

# The Next Home

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Numerous recent socio-demographic changes have contributed to a shift in housing accommodation away from the traditional North American single-detached home towards a variety of dwelling types which have in common two highly significant features: a reduced dwelling size and increased unit density. Smaller families, the proliferation of the non-traditional family type and of the two-income family, a decrease in household size, and an increase in the population of elderly citizens have created the demand for a housing unit that is both smaller and more efficient than the large, detached house that many middle-class Canadians took for granted in their youths. Builders and designers can no longer ignore the new contemporary household with its diversity of interior design needs in their consideration of future housing prototypes. The Next Home – a research project of the McGill School of Architecture Affordable Homes Program, to be presented as a demonstration unit on the McGill campus in the summer of 1996 – is a direct response to these new housing needs. The Next Home extends the research undertaken on the Grow Home project of 1990: an affordable, narrow-front, rowhouse prototype of which 5,000 units were subsequently built in the Montreal area. Key features of the Next Home include buying only the quantity of space that the user needs and can afford, housing affordability, designing the interior layout by selecting from a catalogue of components, flexibility to change and grow, choice of facade design, environmental responsibility and comfort, export potential, and a new urban perspective.

Today's adult Canadians conduct their lives in many ways unlike their parents and grandparents. In order to accommodate the fluctuations in today's households as they move from stage to stage in their evolving life cycles, an adaptable and responsive housing form is urgently required. The new flexible unit must be able to change in accordance with the household changes of its occupants. The centrality of the television in the living and family spaces of the house, the need for communications outlets (telephone, computer) in most rooms, the growth of home offices, the accommodation of freezer and microwave in the kitchen to facilitate the increasingly rushed schedules of residents: all of these functions and activities will need to be addressed adequately in

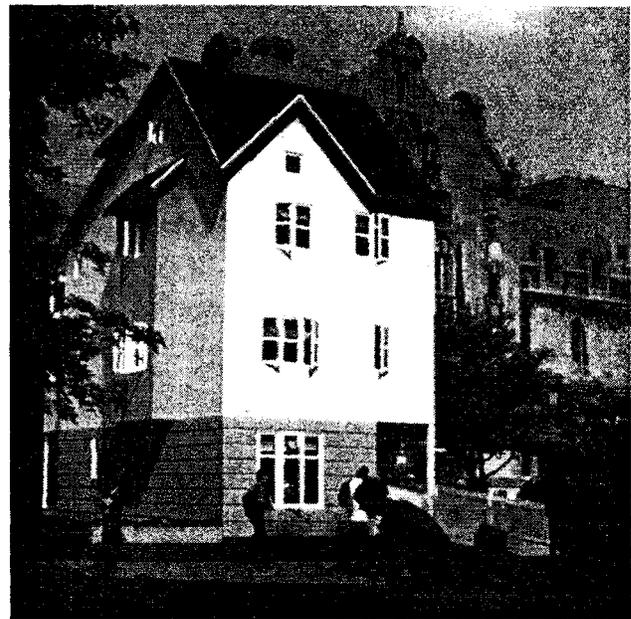


Fig. 1. The Next Home demonstration unit on the campus of McGill University in September 1996. The house, built as part of the School of Architecture's Affordable Homes Program provided students, who participated in the design and construction of the unit, an opportunity to test new ideas and get feedback from builders, professionals, and the public at large.

homes where more women than ever participate in the paid work force and where everyone – male and female – simply works harder and longer. In both the design and technical spheres of the Next Home, a lifestyle of increased technological complexity and reduced leisure time will be acknowledged in all aspects from the design of living rooms and bathrooms to the provision of vital electronic lifelines.

The restructuring of the North American economy away from resource-based activities and heavy manufacturing industries resulting in a greater population concentration around urban centres whose economies are primarily service- and information-based will influence housing production and consumption in Canada. Also significant is the movement of

manufacturing business to lower-wage-paying countries, exacerbating the financial plight of Canadian workers. These trends demonstrate the need for a new type of home: one that can be built affordably on a smaller than conventional lot in denser communities and that can be modified to suit the particular lifestyle of its user. Affordability continues to be a major impediment to home ownership for many. Land and infrastructure costs have doubled in the past twenty years and have assumed a much higher proportion of the total price of a new house, presenting a major problem for most people considering their first purchase of a house, especially in times of economic uncertainty when lack of job security forces earners to regard their personal financial situations as precarious at best. The Next Home – which offers prospective buyers close to 700 square feet of living space for \$50,000 (including land!) in a city such as Montreal – is a long-awaited solution to this crisis in the housing market.

The last few years have witnessed the downturn of the North American real estate market: a period characterized by companies who are no longer willing or able to take bold risks in housing development. Moreover, the majority of house construction in Canada is still undertaken by small companies who build between 25 and 100 units per year and who are more cautious than ever in their investment and building activities. Both phenomena have initiated a downsizing of house design, resulting in the emergence of higher-density planned communities. In addition, the "move-up" market of homeowners is smaller now than ever before, creating new activity in the renovation sector which is rapidly becoming more vibrant than the new-house market. An increasingly popular trend of late has been the opening of home renovation "supermarkets" where homeowners are encouraged to participate actively in the improvement and/or expansion of their homes: a trend which complements the idea of user involvement at the design stage of the Next Home.

With decreased domestic economic activity in Canada, it is becoming apparent that in order to maintain the vital and active levels experienced by the homebuilding industry in the past few decades, the export of housing and housing technologies and products should be actively pursued. The Next Home is especially designed to be prefabricated and marketed in order to accommodate a foreign client who might wish to purchase a complete house, a single one of its components, or a variety of building products.

A sustainable society is able to satisfy its economic and social needs without jeopardizing the prospects of future generations. The notion of sustainable development is essentially based on the conservation of natural resources which

requires that: the consumption of renewable resources be reduced to allow the earth's natural cycles to make them available at a sustainable rate, non-renewable resources be recycled to make them available for processing into new products, and the efficiency of use of non-renewable non-recyclable resources be improved. The selection of building products and systems for the Next Home is based upon these essential principles.

One of the fundamental distinguishing features of the Next Home is the option extended to buyers of purchasing the type and "amount" of house that they need and can afford. This option is achieved by offering a single structure which can be built and sold as a single-family unit, a duplex, or a triplex. The four levels of the Next Home structure can not only be arranged in a manner that suits the present requirements of its residents but can also be re-arranged at a future date to accommodate household and family changes. The adaptability of Next Home configuration includes the flexibility for builders of placing the house in a community context as a detached or semi-detached structure or in a row of like houses.

The users of the Next Home will be able to choose from a catalogue of interior components to suit their individual lifestyles and budgets. These components (kitchen, bathroom, etc.) are selected at the preconstruction stage and allow future residents to "consume" only those elements they require. With the added facility of computer imaging, users will be able to preview the consequences of their selections.

As part of the design of the Next Home facade, the user in a multiunit structure can choose from a range of fenestration and door accessories, provided by the builder and designed by an architect, which will determine the final visual appearance of the openings. Once the openings have been selected, the user chooses from a variety of window and door options to complete the design of the opening and to create a personal facade for the unit. Such an element of choice not only provides personalization but creates visual diversification in a row of Next Home structures.

The need to house a diversity of users within the same structure and in the same community demands a revision of not only the manner in which subdivisions are zoned but of the way houses are designed and marketed. The Next Home has been designed in terms of volumes to be subdivided: the units can be transformed from one type to another at the pre- and postoccupancy stages, while combining subdivided structures and grouping them in various ways increases density and reduces costs. Integrating a variety of households in a single structure is a strategy which answers the urgent need to accommodate a wide diversity of users and household types.