RESEARCH REPORT

Evaluation of Affordable Housing Projects Based on the Grow Home Concept

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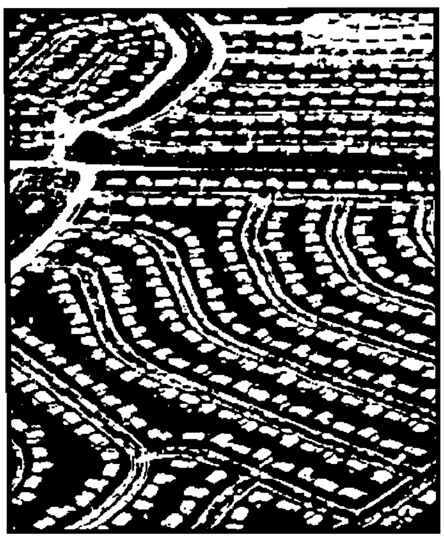
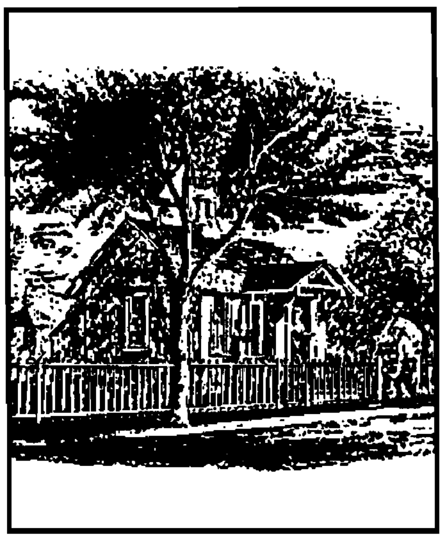
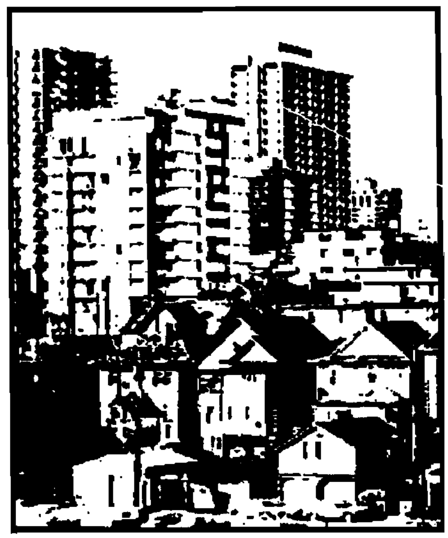

McGill University
School of Architecture
Affordable Homes Program

Evaluation of Affordable Housing Projects Based on the Grow Home Concept

April, 1992

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NOTE: Disponible aussi en français sous le titre:
Évaluation d'ensembles de logements abordables
construits selon le concept de la maison évolutive

ABSTRACT

In response to the affordable housing challenge, a team of researchers from the Affordable Homes Program at McGill University developed the Grow Home - a rowhouse, 4.3 meters wide with 93 square meters of living space. Six months after the erection of a full-scale prototype on the university campus, Mr. Leo Marcotte, a local developer, started the first housing project based on the Grow Home concept. All 87 units in the project sold within the first four weeks - before any ground was broken. Following Mr. Marcotte's lead, 12 other builders started Grow Home-type projects in and around the Montreal area. Over 660 units were built within the first 10 months in 19 projects, ranging in price from $69 000 to $95 000 , and several new projects have since been started.

The proliferation of projects in and around the Montreal area presented an opportunity to evaluate the sociological, architectural and financial characteristics of the occupied projects, and to identify those aspects of the design concept which were most helpful in gaining the acceptance of the buyer and builder alike. Seven projects were selected, and a series of structured interviews were conducted with the builders in order to examine their experiences with the inception, design and implementation of the concept. Questionnaires were distributed to the occupants of the units to assess their initial reaction to their new surroundings. Out of 236 households that were visited, 196 questionnaires were completed. Six areas were examined: demographic makeup, shopping and buying experience, buyers' preferences, occupant satisfaction, level of improvement over previous dwelling and adjustments that were required after the occupants moved in.

Front Elevation

The study found that the projects attracted the demographic group for which they were intended. The household incomes, however, were higher than anticipated. The buyers were allocating from 18.5% to 26.1% of their income to housing, as compared to the 32% figure which is used in most affordability calculations. The unit's selling price was found to be the most appealing feature for the buyers, with 90% of respondents rating it as "extremely important." The second biggest attraction was the unit's overall layout, which received the same rating from 68% of respondents.

The majority of respondents (51.8%) rated the suburb as their most preferred location (regardless of price), and the single-family detached dwelling received the highest rating from 78% of respondents. Approximately 58% of the buyers were specifically looking for a newly-built house, while 54.6% wanted two bedrooms. The majority (68.9%) of the respondents also specified the desire for a particular feature in their new home, mostly for a second and/or large bathroom (15.8% of respondents) and a large and/or private backyard (12.8% of respondents). Sufficient storage, natural lighting and a basement were also considered to be important. The acceptance of a townhouse (which was the preferred type of dwelling for only 2% of respondents) represented the first tradeoff that the buyers were willing to make for the purpose of homeownership.

Occupant satisfaction was evaluated for each of 23 attributes dealing with location, site plan, and unit characteristics and for 10 interior spaces. The majority of respondents expressed satisfaction with 22 of the 23 attributes that were evaluated, and with all of the 10 interior spaces in their dwelling. About 88% of respondents found that their general experience with new house was about the same or better than what they expected, and the vast majority of the buyers (92%) reported that they would recommend their purchase to a friend. Satisfaction levels were generally highest with the units themselves, particularly with the individual rooms and spaces, and the lowest level of satisfaction was reported in the site characteristics. The only attribute which was found to be a source of considerable disappointment was the size of the backyard areas, where 42.1% of the respondents reported being unsatisfied with the results. Two other attributes which were a concern in some of the projects were the quality of interior finishes and the level of soundproofing between units.

The study also found that there was a general increase in the occupants' use of a car as a primary mode of transportation, and in their commuting time to and from work. Furthermore, the occupants' distance from their work place received an exceptionally high priority rating when the importance of this aspect was evaluated. Although the purchase of the unit meant having to move further away from work for the majority of respondents in 3 of the projects, these same occupants reported being satisfied with their new situation. This leads to the conclusion that for the most part there was a strong willingness from the buyers to give up this particular aspect of location for the purpose of homeownership.

When asked about their spending/saving patterns, more than half of the respondents (51.1%) reported that they were able to save either less or much less money than in their previous dwelling, while 31.5% specified that there was no change in this regard. The changes in living/leisure patterns were less pronounced, with 46.8% of respondents reporting a change. The majority of these (60.7%) reported spending more time at home and 29.1% reported that they were entertaining more at home. The majority of respondents (71.4%) reported that the monthly carrying costs for their new home were either the same as or lower than anticipated.

The experience with the Grow Home-type projects demonstrated that effective change in the affordable housing problem can be achieved with the housing product itself. The notion that housing costs can only be reduced by addressing external, macroeconomic factors, and that labour and material costs play an insignificant role in housing prices is not necessarily valid. Housing prices were lowered by reducing construction costs and using land efficiently.

EXECUTIVE SUMMARY

Background

In response to the affordable housing challenge, a team of researchers from the Affordable Homes Program at McGill University developed the Grow Home--an adaptable design alternative for an urban dwelling. Six months after the erection of a full-scale prototype on the university campus, Mr. Leo Marcotte, a local developer, started the first housing project based on the Grow Home concept. During that same period, the provincial and municipal governments implemented programs aimed at promoting housing starts for first-time buyers through interest and tax reduction incentives. With the aid of these incentives, all of the 87 units in the project were sold within the first four weeks - before any ground was broken. Following Mr. Marcotte's lead, 12 other builders started Grow Home-type projects in and around the Montreal area. Over 660 units were built within the first 10 months in 19 projects, ranging in price from $69 000 to $95 000 , and several new projects have since been started.

The proliferation of projects in and around the Montreal area presented an opportunity to evaluate the sociological, architectural and financial characteristics of the occupied dwellings, and to identify those aspects of the design concept which were most helpful in gaining the acceptance of the buyer and builder alike. Seven projects were selected, and a series of structured interviews were conducted with the builders in order to examine their experiences with the inception, design and implementation of the concept. Questionnaires were then distributed to the occupants of the units to assess their initial reaction to their new surroundings.

The Grow Home

The Grow Home is a 93 square-meter rowhouse, 4.3 meters wide which was conceived using simple and effective cost saving strategies. The narrow-front rowhouse configuration allowed significant reductions in land and infrastructure costs, as well as in operating costs, since the heat losses were restricted to 2 exposed walls and a small roof area. Construction costs, kept below $40 000, were minimized by virtue of the house's small size, simple layout, and the efficient use of conventional construction materials. An unpartitioned second floor was proposed in an effort to further reduce costs and enable the owners to complete the unit at their own discretion.

The projects which were built in Montreal revealed some interesting interpretations of the Grow Home concept. While the 4.3-meter width was retained in all cases, the builders modified the design to suit the tastes and budgets of their own particular market. The original plan, which subdivided the space with a central plumbing/stair core, was altered in most cases to accentuate the full depth of the space. The second floor was partitioned and finished in all but one project, some with "luxurious" bathrooms with separate showers and whirlpool baths. Eleven of the builders provided brick veneer on the exterior to increase quality and project an image of permanence, while the remainder used a cement-based aggregate finish. All units were built with basements, adding 46.5 sq. meters to the floor area, and indoor garages were included in 15% of the homes. Vestibules and walk-in closets were added to the units in one of the projects, while separate garages were added to the sides in another. These options, which were proposed as extras in the original design, became standard features.

The affordability of the units was enhanced with government programs aimed at reducing the cost of home ownership for the first few years. The federal government made the purchase possible with as little as 10% down payment through an existing insured mortgage program. In a effort to promote housing starts, the Quebec government offered up to $150 000 to buyers of new homes built by local builders. Applicants had the option of choosing 8.5% financing for three years, or a subsidy of 4.5% of the total cost of the dwelling, up to a maximum of $5 000. At the same time, the City of Montreal implemented a program aimed at attracting residents back into the city. An annual reduction in property tax of $1 000 for five years was made available to first-time buyers purchasing a newly built or renovated dwelling costing up to $100 000, not including land, infrastructure or sales tax. The reduced development, construction and operating costs of the Grow Home, combined with the government subsidies, enabled the purchase of a $76 000 home on $618 a month (including sales tax). With a down payment of under $8 000, apartment tenants with a gross annual household income of $24 000 would have been able to become homeowners.

Purpose of the Study

In light of the Grow Home's recent success in the Montreal area, the purpose of this study was to evaluate the potential of narrow-front rowhousing to respond to Canada's affordability challenge. There are three aspects regarding the inception, design and implementation of the projects that were of interest in evaluating this potential. The first was how successful the product itself was in meeting the functional requirements and financial limitations of the buyers. The second aspect was the role played by the builder in interpreting the concept and marketing the units, and finally, what the effect was of external factors, such as the regulatory environment and government subsidies, on the implementation and sales of the projects.

The occupants in seven projects were surveyed. All of the 236 households were visited and asked to fill out questionnaires. A total of 196 questionnaires were completed (a response rate of 83%), with 38 households refusing to cooperate and 2 households that could not be reached despite repeated visits. Information from the builders was gathered through general discussion and structured interviews. Project documentation in the form of site plans and working drawings was made available, and forms for cost breakdowns were distributed to the builders to be filled out and returned.

Demographic Profile

One of the objectives of the study was to establish a socioeconomic profile of the buyers in order to determine what segment of the population the projects were attracting. The Grow Home has, for the most part, attracted the demographic group for which it was intended. The projects provided starter homes for 89.4% of the respondents. The households were made up mainly of young couples (25-34 years of age) with one child. The single-person household accounted for 16.5 of the cases. The vast majority of respondents (86.6%) were formerly tenants, 92.2% of which lived in apartments.

The household incomes, however, were found to be significantly higher than anticipated. The majority of respondents (67.8%) claimed annual household incomes greater than $40 000, while those of 37.7% were over $50 000. With the municipal and provincial subsidies in effect, the homes would have been affordable to households earning from $24,000 to $27,000. Calculations based on the respondents' total carrying costs revealed that the buyers were allocating from 18.5% to 26.1% of their income on housing. Given that new homes priced 15% to 20% higher than the Grow Home-type units were available in most of the municipalities, it was evident that the tendency to allocate a lower portion of income on accommodation was intentional and not for lack of choice. It is likely that the high income levels are reflective of a change which may be occurring in the spending habits of either the average first-time buyer or the North American household at large, or reflect regional or cultural preferences and aspirations. In either case, it seems that there is a tendency for the buyers to allocate a greater portion of their income to leisure, entertainment and luxury.

Occupants' Shopping and Buying Experience

The rate of sales in the Grow Home-type projects was unusual, especially for a period of economic recession. Consequently, there was an interest in examining the buyers' intentions and expectations at the time of purchase. It was found that the majority of respondents (59.9%) were not actively looking to buy a house at the time of purchase, and seem to have come across the projects by chance. Close to one third (29.4%) of the buyers visited only one project, and 61.3% visited no other project after having seen the one in which they purchased a unit. Futhermore, 39.3% of respondents decided to buy the unit immediately, and another 44.9% decided within one or two weeks of their visit. The vast majority of respondents (77.4%) purchased the house without having seen a model unit.

These buying patterns suggest that the projects represented an exceptional bargain for many of the buyers. Those projects which started earliest had the highest percentage of buyers who were not actively shopping for a house. These buyers also visited the least number of projects and made the quickest buying decisions. The implementation of subsequent projects appears to have filled a market void, enabling the buyers to take more time and do some comparison shopping.

The reasons for purchasing the Grow Home were probed by first asking the occupants to list those features which they thought were most attractive about the projects, and then by listing 6 specific features which the occupants were asked to rate in terms of importance in their decision to purchase. In both instances, the unit's selling price was found to be the most appealing feature by a wide margin.

In the open-ended question, the unit selling price was specified by 40% of the respondents and was the most frequently mentioned attribute in 5 of the projects. It also received the highest importance rating, with 90% of respondents rating it as "extremely important." The second biggest attraction in both questions was the unit's overall layout, which received mention from 22% of the occupants and top rating from 68%.

The majority of respondents (69.8%) also mentioned aspects of the design that they felt uneasy about at the time of purchase. The most frequently mentioned reservations were about the kitchen. Size, layout and storage space in the kitchen designs collectively accounted for 16.7% of all entries. Inadequate parking arrangement and small yard area were also cause for some concern, receiving 9.3% and 8.5% of the mention, respectively. Ironically, the unit's total amount of space was also a concern for 9% of respondents.

Because the projects were not built with the original second floor "growing" potential that was demonstrated in the prototype, there was an interest in determining whether or not the idea of involving the buyer in the construction process would have been acceptable. The results revealed that 20% of the buyers were willing to accept an unpartitioned second floor, and 33% would have assumed some of the construction work (particularly the finishing operations) in exchange for a reduction in price. Although these percentages represent a minority, there was undoubtedly an interest in participating. The notion of involving the buyer in the construction of his home remains a plausible option for reducing housing costs, and may be worthy of further study.

Buyers' Preferences

As an absolute measure of the buyers' willingness to compromise for the sake of ownership, some of their preferences and aspirations were investigated. The findings reflect a fairly strong desire to live in a suburban setting in a new, single-family detached dwelling . The majority of respondents (51.8%) rated the suburb as their most preferred location (regardless of price), and the single-family detached dwelling received the highest rating from 78% of respondents. Approximately 58% of the buyers were specifically looking for a newly-built house, while 54.6% wanted two bedrooms.

The majority (68.9%) of the respondents also specified the desire for a particular feature in their new home. The items mentioned most frequently were a second and/or large bathroom (15.8% of respondents) and a large and/or private backyard (12.8% of respondents). Sufficient storage, natural lighting and a basement were also considered to be relatively important. While the occupants' desire to have these elements was satisfied in most cases, the acceptance of a townhouse (which was the preferred type of dwelling for only 2% of respondents) represented the first tradeoff that the buyers were willing to make for the purpose of homeownership.

Satisfaction and Improvement

In a second phase of analysis, the occupants were asked to evaluate their level of satisfaction with each of 23 attributes, including 5 which were related to location, 7 to the site plan and 11 to the unit itself, and to indicate how they compared to those of their former dwelling . They were then asked to do the same for each of 10 interior spaces in the dwelling. The issue of location, privacy and parking was examined in a little more detail, and suggested improvements to the projects were recorded.

The majority of respondents expressed satisfaction with 22 of the 23 attributes that were evaluated, and with all of the 10 interior spaces in their dwelling. About 88% of respondents found that their general experience with their new house was about the same or better than what they expected, and the vast majority of the buyers (92%) reported that they would recommend their purchase to a friend.

Satisfaction levels were generally highest with the units themselves, particularly with the individual rooms and spaces, and the lowest level of satisfaction was reported in the site characteristics. On a scale of 1 to 5 ("very disappointed to "very satisfied"), the average overall ratings for location, site, unit and room characteristics were found to be 3.697, 3.513, 3.933 and 4.092, respectively. Although there was some variance in satisfaction levels among projects, several aspects of the development were rated fairly consistently across the survey:

- The majority of occupants from all of the projects were satisfied with all of the location characteristics except for their access to public transportation, which was rated as disappointing to most of the occupants in 2 of the projects.

- The project's general image was the highest source of satisfaction among the site attributes in 5 of the projects surveyed, with 32.6% of the respondents reporting being "very satisfied," and another 49.5% "satisfied."

- The majority of the 196 respondents were satisfied with all of the 11 unit features listed, and a significant fraction reported that they were "very satisfied" with 7 aspects in particular: interior appearance (38.5%), exterior appearance (31.2%), quality of exterior finishes (30.3%), total amount of space (32.2%), overall design/layout (28.3%), and amount of natural light (40.2%) and amount of cross-ventilation (30.2%). The total percentage of respondents expressing satisfaction with these attributes ranged from 79.9% for amount of natural light to 90.2% for both overall design/layout and total amount of space.

- Occupant satisfaction with the interior spaces in the units was exceptionally high. The most successful rooms were those which are found on the second floor. The master bedroom was the highest source of satisfaction for the majority of the occupants, with 57.7% reporting to be very satisfied and another 37.0% satisfied. The bathroom and second bedroom were satisfactory to 92.1% and 93.5% of the respondents, respectively. There were only 3 instances where substantial disappointment with the unit's interior spaces was expressed. These were the entrance area in two of the projects (34.5% and 47.7% dissatisfaction) and the kitchen in one other project (50.0% dissatisfaction).

• The weakest source of satisfaction with the units was the quality of interior finishes (receiving an average rating of 3.193), and soundproofing between units (3.500), although there was no other evidence of acoustic privacy being a problem.

• The most frequently mentioned changes that were proposed by the respondents dealt with the kitchen, the entrance, and the unit's width (increase to 5 meters), which received mention from 24.0%, 16.8% and 14.3% of the respondents, respectively.

The only attribute which was found to be a source of considerable disappointment was the size of the backyard areas, where 41.7% to 64.5% of respondents from 5 of the 7 projects reported being unsatisfied with the results. The projects' inability to provide an adequate backyard area was found to be the single most significant source of failure in the projects.

The study also found that there was a general increase in the occupants' use of a car as a primary mode of transportation, and in their commuting time to and from work. Furthermore, the occupants' distance from their work place received an exceptionally high priority rating when the importance of this aspect was evaluated. Although the purchase of the unit meant having to move further away from work for the majority of respondents in 3 of the projects, these same occupants reported being satisfied with their new situation. This leads to the conclusion that, for the most part, there was a strong willingness from the buyers to give up this particular aspect of location for the purpose of homeownership.

The level of improvement with respect to the occupants' former dwelling was fairly consistent among the site attributes, with the general image of the projects rating highest (3.876) and the level of privacy lowest (3.483). With the exception of the level of soundproofing between the units in one of the projects, all of the unit characteristics in all of the projects represented an improvement for the majority of occupants. Similarly, with the exception of the kitchen in one other project, all of the interior spaces were considered to be an improvement over the occupants' former dwelling.

Unit Modifications and Living Adjustments

The next phase of analysis examined the changes that occurred in the occupants' physical surroundings and living habits. This was not only a way of determining the extent to which the buyers' functional requirements were being satisfied, but also a way of testing the unit's adaptability.

The amount of work done by the occupants on the units was quite significant, considering the short period of residency. The study found that 39% of respondents had already done some work , all of it in the basement, including partitions which were erected by 22.5% of the respondents, implying that there was some kind of room addition. The most-frequently mentioned type of work was drywall installation, presumably to finish the exposed structure ceiling.

The majority of respondents (83.8 %) were planning to do work in their units. The most significant modifications planned are in the basement, where 61.5% of the items mentioned involve major work, such as the addition of a playroom, den, toilet, laundry, or bedroom. The type of modifications that were being planned for the upper floors were consistent with the findings of the previous questions, with the primary intention to upgrade the finishes and re-plan the kitchen.

More than half of the respondents (51.1%) reported that they were able to save either less or much less money than in their previous dwelling, while 31.5% specified that there was no change in this regard. The changes in living/leisure patterns were less pronounced, with 46.8% of respondents reporting a change. The majority of these (60.7%) reported spending more time at home and 29.1% reported that they were entertaining more at home. The majority of respondents (71.4%) reported that the expenses in their new home were either the same as or lower than anticipated.

Builders' Contribution and External Influences

The effect of 3 external factors on the implementation of the projects was examined with the following results:

- The effect of government subsidies was found to be significant in enhancing the affordability of the units. Close to 98% of those surveyed qualified for the subsidies, 34.4% of which felt that they would have bought the house anyway had the subsidies not been available, 38.7% said that they would not have bought, and the remaining 26.9% were not sure. The subsidies were therefore directly responsible for at least 38.7% of the sales.

- The regulatory environment was not considered to be a major obstacle. The long processing periods were reported to be a deterrent for many of the builders who considered applying for narrow-front lot subdivision. There was, however, no evidence of any real incentive or effort to change the existing lots. Concerns about the project's image caused minor delays in some cases, but with no significant effect on either the units or the price.

- The depressed economic climate proved to be somewhat beneficial. With housing production almost at a standstill, builders, who have traditionally been characterized by a reluctance to accept innovation, were given an incentive to look into new markets and become more receptive to new or unfamiliar design alternatives. Furthermore, with the increased competition in a struggling labour market, many of the subcontractors were offering reduced rates.

The small, local builder working independently was found to be an essential source in the production and delivery of affordable housing. The builders' knowledge of the market, coupled with their ability to act quickly and adapt to regulatory restrictions resulted in a successful and efficient interpretation of the Grow Home concept, which proved to be well-suited to most of the buyers' preferences and aspirations.

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1. INTRODUCTION

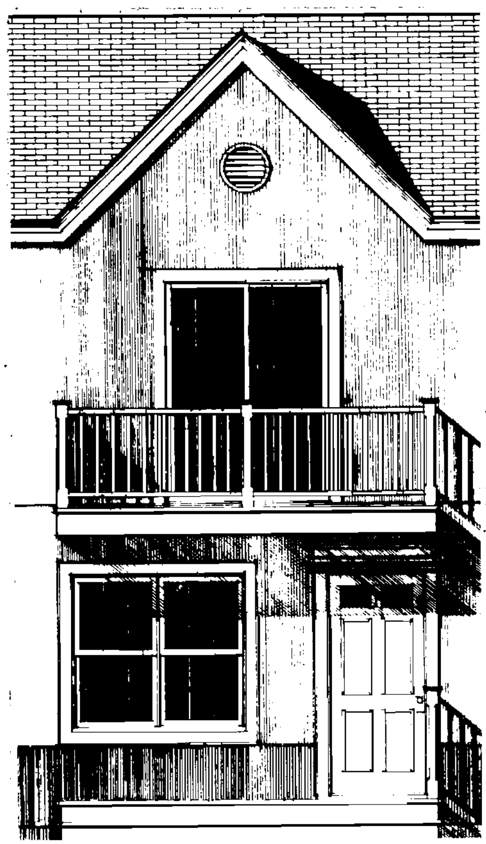
1.1 Background

In June, 1990, a team of researchers from the Affordable Homes Program at McGill University, sponsored by Dow Canada, developed the Grow Home--an affordable and adaptable alternative for an urban dwelling. The design was for a townhouse of 93 square meters, measuring only 4.3 meters wide. It had a kitchen, bathroom and living room on the ground floor. An unpartitioned second floor, which could later be modified to include two bedrooms and a second bathroom, was proposed in an effort to reduce costs and enable the owners to complete the unit at their own discretion. A full-scale prototype of the house was erected on the university campus and opened to the public for one month (figure 1.1).

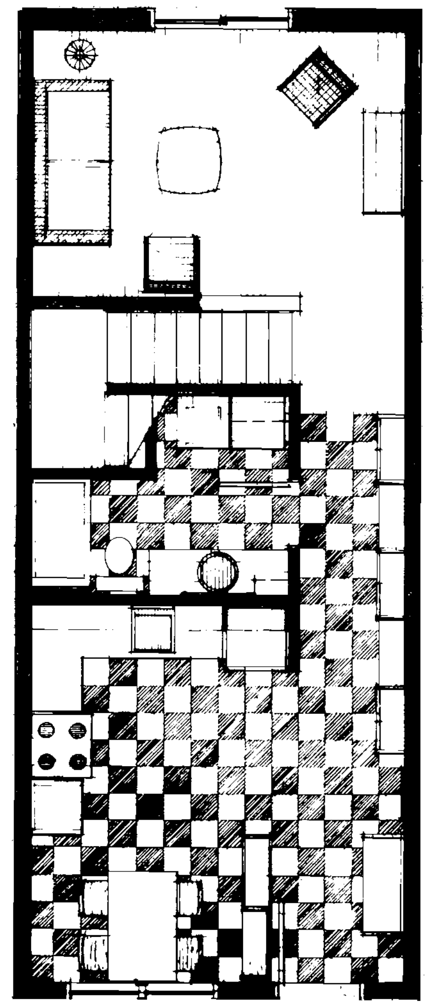
The Grow Home was intended to demonstrate that affordable living accommodation could be built for under $40 000 without sacrificing quality or occupant living comfort. It was designed under the belief that housing prices could be reduced by focusing on the product itself and reducing construction costs, an element that has been considered to play an insignificant role in the affordability equation. It was aimed at sensitizing the public to an alternative form of housing, more suited to the changing demographic profile of the North American household and more attainable to the average young, first-time buyer.

Six months after the demonstration unit was dismantled, Mr. Leo Marcotte, a local developer, started the first housing project based on the Grow Home concept. All of the 87 units in the project were sold within the first four weeks - before any ground was broken. Following Mr. Marcotte's lead, 12 other builders started Grow Home-type projects in and around the Montreal area. Over 660 units were built within the first 10 months in 19 projects, ranging in price from $69 000 to $95 000 , and several new projects have since been started.

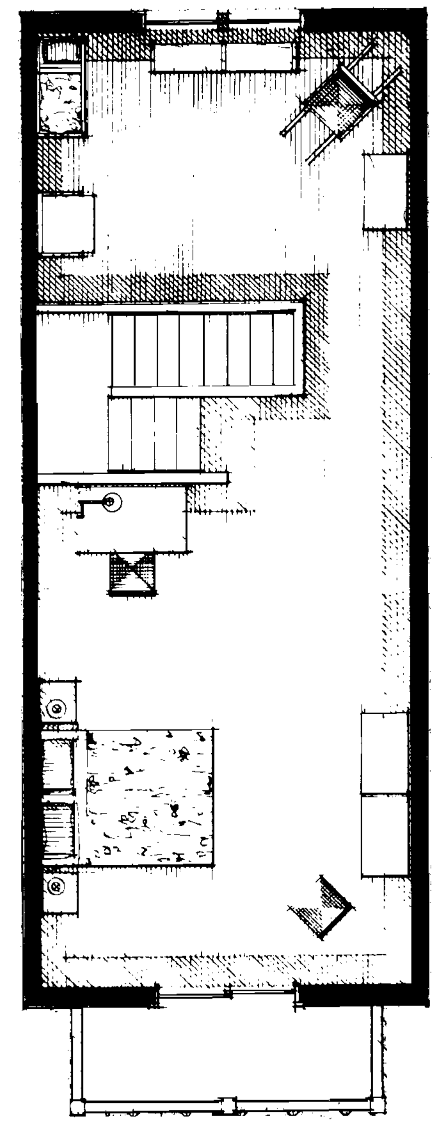
The proliferation of projects in and around the Montreal area presented an opportunity to evaluate the sociological, architectural and financial characteristics of the Grow Home in use, and to identify those aspects of the design concept which were most helpful in gaining the acceptance of the buyer and builder alike. Seven projects were selected, and a series of structured interviews were conducted with the builders in order to examine their experiences with the inception, design and implementation of the concept. Questionnaires were then distributed to the occupants of the units to assess their initial reaction to their new surroundings. This report summarizes the results of the survey.



Front Elevation



Ground Floor Plan



Upper Floor Plan

Figure 1.1: The Grow Home

1.2 The Grow Home

Development, construction and operating costs in the Grow Home were minimized by using simple and effective design strategies. The narrow-front rowhouse configuration allowed significant reductions in land and infrastructure costs, as well as in operating costs, since the heat losses were restricted to 2 exposed walls and a small roof area. For land costs of $215 per square meter, standard lot depths of 30.5 meters and servicing costs of $1 300 per meter, every meter of frontage costs $7 858. By reducing the frontage from 5.5 meters (which is the minimum required by the City of Montreal) to 4.3 meters, a $9 600 saving was incurred. The 4.3-meter dimension also represents the cut-off point for a floor structure consisting of 50mm x 254mm joists at 406mm c/c; adding one foot to the width requires upgrading to a structure which costs 25% more. The need for interior load-bearing partitions is also eliminated, making the space very flexible and adaptable.

Construction costs, kept below $40 000, were minimized by virtue of the house's small size, simple layout, and the efficient use of conventional construction materials. Assuming construction costs at $540/sq.m., a savings of $15 000 could be achieved by simply reducing the size of the dwelling from 120 sq.m. to 93 sq.m.. With the shrinking size of the average North American household, a smaller dwelling would not necessarily compromise the occupants' living comfort. By eliminating irregular contours and staggers, cost reductions could be expected at every level of the construction process, from foundation to roofing. A rectangular configuration, for instance, has about 20% less perimeter than an L-shaped unit of the same floor area. Both labour and material costs are reduced by simplifying the construction task and standardizing the dimensions of the structural and cladding elements. Complex joints and details were kept to a minimum.

Accounting for about one third of the total construction costs, the finishing operations in housing units are among the most labour intensive. By allowing for a flexible interior space, the timing and magnitude of these costs can be manipulated. By leaving the second floor unpartitioned at the time of purchase, as an open loft space for instance, a savings of about $5 000 can be achieved. The space may then be finished by the owner at his or her own discretion.

Decisions related to both planning and construction materials were also aimed at reducing heat loss. The effects of building plan on energy consumption were analyzed by comparing calculated heat losses for six hypothetical types of units. The designs all used the same construction materials but differed in size, configuration, height and grouping. When compared to a completely detached unit, the semi-detached and rowhouse versions of the Grow Home offered reductions in heat loss of 21% and 43%, respectively.

1.3 Public Response

The public response to the Grow Home project was widespread. The Affordable Homes Program received a total of 1410 written requests for information by the end of 1991, with the following breakdown:

- personal: 71%
- developers, real estate agencies and other construction-related organizations: 17%
- educational institutions, professional consulting practices and others: 12%

Approximately 40% of the inquiries were from across Canada, and a vast majority of the others came from the United States. Over one quarter of these were from California, with New York and Pennsylvania accounting for another 20%. Two thirds of the Canadian inquiries were evenly split between Ontario and Quebec. Requests for information were also received from Sweden, France, Portugal, Germany, South Africa and Thailand.

Most of the construction activity related to the Grow Home in and around the Montreal area was continuously monitored. As of December 10, 1991, there were 19 projects being built by 13 contractors totalling 660 units. Over 90 percent of these units had already been sold, and about half of them were occupied. An outline of these projects as well as a summary table are found in appendix A. Those projects marked with an asterisk have been selected for the study.

Although there has been no confirmed report of Grow Home projects being built elsewhere in Canada or in the United States, the large number of inquiries that have been received from builders in these areas (240) makes it likely that some projects have already been implemented.

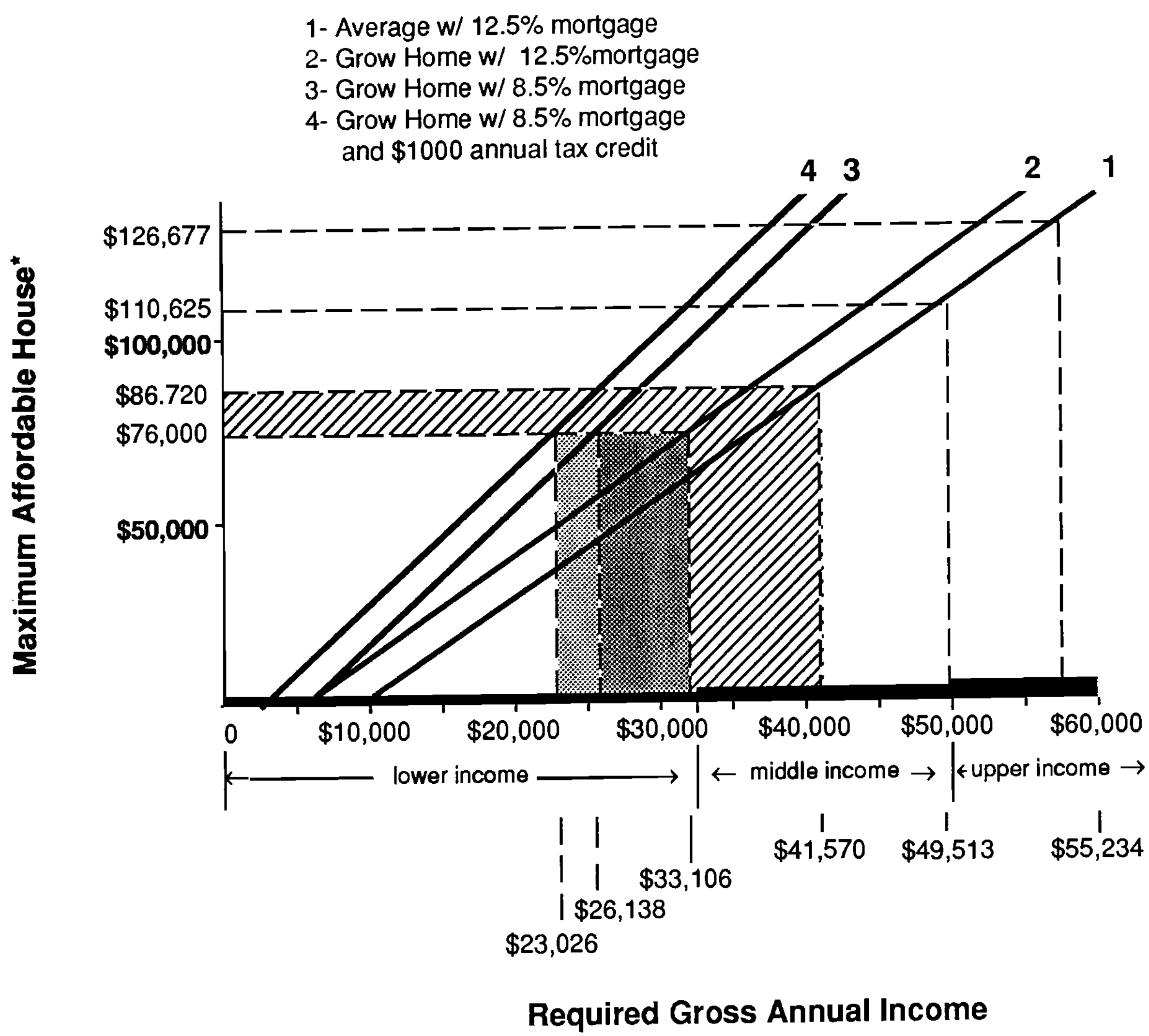
1.3.1 Built Projects

The built projects in Montreal revealed some interesting interpretations of the Grow Home concept. While the 4.3-meter width was retained in all cases, the builders modified the design to suit the tastes and budgets of their own particular market. The original plan, which subdivided the space with a central plumbing/stair core, was altered in most cases to accentuate the full depth of the space. The second floor was partitioned and finished in all but one project, some with "luxurious" bathrooms with separate showers and whirlpool baths. Eleven of the builders provided brick veneer on the exterior to increase quality and project an image of permanence, while the remainder used a cement-based aggregate finish. All units were built with basements, adding 46.5 square meters to the floor area, and indoor garages were included in 15% of the homes. Vestibules and walk-in closets were added to the units in one of the projects, while separate garages were added to the sides in another. These options, which were proposed as extras in the original design, became standard features in many of the projects. A summary of the projects is found in appendix A.

1.3.2 Government Subsidies

The affordability of the units was enhanced with government programs aimed at reducing the cost of home ownership for the first few years. The federal government made the purchase possible with as little as 10% down payment through an existing insured mortgage program. In a effort to promote housing starts, the Quebec government offered up to $150 000 to buyers of new homes built by local builders. Applicants had the option of choosing $8.5% financing for three years, or a subsidy of 4.5% of the total cost of the dwelling, up to a maximum of $5 000. At the same time, the City of Montreal implemented a program aimed at attracting residents back into the city. An annual reduction in property tax of $1 000 for five years was made available to first-time buyers purchasing a newly built or renovated dwelling costing up to $100 000, not including land, infrastructure or sales tax. The reduced development, construction and operating costs, combined with the government subsidies enabled the purchase of a $76 000 home on $618 a month (including sales tax). With a down payment of under $8 000, apartment tenants with a gross annual household income of $24 000 would have been able to become homeowners.

The combined effect of the subsidies and reduced construction costs on affordability is illustrated in figure 1.2. The median household income in Montreal was approximately $41 500. Assuming a 32% gross debt service ratio and a 10% down payment, the maximum affordable home at this income is close to $86 000. This is $24 000 lower than the average price of a resale listing and $40 000 less than the average price of a new house. At these prices, household incomes of $49 500 and $55 300 would be required, falling well into the upper income brackets.



*Based on total carrying costs, including capital, interest, property tax and heating. Annual property taxes and heating costs for the Grow Home were estimated at $1115 and $240, respectively. Costs for other types of units were based on averages for the City of Montreal and assumed to be $2,115 for property taxes and $980 for heating, Sales tax were not included. A gross debt service ratio of 32% is assumed with a 10% down payment.

Source of Data: CMHC, ACQ

Figure 1.2: Combined Effect of Government Subsidies on Affordability

Through lower property taxes and heating costs, the Grow Home shifted the affordability curve towards the left (line 2). Because of the lower development and construction costs, the units were priced at $76 000, making them attainable to households earning slightly more than $33 000 -- just below the middle income bracket. By offering 8.5% financing, the provincial government put the units within the range of households with a $26 000 annual income. The tax credit offered by the city shifted the curve further (line 4) to reduce the required household income to $23 000.

1.4 Study Objectives

In light of the Grow Home's recent success in the Montreal area, the purpose of this study was to evaluate the potential of narrow-front rowhousing to respond to Canada's affordability challenge. There are three aspects regarding the inception, design and implementation of the projects that were of interest in evaluating this potential. The first was how successful the product itself was in meeting the functional requirements and financial limitations of the buyers. The second aspect was the role played by the builder in interpreting the concept and marketing the units, and finally, what the effect was of external factors, such as the regulatory environment and government subsidies, on the implementation and sales of the projects. Following a thorough documentation of the projects physical characteristics, both builders and occupants were surveyed with the following objectives:

- Establish the demographic makeup of the buyers
- Evaluate the occupants' satisfaction with their new surroundings
- Determine what tradeoffs the buyers were willing to make with respect to their former dwelling in their decision to become homeowners
- Acquire a detailed cost breakdown of the projects and identify those factors which presented the greatest potential cost savings
- Establish the general profile of the Grow Home builders
- Examine the builders' experience with the implementation of their projects
- Record the marketing strategies used
- Record any regulatory obstacle or public resistance which was encountered

2. METHODOLOGY

2.1 Project Selection

The study was limited to 7 projects (with a total of 315 units) and 7 builders. Two of the projects in the survey were built by the same contractor, and one additional contractor volunteered to be interviewed and to provide information on his project, which was included in the results of the builder survey. The occupants from this project, however, were not surveyed due to the project's small size and late completion.

The seven projects in the survey were selected based on the following criteria:

- Apparent willingness of the builders and occupants to cooperate with the researchers
  - all of the selected builders agreed to be interviewed, to submit a breakdown of construction costs for the project, and to make a copy of the construction drawings available.

- Advanced state of completion of the project and high number of units occupied
  - the units in 3 of the 7 projects were fully occupied when the questionnaires were distributed, as were over 60% of the units in the other projects

- Location of project
  - one project was located on the island of Montreal, 2 projects on the north shore, 2 others on the south shore, and the last 2 in neighbouring communities off the east end of the island

- General approach to site planning
  - four of the projects were laid out in a conventional manner using existing municipal plans and infrastructure, while the remaining 3 developed new site plans for a group of units, sometimes with private roads

- Type of layout and presence of distinct design features
  - the units in different projects have two types of layout and include features such as garages, vestibules, and aggregate finishes on the exterior

- Consistency of design in units pertaining to the same project
  - the units within each of the projects have little or no variation in size, layout and exterior appearance

2.2 Data Collection

The occupants in seven projects were surveyed. All of the 236 households were visited and asked to fill out questionnaires. A total of 196 questionnaires were completed (a response rate of 83%), with 38 households refusing to cooperate and 2 households that could not be reached despite repeated visits. Two of the projects contained units which were considerably different from the rest of the project, either in terms of dimension or configuration. These units were therefore omitted from the study. The scope of the survey is summarized in table 2.2.

The occupant surveys were conducted between September 15 and December 15, 1991. The occupants in projects 6 and 7 were the first to be visited, after which minor modifications were made to the questionnaire based on recommendations from CMHC. Two questions were added. The first one dealt with the effect of the government subsidies on the occupants ability to buy the house (Q26), and the second one examined how the expenses in the new dwelling compare to what the occupants had expected (Q44). The occupant questionnaire is found in appendix D1, while the results of the survey are found in appendix B.

Project	No. of units started	No. of units occupied	No. of units suitable for study	No. of households visited	No. of refusals	No. of questionnaires completed	Rate of response
1	18	16	16	14	2	12	75.0%
2	32	17	12	12	2	10	83.3%
3	73	49	44	44	8	36	81.8%
4	12	12	12	12	1	11	91.7%
5	26	26	26	26	0	26	100%
6	87	87	87	87	17	70	80.5%
7	47	39	39	39	8	31	79.5%
TOTAL	315	246	236	234	38	196	83.0%

Table 2.1: Response Rates of Occupant Survey

Information from the builders was gathered through general discussion and structured interviews. Project documentation in the form of site plans and working drawings was made available, and forms for cost breakdowns were distributed to the builders to be filled out and returned. Two interviews took place, one with a general questionnaire and a second using a shorter, supplementary questionnaire. The latter consisted of 5 questions dealing with the builders' experience with the regulatory authorities, public opposition and rate of unit sales, and was developed based on the recommendation of CMHC. The general and supplementary builder questionnaires are found in appendices D2 and D3, respectively. The cost breakdown forms are found in appendix D4. The results of the builder interviews are summarized in appendices C1 and C2.

3. PROJECT DESCRIPTION AND COMPARISON

All of the projects selected for the study were developed in suburban settings. The projects' general location, site plan and floor plans are illustrated in figures 3.4 to 3.18. Some of the project characteristics, proximity to services and general construction methods used are summarized in tables 3.1, 3.2 and 3.3, respectively.

	Number of Units	Selling Price [1]	Floor Area (two floors)	Grouping of Units	Density (Units/ha)	Average Front Yard [2]	Average Back Yard [2]
Project 1	18	$72 900	93.9 m^2	9	51.3	24.2m^2	46.5 m^2
Project 2	32	$70 900	93.9 m^2	4, 8, 10	53.5	16.5m^2	79.0m^2
Project 3	73	$83 400	105.9 m^2	3	41.4	30.4m^2	56.9m^2
Project 4	12	$86 500	97.5 m^2	4	43.2	28.1m^2	46.3m^2
Project 5	26	$71 900	94.8 m^2	4, 6	44.8	41.2m^2	45.9m^2
Project 6	87	$76 000	94.3 m^2	3, 4,6, 7, 8	55.0	24.1m^2	78.1m^2
Project 7	47	$69 000	93.9 m^2	5, 7	58.5	41.0m^2	27.2m^2

1. Base model, including land & infrastructure; not including taxes
2. Includes parking where applicable

Table 3.1: General Characteristics of Selected Projects

LOCATION CHARACTERISTICS OF PROJECTS	Proximity to Shopping Facilities	Proximity to Medical Services	Proximity to Public Schools	Proximity to Public Transportation
Within walking distance	**3,4**	**3,4**	**3,5,7**	**3,5,7**
Within a 10-minute drive	**1,2,5,6,7**	**1,2,5,6,7**	**1,2,4,6**	**1,2,4,6**
Within a 20-minute drive	-----------	-----------	-----------	-----------
More than a 20-minute drive	-----------	-----------	-----------	-----------

Table 3.2: Location Characteristics of Selected Projects

Poured Concrete Foundations: • 254mm foundation walls • 760mm X 300mm strip footings • 100mm slab in basement	Insulation Values: • 3.8 RSI for walls • 7.3 RSI for the roof
Wood-Frame construction: • 50mm X 152mm stud walls • 50mm X 254mm floor joists • Prefabricated roof trusses	Interior Finishes: • 12.7mm wallboard, walls & ceiling • Parquet or carpet flooring • Cushion floor in ground-floor bathroom and kitchen • Ceramic tiles in upper floor bathroom
Common Walls: • Double stud wall; 50mm X 100mm w/ 2 layers batt insulation; 4 layers of 12.7mm gypsum wallboard	Exterior Finishes: • Brick veneer on entire front • Brick and/or aluminum around sides and back

Table 3.3: General Construction Characteristics of Selected Projects

While most of the projects were generally similar in the site plan, unit design and construction methods, there were several exceptions which are noteworthy:

- All of the units in project 1, most of those in project 7 and some of those in project 5 do not face a municipal street.

- The overall scale of projects 5 and 7 is smaller than that of the other projects since the units were placed closer together on the site plan, either when facing each other over a private road or across a yard space, back to back.

- The front yards of projects 1 and 7 have been paved almost entirely to accommodate parking, and project 3 is the only one to have interior garages (66% of the units).

- Parking for the units in projects 2 and 6 is located in the back of the homes, and is accessible directly from the kitchen

- All units have practically the same floor area with the exception of project C, which has about 6 m^2 more area on each floor, and to a lesser extent project D, which has about 2 m^2 more per floor.

- The ground floor plan in project E is different from all the others in that the living and dining areas are separated by a kitchen which is located in the middle of the unit.

- The units in all of the projects are entered directly into the living room with three exceptions: project 5 has a small vestibule which opens into the dining room, project 4 has a separate entrance space which has been extended outward from the front of the unit (and is entered along the width of the house), and project 7 has a closet facing the entrance door which defines a small entrance space off the living room.

- The dividing walls between the units in projects 4 and 5, although different from one another, were built using 200mm concrete block. The common wall in project 3 differs from the others in that it has one less layer of gypsum wallboard; two layers of fiberboard were added and resilient bars were installed on one side.

- The entire front elevation of the units in all of the projects were finished with brick veneer except for project 7, which had a cement-aggregate finish.

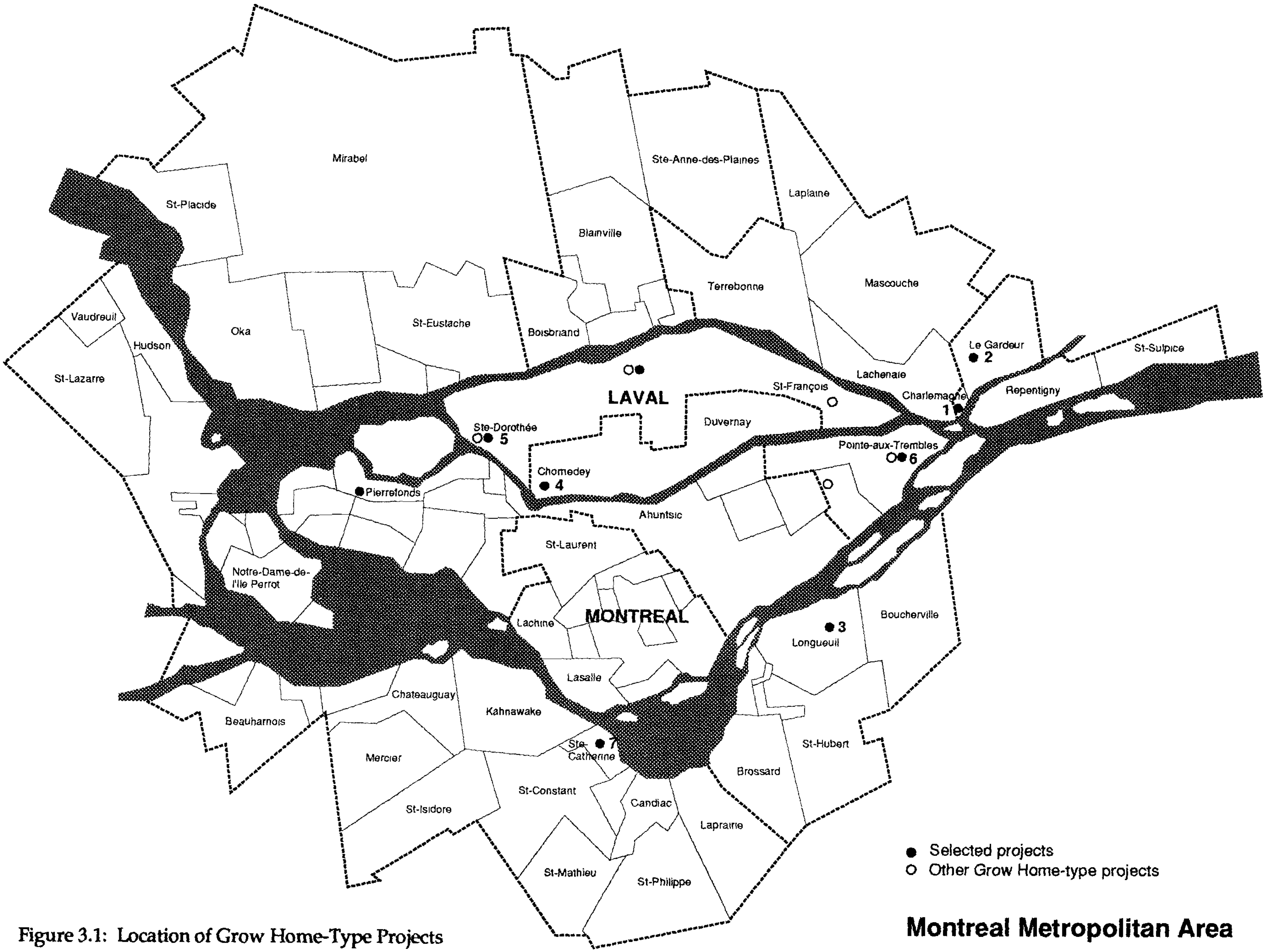


Figure 3.1: Location of Grow Home-Type Projects

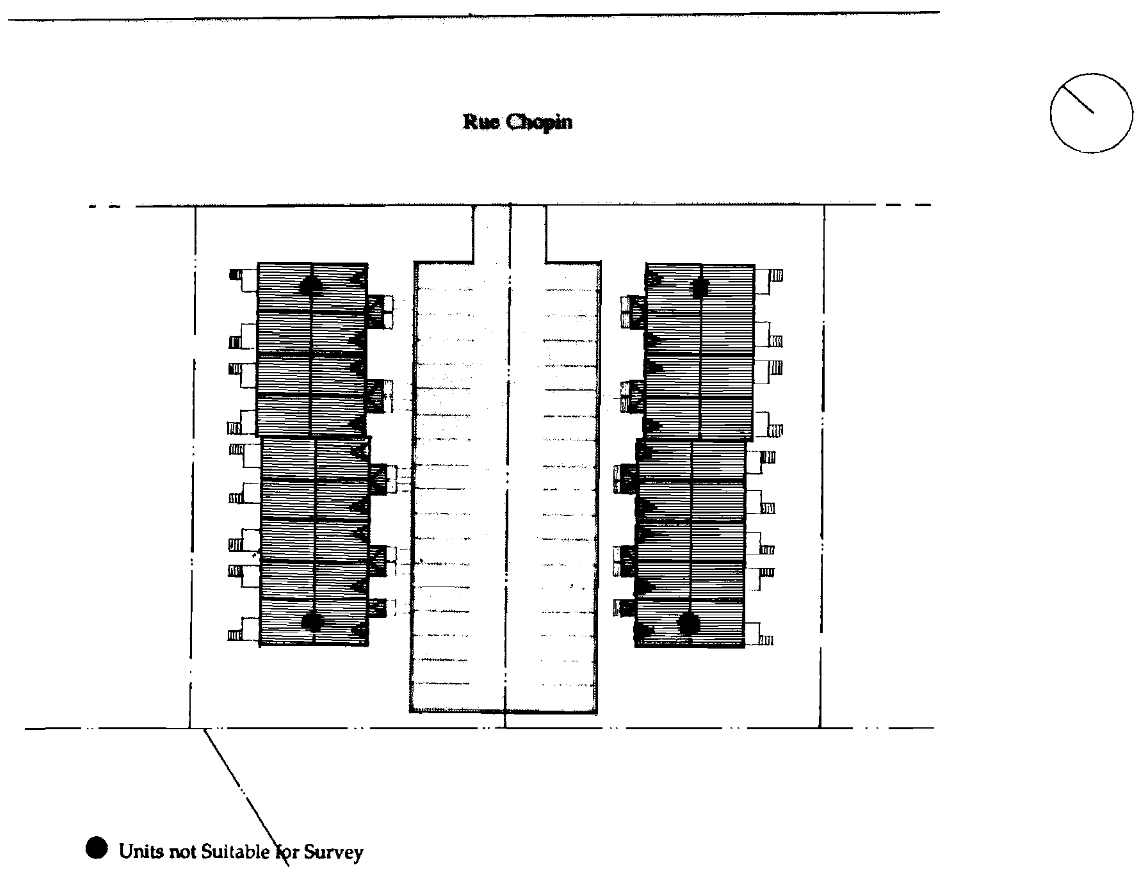


Figure 3.2: Site Plan - Project 1

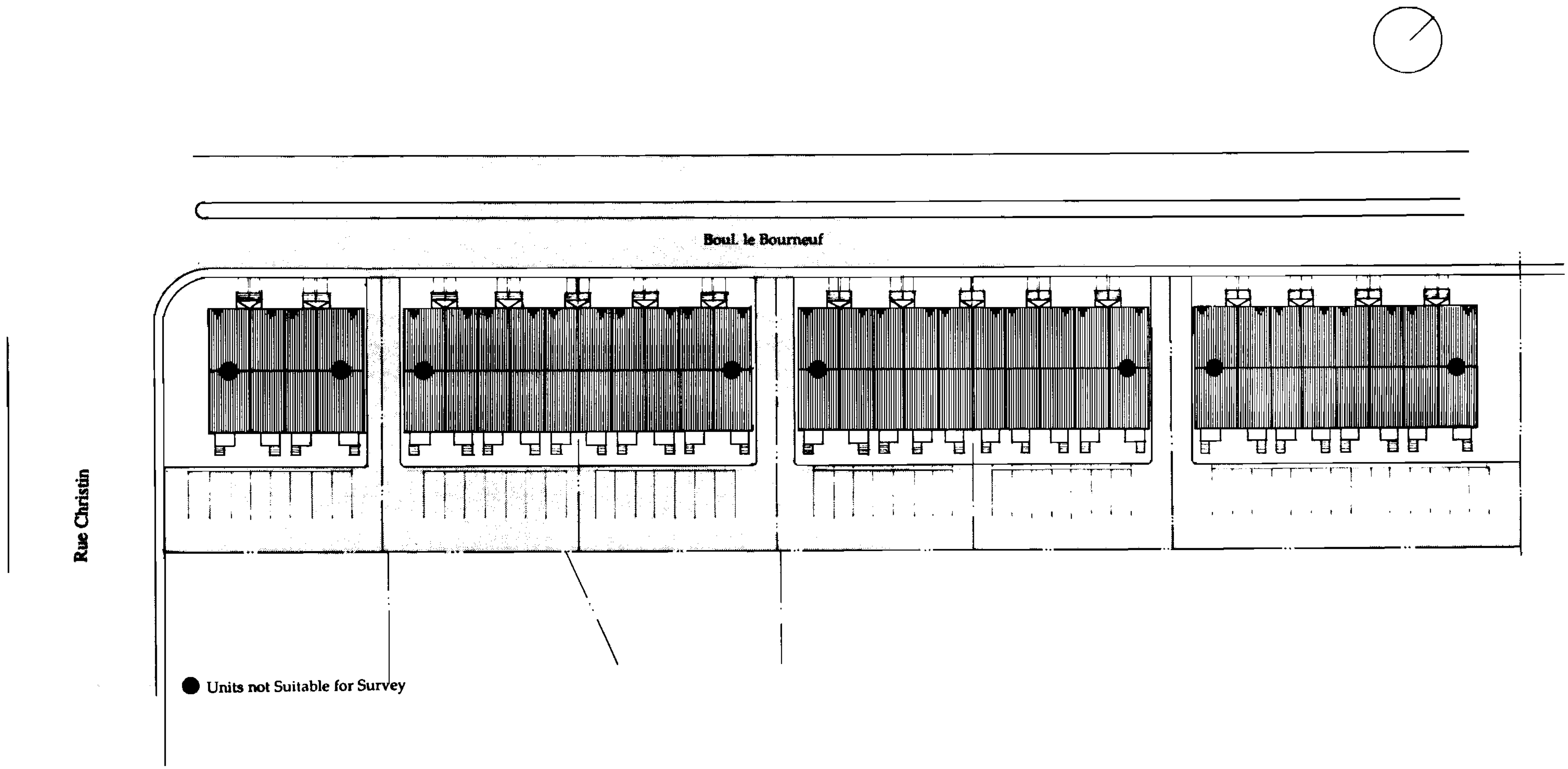


Figure 3.3: Site Plan - Project 2

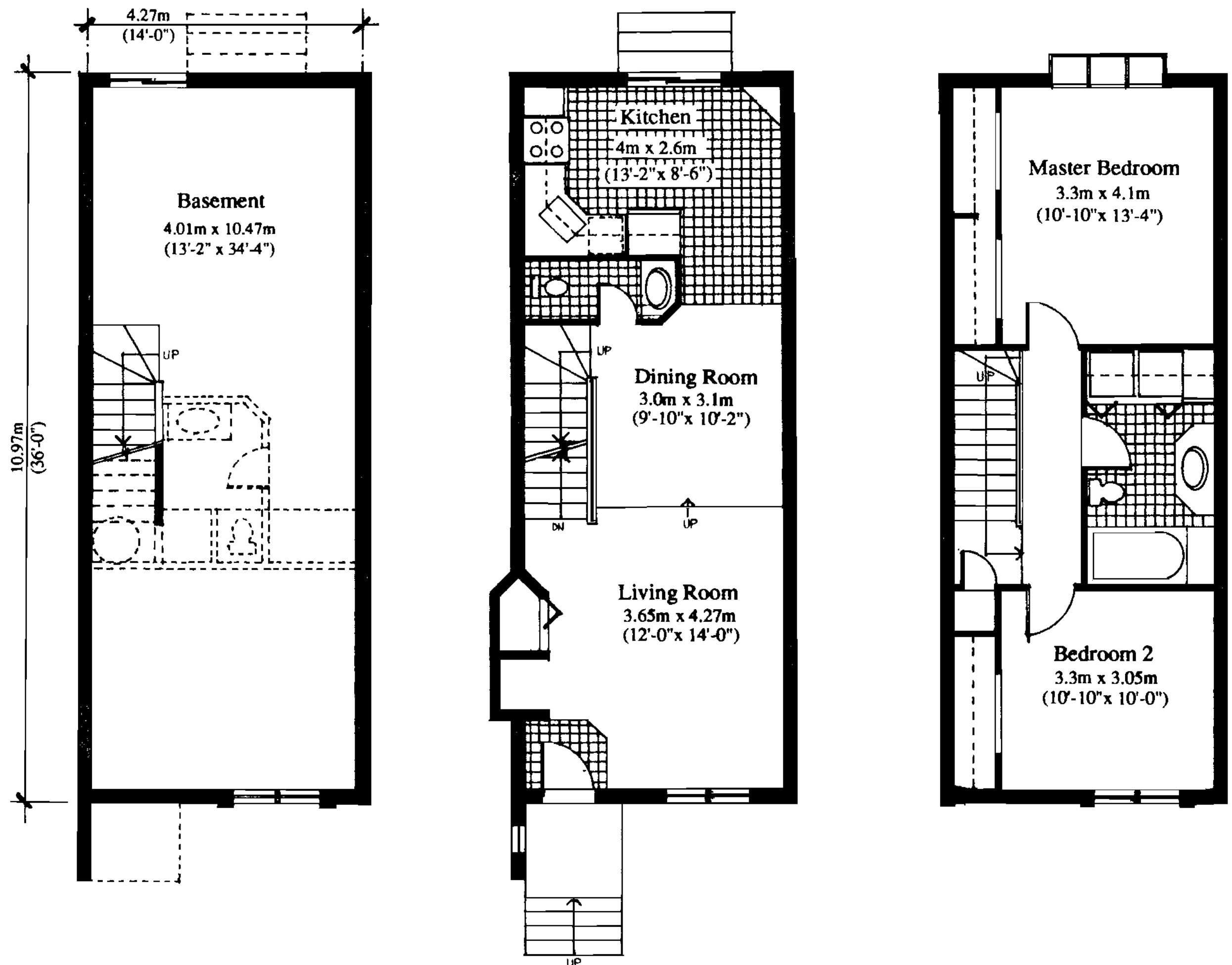


Figure 3.4: Floor Plans - Projects 1 and 2

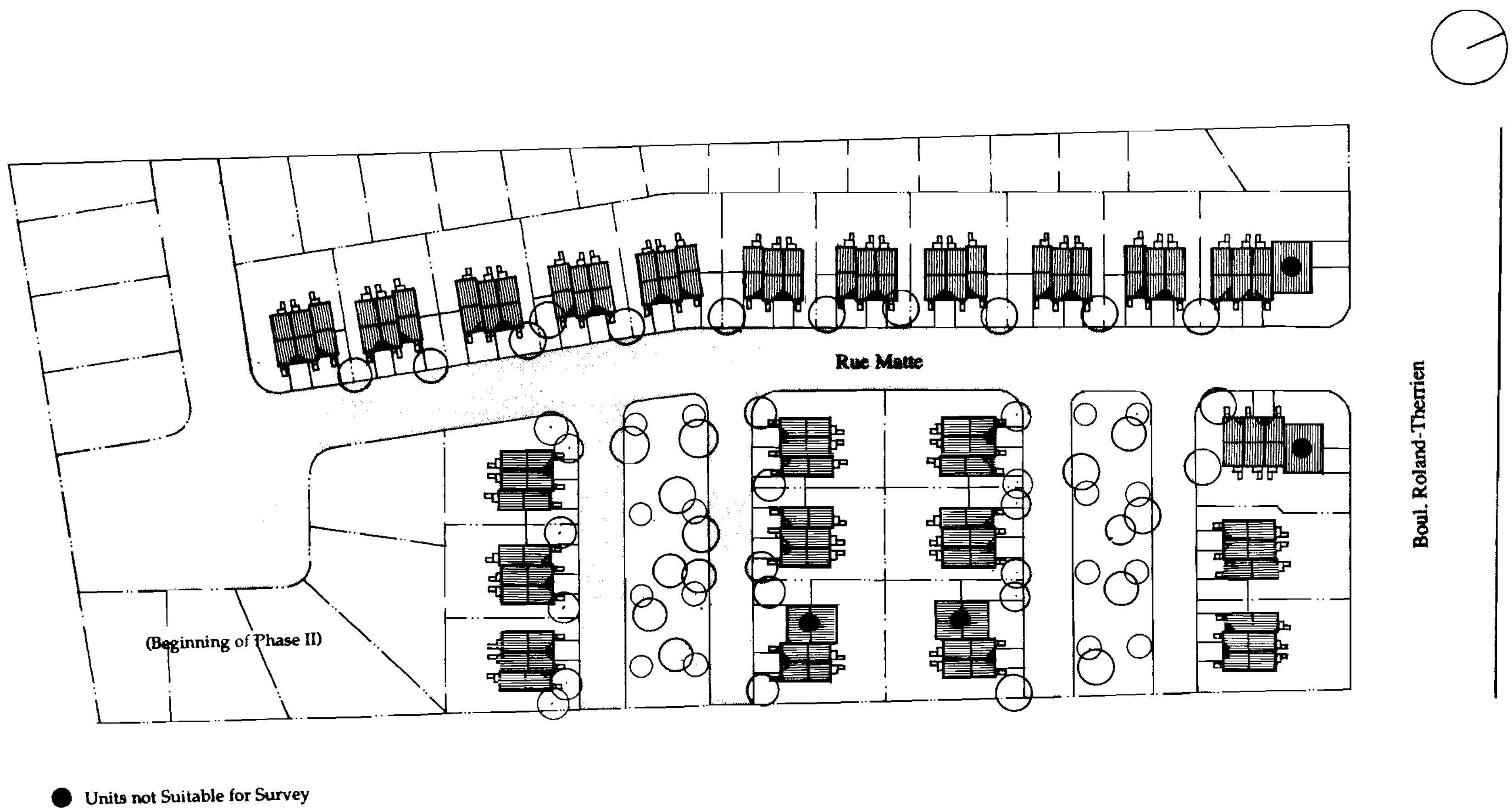


Figure 3.5: Site Plan - Project 3

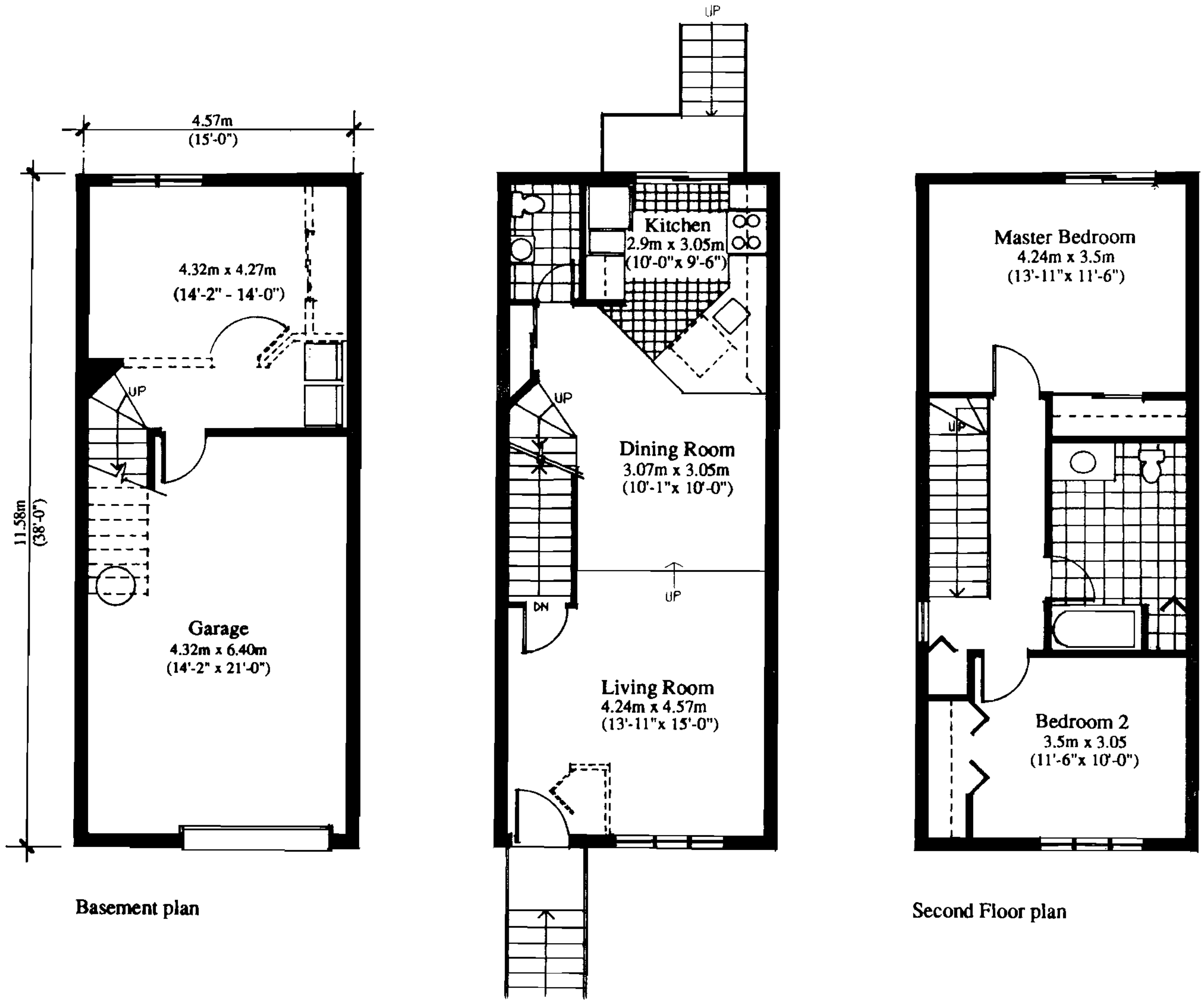


Figure 3.6: Floor Plans - Project 3

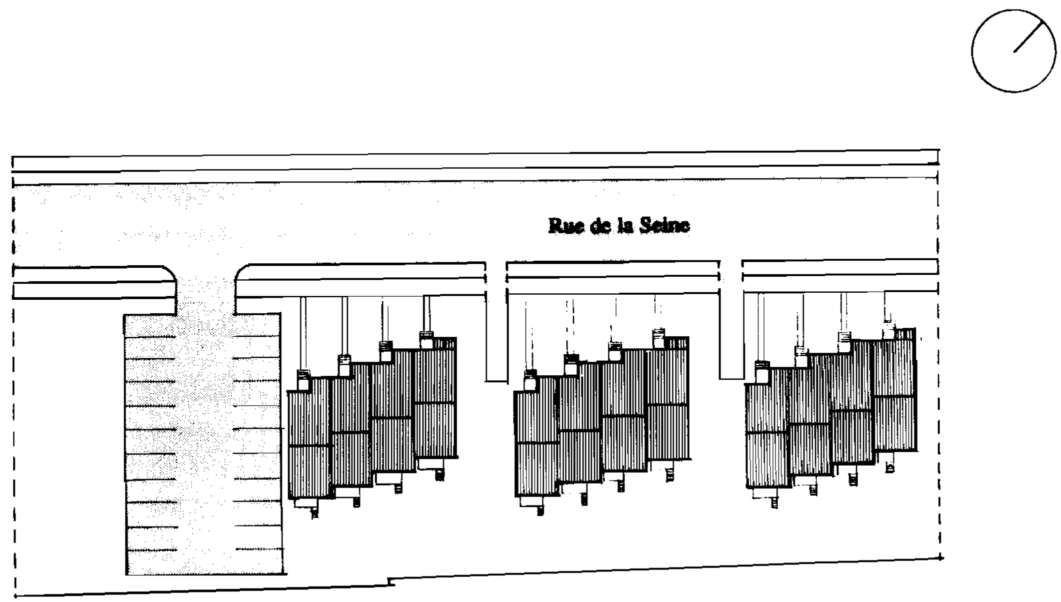


Figure 3.7: Site Plan - Project 4

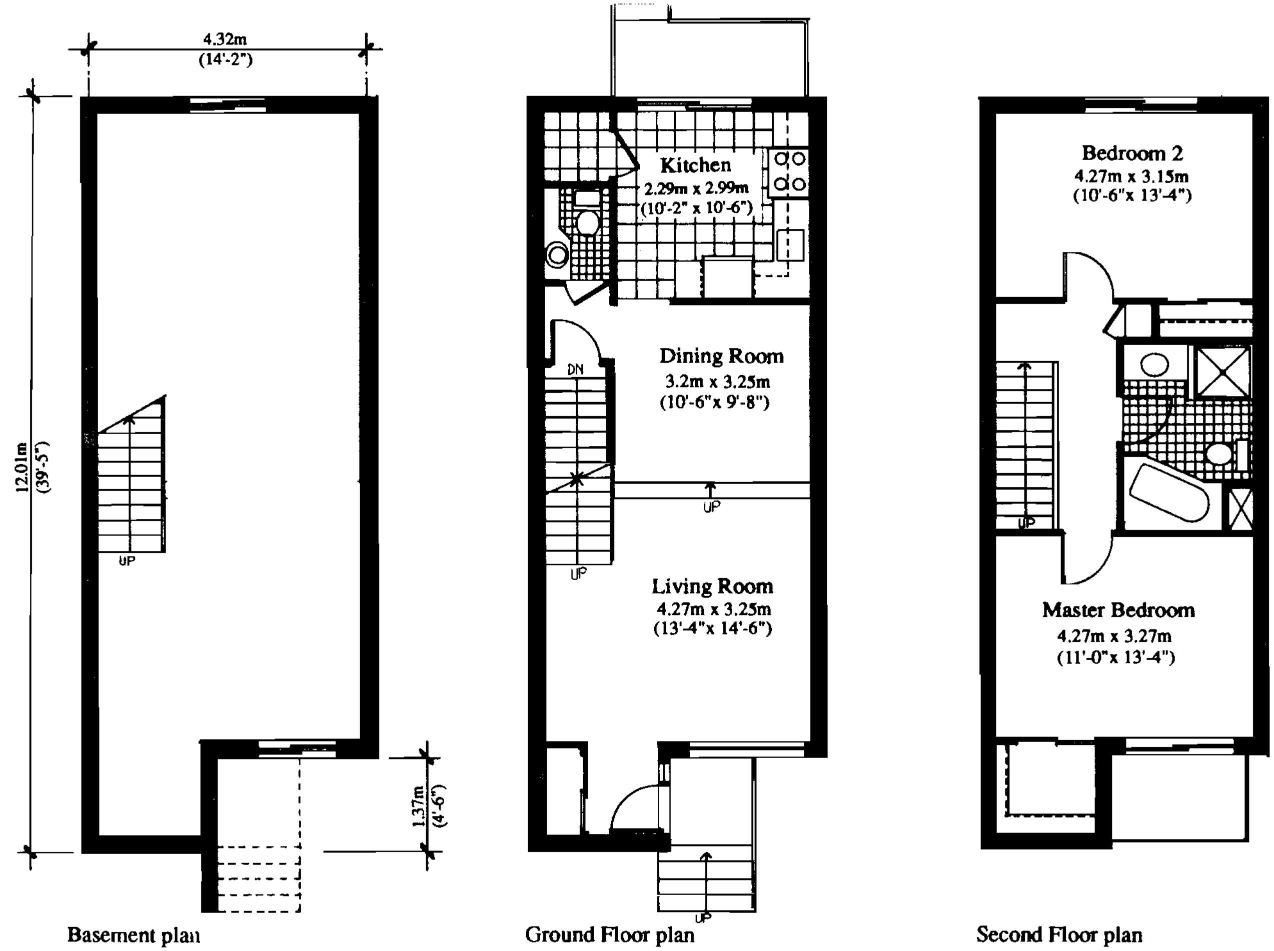


Figure 3.8: Floor Plans - Project 4

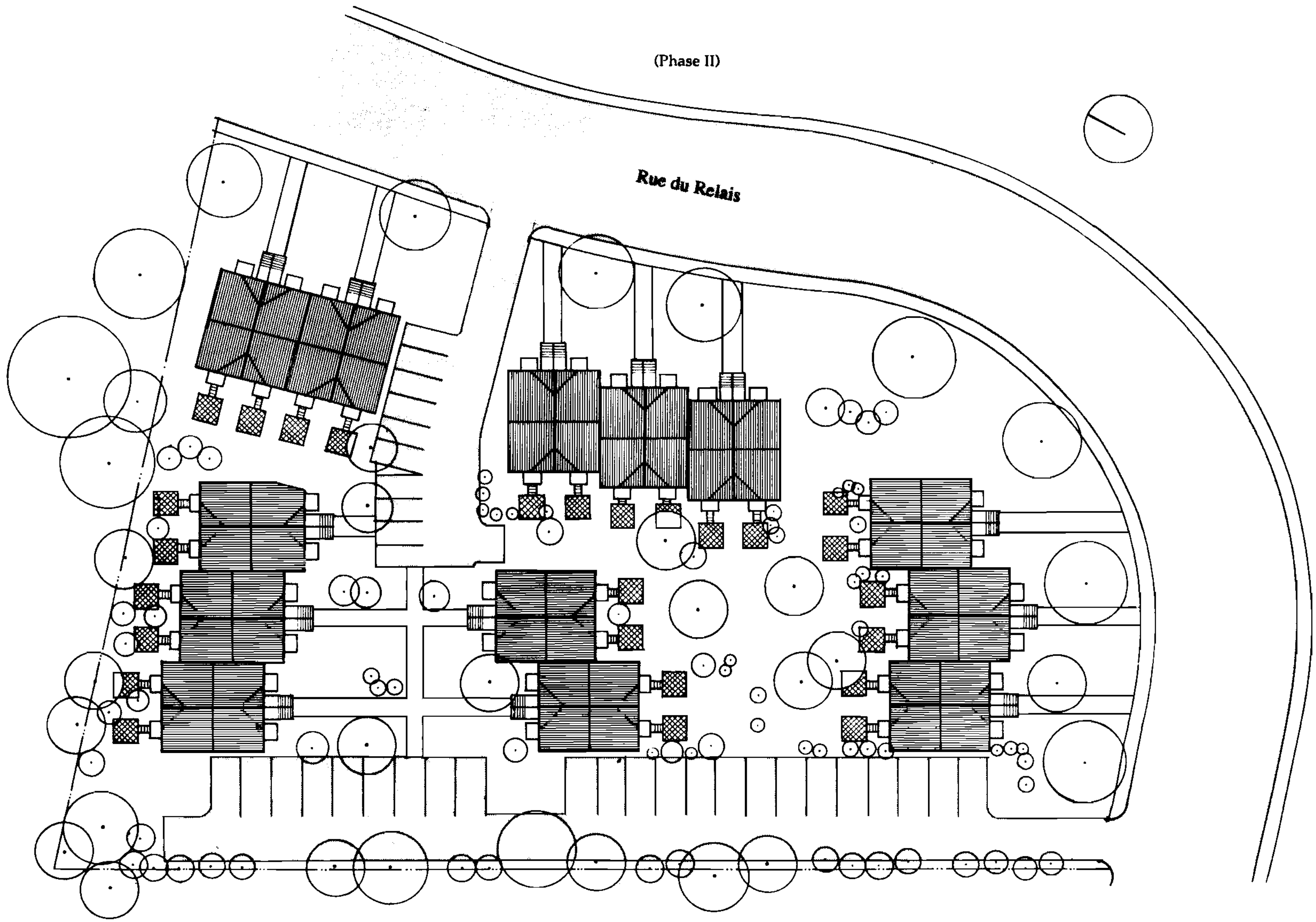


Figure 3.9: Site Plan - Project 5

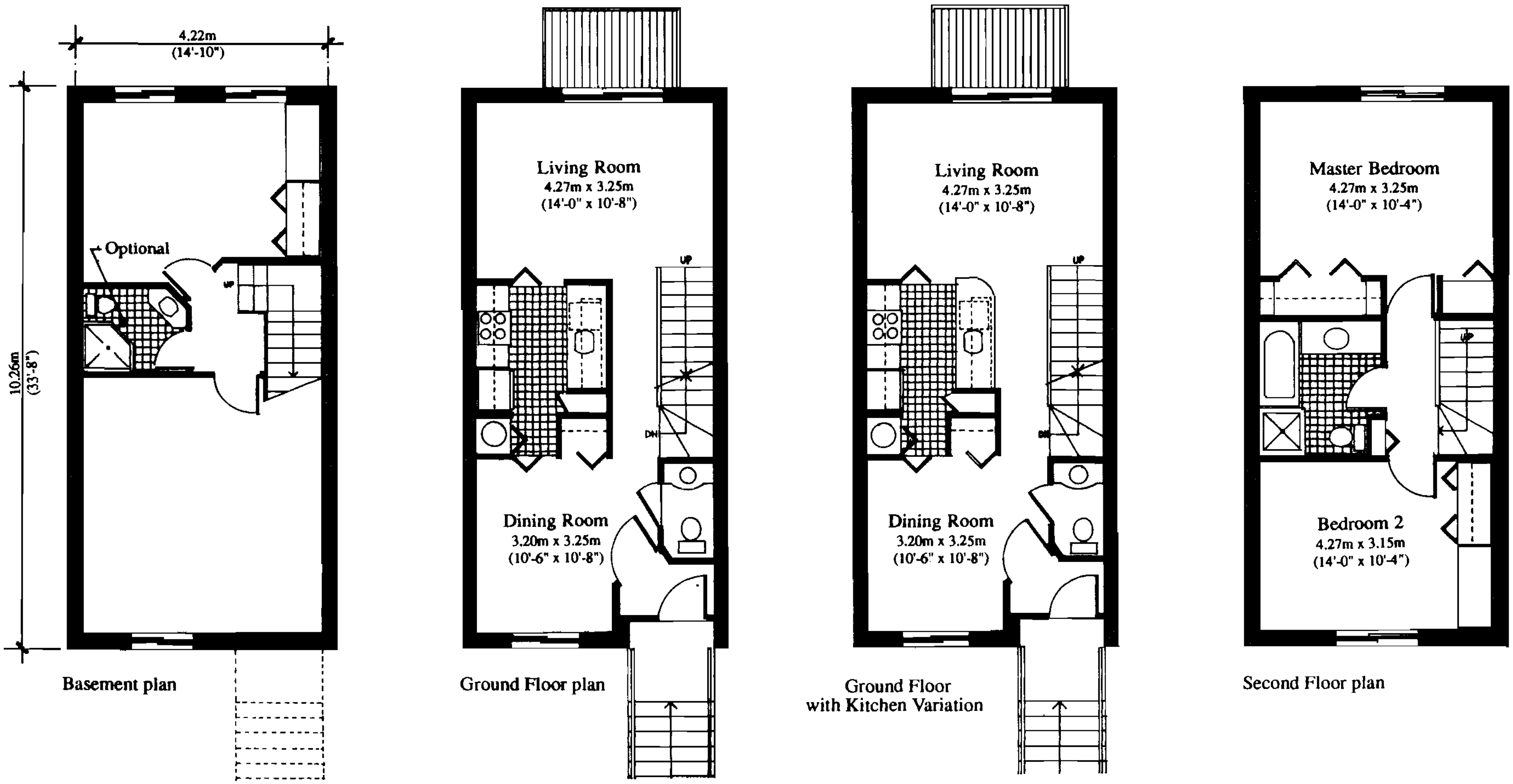


Figure 3.10: Floor Plans - Project 5

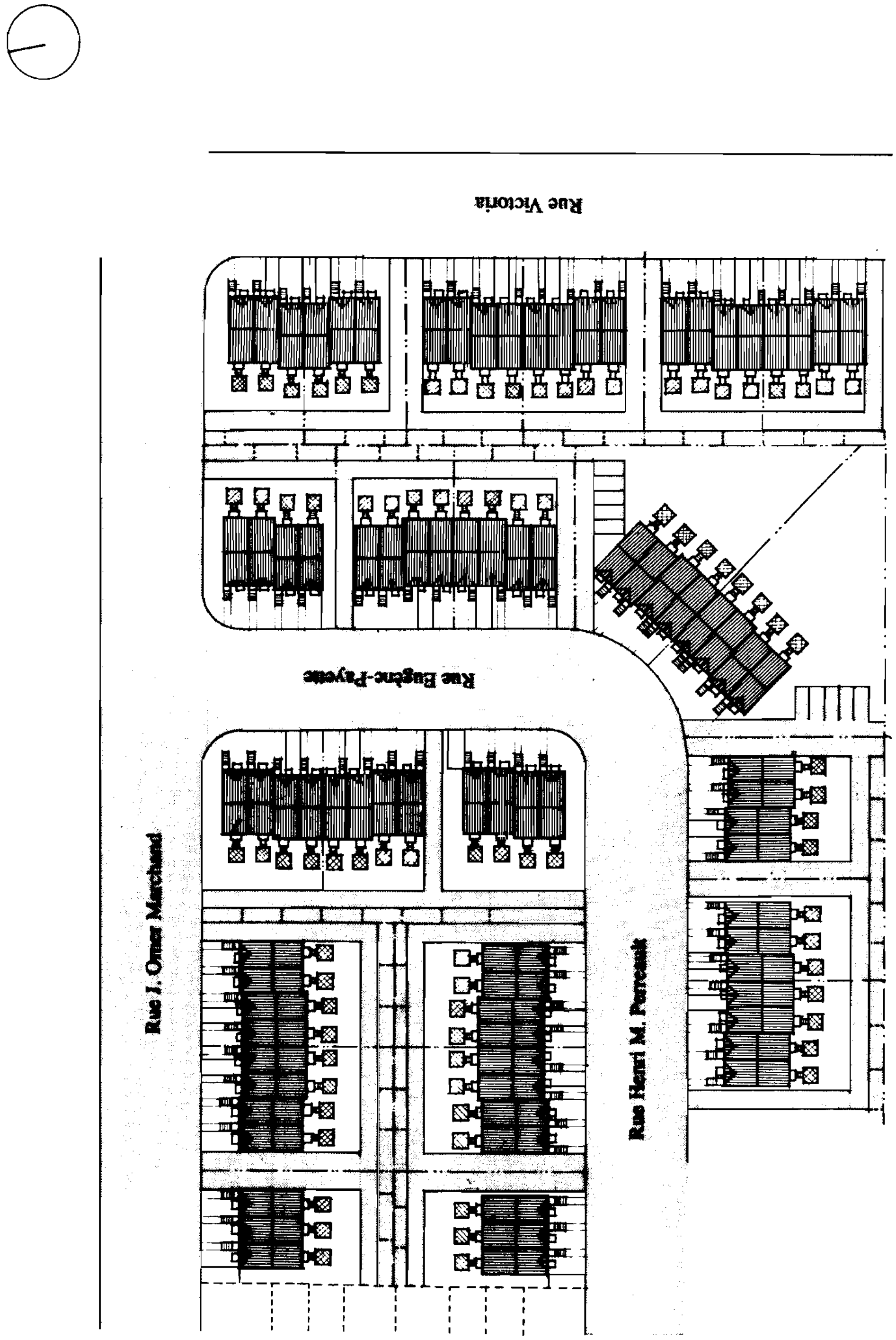


Figure 3.11: Site Plan - Project 6

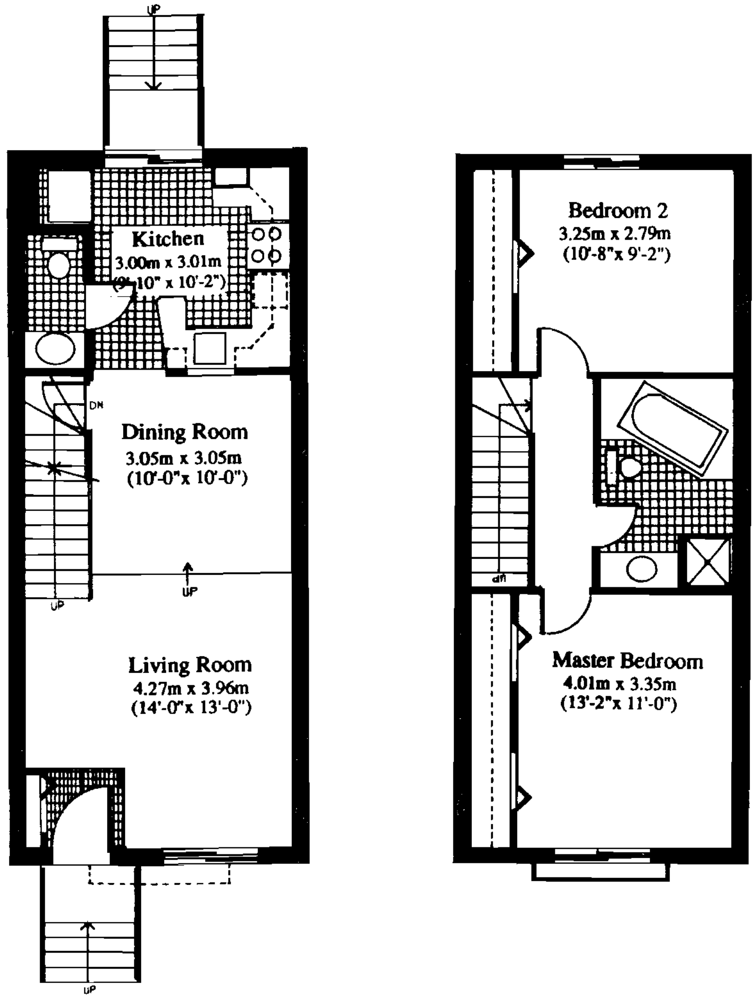


Figure 3.12: Floor Plans - Project 6

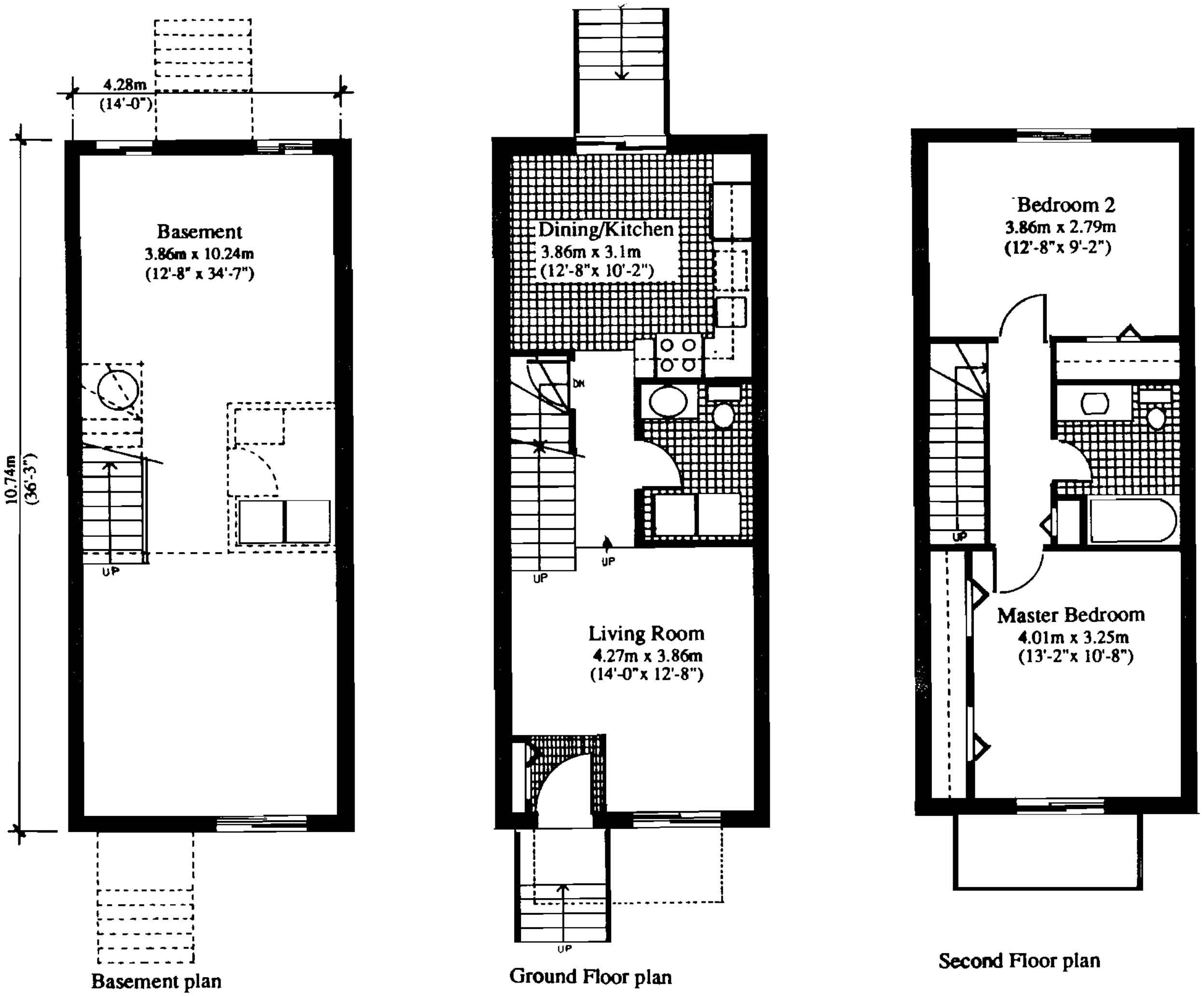


Figure 3.13: Optional Floor Plans - Project 6

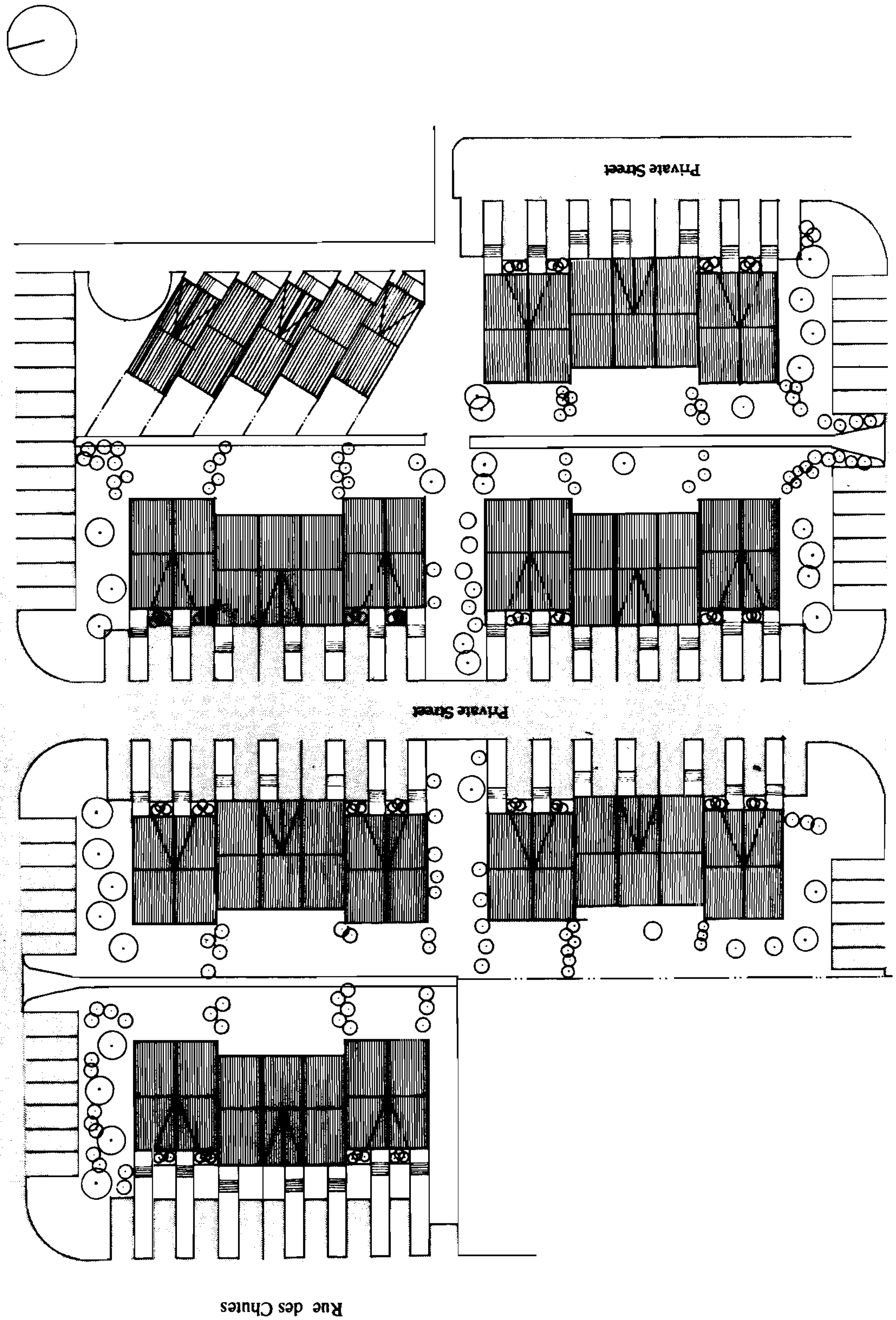


Figure 3.14: Site Plan - Project 7

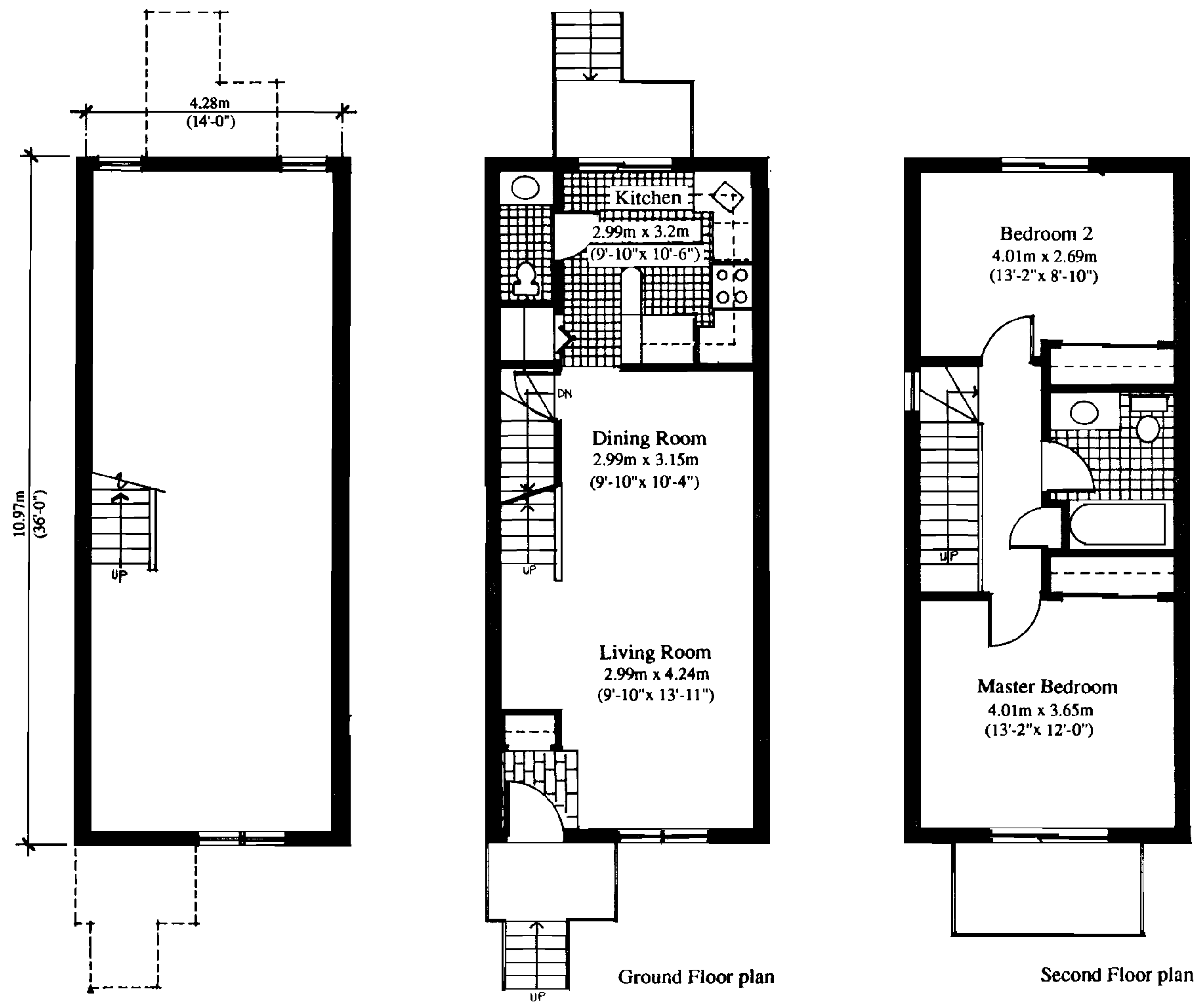


Figure 3.15: Floor Plans - Project 7

4. OCCUPANT SURVEY

4.1. Demographic Profile

One of the objectives of the study was to establish a socioeconomic profile of the buyers in order to determine what segment of the population the projects are attracting. The occupants were asked to answer questions dealing with their background, household characteristics and employment profile (Q49 to Q54). The results are summarized in tables 4.1, 4.2 and 4.3, respectively.

FORMER DWELLING TYPE	(%)	TENURE AT FORMER DWELLING	(%)
Apartment	80.6	Rented	86.6
Townhouse	3.1	Condominium ownership	2.6
Semi-detached	8.4	Co-op ownership	0.5
Single-family detached	7.8	Freehold ownership	10.3

Table 4.1: Occupant Background (by percentage of respondents)

The Grow Home has, for the most part, attracted the demographic group for which it was intended. The projects provided starter homes for 89.4% of the respondents who were first-time buyers. The households were made up mainly of young couples (25-34 years of age) with one child, and the single-person household accounted for 16.5 of the cases. The vast majority of respondents (86.6%) were formerly tenants, 92.2% of whom had lived in apartments.

HOUSEHOLD SIZE		OCCUPANT AGE	(%)
One person	16.0	0 to17	22.1
Two persons	40.7	18 to 24	12.8
Three persons	32.0	25 to 34	43.7
Four persons	7.2	35 to 44	15.2
Five persons	3.1	45 to 54	4.0
Six persons	1.0	Over 55	2.1
HOUSEHOLD TYPE		HOUSEHOLD INCOME	(%)
One adult	16.5	Below $20 000	1.6
Two or more adults	3.6	$20 000 to $29 999	5.5
Single parent	9.8	$30 000 to $39 999	25.1
Couple	32.5	$40 000 to $49 999	30.1
Couple with children	37.6	Over $50 000	37.7

Table 4.2: Household Characteristics (by percentage of respondents)

Although most of the findings reflect the original intentions of the Grow Home, the reported household income was significantly higher than anticipated. The majority of respondents (67.8%) claimed annual household incomes greater than $40 000. With the municipal and provincial subsidies in effect, the homes would have been affordable to households earning $24 000 to $27 000. The high level of incomes are therefore surprising.

EMPLOYMENT STATUS	(%)	NUMBER OF INCOME EARNERS	(%)
Self -employed	9.5	One-income household	36.7
Full-time	69.6	Two-income household	58.7
Part-time	10.8		
Unemployed	6.3	OCCUPATION	(%)
Full-time student	0.6	Farming, fishing, forestry, logging,	
Retired	0.6	mining and quarrying occupations	0.3
Other	2.5	Labourer	3.2
		Semi-skilled	5.7
EDUCATION	(%)	Skilled tradesman	18.1
Primary School	1.7	Sales, service, clerical	36.5
Secondary school	35.7	Professional	11.1
CEGEP	20.8	Managerial or administrative	15.6
University*	30.4	Homemaker	3.5
Trade School	11.4	Other	6.0

* Includes occupants with some university schooling

Table 4.3: Employment Profile and Schooling (by percentage of respondents)

The median income was estimated at $45 818 (table 4.4). Calculations based on the respondents' total carrying costs revealed that the buyers were allocating from 18.5% to 26.1% of their income on housing. One possible explanation for this has to do with changing or different lifestyles. All of the neighbourhoods where the projects were built had an ample supply of newly built homes priced at 10% to 15% higher than those in the Grow Home projects. Therefore, there was no shortage of housing aimed at the middle and upper income groups that made up the majority of Grow Home buyers. The tendency for the projects to attract households with higher income levels may reflect a growing disposition of modern families to spend a higher portion of their income on living and leisure rather than on accommodation. Whether this tendency reflects regional, cultural characteristics or a more general change in allocation of family income is not clear.

PROJECT	1	2	3	4	5	6	7	TOT
Household Income	$45 000	$38 125	$49 575	$45 000	$50 000	$44 500	$42 916	$45 818
Expenses as Tenants	$554	$573	$542	$502	$543	$558	$495	$538
Expenses as Owners	$710	$754	$860	$980	$770	$738	$760	$796
Percentage of Income Allocated to Housing in Current Dwelling	18.9%	23.7%	20.8%	26.1%	18.5%	19.9%	21.2%	20.8%

Table 4.4: Median Incomes and Monthly Carrying Costs

4.2 Occupants' Shopping and Buying Experience

The rate of sales in the Grow Home-type projects was unusual, especially for a period of economic recession. Most of the projects sold out within weeks, often before any significant construction was underway, and many of the builders started second phases shortly afterwards.

In light of the sudden proliferation of projects, there was an interest in examining the buyers' intentions and expectations at the time of purchase. Three aspects of the occupants' shopping and buying experience were addressed. First, the extent and duration of their search for a new dwelling was established, both before and after they came across the Grow Home. Second, their reasons for buying the home were probed, and finally, the acceptability of certain options which were not offered openly was evaluated.

4.2.1 Search for a New Dwelling

In the first place, the occupants were asked how long they had been shopping for a new dwelling (Q12) and how many projects were visited during that period (Q13). They were then asked how long it took them to make a decision to buy (Q21), how many projects were visited after they had visited the one they are currently living in, and whether or not they had seen a model home of the unit they purchased (Q23). The results are listed in table 4.5.

SHOPPING PERIOD	(%)	DECISION TO PURCHASE	(%)
Not Looking	59.5	Immediate	39.3
Up to 6 months	25.6	1 or 2 weeks	44.9
7 to 12 months	7.2	3 or 4 weeks	9.2
13 to 24 months	4.1	5 or 6 weeks	4.6
More than 24 months	3.6	More than 6 weeks	2.0
PROJECTS VISITED OTHER THAN THE GROW HOME	**(%)**	**PROJECTS VISITED AFTER GROW HOME**	**(%)**
None	29.4	None	61.3
1 to 3	41.7	1 to 3	34.0
4 to 6	11.3	4 to 6	3.2
7 to 9	7.2	7 to 9	0.5
10 to 12	4.7	10 to 12	0.0
More than 12	5.7	More than 12	1.0

Table 4.5: Buyers' Shopping Experience (by percentage of respondents)

The buying patterns experienced by the majority of respondents was rather unusual. The majority of respondents (59.9%) were not actively looking to buy a house at the time of purchase, and seem to have come across the projects by chance. Close to one third (29.4%) of the buyers visited no project other than the one that they decided to purchase, and 61.3% looked no further after having seen it. Futhermore, 39.3% of respondents decided to buy the unit immediately, and another 44.9% decided within one or two weeks from their visit. The vast majority of respondents (77.4%) purchased the house without having seen a model unit.

These buying patterns suggest that the projects filled a market void. The short shopping periods and quick decisions to buy - without having seen a completed unit - indicate that the units represented a rather unique opportunity for many of the buyers, an exceptional bargain. This notion becomes more evident when the buying patterns are analyzed by project. Those projects which started earliest (projects 6 & 1) had the highest percentage of buyers who were not actively shopping for a house (69%). The occupants in these same projects also visited the least number of projects (39% visited no other project) and made the quickest buying decisions (52% made the decision immediately). The projects with the highest percentage of buyers who looked no further after having seen it are those which had the lowest selling prices (projects 5 & 7).

4.2.2. Reasons for Purchasing the Grow Home

Prior to any detailed probing on specific aspects of the purchase, the occupants were asked to indicate what especially appealed to them about their house, and whether or not there were any particular aspects about the design that they felt uneasy about at the time of purchase (Q20, Q24). These were taken to act as overall indicators to be qualified or accounted for by the results of the detailed questioning. The most frequently cited attractions and reservations are listed in tables 4.6 and 4.7, respectively.

PROJECT	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOT**
Total number of items	(22)	(17)	(83)	(33)	(57)	(157)	(75)	(444)
Price	18.2	41.2	3.6	6.1	26.3	19.7	22.7	17.8
General layout	9.1	11.8	7.2	9.1	1.7	14.0	9.3	9.7
Total amount of space	18.2	0.0	0.0	3.0	5.3	14.6	8.0	8.3
Location/environment	4.5	0.0	10.8	12.1	12.3	0.0	9.3	6.3
Usable basement	4.5	0.0	6.0	6.1	12.3	1.9	4.0	4.7
Second/large bathroom	4.5	0.0	8.4	0.0	5.3	2.5	4.0	4.0
Open plan	0.0	0.0	4.8	3.0	1.7	5.1	4.0	3.8
Cottage style/two storeys	9.1	0.0	3.6	6.1	7.0	2.5	2.7	3.8
Natural lighting	0.0	0.0	7.2	0.0	0.0	6.4	0.0	3.6
Second/large bedroom	4.5	0.0	6.0	0.0	3.5	2.5	2.7	3.1

Table 4.6: Features That Were Considered Especially Appealing at the Time of Purchase
(by percentage; 290 most frequently mentioned items)

The most appealing feature by a wide margin was the unit selling price, which was specified by 40% of the respondents and was the most frequently mentioned attribute in 5 of the projects. The other two projects (3 & 4), which were the most expensive ones (above $80 000), were considered attractive mainly because of their location and/or general environmental qualities.

Two other attributes which ranked high were related to the unit itself, and include general layout (22% of respondents) and total amount of space (19% of respondents). The latter is particularly interesting, since one of the concerns in the implementation of the Grow Home concept was the public's willingness to accept a smaller living space. With fully finished second floors and basements to add 46.5 square meters of living space, the houses appear to have satisfied some of the buyers' perceptions of spacial comfort. One in five buyers (18.8%) listed the unit's size as an attractive feature. The fact that 80% of the buyers came from apartments may have enhanced the house's attractiveness in this regard.

PROJECT Total number of items	1 (12)	2 (12)	3 (34)	4 (21)	5 (24)	6 (100)	7 (43)	TOT (246)
Parking	8.3	0.0	2.9	9.5	4.2	13.0	11.6	9.3
Small yard area	8.3	25.0	2.9	0.0	4.2	11.0	9.3	8.5
Total amount of space	0.0	8.3	11.8	0.0	33.3	4.0	2.3	7.3
Kitchen layout /practicality	0.0	16.7	0.0	28.6	0.0	1.0	16.3	6.5
Kitchen storage	25.0	8.3	2.9	4.8	0.0	8.0	4.6	6.5
Bathroom	0.0	8.3	5.9	9.5	0.0	1.0	11.6	4.5
Interior finishes/carpet	0.0	0.0	14.7	4.8	0.0	4.0	2.3	4.5
Condominium ownership	0.0	0.0	0.0	0.0	16.7	7.0	0.0	4.5
Kitchen dimensions	41.7	16.7	0.0	0.0	0.0	0.0	4.6	3.7
Natural lighting	0.0	8.3	2.9	9.5	4.2	3.0	2.3	3.7
Privacy	0.0	0.0	11.8	4.8	0.0	2.0	2.3	3.2
Closet too big/useless	0.0	0.0	2.9	0.0	0.0	6.0	2.3	3.2
Washer/dryer location	0.0	0.0	5.9	9.5	8.3	1.0	2.3	3.2
Craftsmanship	0.0	0.0	8.8	0.0	4.2	4.0	0.0	3.2

Table 4.7: Aspects Which Caused Concern at the Time of Purchase
(by percentage; 177 most frequently mentioned items)

The majority of respondents (69.8%) also mentioned aspects of the design that they felt uneasy about at the time of purchase. The most frequently mentioned reservations were about the kitchen. Size, layout and storage space in the kitchen designs collectively accounted for 16.7% of all entries. Inadequate parking arrangements and small yard area also was cause for considerable concern, receiving 9.3% and 8.5% of the mention, respectively. Ironically, the unit's total amount of space was also a concern for 9% of respondents.

A subsequent question pointed out six features of the houses, and the occupants were asked to rate the importance of each one in their decision to purchase the house (Q25). A scale of 1 to 5 was used, with 5 regarded as extremely important. The average rating for each attribute is listed in table 4.8 for each of the projects.

PROJECT	1	2	3	4	5	6	7	TOT
Exterior appearance	3.917	3.875	3.944	3.273	3.792	4.029	3.828	3.884
Interior layout	4.417	4.000	4.611	4.727	4.440	4.686	4.433	4.554
Price	4.417	4.600	4.611	4.818	4.846	4.971	4.900	4.815
Investment potential	3.545	4.000	4.088	4.182	3.696	3.941	4.464	4.033
Private outdoor space	4.273	3.222	4.333	3.889	4.292	4.090	4.034	4.114
Private parking space	4.500	3.111	4.389	4.000	3.880	3.971	3.333	3.932

Table 4.8: Importance of Selected Features When Purchasing the House
(respondents' average on a scale of 5)

The response supports the findings of the previous questions. While the average priority or importance scores were high on all features, the unit's price ranked highest, with 90% of respondents rating it as "extremely important." Interior layout was ranked second overall, and received top rating by 68% of respondents.

Because the project starts coincided with the introduction of government subsidies at the provincial and municipal levels, it was of interest to determine what effect the absence of these subsidies would have had on the unit sales. The occupants of the last 5 projects surveyed (projects 1 to 5) were asked whether or not they qualified for the subsidies and, if so, if they felt that they would have been able to purchase the house had the subsidies not been available (Q26). Only 2.1% of those surveyed did not qualify for the subsidies. Of those that qualified, 34.4% responded that they would have bought the house anyway, 38.7% said that they would not have bought, and the remaining 26.9% were not sure. The subsidies were therefore directly responsible for at least 38.7% of the sales.

4.2.3. Options Considered Acceptable

The projects were not built with the original second floor "growing" potential that was demonstrated in the prototype. The idea of reducing costs by offering an unpartitioned second floor (which could be later modified at the owner's own discretion) was not pursued by any of the builders surveyed. Consequently, there was an interest in determining whether or not the idea of involving the buyer in the construction process would have been acceptable. The occupants were first asked if they would have done any of the construction or finishing work themselves in exchange for a reduction in price, and, if so, to indicate what type of work they would have been willing to undertake from a list of 10 items (Q31). They were then asked if they would have purchased a unit with an unpartitioned second floor for a price reduction of $5000 (Q32).

The results revealed that there is a higher tendency for the buyers to assume specific construction work (33.3%) than there is for them to accept an unpartitioned second floor (20.2%). There is also a higher tendency for the buyers to assume work related to finishing operations than to rough installation (table 4.9). Those tasks requiring the least skill received the highest mention.

CONSTRUCTION AND FINISHING WORK THAT BUYERS WOULD HAVE DONE FOR A REDUCTION IN PRICE	(%)
Paint	25.7
Install drywall	13.3
Landscaping	12.4
Install floor finishes	9.5
Tape and plaster joints in drywall	9.5
Install electrical wiring	8.6
Erect partitions	6.7
Install electrical fixtures	5.7
Install plumbing fixtures	4.3
Install rough plumbing	4.3

Table 4.9: Willingness of the home buyers to participate in the construction process (percentage based on 214 entries)

The apparent lack of interest in participating in the construction process may be due in part to the size of the households. With 43.3% of the units housing three or more occupants, there is apparently an immediate need for a second bedroom. Although the percentage of occupants willing to participate in the construction process represents a minority, there is undoubtedly an interest in the concept, and may be worthy of further study.

4.3 Buyers' Preferences

As an absolute measure of the buyers' aspirations when looking for a house, the occupants were asked to rank various locations and dwelling types in order of preference (Q16,Q15), whether or not they were specifically looking or a newly built house (Q14) and how many bedrooms they were hoping to have (Q18). They were also asked whether or not there were any particular features which were very important for them to have in their new dwellings and, if so, to list them (Q19).

IMPORTANT FEATURES DESIRED IN A NEW HOME [1]	(%)
Second/big bathroom	9.5
Large/private backyard	7.7
Sufficient storage	6.7
Natural lighting	6.4
Basement	5.8
Garage	4.3
Second/big bedrooms	4.0
Open plan	4.0
Sufficient amount of total space	3.7
Functional kitchen	3.7
Two storeys	3.7
Private parking	3.4
Quality of interior finishes	3.1
Good location/neighbourhood	3.1

PREFERRED NUMBER OF BEDROOMS [2]	(%)
One bedroom	0.5
Two bedrooms	54.6
Three bedrooms	43.8
Four bedrooms	0.5
More than four bedrooms	0.5

SPECIFICALLY LOOKING FOR A NEWLY BUILT HOUSE [2]	(%)
	58.5

PREFERRED LOCATION [3]	(Ave)
City center	1.415
Ten minutes from city center	2.947
Suburb	4.134
Small town	3.315
Country	2.940

PREFERRED TYPE OF DWELLING [4]	(Ave)
Single-family detached	3.481
Semi-detached	2.591
Townhouse	2.483
Condominium apartment	1.420

1. Most frequently mentioned attributes; percentage based on 327 entries
2. Based on percentage of respondents
3. Average priority on a scale of 1-5
4. Average priority on a scale of 1-4

Table 4.10: Buyers' Preferences and Desired Features

The findings reflect a fairly strong desire from the buyers to live in a suburban setting in a new, single-family detached dwelling (table 4.10). The majority of respondents (51.8%) rated the suburb as their most preferred location (regardless of price), and the single-family detached dwelling received the highest rating from 78% of respondents. The lowest preference for suburban location was found in project 6, which is the only one of the developments which is located on the island of Montreal.

Approximately 58% of the buyers were specifically looking for a newly built house, while 54.6% wanted two bedrooms.

Although 68.9% of the respondents indicated the desire for a particular feature, the types of features mentioned were random and covered a wide range of items, with preferences for 58 different features. The items mentioned most frequently were the desire to have a second and/or large bathroom (15.8% of respondents) and a large and/or private backyard (12.8% of respondents). Sufficient storage, natural lighting and a basement were also considered to be relatively important.

The results indicate that the popularity of the suburb as a place of residence may be more related to aesthetic judgment than it is to affordability. There was no significant difference in the ratings between the semi-detached and rowhouse alternatives, suggesting that there is an absolute preference for fully detached units. Anything beyond this would be considered a compromise, with the degree of attachment bearing little significance. The high percentage of occupants looking for a three-bedroom house suggests that the basement in the units purchased will likely be finished to include a bedroom, and hints at a perception of the basement as liveable floor space.

The built units accommodated most of the buyers' preferences by providing new construction, a second, large bathroom and two finished bedrooms, with the possibility of adding a third with the unfinished basement. Given the high priority assigned to the suburb, we can conclude that the implementation of projects off the island was not a tradeoff. The only substantial source of compromise appears to have been with the preferred dwelling type, since 4.5% of respondents rated the townhouse as "least preferred," and another 56.8% rated it second to last. The degree to which the occupants' desire for having a large, private yard was fulfilled will be established later.

4.4 Satisfaction and Improvement

In the second phase of analysis, the occupants were asked to evaluate their level of satisfaction with each of 23 attributes, including 5 which were related to location, 7 to the site plan and 11 to the unit itself, and to indicate how they compared to those of their former dwelling (Q33). They were then asked to do the same for each of 10 spaces in the dwelling, including both individual rooms and circulation spaces (Q34). In either case, the opinions were rated on a scale of 1 to 5, with 1 being very disappointed (or much worse than former dwelling) and 5 being very satisfied (or much better than former dwelling). The average ratings for each of the attributes or spaces were calculated by project.

and listed in the tables which follow. Those averages which reflect an exceptional rating (either less than 2 or greater than 4) are shown in bold type.

It should be mentioned that it is generally recommended that residents have at least six months and ideally one year experience living in their new dwelling before post-occupancy evaluations are carried out. The period of residency for many of the occupants in the Grow Home fell short of this amount. The study found that 31% of the occupants had been living in their dwellings for a period between 4 and 6 months, 56% were residents in the project for 2 to 4 months, and the remainder (13%) occupied the dwelling for less than 2 months (Q27). Because the average occupancy period was less than that recommended, the opinions that were gathered in the survey, particularly in matters related to occupant satisfaction, are likely to change with time. The results of the survey in this respect are representative of the occupants' initial reactions to their new dwelling.

4.4.1 Location Characteristics

The project's location was analyzed in terms of its proximity to the occupants' work, public transportation, medical services, shopping facilities and schools. Prior to rating their satisfaction and level of improvement, respondents were asked to rate the attributes on a scale of 1 to 5 according to their importance when shopping for a house, with 5 being regarded as "extremely important" and 1 as "not important at all" (Q17). The actual location of their work was also recorded (Q41).

IMPORTANCE OF LOCATION CHARACTERISTICS	(Ave)
Proximity to work	4.083
Proximity to public transportation	3.450
Proximity to medical services	3.047
Proximity to shopping facilities	2.995
Proximity to schools	2.951

Table 4.11: Importance of Location Characteristics

The occupants' proximity to their work was rated as being the most important of the location characteristics, with 46.9% of the respondents rating it as "extremely important," followed by proximity to public transportation which received top rating rom 37.8% of respondents (table 4.11). The majority of respondents felt that their proximity to schools, medical services and shopping facilities majority of respondents felt that their proximity to schools, medical services and shopping facilities was either unimportant or of little concern.

PROJECT Proximity to:	1	2	3	4	5	6	7	TOT
Work	**4.273**	3.333	**4.152**	3.889	3.417	3.441	**4.032**	3.736
Public transportation	2.333	**1.750**	3.967	**4.250**	**4.560**	3.627	3.033	3.615
Medical services	**4.000**	3.889	3.967	3.556	3.783	3.561	3.667	3.718
Shopping facilities	3.900	**4.000**	3.903	3.600	3.440	3.530	3.690	3.656
Schools	**4.375**	3.500	3.636	3.600	**4.263**	3.538	**4.000**	3.766

Table 4.12: Satisfaction With Location of Current Dwelling (respondents' average on a scale of 5) Q33

The majority of the residents surveyed were satisfied with all aspects of location (table 4.13). There was no discernable difference in the level of satisfaction among the occupants of different projects except for two cases. The majority of respondents from projects 1 and 2 reported disappointment with their proximity to public transportation. Both these projects are located off the far east end of the island and are built in new developments which have, at least for the time being, limited access to public transportation.

The widespread satisfaction with aspects of location was not reflected in the improvement ratings. Marginal improvements over previous dwellings were recorded in 2 of the characteristics (proximity to schools and medical services) while deterioration was reported in the remaining 3. The greatest source of compromise was with the occupants' distance from work, which is quite significant considering that this was ranked first in importance among the buyers' preferences. The issue of public transportation, which was ranked second in importance, was found to be the second highest source of compromise, with 14% of respondents rating it as being much worse than their former dwelling.

PROJECT Proximity to:	1	2	3	4	5	6	7	TOT
Work	**4.000**	2.667	3.107	3.375	2.818	2.493	3.067	2.851
Public transportation	2.833	2.500	3.267	3.125	3.500	2.692	2.462	2.892
Medical services	3.625	3.250	3.448	3.333	3.409	2.905	2.893	3.138
Shopping facilities	3.500	**4.000**	3.233	3.444	3.217	2.609	2.767	2.983
Schools	3.750	3.167	3.000	2.833	3.812	2.911	3.520	3.196

Table 4.13: Comparison of Location Characteristics to Former Dwelling
(respondents' average on a scale of 5)

The occupants in two of the projects (6 and 7) reported relatively high levels of compromise in their location characteristics. When the ratings from these projects are excluded from the calculations, the average totals for public transportation, medical services and shopping facilities and schools are raised to 3.211 , 3.421 and 3.362, respectively. While the conditions for these three aspects are likely to change as the area's infrastructure is improved, the subject of the occupants' proximity to work appears to be a dominant problem.

A somewhat different profile emerges when the ratings are analyzed for the individual projects, with the following results:

- Of the 3 projects that reported a deterioration in proximity to work (2,5,6), the majority of occupants in all 3 of them (66.7%, 80.6% & 69.1%) rated this aspect of location as being important.

- Of the 4 projects that reported a deterioration in proximity to public transportation (1,2,6,7), the majority of occupants in only one of them (82.3%) rated this aspect of location as being important (6).

- Of the 2 projects that reported a deterioration in proximity to medical services (6,7), the majority of occupants in only one of them (51.7%) rated this aspect of location as being important (7).

- Of the projects that reported a deterioration in proximity to shopping facilities (6,7), the minority of occupants in both of them (34.3% & 36.7%) rated this aspect of location as being important.

- Of the 2 projects that reported a deterioration in proximity to schools (4,6), the majority of occupants in only one of them (50.7%) rated this aspect of location as being important (6).

The analysis shows that there were tradeoffs made in every aspect of location. The significance of the tradeoff, however, is somewhat diluted when we consider that the majority of occupants in 7 of the cases (that resulted in deterioration over former dwellings) did not consider that aspect of location to be important. Given the very high priority assigned to proximity to work, the equally high level of compromise that was demonstrated in this regard and the reasonable degree of expressed satisfaction, it appears that, for the most part, there was a strong willingness from the buyers to give up this particular aspect of location for the purpose of homeownership.

4.4.1.1 Transportation

Because all of the projects were built in suburban neighbourhoods (mostly off the island of Montreal), the subject of transportation to and from work was anticipated as a potential problem and was examined in more detail. Occupants were asked how long it took them to commute to work (Q10, Q39) and what mode of transportation was used (Q11, Q40) for both previous and current dwellings. The results are summarized in table 4.14.

MODE OF TRANSPORTATION	Former (%)	Current (%)	COMMUTING TIME	Former (%)	Current (%)
On foot	4.6	0.5	Less than 15 min.	36.1	22.3
Bicycle	0.5	0.5	16 - 30 min.	36.6	34.6
Public transit	23.7	20.2	31 - 45 min.	18.8	22.9
Car	71.2	78.9	46 - 60 min.	6.8	14.9
			61 - 90min.	1.6	4.8
			More than 90 min.	0.0	0.5

Table 4.14: Occupants' Commuting Time to Work and Mode of Transportation (by percentage of respondents)

The move to areas further from work has resulted in increased car usage and commuting time. The number of respondents with a commuting time of under 30 minutes was reduced by 15.9%. Most of these (13.9%) increased their commuting time from 15 minutes or less at their previous dwelling. Similar compromises were found in the way the respondents got to work, with a 7.7% increase in car usage, 3.5% decrease in public transit use and a 4% decrease in walking.

4.4.2 Site Characteristics

The majority of occupants surveyed were satisfied with 6 of the 7 site attributes (table 4.15). The project's general image was the greatest source of satisfaction, with 32.6% of respondents giving their project top rating. Sense of community and child safety were ranked second and third, respectively. The only aspect of the site plan that was not found to be satisfactory was the size of the backyards, which was rated as disappointing by a significant portion of respondents in five of the projects (1,2,5,6,7). There was also some dissatisfaction noted with the level of privacy in two of these same projects (5,7), and with the size of the front yard in one other (7).

PROJECT Project characteristic:	1	2	3	4	5	6	7	TOT
General image	**4.417**	**4.500**	**4.143**	**4.545**	3.720	**4.000**	3.839	**4.042**
Sense of community	3.636	3.875	3.567	3.600	3.958	3.785	**4.000**	3.792
Safety of children	3.375	**4.143**	3.947	3.500	**4.167**	3.603	3.929	3.785
Location of parking	3.917	**4.375**	**4.057**	3.800	3.440	3.000	3.742	3.540
Size of front yard	3.083	3.750	3.588	**4.091**	3.083	3.642	2.310	3.346
Size of backyard	2.750	2.667	3.914	3.636	2.250	2.838	2.484	2.937
Level of privacy	3.833	3.111	3.457	3.727	2.667	3.246	2.935	3.219

Table 4.15: Satisfaction With Site Characteristics of Current Dwelling
(respondents' average on a scale of 5)

When compared to the occupants' former dwelling, all aspects of the site plan were considered to be an improvement (table 4.16). The degree of improvement was fairly consistent among attributes. Those items which respondents most frequently rated as being satisfactory tended to be those which demonstrated the most improvement over their former dwelling. General image, sense of community and safety of children consistently scored highest both in terms of satisfaction and improvement. Size of backyard and level of privacy showed the weakest improvement and lowest satisfaction levels.

The level of privacy in one of the projects (2) was the only source of considerable compromise, with 62.5% of respondents rating this attribute as being much worse than their former dwelling. The only aspect of this project which is uncommon with the others is the fairly small size of the landscaped yard area, which ends at the occupant's parking space (see p. 14). The difficulty in enclosing this yard space, both because it is small and provides the only access to the parking area, may be partly the cause of the loss of privacy. Two other instances where tradeoffs were evident were in project 1 with the size of the backyard, and project 7 with the size of the front yard.

PROJECT Project characteristic:	1	2	3	4	5	6	7	TOT
General image	3.833	**4.125**	3.844	**4.091**	3.478	3.983	3.880	3.876
Sense of community	3.727	**4.375**	3.548	3.300	3.304	3.741	3.852	3.665
Safety of children	3.250	3.571	**4.000**	3.333	3.944	3.667	3.840	3.739
Location of parking	3.833	3.875	3.788	3.200	3.708	3.581	3.207	3.584
Size of front yard	3.556	3.000	3.600	**4.000**	3.810	3.875	2.636	3.577
Size of back yard	2.667	3.125	**4.038**	3.714	3.318	3.684	3.348	3.553
Level of privacy	**4.000**	**1.875**	3.676	3.636	3.000	3.688	3.360	3.483

Table 4.16: Comparison of Site Characteristics to Former Dwelling
(respondents' average on a scale of 5)

There are some noteworthy trends in the site plan characteristics:

- The occupants who reported the lowest level of satisfaction with the size of their backyard tend to be those who were least satisfied with the level of privacy (projects 2,5,6 &7).

- Those projects which scored the highest in the attribute "sense of community/neighbourhood" also demonstrated the highest level of satisfaction with "safety of children." Two of these projects (5 &7), had units which were closely spaced and facing each other over a common yard or parking area. Ironically, these same two projects had the lowest level of satisfaction for the attribute "general image." It appears that although the general scale or "feeling" of these projects is appealing, the configuration and distribution of land along with the exterior design of the units is not fulfilling the occupants' preferences as thoroughly.

4.4.2.1 Outdoor Parking and Privacy

The question of privacy in high density developments is always an important issue. The Grow Home, with its 4.3-meter width, is particularly susceptible to problems if the site plan is not properly designed. In light of the fact that the units were sold under condominium ownership (with collective ownership of the land), there was an interest in determining the projects' performance in this regard. The occupants were asked whether or not they were experiencing any problems in sharing this yard space with their neighbors and, if so, what type of problems were posed (Q36). Only 18.4% of respondents answered that they were experiencing problems. The types of problems mentioned are listed in table 4.17.

PROJECT Total number of reasons	1 (0)	2 (1)	3 (6)	4 (0)	5 (14)	6 (14)	7 (3)	TOT (38)
Lacks Privacy	0	0	3	0	8	3	3	17
Disagreement on fences	0	1	0	0	4	3	0	8
Neighbours don't get along	0	0	0	0	1	3	0	4
Poor access	0	0	1	0	0	3	0	4
Safety/control	0	0	2	0	0	1	0	3
Condo/Shared work	0	0	0	0	0	1	0	1
Too Small	0	0	0	0	1	0	0	1

Table 4.17: Problems With Sharing the Yard Area (by number of problems cited)

The biggest problem with the backyard area according to the respondents is the lack of privacy and disagreements on types, sizes and locations of fences. Uncooperative neighbors and poor access are each mentioned in 4 cases.

The apparent difficulty which was experienced in accommodating parking requirements in most projects also resulted in reduced yard space and, in some cases, excessive paving. The issue of private outdoor space, both for leisure and parking, was therefore of interest and was examined further. The occupants were asked what type of private outdoor space they had at their former dwelling (Q7), what type of parking accommodation was available (Q6), and how many cars were owned by the household (Q38). The vast majority of respondents (93.5%) had some form of private outdoor space, mainly either a front or back balcony. A significant portion of them (16.8%) also enjoyed access to a private backyard. The survey showed that 52.3% of the respondents own one car, and 44.1% own two. Although a substantial fraction of the respondents (46.5%) were restricted to street parking in their former dwelling, the majority (53.5%) had some kind of private parking space, and 6.1% had an interior garage (table 4.18).

TYPE OF PRIVATE OUTDOOR SPACE AT FORMER DWELLING	(%)	TYPE OF PARKING AVAILABLE AT FORMER DWELLING	(%)
None	6.5	Street	46.5
Front balcony	34.4	Private exterior	46.9
Rear balcony	34.4	Carport	0.5
Front yard	7.9	Indoor garage	6.1
Backyard	16.8		

Table 4.18: Private Outdoor Spaces and Parking Accommodation in Former Dwelling (by percentage of respondents)

There appears to be an inconsistency in the number of respondents who rated the size of their backyard compared to their former dwelling and those who reported actually having one . Only 22.5% of occupants surveyed either didn't answer the question or circled the "not applicable" option, whereas 83.2% of the occupants did not indicate that they had a backyard at their former dwelling. It is therefore safe to assume that about 60% of the ratings of the sizes of backyards are as "compared to none." Given the high level of importance that was attributed to having a backyard space and the widespread disappointment with the resulting product, it is clear that the site planning needs considerable attention.

4.4.3 Unit Characteristics

The unit characteristics were clearly the most satisfying attributes for the occupants (table 4.19). The majority of respondents were satisfied with all of the 11 features listed, and a significant fraction reported that they were "very satisfied" with 7 aspects in particular: interior appearance (38.5%), exterior appearance (31.2%), quality of exterior finishes (30.3%), total amount of space (32.2%), overall design/layout (28.3%), amount of natural light (40.2%) and amount of cross-ventilation (30.2%).

There were some discernable differences among projects:

- The two projects built with masonry firewalls (4 &5) between the units had the lowest level of satisfaction with the soundproofing

- The one project built with aggregate finish on the exterior (7) had the lowest level of satisfaction on both exterior appearance and quality of exterior finishes from its occupants

- Project 4, the only one in which one does not enter directly into a room, has the highest level of satisfaction with "overall design/layout" and "total amount of space." The latter is interesting, since the floor area of this project is not significantly bigger than the others. The idea of "squaring off" the room by pulling the entrance out to make a vestibule is seen to have a positive effect on the occupants perception of the total space.

PROJECT Unit characteristic:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**TOT**
Overall design/layout	**4.167**	**4.250**	**4.212**	**4.400**	**4.125**	**4.134**	**4.033**	**4.152**
Total amount of space	**4.455**	**4.375**	**4.182**	**4.727**	3.958	**4.154**	**4.000**	**4.169**
Amount of storage space	**4.583**	**4.333**	3.794	**4.364**	3.917	3.833	3.903	3.952
Flexibility of space	3.833	**4.000**	3.667	3.909	3.522	3.615	3.767	3.689
Exterior appearance	**4.583**	**4.500**	**4.057**	**4.182**	**4.364**	**4.194**	3.967	**4.193**
Interior appearance	**4.583**	**4.600**	**4.200**	**4.364**	3.739	**4.284**	**4.133**	**4.218**
Quality of exterior finishes	**4.500**	**4.700**	3.914	**4.091**	3.957	**4.104**	3.867	**4.069**
Quality of interior finishes	3.500	**4.000**	3.286	3.364	2.435	3.348	2.867	3.193
Amount of natural lighting	**4.250**	**4.333**	**4.000**	**4.545**	**4.000**	**4.182**	3.800	**4.098**
Amount of cross-ventilation	**4.000**	**4.000**	3.824	**4.364**	3.909	**4.209**	3.900	**4.038**
Soundproofing between units	3.667	3.333	3.618	3.182	3.261	3.612	3.400	3.500

Table 4.19: Satisfaction With Unit Characteristics of Current Dwelling
(respondents' average on a scale of 5)

The unit characteristics also offered the highest source of improvement over the occupants' former dwelling (table 4.20). The level of improvement was more consistent among unit attributes than it was in the other cases, with averages ranging from 3.483 (quality of interior finishes) to 3.949 (overall design/ layout).

PROJECT Unit characteristic:	1	2	3	4	5	6	7	TOT
Overall design/layout	3.750	3.375	3.697	**4.091**	3.708	**4.081**	**4.400**	3.949
Total amount of space	**4.091**	**4.250**	3.515	3.818	3.917	3.953	3.310	3.778
Amount of storage space	**4.333**	3.556	3.576	3.900	3.542	3.862	**4.000**	3.808
Flexibility of space	3.750	3.444	3.500	3.636	3.583	3.733	3.600	3.630
Exterior appearance	4.083	**4.000**	3.706	3.455	3.478	**4.140**	3.821	3.862
Interior appearance	**4.000**	**4.333**	3.706	3.636	3.913	**4.183**	3.679	3.938
Quality of exterior finishes	**4.167**	4.000	3.469	3.636	3.542	3.893	3.680	3.740
Quality of interior finishes	3.583	4.000	3.312	3.545	3.292	3.712	3.111	3.483
Amount of natural lighting	3.583	**4.000**	3.152	3.818	3.609	3.719	3.286	3.542
Amount of cross-ventilation	3.667	3.125	3.455	3.818	3.609	3.857	3.536	3.652
Soundproofing between units	4.083	2.375	3.758	3.182	3.500	3.844	3.600	3.657

Table 4.20: Comparison of Unit Characteristics to Former Dwelling
(respondents' average on a scale of 5)

The effect of the residents' previous location on satisfaction was inconsistent, with the following exceptions:

- Interior and exterior appearances were rated among the top three sources of both improvement and satisfaction

- The quality of interior finishes offered the weakest improvement over the occupants' former dwelling and had the lowest level of satisfaction among respondents

- Respondents from projects 5 and 7 considered the quality of interior finishes to be the weakest improvement and the only source of disappointment

- There was a tendency for the units with mounting stairs visible from the entrance to receive the highest ratings in terms of general layout, and for those with a blocked view of the stairway from the entrance to be rated lowest.

4.4.3.1 Interior Spaces

Occupant satisfaction with the individual spaces in the dwelling was exceptionally high in all areas except for the entrance, where two projects (3 & 6) were rated as slightly disappointing (table 4.21). There is nothing substantially different about the designs of these entrances from that of the units in other projects that would help explain these findings, nor do they represent a lower level of improvement from that of other projects. A similar situation exists with the isolated case of occupant dissatisfaction in project 1 with the kitchen. The kitchen layout is identical to that of project 2 and built by the same contractor using the same working drawings. In this case, however, the kitchen design was reported as being inferior to that of the occupants' former dwelling.

PROJECT	1	2	3	4	5	6	7	TOT
Entrance	3.583	3.900	2.897	3.545	3.640	2.862	3.567	3.236
Living room	3.667	3.900	3.613	**4.273**	3.538	**4.015**	3.867	3.844
Dining room	**4.273**	**4.400**	**4.032**	**4.364**	3.440	**4.262**	3.867	**4.060**
Kitchen	2.667	3.300	**4.250**	**4.273**	**4.038**	**4.119**	3.633	3.926
Ground-floor bathroom	**4.250**	**4.300**	**4.240**	**4.625**	3.875	**4.215**	**4.100**	**4.178**
Master bedroom	**4.583**	**5.000**	**4.625**	**4.545**	**4.440**	**4.265**	**4.645**	**4.487**
Second bedroom	**4.455**	**4.800**	**4.312**	**4.727**	**4.520**	**4.209**	**4.379**	**4.373**
Upper-floor bathroom	**4.667**	**4.500**	**4.455**	**4.727**	**4.360**	**4.338**	**4.367**	**4.418**
Hallway	**4.545**	**4.600**	**4.226**	**4.182**	3.960	3.955	**4.214**	**4.126**
Stairs	**4.333**	**4.500**	**4.419**	**4.091**	**4.280**	**4.152**	**4.233**	**4.254**

Table 4.21: Satisfaction With Interior Spaces of Current Dwelling (respondents' average on a scale of 5)

The most successful rooms in terms of occupant satisfaction are those which are found on the second floor. The master bedroom was the highest source of satisfaction for the majority of the occupants, with 58.0% reporting to be very satisfied. The bathroom and second bedroom were satisfactory to 93.0% of the respondents. Next to the entrance, the dining room, living room and kitchen received the lowest average ratings for satisfaction, which were nevertheless quite high. A similar situation occurs at the improvement level, with the spaces on the upper floor providing the biggest improvement over the occupants' former dwelling. The ground floor spaces, particularly the entrance, offered the lowest (table 4.22). There are two other points worth mentioning:

• The entrances of those units which had either a vestibule or a separate entrance area (4,5) were not rated any higher than those which entered directly into a living space.

• The floor plans which had a kitchen in the middle of the unit received high ratings for the kitchen itself, but also the lowest ratings for the dining, living and bathroom areas.

PROJECT	1	2	3	4	5	6	7	TOT
Entrance	3.417	3.500	3.219	3.182	3.478	3.136	3.179	3.243
Living room	3.500	3.333	3.533	**4.182**	3.120	3.557	3.393	3.489
Dining room	3.818	**4.111**	3.633	**4.300**	3.318	3.786	3.185	3.648
Kitchen	2.917	3.000	3.742	**4.091**	3.520	3.762	3.429	3.598
Ground-floor bathroom	**4.444**	**4.111**	3.611	**4.000**	3.429	**4.058**	3.333	3.827
Master bedroom	3.833	**4.222**	3.938	**4.091**	3.792	3.750	3.655	3.823
Second bedroom	3.800	**4.167**	3.607	3.750	**4.091**	3.750	3.520	3.755
Upper-floor bathroom	**4.455**	**4.875**	**4.000**	**4.182**	**4.250**	**4.190**	3.357	**4.076**
Hallway	**4.100**	3.857	3.739	3.545	3.556	3.630	3.500	3.660
Stairs	**4.667**	**4.000**	3.800	**4.000**	3.455	**4.184**	3.857	**4.000**

Table 4.22: Room -by-Room Comparison to Former Dwelling (respondents' average on a scale of 5)

Exceptional improvements were recorded with the upper floor bathroom and staircase. The entrance space was only a minor improvement compared to the former dwelling (3.243). The absence of a vestibule or separate entrance space in itself does not appear to be a significant factor, since those projects which were equipped with these features (4,5) did not rate much higher than the others. The entrances' small size and the lack of adequate closet space may be presumed to be the cause.

4.4.3.2 Acoustic Privacy

Another aspect of privacy which was examined in more detail had to do with sound transmission through the common walls. The occupants were asked whether or not they could hear their neighbors across their common wall and, if so, what sounds could be heard and how often was this considered to be a major disturbance (Q37). The results are shown in table 4.23.

The findings indicate no evidence of acoustic privacy being a major problem. Although the vast majority (73.7%) of respondents reported being able to hear their neighbors, only 1.4% felt that the noise was always disturbing, and that 8.5% found it often disturbing. Only 10.1% of respondents heard their neighbors very often, and 70% answered that they almost never heard them. The apparent tendency to accept whatever noise that could be heard is probably due to the majority of the occupants' background. With over 80% of the respondents coming from apartments, the level of acoustic privacy represented an improvement over former living conditions.

PROJECT	1	2	3	4	5	6	7	TOT
IF NEIGHBORS COULD BE HEARD								
No	16.7	10.0	37.1	18.2	19.2	24.7	35.5	26.3
Yes	83.3	90.0	62.9	81.8	80.8	75.4	64.5	73.7
FREQUENCY								
Very often	20.0	11.1	0.0	22.2	15.8	4.1	20.0	10.1
Occasionally	50.0	44.4	59.1	66.7	47.4	55.1	45.0	52.9
Almost never	30.0	44.4	41.0	11.1	36.8	40.8	35.0	37.0
SOUNDS HEARD								
Walking	31.6	41.2	18.4	15.4	23.6	53.4	38.2	32.8
Stereo or television	21.0	11.8	28.9	26.9	18.2	12.1	32.3	21.0
Closing doors	26.3	23.5	26.3	15.4	18.2	8.6	5.9	16.2
Talking	0.0	0.0	2.6	11.5	10.9	12.1	5.9	7.7
Plumbing noises	5.3	5.9	2.6	11.5	20.0	1.7	0.0	7.3
Up/down stairs	5.3	5.9	0.0	11.5	0.0	1.7	8.8	3.6
Appliance noises	5.3	0.0	5.3	3.8	1.8	1.7	2.9	2.8
Construction noises	0.0	0.0	5.3	3.8	0.0	5.2	0.0	2.4
Yelling	0.0	5.9	0.0	0.0	3.6	1.7	2.9	2.0
Dogs	0.0	5.9	0.0	0.0	1.8	0.0	0.0	0.8
Others	5.3	0.0	10.5	0.0	1.8	1.7	2.9	3.2
LEVEL OF DISTURBANCE								
Not disturbing at all	50.0	87.5	45.5	33.3	38.1	47.1	35.0	45.4
Sometimes disturbing	40.0	0.0	50.0	44.4	42.9	47.1	55.0	44.7
Often disturbing	10.0	12.5	4.5	11.1	14.3	5.9	10.0	8.5
Always disturbing	0.0	0.0	0.0	11.1	4.8	0.0	0.0	1.4

Table 4.23: Acoustic Performance (by percentage of respondents)

There were three main sources of noise that accounted for 70% of all sounds heard: walking, stereo music and doors closing. There is no discernable difference in acoustic wall performance between those units that were built with masonry walls and those which were built as double-stud insulated walls. The neighbours could be heard least frequently across the wall which was constructed with fiberboard and resilient bars on one side (project 3). There was, however, no difference in the level of disturbance.

The size of backyards and level of privacy were consistently reported as being below the rest, both in terms of satisfaction and improvement over the previous dwelling. Given that the level of soundproofing was not this low in its satisfaction ratings, it can be assumed that the cause of lower satisfaction with privacy is due to the backyard. Furthermore, because the level of conflict between the neighbours was also reportedly low, we can conclude that the designs of the site plans were the primary source of the problem.

4.4.4 Suggested Improvements

The questions on satisfaction were followed by a request for suggestions on how the design could be improved (Q35). The majority of occupants (88%) provided suggestions which included 26 points. The most frequently desired changes are listed in descending order in table 4.24.

PROJECT	1	2	3	4	5	6	7	TOT
Total number of items	(19)	(17)	(42)	(26)	(45)	(124)	(54)	(327)
Add kitchen storage	21.0	17.6	11.9	7.7	4.4	21.0	9.3	14.4
Modify entrance	10.5	5.9	23.8	11.5	4.4	8.9	7.4	10.1
Wider unit (16')	15.8	5.9	9.5	19.2	4.4	3.2	16.7	8.6
Modify kitchen plan	21.0	41.2	0.0	0.0	11.1	3.2	13.0	8.3
More windows/natural light	0.0	0.0	0.0	7.7	6.7	5.6	11.1	5.5
Add/modify storage space	0.0	0.0	7.1	3.8	2.2	5.6	1.8	4.0
More land	0.0	0.0	0.0	0.0	2.2	6.4	7.4	4.0
Modify parking layout	0.0	0.0	0.0	0.0	0.0	6.4	7.4	3.7

Table 4.24: Proposed Changes to Existing Units (by percentage of entries)

The proposed changes were quite consistent with the previous findings. The most desireable changes are proposed in the kitchen, with 22.8% of respondents suggesting that the kitchen plan be modified or that storage space be added. The second most frequently-mentioned change (10.1%) is to modify the entrance, and concern for the unit's width is raised for the first time, with 14.3% of respondents suggesting that a wider unit would be better.

4.4.5 General Satisfaction

The issue of occupant satisfaction was concluded with three general questions aimed at measuring the respondents' overall impression with their new surroundings. The occupants were asked how well their new dwelling has lived up to their expectations (Q46), how long they plan to live there Q47) and, finally, whether or not they would recommend their purchase to a friend (Q48). The results are shown in table 4.25.

HOW LONG OCCUPANTS PLAN TO LIVE IN THEIR NEW HOME	(%)	HOW THE NEW HOUSE HAS LIVED UP TO THE OCCUPANTS' EXPECTATIONS	(%)
One or two years	4.8		
Three or four years	29.6	Much better than expected	5.7
Five or six years	31.2	Better than expected	25.8
Seven or eight years	1.1	About the same as expected	56.7
More than eight years	16.9	Worse than expected	10.3
Do not know	16.4	Much worse than expected	1.5

Table 4.25: Plans and Expectations (by percentage of respondents)

The results reflect the general level of satisfaction that was evident in the evaluation of the 23 attributes. The bulk of occupants (60.8%) plan to live in their new house between three and six years, and 16.4% are planning to there for more than eight years. There were no surprises for the majority of respondents (56.7%) who reported that their new dwelling was about the same as expected. Close to one third (31.5%) of respondents felt that it did either better or much better than expected. When asked whether or not they would recommend the purchase to a friend, 92% of respondents answered yes.

4.5 Unit Modifications

The next phase of analysis examined the changes that occurred in the occupants' physical surroundings. This is not only a way of determining the extent to which the buyer's functional requirements were being satisfied, but also a way of testing the unit's adaptability. Occupants were asked whether or not any work had been done to the units, and if so, indicate what type (Q29). They were then asked to list any modifications that were planned (Q30).

The amount of work done by the occupants on the units was quite significant considering the short period of residency. The study found that 39% of respondents had already done some work , all of it in the basement (table 4.26). Partitions were erected in 22.5% of respondents' basements, implying that there was some kind of room addition. The most frequently mentioned work was drywall, presumably to finish the exposed structure ceiling.

WORK DONE IN BASEMENT SINCE OCCUPANCY	(%)
Drywall or plasterwork	15.3
Electrical fixtures	14.2
Partitions	14.2
Floor finishes (wood, carpet, etc.)	12.9
Wall finishes (paint, wallpaper)	11.6
Electrical wiring	7.7
Wood finishes (trims, baseboards, etc.)	6.1
Insulation	4.5
Rough plumbing	3.9
Kitchen/bathroom cupboards	3.2
Plumbing fixtures	1.9
Others	4.5

Table 4.26: Modifications Made Since Occupancy (percentage based on 310 items)

When asked whether or not they were planning to do any work, 83.8 % of the respondents answered that they were. The majority of these (60.9%) reported plans to do work in the basement, 23% on the first floor and 16.1% on the second. The most frequently mentioned work that is planned for each floor is listed in table 4.27. The most significant modifications planned for the units are to be found in the basement, where 61.5% of the items mentioned involve major modifications, such as the addition of a playroom, den, toilet, laundry, or bedroom. The type of modifications that were being planned for the upper floors were consistent with the findings of the previous questions, with intentions to upgrade the finishes and re-plan the kitchen.

WORK PLANNED IN THE BASEMENT	(%)	WORK PLANNED ON THE FIRST FLOOR	(%)	WORK PLANNED ON THE SECOND FLOOR	(%)
Finish completely	25.9	Wall Finishes	16.1	Wall Finishes	39.1
Add a playroom /den	14.6	Re-plan kitchen	12.6	Skylight /window	10.9
Add a toilet/laundry	10.9	Floor finishes	12.6	Floor Finishes	10.9
Add a bedroom	10.1	Partitions	8.0	More storage	4.3
Add storage	9.7	Drywall	6.9	Electrical fixtures	4.3
Finish partially	7.7	Change doors	5.7	Kitch/bath cupboards	4.3
Floor finishes	6.5	Decoration	5.7	Insulation/clim.control	4.3

Table 4.27: Modifications planned (percentages based on 247, 87 and 46 responses)

4.6 Living Adjustments

As a general measure of the type of compromise that was made with the occupants' purchase of the home, the respondents were asked to indicate what type of changes occurred in their spending/saving habits (Q44), and in the way they spend their leisure time (Q45).

Table 4.28 summarizes the changes in the occupants' spending and living habits. More than half on the respondents (51.1%) reported saving either less or much less than in their previous dwelling, while 31.5% specified that there was no change. The changes in living pattern were more pronounced, with 46.8% of respondents reporting a change. The majority of these (60.7%) reported spending more time at home and 29.1% reporting that they were entertaining more at home. The occupants were also asked if their expenses in the new house were higher than anticipated (Q43). The majority of respondents (71.4%) reported that the expenses were not higher than anticipated. There was no discernable difference in the change in saving habits between the occupants living in the more expensive units and those in the lower priced developments.

CHANGE IN SPENDING/SAVING HABITS WITH RESPECT TO PREVIOUS DWELLING*	(%)	CHANGE IN LIVING/LEISURE PATTERNS WITH RESPECT TO PREVIOUS DWELLING	(%)
Saving much less	21.8	Spending more time at home	48.4
Saving less	29.3	Spending less time at home	4.0
No change	31.5	Entertaining more at home	41.3
Saving more	12.0	Entertaining less at home	6.3
Saving much more	5.4	* Based on the results of projects 1 to 5	

Table 4.28: Changes in Spending and Living Patterns (by percentage of respondents)

4.5 Summary of Findings

While the demographic profile of the buyers was, for the most part, consistent with the design objectives of the Grow Home, the household incomes that were reported exceeded the expected values. The projects provided starter homes for 89.4% of the respondents. The households were made up mainly of young couples (25-34 years of age) with one child. The single-person household accounted for 16.5% of the cases. The vast majority of respondents (86.6%) were formerly tenants, 92.2% of whom had lived in apartments. The median income, however, was close to $46 000. The units' selling prices, coupled with the government subsidies, made the home affordable to households with incomes 30% lower than the respondents' median income. Calculations based on the respondents' total carrying costs revealed that the buyers were allocating 19% to 26% of their income to housing.

Only 2.1% of the occupants surveyed did not qualify for the provincial and municipal subsidies that were in effect at the time of purchase. Of those that qualified, 34.4% responded that they would have bought the house anyway, 38.7% said that they would not have bought, and the remaining 26.9% were not sure. The subsidies were therefore directly responsible for at least 38.7% of the sales.

The dominant buying patterns of the occupants were characterized by short, impulsive decisions. The majority of the buyers (60%) were not actively shopping for a house, and 61% sought no further after having visited the project where they decided to buy. Over 75% of these buyers had never seen a model unit prior to their purchase.

There were two aspects of the units which attracted the majority of the buyers: price and interior layout. When asked to rate the importance of specific features in their purchase, price was ranked first, with 90% of the respondents rating it as "extremely important," while interior layout received the same response from 68% of those questioned. Buyers also expressed interest in doing some of the construction work themselves in exchange for a reduction in price. There were more buyers willing to assume specific construction tasks (33.3%) than there were willing to accept an open loft space on the second floor (20.2%).

The preferences of the buyers were mainly for a single-family detached unit (78%) in a suburban setting (52%) and newly-built houses (58%). The majority of respondents also reported a preference for two bedrooms (55%) while most of the others were hoping to have 3 bedrooms (44% of respondents). A second or large bathroom, a large or private yard, sufficient storage, natural lighting and a basement were the most frequently cited features which were considered important to have in a home. While the occupants' desire to have these elements was satisfied in most cases, the acceptance of a townhouse (which was the preferred type of dwelling for only 2% of respondents) represented the first tradeoff that the buyers were willing to make for the purpose of home ownership.

The comparison of several location characteristics to those of the occupants' former dwelling revealed that other compromises were made in 4 of the projects. The most significant one was the occupants' distance from their work place, which received an exceptionally high priority rating when the importance of this aspect was evaluated. Although the purchase of the unit meant having to move further away from work for the majority of respondents in 3 of the projects, these same occupants reported being satisfied with their new situation. Futhermore, there was a general increase in commuting time and car usage. It appears that, for the most part, there was a strong willingness from the buyers to give up this particular aspect of location for the purpose of homeownership.

The occupants' proximity to public transportation, shopping facilities, medical services and schools were also sources of compromise, but to a lesser extent. The majority of respondents from 2 of the projects reported being satisfied with their proximity to medical services, even though it represented a deterioration from their former dwelling, indicating that the compromise was acceptable. Occupants from the same two projects also reported a deterioration in their proximity to public transportation, shopping facilities or schools while expressing satisfaction with all of them. Although the occupants' proximity to services and shopping facilities is likely to change as the area's infrastructure is improved, the occupants' proximity to work remains a problem.

The level of improvement with the site characteristics was fairly consistent among attributes, with the general image of the project rating highest and the level of privacy lowest. There were three instances of deterioration with respect to the occupants' former dwelling: the size of front yard in project 7, the size of backyard in project 1 and the level of privacy in project 2. With the exception of the level of soundproofing between the units in project 2, all of the unit characteristics in all off the projects represented an improvement for the majority of occupants. Similarly, with the exception of the kitchen on project 1, all of the interior spaces in all of the projects were considered to be an improvement over the occupants' former dwelling.

The majority of respondents expressed satisfaction with 22 of 23 location, site and unit attributes that were evaluated, as well as with all of 10 interior spaces in their dwelling. About 88% of respondents found that their experience with the new house was about the same or better than what they expected, and the vast majority of the buyers (92%) reported that they would recommend their purchase to a friend.

Satisfaction levels were generally highest with the units themselves, particularly with the individual rooms and spaces, while the lowest level of satisfaction was reported in the site characteristics. On a scale of 1 to 5 ("very disappointed to "very satisfied"), the average overall ratings for location, site, unit and room characteristics were found to be 3.697, 3.513, 3.933 and 4.092, respectively. Although there was some variance in satisfaction levels among projects, several aspects of the development were rated fairly consistently across the survey:

- The majority of occupants from all of the projects were satisfied with all of the location characteristics except for their access to public transportation, which was rated as disappointing to the most of occupants in 2 of the projects.

- The project's general image was the highest source of satisfaction among the site attributes in 5 of the projects surveyed, with 33% of the respondents reporting being "very satisfied," and another 49.5% "satisfied."

- The majority of respondents were satisfied with all of the 11 unit features listed, and a significant fraction reported that they were "very satisfied" with 7 aspects in particular: interior appearance (38.5%), exterior appearance (31.2%), quality of exterior finishes (30.3%), total amount of space (32.2%), overall design/layout (28.3%), and amount of natural lighting (40.2%) and amount of cross-ventilation (30.2%). The total percentage of respondents expressing satisfaction with these attributes ranged from 79.9% for amount of natural light to 90.2% for both overall design/layout and total amount of space.

- Occupant satisfaction with the interior spaces in the units was exceptionally high. The most successful rooms were found on the second floor. The master bedroom was the highest source of satisfaction for the majority of the occupants, with 57.7% reporting to be very satisfied and another 37% satisfied. The bathroom and second bedroom were satisfactory to 92.1% and 93.5% of the respondents, respectively.

- The weakest source of satisfaction with the units was the quality of interior finishes (receiving an average rating of 3.193), and soundproofing between units (3.500). Although there was no evidence of acoustic privacy being a major problem (soundproofing between units was rated as being satisfactory in all projects), the fact that 74% of the occupants could hear their neighbours indicates that there is room for improvement.

- The most frequently mentioned changes that were proposed by the respondents dealt with the kitchen, the entrance, and the unit's width (increase to 5 meters), which received mention from 24.0%, 16.8% and 14.3% of the respondents, respectively.

The only attribute which was found to be a source of considerable disappointment was the size of the backyard areas, where 41.7% to 64.5% of respondents from 5 of the 7 projects reported being unsatisfied with the results. There were 6 other instances where a large fraction of the occupants in a particular project were unsatisfied with one of the attributes:

- The majority (71%) of occupants in projects 1 and 2 rated their proximity to public transportation as disappointing.

- The size of the front yard was unsatisfactory to 69% of the respondents in project 7.

- In terms of privacy level, the site plans in projects 5 and 7 were found to be disappointing to 40% of the residents.

- The quality of interior finishes was unsatisfactory to 47% of respondents in project 7.

The amount of work done by the occupants on the units was quite significant considering the short period of residency. The study found that 39% of respondents had already done some work , all of it in the basement, including partitions which were erected by 22.5% of the respondents, implying that there was some kind of room addition. The most frequently mentioned type of work was drywall installation, presumably to finish the exposed structure ceiling.

The majority of respondents (83.8 %) were planning to do work in their units. The biggest modifications are planned for the basement, where 61.5% of the items mentioned involve major work, such as the addition of a playroom, den, toilet, laundry, or bedroom. The type of modifications that were being planned for the upper floors were consistent with the findings of the previous questions, with the primary intention to upgrade the finishes and re-plan the kitchen.

More than half on the respondents (51.1%) reported being able to save either less or much less money than in their previous dwelling, while 31.5% specified that there was no change in this regard. The changes in living/leisure patterns were less pronounced, with 46.8% of respondents reporting a change. The majority of these (60.7%) reported spending more time at home and 29.1% reported that they were entertaining more at home. The majority of respondents (71.4%) reported that the expenses in their new home were not higher than anticipated.

5. BUILDER INTERVIEWS

The information and observations which follow are based on discussions and structured interviews with the builders selected for this study. Whereas the projects in the survey were identified with a number, the builders were designated a letter as follows:

Project		Builder
0 *	----------->	A
1 +	----------->	B1
2 +	----------->	B2
3	----------->	C
4	----------->	D
5	----------->	E
6	----------->	F
7	----------->	G

* No occupant survey was conducted for this project
\+ Two of the projects were built by the same contractor

Table 5.1: Projects and Builders

5.1 Builder Profile

The profile of the Grow Home builders was assembled from five variables: age of company (Q2), number of employees (Q3), scope of work (Q4), percentage of work subcontracted (Q5) and types of projects built (Q6). The results can be summarized with a few prevailing characteristics:

- Four of the seven builders have been in operation for 5 years or less

- Four of the builders have 5 employees or less on the permanent payroll, two of them have between 6 and 10 and the other two have more than 10 employees.

- The scope of the work done by most of the builders is not restricted to general contracting. Five of them are involved in land development, one acts as a subcontractor and another one offers professional services in project management.

• Most, if not all of the work is subcontracted. Three of the builders subcontract all their work , another three subcontract 90% or more, and one subcontracts 80%.

• While all of the builders are and have been involved in residential construction, 5 of them have built commercial buildings and two have built industrial. None of the builders have done institutional construction.

• The average number of housing units built annually ranges from 2 to 600 units. Most of the contractors (5) build between 25 and 80 units a year. Three of them build mostly apartment buildings, which make up 60% to 97% of their work. Two are involved almost exclusively in single-family detached (100 % and 90 % of units). One builds mainly townhouses (70%) and the last one has his work evenly distributed among the various housing types.

• Of the contractors that build apartment buildings, two are involved in medium and high-rise construction (above 7 storeys) while the remainder have dealt exclusively with low rise (1 to 3 stories).

• Only two of the contractors (E &F) had experience in low cost market housing.

5.2 Project Delivery

5.2.1 Inception

For all except one of the contractors, the idea of building 4.3-meter rowhousing came from a magazine or newspaper article. Two of the contractors had seen other projects that were based on the Grow Home concept and two others had visited the demonstration unit that had been built on the university campus. When asked whether or not they had any hesitations about building the projects, two of the builders reported having had concerns about the narrow width of the units.

5.2.2 Design/Working Drawings

Four of the builders purchased land specifically for their project, while the remaining three already owned the land before the project's inception. The final designs for the units were developed by independent architects in four of the cases, which is rather unusual for small homebuilders in the area.

An in-house architect (the owner himself) adapted the unit's design in one of the projects, and the other two used the services of in-house technicians. The working drawings were executed by the same independent architects in 3 of the projects, while the services of architectural technicians were used in the others.

Three of the contractors had already built in the same municipality where they implemented the Grow Home concept, and reported that their experience in this regard was helpful in planning and choice of materials. One contractor mentioned the need to give his market a full basement at the expense of an indoor garage. Two of them felt strongly about placing the kitchen in the back of the house, facing the backyard area (which was opposite to the layout in the Grow Home demonstration unit), and the other mentioned his clients' preference for an open plan on the ground floor rather than separate rooms. All three cited the need to finish the units in brick veneer, and casement windows were considered to a strong selling point in one of the cases (although all of the builders installed casements in the front of the units). With the exception of one builder, everyone felt that offering the prospective home buyer options was helpful in boosting the sale of units. All of the builders offered a selection of finishes and fixture to various degrees (table 5.1).

Builder	**A**	**B**	**C**	**D**	**E**	**F**	**G**
Units Built	(4)	(48)	(93)	(22)	(62)	(177)	(47)
Exterior finishes	•						
Floor finishes	•	•	•	•	•	•	•
Paint colors	•	•		•			
Kitchen cabinets	•	•			•	•	•
Bathroom fixtures	•	•	•	•	•	•	•
Plumbing fixtures	•	•				•	
Lighting fixtures	•	•	•			•	•
Wood finishes	•	•				•	•
Other						•	

* Interior railings

Table 5.2: Options Offered by the Contractors

All of the builders offered a choice of floor finishes and bathroom fixtures. Next to these, lighting fixtures and kitchen cabinets were the most commonly offered options, although the selection was usually restricted to color. Wood finishes were an option for the buyers of 4 projects, and paint color and plumbing fixtures were offered in three cases. Only two of the builders surveyed had an optional floor plan available, and one other builder offered a choice of railing.

The involvement of the buyer in the planning or construction of the unit was somewhat more restrictive (table 5.2). Only one of the builders surveyed offered the option of purchasing a unit with an unpartitioned second floor, and the option was not advertised nor was it suggested. It was available for anyone who requested it specifically. One of the contractors, under the same conditions, would have allowed the buyers to do some of the construction work themselves in exchange for a reduction in price. Most of the buyers, however, were permitted to change the interior layout at will, provided there were no structural changes required.

With the exception of one builder, there is no evidence that the offer of options significantly affected the occupants' satisfaction with either the interior appearance or the quality of interior finishes.

Builder Units Built	**A** (4)	**B** (48)	**C** (93)	**D** (22)	**E** (62)	**F** (177)	**G** (47)
Option of choosing from different floor plans:	Y	N	N	N	N	Y	N
Option of purchasing a unit with an unpartitioned second floor:	N	N	N	N	N	Y	N
Buyers permitted to change the interior layout at will prior to or during construction:	Y*	Y*	Y	Y*	N	N	Y*
Buyers permitted to do any of the construction work themselves in exchange for a reduction in price:	Y	N	N	N	N	N	N

* Modifications were allowed provided they were minor ie. requiring no structural changes

Table 5.3: Flexibility in Planning and Construction

5.2.3 Implementation

The speed with which the units were built varied substantially from one project to another. There was no apparent correlation between the size of the project (or the size of the company) with the rate of output. Average rates ranged between 2.6 and 19.5 units per month, driven presumably by the contractual delivery dates. Most of the contractors started building within two months after being exposed to the idea, with three of them starting within the first four weeks.

According to 4 of the builders, construction work in the Grow Home-type projects progressed faster than that in other projects of similar scale, whereas one builder reported that the opposite was true. Those who felt that construction progress was greater cited the unit's structural simplicity and the rowhousing configuration as principle reasons. One builder estimated that he could erect 7 units in 5 days (frame and roof). The fact that labour was readily available during a period of economic recession was also mentioned as being helpful in speeding up the construction process, as it enabled several teams of subcontractors to work on the project simultaneously. Four of the builders found that the speed of erection increased as construction work progressed and more blocks of units were built.

The opposing argument focused on the small size of the units, which allegedly left little room for the workers to move around in and limited the number of trades which could work in the same unit simultaneously. One builder proceeded to mention that the improvement in building efficiency over other projects was slight, since the interior finishes take most of the time and there is no substantial difference (aside from quantity of materials) between the finishes in these homes and those in other projects. Three builders stated that the offer of options affected the delivery of units by making the coordination effort more difficult, increasing the frequency of errors and complications, and slowing down the construction process. With the exception of one contractor (who added 3 workers to his team) all of the builders delivered the units without the need to hire new staff.

5.2.4 Unit Sales

The rate of unit sales was rather unusual. Three of the projects (totalling 148 units) sold out within the first 5 weeks, and all of the builders started second projects based on the same principle, usually in the same general location as the first. The majority of the units from the projects surveyed (60.3%) sold out before any significant construction was underway, and another 17% were sold after some framing had been completed. Three contractors reported a sharp drop in sales after the first month of construction, presumably because of increased competition from several other projects which were started simultaneously. Four builders reported that a few buyers (usually 2 or 3) had cancelled their purchase. The reasons cited for this were usually an inability to obtain financing or disappointment with either the finished unit or the form of tenure (condominium).

5.2.5 Observations &Feedback

The builders were asked whether they had knowledge of which purchasers were first-time buyers and, if so, if there were any particular demands made by this group which were not common among other buyers. They were also asked about any concern which might have been expressed by the buyers about the number of bedrooms in their units, and how they would change the design of their project if they were to start all over again. Finally, they were probed on whether or not they saw any potential for developments like these in the future.

A small portion of the buyers (approximately 4%) reportedly expressed concern about having only two bedrooms. All of the builders reported knowing who the first-time buyers were. According to their estimates, 89% of the buyers were first-time owners, which corresponds almost exactly with the results of the occupant survey (88.9% of respondents). Three of the builders noticed basic characteristic differences among this group. Generally, the first-time buyer was perceived as being more cautious and as having a tendency to expect more value. One contractor also sensed that there was a higher concern for privacy when accommodating the needs of the first-time buyer.

All but one of the builders offered suggestions on how their project could be improved (table 5.3). The nature of the these comments was generally consistent with the findings of the occupant survey. The builders appear to have sensed the buyers' preferences by addressing 4 main aspects of their development: enhancing the perceived spaciousness of the unit interior, reducing construction costs to offer a lower price, improve parking arrangements, and increase privacy through 4.3-meter land subdivision and freehold ownership.

- Reduce construction costs further by using cheaper finishing materials, fewer or smaller windows and smaller units (93 sq. m.); try to fit three bedrooms.
- Would try to acquire 4.3-meter land subdivision; place parking in front of each unit.
- Would open the stair which leads to the basement, in order to add a sense of spaciousness to the interior.
- Would try to acquire 4.3-meter land subdivision; condominium arrangement has proven to be a major problem.
- More careful site planning to accommodate parking in a more manageable fashion
- Would build with the individual units placed at an angle in order to separate the entrances, add privacy and a sense of identity to the units; would replace entrance closet, since it blocks the view into the house; would build in larger parcels of land to accommodate better parking arrangements.

Table 5.4: Improvements That Would be Made by Builders

All of the builders saw potential for more developments like these in the future, although two of them felt that the demand would only be short term (1 or 2 more years) and that the sales should drop significantly once the government subsidy programs expire. Another two of the builders found narrow-front rowhousing to be a highly adaptable and efficient way of meeting the demands of an affordable housing market. There was, however, some expression of concern over the municipalities' ability to accommodate this form of housing. The need for more cooperation and changes in excessively restrictive or inappropriate by-laws was mentioned by two of the builders.

5.3 Marketing Techniques and Public Response

Recognizing that they were dealing with a new product aimed at a market which was different from what they had been used to, the builders started adopting appropriate marketing strategies and selling techniques. A common sense approach was used in dealing with the prospective client. Many of the advertisements, for instance, only specified the monthly payment which would be required to own the house, with no mention made of the unit's selling price. Promotional brochures were distributed directly to the mailboxes of local tenants, many of whose monthly rents were only about $200 less than the rowhouse mortgage fees. Advertisements were placed in the entertainment and leisure sections of the local newspapers rather than in the real estate section; some preferred to advertize on local radio stations. The projects were not referred to as "affordable," but as exceptional opportunities to acquire a quality dwelling. Emphasis was placed on the standard options and "luxury" items: fireplaces, whirlpool baths, brick exterior and wood flooring, much like the option lists used in car sales. Overall dimensions of the units on the promotional brochures and advertisements were omitted, and substituted with the exact dimensions for each room. Salesmen were stressing floor area and room-by-room comparisons between the Grow Home and the buyer's current dwelling rather than overall dimensions.

The nature of the marketing strategies showed a keen understanding of a newfound niche in the market. It acknowledged the fact that people who were used to thinking that home ownership was beyond their means would not be looking through the real estate section of the newspapers, nor would they be familiar with the calculation of monthly carrying costs of houses from a price list. The thought of living in a 4.3-meter house would sound rather confining, as it did to some of the builders themselves before they walked through a built unit.

5.4 Public Opposition

Two of the builders surveyed reported having encountered public opposition from the neighbouring community. In both cases, the main source of complaint was the general "affordable" image of the project, and concessions were made to address these concerns. The magnitude of the resistance was not substantial (involving about 20 activists in either case), and neither of the builders felt that their sales were affected, rating the impact of the opposition as "very minimal."

In the first case, the resistance focused on the density of the development and concerns that the local schools would not be able to accommodate the rapid influx of young families. The opposition started with informal, verbal complaints from the local residents, and mounted rapidly to written complaints, signed petitions and, finally legal action. The efforts were aimed at stopping the municipality from enacting zoning changes, requested by the builder, which would have enabled a higher-density development. The builder responded to the resistance by retracting his request and lowering the density of the project (from 44 to 26 units). Complaints were reported to have faded rapidly once the first units were completed with a quality of exterior finishing which was at par with, if not superior to, the existing homes in the area.

The second project which experienced problems followed the same general lines of resistance. While there was no legal action taken in this case, demonstrations involving about 20 neighbours were organized in front of the project. Concessions were made after the builder met with concerned members of the community and agreed to implement certain changes in the architectural design of the units. The land had been zoned for low-rise condominium apartments (4.5 storeys), and the residents were apparently convinced that narrow-front rowhousing would be more appealing than the alternative. As with the first project, the builder reported that the opposition faded as the units reached completion and acquired the approval of the nearby residents.

5.5 Experience with the Regulatory System

While all of the contractors surveyed were required to deal with only one authority (municipal) in order to obtain their building permit, the number of submissions and length of time it took to process these varied from project to project. The builders in 5 of the projects received approval after only one submission. Their applications took from 1 week to 8 weeks to process. All of these contractors felt that the processing periods were normal, and offered no further comment.

The builder of one other project expressed the same general reaction. Although his application was submitted four times, he was able to obtain a permit within four weeks. Refusals were based on concerns over the narrow-front rowhousing configuration, which was uncommon in the area. The builder was able to obtain a permit for his project only after receiving approval for a four-storey condominium apartment block with 42% more units than his rowhousing proposal, which is what the area was zoned for. He was then able to obtain permission for a rowhousing development in "exchange" for a reduced density.

A similar situation existed with project B1, where 4 submissions were required and a building permit was acquired 6 weeks later. Hesitations regarding the general image and density of the development were the causes of the delay, as well as certain technical requirements. The builder in this case felt that the time it took to process the application was much too long, and estimated that the delay had a severe effect on his sales, since he was unable to complete a model unit at the same time as or before his competition.

The contractor from the remaining project (A) submitted an application to modify the land subdivision (while remaining within the legal limits) in order to built semi-detached versions of the Grow Home. Two applications were required, the first of which took 8 weeks to process. Since application for land subdivisions are processed by authorities at a provincial level (submissions were sent to Quebec City), there was an 18 week delay in obtaining a building permit. The impact on unit sales was estimated at 3 on a scale of 1 to 5, with 5 being regarded as very severe.

None of the builders tried to obtain zoning for 4.3-meter land subdivision for this same reason. The builders in 6 of the projects reported that applications were not submitted for fear that it would have taken too long to get approval. One builder felt that it would not have even been possible, based on his experience. Another builder simply felt that working with condominiums was to his advantage. The builders were asked if they felt that unit sales would have been higher with 4.3-meter wide land subdivisions. Three of them responded that there would have been no effect, 3 others estimated that they might have sold up to 10% more, and one builder estimated that his sales would have doubled had he been able to obtain the proper land subdivision.

5.6 Construction Costs and Cost-Saving Techniques

The builders were asked to comment on the type and magnitude of savings that were achieved through various aspects of their development. Eight specific areas of potential savings were outlined for the respondents: economies of scale, grouping/planning of units (rowhousing configuration, tenure, etc.), material replacement (alternative plumbing or framing components), prefabricated components (exterior concrete stairs, balconies, etc.), market and/or economic conditions, standardization of unit designs (location of openings, etc.), simplicity of design and material wastage.

General savings were reported in all aspects of the developments, except for material replacement and prefabrication. Those who used unconventional materials and components (plastic piping, wood truss-joists, etc.) claimed that the replacements were more for convenience than they were for economy. Economies of scale in the order of 5% to 15% were reported by 3 of the contractors, not necessarily from the larger projects.

The inability of the contractors to subdivide their land for freehold ownership actually turned out to be an asset for 4 of the builders. Selling the townhouses as condominiums helped reduce construction costs by alleviating some of the building code requirements. Under freehold ownership, for instance, some municipalities require that the units be separated with a masonry firewall. For condominiums, on the other hand, a continuous two-hour fire separation would be sufficient. This enabled these builders to use wood and drywall for the common wall instead of concrete block, resulting in a savings of about $3 500 per unit. Furthermore, some municipalities require separate water cuts in the infrastructure when units are on separate parcels of land -- a cost which is absorbed by the builder and passed on to the home buyer. At $3 000 per water cut, the builders achieved a savings of $9 000 for a group of four units. Similar restrictions in the way of plumbing requirements led to additional savings in some of the developments.

An opposing argument put forth by one of the builders suggested that more stringent requirements in other respects offset these potential savings. The requirement for 1.3 private parking spaces for condominiums, for example, resulted in the need for more land to provide communal parking and, consequently increased landscaping and paving costs.

The highest source of savings appears to have been the weak economy. With increased competition in a struggling labour market, many of the subcontractors were offering reduced rates. Five of the builders reported savings in this regard. Four of these estimated that labour rates were reduced by about 10%, and the other builder reported savings of 10% to 15% in labour and an additional 5% on materials.

The standardization of units was not considered to be a major source of savings. Most contractors felt that real advantage of making the units as standard as possible is that it simplifies the level of coordination required. Two of the contractors estimated a reduction in labour costs in the neighbourhood of 10 hours per unit. Similarly, the simplicity of the design was considered to be only a marginal source of economy. Three contractors reported savings in this area, with estimates raging from a mere $50 per unit to 5% of the total costs.

Finally, the majority of contractors found that there was less material wastage with the Grow Home-type projects than with other projects of similar scale. This was due mainly to the unit's simple layout and rowhousing configuration, which required less cutting and fitting of building components. While two of the builders felt that these savings were slight (approximately 5% less wastage), two of them estimated that wastage was reduced by about 15%. A fifth contractor claimed savings in this regard to be as high as 20%.

Construction costs were found to remain within the $47 000 range in most cases (including basement, partitioned upper floor and brick finishes), which corresponds to the estimates given when the Grow Home was designed (table 5.4).

CONSTRUCTION COSTS [1]	Average cost per unit	Average cost per square meter
Site	$2 082	$17.10
Foundations	$2 920	$23.98
Common Wall	$2 228	$18.28
Rough Carpentry [2]	$11 666	$95.81
Doors and Windows	$2 536	$20.86
Services	$5 699	$46.77
Interior Finishes	$9 665	$79.35
Furnishings	$2 245	$18.39
Exterior Finishes	$4 689	$38.49
Landscaping and Paving	$2 563	$21.08
TOTAL	**$45 020**	**$369.89**

1. Material and labour costs in Canadian dollars; does NOT include land, infrastructure, overhead and profit; based on gross floor area including 1/2 basement.
2. Includes thermal and moisture protection.

Table 5.5: Average Construction Costs

6. CONCLUSION

The implementation of the Grow Home concept in and around the Montreal area has demonstrated that a significant potential exists for narrow-front rowhousing to respond to the housing affordability challenge, although there are some issues that need to be addressed. The first of these deals with the household incomes that were reported in the built projects, which exceeded expected values. The buyers in Montreal were allocating a relatively low portion of their income on housing, generally in the area of 21%, and the reason for this is not entirely clear. Given that new homes priced 15% to 20% higher than the Grow Home-type units were available, it was evident that the tendency to allocate a lower portion of income on accommodation was intentional and not for lack of choice. The economic recession which existed during the sales period may have resulted in cautious investment from the buyers. This, however,is not consistent with the almost radical spending patterns that emerged. It is more likely that the elevated income levels are reflective of a change which may be occurring in the spending habits of either the average first-time buyer or the North American household in general. It might also be due to regional or cultural preferences and aspirations. In either case, it seems that there is a tendency for the buyers to allocate a greater portion of their incomes to leisure, entertainment and luxury, given the respondents' high concern for the quality of materials, expressed desire for large bathrooms and bedrooms, and their general satisfaction with the size of the units. These concerns were recognized by the contractors, who reported the necessity of building with brick exteriors and offering a range of options, such as whirlpool baths and fireplaces. The need to address these demands in the design and development of alternative affordable housing solutions cannot be ignored.

The second issue that should be considered has to do with the types of tradeoffs that the buyers were willing to make. A willingness to compromise some of their preferences for the purpose of home ownership was evident, particularly in matters relating to location and housing type. There was a tendency for the buyers to compromise on their strong preferences for single-family detached units and to travel longer distances to and from work for the sake of ownership. The townhouse, with its separate entrance at ground level and yard space, satisfies the traditional perceptions of a house, and was generally accepted as such. The tendency to accept tradeoffs, however, drops significantly when any of the traditional elements are compromised. This became evident with the relatively high levels of disappointment which were expressed with the size of the backyard area. Given its high priority rating and the occupants' expressed desire to have one, the projects' inability to provide an adequate backyard area was found to be the single most significant source of failure in the projects.

The source of the problem is adapting to a new or unfamiliar product. Narrow-front rowhousing is difficult to plan efficiently, particularly at the site level. Parking and privacy considerations are critical in achieving a comfortable and attractive development. Although the builders were quick in making corrective changes to the units in their second (and sometimes third) developments based on their experience with the first development, the site planning and land division present a different challenge altogether. An appropriate solution is difficult to achieve when the builders are working around the existing municipal infrastructure. The small builder's general reluctance to work with design professionals (and vice versa) aggravates the problem. A set of general guidelines on site planning approaches for low-rise, high density developments in the form of a simple, graphic, easy-to-read publication may be helpful in this regard.

Another aspect of the built projects which deserves some attention is the potential to improve the units through minor modifications. Judging by the levels of occupant satisfaction for location, site and unit characteristics, we can conclude that most of the functional requirements and aesthetic preferences of the buyers were fulfilled, with the sole exception of the backyard area. Three other aspects of the projects, although generally rated as satisfactory, may require improvement: the general level of privacy in the project, both visual and aural, the quality of interior finishes the design of the entrance area and the efficiency of the kitchen layout. A set of guidelines or examples of how these aspects can be improved would seem to be a simple and effective way of improving the designs.

The adaptability of the units not only simplified the task of modifying the layout, but also enabled the builders to offer a wide range of options without significantly complicating the construction process. This was thought to be a key selling point, since it allowed the buyers to personalize their dwelling and to adjust the design to suit their budget. Last-minute changes could be made to the floor plan, and by keeping the size and location of openings consistent, most builders were able to proceed with the construction of the structure and envelope before the interior layout was finalized. The survey revealed that 20% of the buyers were willing to accept an unpartitioned second floor, and 33% would have assumed some of the construction work (particularly the finishing operations) in exchange for a reduction in price. Although these percentages represent a minority, there was undoubtedly an interest in participating. The notion of involving the buyer in the construction of his home remains a plausible option for reducing housing costs, and may be worthy of further study.

The effect of external factors on the implementation of the projects was significant, and there were several observations that are noteworthy:

• The effect of the provincial and municipal subsidies on the final selling price and/or monthly carrying costs was found to be substantial but not critical in most cases, accounting directly for some 40% of unit sales. Although the rate of unit sales decreased for most builders after the expiry of the programs, they remained steady throughout the second and third phases of the developments, usually ranging from 1 to 3 sales per week.

• The regulatory environment was not considered to be a major obstacle. The long processing periods were reported to be a deterrent for many of the builders who considered applying for narrow-front lot subdivision. There was, however, no evidence of any real incentive or effort to change the existing lots. Concerns about the project's image caused minor delays in some cases, but with no significant effect on either the units or the price.

• The depressed economic climate turned out to be somewhat of an advantage. With housing production at a practical standstill, the builders, who have traditionally been characterized by a reluctance to innovation, were given an incentive to look into new markets, and became more receptive to new or unfamiliar design alternatives. Furthermore, with the increased competition in a struggling labour market, many of the subcontractors were offering reduced rates.

The experience with the Grow Home-type projects demonstrated that effective change in the affordable housing problem can be achieved with the housing product itself. The notion that housing costs can only be reduced by addressing external, macroeconomic factors, and that labour and material costs play an insignificant role in housing prices is not necessarily valid. Housing prices were lowered by reducing construction costs and using land efficiently. The small, local builder working independently was found to be an essential source in the production and delivery of affordable housing. The builders' knowledge of the market, coupled with their ability to act quickly and adapt to regulatory restrictions resulted in a successful and efficient interpretation of the Grow Home concept, which proved to be well-suited to the buyers' preferences and aspirations.

Appendices

APPENDIX A

GROW HOME-TYPE PROJECTS

Status:10/12/91	No. of Units Built	No. of Units Planned	Selling Price*	Grouping	Exterior Finish	Garage	N° of Layouts
ANOBID CONSTRUCTION CORP.							
St. Francois,Laval	4	Ind.	89,900	2	Aggr/Brick	Y	2
LES ENTREPRISES J. & R. BOLDUC							
PROJECT I: Charlemagne*	18	C	72,900	9	Brick/Alum	N	1
PROJECT II: Le Gardeur*	32	C	70,900	4,8	Brick/Alum	N	1
LE GROUPE CAPITAL							
Montreal	74	C	92,900	4,5	Brick	Y	1
LES CONSTRUCTIONS CLEARY INC.							
Longueuil -- Phase 1*	93	C	83,400	3	Brick	Y	1
Longueuil -- Phase 2	P	182	------	3	Brick	Y	1
DUVO CONSTRUCTION LTÉE							
PROJECT I: Chomedy, Laval*	12	C	86,500	4	Brick/Alum	N	1
PROJECT II: Chomedy, Laval	10	C	85,950	2,4	Brick/Alum	N	1
LES HABITATS DE LA RELANCE							
Saint Constant	7	C	69,000	7	Brick/Alum	N	1
LUXUS CONSTRUCTION INC.							
Pointe-Aux-Trembles	34	Ind.	88,900	3,4	Aggr/Alum	N	1
CONSTRUCTION LEO MARCOTTE INC.							
PROJECT I: Pointe-Aux-Trembles*	87	C	76,000	3 - 8	Brick/Alum	N	2
PROJECT II: Pointe-Aux-Trembles	90	C	83,900	3 - 8	Brick/Alum	N	3
NELESCO CONSTRUCTION INC.							
Ste. Dorothée, Laval -- Phase 1*	26	C	71,900	4,6	Brick/Alum	N	1
Ste. Dorothée, Laval -- Phase 2	36	40	72,900	4,6	Brick/Alum	N	1
PHARAONS CONSTRUCTION INC.							
Ste Rose, Laval	P	10	------	2	Aggregate	N	1
SIGPRA CONSTRUCTION INC.							
Ste Catherine*	47	C	69,000	5,7	Aggr/Alum	N	1
TELMONDE DEVELOPMENT INC.							
Pierrefonds	2	18	95,000	2	Brick/Alum	Y	2
CONSTRUCTIONS M.L. VERVILLE INC.							
PROJECT I: Ste Rose, Laval	38	C	79,900	2	Aggregate	N	2
PROJECT II: Ste Dorothée, Laval	50	C	79,900	2	Aggregate	N	2
	TOTAL = 660						

C=Complete; P=In Planning Stages

* Base model, including land and infrastructure

Previous Dwelling

1.(a) Whether or not there were any changes in the household from the previous dwelling to the current one.

	1	2	3	4	5	6	7	TOT
No Change	83.333	90.000	80.556	90.909	80.769	90.000	74.194	84.184
Change	8.333	10.000	16.667	9.091	19.231	7.143	22.581	13.265
No answer	8.333	0.000	2.778	0.000	0.000	2.857	3.226	2.551

1.(b) Changes that occurred in the household.

	1	2	3	4	5	6	7	TOT
Increase in size	0.000	0.000	20.000	0.000	80.000	80.000	71.429	56.000
Decrease in size	0.000	100.000	60.000	100.000	0.000	20.000	28.571	32.000
No precision	100.000	0.000	20.000	0.000	20.000	0.000	0.000	12.000

Increase: Now living with a relative (3); new spouse/companion (5); new baby (4).
Decrease: Separation/divorce (5); formerly had a roommate (3); formerly living with parents (2).

2. Time spent in previous dwelling.

	1	2	3	4	5	6	7	TOT
Less than 1 yr	0.000	0.000	2.778	0.000	11.538	5.714	6.452	5.102
1 or 2 yrs	25.000	70.000	38.889	9.091	50.000	50.000	25.806	41.327
3 or 4 yrs	58.333	10.000	30.556	45.455	19.231	20.000	32.258	27.041
5 or 6yrs	0.000	10.000	19.444	27.273	11.538	7.143	25.806	13.776
7 or 8 yrs	0.000	10.000	2.778	9.091	3.846	4.286	0.000	3.571
More than 8 yrs	16.667	0.000	5.556	9.091	3.846	11.429	9.677	8.673
No answer	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510

3. Location of previous dwelling.

Project 1, Charlemagne

Same municipality:		3
Neighboring municipality:	Legardeur	1
	Repentigny	2
	TOT	3
Montreal island:		5
Other municipality:		0
No answer		1

3. Location of previous dwelling.
(continued)

Project 2, Legardeur

Same municipality:		**1**
Neighboring municipality:	Charlemagne	1
	Repentigny	2
	TOT	**4**
Between 2 & 3 mun. away:	Laval	**1**
Montreal island:		**4**
Other municipality:	Stoneham	**1**
No answer:		**0**

Project 3, Longueuil

Same municipality:		**17**
Neighboring municipality:		
	St-Hubert	2
	Boucherville	1
	TOT	**3**
Between 2 & 3 mun. away:	Brossard	2
	Mc Masterville	1
	Ste-Julie	2
	TOT	**5**
Montreal island:	Montreal	4
	Pte-aux-Trembles	1
	Nouveau-Rosemont	1
	Verdun	2
	TOT	**8**
Other municipality:	Ste-Foy	1
	Charlesbourg	1
	Lachenaie	1
	TOT	**3**
No answer:		**0**

Project 4, Chomedey

Same municipality:		**3**
Neighboring municipality:	Laval	**2**
Between 2 & 3 mun. away:		**0**
Montreal island:	Montreal	2
	Cartierville	1
	St-Laurent	3
	TOT	**6**
Other municipality:		**0**
No answer:		**0**

3. Location of previous dwelling.
(continued)

Project 5, Ste-Dorothée

Same municipality:		**2**
Neighboring municipality:	Chomedey	2
	Ile Bizard	1
	Ste-Ros	1
	TOT	**4**
Between 2 & 3 mun. away:	Laval	2
	Pont-Viau	1
	Vimont	1
	TOT	**4**
Montreal island:	Montreal	8
	Montreal-Nord	2
	Lasalle	2
	Pierrefonds	1
	Plateau Mt-Royal	1
	Roxbo	1
	TOT	**15**
Other municipality:	Brossard	**1**
No answer:		**0**

Project 6, Pointe-aux-Trembles

Same municipality:		**10**
Neighboring municipality:	St-Léonard	6
	Montréal-Est	5
	Anjou	3
	Montréal-Nord	2
	TOT	**16**
Montreal island:	Montreal	29
	Rosemont	5
	Pointe-St-Charles	1
	Lasalle	1
	Ahuntsic	1
	Montréal (downtown)	1
	TOT	**38**
Other municipality:	Laval	1
	St-Bruno	1
	Longueuil	3
	TOT	**5**
No answer:		**1**

3. Location of previous dwelling.
(continued)

Project 7, Ste-Catherine

Same municipality:	**TOT**	**3**
Neighboring municipality:	Delson	2
	St-Constant	2
	TOT	**4**
Between 2 & 3 mun. away:	Laprairie	1
	Chateaugay	1
	Candiac	1
	TOT	**3**
Montreal island:	Montreal	3
	Montreal-Nord	1
	Lasalle	2
	St-Laurent	1
	St-Léonard	1
	Verdun	3
	Anjou	1
	TOT	**12**
Other municipality:	Brossard	2
	Longueuil	4
	St-Hubert	2
	Franklin Centre	1
	TOT	**9**
No answer:		**0**

4. Type of previous dwelling.

	1	**2**	**3**	**4**	**5**	**6**	**7**	**TOT**
Apartment	83.333	70.000	77.778	90.909	84.615	78.571	70.968	78.571
Townhouse	0.000	0.000	5.556	0.000	0.000	5.714	0.000	3.061
Semi-detached	8.333	10.000	5.556	0.000	3.846	12.857	6.452	8.163
S F D	8.333	10.000	5.556	9.091	11.538	1.429	19.355	7.653
No answer	0.000	10.000	5.556	0.000	0.000	1.429	3.226	2.551

5. How the property was held.

	1	**2**	**3**	**4**	**5**	**6**	**7**	**TOT**
Rented	84.615	90.000	72.222	90.909	88.462	95.714	70.968	85.279
Condominium	0.000	10.000	5.556	9.091	0.000	0.000	3.226	2.538
Cooperative	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.508
Freehold	7.692	0.000	19.444	0.000	7.692	2.857	25.806	10.152
No answer	7.692	0.000	2.778	0.000	0.000	1.429	0.000	1.523

5. How the property was held.
(continued)

a) Number of homes owned previously.

	1	2	3	4	5	6	7	TOT
1st time buyer	91.667	100.000	78.788	90.909	92.000	97.101	75.862	89.362
2nd time buyer	8.333	0.000	6.061	9.091	8.000	1.449	17.241	6.383
3rd time buyer or more	0.000	0.000	15.152	0.000	0.000	1.449	6.897	4.255

6. Type of parking at previous dwelling.

	1	2	3	4	5	6	7	TOT
Street	30.769	30.000	16.667	54.545	51.852	71.429	25.806	45.960
Private exterior	61.538	60.000	75.000	36.364	40.741	24.286	61.290	46.465
Carport	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.505
Indoor Garage	7.692	10.000	2.778	9.091	7.407	4.286	9.677	6.061
No answer	0.000	0.000	5.556	0.000	0.000	0.000	0.000	1.010

7. Type of private outdoor space at previous dwelling.

	1	2	3	4	5	6	7	TOT
None	0.000	6.250	7.143	0.000	13.953	6.140	4.918	6.452
Front Balcony	38.095	31.250	30.000	43.750	32.558	38.596	29.508	34.311
Rear Balcony	19.048	25.000	32.857	50.000	27.907	41.228	31.148	34.311
Front yard	19.048	18.750	7.143	0.000	13.953	1.754	11.475	7.918
Backyard	23.810	18.750	22.857	6.250	11.628	12.281	21.311	16.716
Others	0.000	0.000	0.000	0.000	0.000	0.000	1.639	0.293
No answer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Others: patio (1)

8.(a) Previous expenses as renters.

Respondents	Rent	Elect/ Summer	Elect/heat Winter	Insurance	Sub-tot	TOT	notes
Project 1 (no answer/1)							
1	465	-	88	15	568	-	
2	375	40	-	15	430	-	
3	430	25	-	20	475	-	
4	505	35	75	29	-	589	
5	610	83	83	17	-	710	
6	415	55	55	15	-	540	
7	500	70	120	25	-	620	
8	380	30	120	20	-	475	
9	235	50	250	18	-	403	
10	550	incl.	incl.	140	-	690	

8.(a) Previous expenses as renters.
(continued)

Respondents	Rent	Elect/ Summer	Elect/heat Winter	Insurance	Sub-tot	TOT	notes
Project 2 (no answer/1)							
1	615	-	-	-	615	-	
2	370	50	75	30	-	463	
3	475	35	50	25	-	542	
4	580	240	150	25	-	800	apart
5	475	45	113	19	-	573	
6	285	101	101	13	-	399	
7	435	80	300	17	-	642	
8	480	50	-	-	530	-	
9	500	75	150	-	608	-	
Project 3 (no answer/4)							
1	255	incl.	incl.	incl.	-	255	
2	485	0	0	?	485	-	
3	565	70	90	80	-	725	
4	550	95	95	25	-	670	
5	525	45	170	30	-	663	
6	450	90	90	25	-	565	
7	500	20	65	29	-	572	Condo
8	800	60	100	25	-	905	
9	405	20	20	15	-	440	
10	625	77	77	25	-	727	
11	380	80	80	15	-	475	
12	590	30	60	17	-	652	
13	570	57	57	13	-	640	
14	325	65	65	15	-	405	
15	450	44	44	21	-	515	
16	300	-	50	-	350	-	
17	445	60	-	-	505	-	
18	364	100	-	?	464	-	
19	525	-	-	17	542	-	
20	440	-	-	33	473	-	
21	437	incl.	incl.	20	-	457	
22	525	36	-	20	581	-	
23	540	48	-	25	613	-	
24	495	50	?	19	564	-	
25	345	-	71	20	436	-	
Project 4 (no answer/2)							
1	330	70	70	30	-	430	
2	365	30	50	11	-	416	
3	840	-	-	33	873	-	
4	690	-	-	20	710	-	
5	370	50	100	15	-	460	
6	400	75	75	25	-	500	
7	520	25	65	25	-	590	
8	450	40	-	15	505	-	

8.(a) Previous expenses as renters.
(continued)

Respondents	Rent	Elect/ Summer	Elect/heat Winter	Insurance	Sub-tot	TOT	notes
Project 5 (no answer/1)							
1	525	100	100	17	-	642	
2	620	incl.	incl.	incl.	-	620	
3	600	45	55	-	650	-	
4	500	38	130	15	-	599	
5	430	50	80	17	-	512	
6	475	250	250	17	-	742	apart
7	475	50	25	20	-	533	
8	470	70	70	21	-	561	
9	260	30	100	30	-	355	
10	775	30	130	20	-	875	apart
11	460	31	31	18	-	509	
12	430	20	75	25	-	503	
13	385	-	-	-	385	-	
14	560	130	130	40	-	730	
15	485	25	60	15	-	543	
16	305	33	64	19	-	421	
17	575	50	75	19	-	656	
18	300	25	75	20	-	370	
19	450	60	70	17	-	532	
20	265	-	-	-	265	-	
21	475	60	150	-	580	-	
22	425	75	80	15	-	518	
23	500	21	43	25	-	557	
Project 6 (no answer/5)							
1	240	40	50	30	-	315	
2	347	57	57	18	-	422	
3	400	100	0	30	530	-	
4	350	50	50	17	-	417	
5	325	30	-	13	368	-	
6	300	60	200	10	-	440	
7	505	20	80	15	-	570	
8	240	65	-	15	320	-	
9	375	0	0	10	-	385	
10	410	45	50	17	-	435	
11	565	60	150	22	-	692	
12	500	50	230	-	640	-	
13	310	30	40	20	-	365	
14	440	25	55	15	-	495	
15	385	200	400	10	-	695	
16	450	35	100	25	-	543	
17	380	20	100	10	-	450	
18	400	100	100	25	-	525	
19	475	61	61	21	-	557	
20	450	150	150	20	-	620	
21	480	75	75	21	-	576	
22	480	64	64	17	-	561	

8.(a) Previous expenses as renters.
(continued)

Respondents	Rent	Elect/ Summer	Elect/heat Winter	Insurance	Sub-tot	TOT	notes
Project 6 (continued)							
23	470	83	83	17	-	570	
24	600	-	-	19	619	-	
25	420	60	200	-	550	-	
26	435	22	69	90	-	571	
27	500	-	-	21	521	-	
28	450	90	150	20	-	590	
29	425	30	60	17	-	489	
30	406	95	-	19	520		
31	530	100	100	21	-	651+75$ water tax	
32	495	80	80	15	-	590	
33	455	100	100	55	-	610	
34	455	0	-	30	485	-	
35	450	100	100	31	-	581	
36	450	35	92	20	-	534	
37	535	50	100	21	-	631	
38	685	70	117	49	-	828	
39	525	40	100	-	595	-	
40	483	83	83	25	-	591	
41	470	72	72	30	-	572	
42	455	40	100	20	-	545	
43	535	65	-	21	621	-	
44	600	200	-	25	825	-	
45	505	-	-	25	530	-	
46	560	110	110	17	-	687	
47	590	89	89	30	-	709	
48	395	63	63	25	-	483	
49	510	-	75	19	604	-	
50	590	-	-	-	590	-	
51	440	75	130	23	-	566	
52	430	35	75	20	-	560	
53	450	300	300	28	-	778	townhouse
54	350	90	30	38	-	448	
55	285	-	-	13	298	-	semi-detached
56	300	-	-	-	300	-	
57	315	25	55	8	-	363	
58	535	-	100	20	655	-	
59	361	20	-	20	401		
60	485	25	0	30	-	540	
61	500	75	75	20	-	595	
62	600	125	125	13	-	738	
63	450	-	-	-	450	-	
64	390	30	45	22	-	450	

8.(a) Previous expenses as renters.
(continued)

Respondents	Rent	Elect/ Summer	Elect/heat Winter	Insurance	Sub-tot	TOT	notes
Project 7 (no answer/1)							
1	450	40	200	10	-	580	
2	360	100	-	-	-	460	
3	420	54	54	25	-	509	
4	450	15	15	30	-	495	
5	350	80	-	15	445	-	
6	425	?	-	-	425	-	
7	515	15	-	16	551	-	
8	440	30	60	20	-	505	
9	340	-	-	-	340	-	
10	430	240	360	21	-	751	
11	350	92	92	25	-	467	
12	535	10	40	25	-	585	
13	350	60	60	15	-	425	
14	575	70	100	16	-	676	
15	440	-	-	-	440	-	
16	475	20	20	15	-	510	
17	300	40	120	21	-	401	
18	380	65	65	20	-	465	
19	440	270	400	13	-	775	
20	350	-	-	-	350	-	
21	475	69	-	-	544	-	

8.(b) Previous expenses as owners.

Respond.	Mortgage	Elec/ Summer	Elect/heat Winter	Maintenance	Insurance	Prop. tax	Sub-tot	TOT
Project 1								
1	1150	-	-	-	63	250	1463	- 5 flats
Project 2								
1	578	169	-	40	80	140	1007	-
2	1214	100	125	333	42	250	2064-1000R = 1064	
3	585	-	45	65	incl. in maintenance	100	795	-
Project 3								
4	-	102	102	-	30	191	323	-
5	700	-	80	80	10	95	1065	-
6	800	150	180	-	60	217	1242	-
7	377	80	125	-	-	133	613	-
Project 4								
1	360	20	60	80	40	100	-	620
Project 5								
1	900	90	270	100	30	200	-	1410
2	430	50	90	100	35	80	-	715
Project 6								
1	950	360	900	150	21	150	-	1901

8.(b) Previous expenses as owners.
(continued)

Respond.	Mortgage	Elec/ Summer	Elect/heat Winter	Maintenance	Insurance	Prop. tax	Sub-tot	TOT
Project 7								
1	600	200	200	50	25	133	-	1008
2	1600	90	?	150	50	200	2090	-
3	650	200	200	500	250	100	-	1700
4	450	75	140	40	25	30	-	653
5	675	40	125	100	25	150	-	1032
6	860	100	200	50	34	200	-	1294
7	500	150	150	40	20	125	-	835
8	800	100	300	-	125	100	1225	-

9. Proximity to services at previous dwelling.

a) Proximity to shopping facilities

	1	2	3	4	5	6	7	TOT
Walking distance	50.000	50.000	44.444	63.636	53.846	48.571	38.710	47.959
10 min. drive	41.667	30.000	50.000	27.273	46.154	50.000	54.839	47.449
20 min. drive	8.333	10.000	0.000	9.091	0.000	1.429	0.000	2.041
> than 20 min.drive	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510
No answer	0.000	10.000	5.556	0.000	0.000	0.000	3.226	2.041

b) Proximity to medical services

	1	2	3	4	5	6	7	TOT
Walking distance	33.333	40.000	50.000	45.455	46.154	42.857	45.161	44.388
10 min. drive	66.667	50.000	41.667	54.545	50.000	51.429	45.161	49.490
20 min. drive	0.000	10.000	2.778	0.000	0.000	1.429	0.000	1.531
> than a 20 min. drive	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510
No answer	0.000	0.000	5.556	0.000	3.846	4.286	6.452	4.082

c) Proximity to schools

	1	2	3	4	5	6	7	TOT
Walking distance	75.000	80.000	75.000	72.727	73.077	65.714	70.968	70.918
10 min. drive	16.667	10.000	19.444	27.273	23.077	22.857	22.581	21.429
20 min. drive	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
> than a 20 min. drive	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
No answer	8.333	10.000	5.556	0.000	3.846	8.571	6.452	6.633

d) Proximity to public transportation

	1	2	3	4	5	6	7	TOT
Walking distance	66.667	20.000	100.000	100.000	88.462	92.754	83.871	86.154
10 min. drive	0.000	80.000	0.000	0.000	7.692	2.899	3.226	7.179
20 min. drive	8.333	0.000	0.000	0.000	0.000	0.000	3.226	1.026
> than a 20 min. drive	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No answer	25.000	0.000	0.000	0.000	3.846	4.348	9.677	5.641

10. Usual mode of transportation to workplace.

	1	2	3	4	5	6	7	TOT
On foot	7.692	0.000	2.632	9.091	3.846	5.814	2.778	4.525
Bicycle	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0. 452
Public Transp.	7.692	9.091	15.789	9.091	30.769	33.721	16.667	23.529
Car	76.923	90.909	81.579	81.818	61.538	60.465	77.778	70.588
No answer	7.692	0.000	0.000	0.000	0.000	0.000	2.778	0.905

11. Average commuting time to and from work.

	1	2	3	4	5	6	7	TOT
Less than 15 min	50.000	50.000	41.667	54.545	23.077	34.286	20.588	34.673
16-30 min.	33.333	10.000	38.889	36.364	46.154	27.143	47.059	35.176
31 - 45 min.	16.667	10.000	16.667	9.091	11.538	21.429	23.529	18.090
46 - 60 min.	0.000	20.000	2.778	0.000	19.231	5.714	2.941	6.533
61 - 90 min.	0.000	0.000	0.000	0.000	0.000	2.857	2.941	1.508
More than 90 min.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No answer	0.000	10.000	0.000	0.000	0.000	8.571	2.941	4.020

Search for a New Home

12. Time spent looking for a new home.

	1	2	3	4	5	6	7	TOT
Not Looking	66.667	50.000	50.000	27.273	65.385	70.000	51.613	59.184
Up to 6 months	25.000	20.000	33.333	45.455	30.769	12.857	35.484	25.510
7 to 12 months	8.333	20.000	5.556	18.182	0.000	10.000	0.000	7.143
13 to 24 months	0.000	0.000	8.333	0.000	0.000	4.286	6.452	4.082
More than 24 months	0.000	10.000	2.778	9.091	3.846	2.857	3.226	3.571
No answer	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510

13. Number of projects visited during this period (not including project where unit was purchased).

	1	2	3	4	5	6	7	TOT
None	50.000	10.000	25.000	9.091	26.923	37.143	22.581	29.082
1 to 3	41.667	40.000	30.556	63.636	53.846	44.286	29.032	41.327
4 to 6	8.333	10.000	16.667	9.091	11.538	7.143	16.129	11.224
7 to 9	0.000	40.000	11.111	0.000	3.846	2.857	9.677	7.143
10 to 12	0.000	0.000	8.333	9.091	3.846	2.857	6.452	4.592
More than 12	0.000	0.000	8.333	9.091	0.000	4.286	12.903	5.612
No answer	0.000	0.000	0.000	0.000	0.000	1.429	3.226	1.020

14. Whether or not occupant was specifically looking to buy a newly built home.

	1	2	3	4	5	6	7	TOT
Yes	58.333	60.000	61.111	54.545	42.308	54.286	77.419	58.163
No	25.000	30.000	22.222	0.000	23.077	20.000	9.677	18.878
No Preference	16.667	10.000	16.667	45.455	34.615	25.714	9.677	22.449
No answer	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510

15. Preferred type of dwelling.

a) Single family detached

	1	2	3	4	5	6	7	TOT
Least preferred	25.000	10.000	27.778	18.182	7.692	2.857	9.677	11.735
2	8.333	10.000	0.000	0.000	0.000	5.714	12.903	5.102
3	0.000	0.000	5.556	9.091	0.000	5.714	3.226	4.082
Most preferred	66.667	70.000	55.556	72.727	88.462	82.857	70.968	74.490
No answer	0.000	10.000	11.111	0.000	3.846	2.857	3.226	4.592

b) Semi-detached

	1	2	3	4	5	6	7	TOT
Least preferred	16.667	10.000	5.556	0.000	7.692	8.571	22.581	10.204
2	25.000	10.000	27.778	27.273	15.385	20.000	16.129	20.408
3	33.333	80.000	50.000	72.727	73.077	60.000	51.613	58.673
Most preferred	16.667	0.000	5.556	0.000	0.000	1.429	3.226	3.061
No answer	8.333	0.000	11.111	0.000	3.846	10.000	6.452	7.653

c) Townhouse

	1	2	3	4	5	6	7	TOT
Least preferred	8.333	0.000	2.778	0.000	0.000	7.143	3.226	4.082
2	41.667	60.000	36.111	54.545	69.231	52.857	48.387	51.020
3	41.667	10.000	30.556	27.273	23.077	12.857	25.806	21.939
Most preferred	0.000	20.000	19.444	18.182	3.846	11.429	16.129	12.755
No answer	8.333	10.000	11.111	0.000	3.846	15.714	6.452	10.204

d) Condominium apartment

	1	2	3	4	5	6	7	TOT
Least preferred	50.000	70.000	50.000	72.727	84.615	71.429	74.194	68.367
2	16.667	10.000	13.889	9.091	3.846	7.143	9.677	9.184
3	8.333	0.000	11.111	9.091	3.846	1.429	9.677	5.612
Most preferred	16.667	10.000	11.111	9.091	3.846	1.429	3.226	5.612
No answer	8.333	10.000	13.889	0.000	3.846	18.571	3.226	11.224

16. Preferred location.

a) City center

	1	2	3	4	5	6	7	TOT
Least preferred	58.333	70.000	66.667	90.909	80.769	71.429	74.194	72.449
2	16.667	10.000	16.667	0.000	15.385	8.571	16.129	12.245
3	0.000	0.000	2.778	9.091	0.000	2.857	0.000	2.041
4	16.667	10.000	0.000	0.000	0.000	5.714	3.226	4.082
Most preferred	0.000	0.000	5.556	0.000	3.846	2.857	0.000	2.551
No answer	8.333	10.000	8.333	0.000	0.000	8.571	6.452	6.633

b) Within 10 min. from city center

	1	2	3	4	5	6	7	TOT
Least preferred	16.667	40.000	19.444	18.182	3.846	4.286	9.677	11.224
2	50.000	30.000	16.667	18.182	50.000	35.714	38.710	34.184
3	16.667	0.000	25.000	18.182	15.385	15.714	22.581	17.857
4	0.000	0.000	22.222	18.182	11.538	12.857	9.677	12.755
Most preferred	8.333	20.000	11.111	27.273	19.231	28.571	9.677	19.388
No answer	8.333	10.000	5.556	0.000	0.000	2.857	9.677	4.592

c) Suburb

	1	2	3	4	5	6	7	TOT
Least preferred	0.000	0.000	5.556	0.000	3.846	5.714	0.000	3.571
2	0.000	0.000	2.778	9.091	3.846	5.714	0.000	3.571
3	8.333	30.000	16.667	9.091	7.692	24.286	22.581	18.878
4	25.000	10.000	16.667	18.182	34.615	21.429	9.677	19.898
Most preferred	58.333	50.000	55.556	63.636	50.000	37.143	61.290	49.490
No answer	8.333	10.000	2.778	0.000	0.000	5.714	6.452	4.592

d) Small Town

	1	2	3	4	5	6	7	TOT
Least preferred	8.333	20.000	8.333	0.000	3.846	7.143	3.226	6.633
2	8.333	0.000	11.111	45.455	3.846	18.571	6.452	13.265
3	25.000	20.000	36.111	9.091	42.308	20.000	19.355	25.510
4	33.333	40.000	30.556	45.455	42.308	37.143	45.161	38.265
Most preferred	16.667	20.000	5.556	0.000	7.692	5.714	16.129	8.673
No answer	8.333	0.000	8.333	0.000	0.000	11.429	9.677	7.653

e) Countryside

	1	2	3	4	5	6	7	TOT
Least preferred	25.000	20.000	22.222	18.182	23.077	21.429	25.806	22.449
2	0.000	20.000	30.556	9.091	15.385	14.286	16.129	16.837
3	25.00	30.000	13.889	36.364	26.923	14.286	22.581	19.898
4	25.000	10.000	8.333	27.273	15.385	12.857	9.677	13.265
Most preferred	25.000	10.000	16.667	9.091	19.231	28.571	19.355	21.429
No answer	0.000	10.000	8.333	0.000	0.000	8.571	6.452	6.122

17. Importance of location with respect to work and services in the search for a new dwelling.

a) Proximity to work

	1	2	3	4	5	6	7	TOT
Not imp. at all	0.000	0.000	5.556	0.000	7.692	7.143	3.226	5.102
2	8.333	0.000	0.000	0.000	0.000	5.714	0.000	2.551
3	0.000	30.000	13.889	27.273	26.923	17.143	12.903	17.347
4	33.333	0.000	16.667	18.182	38.462	22.857	48.387	27.041
Extremely imp.	58.333	60.000	63.889	54.545	26.923	44.286	32.258	45.918
No answer	0.000	10.000	0.000	0.000	0.000	2.857	3.226	2.041

b) Proximity to public transportation

	1	2	3	4	5	6	7	TOT
Not imp. at all	58.333	40.000	33.333	27.273	19.231	5.714	29.032	22.449
2	8.333	0.000	2.778	0.000	7.692	4.286	12.903	5.612
3	8.333	30.000	11.111	27.273	7.692	7.143	16.129	11.735
4	0.000	10.000	16.667	18.182	7.692	27.143	25.806	19.388
Extremely imp.	16.667	10.000	33.333	27.273	57.692	52.857	9.677	37.245
No answer	8.333	10.000	2.778	0.000	0.000	2.857	6.452	3.571

c) Proximity to medical services

	1	2	3	4	5	6	7	TOT
Not imp. at all	8.333	20.000	16.667	9.091	7.692	18.571	6.452	13.776
2	33.333	20.000	16.667	18.182	23.077	15.714	6.452	16.837
3	16.667	0.000	30.556	63.636	50.000	25.714	32.258	31.122
4	8.333	40.000	13.889	9.091	19.231	21.429	35.484	21.429
Extremely imp.	25.000	20.000	19.444	0.000	0.000	15.714	12.903	13.776
No answer	8.333	0.000	2.778	0.000	0.000	2.857	6.452	3.061

d) Proximity to shopping facilities

	1	2	3	4	5	6	7	TOT
Not imp. at all	16.667	20.000	13.889	18.182	7.692	18.571	9.677	14.796
2	16.667	20.000	8.333	18.182	15.385	10.000	19.355	13.265
3	50.000	20.000	38.889	54.545	50.000	34.286	32.258	38.265
4	8.333	20.000	22.222	0.000	11.538	20.000	22.581	17.857
Extremely imp.	0.000	10.000	13.889	9.091	15.385	12.857	12.903	12.245
No answer	8.333	10.000	2.778	0.000	0.000	4.286	3.226	3.571

e) Proximity to schools

	1	2	3	4	5	6	7	TOT
Not imp. at all	16.667	20.000	30.556	54.545	38.462	24.286	29.032	29.082
2	16.667	10.000	13.889	9.091	11.538	11.429	9.677	11.735
3	16.667	0.000	13.889	18.182	11.538	10.000	6.452	10.714
4	8.333	40.000	19.444	9.091	26.923	17.143	12.903	18.367
Extremely imp.	33.333	20.000	13.889	9.091	11.538	28.571	35.484	23.469
No answer	8.333	10.000	8.333	0.000	0.000	8.571	6.452	6.633

18. Preferred number of bedrooms.

	1	2	3	4	5	6	7	TOT
One BR	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510
Two BR	41.667	80.000	52.778	63.636	53.846	47.143	64.516	54.082
Three BR	58.333	20.000	47.222	36.364	38.462	52.857	25.806	43.367
Four BR	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
Over four BR	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
No answer	0.000	0.000	0.000	0.000	0.000	0.000	6.452	1.020

19.(a) Whether or not there were any particular features that were important to have in the new home.

	1	2	3	4	5	6	7	TOT
No	41.667	30.000	22.222	0.000	38.462	38.571	22.581	30.612
Yes	58.333	70.000	75.000	100.000	61.538	60.000	74.194	67.857
No answer	0.000	0.000	2.778	0.000	0.000	1.429	3.226	1.531

19.(b) Particular features that were important to have in the new home.

	A	B	C	D	E	F	G	TOT
Second/big bathroom	10.526	14.286	2.941	7.143	20.000	11.224	8.571	9.480
Sufficient storage	21.053	21.429	1.471	3.571	0.000	8.163	7.143	6.728
Natural light	5.263	0.000	5.882	0.000	13.333	7.143	7.143	6.422
Basement	15.789	7.143	5.882	3.571	6.667	7.143	1.429	5.810
Garage	0.000	0.000	17.647	0.000	3.333	1.020	0.000	4.281
Large backyard	5.263	0.000	0.000	0.000	0.000	7.143	8.571	4.281
Open plan	0.000	0.000	1.471	7.143	6.667	4.082	5.714	3.976
Second/big bedroom(s)	10.526	0.000	2.941	7.143	3.333	4.082	2.857	3.976
Two storeys	5.263	7.143	2.941	3.571	3.333	5.102	1.429	3.670
Functional kitchen	0.000	21.429	0.000	7.143	3.333	5.102	1.429	3.670
Total amount of space	5.263	0.000	10.294	3.571	0.000	3.061	0.000	3.670
Private parking	0.000	0.000	4.412	10.714	0.000	2.041	4.286	3.364
Private backyard	0.000	0.000	5.882	7.143	6.667	1.020	2.857	3.364
Good location/enviro.	0.000	0.000	5.882	3.571	3.333	1.020	4.286	3.058
Quality int. finishes	5.263	0.000	4.412	0.000	3.333	2.041	4.286	3.058
Bedroom upstairs	0.000	0.000	2.941	7.143	3.333	3.061	1.429	2.752
General layout	0.000	0.000	0.000	0.000	6.667	4.082	2.857	2.446
Ease of of access	0.000	0.000	1.471	3.571	0.000	2.041	4.286	2.141
Quality ext. finishes	0.000	0.000	4.412	0.000	3.333	3.061	0.000	2.141
Luxury items	5.263	0.000	0.000	10.714	0.000	2.041	0.000	1.835
Separate dining/kitch.	0.000	0.000	0.000	0.000	0.000	5.102	0.000	1.529
Some vegetation	0.000	0.000	5.882	0.000	0.000	0.000	0.000	1.223
General image	0.000	0.000	1.471	0.000	3.333	0.000	1.429	0.917
Sense of commun./ neighborhood	0.000	7.143	0.000	0.000	0.000	1.020	1.429	0.917
Privacy	0.000	0.000	0.000	0.000	0.000	0.000	4.286	0.917
Low maintenance	0.000	0.000	1.471	3.571	0.000	1.020	0.000	0.917
Soundproofing	5.263	0.000	0.000	3.571	0.000	0.000	1.429	0.917
Infrastructure incl.	0.000	7.143	1.471	0.000	0.000	0.000	0.000	0.612

19.(b) Particular features that were important to have in the new home.
(continued)

Safety	0.000	0.000	1.471	0.000	0.000	0.000	0.000	0.306
Ext appearance	0.000	0.000	0.000	0.000	0.000	1.020	0.000	0.306
Int. appearance	0.000	0.000	0.000	0.000	0.000	1.020	0.000	0.306
Cross-ventilation	0.000	0.000	0.000	0.000	3.333	0.000	0.000	0.306
Condo/ownership	5.263	0.000	0.000	0.000	0.000	0.000	0.000	0.306
Return on invest	0.000	0.000	1.471	0.000	0.000	0.000	0.000	0.306
Craftsmanship	0.000	0.000	1.471	0.000	0.000	0.000	0.000	0.306
Flexibility	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OTHERS	0.000	14.286	4.412	7.143	6.667	7.143	22.857	9.786

Others: Price (2); taxes (1); big balcony (1); third room (3); washer/dryer on first floor or in the kitchen (2); big living room (2); big enough to include a separate study/workshop/aux. room (4); kitchen and dining separated from living (2); kitchen, living and dining on same floor (2); everything on the same floor (4); closed main entrance (1); heating (1); insulation (1); staircase with a wood ramp (1); no carpet (1); cottage style (1); new house (2); patio door (1).

20. What buyers particularly liked about their new homes.

	A	B	C	D	E	F	G	TOT
Price	18.182	36.842	3.614	6.250	26.316	19.375	22.368	17.595
General layout	9.091	10.526	7.229	9.375	1.754	13.750	9.211	9.577
Total amount of space	18.182	0.000	0.000	3.125	5.263	14.375	7.895	8.241
Location/enviro.	4.545	0.000	10.843	12.500	12.281	0.000	9.211	6.236
Basement	4.545	0.000	6.024	6.250	12.281	1.875	3.947	4.677
Second/big bathroom	4.545	0.000	8.434	0.000	5.263	2.500	3.947	4.009
Open plan	0.000	0.000	4.819	3.125	1.754	5.000	3.947	3.786
Two storeys	9.091	0.000	3.614	6.250	7.018	2.500	2.632	3.786
Natural light	0.000	0.000	7.229	0.000	0.000	6.250	0.000	3.563
Second/big bedrooms	4.545	0.000	6.024	0.000	3.509	2.500	2.632	3.118
General image	0.000	0.000	2.410	0.000	5.263	0.000	10.526	2.895
Low maintenance	9.091	5.263	1.205	3.125	0.000	4.375	0.000	2.673
Size of backyard	0.000	0.000	6.024	6.250	1.754	0.000	2.632	2.227
No answer	0.000	10.526	1.205	0.000	0.000	1.875	2.632	1.782
Ease of access	0.000	0.000	0.000	3.125	0.000	3.125	1.316	1.559
Garage	0.000	0.000	8.434	0.000	0.000	0.000	0.000	1.559
Ext. appearance	0.000	0.000	0.000	0.000	0.000	4.375	0.000	1.559
Bedroom upstairs	0.000	5.263	0.000	3.125	5.263	0.000	1.316	1.336
Amount of storage	4.545	0.000	2.410	0.000	1.754	1.250	0.000	1.336
Int. finishes	0.000	0.000	0.000	9.375	0.000	1.250	0.000	1.114
Private backyard	0.000	0.000	2.410	0.000	0.000	0.625	1.316	0.891
Some vegetation	0.000	0.000	4.819	0.000	0.000	0.000	0.000	0.891
Privacy	0.000	0.000	0.000	3.125	0.000	1.250	1.316	0.891
Condo/ownership	0.000	0.000	0.000	6.250	0.000	0.000	2.632	0.891
Sense of commun/ neighborhood	0.000	0.000	0.000	9.375	0.000	0.000	0.000	0.668
Int. appearance	0.000	0.000	0.000	0.000	0.000	1.875	0.000	0.668
Soundproofing	0.000	0.000	0.000	0.000	0.000	1.250	1.316	0.668
Return on investment	0.000	0.000	2.410	0.000	0.000	0.000	1.316	0.668

20. What buyers particularly liked about their new homes.
(continued)

Flexibility	0.000	0.000	0.000	3.125	0.000	0.625	0.000	0.445
Ext. finishes	0.000	0.000	0.000	0.000	0.000	1.250	0.000	0.445
Luxury items	0.000	0.000	1.205	0.000	0.000	0.625	0.000	0.445
Craftsmanship	4.545	0.000	1.205	0.000	0.000	0.000	0.000	0.445
Safety	0.000	5.263	0.000	0.000	0.000	0.000	0.000	0.223
Parking	0.000	0.000	1.205	0.000	0.000	0.000	0.000	0.223
Low maintenance cost	0.000	5.263	0.000	0.000	0.000	0.000	0.000	0.223
Functional kitchen	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.223
Cross-ventilation	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.223
Separate dining/kitch	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Infrastructure incl.	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Others	9.091	21.053	7.229	6.250	10.526	6.875	7.895	8.241

Others: Everything (1); access to property (2); can pass it on to children (1); new house (4); cottage style (1); taxes (2); interest rate (7); advantages of a townhouse (1); neighbors of the same age group (1); options offered for interior finishes (1); all the amenities (1); patio door/master bedroom (2); turn key project (1); private entrance (1); vestibule (2); front and back balcony (1); backyard and front yard (1); general concept (1); bought on plan (1); satisfied current needs (1); dead-end street (1); semi-detached house (1); insulation (1); open staircase (1)

21. Time it took after initial visit to make the decision to buy.

	1	2	3	4	5	6	7	TOT
Immediate	58.333	30.000	25.000	9.091	15.385	55.714	45.161	39.286
1 or 2 wks	41.667	60.000	52.778	45.455	69.231	32.857	38.710	44.898
3 or 4 wks	0.000	10.000	11.111	9.091	11.538	7.143	12.903	9.184
5 or 6 wks	0.000	0.000	8.333	18.182	3.846	4.286	0.000	4.592
More than 6 wks	0.000	0.000	2.778	18.182	0.000	0.000	3.226	2.041
No answer	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

22. Number of projects visited after seeing the project where the unit was purchased.

	1	2	3	4	5	6	7	TOT
None	41.667	50.000	52.778	45.455	72.857	51.613	58.065	59.204
1 to 3	58.333	50.000	41.667	54.545	24.286	32.258	19.355	32.836
4 to 6	0.000	0.000	5.556	0.000	1.429	0.000	9.677	2.985
7 to 9	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.498
10 to 12	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
More than 12	0.000	0.000	0.000	0.000	0.000	0.000	6.452	0.995
No answer	0.000	0.000	0.000	0.000	1.429	16.129	3.226	3.483

23. Whether or not a model unit was visited prior to purchase.

	1	2	3	4	5	6	7	TOT
Yes	75.000	30.000	55.556	0.000	0.000	7.143	22.581	22.564
No	25.000	70.000	44.444	100.000	100.000	92.857	77.419	77.436

24.(a) Whether or not there were any particular aspects about the design of the new home that caused concern at the time of purchase.

	1	2	3	4	5	6	7	TOT
No	25.000	20.000	33.333	0.000	46.154	31.429	19.355	29.082
Yes	75.000	70.000	66.667	90.909	53.846	64.286	74.194	67.347
No answer	0.000	10.000	0.000	9.091	0.000	4.286	6.452	3.571

24.(b) Particular aspects about the design of the new home that caused concern at the time of purchase.

	1	2	3	4	5	6	7	TOT
Density	0.000	0.000	0.000	0.000	4.167	0.000	0.000	0.410
Location/enviro.	0.000	0.000	0.000	0.000	0.000	5.102	0.000	2.049
Safety	0.000	0.000	0.000	0.000	0.000	3.061	0.000	1.230
Parking	8.333	0.000	2.941	9.524	4.167	13.265	11.628	9.426
Not enough backyard	8.333	25.000	2.941	0.000	4.167	11.224	9.302	8.607
Privacy	0.000	0.000	11.765	4.762	0.000	2.041	2.326	3.279
No vestibule/small	0.000	0.000	2.941	0.000	4.167	2.041	2.326	2.049
Entr. closet too big	0.000	0.000	2.941	0.000	0.000	6.122	2.326	3.279
Open plan	0.000	0.000	5.882	0.000	0.000	0.000	0.000	0.820
Unfinished basement	8.333	0.000	2.941	0.000	0.000	1.020	2.326	1.639
No exit in basement	0.000	0.000	2.941	0.000	0.000	0.000	0.000	0.410
Kitchen layout	0.000	16.667	0.000	28.571	0.000	1.020	16.279	6.557
Kitchen dimensions	41.667	16.667	0.000	0.000	0.000	0.000	4.651	3.689
Kitchen storage	25.000	8.333	2.941	4.762	0.000	8.163	4.651	6.557
Toilet location	8.333	0.000	2.941	0.000	4.167	1.020	6.977	2.869
Bedrooms	0.000	0.000	0.000	4.762	0.000	1.020	2.326	1.230
No third bedroom	0.000	8.333	2.941	0.000	0.000	0.000	0.000	0.820
Bathroom	0.000	8.333	5.882	9.524	0.000	1.020	11.628	4.508
Total amount of space	0.000	8.333	11.765	0.000	33.333	4.082	2.326	7.377
Amount of storage	0.000	0.000	0.000	0.000	4.167	3.061	2.326	2.049
Int. appearance	0.000	0.000	0.000	0.000	4.167	0.000	0.000	0.410
Ext. finishes/wiring	0.000	0.000	0.000	0.000	0.000	1.020	2.326	0.820
Int. finishes/carpet	0.000	0.000	14.706	4.762	0.000	4.082	2.326	4.508
Natural lighting	0.000	8.333	2.941	9.524	4.167	3.061	2.326	3.689
Ventilation/AC	0.000	0.000	0.000	0.000	0.000	1.020	2.326	0.820
Condo/ownership	0.000	0.000	0.000	0.000	16.667	7.143	0.000	4.508
Location wash/dryer	0.000	0.000	5.882	9.524	8.333	1.020	2.326	3.279
Infrastruc. plan	0.000	0.000	0.000	0.000	0.000	1.020	0.000	0.410
Craftsmanship	0.000	0.000	8.824	0.000	4.167	4.082	0.000	3.279
Basement stair	0.000	0.000	2.941	0.000	0.000	3.061	0.000	1.639
No exh. fan in kitchen	0.000	0.000	2.941	0.000	0.000	0.000	0.000	0.410
Staircase	0.000	0.000	0.000	4.762	0.000	2.041	0.000	1.230
Bought on plan	0.000	0.000	0.000	4.762	0.000	2.041	2.326	1.639
Electrical fixtures	0.000	0.000	0.000	4.762	0.000	1.020	0.000	0.820
Attached house	0.000	0.000	0.000	0.000	4.167	0.000	0.000	0.410
Project administration	0.000	0.000	0.000	0.000	0.000	2.041	4.651	1.639
Patio dr bedrm/no balc.	0.000	0.000	0.000	0.000	0.000	3.061	0.000	1.230
Small hot water tank	0.000	0.000	0.000	0.000	0.000	1.020	0.000	0.410
Level change @LR/DR	0.000	0.000	0.000	0.000	0.000	2.041	0.000	0.813

25. Importance of each of the following factors in the decision to purchase the new house.

a) Exterior appearance

	1	2	3	4	5	6	7	TOT
Not important at all	0.000	0.000	5.556	9.091	0.000	2.857	3.226	3.061
2	0.000	20.000	0.000	9.091	3.846	4.286	3.226	4.082
3	33.333	20.000	30.556	45.455	38.462	14.286	25.806	25.510
4	41.667	10.000	22.222	18.182	23.077	42.857	35.484	32.143
Extremely important	25.000	30.000	41.667	18.182	26.923	34.286	25.806	31.633
No answer	0.000	20.000	0.000	0.000	7.692	1.429	6.452	3.571

b) Interior plan

	1	2	3	4	5	6	7	TOT
Not important at all	0.000	0.000	2.778	0.000	0.000	0.000	0.000	0.510
2	0.000	0.000	0.000	0.000	0.000	1.429	3.226	1.020
3	16.667	30.000	2.778	9.091	7.692	4.286	16.129	8.673
4	25.000	30.000	22.222	9.091	38.462	18.571	12.903	21.429
Extremely important	58.333	30.000	72.222	81.818	50.000	75.714	64.516	66.837
No answer	0.000	10.000	0.000	0.000	3.846	0.000	3.226	1.531

c) Price

	1	2	3	4	5	6	7	TOT
Not important at all	8.333	10.000	2.778	0.000	3.846	0.000	0.000	2.041
2	0.000	0.000	2.778	0.000	0.000	0.000	0.000	0.510
3	0.000	0.000	5.556	0.000	0.000	0.000	0.000	1.020
4	25.000	0.000	8.333	18.182	0.000	2.857	9.677	6.633
Extremely important	66.667	90.000	80.556	81.818	96.154	97.143	87.097	89.286
No answer	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510

d) Return on investment

	1	2	3	4	5	6	7	TOT
Not important at all	8.333	0.000	0.000	0.000	11.538	4.286	0.000	3.571
2	16.667	10.000	8.333	0.000	3.846	7.143	0.000	6.122
3	8.333	10.000	19.444	18.182	19.231	12.857	3.226	13.265
4	33.333	40.000	22.222	45.455	19.231	31.429	41.935	31.122
Extremely important	25.000	30.000	44.444	36.364	34.615	40.000	45.161	39.286
No answer	8.333	10.000	5.556	0.000	11.538	4.286	9.677	6.633

e) Private outdoor space

	1	2	3	4	5	6	7	TOT
Not important at all	0.000	10.000	2.778	0.000	0.000	2.857	3.226	2.551
2	8.333	30.000	0.000	9.091	3.846	4.286	12.903	6.633
3	8.333	10.000	16.667	18.182	15.385	14.286	3.226	12.755
4	25.000	10.000	22.222	27.273	23.077	34.286	32.258	28.061
Extremely important	50.000	30.000	58.333	27.273	50.000	40.000	41.935	44.388
No answer	8.333	10.000	0.000	18.182	7.692	4.286	6.452	5.612

25. Importance of each of the following factors in the decision to purchase the new house. (continued)

f) Private parking space

	1	2	3	4	5	6	7	TOT
Not important at all	0.000	30.000	2.778	0.000	7.692	7.143	9.677	7.143
2	0.000	10.000	2.778	18.182	7.692	8.571	6.452	7.143
3	8.333	10.000	11.111	18.182	11.538	10.000	25.806	13.265
4	33.333	0.000	19.444	9.091	30.769	25.714	51.613	27.551
Extremely important	58.333	40.000	63.889	54.545	38.462	45.714	3.226	42.347
No answer	0.000	10.000	0.000	0.000	3.846	2.857	3.226	2.551

26. Whether or not the occupants qualified for the provincial and/or municipal subsidies which were being offered at the time of purchase.

	1	2	3	4	5	TOT
Qualified	100.000	81.818	97.222	90.909	100.000	95.833
Did not qualify	0.000	9.091	0.000	9.091	0.000	2.083
No answer	0.000	9.091	2.778	0.000	0.000	2.083

a) Whether or not the house would have been bought had the subsidies not been available (for respondents who qualified).

	1	2	3	4	5	TOT
Would have bought	41.667	22.222	47.222	20.000	23.077	34.409
Would not have bought	33.333	55.556	22.222	50.000	53.846	38.710
Not sure	25.000	22.222	30.556	30.000	23.077	26.882

The New Home

27. Occupancy period.

	1	2	3	4	5	6	7	TOT
Less than 2 months	0.000	20.000	38.889	63.636	0.000	1.429	3.226	12.755
2-4 months	8.333	0.000	38.889	36.364	3.846	88.571	87.097	55.612
4-6 months	91.667	80.000	22.222	0.000	96.154	10.000	6.452	31.122
More than 6 months	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No answer	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510

28. Selected options/features.

	1	2	3	4	5	6	7	TOT
Toilet / 1st floor	24.000	21.622	17.347	14.493	20.690	0.000	18.182	15.294
Open kitchen	12.000	8.108	17.857	10.145	10.345	0.000	10.227	10.588
Large 2nd floor bath	2.000	2.703	8.163	15.942	21.552	25.000	17.045	14.706
Whirlpool bath	24.000	24.324	4.082	4.348	0.000	4.839	0.000	5.588
Fireplace	0.000	2.703	2.041	10.145	0.000	1.613	0.000	2.059
Front balcony	20.000	16.216	9.694	15.942	14.655	31.452	18.182	17.353
Rear balcony	6.000	10.811	16.837	10.145	22.414	0.000	12.500	12.353
Side window	8.000	5.405	8.163	7.246	0.000	0.806	0.000	4.118
Finished basement	2.000	5.405	5.102	4.348	1.724	2.419	3.409	3.529
End unit	0.000	0.000	10.204	7.246	8.621	16.935	5.682	8.971
None	0.000	2.703	0.000	0.000	0.000	5.645	3.409	1.618
Others	2.000	0.000	0.510	0.000	0.000	5.645	9.091	2.500
No answer	0.000	0.000	0.000	0.000	0.000	5.645	2.273	1.324

Others: Heat pump (1); door in side wall (1); additional storage (1); rough plumbing in basement (2); finished basement w/ toilet (1); basement bedroom(1); whirlpool podium (1); central vacuum (1); alarm system (1); lunch counter in kitchen (1); additional cupboards (1) roughing for dishwasher (1); bigger bedroom (1); neon light covers (1).

29.(a) Whether or not any work was done on the home since occupancy.

	1	2	3	4	5	6	7	TOT
Yes	33.333	60.000	55.556	27.273	46.154	34.286	22.581	38.776
No	66.667	40.000	44.444	72.727	53.846	64.286	77.419	60.714
No answer	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510

29.(b) Type of work done.

<u>Basement</u>

	1	2	3	4	5	6	7	TOT
Insulation	0.000	0.000	7.463	12.500	9.722	0.000	0.000	4.516
Partitions	13.333	13.333	8.955	6.250	11.111	22.353	15.000	14.194
Drywall	13.333	6.667	13.433	12.500	12.500	22.353	12.500	15.161
Wall finishes	13.333	13.333	16.418	12.500	9.722	12.941	2.500	11.613
Floor finishes	13.333	13.333	14.925	12.500	12.500	12.941	10.000	12.903
Wood finishes	6.667	13.333	7.463	6.250	8.333	0.000	10.000	6.129
Kit/bathrm cupbrds	0.000	0.000	2.985	0.000	5.556	0.000	10.000	3.226
Elect.wiring	20.000	20.000	4.478	6.250	12.500	1.176	10.000	7.742
Elect. fixtures	20.000	20.000	10.448	6.250	9.722	22.353	10.000	14.194
Rough plumbing	0.000	0.000	4.478	6.250	4.167	1.176	10.000	3.871
Plumbing fixtures	0.000	0.000	1.493	6.250	0.000	0.000	10.000	1.935
Others	0.000	0.000	7.463	12.500	4.167	4.706	0.000	4.516

Others: More storage space (3); more shelves (4); central vacuum (1); laundry room (1); living room (1); air exchanger (1); bar (1); doors (1).

29.(b) Type of work done.
(continued)

First Floor (by total number of respondents)

partition/ 1
drywall/ 1
wall finishes/ 11
floor finishes/ 1
wood finishes/2
cupboards/ 5
electrical wiring/1
electrical fixtures/3
rough plumbing/1
others/9
Others: Wall to wall carpet (1); door knobs changed (1); add mirrors in dining and on closet doors (1); glass block wall (1); changed kitchen layout (1); air exchanger (1); changed 1 door (1); more shelves (1); microwave oven installation (1).

Second Floor (by total number of respondents)

wall finishes/3
wood finishes/1
electrical fixtures/1
others/5
Others: More storage space (1); shower door installed (1); changed door knobs (1); air exchanger (1); stair ramp (1)

30.(a) Whether or not there is any work that the occupants are planning to do.

	1	2	3	4	5	6	7	TOT
Yes	75.000	80.000	75.000	81.818	80.769	82.857	90.323	81.633
No	16.667	20.000	25.000	18.182	11.538	15.714	6.452	15.816
No answer	8.333	0.000	0.000	0.000	7.692	1.429	3.226	2.551

30.(b) Work planned.
Basement

	A	B	C	D	E	F	G	TOT
Finish completely	7.143	27.273	21.739	0.000	24.444	16.129	88.889	25.911
Finish partially	14.286	18.182	2.174	18.182	6.667	6.452	11.111	7.692
Add a toilet/laundry	21.429	18.182	8.696	0.000	2.222	18.280	0.000	10.931
Add a room	21.429	0.000	15.217	0.000	0.000	16.129	0.000	10.121
Add a playrm /den	28.571	9.091	8.696	54.545	8.889	18.280	0.000	14.575
Add storage	7.143	9.091	6.522	0.000	31.111	5.376	0.000	9.717
Office/workshop	0.000	9.091	0.000	0.000	4.444	4.301	0.000	2.834
Wall /wood finishes	0.000	0.000	8.696	9.091	4.444	7.527	0.000	5.668
Floor finishes	0.000	0.000	8.696	0.000	11.111	7.527	0.000	6.478
Others	0.000	9.091	19.565	18.182	6.667	0.000	0.000	6.073

Others: Low-combustion furnace (1); bar (1); electric garage door (1); pave driveway(1); insulation (1); decoration (1); move cabinet in basement (1); garage (6); electrical fixtures + wiring (2)

30.(b) Work planned.
(continued)

First Floor

	A	B	C	D	E	F	G	TOT
Insul/clim. control	0.000	0.000	7.143	0.000	3.571	0.000	0.000	2.299
Partitions	20.000	20.000	7.143	0.000	7.143	7.692	0.000	8.046
Drywall	20.000	20.000	7.143	0.000	7.143	0.000	0.000	6.897
Wall Finishes	0.000	20.000	28.571	27.273	10.714	7.692	16.667	16.092
Floor Finishes	20.000	0.000	14.286	9.091	17.857	7.692	16.667	12.644
Wood Finishes	0.000	0.000	7.143	0.000	0.000	15.385	0.000	3.448
Kitch./bathrm cupbrds	0.000	0.000	0.000	0.000	3.571	7.692	0.000	2.299
Elect. wiring	0.000	0.000	0.000	0.000	3.571	0.000	0.000	1.149
Elect. fixtures	0.000	0.000	0.000	0.000	10.714	0.000	0.000	3.448
Rough Plumbing	0.000	0.000	7.143	0.000	0.000	0.000	16.667	2.299
Plumbing fixtures	0.000	0.000	0.000	0.000	3.571	0.000	0.000	1.149
Re-plan kitchen	40.000	30.000	0.000	27.273	0.000	15.385	16.667	12.644
Re-plan entrance	0.000	0.000	0.000	0.000	3.571	0.000	33.333	3.448
Decoration	0.000	10.000	0.000	36.364	0.000	0.000	0.000	5.747
Security system	0.000	0.000	7.143	0.000	0.000	0.000	0.000	1.149
Central vacuum	0.000	0.000	7.143	0.000	0.000	0.000	0.000	1.149
Add windows	0.000	0.000	7.143	0.000	0.000	0.000	0.000	1.149
Change doors	0.000	0.000	0.000	0.000	17.857	0.000	0.000	5.747
Change toilet	0.000	0.000	0.000	0.000	7.143	0.000	0.000	2.299
Others	0.000	0.000	0.000	0.000	3.571	38.462	0.000	6.897

Others: Fireplace (3); improve (1); solarium (1); remove toilet and vestibule to make bigger living room(1).

Second Floor

	A	B	C	D	E	F	G	TOT
Insul./clim. control	0.000	0.000	0.000	0.000	18.182	0.000	0.000	4.348
Partitions	0.000	0.000	0.000	0.000	0.000	9.091	0.000	2.174
Drywall	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wall Finishes	50.000	0.000	66.667	33.333	27.273	27.273	100.000	39.130
Floor Finishes	50.000	25.000	11.111	0.000	18.182	0.000	0.000	10.870
Wood Finishes	0.000	0.000	11.111	0.000	0.000	0.000	0.000	2.174
Kitch./bathrm cupbrds	0.000	25.000	0.000	16.667	0.000	0.000	0.000	4.348
Elect. wiring	0.000	0.000	0.000	16.667	0.000	0.000	0.000	2.174
Elect. fixtures	0.000	25.000	0.000	0.000	0.000	9.091	0.000	4.348
Rough plumbing	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Plumbing fixtures	0.000	0.000	0.000	0.000	9.091	0.000	0.000	2.174
More storage	0.000	0.000	0.000	0.000	18.182	0.000	0.000	4.348
Skylight /windows	0.000	0.000	11.111	0.000	0.000	36.364	0.000	10.870
Others	0.000	25.000	0.000	33.333	9.091	18.182	0.000	13.043

Others: Mirror door in master bedroom (1); sliding door for bathroom (1); fireplace (1); more storage in closets (1); install shower door(1); decorate (1).

31.(a) Whether or not the occupants were willing to do more construction or finishing work themselves in exchange for a reduction in the cost of the home.

	1	2	3	4	5	6	7	TOT
Willing	16.667	40.000	22.222	45.455	38.462	31.429	41.935	32.653
Not willing	75.000	60.000	77.778	54.545	57.692	68.571	51.613	65.306
No answer	8.333	0.000	0.000	0.000	3.846	0.000	6.452	2.041

31.(b) Type of work willing to be done

	1	2	3	4	5	6	7	TOT
Erect partitions	0.000	15.385	0.000	11.111	7.500	3.175	9.302	6.542
Rough plumbing	0.000	0.000	0.000	7.407	5.000	4.762	4.651	4.206
Plumbing fixtures	0.000	0.000	0.000	7.407	5.000	4.762	4.651	4.206
Elect. wiring	0.000	15.385	11.538	7.407	7.500	7.937	6.977	8.411
Electr. fixtures	0.000	7.692	11.538	7.407	5.000	3.175	4.651	5.607
Drywall	0.000	15.385	11.538	14.815	15.000	9.524	16.279	13.084
Joints/drywall	0.000	7.692	15.385	11.111	10.000	7.937	6.977	9.346
Floor finishes	0.000	0.000	11.538	7.407	12.500	9.524	9.302	9.346
Painting	50.000	23.077	30.769	14.815	22.500	28.571	25.581	25.234
Landscaping	0.000	15.385	7.692	11.111	7.500	19.048	9.302	12.150
Others	50.000	0.000	0.000	0.000	2.500	1.587	2.326	1.869

Others: install a heat pump (1); redo the staircase (1); ceramic bath podium (1); would do work in the basement only

32. Whether or not buyers would have accepted an unpartitioned second floor for a $5000 reduction in price.

	1	2	3	4	5	6	7	TOT
Would accept	16.667	10.000	16.667	36.364	30.769	12.857	25.806	19.388
Would not accept	83.333	80.000	80.556	63.636	65.385	82.857	67.742	76.531
No answer	0.000	10.000	2.778	0.000	3.846	4.286	6.452	4.082

33.1. Occupant satisfaction with the following points:

LOCATION

a) Proximity to work

	1	2	3	4	5	6	7	TOT
V. disappointed	8.333	10.000	0.000	0.000	7.692	1.429	0.000	2.551
2	0.000	0.000	2.778	0.000	7.692	15.714	6.452	8.163
3	8.333	30.000	22.222	36.364	30.769	27.143	12.903	23.980
4	16.667	0.000	25.000	18.182	30.769	44.286	51.613	34.694
V. satisfied	58.333	20.000	41.667	27.273	15.385	8.571	29.032	23.469
No answer	8.333	40.000	8.333	18.182	7.692	2.857	0.000	7.143

33.1. Occupant satisfaction with the following points:
(continued)

b) Proximity to public transportation

	1	2	3	4	5	6	7	TOT
V. disappointed	16.667	30.000	0.000	0.000	0.000	4.286	6.452	5.102
2	8.333	40.000	5.556	0.000	3.846	12.857	19.355	11.735
3	16.667	10.000	27.778	18.182	11.538	14.286	48.387	21.939
4	8.333	0.000	13.889	18.182	7.692	47.143	9.677	23.469
V. satisfied	0.000	0.000	36.111	36.364	73.077	17.143	12.903	26.531
No answer	50.000	20.000	16.667	27.273	3.846	4.286	3.226	11.224

c) Proximity to medical services

	1	2	3	4	5	6	7	TOT
V. disappointed	8.333	0.000	0.000	0.000	0.000	0.000	0.000	0.510
2	0.000	10.000	2.778	0.000	3.846	5.714	6.452	4.592
3	8.333	20.000	27.778	45.455	30.769	32.857	29.032	29.592
4	33.333	30.000	22.222	27.273	34.615	52.857	51.613	40.816
V. satisfied	33.333	30.000	30.556	9.091	19.231	2.857	9.677	14.796
No answer	16.667	10.000	16.667	18.182	11.538	5.714	3.226	9.694

d) Proximity to shopping facilities

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
2	8.333	0.000	5.556	9.091	7.692	12.857	9.677	9.184
3	16.667	30.000	27.778	36.364	42.308	22.857	22.581	27.041
4	33.333	30.000	22.222	27.273	26.923	54.286	48.387	39.796
V. satisfied	25.000	30.000	30.556	18.182	15.385	4.286	12.903	15.306
No answer	16.667	10.000	13.889	9.091	3.846	5.714	6.452	8.163

e) Proximity to schools

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	0.000	3.226	0.510
2	0.000	10.000	5.556	0.000	3.846	7.143	3.226	5.102
3	8.333	30.000	22.222	18.182	19.231	38.571	25.806	27.551
4	25.000	30.000	22.222	27.273	3.846	37.143	12.903	24.490
V. satisfied	33.333	10.000	11.111	0.000	46.154	10.000	41.935	20.918
No answer	33.333	20.000	38.889	54.545	26.923	7.143	12.903	21.429

SITE

f) General image of the project

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	3.846	1.429	6.452	2.551
2	0.000	0.000	5.556	0.000	3.846	7.143	6.452	5.102
3	8.333	0.000	11.111	0.000	38.462	4.286	3.226	9.694
4	41.667	40.000	33.333	45.455	19.231	61.429	64.516	47.959
V. satisfied	50.000	40.000	44.444	54.545	30.769	22.857	19.355	31.633
No answer	0.000	20.000	2.778	0.000	3.846	2.857	0.000	3.061

33.1. Occupant satisfaction with the following points:
(continued)

g) Sense of community/neighborhood

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
2	16.667	10.000	2.778	0.000	3.846	4.286	3.226	4.592
3	16.667	20.000	44.444	54.545	15.385	24.286	12.903	26.020
4	41.667	20.000	22.222	18.182	38.462	51.429	61.290	41.837
V. satisfied	16.667	30.000	13.889	18.182	30.769	12.857	19.355	17.857
No answer	8.333	20.000	16.667	9.091	7.692	7.143	3.226	9.184

h) Safety of children

	1	2	3	4	5	6	7	TOT
V. disappointed	8.333	0.000	2.778	0.000	0.000	4.286	0.000	2.551
2	8.333	10.000	0.000	9.091	0.000	10.000	9.677	6.633
3	16.667	0.000	11.111	18.182	15.385	17.143	9.677	13.776
4	16.667	30.000	22.222	18.182	26.923	44.286	48.387	34.694
V. satisfied	16.667	30.000	16.667	9.091	26.923	14.286	22.581	18.367
No answer	33.333	30.000	47.222	45.455	30.769	10.000	9.677	23.980

i) Location of parking

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	11.538	22.857	3.226	10.714
2	16.667	0.000	5.556	0.000	7.692	15.714	19.355	11.735
3	16.667	20.000	16.667	45.455	34.615	5.714	3.226	14.796
4	25.000	10.000	30.556	18.182	11.538	38.571	48.387	31.633
V. satisfied	41.667	50.000	41.667	27.273	30.769	11.429	25.806	26.531
No answer	0.000	20.000	2.778	9.091	3.846	5.714	0.000	4.592

j) Size of front yard

	1	2	3	4	5	6	7	TOT
V. disappointed	25.000	10.000	2.778	0.000	23.077	4.286	16.129	9.694
2	0.000	0.000	13.889	0.000	7.692	8.571	48.387	14.286
3	41.667	20.000	25.000	36.364	15.385	10.000	12.903	17.857
4	8.333	20.000	30.556	18.182	30.769	67.143	16.129	38.776
V. satisfied	25.000	30.000	22.222	45.455	15.385	5.714	0.000	13.776
No answer	0.000	20.000	5.556	0.000	7.692	4.286	6.452	5.612

k) Size of back yard

	1	2	3	4	5	6	7	TOT
V. disappointed	25.000	30.000	0.000	9.091	46.154	18.571	22.581	19.898
2	16.667	10.000	5.556	0.000	3.846	31.429	41.935	20.918
3	33.333	30.000	27.778	36.364	19.231	5.714	3.226	15.816
4	8.333	0.000	33.333	27.273	19.231	30.000	29.032	26.020
V. satisfied	16.667	20.000	30.556	27.273	3.846	11.429	3.226	14.286
No answer	0.000	10.000	2.778	0.000	7.692	2.857	0.000	3.061

33.1. Occupant satisfaction with the following points:
(continued)
l) Level of privacy

	1	2	3	4	5	6	7	TOT
V. disappointed	8.333	30.000	5.556	9.091	19.231	5.714	16.667	10.769
2	0.000	0.000	13.889	9.091	19.231	25.714	23.333	18.462
3	25.000	20.000	19.444	18.182	30.769	8.571	3.333	14.872
4	33.333	10.000	47.222	27.273	19.231	45.714	53.333	40.000
V. satisfied	33.333	30.000	11.111	36.364	3.846	7.143	3.333	11.282
No answer	0.000	10.000	2.778	0.000	7.692	7.143	0.000	4.615

UNIT
m) Overall design /layout

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
2	0.000	0.000	2.778	0.000	0.000	2.857	3.226	2.041
3	25.000	0.000	5.556	18.182	15.385	1.429	3.226	6.633
4	33.333	60.000	52.778	18.182	50.000	65.714	77.419	58.163
V. satisfied	41.667	20.000	30.556	54.545	26.923	24.286	12.903	26.531
No answer	0.000	20.000	8.333	9.091	7.692	4.286	3.226	6.122

n) Total amount of space

	1	2	3	4	5	6	7	TOT
V.disappointed	0.000	0.000	0.000	0.000	0.000	1.429	3.226	1.020
2	0.000	0.000	0.000	0.000	7.692	2.857	6.452	3.061
3	0.000	0.000	16.667	0.000	15.385	0.000	0.000	5.102
4	50.000	50.000	41.667	27.273	42.308	64.286	67.742	54.082
V. satisfied	41.667	30.000	33.333	72.727	26.923	24.286	22.581	30.102
No answer	8.333	20.000	8.333	0.000	7.692	7.143	0.000	6.633

o) Amount of storage space

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	4.286	0.000	1.531
2	0.000	0.000	5.556	9.091	7.692	12.857	12.903	9.184
3	0.000	10.000	27.778	9.091	26.923	2.857	6.452	11.735
4	41.667	40.000	41.667	18.182	23.077	48.571	58.065	42.857
V. satisfied	58.333	40.000	19.444	63.636	34.615	25.714	22.581	30.102
No answer	0.000	10.000	5.556	0.000	7.692	5.714	0.000	4.592

p) Flexibility of space

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
2	16.667	0.000	5.556	9.091	7.692	18.571	9.677	11.735
3	16.667	30.000	30.556	18.182	38.462	8.571	12.903	19.388
4	33.333	30.000	44.444	45.455	30.769	50.000	64.516	46.429
V. satisfied	33.333	30.000	11.111	27.273	11.538	14.286	9.677	15.306
No answer	0.000	10.000	8.333	0.000	11.538	7.143	3.226	6.633

33.1. Occupant satisfaction with the following points:
(continued)

q) Exterior appearance

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	0.000	0.000	0.000	0.510
2	0.000	0.000	2.778	0.000	0.000	2.857	12.903	3.571
3	16.667	0.000	8.333	27.273	15.385	0.000	6.452	7.143
4	8.333	50.000	55.556	27.273	42.308	68.571	64.516	55.102
V. satisfied	75.000	50.000	27.778	45.455	30.769	24.286	16.129	30.102
No answer	0.000	0.000	2.778	0.000	11.538	4.286	0.000	3.571

r) Interior appearance

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	0.000	0.000	3.226	1.020
2	0.000	0.000	2.778	0.000	0.000	2.857	3.226	2.041
3	8.333	0.000	8.333	18.182	15.385	2.857	3.226	6.633
4	25.000	40.000	41.667	27.273	61.538	54.286	54.839	48.980
V. satisfied	66.667	60.000	41.667	54.545	7.692	35.714	32.258	36.735
No answer	0.000	0.000	2.778	0.000	15.385	4.286	3.226	4.592

s) Quality of exterior finishes

	1	2	3	4	5	6	7	TOT
V.disappointed	0.000	0.000	5.556	0.000	0.000	2.857	0.000	2.041
2	0.000	0.000	0.000	0.000	3.846	2.857	9.677	3.061
3	16.667	10.000	16.667	27.273	15.385	4.286	3.226	10.204
4	16.667	10.000	50.000	36.364	50.000	57.143	74.194	51.531
V. satisfied	66.667	80.000	25.000	36.364	19.231	28.571	9.677	29.082
No answer	0.000	0.000	2.778	0.000	11.538	4.286	3.226	4.082

t) Quality of interior finishes

	1	2	3	4	5	6	7	TOT
V. disappointed	16.667	10.000	13.889	0.000	26.923	5.714	19.355	12.755
2	8.333	0.000	11.111	9.091	23.077	27.143	25.806	19.898
3	16.667	20.000	25.000	63.636	19.231	4.286	6.452	15.306
4	25.000	20.000	27.778	9.091	11.538	42.857	38.710	31.122
V. satisfied	33.333	50.000	19.444	18.182	7.692	14.286	6.452	16.327
No answer	0.000	0.000	2.778	0.000	11.538	5.714	3.226	4.592

u) Amount of natural light

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	3.846	0.000	3.226	1.531
2	0.000	0.000	2.778	0.000	0.000	10.000	16.129	6.633
3	25.000	20.000	22.222	9.091	15.385	2.857	3.226	10.714
4	25.000	20.000	30.556	27.273	38.462	41.429	48.387	37.245
V. satisfied	50.000	50.000	36.111	63.636	26.923	40.000	25.806	37.755
No answer	0.000	10.000	5.556	0.000	15.385	5.714	3.226	6.122

33.1. Occupant satisfaction with the following points:
(continued)

v) Amount of cross-ventilation

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
2	0.000	10.000	5.556	0.000	7.692	4.286	6.452	5.102
3	33.333	20.000	30.556	18.182	3.846	5.714	6.452	13.265
4	33.333	20.000	33.333	27.273	46.154	51.429	74.194	46.939
V. satisfied	33.333	40.000	25.000	54.545	23.077	34.286	9.677	28.571
No answer	0.000	10.000	5.556	0.000	15.385	4.286	3.226	5.612

w) Soundproofing between units

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	20.000	5.556	18.182	19.231	1.429	6.452	7.143
2	16.667	10.000	5.556	0.000	3.846	25.714	25.806	16.327
3	25.000	0.000	27.778	45.455	23.077	0.000	0.000	12.245
4	33.333	40.000	36.111	18.182	19.231	50.000	51.613	40.306
V. satisfied	25.000	20.000	19.444	18.182	23.077	18.571	12.903	18.878
No answer	0.000	10.000	5.556	0.000	11.538	4.286	3.226	5.102

33.2. Comparison of current dwelling to the former one for each of the following points:

LOCATION

a) Proximity to work

	1	2	3	4	5	6	7	TOT
Much worse	0.000	30.000	11.111	9.091	11.538	10.000	6.452	10.204
2	0.000	0.000	11.111	18.182	26.923	47.143	16.129	26.020
3	25.000	0.000	33.333	9.091	26.923	24.286	48.387	28.061
4	8.333	20.000	2.778	9.091	3.846	10.000	16.129	9.184
Much better	25.000	10.000	19.444	27.273	15.385	4.286	9.677	12.245
No answer	41.667	40.000	22.222	27.273	15.385	4.286	3.226	14.286

b) Proximity to public transportation

	1	2	3	4	5	6	7	TOT
Much worse	16.667	20.000	2.778	9.091	3.846	10.000	25.806	11.224
2	8.333	40.000	19.444	9.091	3.846	24.286	16.129	18.367
3	8.333	0.000	30.556	27.273	53.846	48.571	29.032	36.735
4	0.000	0.000	13.889	18.182	3.846	4.286	3.226	6.122
Much better	16.667	20.000	16.667	9.091	26.923	5.714	9.677	12.755
No answer	50.000	20.000	16.667	27.273	7.692	7.143	16.129	14.796

33.2. Comparison of current dwelling to the former one for each of the following points: (continued)

c) Proximity to medical services

	1	2	3	4	5	6	7	TOT
Much worse	0.000	20.000	2.778	0.000	0.000	2.857	3.226	3.061
2	0.000	0.000	2.778	9.091	15.385	24.286	12.903	13.776
3	41.667	20.000	44.444	45.455	38.462	48.571	67.742	47.449
4	8.333	20.000	16.667	18.182	11.538	7.143	3.226	10.204
Much better	16.667	20.000	13.889	9.091	19.231	7.143	3.226	10.714
No answer	33.333	20.000	19.444	18.182	15.385	10.000	9.677	14.796

d) Proximity to shopping facilities

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	0.000	0.000	3.846	5.714	3.226	3.061
2	8.333	0.000	19.444	9.091	23.077	38.571	29.032	26.020
3	41.667	20.000	33.333	27.273	30.769	37.143	58.065	37.755
4	16.667	40.000	22.222	45.455	11.538	5.714	0.000	13.265
Much better	16.667	20.000	8.333	0.000	19.231	4.286	6.452	8.673
No answer	16.667	20.000	16.667	18.182	11.538	8.571	3.226	11.224

e) Proximity to schools

	1	2	3	4	5	6	7	TOT
Much worse	0.000	10.000	8.333	0.000	0.000	4.286	3.226	4.082
2	0.000	0.000	8.333	18.182	3.846	15.714	3.226	9.184
3	41.667	20.000	27.778	27.273	26.923	48.571	32.258	36.224
4	0.000	30.000	2.778	9.091	7.692	5.714	32.258	10.714
Much better	25.000	0.000	11.111	0.000	23.077	5.714	9.677	10.204
No answer	33.333	40.000	41.667	45.455	38.462	20.000	19.355	29.592

SITE

f) General image of project

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	2.778	0.000	11.538	1.429	6.452	3.571
2	8.333	10.000	11.111	9.091	11.538	2.857	3.226	6.633
3	33.333	10.000	16.667	27.273	11.538	15.714	9.677	15.816
4	25.000	20.000	25.000	9.091	30.769	38.571	35.484	31.122
Much better	33.333	40.000	33.333	54.545	23.077	24.286	25.806	29.082
No answer	0.000	20.000	11.111	0.000	11.538	17.143	19.355	13.776

g) Sense of community/ neighborhood

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	0.000	9.091	11.538	1.429	0.000	2.551
2	16.667	0.000	5.556	0.000	11.538	4.286	6.452	6.122
3	16.667	20.000	41.667	54.545	23.077	24.286	22.581	28.061
4	33.333	10.000	25.000	9.091	23.077	30.000	35.484	27.041
Much better	25.000	50.000	13.889	18.182	19.231	17.143	22.581	19.898
No answer	8.333	20.000	13.889	9.091	11.538	22.857	12.903	16.327

33.2. Comparison of current dwelling to the former one for each of the following points: (continued)

h) Safety of children

	1	2	3	4	5	6	7	TOT
Much worse	8.333	20.000	0.000	0.000	3.846	2.857	6.452	4.082
2	16.667	0.000	2.778	0.000	0.000	4.286	0.000	3.061
3	8.333	0.000	19.444	45.455	23.077	27.143	19.355	22.449
4	16.667	20.000	11.111	0.000	11.538	30.000	29.032	20.918
Much better	16.667	30.000	25.000	9.091	30.769	17.143	25.806	21.939
No answer	33.333	30.000	41.667	45.455	30.769	18.571	19.355	27.551

i) Location of parking

	1	2	3	4	5	6	7	TOT
Much worse	8.333	10.000	8.333	9.091	11.538	10.000	6.452	9.184
2	8.333	0.000	5.556	9.091	3.846	10.000	19.355	9.184
3	25.000	20.000	22.222	36.364	23.077	11.429	32.258	20.918
4	8.333	10.000	16.667	27.273	15.385	32.857	19.355	22.449
Much better	50.000	40.000	38.889	9.091	38.462	24.286	16.129	29.082
No answer	0.000	20.000	8.333	9.091	7.692	11.429	6.452	9.184

j) Size of front yard

	1	2	3	4	5	6	7	TOT
Much worse	8.333	40.000	8.333	0.000	11.538	4.286	9.677	8.673
2	0.000	0.000	5.556	0.000	3.846	4.286	35.484	8.673
3	33.333	0.000	13.889	18.182	11.538	14.286	6.452	13.265
4	8.333	0.000	19.444	36.364	15.385	31.429	9.677	20.918
Much better	25.000	40.000	22.222	18.182	38.462	25.714	9.677	24.490
No answer	25.000	20.000	30.556	27.273	19.231	20.000	29.032	23.980

k) Size of backyard

	1	2	3	4	5	6	7	TOT
Much worse	25.000	30.000	5.556	0.000	26.923	10.000	12.903	13.265
2	8.333	10.000	2.778	9.091	0.000	8.571	9.677	6.633
3	25.000	0.000	11.111	9.091	11.538	5.714	6.452	8.673
4	0.000	0.000	16.667	36.364	11.538	30.000	29.032	21.939
Much better	16.667	40.000	36.111	9.091	34.615	27.143	16.129	27.041
No answer	25.000	20.000	27.778	36.364	15.385	18.571	25.806	22.449

l) Level of privacy

	1	2	3	4	5	6	7	TOT
Much worse	8.333	50.000	8.333	0.000	15.385	5.714	6.452	9.694
2	8.333	10.000	2.778	18.182	3.846	7.143	6.452	6.633
3	16.667	10.000	27.778	27.273	46.154	24.286	29.032	27.551
4	8.333	0.000	27.778	27.273	19.231	27.143	29.032	23.980
Much better	58.333	10.000	27.778	27.273	7.692	27.143	9.677	22.959
No answer	0.000	20.000	5.556	0.000	7.692	8.571	19.355	9.184

33.2. Comparison of current dwelling to the former one for each of the following points: (continued)

UNIT

m) Overall design/layout

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	8.333	9.091	3.846	0.000	3.226	3.061
2	0.000	0.000	11.111	0.000	7.692	2.857	6.452	5.102
3	50.000	20.000	25.000	27.273	19.231	10.000	12.903	18.367
4	25.000	20.000	19.444	27.273	23.077	52.857	35.484	35.204
Much better	25.000	40.000	27.778	36.364	38.462	22.857	22.581	27.551
No answer	0.000	20.000	8.333	0.000	7.692	11.429	19.355	10.714

n) Total amount of space

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	9.091	7.692	1.429	3.226	3.571
2	0.000	20.000	11.111	0.000	11.538	7.143	12.903	9.184
3	25.000	30.000	13.889	18.182	19.231	14.286	12.903	16.327
4	33.333	10.000	36.111	18.182	15.385	40.000	35.484	32.143
Much better	33.333	20.000	25.000	54.545	38.462	28.571	29.032	30.612
No answer	8.333	20.000	8.333	0.000	7.692	8.571	6.452	8.163

o) Amount of storage space

	1	2	3	4	5	6	7	TOT
Much worse	0.000	20.000	5.556	9.091	11.538	4.286	0.000	5.612
2	8.333	0.000	19.444	9.091	11.538	7.143	12.903	10.714
3	16.667	20.000	11.111	9.091	15.385	15.714	6.452	13.265
4	8.333	10.000	27.778	18.182	23.077	35.714	41.935	29.592
Much better	66.667	40.000	27.778	45.455	30.769	30.000	32.258	33.673
No answer	0.000	10.000	8.333	9.091	7.692	7.143	6.452	7.143

p) Flexibility of space

	1	2	3	4	5	6	7	TOT
Much worse	8.333	20.000	5.556	18.182	3.846	1.429	3.226	5.102
2	0.000	0.000	8.333	0.000	15.385	8.571	16.129	9.184
3	33.333	20.000	30.556	18.182	26.923	18.571	12.903	21.939
4	25.000	20.000	25.000	27.273	15.385	40.000	25.806	29.082
Much better	33.333	30.000	19.444	36.364	30.769	17.143	22.581	22.959
No answer	0.000	10.000	11.111	0.000	7.692	14.286	19.355	11.735

q) Exterior appearance

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	9.091	7.692	0.000	0.000	2.551
2	0.000	0.000	8.333	9.091	3.846	2.857	12.903	5.612
3	33.333	40.000	27.778	36.364	34.615	10.000	19.355	22.449
4	25.000	10.000	19.444	18.182	23.077	41.429	29.032	29.082
Much better	41.667	40.000	33.333	27.273	19.231	27.143	29.032	29.082
No answer	0.000	10.000	5.556	0.000	11.538	18.571	9.677	11.224

33.2. Comparison of current dwelling to the former one for each of the following points: (continued)

r) Interior appearance

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	9.091	3.846	0.000	0.000	2.041
2	8.333	10.000	8.333	9.091	3.846	4.286	16.129	7.653
3	16.667	0.000	25.000	27.273	23.077	10.000	12.903	15.816
4	41.667	30.000	25.000	18.182	23.077	37.143	45.161	33.163
Much better	33.333	50.000	30.556	36.364	34.615	34.286	16.129	31.633
No answer	0.000	10.000	5.556	0.000	11.538	14.286	9.677	9.694

s) Quality of exterior finishes

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	0.000	7.692	1.429	0.000	2.551
2	8.333	10.000	2.778	0.000	3.846	4.286	3.226	4.082
3	25.000	30.000	41.667	54.545	34.615	21.429	38.710	32.143
4	8.333	0.000	22.222	27.273	23.077	27.143	19.355	21.939
Much better	58.333	50.000	16.667	18.182	23.077	25.714	19.355	25.510
No answer	0.000	10.000	11.111	0.000	7.692	20.000	19.355	13.776

t) Quality of interior finishes

	1	2	3	4	5	6	7	TOT
Much worse	16.667	0.000	8.333	0.000	15.385	1.429	9.677	6.633
2	0.000	0.000	5.556	9.091	11.538	12.857	19.355	10.714
3	25.000	30.000	36.111	45.455	23.077	21.429	25.806	27.041
4	25.000	30.000	27.778	27.273	15.385	21.429	16.129	21.939
Much better	33.333	30.000	11.111	18.182	26.923	27.143	16.129	22.449
No answer	0.000	10.000	11.111	0.000	7.692	15.714	12.903	11.224

u) Amount of natural light

	1	2	3	4	5	6	7	TOT
Much worse	8.333	0.000	8.333	0.000	3.846	2.857	12.903	5.612
2	16.667	10.000	22.222	18.182	19.231	8.571	12.903	14.286
3	25.000	0.000	27.778	27.273	11.538	27.143	16.129	21.939
4	8.333	50.000	13.889	9.091	26.923	25.714	32.258	23.980
Much better	41.667	20.000	19.444	45.455	26.923	27.143	16.129	25.510
No answer	0.000	20.000	8.333	0.000	11.538	8.571	9.677	8.673

v) Amount of cross-ventilation

	1	2	3	4	5	6	7	TOT
Much worse	8.333	10.000	5.556	0.000	7.692	2.857	3.226	4.592
2	16.667	0.000	8.333	0.000	11.538	4.286	6.452	6.633
3	16.667	50.000	33.333	54.545	19.231	25.714	32.258	29.592
4	16.667	10.000	27.778	9.091	19.231	27.143	35.484	25.000
Much better	41.667	10.000	16.667	36.364	30.769	30.000	12.903	25.000
No answer	0.000	20.000	8.333	0.000	11.538	10.000	9.677	9.184

33.2. Comparison of current dwelling to the former one for each of the following points: (continued)

w) Soundproofing between units

	1	2	3	4	5	6	7	TOT
Much worse	8.333	30.000	5.556	18.182	11.538	4.286	3.226	7.653
2	0.000	20.000	11.111	0.000	7.692	7.143	9.677	8.163
3	25.000	10.000	22.222	45.455	23.077	22.857	29.032	24.490
4	8.333	10.000	13.889	18.182	11.538	21.429	12.903	15.816
Much better	58.333	10.000	38.889	18.182	30.769	35.714	25.806	33.163
No answer	0.000	20.000	8.333	0.000	15.385	8.571	19.355	10.714

34.1. Occupant satisfaction with the following spaces:

GROUND FLOOR

a) Entrance

	1	2	3	4	5	6	7	TOT
V. disappointed	8.333	0.000	8.333	0.000	3.846	12.857	3.226	7.653
2	0.000	10.000	19.444	9.091	7.692	31.429	19.355	19.898
3	41.667	30.000	30.556	45.455	26.923	8.571	3.226	19.388
4	25.000	20.000	16.667	27.273	38.462	35.714	61.290	34.694
V. satisfied	25.000	40.000	5.556	18.182	19.231	4.286	9.677	11.224
No answer	0.000	0.000	19.444	0.000	3.846	7.143	3.226	7.143

b) Living room

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	3.846	0.000	3.226	1.531
2	16.667	0.000	5.556	9.091	0.000	8.571	9.677	7.143
3	16.667	40.000	33.333	18.182	42.308	0.000	0.000	15.816
4	50.000	30.000	25.000	9.091	46.154	67.143	67.742	50.510
V. satisfied	16.667	30.000	19.444	63.636	7.692	18.571	16.129	19.898
No answer	0.000	0.000	13.889	0.000	0.000	5.714	3.226	5.102

c) Dining room

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	3.846	0.000	3.226	1.531
2	0.000	0.000	2.778	0.000	15.385	1.429	6.452	4.082
3	8.333	20.000	19.444	18.182	26.923	1.429	3.226	10.714
4	50.000	20.000	25.000	27.273	34.615	61.429	70.968	47.959
V. satisfied	33.333	60.000	36.111	54.545	15.385	28.571	12.903	29.082
No answer	8.333	0.000	13.889	0.000	3.846	7.143	3.226	6.633

34.1. Occupant satisfaction with the following spaces:
(continued)

d) Kitchen

	1	2	3	4	5	6	7	TOT
V. disappointed	25.000	0.000	0.000	0.000	7.692	2.857	3.226	4.082
2	25.000	30.000	5.556	0.000	0.000	5.714	19.355	9.184
3	16.667	30.000	11.111	18.182	15.385	1.429	0.000	8.163
4	25.000	20.000	27.778	36.364	34.615	52.857	61.290	42.857
V. satisfied	8.333	20.000	44.444	45.455	42.308	32.857	12.903	31.633
No answer	0.000	0.000	11.111	0.000	0.000	4.286	3.226	4.082

e) Washroom

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	3.846	0.000	0.000	0.510
2	8.333	0.000	5.556	0.000	7.692	2.857	3.226	4.082
3	8.333	20.000	5.556	0.000	15.385	4.286	3.226	6.633
4	33.333	30.000	25.000	27.273	34.615	55.714	70.967	45.408
V. satisfied	50.000	50.000	33.333	45.455	30.769	30.000	19.355	32.143
No answer	0.000	0.000	30.556	27.273	7.692	7.143	3.226	11.224

SECOND FLOOR
f) Master bedroom

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
2	0.000	0.000	2.778	0.000	3.846	4.286	0.000	2.551
3	16.667	0.000	2.778	9.091	0.000	0.000	0.000	2.041
4	8.333	0.000	19.444	27.273	42.308	52.857	35.484	35.714
V. satisfied	75.000	100.000	63.889	63.636	50.000	38.571	64.516	55.612
No answer	0.000	0.000	11.111	0.000	3.846	2.857	0.000	3.571

g) Bedroom

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	2.778	0.000	0.000	4.286	0.000	2.041
3	8.333	0.000	13.889	0.000	7.692	0.000	0.000	4.082
4	33.333	20.000	25.000	27.273	30.769	62.857	58.065	44.898
V. satisfied	50.000	80.000	47.222	72.727	57.692	28.571	35.484	43.367
No answer	8.333	0.000	11.111	0.000	3.846	4.286	6.452	5.612

h) Bathroom

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	2.778	0.000	0.000	0.000	3.226	1.020
2	0.000	10.000	2.778	0.000	0.000	1.429	3.226	2.041
3	8.333	0.000	2.778	0.000	15.385	4.286	0.000	4.592
4	16.667	20.000	25.000	27.273	30.769	51.429	38.710	36.735
V. satisfied	75.000	70.000	58.333	72.727	50.000	40.000	51.613	52.041
No answer	0.000	0.000	8.333	0.000	3.846	2.857	3.226	3.571

34.1. Occupant satisfaction with the following spaces:
(continued)

i) Hallway

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	2.778	0.000	7.692	7.143	0.000	4.082
3	8.333	0.000	5.556	27.273	23.077	10.000	6.452	10.714
4	25.000	40.000	47.222	27.273	30.769	58.571	58.065	47.959
V. satisfied	58.333	60.000	30.556	45.455	34.615	20.000	25.806	30.612
No answer	8.333	0.000	13.889	0.000	3.846	4.286	9.677	6.633

j) Stairs

	1	2	3	4	5	6	7	TOT
V. disappointed	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	9.091	0.000	5.714	0.000	2.551
3	25.000	10.000	8.333	18.182	11.538	4.286	3.226	8.163
4	16.667	30.000	33.333	27.273	46.154	54.286	67.742	46.429
V. satisfied	58.333	60.000	44.444	45.455	38.462	30.000	25.806	37.245
No answer	0.000	0.000	13.889	0.000	3.846	5.714	3.226	5.612

34.2. Comparison of current dwelling to former one for each of the following spaces:

GROUND FLOOR

a) Entrance

	1	2	3	4	5	6	7	TOT
Much worse	16.667	0.000	13.889	18.182	11.538	8.571	9.677	10.714
2	0.000	10.000	16.667	9.091	3.846	21.429	16.129	14.796
3	41.667	30.000	16.667	18.182	26.923	21.429	25.806	23.469
4	8.333	30.000	19.444	45.455	23.077	15.714	25.806	20.918
Much better	33.333	10.000	22.222	9.091	23.077	17.143	12.903	18.367
No answer	0.000	20.000	11.111	0.000	11.538	15.714	9.677	11.735

b) Living room

	1	2	3	4	5	6	7	TOT
Much worse	0.000	10.000	2.778	9.091	11.538	2.857	3.226	4.592
2	16.667	10.000	13.889	0.000	15.385	10.000	12.903	11.735
3	33.333	30.000	25.000	9.091	38.462	28.571	32.258	29.082
4	33.333	20.000	19.444	27.273	11.538	27.143	29.032	23.980
Much better	16.667	20.000	22.222	54.545	19.231	18.571	12.903	20.408
No answer	0.000	10.000	16.667	0.000	3.846	12.857	9.677	10.204

34.2. Comparison of current dwelling to former one for each of the following spaces: (continued)

c) Dining room

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	0.000	7.692	2.857	6.452	4.082
2	8.333	10.000	5.556	0.000	11.538	5.714	19.355	8.673
3	25.000	20.000	30.556	18.182	30.769	20.000	29.032	25.000
4	33.333	10.000	13.889	27.273	15.385	28.571	16.129	21.429
Much better	25.000	50.000	27.778	45.455	19.231	22.857	16.129	25.000
No answer	8.333	10.000	16.667	9.091	15.385	20.000	12.903	15.816

d) Kitchen

	1	2	3	4	5	6	7	TOT
Much worse	33.333	10.000	2.778	0.000	7.692	4.286	6.452	6.633
2	16.667	20.000	8.333	9.091	11.538	8.571	12.903	10.714
3	0.000	40.000	25.000	9.091	26.923	17.143	25.806	20.918
4	25.000	0.000	22.222	45.455	23.077	34.286	25.806	27.551
Much better	25.000	20.000	27.778	36.364	26.923	25.714	19.355	25.510
No answer	0.000	10.000	13.889	0.000	3.846	10.000	9.677	8.673

e) Washroom

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	2.778	0.000	11.538	0.000	9.677	3.571
2	0.000	10.000	11.111	0.000	3.846	4.286	9.677	6.122
3	16.667	20.000	8.333	18.182	11.538	12.857	16.129	13.265
4	8.333	10.000	8.333	27.273	3.846	31.429	29.032	20.408
Much better	50.000	50.000	19.444	18.182	23.077	25.714	12.903	24.490
No answer	25.000	10.000	50.000	36.364	46.154	25.714	22.581	32.143

SECOND FLOOR

f) Master bedroom

	1	2	3	4	5	6	7	TOT
Much worse	8.333	0.000	2.778	0.000	3.846	0.000	0.000	1.531
2	0.000	0.000	0.000	0.000	7.692	11.429	12.903	7.143
3	41.667	30.000	30.556	36.364	19.231	20.000	35.484	27.041
4	0.000	10.000	22.222	18.182	34.615	40.000	16.129	27.041
Much better	50.000	50.000	33.333	45.455	26.923	20.000	29.032	29.592
No answer	0.000	10.000	11.111	0.000	7.692	8.571	6.452	7.653

g) Bedroom

	1	2	3	4	5	6	7	TOT
Much worse	8.333	0.000	2.778	0.000	3.846	2.857	3.226	3.061
2	8.333	0.000	0.000	9.091	3.846	7.143	9.677	5.612
3	8.333	20.000	41.667	27.273	7.692	18.571	29.032	22.959
4	25.000	10.000	13.889	9.091	34.615	37.143	19.355	26.020
Much better	33.333	30.000	19.444	27.273	34.615	20.000	19.355	23.469
No answer	16.667	40.000	22.222	27.273	15.385	14.286	19.355	18.878

34.2. Comparison of current dwelling to former one for each of the following spaces: (continued)

h) Bathroom

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	5.556	9.091	7.692	1.429	16.129	5.612
2	8.333	0.000	8.333	0.000	0.000	4.286	9.677	5.102
3	0.000	0.000	8.333	9.091	0.000	12.857	16.129	9.184
4	25.000	10.000	22.222	27.273	26.923	28.571	22.581	25.000
Much better	58.333	70.000	41.667	54.545	42.308	42.857	25.806	42.857
No answer	8.333	20.000	13.889	0.000	23.077	10.000	9.677	12.245

i) Hallway

	1	2	3	4	5	6	7	TOT
Much worse	0.000	0.000	2.778	9.091	7.692	2.857	0.000	3.061
2	8.333	0.000	2.778	0.000	3.846	5.714	6.452	4.592
3	8.333	30.000	25.000	45.455	26.923	24.286	32.258	26.531
4	33.333	20.000	11.111	18.182	3.846	28.571	3.226	17.347
Much better	33.333	20.000	22.222	27.273	26.923	15.714	16.129	20.408
No answer	16.667	30.000	36.111	0.000	30.769	22.857	41.935	28.061

j) Stair

	1	2	3	4	5	6	7	TOT
Much worse	0.000	10.000	2.778	0.000	7.692	0.000	3.226	2.551
2	0.000	0.000	2.778	0.000	0.000	2.857	0.000	1.531
3	8.333	0.000	8.333	18.182	15.385	5.714	16.129	9.694
4	0.000	20.000	13.889	9.091	3.846	24.286	6.452	14.286
Much better	41.667	30.000	13.889	18.182	15.385	21.429	19.355	20.408
No answer	50.000	40.000	58.333	54.545	57.692	45.714	54.839	51.531

35. Changes that would be made if the units could be redesigned (by number of respondents).

	A	B	C	D	E	F	G	TOT
Add kitchen storage	4	3	5	2	2	26	5	47.000
No Answer	2	2	9	1	5	19	6	44.000
Re-plan entrance	2	1	10	3	2	11	4	33.000
Unit wider (16')	3	1	4	5	2	4	9	28.000
Re-plan kitchen	4	7	0	0	5	4	7	27.000
More windw/nat.light	0	0	0	2	3	7	6	18.000
Storage(int.ext. + loca)	0	0	3	1	1	7	1	13.000
More land	0	0	0	0	1	8	4	13.000
Modify parking layout	0	0	0	0	0	8	4	12.000
Re-plan bathroom	1	0	0	1	1	2	4	9.000
Better insul/floor	0	1	2	2	1	2	1	9.000
Bigger living/dining	1	1	1	2	3	0	0	8.000
Entr. closet dim./none	0	0	1	0	0	7	0	8.000
Open staircase	1	0	4	0	0	1	1	7.000
Quality wall finishes	0	0	2	0	2	2	1	7.000

35. Changes that would be made if the units could be redesigned (by number of respondents). (continued)

More luxury items	0	0	2	0	2	2	1	7.000
Plumb. fixt./ entry loc. basement	0	0	0	0	1	5	1	7.000
Floor finishes	0	0	1	1	2	1	1	6.000
Rear balcony bigger	0	0	0	3	0	1	1	5.000
Add a garage	0	0	0	1	1	3	0	5.000
Interchange liv/dining	0	0	0	0	5	0	0	5.000
No patio dr if no balc/b-wdow	0	0	0	0	0	5	0	5.000
Finished basement std	1	0	1	0	1	1	0	4.000
Bigger 2nd room	0	0	3	0	0	1	0	4.000
Open LR & DR	0	0	0	0	4	0	0	4.000
Toilet(door,dimension)	2	1	0	0	0	0	0	3.000
Stairs Construc/layout	0	0	0	0	0	3	0	3.000
Access basement from ext.	0	0	0	1	0	2	0	3.000
No patio doors / 2nd bedrm/liv	0	0	0	0	2	0	1	3.000
Change heaters mb/kitch/din	0	0	0	0	0	2	1	3.000
Generally bigger	0	0	0	1	1	0	0	2.000
No wall bet. kitch and dining	0	0	0	1	0	1	0	2.000
Private land ownership	0	0	0	0	2	0	0	2.000
Give balcony to all units	0	0	0	0	0	2	0	2.000
Unit longer (40')	0	1	0	0	0	0	0	1.000
Transfer toilet to basement	0	1	0	0	0	0	0	1.000
1 floor too many	0	0	1	0	0	0	0	1.000
Separate liv/dining	0	0	1	0	0	0	0	1.000
Patio	0	0	1	0	0	0	0	1.000
2nd floor as a loft	0	0	0	0	1	0	0	1.000
No step bet. liv. and dining	0	0	0	0	0	1	0	1.000
Bigger MB	0	0	0	0	0	0	1	1.000
Basement staircase too small	0	0	0	0	0	1	0	1.000
Location elect. fixture	0	0	0	0	0	1	0	1.000
Block wall bet. units	0	0	0	0	0	1	0	1.000
Better quality windows	0	0	0	0	0	1	0	1.000
No patio door/kitchen	0	0	0	0	0	1	0	1.000

36.(a) Whether or not there were any problems in sharing the yard area with the neighbors.

	1	2	3	4	5	6	7	TOT
Yes	0.000	10.000	13.889	0.000	38.462	17.143	12.903	16.327
No	100.000	80.000	63.889	63.636	57.692	80.000	67.742	72.449
No answer	0.000	10.000	22.222	36.364	3.846	2.857	19.355	11.224

36.(b) Type of problems encountered.

	1	2	3	4	5	6	7	TOT
Fence placement	0.000	100.000	0.000	0.000	28.571	21.429	0.000	21.053
Lack of privacy	0.000	0.000	50.000	0.000	57.143	21.429	100.000	44.737
Poor access	0.000	0.000	16.667	0.000	0.000	21.429	0.000	10.526
Safety/control	0.000	0.000	33.333	0.000	0.000	7.143	0.000	7.895
Incompatible neighbors	0.000	0.000	0.000	0.000	7.143	21.429	0.000	10.526
Too small	0.000	0.000	0.000	0.000	7.143	0.000	0.000	2.632
Condo/shared work	0.000	0.000	0.000	0.000	0.000	7.143	0.000	2.632

37.(a) Whether or not the neighbors could be heard across the common wall.

	1	2	3	4	5	6	7	TOT
No	16.667	10.000	36.111	18.182	19.231	24.286	35.484	26.020
Yes	83.333	90.000	61.111	81.818	80.769	74.286	64.516	72.959
No answer	0.000	0.000	2.778	0.000	0.000	1.429	0.000	1.020

37.(b) How often the neighbors could be heard.

	1	2	3	4	5	6	7	TOT
Very often	20.000	11.111	0.000	22.222	14.286	3.846	20.000	9.790
Occasionally	50.000	44.444	59.091	66.667	42.857	51.923	45.000	51.049
Almost never	30.000	44.444	40.909	11.111	33.333	38.462	35.000	35.664
No answer	0.000	0.000	0.000	0.000	9.524	5.769	0.000	3.497

37.(c) What was heard.

	1	2	3	4	5	6	7	TOT
Walking	31.579	41.176	18.421	15.385	23.636	53.448	38.235	32.794
Talking	0.000	0.000	2.632	11.538	10.909	12.069	5.882	7.692
Yelling	0.000	5.882	0.000	0.000	3.636	1.724	2.941	2.024
Dogs	0.000	5.882	0.000	0.000	1.818	0.000	0.000	0.810
Music or T.V.	21.053	11.765	28.947	26.923	18.182	12.069	32.353	21.053
Doors closing	26.316	23.529	26.316	15.385	18.182	8.621	5.882	16.194
Plumbing noises	5.263	5.882	2.632	11.538	20.000	1.724	0.000	7.287
Up/dn staircase	5.263	5.882	0.000	11.538	0.000	1.724	8.824	3.644
Mech. noises	5.263	0.000	5.263	3.846	1.818	1.724	2.941	2.834
Construct. noises	0.000	0.000	5.263	3.846	0.000	5.172	0.000	2.429
Others	5.263	0.000	10.526	0.000	1.818	1.724	2.941	3.239

Others: Baby crying and children playing (2) drawers closing (1); impact noise (1); general noises (1).

37.(d) Whether or not this was considered a major disturbance.

	1	2	3	4	5	6	7	TOT
Not Disturbing	50.000	77.778	45.455	33.333	38.095	46.154	35.000	44.755
Sometimes dist.	40.000	0.000	50.000	44.444	42.857	46.154	55.000	44.056
Often dist.	10.000	11.111	4.545	11.111	14.286	5.769	10.000	8.392
Always dist.	0.000	0.000	0.000	11.111	4.762	0.000	0.000	1.399
No answer	0.000	11.111	0.000	0.000	0.000	1.923	0.000	1.399

38. Number of motor vehicles owned.

	1	2	3	4	5	6	7	TOT
None	0.000	0.000	0.000	9.091	0.000	1.429	0.000	1.020
1	66.667	40.000	55.556	72.727	76.923	38.571	48.387	52.041
2	33.333	60.000	36.111	18.182	23.077	58.571	45.161	43.878
More than 2	0.000	0.000	8.333	0.000	0.000	0.000	6.452	2.551
No answer	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510

39. Usual mode of transportation to workplace.

	1	2	3	4	5	6	7	TOT
By foot	0.000	0.000	0.000	0.000	0.000	1.176	0.000	0.465
Bicycle	0.000	0.000	0.000	0.000	0.000	0.000	2.941	0.465
Public transp.	0.000	0.000	13.889	8.333	38.462	29.412	5.882	20.000
Car	100.000	90.000	86.111	91.667	61.538	68.235	91.176	78.140
No answer	0.000	10.000	0.000	0.000	0.000	1.176	0.000	0.930

40. Time spent commuting to and from work.

	1	2	3	4	5	6	7	TOT
Less than 15 min.	50.000	20.000	44.444	18.182	0.000	10.000	29.032	21.429
16-30 min.	33.333	60.000	44.444	54.545	23.077	21.429	38.710	33.163
31 - 45 min.	16.667	10.000	8.333	18.182	34.615	27.143	22.581	21.939
46 - 60 min.	0.000	0.000	2.778	9.091	34.615	20.000	9.677	14.286
61 - 90 min.	0.000	0.000	0.000	0.000	7.692	10.000	0.000	4.592
More than 90 min.	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
No answer	0.000	20.000	0.000	0.000	0.000	10.000	0.000	4.082

41. Location of work.

Project 1, Charlemagne

Same municipality:		**2**
Neighboring municipality:	Repentigny	**1**
Between 2 and 3 mun. away:		**0**
Montreal island:	Montreal	2
	Montreal-Est	2
	Pointe-aux-Trembles	1
	TOT	**5**
Other municipality:	Laval	1
	St-Vincent-de-Paul	1
	Around the region	1
	Terrebonne	1
	TOT	**4**
No answer:		**0**

41. Location of work.
(continued)

Project 2, Legardeur

Same municipality:		0
Neighboring municipality:	Repentigny	2
Montreal island:	Montreal	3
	Outremont	1
	Montreal-Nord	1
	TOT	5
Other municipality:	Longueuil	1
No answer		1

Project 3, Longueuil

Same municipality:		12
Neighboring municipality:		
	St-Hubert	4
	Boucherville	2
	St-Lambert	2
	TOT	8
Between 2 & 3 mun. away:	St-Basile-le-Grand	1
	Côte-ste-Catherine	1
	Beloeil	1
	TOT	3
Montreal island:	Montreal	9
	Anjou	1
	St-Laurent	1
	TOT	11
Other municipality:	On the road	1
No answer:		1

Project 4, Chomedey

Same municipality:		0
Neighboring municipality:	Laval	1
Between 2 & 3 mun. away:		0
Montreal island:	Montreal	6
	Cartierville	1
	St-Laurent	2
	TOT	9
Other municipality:		0
No answer		1

Project 5, Ste-Dorothée

Same municipality:		0
Neighboring municipality:		0
Between 2 & 3 mun. away:	Laval	2
Montreal island:	Downtown Montreal	12
	Montreal	5
	St-Laurent	5
	TOT	22
Other municipality:	Blainville	1
No answer		1

41. Location of work.
(continued)

Project 6, Pointe-aux-Trembles

Same municipality:	**TOT**	**3**
Neighboring municipality:	St-Léonard	1
	Montréal-Est	2
	Anjou	5
	Montréal-Nord	3
	TOT	**11**
Montreal island:	Montreal	42
	Rosemont	1
	Outremont	1
	St-Laurent	3
	Westmount	1
	TOT	**48**
Other municipality:	Boucherville	1
	Longueuil	2
	TOT	**3**
No answer		**5**

Project 7, Ste-Catherine

Same municipality:	**TOT**	**1**
Neighboring municipality:	Delson	2
	St-Constant	1
	TOT	**3**
Between 2 & 3 mun. away:	Laprairie	1
	Chateaugay	1
	Candiac	2
	TOT	**4**
Montreal island:	Montreal	12
	Dorval	2
	St-Laurent	1
	N.D.G	1
	TOT	**16**
Other municipality:	Brossard	2
	Ste-Clothilde	1
	St-Hubert	2
	Varennes	1
	Brossard	2
	TOT	**8**
No answer		**0**

42. Monthly expenses in new house.

Respond.	Mortgage	Elect/ Summer	Taxes	Condo fees	Insurance	Maintenance	Sub-tot	TOT	Previous
Project 1 (no answer/1)									
1	545	-	-	15	-	-	560	-	562
2	530	?	62	0	15	15	622	-	430
3	544	75	63	15	-	-	697	-	475
4	564	30	65	15	58	30	-	762	571
5	765	83	incl. in mrtge	15	25	-	-	888	710
6	574	70	64	10	17	15	-	750	485
7	530	70	70	15	25	-	710	-	620
8	565	35	62	15	35	-	712	-	475
9	734	60	65	15	15	-	889	-	2150
10	450	?	64	15	140	?	669	-	690
11	518	40	62	15	18	25	-	678	325
Project 2 (no answer/1)									
1	780	-	-	-	-	-	780	-	615
2	-	50	-	15	14	-	79	-	500
3	596	30	incl. in mrtge	-	25	15	666	-	unknown
4	670	60	70	-	19	15	834	-	827
5	550	60	65	-	25	15	715	-	585
6	535	70	65	-	15	15	700	-	895
7	650	-	64	-	-	15	729	-	725
8	656	48	64	15	20	-	803	-	651
9	700	50	65	-	25	15	855	-	525
Project 3 (no answer/8)									
1	436	50	135	17	36	-	674	-	770
2	750	20	200	13	15	-	998	-	455
3	700	-	116	13	30	-	859	-	350
4	705	-	117	20	25	10	887	-	505
5	880	-	200	-	17	-	1097	-	697
6	680	80	150	12	25	-	947	-	613
7	864	-	-	12	17	-	893	-	2063-(1000)
8	600	80	-	-	30	-	710	-	581
9	650	-	120	13	35	0	818	-	985
10	676	-	150	15	15	-	856	-	475
11	750	70	156	20	13	-	1009	-	255
12	850	-	-	-	40	-	890	-	765
13	660	118	100	-	25	-	903	-	655
14	900	70	150	0	25	0	-	1145	727
15	725	90	150	-	30	-	995	-	542
16	700	-	125	20	15	-	860	-	965
17	459	85	152	0	20	0	-	716	Nul
18	707	-	-	18	-	-	725	-	485
19	800	-	140	20	25	-	985	-	795
20	696	100	150	20	20	-	-	886	436
21	430	-	133	14	15	-	592	-	457
22	630	-	133	13	18	-	798	-	787
23	900	100	133	20	17	40	-	1210	855

42. Monthly expenses in new house.
(continued)

Respond.	Mortgage	Elect/ Summer	Taxes	Condo fees	Insurance	Maintenance	Sub-tot	TOT	Previous
Project 3 (continued)									
24	544	-	125	15	23	-	707	-	614
25	654	-	135	-	25	-	814	-	405
26	80	-	167	8	38	-	293	-	559
27	370	60	133	14	25	-	577	-	464
28	492	60	150	14	19	-	735	-	564
Project 4 (no answer/3)									
1	850	-	-	20	33	-	903	-	873
2	700	-	60	20	40	-	820	-	535
3	700	106	100	20	15	0	-	941	505
4	708	140	150	25	90	100	-	1213	500
5	1000	-	incl. in mrtge	20	25	0	1045	-	575
6	800	-	150	20	50	-	1020	-	635
7	600	20	100	20	50	20	-	810	620
8	800	100	150	210	17	-	1087	-	540
Project 5 (no answer/0)									
1	680	100	100	30	25	-	935	-	900
2	435	50	100	30	20	10	-	645	1227
3	530	40	0	30	25	0	-	625	498
4	652	-	-	30	23	-	705	-	512
5	640	-	100	-	21	-	761	-	650
6	513	20	120	30	30	-	743	-	620
7	551	-	150	30	18	-	749	-	558
8	630	114	100	30	21	-	885	-	561
9	700	75	100	30	22	20	-	947	509
10	560	-	100	30	30	15	735	-	355
11	595	-	100	30	125	-	850	-	542
12	475	-	100	30	25	-	625	-	265
13	520	150	100	35	21	-	826	-	742
14	560	40	120	30	-	-	950	-	385
15	650	-	100	30	13	-	793	-	?
16	760	100	100	30	17	-	1007	-	632
17	628	70	100	30	20	-	848	-	632
18	665	35	-	30	15	-	745	-	600
19	500	70	100	30	20	50	-	770	875
20	600	-	100	30	40	-	770	-	730
21	540	-	100	30	19	-	679	-	373
22	560	100	100	30	25	-	815	-	657
23	520	35	100	30	20	-	805	-	370
24	540	30	100	30	-	-	700	-	580
25	516	70	100	30	40	-	756	-	518
26	455	130	125	60	40	0	-	810	715

42. Monthly expenses in new house.
(continued)

Respond.	Mortgage	Elect/ Summer	Taxes	Condo fees	Insurance	Maintenance	Sub-tot	TOT	Previous
Project 6 (no answer/7)									
1	615	-	80	15	40	-	795	-	360
2	765	-	60	-	30	-	973	-	422
3	640	-	75	-	20	-	735	-	417
4	0	32	?	20	13	15	80	-	368
5	600	36	50	0	10	-	696	-	440
6	725	40	67	20	24	-	876	-	570
7	650	?	75	25	28	20	798	-	320
8	504	30	50	0	20	30	634	-	385
9	660	40	-	-	-	-	700	-	476
10	780	62	?	?	40	?	882	-	692
11	680	-	-	-	-	-	680	-	640
12	570	40	75	20	40	-	745	-	365
13	660	?	80	?	20	?	760	-	495
14	659	-	50	-	21	-	730	-	695
15	610	-	100	-	25	-	735	-	543
16	620	-	50	-	16	-	686	-	450
17	500	75	50	20	30	-	688	-	525
18	650	-	50	-	20	10	800	-	557
19	720	50	incl. in mrtge	-	-	-	770	-	620
20	760	?	50	0	40	?	850	-	576
21	721	?	?	10	17	?	748	-	561
22	700	80	117	-	29	-	926	-	570
23	597	?	50	-	25	-	672	-	734
24	640	?	?	10	21	?	671	-	630
25	700	?	?	?	34	?	734	-	519
26	640	?	50	0	32	15	737	-	587
27	644	-	50	-	25	-	719	-	637
28	658	95	50	-	36	?	839	-	520
29	513	60	-	-	-	-	573	-	651
30	525	?	50	-	33	-	608	-	590
31	704	?	50	?	45	?	799	-	610
32	480	40	160	30	38	incl. in condo fee	-	738	485
33	599	106	50	-	30	-	795	-	481
34	611	35	-	-	21	-	695	-	534
35	655	?	50	?	16	?	721	-	631
36	710	45	50	?	18	-	823	-	917
37	749	40	-	-	30	-	818	-	665
38	700	-	75	?	10	?	785	-	591
39	580	?	50	-	80	?	710	-	572
40	615	40	100	0	20	25	-	825	545
41	588	65	50	-	20	-	788	-	621
42	500	-	100	50	17	-	667	-	825
43	590	30	70	10	25	-	760	-	530
44	659	110	70	-	25	-	864	-	691
45	602	90	50	-	35	-	777	-	709
46	634	-	50	-	29	-	776	-	483

42. Monthly expenses in new house.
(continued)

Respond.	Mortgage	Elect/ Summer	Taxes	Condo fees	Insurance	Maintenance	Sub-tot	TOT	Previous
Project 6 (continued)									
47	705	-	-	-	23	-	808	-	604
48	600	-	50	20	25	15	710	-	566
49	739	?	75	?	17	?	831	-	560
50	630	?	50	-	37	?	717	-	778
51	730	?	75	20	50	?	875	-	453
52	595	?	50	-	18	-	663	-	298
53	680	80	incl. in mrtge	-	25	?	795	-	300
54	665	?	50	?	20	?	735	-	503
55	610	?	75	?	30	-	715	-	655
56	650	?	50	?	40	?	740	-	401
57	606	?	incl. in mrtge	?	?	?	606	-	540
58	?	?	50	0	30	0	80	-	595
59	704	?	incl. in mrtge	20	13	-	737	-	738
60	643	?	50	20	-	-	613	-	450
61	600	40	50	-	20	-	720	-	450
62	569	37	-	-	33	-	639	-	Unknown
63	721	?	58	0	25	0	804	-	own.1901
Project 7 (no answer/9)									
1	700	?	110	40	15	?	865	-	580
2	600	?	?	?	?	?	600	-	460
3	397	90	150	40	15	-	692	-	own.2090
4	490	40	70	40	21	?	621	-	509
5	550	?	100	40	40	-	730	-	495
6	510	40	100	40	15	?	705	-	445
7	613	40	100	40	-	-	823	-	425
8	567	?	100	45	30	-	752	-	551
9	630	30	100	30	20	30	-	855	505
10	495	35	100	40	20	20	-	738	340
11	530	?	100	40	21	-	691	-	751
12	610	?	92	40	incl. in condo fee	40	782	-	467
13	?	23	?	40	?	?	63	-	585
14	600	109	100	40	18	?	867		425
15	533	60	75	40	30	-	783	-	Unknown
16	640	?	100	40	30	-	810	-	465
17	?	60	?	40	?	?	105	-	544
18	430	25	100	40	19	-	614	-	1700
19	500	69	120	40	40	?	769	-	653
20	500	50	100	40	75	100	875	-	1032
21	500	88	100	40	-	-	728	-	1294
22	400	60	100	40	170	20	790	-	835

43A.(a) Whether or not the expenses in the new dwelling are higher than anticipated.

	1	2	3	4	5	TOT
No	75.000	40.000	47.222	54.545	73.077	57.895
Yes	16.667	30.000	36.111	36.364	26.923	30.526
No answer	8.333	30.000	16.667	9.091	0.000	11.579

(b) Degree to which the expenses exceeded the expected level

	1	2	3	4	5	TOT
slightly higher	0.000	33.333	15.385	25.000	28.571	20.690
2	50.000	66.667	46.154	25.000	42.857	44.828
3	50.000	0.000	30.769	25.000	14.286	24.138
4	0.000	0.000	0.000	0.000	14.286	3. 448
much higher	0.000	0.000	0.000	0.000	0.000	0.000
No answer	0.000	0.000	7.692	25.000	0.000	6.897

43B.(a) Whether or not the expenses in the new dwelling are higher than anticipated.

	6	7	TOT
No	75.714	54.839	69.307
Yes	18.571	25.806	20.792
No answer	5.714	19.355	9.901

(b) Whether or not the extra expenses place a strain on the family budget

	6	7	TOT
Yes	15.714	9.677	13.861
No	80.000	61.290	74.257
No answer	4.286	29.032	11.881

44. Change in spending/saving habits with respect to previous dwelling.

	1	2	3	4	5	TOT
No Change	33.333	50.000	38.889	27.273	11.538	30.526
Saving much less	8.333	20.000	27.778	9.091	23.077	21.053
Saving less	25.000	30.000	25.000	27.273	34.615	28.421
Saving more	16.667	0.000	2.778	18.182	23.077	11.579
Saving much more	8.333	0.000	2.778	9.091	7.692	5.263
No answer	8.333	0.000	2.778	9.091	0.000	3.158

45.(a) Whether or not there was any change in the way the occupants spend their leisure time.

	1	2	3	4	5	6	7	TOT
Yes	33.333	70.000	44.444	81.818	61.538	38.571	32.258	45.408
No	58.333	30.000	52.778	18.182	38.462	57.143	64.516	51.531
No answer	8.333	0.000	2.778	0.000	0.000	4.286	3.226	3.06

45.(b) Specific changes in the way the occupants spend their leisure time.

	1	2	3	4	5	6	7	TOT
Stay at home more	66.667	50.000	63.158	50.000	52.381	70.690	51.724	60.645
Stay at home less	0.000	10.000	5.263	0.000	9.524	0.000	6.897	3.871
Entertain more at home	16.667	30.000	26.316	50.000	33.333	24.138	31.034	29.032
Entertain less at home	16.667	0.000	5.263	0.000	4.762	5.172	10.345	5.806
Others	0.000	10.000	0.000	0.000	0.000	0.000	0.000	0.645

Others: Less eating out (1).

45.(c) Reasons for this change.

	1	2	3	4	5	TOT
Tight budget/less savings	40.000	37.500	27.778	0.000	31.579	25.806
Feels good to be home	20.000	25.000	0.000	16.667	5.263	9.677
Less leisure/more work	20.000	12.500	5.556	0.000	0.000	4.839
Area not as commercial	20.000	0.000	0.000	0.000	0.000	1.61
New born child	0.000	12.500	0.000	0.000	15.789	6.452
Installation	0.000	12.500	33.333	25.000	5.263	17.742
Every body wants to see	0.000	0.000	5.556	25.000	0.000	6.452
More space	0.000	0.000	5.556	16.667	0.000	4.839
Further from loved ones	0.000	0.000	5.556	0.000	10.526	4.839
More transp.time	0.000	0.000	0.000	0.000	5.263	1.613
Having a backyard	0.000	0.000	0.000	0.000	5.263	1.613
No answer	0.000	0.000	16.667	16.667	21.053	14.516

46. How the new house has lived up to the occupants' expectations.

	1	2	3	4	5	6	7	TOT
Much Better than expected	8.333	10.000	0.000	18.182	3.846	7.143	3.226	5.612
Better than expected	16.667	20.000	25.000	18.182	30.769	27.143	25.806	25.510
About the same as expected	58.333	70.000	66.667	45.455	46.154	50.000	64.516	56.122
Worse than expected	8.333	0.000	5.556	18.182	15.385	12.857	6.452	10.204
Much worse than expected	8.333	0.000	2.778	0.000	3.846	0.000	0.000	1.531
No answer	0.000	0.000	0.000	0.000	0.000	2.857	0.000	1.020

47. How long the occupants plan to live in their new home.

	1	2	3	4	5	6	7	TOT
1-2 Years	8.333	0.000	5.556	0.000	11.538	1.429	6.452	4.592
3 - 4 Years	25.000	40.000	30.556	18.182	26.923	20.000	48.387	28.571
5-6 Years	33.333	30.000	16.667	18.182	38.462	37.143	25.806	30.102
7-8 Years	0.000	0.000	0.000	0.000	0.000	1.429	3.226	1.020
+ than 8 Years	0.000	10.000	5.556	9.091	7.692	31.429	12.903	16.327
Do Not Know	33.333	20.000	41.667	54.545	15.385	0.000	0.000	15.816
No answer	0.000	0.000	0.000	0.000	0.000	8.571	3.226	3.571

48. Whether or not the purchase would be recommended to a friend.

	1	2	3	4	5	6	7	TOT
Yes	91.667	100.000	97.222	90.909	88.462	91.429	77.419	90.306
No	0.000	0.000	0.000	0.000	7.692	2.857	9.677	3.571
Yes, with modifications	8.333	0.000	0.000	9.091	0.000	4.286	12.903	4.592
No answer	0.000	0.000	2.778	0.000	3.846	1.429	0.000	1.531

Household Characteristics

49.1. Household size

	1	2	3	4	5	6	7	TOT
1 person	8.333	10.000	19.444	36.364	11.538	12.857	19.355	15.816
2 people	41.667	40.000	38.889	45.455	42.308	40.000	38.710	40.306
3 people	33.333	40.000	33.333	0.000	34.615	32.857	32.258	31.633
4 people	16.667	10.000	5.556	9.091	0.000	10.000	3.226	7.143
5 people	0.000	0.000	0.000	0.000	7.692	2.857	6.452	3.061
6 people	0.000	0.000	2.778	0.000	3.846	0.000	0.000	1.020
No answer	0.000	0.000	0.000	9.091	0.000	1.429	0.000	1.020

49.2. Age of occupants

	1	2	3	4	5	6	7	TOT
0 -17	25.806	24.000	15.294	10.000	24.590	19.653	20.000	19.787
18-24	3.226	8.000	10.588	0.000	19.672	10.405	16.000	11.489
25-34	41.935	52.000	29.412	35.000	36.066	43.353	38.667	39.149
35-44	29.032	4.000	7.059	30.000	6.557	15.607	14.667	13.617
45-54	0.000	0.000	5.882	5.000	1.639	5.202	1.333	3.617
Over 55	0.000	0.000	2.353	0.000	0.000	2.890	2.667	1.915
No answer	0.000	12.000	29.412	20.000	11.475	2.890	6.667	10.426

49.3. Household type

	1	2	3	4	5	6	7	TOT
1 adult alone	8.333	10.000	19.444	36.364	11.538	12.857	22.581	16.327
2 or more adults	0.000	10.000	2.778	9.091	0.000	4.286	3.226	3.571
Single parent w/kids	0.000	0.000	13.889	0.000	23.077	7.143	6.452	9.184
Idem + relative	8.333	0.000	0.000	0.000	0.000	0.000	0.000	0.510
Couple with no kids	41.667	30.000	30.556	36.364	26.923	32.857	32.258	32.143
Couple with kids	41.667	50.000	30.556	9.091	38.462	41.429	32.258	36.224
Idem+relative	0.000	0.000	2.778	0.000	0.000	0.000	3.226	1.020
No answer	0.000	0.000	0.000	9.091	0.000	1.429	0.000	1.020

50. Number of owners.

	1	2	3	4	5	6	7	TOT
1 owner	50.000	20.000	69.444	54.545	42.308	35.294	45.161	45.361
2 owners	50.000	80.000	30.556	45.455	53.846	61.765	54.839	53.093
3 owners	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
More than 3	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
No answer	0.000	0.000	0.000	0.000	3.846	2.941	0.000	1.546

51. Level of education of respondents <u>and</u> their spouse/companion

	1	2	3	4	5	6	7	TOT
Primary School	4.545	10.526	0.000	0.000	0.000	1.587	1.754	1.744
Secondary school	36.364	52.632	38.596	16.667	17.778	38.095	40.351	35.465
CEGEP	27.273	26.316	22.807	22.222	20.000	20.635	14.035	20.639
University *	27.273	10.526	36.842	55.556	15.556	32.540	29.825	30.232
Trade School	4.545	0.000	1.754	5.556	46.667	7.143	7.018	10.756
No Answer	0.000	0.000	0.000	0.000	0.000	0.000	7.018	1.163

* Includes some university schooling

52. Employment status

	1	2	3	4	5	TOT
Self employed	8.333	10.526	3.448	22.222	11.364	9.202
Full time	58.333	63.158	68.966	66.667	72.727	67.485
Part-time	12.500	5.263	17.241	11.111	2.273	10.429
Not working	8.333	5.263	8.621	0.000	4.545	6.135
Full-time student	0.000	0.000	0.000	0.000	2.273	0.613
Retired	0.000	5.263	0.000	0.000	0.000	0.613
Other	4.167	5.263	0.000	0.000	4.545	2.454
No answer	8.333	5.263	1.724	0.000	2.273	3.067

Others: Maternity leave (1); working on a temporary basis (1); at home (1); in training for a job (1); both part-time student and part-time worker (1); full time student and part time worker (1).

53. Type of occupation of respondents and their spouse/companion.

	1	2	3	4	5	6	7	TOT
FFFLNQ	0.000	0.000	0.000	0.000	2.857	0.000	0.000	0.305
Labor	4.762	11.765	0.000	0.000	5.714	11.024	9.615	7.317
Semi-skilled	14.286	0.000	4.348	0.000	0.000	2.362	5.769	3.354
Skilled	14.286	23.529	21.739	16.129	17.143	22.047	36.538	22.866
SSC	28.571	41.176	32.609	12.903	37.143	40.945	30.769	34.451
Professional	14.286	0.000	6.522	61.290	11.429	2.362	3.846	10.061
Man or Adm	19.048	5.882	26.087	9.677	20.000	6.299	3.846	11.280
HomeMKR	4.762	0.000	4.348	0.000	2.857	3.150	3.846	3.049
Other	0.000	5.882	4.348	0.000	0.000	3.937	5.769	3.354
No answer	0.000	11.765	0.000	0.000	2.857	7.874	0.000	3.963

Others: Computer analyst (5); full time student (2); retired (1); free lance (1); communication (2)

54 . Annual household income.

	1	2	3	4	5	6	7	TOT
<9 999$	0.000	0.000	0.000	0.000	0.000	1.429	0.000	0.510
10 000-19 000$	0.000	10.000	2.778	0.000	0.000	0.000	0.000	1.020
20 000-29 000$	16.667	0.000	5.556	0.000	3.846	7.143	0.000	5.102
30 000-39 000$	16.667	40.000	13.889	18.182	23.077	24.286	32.258	23.469
40 000-49 000$	25.000	20.000	25.000	36.364	19.231	28.571	38.710	28.061
>50 000$	41.667	30.000	47.222	27.273	50.000	31.429	19.355	35.204
No Answer	0.000	0.000	5.556	18.182	3.846	7.143	9.677	6.633

Builder Profile

1. Companies:

Project #0	Name of company:	ANOBID CONSTRUCTION CORP.	A
	Information furnished by:	Mr. José DiBona	
	Position in company:	President	
	Involvement in project:	Construction Manager	
	Date of interview:	November 19, 1991	
Project #1 & Project #2	Name of company:	LES ENTREPRISES J. & R. BOLDUC	B
	Information furnished by:	Mr. Jules Bolduc, Mr. Renaud Bolduc	
	Position in company:	President	
	Involvement in project:	Construction Managers	
	Date of interview:	November 18, 1991	
Project #3	Name of company:	LES CONSTRUCTIONS CLEARY INC.	C
	Information furnished by:	Mr. Danny Cleary	
	Position in company:	President	
	Involvement in project:	Construction Manager	
	Date of interview:	August 26, 1991	
Project #4	Name of company:	DUVO CONSTRUCTION LTÉE.	D
	Information furnished by:	Mr. E. K. Voland	
	Position in company:	President	
	Involvement in project:	Construction Manager	
	Date of interview:	August 29, 1991	
Project #5	Name of company:	NELESCO CONSTRUCTION INC.	E
	Information furnished by:	Mr. Garry Garbarino	
	Position in company:	President	
	Involvement in project:	Construction Manager	
	Date of interview:	September 4, 1991	
Project #6	Name of company:	CONSTRUCTION LEO MARCOTTE INC.	F
	Information furnished by:	Mr. Leo marcotte	
	Position in company:	President	
	Involvement in project:	Construction Manager	
	Date of interview:	January 9, 1992	
Project #7	Name of company:	SIGPRA CONSTRUCTION	G
	Information furnished by:	Mr. Jean-Marc Daigle	
	Position in company:	Project employee	
	Involvement in project:	Construction Manager	
	Date of interview:	August 29, 1991	

2. Age of company:

	A	B	C	D	E	F	G
Years	3	12	5	4	5	15	4

3. Number of employees:

	A	B	C	D	E	F	G
Labour	0	1	7	0	1	0	2
Foremen	0	0	1	1	1	2	1
Sales	0	1	1	0	1	4	1
Mgmt/Adm	1	0	2	2	1	6	2
TOTAL	1	2	7	3	4	12	6

4. Scope of work done by company:

	A	B	C	D	E	F	G
Land Development	N	N	Y	Y	Y	Y	Y
General Contracting	Y	Y	Y	Y	Y	Y	Y
Sub-contracting	N	N	N	N	Y	N	N
Other	Y*	N	N	N	N	N	N

* Professional project management

5. Percentage of work subcontracted:

A	B	C	D	E	F	G
80%	100%	95%	100%	90%	100%	98%

6. Type of projects built:

	A	B	C	D	E	F	G
Industrial	Y	N	N	N	N	N	Y
Commercial	Y	Y	N	N	Y	Y	Y
Institutional	N	N	N	N	N	N	N
Residential	Y	Y	Y	Y	Y	Y	Y

a) Approximate number of residential units built annually:

	A	B	C	D	E	F	G
No. of units	1-2	30-35	25-75	80	60	70	600

b) Types of residential units built by percentage of total:

	A	B	C	D	E	F	G
SFD	100%	90%	15%	0%	30%	12.5%	5%
Semi detached	0%	0%	0%	0%	30%	12.5%	0%
Townhouses	0%	10%	25%	3%	10%	70%	15%
Apartments	0%	0%	60%	97%	30%	5%	80%

c) Size of apartment buildings built by percentage of total apartment construction:

	C	D	E	F	G
Low rise (1 to 3 stories)	100%	100%	80%	100%	25%
Medium rise (4 to 6 stories)	0%	0%	10%	0%	25%
High rise (7 stories or more)	0%	0%	10%	0%	50%

d) Whether or not this was the first experience with affordable housing:

	A	B	C	D	E	F	G
First experience	Y	Y	Y	Y	N	N	Y

Project Initiation

7. Where the builder got the idea to build 14-foot townhouses:

	A	B	C	D	E	F	G
Other projects	N	Y	Y	N	Y	N	N
Newspaper/magazine	Y	N	Y	Y	Y	Y	Y
Demonstration unit	Y	N	N	N	N	Y	N
Other	N	N	N	N	N	N	N

8. Whether or not there was any hesitation about building the units:

	A	B	C	D	E	F	G
Hesitation	N	N	N	N	Y*	Y*	N

* Both concerns were with the narrow width of the units

9. Whether or not the land was owned prior to the project:

	A	B	C	D	E	F	G
Land owned	N	N	N	Y	N	Y	Y

10. Execution of design and working drawings:

	A		B		C		D		E		F		G	
	D	WD	D	WD	D	WD	D	WD	D	WD	D	WD	D	WD
In house technician	N	N	N	N	N	N	N	N	N	N	Y	Y	Y	N
In house architect	N	N	N	N	N	N	Y	N	N	N	N	N	N	N
Independent technician	N	N	N	Y	N	N	N	Y	N	N	N	N	N	Y
Independent architect	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	N

11. Contractors who had already built in the same municipality as the current project:

	A	B	C	D	E	F	G
Built in municipality	N	N	Y	Y	N	Y	N

a) How the experience influenced the decisions in the current project:

C. Unit design: preference for open plan
Material selection: preference for brick exterior and casement windows
Marketing approach: advertisements aimed at renters in the area; adds on radio and on leisure and entertainment sections of local newspaper ie. not in the "homes for sale" section.

D. Land subdivision: separate parking area; in this price range, local preferences would tend towards a full basement and outdoor parking instead of an indoor garage.
Unit design: Kitchens towards the back of the house; popularity of sunken living rooms
Material selection: brick on the exterior
Division of property: forced into condominium; knew ahead of time that 14-foot zoning would not be permitted
Marketing approach: based on a housing study compiled by the city; was able to compare condominiums in the same price range and knew that these units had a higher value

F. Land subdivision: familiar with rowhousing construction in the area
Unit design: Kitchens towards the back of the house
Material selection: brick on the exterior
Marketing approach: advertize monthly payment; distribute brochures to mailboxes of apartments in the neighbourhood; stress room-by-room comparisons rather than overall dimensions

12. Options offered:

• All builders offered options to the buyers as follows:

	A	B	C	D	E	F	G
Floor plans	X					X	
Exterior finishes	X						
Floor finishes	X	X	X	X	X	X	X
Paint colors	X	X		X			
Kitchen cabinets	X	X			X	X	X
Bathroom fixtures	X	X	X	X	X	X	X
Plumbing fixtures	X	X				X	
Lighting fixtures	X	X	X			X	X
Wood finishes	X	X				X	X
Other						X*	

* Interior railings

13. Whether or not the buyers were given the option of purchasing a unit with an unpartitioned second floor:

	A	B	C	D	E	F	G
Option given	N	N	N	N	N	Y	N

14. Whether or not the buyers were permitted to change the interior layout at will prior to or during construction:

	A	B	C	D	E	F	G
Changes permitted	Y*	Y*	Y	Y*	N	N	Y*

* Modifications were allowed provided they were minor ie. requiring no structural changes

15. Whether or not the buyers were permitted to do any of the construction work themselves in exchange for a reduction in sales price:

	A	B	C	D	E	F	G
Work permitted	Y*	N	N	N	N	N	N

* Any type of arrangement was possible

16. Whether or not the options were thought to be helpful in increasing sales:

	A	B	C	D	E	F	G
Options helpful	n/a	Y	Y	Y	N	Y	Y

17. When the sales were finalized (by percentage of total sales):

	A	B	C	D	E	F	G
Before any construction	0%	52%	25%	100%	100%	100%	35%
After some construction	50%	10%	25%	0%	0%	0%	50%
After seeing completed unit	50%	38%	50%	0%	0%	0%	15%

18. Whether or not any of the buyers cancelled their purchase:

	A	B	C	D	E	F	G
Cancelled purchase	Y	Y	N	N	Y	Y	N

a) Reasons for cancelling purchase:

A,B,F. buyer unable to obtain financing
A. buyer lost employment
B. buyer was unsatisfied with finished product (bought on plan)
E. buyer unaware that he had purchased a condominium rather than a townhouse under freehold ownership

19. Whether or not the builders knew which buyers were fist-time homeowners:

- All builders knew who were the first-time home buyers

a) Percentage of unit sales to first-time buyers:

	A	B	C	D	E	F	G
First-time buyers	100%	80%	90%	100%	75%	95%	90%

20. Whether or not there were any particular demands made by first-time buyers which were not common among other buyers:

	A	B	C	D	E	F	G
Special demands	N	N	N	Y	Y	N	Y

a) What the demands were:

D,E. generally expect more value
D. higher concern for privacy
G. more informed, more cautious

21. Whether or the any of the buyers expressed any concern about having only two bedrooms:

	A	B	C	D	E	F	G
Expressed concern	Y	Y	Y	N	N	N	Y

a) Percentage of buyers that expressed concern:

	A	B	C	D	E	F	G
Expressed concern	20%	5%	10%	N	N	N	2%

Project Delivery

22. Project duration (in months):

	A	B1	B2	C	D	E	F	G
From inception to construction start	4	0.5	2	1	x	1.5	2.5	1
From construction start to finish	3	7	7	5*	x	2	4.5	3
Construction finish to occupancy	x	1	x	x	x	x	0.5	x
From inception to construction finish	7	7.5	9	x	x	3.5	8	4
From inception to full occupancy	x	8.5	x	x	4	3.5	8.5	x

* 30% completion

23. Whether or not the construction work progressed faster than in other projects of similar scale.

	A	B	C	D	E	F	G
Progressed faster	Y	Y	N	N	N	Y	Y

a) Why projects progressed faster:

A. structure is very basic; only slightly faster, since finishes take most of the time and the finishes in these homes are the same as those in others

B. able to build them in series; build blocks of eight units as you would one large house

F. rowhousing is quicker; labour readily available; simple design; many units contained within a small area

G. seven units in five days-frame and roof

E. opposite is true; small size of units leaves little room to move around in and slows down the construction process

24. Whether or not the speed of erection increased with each block.

	A	B	C	D	E	F	G
Speed increased	n/a	Y	Y	N	Y	N	Y

25. Number of employees required for this project.

	A	B	C	D	E	F	G
Labour	0	1	7	0	1	0	2
Foremen	0	0	1	1	1	1	1
Sales	0	1	1	0	1	2	1
Mgmt/Adm	1	0	2	2	1	6	2
TOTAL	1	2	7	3	4	9	6

26. Whether or not the offer of options affected the delivery of the units.

	A	B	C	D	E	F	G
Delivery affected	n/a	N	Y	Y	N	N	Y

a) How the delivery was affected.

	A	B	C	D	E	F	G
Difficulty in coordination			Y	Y			Y
Slowdown in construction			Y	Y			Y
Errors & complications			N	Y			Y

27. Improvements that would be made if a new project were to be started:

A. Reduce construction costs further by using cheaper finishing materials, less fenestration and smaller units (1000 sq. ft.); try to fit three bedrooms.

B. Would try to acquire 14-foot land subdivision; place parking in front of each unit.

C. Would open the stair which leads to the basement in order to add a sense of spaciousness to the interior.

E. Would try to acquire 14-foot land subdivision; condominium arrangement has proven to be a major problem.

F. More careful site planning to accommodate parking in a more manageable fashion

G. Would build units at an angle in order to separate the entrances, add privacy and add a sense of identity to the units; would replace entrance closet, since it blocks the view into the house; would build in larger parcels of land to accommodate better parking arrangements.

28. Whether or not the builders saw potential for more developments like this one in the future.

- All builders answered YES

a) Reasons:

A. market exists; need more cooperation from municipalities
B. market exists; demand should continue for one or two more years
C. market exists
D. market exists for affordable housing, and rowhousing is an efficient way of providing it; need more cooperation from municipalities to allow for more creative site planning alternatives; condominiums are a problem, since they are less marketable and require more parking spaces per unit than houses under freehold ownership; by-laws should at least allow parking on a separate lot and allow freehold ownership of rowhouses.
E. market exists for affordable housing
F. market exists for affordable housing; this design is adaptable to many places
G. conditions are right; demand should decrease substantially once the deadlines for the provincial and municipal subsidies expire

Cost Savings

29. Cost savings which were achieved:

A. Economies of scale: approx. 10%
Market/economy: approx. 10% on labour only

B. Economies of scale: approx. 15% on materials
Grouping/planning: None; no need for masonry wall but communal parking and other required extras cost more
Prefabricated components: None; cost slightly more but more efficient construction progress and less material wastage
Market/economy: approx. 10%
Material wastage: somewhat less wastage but no major savings

C. Economies of scale: None; had low prices to begin with
Grouping/planning: approx. $4000 per block wall and $4000 per water cut (need only two water cuts for every three units)
Material replacement: plastic water pipes; no real savings, just more convenient
Market/economy: approx. 10% on labour
Simplicity: approx. 5%
Material wastage: approx. 20% less wastage

D. Grouping/planning: one water cut for every four units
Standardization: some savings
Simplicity: some savings
Material waste: no real savings

E. Grouping/planning: need for only one water cut per group of units
Standardization: just more convenient; no real savings
Material waste: approx. 5% savings

F. Grouping/planning: higher surveying fees; 25% less land required; approx. 15% savings on materials
Market/economy: approx. 10% on labour
Standardization: savings of about 10 hours worth of labour per house
Simplicity: approx. $50 per house
Material waste: waste approx. 5% compared to 20% for other types of units

G. Economies of scale: approx. 5%
Market/economy: 10%-15% on labour; 5% on material
Material wastage: approx. 15%

a) Trades which offered the highest savings:

A. Rough carpentry
B. None
C. None
D. None
E. Steel contractor (for balconies and railings)
F. None; general savings of approx. 5%
G. Plumbing

S1. Whether or not any resistance was encountered in the surrounding neighborhood/region.

	A	B1	B2	C	D	E	F	G
Resistance?	N	N	N	N	N	Y	N	Y

a) What type of resistance:

Type of resistance (#)	E	G
Informal, verbal complaints	Y (10-15)	Y (20)
Written complaints	Y (approx. 20)	Y (20)
Signed petitions	Y	N
Legal action	Y [1]	N
Other	N	Y [2]

1. Attempt to stop zoning changes which would have permitted a development of higher density.
2. Demonstrations

b) Main reason for opposition:

Reason for opposition	E	G
Size of units	N	N
Price of units	N	N
Density of the development	N	N
Appearance of the units	N	N
Public image <u>ie.</u> "Affordable Housing"	Y	Y

c) Whether or not resistance changed when the project neared completion:

	E	G
Resistance changed?	Y	Y

d) How resistance changed:

E,G: Resistance gradually faded

e) Why resistance faded:

E: Density was reduced; request for zoning changes was retracted
Quality of the project was not cheap

G: Builder called a meeting; changed elevations and convinced public that the project was a quality development

f) Effect of resistance on sales:

	E	G
Very minimal	x	x
2		
3		
4		
Very severe		

S2. Number of authorities required to get approval from for the project.

	A	B1	B2	C	D	E	F	G
No. of authorities	1	1	1	1	1	1	1	1

a) Which authorities:

A, B1, B2, C, D, E, F, G: Municipality

b) Number of submissions required to get approval from each authority:

	A	B1	B2	C	D	E	F	G
First authority	2	1	4	1	1	1	1	4

c) Amount of time it took to process the first submission (in weeks).

	A	B1	B2	C	D	E	F	G
First authority	8	1.5	1	1	8	4	4	0.25

d) Total amount of time it took to get a building permit (in weeks).

	A	B1	B2	C	D	E	F	G
Amount of time	18	1.5	6	1	8	4	4	4

e) Reactions to the length of time it took to acquire a building permit.

	A	B1	B2	C	D	E	F	G
Much too long	x		x					
Somewhat long								
About right		x		x	x	x	x	x
Other comments	x*							

* Approval for new land subdivision was very time consuming; application was sent to Quebec for approval by the provincial government

f) Effect of long application processing time on sales.

	A	B2
Very minimal		
2		
3	x	
4		
Very severe		x*

* Extended waiting period enabled the competing builders to catch up

S3. Whether or not the builder tried to obtain 14-foot zoning.

- None of the builders interviewed tried to obtain 14-foot zoning

a) Reasons for not applying for 14-foot zoning:

A, B1,B2, C, F, G. Would have taken too long to get approval

D. Felt that it would have not been possible, based on previous discussions with city officials

E. Felt he could do better with condominiums

b) Whether or not the builders felt that sales would have been increased if they were permitted to subdivide the land into 14-foot wide parcels.

	A	B1	B2	C	D	E	F	G
No effect on sales				x			x	x
Sales increase by 0-10%		x	x		x			
More than 100% higher	x							
Not sure						x		

S4. Whether or not any regulatory obstacles were encountered in the planning and construction of the project.

	A	B1	B2	C	D	E	F	G
Obstacles encountered	Y	Y	Y	N	N	Y	N	Y

a) Type of obstacle encountered:

A. Labour unions were an obstacle; prices too inflated for affordable housing projects; project would have been delivered faster and cheaper without unionized labour

B1,B2, G. Some hesitation/resistance from the municipal authorities concerning the image of the project; concern over the possibility of the project becoming a "ghetto"

E. Existing regulations cannot accommodate narrow-front rowhousing properly; municipality generally very cooperative and open to new ideas, then regulation make them difficult to apply

b) Whether or not the regulatory obstacles encountered compromised the quality of the project.

	A	B1	B2	E	G
Quality affected	Y	N	N	N	N

c) Impact of compromises on sales.

	A	B1	B2	E	G
Very minimal					
2					
3					
4	x				
Very severe					

S5. Average rate of sales of units (units per month).

	A	B1	B2	C	D	E	F	G
Rate of sales	n/a	6	6	10	4	24	87	37

a) Whether or not this rate was constant throughout the duration of the project.

	A	B1	B2	C	D	E	F	G
Constant rate of sales	n/a	N	N	Y	Y	Y	N	Y

b) How rate of sales changed during the project.

B1,B2. Rapid decrease after first month; increase after model unit was opened

F. Rapid decrease after first month; sales levelled out at approx. 2 unit per week

Questionnaire

Part One - Occupants

#000-000

Date:________ /________ /________
DAY MONTH YEAR

As you may be aware, the design of the home you have purchased is related to a concept which was developed at McGill University. As part of a follow -up study, the researchers would now like to assess your initial satisfaction with your new home and how it compares to your former dwelling. The feedback will be used to identify the successes and failures of the design and to make whatever changes and recommendations are necessary for improvement in the future.

It is important that the occupant who fills out the questionnaire be a registered owner of the property. Any additional comments he/she may have are welcome and may be added on the backside of the paper.

All data obtained from this questionnaire will be used for statistical purposes only, and information contained within the individual questionnaires will remain strictly confidential.

Your cooperation is greatly appreciated.

Your Previous Dwelling

1. **Were the occupants of your previous dwelling the same as those living in your current dwelling?** Yes ☐ No ☐

   If no, what were the differences?

   ____

   ____

   ____

2. **How long did you live in your previous dwelling?**

   Less than 1 year ☐ 1 or 2 years ☐ 3 or 4 years ☐

   5 or 6 years ☐ 7 or 8 years ☐ more than 8 years ☐

3. **In what municipality was your previous dwelling located?** ______________________________

4. **What type of dwelling was it?**

   Apartment ☐ Townhouse ☐ Semi-detached ☐ Single Family Detached ☐

5. **How was the property held?**

   Rented ☐ Condominium ownership ☐

   Co-op ownership ☐ Freehold ownership ☐

   If the property was owned, was it the first home you owned? Yes ☐ No ☐

6. **What kind of parking did you have?**

   Public street ☐ Outdoor parking lot ☐ Outdoor carport ☐ Indoor garage ☐

7. **What kind of private outdoor space did you have?**

   None ☐ Front balcony/porch ☐ Back balcony/porch ☐

   Front yard ☐ Back yard ☐ Other ______________________________

8. **What were your <u>average monthly</u> expenses in 1990 as a tenant or an owner?**

As an owner:		As a tenant:	
Mortgage	$ ________	Rent	$ ________
Electricity (summer)	$ ________	Electricity (summer)	$ ________
Electricity (winter) **or** Heating	$ ________	Electricity (winter) **or** Heating (if applicable)	$ ________
Maintenance	$ ________	Maintenance	$ ________
Insurance	$ ________	Insurance	$ ________
Property Taxes	$ ________		

9. How close were you to each of the following?

	within walking distance	within a 10 min. drive	within a 20 min drive	more than a 20 min. drive
▪ Shopping facilities	☐	☐	☐	☐
▪ Medical services	☐	☐	☐	☐
▪ Schools	☐	☐	☐	☐
▪ Public transportation	☐	☐	☐	☐

10. How did you get to work most of the time? (Check only one please)

Walking ☐ Bicycle ☐ Public transportation ☐ Motor vehicle ☐

Other ______________________________

11. How long did it take you on the average to get to work? (Check only one please)

Less than 15 min. ☐ 16 min. to 30 min. ☐ 31 min. to 45 min. ☐

46 min. to 60 min. ☐ 61 min. to 90 min. ☐ more than 90 min. ☐

Your Search for a New Home

12. How much time did you spend looking for your new home?

Was not actively shopping ☐ Up to 6 months ☐ 7 to 12 months ☐

13 to 24 months ☐ more than 24 months ☐

13. How many projects did you visit during that time?

(NOT including the one you are now living in)

None ☐ 1 to 3 ☐ 4 to 6 ☐ 7 to 9 ☐ 10 to 12 ☐ More than 12 ☐

14. Were you specifically looking to buy a newly-built house?

Yes ☐ No ☐ Had no preference ☐

15. What type of dwelling would you have bought if you could have done as you pleased?

Rate the following in order of preference:

	LEAST PREFERRED			MOST PREFERRED
▪ Single family detached	1	2	3	4
▪ Semi detached	1	2	3	4
▪ Townhouse	1	2	3	4
▪ Condominium apartment	1	2	3	4

16. **Where would you have liked to live?**

Rate the following in order of preference:

	LEAST PREFERRED				MOST PREFERRED
▪ City center	1	2	3	4	5
▪ Within 10 min. from city center	1	2	3	4	5
▪ Suburb	1	2	3	4	5
▪ Small town	1	2	3	4	5
▪ Country	1	2	3	4	5

17. **How important were each of the following factors to you in your search for a new dwelling?**

	NOT IMPORTANT AT ALL				EXTREMELY IMPORTANT
▪ Proximity to work	1	2	3	4	5
▪ Proximity to public transportation	1	2	3	4	5
▪ Proximity to medical services	1	2	3	4	5
▪ Proximity to shopping facilities	1	2	3	4	5
▪ Proximity to schools	1	2	3	4	5

18. **How many bedrooms were you hoping to have in your new home?**

One ☐ Two ☐ Three ☐ Four ☐ More than four ☐

19. **Were there any particular features which were very important for you to have in your new home?** Yes ☐ No ☐

If yes, what were they?

a)____

b)____

c)____

20. **What especially appealed to you about this home?**

____

____

____

21. After visiting the project for the first time, how long did it take you to make the decision to buy?

Decision was made immediately ☐ 1 or 2 weeks ☐ 3 or 4 weeks ☐
5 or 6 weeks ☐ More than 6 weeks ☐

22. How many other projects did you visit after seeing this one?

None ☐ 1 to 3 ☐ 4 to 6 ☐ 7 to 9 ☐ 10 to 12 ☐ More than 12 ☐

23. Did you see a model unit prior to your purchase? Yes ☐ No ☐

24. Were there any particular aspects about the design your new home that you felt uneasy about at the time of purchase? Yes ☐ No ☐

If yes, what were they?

a)____

b)____

c)____

25. How important were each of the following factors in your decision to purchase your new house?

	NOT IMPORTANT AT ALL				EXTREMELY IMPORTANT
▪ Exterior appearance	1	2	3	4	5
▪ Interior plan	1	2	3	4	5
▪ Price	1	2	3	4	5
▪ The potential for a return on investment	1	2	3	4	5
▪ Presence of a private outdoor space	1	2	3	4	5
▪ Presence of a private parking space	1	2	3	4	5

26. Did you qualify for the provincial and/or municipal subsidies which were being offered at the time of purchase? Yes ☐ No ☐

If yes, do you think you would have purchased your dwelling anyway if these subsidies were NOT available?

Yes ☐ No ☐ Not sure ☐

Your New Home

27. When did you move into your new home? Date ________ / ________ / ________
DAY MONTH YEAR

28. Which of the following features do you have in your dwelling?

Washroom on first floor	☐	Front balcony	☐
Open kitchen	☐	Rear balcony	☐
Separate shower (in 2nd floor bathroom)	☐	Window on the side wall (if you live in an end unit)	☐
Whirlpool bath	☐	Finished basement	☐
Fireplace	☐		

29. Aside from basic furnishings, have you done any work on your new home since you bought it? Yes ☐ No ☐

If yes, please specify what type of work was done for each floor:

	BASEMENT	GROUND FLOOR	SECOND FLOOR
Insulation	☐	☐	☐
Partitions	☐	☐	☐
Drywall or plasterwork	☐	☐	☐
Wall finishes (paint,wallpaper)	☐	☐	☐
Floor finishes (wood, carpet, etc.)	☐	☐	☐
Wood finishes (trims, baseboards, etc.)	☐	☐	☐
Kitchen/bathroom cupboards	☐	☐	☐
Electrical wiring	☐	☐	☐
Electrical fixtures (lighting, switches, etc.)	☐	☐	☐
Rough plumbing	☐	☐	☐
Plumbing fixtures	☐	☐	☐
Other (please specify) ________________	☐	☐	☐
Other (please specify) ________________	☐	☐	☐

30. Is there any work which you plan to do? Yes ☐ No ☐

If yes, please specify what work you plan to do:

First floor: ____

____

____

____

____

Second floor: ____

____

____

____

____

Basement: ____

____

____

____

____

31. Would you have done more of the construction or finishing work yourself in exchange for a reduction in the cost of the home? Yes ☐ No ☐

If yes, which of the following work would you have considered?

Erect partitions	☐	Install drywall	☐
Install rough plumbing	☐	Tape and plaster joints in drywall	☐
Install plumbing fixtures	☐	Install flooring finishes	☐
Install electrical wiring (if permitted by code)	☐	Painting	☐
		Landscaping	☐
Install electrical fixtures (if permitted by code)	☐		

32. Would you have accepted an unpartitioned second floor (ie. a loft space) for a price reduction of $5,000? Yes ☐ No ☐

33. **Please indicate your level of satisfaction with each of the following points and evaluate how they compare to your previous dwelling. Specific comments may be added on the reverse side of this sheet.**

	LEVEL OF SATISFACTION						COMPARED TO PREVIOUS DWELLING					
	VERY DISAPPOINTED				VERY SATISFIED	not applicable	MUCH WORSE				MUCH BETTER	not applicable
Location:												
a) Proximity to work	1	2	3	4	5	N/A	1	2	3	4	5	N/A
b) Proximity to public transportation	1	2	3	4	5		1	2	3	4	5	
c) Proximity to medical services	1	2	3	4	5		1	2	3	4	5	
d) Proximity to shopping centers	1	2	3	4	5		1	2	3	4	5	
e) Proximity to schools	1	2	3	4	5	N/A	1	2	3	4	5	N/A
Site:												
f) General image of project	1	2	3	4	5		1	2	3	4	5	
g) Sense of community/neighborhood	1	2	3	4	5		1	2	3	4	5	
h) Safety of children	1	2	3	4	5	N/A	1	2	3	4	5	N/A
i) Location of parking	1	2	3	4	5		1	2	3	4	5	
j) Size of front yard	1	2	3	4	5		1	2	3	4	5	N/A
k) Size of back yard	1	2	3	4	5		1	2	3	4	5	N/A
l) Level of privacy	1	2	3	4	5		1	2	3	4	5	
Unit:												
m) Overall design/layout	1	2	3	4	5		1	2	3	4	5	
n) Total amount of space	1	2	3	4	5		1	2	3	4	5	
o) Amount of storage space	1	2	3	4	5		1	2	3	4	5	
p) Flexibility of space	1	2	3	4	5		1	2	3	4	5	
q) Exterior appearance	1	2	3	4	5		1	2	3	4	5	
r) Interior appearance	1	2	3	4	5		1	2	3	4	5	
s) Quality of exterior finishes	1	2	3	4	5		1	2	3	4	5	
t) Quality of interior finishes	1	2	3	4	5		1	2	3	4	5	
u) Amount of natural lighting	1	2	3	4	5		1	2	3	4	5	
v) Amount of cross-ventilation	1	2	3	4	5		1	2	3	4	5	
w) Soundproofing between units	1	2	3	4	5		1	2	3	4	5	N/A

34. **Please indicate your level of satisfaction with the general use of each of the following spaces and evaluate how they compare to your previous dwelling. Specific comments may be added on the reverse side of this sheet.**

	LEVEL OF SATISFACTION						COMPARED TO PREVIOUS DWELLING					
	VERY DISAPPOINTED				VERY SATISFIED	not applicable	MUCH WORSE				MUCH BETTER	not applicable
Ground floor:												
a) Entrance	1	2	3	4	5		1	2	3	4	5	
b) Living room	1	2	3	4	5		1	2	3	4	5	
c) Dining room	1	2	3	4	5		1	2	3	4	5	N/A
d) Kitchen	1	2	3	4	5		1	2	3	4	5	
e) Water closet	1	2	3	4	5	N/A	1	2	3	4	5	N/A
Second floor:												
f) Master bedroom	1	2	3	4	5		1	2	3	4	5	
g) Bedroom	1	2	3	4	5		1	2	3	4	5	N/A
h) Bathroom	1	2	3	4	5		1	2	3	4	5	
i) Hallway	1	2	3	4	5		1	2	3	4	5	N/A
j) Stairs	1	2	3	4	5		1	2	3	4	5	N/A

35. **If you could redesign the unit, what changes would you make?**

a) ______________________________

____

b) ______________________________

____

c) ______________________________

____

36. **Are you having any problem sharing the yard area with your neighbors?** Yes ☐ No ☐

If yes, please specify:

____

____

____

____

____

37. Do you hear your neighbors through your common wall? Yes ☐ No ☐

If yes, how often?

Very often ☐ Occasionally ☐ Almost never ☐

What do you hear?

Walking ☐ Talking ☐ Music or television ☐

Doors closing ☐ Plumbing noise ☐ Other ________________

Do you consider this to be a major disturbance?

Not at all ☐ Sometimes ☐ Often ☐ Always ☐

38. How many motor vehicles do you own?

None ☐ One ☐ Two ☐ More than two ☐

39. How do you get to work most of the time? (Check only one please)

Walking ☐ Bicycle ☐ Public transportation ☐ Motor vehicle ☐

Other ________________________________

40. How long does it take you to get to work? (Check only one please)

Less than 15 min. ☐ 16 min. to 30 min. ☐ 31 min. to 45 min. ☐

46 min. to 60 min. ☐ 61 min. to 90 min. ☐ more than 90 min. ☐

41. Where is your work located? ________________ / ________________

STREET MUNICIPALITY

42. What are your average monthly expenses in your new home?

Mortgage	$ ________	Electricity (summer)	$ ________
Taxes	$ ________	Condominium fees	$ ________
Insurance	$ ________	Maintenance	$ ________

43. Are these expenses higher than you anticipated? Yes ☐ No ☐

If yes, how would you rate the difference?

VERY SLIGHTLY HIGHER THAN ANTICIPATED — VERY MUCH HIGHER THAN ANTICIPATED

1 2 3 4 5

44. How have your spending/saving habits changed since you moved into your new home?

No change ☐

Saving much less than in previous dwelling ☐

Saving less than in previous dwelling ☐

Saving more than in previous dwelling ☐

Saving much more than in previous dwelling ☐

45. Has there been any change in the way you spend your leisure time since you moved?

Yes ☐ No ☐

If yes, how has it changed?

Spend more time at home ☐ Spend less time at home ☐

Entertain more at home ☐ Entertain less at home ☐

Other____

Why do you think this is?

____

____

46. In general, how has your new home lived up to the expectations you had at the time of purchase?

Much better than expected ☐ Worse than expected ☐

Better than expected ☐ Much worse than expected ☐

About the same as expected ☐

47. How long do you plan to live here?

1 or 2 years ☐ 3 or 4 years ☐ 5 or 6 years ☐

7 or 8 years ☐ more than 8 years ☐ Don't know ☐

48. Would you recommend your purchase to a friend? Yes ☐ No ☐

Household Characteristics

In these last few questions, we would like to have some basic information about the characteristics of your household. As with all of the previous data that has been gathered, this information will be used only for statistical purposes. The information contained within the individual questionnaires will be kept strictly confidential.

49. Please indicate the age, sex and relationship to you of each person who lives in this dwelling.

PERSON	AGE	SEX M	SEX F	RELATION TO YOU (check one box only for each person) SPOUSE/ COMPANION	CHILD	PARENT	OTHER (please specify)
a) Yourself	______	☐	☐	-	-	-	-
b) Person 2	______	☐	☐	☐	☐	☐	__________
c) Person 3	______	☐	☐	☐	☐	☐	__________
d) Person 4	______	☐	☐	☐	☐	☐	__________
e) Person 5	______	☐	☐	☐	☐	☐	__________

50. Aside from yourself, is any other person registered as an owner of the dwelling you are now living in? Yes ☐ No ☐

If yes, indicate who else holds a title on the property:

a) Person 2 ☐
b) Person 3 ☐
c) Person 4 ☐
d) Person 5 ☐
e) Other ☐

51. What is the highest level of formal education which you and your spouse or companion, (if applicable) have completed?

	YOU	YOUR SPOUSE/COMPANION (if applicable)
Primary school	☐	☐
Secondary school	☐	☐
CEGEP	☐	☐
Some university	☐	☐
University graduate	☐	☐
Trade school (specify)	______________	______________

52. Which of the following categories best describes the current employment status of you and your spouse or companion (if applicable)?

	YOU	YOUR SPOUSE/COMPANION (if applicable)
Self employed	☐	☐
Full-time employee	☐	☐
Part-time employee	☐	☐
Unemployed	☐	☐
Full-time student	☐	☐
Retired	☐	☐
Other (specify)	______________	______________

53. Which of the following occupational groups comes closest to describing your current occupation (or former, if retired) and that of your spouse or companion (if applicable)?

	YOU	YOUR SPOUSE/COMPANION (if applicable)
Farming, fishing, forestry, logging, mining and quarrying occupations	☐	☐
Labourer	☐	☐
Semi-skilled	☐	☐
Skilled tradesman	☐	☐
Sales, service, clerical	☐	☐
Professional	☐	☐
Managerial or administrative	☐	☐
Homemaker	☐	☐
Other (specify)	______________	______________

54. Considering all sources, approximately what is your total annual household income?

Less than $9,999	☐	$30,000 to $39,999	☐
$10,000 to $19,999	☐	$40,000 to $49,999	☐
$20,000 to $29,999	☐	$50,000 or more	☐

THANK YOU FOR YOUR COOPERATION

Questionnaire

Part Two - Developer

Information furnished by: ______________________________

Position in company: ______________________________

Involvement in project: ______________________________

Date: ______________

Developer

1. **Name of company:** ______________________________________

2. **In what year was this company established?** ______

3. **How many permanent employees are there?**
   - Labour ____
   - Foremen ____
   - Sales ____
   - Management/Administration ____
   - TOTAL ____

4. **What is the scope of work performed by this company?**
   - Land development ____
   - General contracting ____
   - Sub-contracting ____
   - Other: ______________

5. **What percentage of the construction work is sub-contracted?** ________%

6. **What type of projects have you built?**
   - Industrial ____
   - Commercial ____
   - Institutional ____
   - Residential ____

   If residential, approximately how many units do you build per year? ________

   What types of units are they?
   - Single family detached ____% of total
   - Semi detached ____% of total
   - Townhouses ____% of total
   - Apartments ____% of total

   If apartments, what size?
   - Low rise (1 to 3 stories) ____
   - Medium rise (4 to 6 stories) ____
   - High rise (7 stories or more) ____

   Is this your first experience with affordable housing? Yes ☐ No ☐

Project Initiation

7. Where did the idea to build townhouses 14 feet wide come from?

Other projects around Montreal ____

Newspaper/magazine article ____

Visited demonstration unit at McGill ____

Other ______________________________

8. Did you have any hesitation about building these units? Yes ☐ No ☐

If yes, what was your hesitation about?

____

____

9. Was land owned by you before the project was initiated? Yes ☐ No ☐

10. Who executed the design and working drawings for the housing units?

	Design	Working Drawings
In-house technician	☐	☐
In-house architect	☐	☐
Independent technician	☐	☐
Independent architect	☐	☐

11. Have you built any housing units in this municipality prior to this project? Yes ☐ No ☐

If yes, did this experience influence any of the following aspects of your current project?

Land subdivision ☐ How? ______________________________

____

____

Unit design ☐ How? ______________________________

____

____

Material selection ☐ How? ______________________________

____

____

Division of property ☐ How? ______________________________

____

____

Marketing approach ☐ How? ______________________________

____

____

12. **Where any options offered to the buyers?** Yes ☐ No ☐

If yes, what were they?

- ☐ Floor Plans: ____________
- ☐ Exterior finishes: ____________
- ☐ Floor finishes: ____________
- ☐ Paint colors: ____________
- ☐ Kitchen cabinets: ____________
- ☐ Bathroom fixtures: ____________
- ☐ Plumbing fixtures: ____________
- ☐ Lighting fixtures: ____________
- ☐ Wood finishes: ____________
- ☐ Other: ____________

13. **Were the buyers given the option of purchasing a unit with an unpartitioned upper floor?** Yes ☐ No ☐

14. **Were the buyers permitted to change the interior layout at will prior to or during construction?** Yes ☐ No ☐ Sometimes ☐

Explain: ____________

____

15. **Were the buyers permitted to do any of the construction work themselves in exchange for a reduction in sales price?** Yes ☐ No ☐

If yes, what work were they allowed to do?

____

____

16. **Do you feel that the options offered were helpful in increasing sales?** Yes ☐ No ☐

17. **When did the buyers finalize their purchase?** Specify numbers or percentages

Before any construction was under way	________	or ______%
Only after construction on some units was started	________	or ______%
Only after seeing a completed unit	________	or ______%

18. **Did any of the buyers cancel their purchase?** Yes ☐ No ☐

If yes, for what reasons?

____

____

____

19. Did you know which buyers were first-time buyers? Yes ☐ No ☐

If yes, what percentage of the homes were sold to first-time buyers? ___________%

20. Did you find that there were some particular demands made by the first-time buyers which are not common among other buyers? Yes ☐ No ☐

If yes, what are they?

a) ______________________________

b) ______________________________

c) ______________________________

21. Did the buyers express any concern about having only two bedrooms? Yes ☐ No ☐

If yes, how many? ________ or ________%

Project Delivery

22. What was the project duration from inception to occupation? Specify the dates.

Decision to initiate project __________

Start of construction __________

Completion of construction __________

Full occupancy of units __________

23. Did the work progress faster than in other projects of similar scale? Yes ☐ No ☐

If yes, why do you think so?

____

____

____

____

24. Did the speed of erection increase with each block? Yes ☐ No ☐

25. How many employees were required for this project?

Labour _____

Foremen _____

Sales _____

Management/Administration _____

TOTAL _____

26. Did the offer of options affect the delivery of the units ? Yes ☐ No ☐

If yes, in what way?

☐ Noticeable difficulty in coordinating trades

☐ Noticeable slowdown in construction progress

☐ Errors and complications

☐ Other: ____________________

27. If you were to start the project all over, what changes or improvements would you make to the design of the units and land subdivision?

____

____

____

28. Do you see potential for more developments like this one in the future? Yes ☐ No ☐

If yes, please explain

____

____

____

Cost Savings

29. Indicate whether or not any savings were achieved through any of the following and comment on the type and magnitude of the savings:

Economies of scale

- ____________________
- ____________________

Grouping/Planning

- condominium arrangement ____________________
- ____________________
- ____________________

Material Replacement

- TJL joists for solid joists ____________________
- fire separation for fire wall ____________________
- larger bricks/blocks ____________________
- ____________________
- ____________________

Prefabrication

- front stairs ______
- rear balcony ______
- front balcony ______
- trusses/dormer ______
- ______
- ______

Market/Economy

- labor availability ______
- recession ______
- ______
- ______

Standardization

- openings ______
- limited choice of plans, ______
  colors, finishes, etc... ______
- ______
- ______

Simplicity

- no staggers ______
- proximity of plumbing fixtures ______
- ______
- ______

Material Waste

- 14' lengths ______
- ______
- ______

Which trades offered the highest savings? ______

______

______

______

PUBLIC OPPOSITION

S1. Did you encounter any resistance in the surrounding neighbourhood/region in your effort to implement this project? Yes ☐ No ☐

If yes, what type of resistance did you encounter?

Informal, verbal complaints ☐ How many? ____________

Written complaints ☐ How many? ____________

Signed petitions ☐ How many signatures? ____________

Legal action ☐ Specify: ____________

Other (please specify)____________

What was the main reason for the opposition?

Size of units ☐

Price of units ☐

Density of the development ☐

Appearance of the units ☐

Public image ie. "Affordable Housing" ☐

Other (please specify)____________

Did the level of resistance change as the project neared completion?

Yes ☐ No ☐

If yes, how?

☐

Why do you think so?

____

____

How would you rate the impact of the public resistance on your sales?

VERY MINIMAL				VERY SEVERE
1	2	3	4	5

REGULATORY OBSTACLES

S2. How many authorities did you have to get approval from to build your project?

a) What were they?

1. ______________________ 3. ______________________

2. ______________________ 4. ______________________

b) How many submissions did it take to get approval from each authority?

1. _____ 2. _____ 3. _____ 4. _____

c) How long did it take to process the first submission?

1. _____wks	2. _____wks	3. _____wks	4. _____wks
_____mo	_____mo	_____mo	_____mo

d) Altogether, how long did it take you to get your building permit? _______ weeks

_______ months

e) How do you feel about the length of time it took to get approval relative to your other projects?

Much too long ☐

Somewhat long ☐

About right ☐

Other comments:____

____

If you feel that it took too long, do you think that these delays had an impact on your sales? Yes ☐ No ☐

If yes, how would you rate this impact ?

VERY MINIMAL				VERY SEVERE
1	2	3	4	5

S3. Did you try to obtain 14-foot zoning for your project? Yes ☐ No ☐

If yes, what reason was given for the refusal?

____

____

If no, why not?

____

____

a) Do you think that your sales would have been increased if you were permitted to subdivide your land into 14-foot wide parcels? Yes ☐ No ☐ Not Sure ☐

If yes, by what percentage would you estimate?

0% to 10% ☐	11% to 20% ☐	21% to 30% ☐
31% to 40% ☐	41% to 50% ☐	51% to 60% ☐
61% to 70% ☐	71% to 80% ☐	81% to 90% ☐
91% to 100% ☐	More than 100% ☐	

S4. Aside from the 14-foot zoning, did you encounter any regulatory obstacles in the planning and construction of your project? Yes ☐ No ☐

If yes, what were they?

____

____

Do you feel that the quality of your project was significantly compromised because of these obstacles? Yes ☐ No ☐

If yes, how?

____

____

How would you rate the impact of these compromises on your sales?

VERY MINIMAL				VERY SEVERE
1	2	3	4	5

SALE OF UNITS

S5. At what average rate were the units sold? approx. ________ / week
approx. ________ / month

a) Was this rate constant throughout the duration of the project? Yes ☐ No ☐

If no, how did the rate of sales change during the project?

____

____

____

COST BREAKDOWN

The building costs have been subdivided into eleven sections. Only the total costs for each section are required. Place a check beside those items which are included in the cost and add any others which have not been accounted for on the right hand side. All costs should include both labour and materials. Indicate whether costs are for a single unit or for a block.

- ☐ Costs are for a single unit
- ☐ Costs are for a group of ____ units

SITEWORK ....$ _______

Including: *Other:*
- ☐ Excavation
- ☐ French drain
- ☐ Backfill
- ☐ Grading

BASEMENT..$ _______

Including: *Other:*
- ☐ Footings
- ☐ Basement walls
- ☐ Basement floor slab

MASONRY CONSTRUCTION ....$ _______

Including: *Other:*
- ☐ Concrete block mitoyen wall

ROUGH CARPENTRY..........................$ _______

Including: *Other:*
- ☐ Frame
- ☐ Roof trusses
- ☐ Sheathing

EXTERIOR DOORS AND WINDOWS.....$ _______

Including: *Other:*
- ☐ Front door
- ☐ Patio door
- ☐ Garage door
- ☐ Windows

INSULATION/WATERPROOFING.........$ _______

Including: *Other:*
- ☐ Wall insulation
- ☐ Roof insulation
- ☐ Basement waterproofing
- ☐ Flashing
- ☐ Vapour barriers
- ☐ Roofing shingles

SERVICES...$ _______

Including:
- ☐ Rough plumbing
- ☐ Electrical wiring

Other:

INTERIORS ....$ _______

Including:
- ☐ Interior doors and frames
- ☐ Gypsum Wallboard
- ☐ Joints-taped & plastered
- ☐ Paint
- ☐ Lighting fixtures
- ☐ Plumbing fixtures
- ☐ Floor finishes
- ☐ Finish carpentry
- ☐ Interior railing

Other:

FURNISHINGS ....$ _______

Including:
- ☐ Kitchen Cabinets
- ☐ Laundry cabinets
- ☐ Vanities

Other:

EXTERIOR FINISHES ....$ _______

Including:
- ☐ Brick
- ☐ Aluminum
- ☐ Aggregate
- ☐ Cement finishing
- ☐ Aluminum soffits
- ☐ Roof/attic vents
- ☐ Gutters

Other:

SITE TREATMENT ....$ _______

Including:
- ☐ Exterior concrete stairs
- ☐ Exterior decks
- ☐ Exterior railing
- ☐ Landscaping
- ☐ Paving

Other:

OTHER ____________________ ....$ _______

Including:

TOTAL <u>CONSTRUCTION</u> COST OF
A STANDARD UNIT OR BLOCK = $ ________
(Does NOT include land, infrastructure, overhead and profit)