According to Type of Work and Region of Québec, 1996 (\$)

The average renovation expenditure per household that renovates for the two other types of work examined is substantially lower and quite similar in all three regions.

Year of Construction

The year of construction is a variable often associated with renovation activity. As previously mentioned, it is not a determining factor in one's decision to renovate - households will renovate regardless of whether their home is of recent or older construction. Does the year of construction, however, have an influence on the level of renovation expenditures? The following examines this aspect.

Table 8 shows the distribution of the amounts spent on each type of work according to the year of construction, as well as the distribution of homeowner households according to this variable.

Table 8
Distribution of Homeowner Households and Renovation Expenditures by Type of Work
According to Year of Construction in Québec, 1996 (%)

YEAR OF CONSTRUCTION	HOUSEHOLDS	RENOVATIONS				
		TOTAL EXPENDITURES	TYPE OF WORK			
			Additions Expansions	Renovations Alterations	Equipment Replacement	Maintenance Repairs
Total	100.0	100.0	100.0	100.0	100.0	100.0
1987 - 96	21.5	17.0	27.5	9.6	11.9	18.5
1977 - 86	19.7	19.9	19.7	21.3	19.1	18.4
1967 - 76	19.9	23.2	23.8	24.1	23.6	19.1
1947 - 66	21.7	19.0	13.5	20.3	22.5	22.8
Before 1947	17.2	20.9	15.5	24.7	22.9	21.2

The distribution of renovation expenditures (totaling \$4.7 billion) differs slightly from the distribution of homeowner households according to the year of construction of their dwellings. Renovation expenditures for recently built homes (1987-1996) account for only 17.0% of total spending, while this category makes up 21.5% of the housing stock. Moreover, the percentage of expenditures is noticeably higher than the percentage of

homeowners for dwellings built from 1967 to 1976 (23.2% compared to 19.9%) and prior to 1947 (20.9% compared to 17.2%). Thus, while no clear pattern can be detected, differences can be observed in the distribution of total renovation expenditures according to the year of construction.

The analysis can be taken one step further by examining the distribution of spending according to the different types of work. Here, the differences are greater. Homes built since 1987, making up 21.5% of the housing stock, account for 27.5% of additions, expansions and landscaping work, but only 9.6% of renovations and alterations work and 11.9% of equipment replacement work. Furthermore, an examination of spending related to these recent dwellings shows that additions, expansions and landscaping work account for half of total renovation expenditures for these houses.

Conversely, older houses built before 1977 and constituting 58.8% of the housing stock, account for only 52.8% of expenditures for additions, expansions and landscaping work, but are responsible for 69.1% of expenditures for renovations and alterations work and 68% of expenditures for equipment replacement.

We can conclude that, from the point of view of the household, recently built homes require mostly additions, expansions and landscaping work, whereas older homes require renovations, alterations and equipment replacement work. Maintenance work shows little variation relative to the age of dwellings.

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Occupancy Period

We recall that the propensity to renovate among homeowners decreases according to occupancy period: the longer the occupancy, the less the propensity to renovate.

While this is the case regarding the number of homeowners who renovate, is it also the case for the amount of renovation expenditures? Do expenditures decrease when the occupancy period increases?

Table 9 shows the distribution of homeowner households and expenditures by type of work according to occupancy period.

Table 9
Distribution of Homeowner Households and Renovation Expenditures by Type of Work According to Occupancy Period in Québec, 1996 (%)

OCCUPANCY PERIOD	HOUSEHOLDS	RENOVATIONS				
		TOTAL EXPENDITURES	TYPE OF WORK			
			Additions Expansions	Renovations Alterations	Equipment Replacement	Maintenance Repairs
Total	100.0	100.0	100.0	100.0	100.0	100.0
0 - 5 years	30.8	36.2	41.6	33.0	32.8	37.3
6 - 10 years	20.9	24.7	29.5	23.0	23.8	19.6
11 - 20 years	23.9	20.9	17.4	23.6	20.1	23.0
21 years +	24.4	18.2	11.5	20.4	23.3	20.1

A significant proportion of homeowners (30.8%) is characterized by a short occupancy period (0 to 5 years), yet this group accounts for an even higher share of expenditures (36.2%). In effect, the percentage of renovation expenditures decreases as the occupancy period increases.

For dwellings whose occupancy period is 6 to 10 years, the percentage of renovation expenditures is higher than their percentage of the total housing stock (24.7% compared to 20.9%). For dwellings whose occupancy period is 11 to 20 years, the situation is the reverse: although constituting 23.9% of the housing stock, they account for only 20.9% of renovation expenditures. The difference becomes even greater for dwellings occupied over 20 years: renovation expenditures account for only 18.2% of total renovation spending whereas these dwellings include 24.4% of the housing stock.

This same trend is seen when looking at expenditures according to type of work. The greatest difference involves additions, expansions and landscaping work: 41.6% of expenditures are for recently occupied dwellings, which make up only 30.8% of the housing stock; and only 11.5% of these expenditures are for dwellings occupied over 20 years (24.4% of the housing stock).

In short, renovation expenditures are closely related to the length of time homeowners occupy their dwellings. This situation would seem to reflect the number of years it takes households to adapt their homes to suit their own tastes and requirements. Given this observation, however, the relationship between the age of the household maintainer and the willingness to undergo change should not be underestimated.

Age of Household Maintainer

As previously discussed, the propensity to renovate decreases with age. How then does the age of the household maintainer influence renovation expenditures?

Table 10 shows the distribution of homeowner households and renovation expenditures by type of work according to age of the household maintainer.

When maintainers 18 to 34 years of age are excluded, renovation expenditures decrease with age. Households whose maintainer is aged 35 to 44 make up only 27.3% of total

households but account for 32.7% of expenditures, while households whose maintainer is aged 65 and over are responsible for only 9.7% of total expenditures although they constitute 15.8% of households.

Table 10
Distribution of Homeowner Households and Renovation Expenditures by Type of Work
According to Age of Maintainer in Québec, 1996 (%)

AGE OF MAINTAINER	HOUSEHOLDS	RENOVATIONS				
		TOTAL EXPENDITURES	TYPE OF WORK			
			Additions Expansions	Renovations Alterations	Equipment Replacement	Maintenance Repairs
Total	100.0	100.0	100.0	100.0	100.0	100.0
Age 15 - 34	18.4	20.5	20.8	22.4	18.1	19.2
Age 35 - 44	27.3	32.7	43.9	27.3	26.8	29.7
Age 45 - 54	21.8	21.8	17.9	23.1	24.6	22.8
Age 54 - 64	16.7	15.3	12.7	13.5	19.3	19.2
65 years+	15.8	9.7	4.7	13.7	11.2	9.1

The distribution of expenditures for each type of work shows a pattern similar to that of total expenditures. However, the differences are much more pronounced for additions, expansions and landscaping work than for the other types of work. Thus, excluding the youngest household maintainers (18 to 34 years), we see that a large proportion of total expenditures for additions and expansions work (43.9%) is attributed to households whose maintainer is 35 to 44 years old. The table also shows that, even regarding expenditures for maintenance and repair work, the elderly spend considerably less and account for only 9.1% of total spending.

It can be seen, therefore, that the age of the household maintainer is an important factor with respect to a household's decision to renovate. This should not be that surprising given that an older household is probably less likely to undertake major modifications to its milieu than to maintain the quality of the dwelling and, when necessary, adapt it according to its

new needs. Life cycle appears to be an important factor in explaining a household's propensity to renovate and the amount of money it is willing to spend on renovations.

Dwelling Value

The value of the dwelling has also been shown to have an influence on renovation activity. An analysis of this factor shows that the propensity to renovate is greater among the owners of more expensive homes. How is this trend reflected in terms of dollars spent?

Table 11 shows the distribution of homeowner households and renovation expenditures by type of work according to dwelling value.

Table 11
Distribution of Homeowner Households and Renovation Expenditures by Type of Work According to Dwelling Value in Québec, 1996 (%)

DWELLING VALUE (\$000)	HOUSEHOLDS	RENOVATIONS				
		TOTAL EXPENDITURES	TYPE OF WORK			
			Additions Expansions	Renovations Alterations	Equipment Replacement	Maintenance Repairs
Total	100.0	100.0	100.0	100.0	100.0	100.0
Less than 50	11.1	8.9	9.2	7.8	11.7	7.1
50 - 74	22.8	23.0	19.8	25.4	24.3	21.8
75 - 99	25.4	22.2	19.6	26.1	20.2	21.6
100 - 124	18.2	17.2	15.4	15.0	21.1	20.1
125 - 149	9.1	10.7	14.4	7.9	10.5	9.4
150 - 199	9.1	12.3	17.7	10.8	6.9	12.8
200 or more	4.3	5.7	3.9	7.0	5.3	7.2

With regard to total households, we see that owners of dwellings worth less than \$125,000 spend proportionally less; although they constitute 77.5% of homeowners, their spending accounts for only 71.3% of total expenditures. Conversely, the most expensive homes make up 22.5% of the housing stock but account for 28.7% of total expenditures.

The above-mentioned trends characterizing the distribution of households and total renovation expenditures are generally applicable to each of the types of work. The share of expenditures for renovations and alterations is notable, however, in that homes priced from \$50,000 to \$99,999 generate a proportion of spending (51.5%) which is slightly higher than their percentage of the housing stock (48.2%).

In summary, this section of the study shows that the most important type of renovation projects in terms of dollars spent are landscaping, exterior windows, and roof repair and that the highest average renovation expenditures occur in the Québec City CMA. When the year of construction is taken into account, spending on additions, expansions and landscaping is higher in the case of recently built homes. Expenditures for renovations and alterations are the highest in the case of older homes. With regard to occupancy period, the longer the period, the less the amount spent on renovation work. When occupancy is less than 6 years, renovation spending involves mainly additions, expansions and landscaping. Finally, when the dwelling value is higher, households tend to spend more on renovation work.

Expense Category

It was previously mentioned that contracting expenditures constituted 47% of total renovation expenditures compared to 53% for materials. What are the main renovation projects related to each expense category?

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Main Renovation Projects

Previously, a number of renovation projects entailing substantial expenditures were identified. Many of these projects remain equally significant in terms of expense category. Table 12 lists these projects as well as total and average expenditures ⁶.

Table 12
Main Home Renovation Projects According to Expense Category in Québec, 1996 (\$)

Expense Category	Expenditures (Millions)	Average Expenditure
Renovation Contracts		
Exterior windows	241	3,998
Repairing roof	226	4,187
Adding insulating materials	129	6,859
Other types of floor covering	124	3,306
Landscaping	123	1,894
Materials		
Landscaping	292	1,141
Remodeling bathroom	134	2,774
Finishing basement	112	2,600
Other types of floor covering	104	1,600
Adding insulating materials	101	1,862

⁶ The average expenditure for a given expense category is calculated in function of the number of projects for which the expense category is relevant. The sum of the average expenditures for contracting and for materials for a given project is thus different from the average total expenditure for the same project.

Exterior windows (\$241 million) and roof repairs (\$226 million) rank first in the contracting expense category, whereas landscaping (\$292 million) ranks first in the materials expense category.

Distribution of Expenditures by Region

Figure 16 shows the distribution of renovation expenditures according to region and expense category. As can be seen, the Montréal CMA accounts for the largest volume of contracting expenditures (\$1 billion), while the Other Regions account for the majority of materials expenditures (\$1.4 billion).

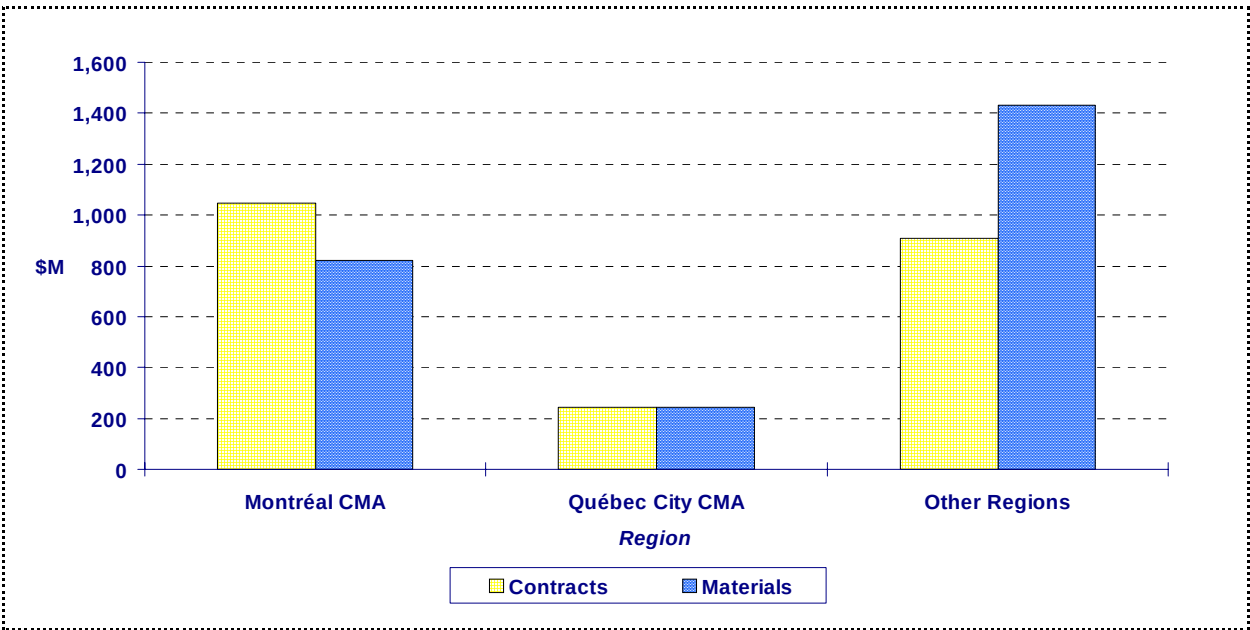


Figure 16
Distribution of Homeowner Renovation Expenditures According to Expense Category and Region of Québec, 1996 (\$ Millions)

As shown in Figure 17, the average expenditure per household for contracting (\$2,303) is highest in the Montréal CMA, while the average expenditure per household for materials is higher in the Other Regions. In the Québec City CMA, the average expenditures per household for contracting (\$2,205) and materials (\$2,192) are almost identical. Outside the two urban centres, the average expenditure per household for contracting (\$1,494) is much lower than that for materials (\$2,352).

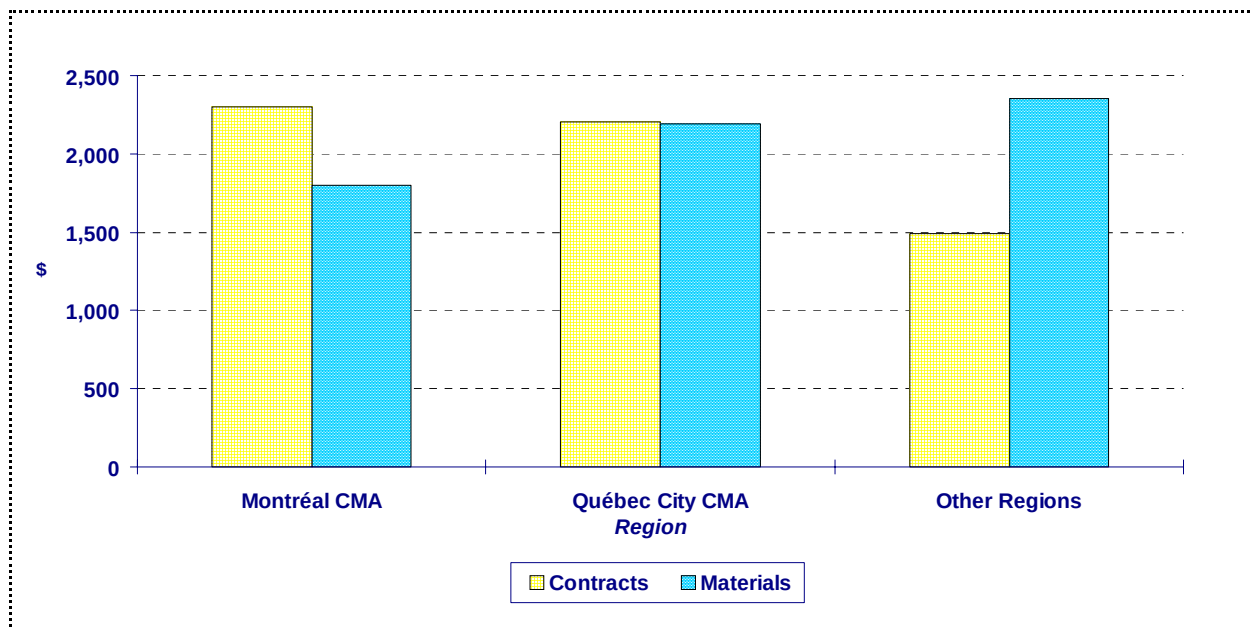


Figure 17
Average Renovation Expenditure Per Household That Renovates According to Expense Category and Region of Québec, 1996 (\$)

Year of Construction

We have seen that the age of a dwelling has little influence on a household's decision to renovate, but that it does affect the amount spent on some types of work. What impact does this factor have on the renovation expense category?

Table 13 shows the distribution of homeowner households and expenditures by expense category according to year of construction.

Table 13
Distribution of Homeowner Households and Renovation Expenditures
by Expense Category According to Year of Construction in Québec, 1996 (%)

YEAR OF CONSTRUCTION	HOUSEHOLDS	EXPENDITURES		
		TOTAL EXPENDITURES	EXPENSE CATEGORY	
			Contracts	Materials
Total	100.0	100.0	100.0	100.0
1987-1996	21.5	17.0	15.1	18.6
1977-1986	19.7	19.9	19.3	20.4
1967-1976	19.9	23.2	25.9	20.8
1947-1966	21.7	19.0	19.4	18.7
Before 1947	17.2	20.9	20.3	21.5

In comparing the proportion of contracting expenditures with the housing stock by year of construction, two construction periods are of interest. Houses built since 1987 account for only 15.1% of contracting expenditures but constitute 21.5% of the housing stock. Dwellings built from 1967 to 1976 account for 25.9% of contracting expenditures while including only 19.9% of the housing stock. Nonetheless, the data overall do not show a systematic correlation between the construction period and volume of contracting expenditures. This situation can also be observed with respect to the volume of expenditures for materials.

Occupancy Period

The longer the occupancy period, the less households tend to renovate. But is there a relationship between occupancy period and expense category? Are total contracting expenditures less for households with longer occupancy periods?

Table 14 shows the distribution of homeowner households and expenditures by expense category according to occupancy period.

Table 14
Distribution of Homeowner Households and Renovation Expenditures
by Expense Category According to Occupancy Period in Québec, 1996 (%)

OCCUPANCY PERIOD	HOUSEHOLDS	EXPENDITURES		
		TOTAL EXPENDITURES	EXPENSE CATEGORY	
			Contracts	Materials
Total	100.0	100.0	100.0	100.0
0 - 5 years	30.8	36.2	33.5	38.7
6 - 10 years	20.9	24.7	21.1	27.8
11 - 20 years	23.9	20.9	23.2	18.8
21 years or more	24.4	18.2	22.2	14.7

It can be seen that the distribution of contracting expenditures is very similar to the distribution of households according to occupancy period. Furthermore, the pattern for materials expenditures is similar to that for total expenditures. Spending varies in proportion to the occupancy period, increasing when the occupancy period is shorter and decreasing when the occupancy period is longer.

An examination of expenditures for each period of occupancy shows that, when the period is less than 11 years, materials account for more than half of renovation expenditures. When the occupancy period is longer than 10 years, contracting accounts for the majority of renovation expenditures.

Age of Household Maintainer

It has been found that propensity to renovate decreases with age and that this factor also has an impact on the level of renovation expenditures and type of work completed. What is the relationship between age of the household maintainer and expense category (contracting vs. materials)?

Table 15 shows the distribution of homeowner households and expenditures by expense category according to age of the household maintainer. We note that the distribution of contracting expenditures is very similar to the distribution of homeowner households, according to age of the maintainer.

Table 15
Distribution of Homeowner Households and Renovation Expenditures
by Expense Category According to Age of Maintainer in Québec, 1996 (%)

AGE OF MAINTAINER	HOUSEHOLDS	EXPENDITURES		
		TOTAL EXPENDITURES	EXPENSE CATEGORY	
			Contracts	Materials
Total	100.0	100.0	100.0	100.0
Age 15 - 34	18.4	20.5	16.2	24.3
Age 35 - 44	27.3	32.7	26.6	38.0
Age 45 - 54	21.8	21.8	23.8	20.1
Age 54 - 64	16.7	15.3	19.0	12.1
Age 65 and over	15.8	9.7	14.4	5.0

The opposite is true for materials expenditures: the older the household maintainer, the less is spent on materials. Thus, expenditures for materials by homeowner households whose maintainer is under 45 years old account for 62.3% of total spending even though these households comprise only 45.7% of all homeowner households.

Table 15 confirms that, despite the low rate of renovation activity among older households, this group's share of contracting expenditures is proportional to their number.

The distribution of spending according to maintainer age group shows that younger households spend more on materials than on contracting. For households whose maintainer is 15 to 44 years of age, the share of expenditures attributed to materials is over 60%. For maintainers 45 years of age and older, the majority of renovation expenditures is for contracting.

Dwelling Value

We know that dwelling value is positively related to renovation demand: more expensive houses undergo renovation more often. How is dwelling value related to contracting and materials expenditures?

Table 16 shows the distribution of homeowner households and spending by expense category according to dwelling value.

Expenditures for contracting show that there is a close connection between the expense category and dwelling value, and in turn, a household's wealth. The lower the dwelling value, the lower the contracting expenditure. Houses worth less than \$50,000 constitute 11.1% of the housing stock but account for only 5.9% of contracting expenditures. Furthermore, the higher the dwelling value, the higher the contracting expenditure. Houses worth \$200,000 or more make up only 4.3% of the housing stock, but account for twice that proportion of contracting expenditures (9.0%).

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This table, therefore, confirms the notion that occupants of homes of lower value tend to do their own renovation work, while homeowners occupying more expensive dwellings tend to contract out the work.

Table 16

**Distribution of Homeowner Households and Renovation Expenditures
by Expense Category According to Dwelling Value in Québec, 1996 (%)**

DWELLING VALUE (\$000)	HOUSEHOLDS	EXPENDITURES		
		TOTAL EXPENDITURES	Expense category	
			Contracts	Materials
Total	100.0	100.0	100.0	100.0
Less than 50	11.1	8.9	5.9	11.5
50 - 74	22.8	23.0	20.9	24.7
75 - 99	25.4	22.2	20.9	23.2
100 - 124	18.2	17.2	20.6	14.4
125 - 149	9.1	10.7	11.2	10.2
150 - 199	9.1	12.3	11.5	13.1
200 or more	4.3	5.7	9.0	2.9

To summarize, in terms of renovation expense categories (contracting vs. materials), it can be seen that the average contracting expenditure is higher in the Montréal CMA, whereas the average materials expenditure is higher in the Other Regions of Québec. While the year of construction has practically no impact on the expense category, the occupancy period does, i.e., the longer the occupancy period, the less homeowner households spend on materials.

With regard to the age of the household maintainer, the older the maintainer, the more a household spends on contracting. Finally, with respect to dwelling value, the higher the value of the house, the greater the expenditure for contracting.

This portrait of renovation activities has enabled us to detail socioeconomic characteristics of renovators and to examine the nature of renovation expenditures. This analysis has highlighted the main types of renovation work and expenditures taking into account a number of important factors such as region, occupancy period, age of the household maintainer, dwelling value and year of construction.

Moving from this general description of the renovation market, we can now examine some specific segments of the market.

R ESIDENTIAL RENOVATION MARKET SEGMENTS

The residential renovation market involves significant sums of money and a majority of homeowners renovate. The market comprises a number of aspects including landscaping, alterations or additions to the dwelling, and maintenance work. Renovations may be carried out by a specialist in the field and require the purchase of materials.

Overview

This economic activity is characterized by both general and specific trends which we will now discuss. Proceeding from the analysis of the previous sections, we will examine the concentration of financial resources devoted to this sector and identify the most significant factors that may explain its evolution.

Leaving aside the maintenance and repair component which comprises a range of small projects which are all quite similar, certain renovation projects dominate the market. Table 17 recalls these projects and their characteristics.

We note that *landscaping* projects rank first in terms of dollars spent at \$415 million. The lion's share of this expenditure (70%) goes to materials for a total of \$292 million. *Exterior windows* projects rank second at \$338 million, including a significant proportion of contracting expenditures (71%) valued at \$241 million. In third place, *roof repair* projects at \$313 million including, again, a large proportion of contracting expenditures (72%) equivalent to \$226 million. Next in order of volume of spending are *adding insulating materials* (contracting), *other types of floor covering* (contracting) and *remodeling bathrooms* (materials).

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Table 17
Main Home Renovation Projects According to Type of Work and Expense Category
in Québec, 1996 (\$)

Type of Work			Expense Category			
			Contracts		Materials	
TYPE	Expenditures (Millions)	Average	Expenditures (Millions)	Average	Expenditures (Millions)	Average
Total	4,694	1,732	2,202	2,286	2,492	1,185
Renovations, Alterations	1,547	2,738	748	3,150	799	1,876
Exterior windows	338	3,777	241	3,998	97	2,622
Adding insulating materials	230	3,451	129	6,859	101	1,862
Remodeling bathroom	225	3,847	91	3,726	134	2,774
Additions, Expansions	1,441	2,251	541	2,666	901	1,717
Landscaping	415	1,421	123	1,894	292	1,141
Terrace, patio, gazebo	157	2,205	70	2,757	87	1,483
Driveway, walkway	114	2,187	72	2,236	42	1,662
Equipment replacement	1,016	2,278	677	2,633	339	1,363
Repairing roof	313	4,136	226	4,187	87	2,740
Other types of floor covering	228	2,830	124	3,306	104	1,600
Maintenance, Repairs	690	651	236	888	454	502

Moreover, an examination of the average expenditure for each group of projects (type of work) reveals significant differences. The average expenditure for roof repair projects is \$4,136; households that contract out spend an average of \$4,187, while for those who purchase materials directly, the average expenditure is \$2,740. Remodeling bathrooms entails an average expenditure of \$3,847 (\$3,726 for contracting and \$2,774 for materials). Exterior windows account for an average expenditure of \$3,777 (\$3,998 for contracting and \$2,622 for materials). When renovations require the use of a contractor, adding insulating materials remains the most expensive project entailing an average contracting expenditure of \$6,859.

It should be noted that, even though expenditures for contracting and for materials are not mutually exclusive - households may hire a contractor and yet still purchase some or all of the materials directly - the higher average expenditure for contracting indicates the importance of labour costs related to renovation activities.

A Regional Market Dimension

Some regional trends in renovation spending can be observed. For the purpose of this exercise, namely to identify some important market niches, several project groups have been selected for which total expenditures are \$300 million or more. Table 18 presents these groups in order of importance.

Table 18
Main Expenditures According to Type of Home Renovation Work,
Expense Category and Region in Québec, 1996 (\$)

TYPE OF WORK	EXPENSE CATEGORY	REGION	EXPENDITURES (MILLIONS)
Additions, Expansions	Materials	Other	521.5
Renovations, Alterations	Materials	Other	461.0
Renovations, Alterations	Contracts	Montréal	364.7
Equipment Replacement	Contracts	Other	315.0
Renovations, Alterations	Contracts	Other	296.3
Equipment Replacement	Contracts	Montréal	296.0
Additions, Expansions	Materials	Montréal	282.0

First, additions and expansions cost \$521.5 million in materials expenditures in the Other Regions of Québec. These regions also spend \$461 million in materials expenditures for renovations and alterations. The Montréal CMA follows with contracting expenditures of \$364.7 million for renovations and alterations. Next, contracting expenditures in the Other Regions for equipment replacement and new installations total \$315 million. Homeowners

in the Other Regions also spend \$296.3 million on contracting for renovations and alterations. Homeowners in the Montréal CMA spend an equivalent amount (\$296 million) on contracting for equipment replacement and new installations. Finally, households in this same region spend \$282 million on materials for additions and expansions.

A Sub-Market Based on Dwelling Value

An attempt to identify market niches is possible taking into account some of the variables analysed previously. Among these, dwelling value is a factor worth examining.

Table 19 shows the main renovation expenditures according to dwelling value, type of work and expense category. It can be seen that materials purchases account for a sizeable share of expenditures. Of the seven types of work examined⁷, the four most important involve the purchase of materials either for renovations and alterations or for additions, expansions and landscaping. Houses valued at \$50,000 to \$74,999 account for materials expenditures valued at \$213 million for renovations and alterations and at \$195 million for additions, expansions and landscaping.

⁷ Most important in terms of expenditures

Table 19
Main Expenditures According to Type of Home Renovation Work,
Expense Category and Dwelling Value in Québec, 1996 (\$)

TYPE OF WORK	EXPENSE CATEGORY	DWELLING VALUE	EXPENDITURES (MILLIONS)
Renovations, Alterations	Materials	50,000 - 74,999	213
Renovations, Alterations	Materials	75,000 - 99,999	213
Additions, Expansions	Materials	50,000 - 74,999	195
Additions, Expansions	Materials	75,000 - 99,999	193
Renovations, Alterations	Contracts	75,000 - 99,999	191
Renovations, Alterations	Contracts	50,000 - 74,999	180
Equipment Replacement	Contracts	100,000 - 124,999	177

Dwellings valued at \$75,000 to \$99,999 also account for considerable materials expenditures: \$213 million for renovations and alterations and \$193 million for additions, expansions and landscaping. Contracting expenditures of \$191 million for renovations and alterations were also spent on renovating these houses. Finally, houses valued at \$100,000 to \$124,999 generated \$177 million in contracting expenditures for equipment replacement work.

A Sub-Market Based on Year of Construction

Another market segment can be characterized in terms of the dwelling's year of construction.

Table 20 shows the main renovation expenditures according to construction period, type of work and expense category. As can be seen, materials account for a considerable portion of expenditures.

Of the seven project groups considered, four involve the purchase of materials both for additions, expansions and landscaping work and renovations and alterations work.

Table 20
Main Expenditures According to Type of Home Renovation Work,
Expense Category and Year of Construction in Québec, 1996 (\$)

TYPE OF WORK	EXPENSE CATEGORY	YEAR OF CONSTRUCTION	EXPENDITURES (MILLIONS)
Additions, Expansions	Materials	1987-1996	231
Renovations, Alterations	Contracts	1967-1976	229
Additions, Expansions	Materials	1967-1976	216
Renovations, Alterations	Materials	Before 1947	205
Renovations, Alterations	Materials	1977-1986	180
Renovations, Alterations	Contracts	Before 1947	176
Equipment Replacement	Contracts	1967-1976	172

Dwellings built since 1987 account for \$231 million in materials expenditures for additions, expansions and landscaping. Houses built from 1967 to 1976, however, are most often cited in this table. They appear in relation to three types of work: renovations and alterations in the contracting expense category (\$229 million), additions, expansions and landscaping in the materials expense category (\$216 million) and equipment replacement and new installations in the contracting category (\$172 million). Owners of the oldest houses, those built before 1947, spent \$205 million in materials expenditures and \$176 million in contracting expenditures for renovations and alterations.

A Sub-Market Based on Occupancy Period

We know that occupancy period constitutes a determining factor with respect to renovation expenditures: the longer the occupancy, the lower the propensity to renovate. Table 21 shows the main renovation expenditures according to occupancy period, type of work and expense category. Here, too, materials expenditures account for more than half of the spending shown. Of the nine project groups considered, four involve the purchase of materials for additions, expansions and landscaping work and for renovations and alterations work. Contracting also accounts for an important part of expenditures relative to all three types of work examined: additions, expansions and landscaping work, renovations and alterations work, and equipment replacement work.

Table 21
Main Expenditures According to Type of Home Renovation Work,
Expense Category and Occupancy Period in Québec, 1996 (\$)

TYPE OF WORK	EXPENSE CATEGORY	OCCUPANCY PERIOD	EXPENDITURES (MILLIONS)
Additions, Expansions	Materials	0 - 5 years	365
Renovations, Alterations	Materials	0 - 5 years	297
Additions, Expansions	Materials	6 - 10 years	282
Additions, Expansions	Contracts	0 - 5 years	235
Renovations, Alterations	Materials	6 - 10 years	228
Renovations, Alterations	Contracts	0 - 5 years	213
Equipment Replacement	Contracts	0 - 5 years	212
Renovations, Alterations	Contracts	11 - 20 years	210
Renovations, Alterations	Contracts	21 years or more	197

It can be seen that most of the expenditures shown in Table 21 are related to the shortest occupancy period, i.e., 0 to 5 years. These expenditures involve both materials and

contracting. They are related to both additions and expansions work, and renovations and alterations work. The total of materials expenditures for this shortest occupancy period reaches \$662 million, while contracting expenditures reach \$660 million. The 6 to 10 year occupancy period accounts for \$510 million in materials expenditures. When the occupancy period extends beyond 10 years, households are more inclined to spend on contracting for renovations. These expenditures involve mainly renovations and alterations and are evaluated at \$407 million.

A Sub-Market Based on Age of Household Maintainer

As previously mentioned, this factor plays a significant role relative to renovation expenditures. The older the household maintainer, the lower the propensity to renovate. Table 22 shows the main renovation expenditures according to age of the household maintainer, type of work and expense category.

Table 22
Main Expenditures According to Type of Home Renovation Work,
Expense Category and Age of Maintainer in Québec, 1996 (\$)

TYPE OF WORK	EXPENSE CATEGORY	AGE OF MAINTAINER	EXPENDITURES (MILLIONS)
Additions, Expansions	Materials	Age 35 - 44	412
Renovations, Alterations	Materials	Age 35 - 44	261
Renovations, Alterations	Materials	Age 18 - 34	227
Additions, Expansions	Contracts	Age 35 - 44	221
Renovations, Alterations	Contracts	Age 45 - 54	205
Additions, Expansions	Materials	Age 18 - 34	197

Of the six project groups considered, four are related to the purchase of materials for additions, expansions and landscaping work or for renovations and alterations work. Contracting accounts for substantial expenditures for additions, expansions and landscaping work, and for renovations and alterations work.

According to Table 22, households whose maintainer is 35 to 44 years of age account for most of the renovation expenditures. This group spends a total of \$894 million on renovations with \$673 million going to the purchase of materials. Households whose maintainer is aged 18 to 34 spend \$424 million on materials. Finally, older households, whose maintainer is 45 to 54 years old, spend \$205 million on contracting for renovations and alterations.

In summary, the data collected has enabled the identification of a number of segments of the residential renovation market in Québec. These are characterized according to type of work, region where the work is completed, dwelling value, year of construction of the dwelling, homeowner occupancy period and age of the household maintainer.

C ONCLUSION

The methodology used and the data gathered from the subsequent survey of residential renovation in Québec produced the mass of information from which this analysis was performed.

The primary purpose of the analysis was to make available a range of qualitative and quantitative information that would provide a clearer picture of this sector of economic activity which generates annual expenditures of nearly \$5 billion.

It has thus been possible to quantify various facets of renovation activities according to a regional dimension and socioeconomic characteristics of households.

Furthermore, this study has focused on analysing data in terms of dollars spent rather than simply enumerating renovation activities. With this approach, it has been possible, based on the amount of expenditures implicated and their economic impact, to determine who decides to renovate, what types of renovations are completed and within what context residential renovation activity occurs.

In terms of what motivates a household to renovate, we note that younger, larger households with higher incomes, which occupy their dwellings for shorter periods of time, are most likely to renovate.

In terms of the types of work carried out, it can be seen that additions, expansions and landscaping are the priority for those households whose maintainers are middle-aged, whose occupancy period is less than 10 years, and whose dwellings have been recently constructed and are of higher value. In contrast, renovations, alterations and improvements are more common for households whose maintainers are in their late 40's and early 50's, whose occupancy period is more than 10 years and whose houses are of older construction.

Despite the fact that the major part of renovation work is carried out by the occupants themselves, nearly 50% of renovation expenditures are spent on hiring professionals as well as general and specialized contractors. The proportion of expenditures for contracting is greater if the household is located in an urban centre, the household maintainer is older and the dwelling is of higher value.

APPENDIX 1

Methodological Considerations

The purpose of this research has been to improve our knowledge of the residential renovation market in Québec by assembling a bank of information which reflects, in the most precise way possible, the realities of this market.

There was a need to develop an “effective” measuring tool for gauging activity in this sector, which would provide both a measure of the total volume of activity and quantify as completely as possible the components of the sector in terms of both supply and demand. In other words, a tool was required to help us know what consumers are spending their money on and where the products and services “consumed” originate (general or specialized contractors, professionals, interior decorators, retailers, etc.).

The method to obtain this information, however, is not simple in that it relates to a variety of products and services offered by a wide range of suppliers. We need to confront, on the one hand, suppliers (contractors, retailers and wholesalers) who deal not only with the residential renovation sector, but also that of the new construction as well as industrial and commercial sectors. On the other hand, the way products are defined may be quite different from the perspective of the consumer vs. that of the supplier. For example, renovating a kitchen may be perceived quite differently by the household who orders the work, the retailer who sells the materials and the interior decorator who provides the expertise and carries out the renovation. Furthermore, the same product can be used for renovation projects which are not of the same type or scale.

The proposed study was to:

- ◆ analyse the components of this market;
- ◆ determine an appropriate nomenclature in order that this activity could be accurately quantified; and
- ◆ compile demand-related information.

The first part of the study consisted of making an inventory of all available information on the renovation market in Québec, conducting an in-depth analysis, determining the

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strengths and weaknesses of the data and, above all, developing a methodology⁸ that would enable the integration of available information concerning both the demand⁹ and supply sides¹⁰. To a certain degree, it involved analysing a complex reality according to various components (types of work, geographical distribution, distribution network, types of expenditures, etc.). Overall, it involved describing the structure of the Québec renovation market and how the market functions.

With regard to the demand side, data was collected according to three objectives:

- ◆ to quantify global demand and its components related to both the homeowner and rental markets;
- ◆ to determine the source of the “products consumed” (retail sales, purchases from building contractors, work performed by homeowners themselves, their employees or friends, etc.); and
- ◆ to ensure that the data obtained be as precise as possible.

At the same time, a data collection procedure needed to be established for information on the supply of products and services or, at least, with regard to work supplied by entrepreneurs. It soon became apparent, however, that it was difficult to efficiently gather data concerning this aspect of the renovation market. A number of factors can explain this. A supply side measure could have a short useful life because production and distribution mechanisms are now undergoing a number of major changes. This situation has given rise to a certain degree of instability among service suppliers, making a short-term evaluation of market fluctuations risky. Furthermore, it is often complicated to determine the use made of the products sold, whether they are in the residential or commercial sectors. In addition, suppliers are difficult to reach as the supply side is composed of many kinds of

⁸ based on projects, services and types of work

⁹ comprising those who undertake or who order the work

¹⁰ comprising those who undertake the work or these who supply the products and services

suppliers (product retailers, general and specialized contractors, professionals, interior decorators, etc.).

Given these difficulties, we arrived at the conclusion that it would be better to use renovation demand components in order to measure renovation supply.

But how to understand the reality of renovation demand and its structure? A schema or analytical framework flexible enough to identify the various dimensions of this demand was needed. Thus, the idea to question survey respondents employing the concept of a **renovation project** was retained. This concept makes it easier to integrate the various components related to renovation work. Furthermore, it calls upon an “intuitive approach” on the part of the renovator and is adapted to his or her preoccupations and ways of undertaking the work. Its main advantage is “its ease of understanding and its high utilization potential” in the renovation market. Commonly employed in the field, it is applicable to the various types of renovation work: “additions-expansions-landscaping”; “renovations-alterations-improvements”; “equipment replacement-new installations”; and “repairs-maintenance” work. See Appendix 2 for a list of projects grouped according to this typology and Appendix 3 for a brief description of the methodology employed in the survey.

The **renovation project** concept fits within an analytical framework aimed at measuring renovation market activity. Households that renovate, types of work, the nature of expenditures, expense categories, types of dwelling, the regional distribution of activities as well as the specific characteristics of each of these components are all aspects that should be included in the process. Indeed, the project concept constantly recalls these various components and herein lies its efficacy in the gathering of base data for the evaluation of renovation activity.

While the **renovation project** approach offers a number of advantages, it does not distinguish differences in the amounts spent on renovation. Thus, this approach takes equally into account projects costing thousands of dollars and those costing a mere \$100.

There is, in fact, debate as to what should be considered a renovation project in terms of its monetary value:

- ◆ For example, a number of professionals contend that a renovation project must be worth at least \$5,000 for it to maintain or improve the quality of the housing stock and produce significant effects in the renovation market. Because average expenditures for maintenance and repairs are much less than expenditures for other types of renovation, this results in the exclusion of these expenditures from the market. Moreover, under national accounting procedures, Statistics Canada does not consider these expenditures as an investment in housing, as it does for other types of renovation spending which are considered capital expenditures.
- ◆ Others, however, believe that any project regardless of its value contributes to maintaining the quality of housing and should be considered part of the renovation market.

For the purpose of this study, any expenditure by a homeowner or tenant household of at least \$100 is considered a renovation expenditure. The methodology used takes into account the full range of spending while also providing data useful for the segmentation of projects according to expenditure amount¹¹.

The determination of renovation expenditures presents a further difficulty. When renovation expenditures are analysed according to tenure, it is found that renters contribute only marginally to total expenditures. This finding confirms the generally held belief that renovation expenditures in the rental housing sector are essentially the concern of landlords.

Due to these methodological considerations and budgetary restrictions, landlords could not be included in the survey.

¹¹ While one of the advantages of this approach is that it reduces survey costs by making it easier to include the number of households required to have representative results, it reduces the statistical reliability of data concerning those household members who spend large sums of money on renovations and who, as a result of their behaviour, have a major influence on the market.

APPENDIX 2

List of Projects

The following is a list of the 79 renovation projects categorized under the four main types of work.

Additions, Expansions and Landscaping

- R Garage or carport
- R Terrace, patio or gazebo
- R Shed
- R In-ground pool
- R Fence, hedge and retaining walls
- R Balcony, porch and canopy(ies)
- R Driveway and walkway
- R Greenhouse and sun room
- R Skylight
- R Bathroom
- R Family room and other room
- R Elevation and piling
- R Water inlet, sewer system and septic tank
- R Adapted products
- R Landscaping

Renovations, alterations and improvements

- R Garage door
- R Exterior doors
- R Exterior windows
- R Bathroom fittings and equipment
- R New bathroom equipment
- R Remodeling bathroom
- R Kitchen cabinets and/or kitchen equipment
- R Remodeling kitchen
- R Renovating/building another room

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- R Home office
- R Finishing basement
- R Finishing attic
- R Changing interior doors
- R Stairs and banisters
- R Remodeling interior completely
- R Adding insulating materials
- R Renovation, alteration or improvement: patio, terrace and gazebo
- R Renovation, alteration or improvement: balcony, porch and canopy
- R Renovation, alteration or improvement: chimney

Equipment Replacement and New Installations

- R Repairing roof
- R Roof gutters, fascia and soffits
- R Exterior cladding
- R Relaying foundations
- R Water heater
- R Main heating devices
- R Main heating devices (using same energy)
- R Main heating devices (using different energy)
- R Backup heating
- R Other plumbing devices
- R Air-conditioning and ventilation
- R Heat pump
- R Air exchanger
- R Power supply unit
- R Other electrical devices
- R Wall-to-wall carpeting and carpets
- R Other types of floor covering
- R Wall and ceiling covering
- R Built-in appliances
- R Central vacuuming system
- R Detection and/or safety system

- R Repairing plumbing completely
- R Repairing electrical system completely

Maintenance and Repairs

- R Exterior paint and stain
- R Repairing foundations and exterior walls
- R Roof, roof gutters and ventilation
- R Exterior sealant
- R Doors and windows
- R Driveway and walkway
- R Maintenance of the electrical system
- R Devices and equipment
- R Plasterwork and gypsum board
- R Interior paint
- R Wallpaper
- R Floor covering
- R Plumbing and pipes
- R Kitchen
- R Bathroom
- R Interior doors and stairs
- R Insulation and weatherstripping
- R Maintenance and repair: patio, terrace or gazebo
- R Maintenance and repair of fence
- R Maintenance and repair of shed
- R Cleaning carpets
- R Maintenance of pool and pool liner

APPENDIX 3

Survey Methodology

Survey¹ Methodology

The survey, conducted in the spring and summer of 1997, questioned over 2,500 households. The sample had been stratified according to tenure, region (Québec divided into three regions: the Montréal census metropolitan area, the Québec City census metropolitan area and the rest of Québec) and according to whether households had or had not undertaken renovation or maintenance work worth at least \$100 in the previous twelve (12) months (from June 1, 1996 to May 31, 1997).

In order to identify as completely as possible household expenditures, nine (9) expenditure categories were presented to respondents:

1. *Landscaping*

- doing or redoing landscaping on the main section or another section of the property, including rockery, retaining walls, fences, hedges, planting trees, turfing, lawn sprinkler system, lighting and fountains.

2. *Other Exterior Work*

- adding a terrace, wooden or concrete patio, balcony, gazebo or garden shed;
- installing an in-ground pool;
- adding or redoing a driveway or walkways.

3. *Expansions*

- adding a garage or carport, greenhouse or sun room;
- enlarging the structure in order to add a new kitchen, new bathroom, family room or other room.

¹ More detailed survey information is available in the final report of Ad hoc Recherche, the firm hired to conceptualize and conduct the survey. The report is entitled: *Enquête majeure sur la rénovation au Québec: rapport final*, February 1998.

4. *Other Types of Exterior Renovation Work*

- replacing garage doors, exterior doors or exterior windows;
- installing a skylight or new roof gutters;
- repairing the roof;
- replacing old exterior cladding with new material.

5. *Replacing or installing new equipment*

- water heater, main heating system, new fireplace, air conditioning or ventilation system, heat pump, air exchanger, central vacuuming system, burglar alarm system.

6. *Major Interior Renovation Work*

- demolishing and remodeling the kitchen or bathroom;
- renovating or remodeling the dining room, drawing room, family room, bedroom, or laundry room;
- finishing the attic or basement;
- completely renovating the interior.

7. *Minor Renovation Work*

- changing plumbing components;
- adding a bathtub or sauna;
- removing cabinet doors or a counter and replacing with new equipment;
- changing interior doors;
- installing or repairing staircases;
- installing or replacing wall-to-wall carpeting;
- installing new floor covering (hardwood, parquetry, ceramic).

8. *Other Types of Repair, Renovation, Replacement, Addition and Alteration Work*

9. *Various Types of Repair and Maintenance Work*

- repairing foundations, exterior walls, exterior doors and windows, a parking area or walkway;
 - repairing and maintaining in good working order heating, ventilation, and air-conditioning equipment, lighting fixtures and electrical outlets;
 - doing plastering and gypsum board work to prepare walls or ceiling for painting;
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- painting one or more rooms or putting up new wallpaper;
- repairing pipe fittings and drains or changing taps or plumbing components.

For each of the first eight categories, respondents were asked the following:

- total cost;
- whether or not third parties were hired to carry out the work and, if yes, the amount paid;
- whether materials were purchased and, if yes, the amount paid;
- the precise nature of the work carried out.