

ESEARCH HIGHLIGHTS

April 2002 Socio-economic Series Issue 101

PRO-HOME: A PROGRESSIVE, PLANNED APPROACH TO AFFORDABLE HOME OWNERSHIP

Introduction

The incidence of homelessness in some Canadian cities emphasizes a lack of affordable housing and the need for housing solutions that would benefit low-income households. This occurrence is particularly evident in cities with low vacancy rates and high housing costs, such as Toronto. In 1998, the cost of an average starter home in Toronto was beyond the means of more than two thirds (about 600,000) of Toronto households that did not already own a house.

Research funded by Canada Mortgage and Housing Corporation (CMHC), under its External Research Program, describes a new incremental or "progressive" approach to home building; it examines also its potential to increase access to affordable home ownership in Canada. The proposed design and development approach, named "Pro-Home", does not rely on government subsidy.

Objectives

The research objectives for this project were as follows:

- Define the context and rationale for developing an incremental approach to housing production in Canada, including the potential target market for Pro-Home.
- Examine a number of Canadian and international precedents of incremental housing approaches and draw lessons from them.
- Describe the Pro-Home concept through design drawings and three-dimensional models that illustrate key features.
- Explore the feasibility and potential of the Pro-Home concept through a hypothetical application scenario at a potential demonstration site.
- Propose an implementation framework identifying key organizational elements that bridge the gap between concept and action.

Background

An incremental approach to housing development is not a new concept. In fact, it is a form of owner-built development that characterized pre-1950s housing in many Canadian cities. Since the 1960s, the approach has also been encouraged in developing countries by the World Bank and the United Nations Centre for Human Settlements.

Schemes vary from provision of municipal infrastructure, to less planned approaches with no services. These schemes—particularly those involving owner-builders—have enabled a wider range of income groups to achieve home ownership both with and, more often, without government assistance.

In the first half of the 1900s, lower income, immigrant families developed large portions of older Canadian cities using their own, and in some cases their neighbours', labour and capital. Subdivided park or farm lots were developed unevenly, without any overall plan, but this approach provided affordable homes for many working-class families. According to some estimates, as much as 25 per cent of housing built in Toronto between 1900 and 1913 was self-built.

These early owner-built homes included, among others, the cottage (1850s-1930s), the tarpaper shack (1910-20s), the Eaton's home (1918), the basement home (1950s) and the bungalow and basement (1960s). Figure 1 shows an early kit house.





Figure 1: Early kit house, Toronto



At the start of the 1900s, the introduction of building, planning and health regulations in Toronto began to impede incremental housing development. By mid-century, development practices were beginning to exclude the more modest owner-builder, grow-as-you-go solution, in favour of new, fully planned and serviced developments.

In the relatively rapid shift from unplanned to planned housing development, a housing process accessible to a wide range of income groups was replaced with a housing product for affluent households.

Depending on interest rates, households below the 50th and 60th income percentile lost the option of developing their own properties gradually. As a result, these families were forced to become tenants in high-rise buildings that began to appear in inner-city areas during the 1960s.

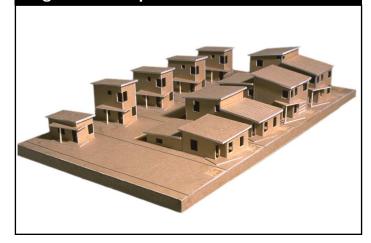
The Pro-Home concept

The Pro-Home concept embodies the following key features:

- incremental—Pro-Home allows homeowners to start with a home they can afford and then to expand or alter it as circumstances evolve.
- affordable—Pro-Home enables home ownership by seeing housing as a process rather than product.
- flexible—A Pro-Home can be built by a contractor, the owner, or a combination of both; it can also include an accessory unit, which can be used as a source of income.

A Pro-Home may be built either in sections, beginning with a core that can be added to, horizontally or vertically, or as a complete shell with the interior left unfinished. In the first instance, each section is fully habitable, whereas in the second option, the owner can reside in the enclosed space or basement while completing the remaining superstructure. The house design can use popular construction methods or prefabrication packages that can be easily deconstructed into separate units, to enable construction in stages.

Figure 2: Pro-Home community at various stages of development

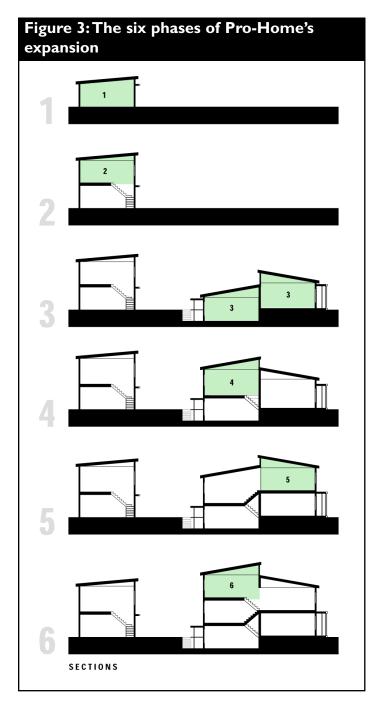


Pro-Home's focus on staged expansion distinguishes it from Grow Home, which concentrates on reconfiguring the interior space over time. Sprout, also a Canadian concept, is designed to accommodate expansion like Pro-Home, but it differs in that initial construction involves a small starter home, as opposed to a more basic core section or just the exterior shell.

Construction of a Pro-Home might progress over a period of time as follows: a single-storey coach house unit is built at the rear of a lot; a second storey is added to the coach house; the basement and a ground floor section of a starter home are built at the front of the lot; extensions are added to the ground floor unit; a second storey is added to the main house; and finally, a third floor completes the front house, with the rear building used as either a garage or a coach house (Figure 3).

The standard size of a Pro-Home floor plate is $6.1 \text{ m} \times 6.1 \text{ m}$ (20 ft \times 20 ft). The walls and roof are matched to this to facilitate future expansion and renovation, and each additional floor is the same standard size. The floor plan can be configured to accommodate rental units, live-in flats or otherwise arranged according to the specific needs of the owner.

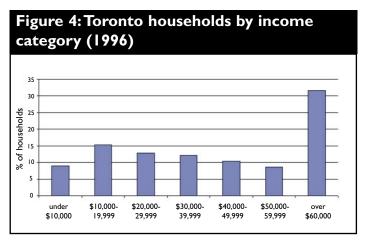
As the house expands from one phase to the next, the roof can be removed and new floor and wall panels added. The existing roof can be reused and placed directly on top of the new walls. Prefabricated floors are framed to incorporate future phase additions, such as areas for stair openings and mechanical services.



Market and feasibility analyses: Toronto as a case in point

According to data published by CMHC, the average starter house price in the Toronto Census Metropolitan Area was \$201,337 in the first half of 1998. The estimated annual household income necessary to cover mortgage

payments, property taxes and heating costs rose from \$53,821 in the first half of 1997 to \$64,838 in the first half of 1998, an increase of 17 per cent. According to Statistics Canada, the annual income for the majority of Toronto households (68 per cent) was less than \$60,000 in 1996 (Figure 4). In other words, by 1998, most households could not afford an average starter home.



The analysis indicated that not only is there a sizeable potential market for Pro-Home in Toronto but it is also distributed across the city. It is estimated that Pro-Home would enable as many as 224,000 additional households within Toronto to purchase a starter home. A similar need for a practical solution such as Pro-Home is also evident in other cities.

To illustrate Pro-Home's feasibility, a preliminary pro forma and development budget were developed using an actual Toronto site. An underlying assumption was that the site would be developed on a not-for-profit basis. The analysis demonstrated that Pro-Home development does not require subsidies or reductions in land market value or to development levies. It also confirmed the availability of financing.

Depending on the development scenario, Pro-Home can potentially increase access to home ownership by a significant margin. In Toronto, for example, using even a fully developed model (basement and ground floor section), the qualifying income for a Pro-Home in 2000 was estimated at \$41,745. This is \$23,000 lower than the estimated annual income (\$64,750) required in 2000 for an average existing starter home.

Implementation framework

Certain organizational aspects could contribute to the success of incremental housing development. For example, partnerships with non-profit groups will likely increase a development's potential for creating affordable housing. The inclusion of a developer, a planning and design firm as well as a prefabricated homes producer could also be instrumental to reducing costs.

10-step implementation process

- 1. Identify demonstration sites.
- 2. Solicit proposals from developers.
- 3. Develop concept plan and housing proposal.
- 4. Conduct consultation/focus groups.
- 5. Form private/public partnership(s).
- 6. Prepare detailed implementation plan.
- 7. Subdivide land.
- 8. Construct model homes.
- 9. Establish building store/resource centre.
- 10. Begin construction of housing development.

Conclusions

Pro-Home offers a planned, incremental approach to housing development specifically geared to making home ownership accessible to low-income households by a means not currently available through other approaches to home ownership. It allows buyers to start with a home they can afford, and then expand and renovate as their circumstances change. The option of an accessory unit and homeowners participating in the home-building process help to reduce the cost of owning and maintaining a home.

CMHC Project Manager: Fanis Grammenos

Research Consultant: John van Nostrand, Planning Alliance

Housing Research at CMHC

Under Part IX of the *National Housing Act*, the Government of Canada provides funds to CMHC to conduct research into the social, economic and technical aspects of housing and related fields, and to undertake the publishing and distribution of the results of this research.

This fact sheet is one of a series intended to inform you of the nature and scope of CMHC's research.

To find more Research Highlights plus a wide variety of information products, visit our Web site at

www.cmhc.ca

or contact:

Canada Mortgage and Housing Corporation 700 Montreal Road Ottawa, Ontario KIA 0P7

Phone: I 800 668-2642 Fax: I 800 245-9274

OUR WEB SITE ADDRESS: www.cmhc.ca