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External Research Program



Pro-Home: A Progressive, Planned
Approach to Affordable Home Ownership



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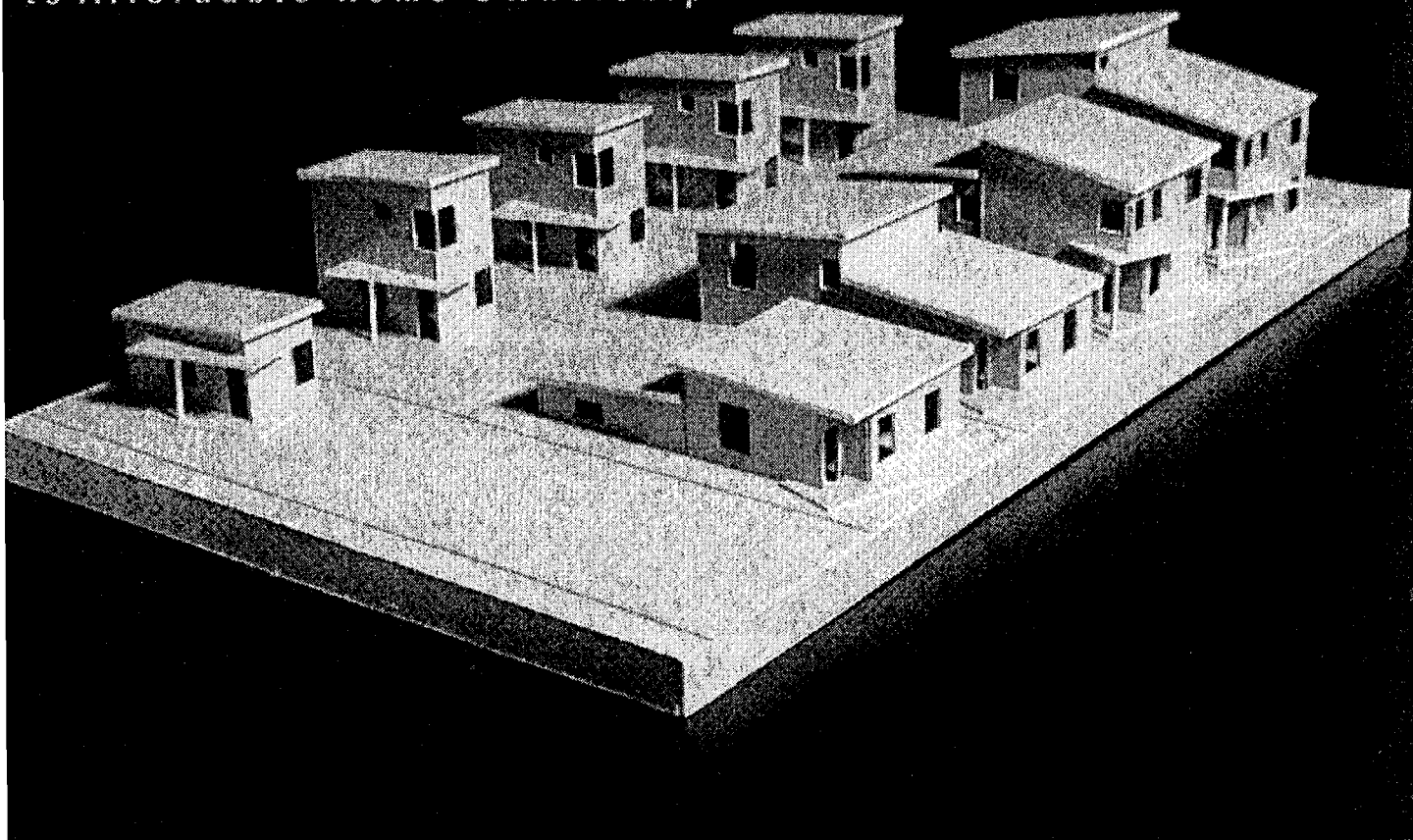
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A Progressive, Planned Approach
to Affordable Home Ownership



Submitted by:
Planning Alliance
Toronto, Canada

JULY, 2000

**Pro-Home: A Planned, Progressive Approach
to Affordable Homeownership**

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This project was carried out with the assistance of a financial contribution from Canada Mortgage and Housing Corporation (CMHC) under the terms of the External Research Program. The views expressed are those of the authors and do not represent the official views of CMHC.

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Planning Alliance (formerly John van Nostrand Associates) is a Canadian-owned firm of planners, architects and engineers founded in 1978. Planning Alliance provides urban and rural planning and management services to international development agencies, Canadian and international municipalities, non-governmental organisations, and the private sector.

PA has been responsible for the planning, design and construction management of a number of major urban development, community planning and housing projects in Canada, Africa, Latin America, the Caribbean and Asia. These projects include the Lesotho Urban Upgrading Project, which was awarded a World Habitat Award and a Canadian Institute of Planners Award of Excellence in 1991. Planning Alliance is based in Toronto, along with its affiliated architectural practice, Architects Alliance.

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Acknowledgements

The authors would also like to express their appreciation to the Canada Mortgage and Housing Corporation (CMHC) for granting an External Research Grant that made the realisation of this Study possible.

The authors would also like to extend their sincere thanks to Fanis Grammenos, Project Officer at CMHC, for his guidance and assistance with this Study.

Thanks are also due to Jon van Oostveen and Michael Lukasic of Planning Alliance/Architects Alliance who produced the architectural design drawings contained in this Study; Ian Graham who provided financial advice during the early stages of developing the Pro-Home concept; Alon Szpindel at Sundance Development Corporation who provided development advice; and Tom Lehari at Viceroy Homes who assisted with house designs and cost estimates.

Finally, special thanks are extended to Professor Richard Harris at McMaster University whose book, *The Unplanned Suburbs: Toronto's American Tragedy 1900 to 1950*, proved inspirational and whose assistance proved invaluable during the evolution of this project.

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Executive Summary

Growing poverty, declining real incomes, the elimination or reduction of federal and provincial support for new social housing, the loss of affordable rental stock, and a private housing industry that caters to predominantly upper income levels have all exacerbated the lack of affordable housing in Canada. The growing level of homelessness and shelter use in most Canadian cities underlines this lack of affordable housing, and the inadequacy of current housing policies, approaches and programs in Canada to meet the housing needs of lower income households.

The lack of affordable housing is particularly apparent in large cities such as Toronto. In 1998, the cost of an average starter home in Toronto was affordable to less than one-third of resident households who did not already own a house in the City. In numerical terms, this meant that there were approximately 600,000 households in the City unable to afford the cost of the average starter home. As housing prices rise, the proportion of renters who can afford a starter home continues to decline.

It is within this context that this Study proposes a novel – albeit not new – approach to expanding the supply of affordable housing in Canada. Given the current context of limited public funding for new affordable housing initiatives in Canada, it is notable that the proposed approach does not rely on any major form of government subsidy. While not a comprehensive solution to the lack of affordable housing, the proposed approach offers a concrete and practical strategy for increasing access to affordable homeownership.

More specifically, this Study describes an incremental or progressive approach to residential development and examines its potential to increase access to affordable homeownership in Canada. To reflect the incremental or "progressive" nature of the proposed housing process, this approach is referred to here as "Pro-Home". By progressive, we refer to the following definitive features of the Pro-Home approach:

- *Incremental*: the Pro-Home can be constructed in an incremental manner, with homeowners choosing a "starter" home they can afford, and then expanding or altering it over time in consonance with their evolving social and financial situation.
- *Affordable*: the Pro-Home approach increases access to affordable homeownership by focusing on a residential development process that treats housing as a process, rather than a finished end-product.
- *Flexible*: the Pro-Home can be either contractor or owner-built, or a combination of both, and provides for the option of an accessory unit as a source of income for prospective buyers.

Put simply, this incremental approach to housing development allows for a "grow-as-you-go" process, while at the same time, not excluding those who can afford a fully finished home. The Pro-Home allows people to access homeownership by expanding the limited range of market options currently available to consumers of more modest economic means. By creating a greater range of price points, this approach allows a wider cross-section of consumers to enter the private housing market, and to invest further in their asset at their own pace and convenience.

Thus, a lower-income purchaser can buy a small, habitable unit and later build an addition. Or, a middle-income purchaser can build a larger unit and gradually renovate the existing space or construct an accessory unit as an income-generating property. An upper-income household can continue to buy a fully completed house, such as those available through existing conventional housing developments.

While not excluding higher income segments of the housing market, this approach offers considerable potential for increasing access to affordable homeownership for middle and lower income households. Although seemingly non-conventional relative to the contemporary housing market and standard development process, the Pro-Home approach to housing development is in fact *not* new. Rather, the concept is derived from the important historical precedent of incremental, owner-built homes, a form of residential development that characterised housing provision for many in Canadian cities such as Toronto before 1950.

As illustrated by this Study, the number and variation of both Canadian and international progressive housing precedents is vast. Schemes range from planned and assisted self-help schemes involving government support and the provision of municipal infrastructure (e.g. Sweden), to less planned approaches with no services that relied on the individual or mutual efforts of owner-builders and their families, friends and/or neighbours (e.g. Earls Court in Toronto). In each case, incremental residential development approaches, combined with the efforts of owner-builders, have facilitated the availability of affordable homeownership for a wider range of income groups than would otherwise be possible, both with, and more often without, government assistance.

The Pro-Home approach takes the best ideas from nineteenth and twentieth century housing development and combines them to achieve a development form that is both familiar and new. The ability to access basic housing, and to expand on a gradual, affordable basis in accordance with a household's financial means is combined with a comprehensive infrastructure and land-use planning framework. As such, the Pro-Home model constitutes a reintroduction of earlier progressive approaches, with several important caveats attached.

Rather than adopting the completely unplanned approach that previously characterised incremental housing development, this Study proposes a hybrid strategy that combines the accessibility of incremental housing with the benefits of infrastructure provision. In addition, the Pro-Home can be contractor or owner-built, or a combination of both. The most salient features of the Pro-Home model remain its incremental, affordable and flexible approach to housing development.

As demonstrated in this Study by the practical application of the Pro-Home approach at a potential demonstration site in Toronto, the approach is not only feasible from a design and financial perspective, but also succeeds in increasing access to affordable homeownership. According to this scenario, the application of the Pro-Home approach would allow as many as 224,000 additional households within the City to purchase a starter home over conventional housing development strategies.

Although these numbers will vary depending on local market conditions, the scenario underlines Pro-Home's potential for increasing affordable homeownership. And, while the unconventional nature of a Pro-Home development may face constraints in terms of obtaining planning and building approvals, these constraints are by no means insurmountable if the goal of increasing the supply of affordable housing is accorded high priority.

In addition to providing more affordable access to homeownership, incremental development has other concrete benefits and spin-offs. Among others, these potential benefits include:

- the possibilities for on-the-job training in construction skills,
- the potential to better harness local initiative, resources and ingenuity,
- increased profit potential for private developers within the lower income housing sector,
- reduced subsidies,
- enhanced sense of ownership on the part of owner-builders.

To facilitate the gap between concept and action, this Study also identifies key organisational components underlying the successful implementation of the Pro-Home. These components include organisational elements (e.g. partnerships), arrangements (e.g. organisational model) and processes (e.g. step-by-step implementation process).

As evident from this Study, it is assumed that the Pro-Home will be implemented by the private sector, working in partnership with others, such as the public sector and non-profit housing providers. Of significance in this regard, Parts IV and V of this Study were prepared in close collaboration with a dynamic land developer and a major manufacturer of pre-fabricated housing – both of whom are eager to be involved in possible demonstration projects slated for the City of Toronto.

The Pro-Home approach to housing development offers a concrete and viable strategy for making homeownership more accessible and affordable, not only in Toronto but also in other Canadian communities. Properly planned and implemented, the Pro-Home approach will provide a much greater proportion of residents with access to affordable, permanent and unsubsidised housing and homeownership, while also creating the secondary benefit of expanding the supply of rental accommodation through optional accessory units.

Résumé

La pauvreté grandissante, la baisse des revenus réels, l'élimination ou la réduction du soutien des gouvernements fédéral et provinciaux au logement social neuf, la perte du parc de logements locatifs abordables et une industrie de l'habitation privée qui répond aux besoins des personnes qui ont des revenus très élevés ont exacerbé la pénurie de logements abordables au Canada. Le nombre croissant des sans-abri et des refuges dans la plupart des villes canadiennes fait ressortir cette pénurie de logements abordables et l'insuffisance des politiques actuelles en matière de logement, des approches et des programmes visant à répondre aux besoins des ménages à faible revenu.

La pénurie de logements abordables est particulièrement apparente dans les grandes villes comme Toronto. En 1998, le prix moyen d'une maison d'accédant à Toronto était abordable à moins d'un tiers des ménages résidents qui n'étaient pas déjà propriétaires d'une maison. En chiffres, cela signifie qu'il y avait environ 600 000 ménages à Toronto qui ne pouvaient se permettre le prix moyen d'une maison d'accédant. Lorsque le prix des maisons monte, la proportion de locataires qui peuvent se permettre une maison d'accédant continue à baisser.

C'est dans ce contexte que la présente étude propose une approche novatrice, bien que pas nouvelle, visant à augmenter le parc de logements abordables au Canada. Étant donné le contexte actuel de financement public limité destiné aux initiatives de logements abordables au Canada, on remarquera que l'approche proposée ne repose sur aucune forme de subventions gouvernementales. Bien qu'elle ne soit pas une solution globale à la pénurie de logements abordables, l'approche proposée offre une stratégie concrète et pratique pour augmenter l'accession à prix abordable à la propriété.

Plus précisément, cette étude décrit une approche progressive à l'aménagement résidentiel et examine son potentiel d'élargir l'accession à prix abordable à la propriété au Canada. Afin de tenir compte de cet aspect progressif du processus de logement proposé, cette approche est désignée sous le nom d'approche «Pro-maison». Le terme «progressif» renvoie aux caractéristiques définitives suivantes de l'approche «Pro-maison» :

- *Progressive* : la «Pro-maison» peut être construite d'une manière progressive, son propriétaire choisissant une maison d'accédant qu'il peut se permettre et l'agrandissant ou la modifiant au fur et à mesure que sa situation sociale et financière évolue.
- *Abordable* : l'approche «Pro-maison» favorise l'accession à prix abordable à la propriété en mettant l'accent sur un processus d'aménagement résidentiel qui traite le logement comme un processus, plutôt que comme un produit fini.

- *Flexible* : la «Pro-maison» peut être construite par un entrepreneur ou par son propriétaire, ou une combinaison des deux. Elle donne l'option d'un appartement accessoire comme une source de revenus pour les acheteurs éventuels.

Pour simplifier, cette approche progressive à la production de logements permet un processus d'expansion qui, en même temps, n'exclut pas ceux qui peuvent se permettre une maison entièrement finie. La Pro-maison permet d'accéder à la propriété en élargissant l'éventail limité d'options de marché actuellement disponibles aux consommateurs ayant des moyens financiers plus modestes. En créant une gamme plus grande de prix au détail, cette approche donne la possibilité à plus de consommateurs d'entrer dans le marché du logement privé et d'investir davantage dans leur maison à leur propre rythme et convenance.

Ainsi, un consommateur à faible revenu peut acheter un petit logement habitable et construire plus tard un ajout, ou un consommateur à revenu moyen peut construire un plus grand logement et rénover graduellement l'espace existant ou construire un appartement accessoire qui pourra générer des revenus. Un ménage à revenu supérieur peut acheter une maison complètement finie, comme celles disponibles par le biais d'aménagements résidentiels traditionnels existants.

Tout en n'excluant pas les segments de revenus plus élevés du marché de l'habitation, cette approche offre un potentiel considérable pour élargir l'accession à prix abordable à la propriété pour des ménages à revenu moyen et à faible revenu. Quoiqu'elle soit en apparence non traditionnelle si on la compare au marché de l'habitation contemporain et au processus d'aménagement standard, l'approche Pro-maison de la production de logements n'est en fait pas nouvelle. Le concept est dérivé d'un important précédent historique de maisons progressives construites par leur propriétaire, une forme d'aménagement résidentiel qui caractérisait la production de maisons dans beaucoup de villes canadiennes de la taille de Toronto avant les années 1950.

Tel qu'il est démontré dans cette étude, il existe un grand nombre de précédents de maisons progressives construites tant au Canada qu'à l'étranger. Les projets varient de projets d'autoassistance planifiés et aidés avec le soutien du gouvernement et les services d'infrastructure municipale (p. ex. en Suède) à des approches moins planifiées sans aucun service qui reposent sur des efforts individuels ou mutuels de propriétaires-constructeurs et de leurs familles, amis et/ou voisins (p. ex. Earls Court à Toronto). À chaque occasion, les approches d'aménagement résidentiel progressif, combinées aux efforts de propriétaires-constructeurs, ont facilité l'accession à prix abordable à la propriété pour un plus vaste éventail de groupes de revenu qui autrement serait possible avec ou le plus souvent sans une aide gouvernementale.

L'approche Pro-maison s'inspire des meilleures idées d'aménagement résidentiel du 19^e et du 20^e siècle et les intègre pour arriver à une forme d'aménagement qui est en même temps familière et nouvelle. La possibilité de posséder un logement de base et de l'agrandir de façon graduelle et abordable selon les moyens financiers du ménage

est associée à un cadre de travail global de planification d'infrastructure et d'utilisation des terrains. À ce titre, le modèle Pro-maison représente une remise en vigueur des approches progressives précédentes combinées à plusieurs restrictions importantes ci-jointes.

Au lieu d'adopter l'approche complètement non planifiée qui caractérisait auparavant la production de maisons progressives, cette étude propose une stratégie hybride qui combine l'accessibilité aux maisons progressives et les avantages des services d'infrastructure. De plus, la Pro-maison peut être construite par un entrepreneur ou par son propriétaire, ou une combinaison des deux. Les caractéristiques les plus importantes du modèle Pro-maison demeurent son approche progressive, abordable et flexible à la production de maisons.

Tel qu'il est démontré dans cette étude par l'application pratique du modèle Pro-maison lors d'une démonstration à Toronto, l'approche est non seulement faisable du point de vue financier et de la conception, mais elle a également contribué à faire augmenter l'accession à prix abordable à la propriété. D'après ce scénario, l'application du modèle Pro-maison permettrait à 224 000 autres ménages de la ville de Toronto d'acheter une maison d'accédant par rapport à des stratégies traditionnelles de production de maisons.

Quoique ces chiffres varieront selon les conditions du marché local, ce scénario de la Pro-maison possède le potentiel de faire augmenter à prix abordable l'accession à la propriété. Même si la nature non traditionnelle de la production de la Pro-maison peut rencontrer des contraintes sur le plan de l'obtention des permis de planifier et de construire, ces contraintes ne sont nullement insurmontables si l'objectif de faire augmenter l'offre de logements abordables est prioritaire.

En plus de fournir une accession à prix abordable à la propriété, l'aménagement progressif a d'autres retombées et avantages concrets. Ces retombées et avantages potentiels comprennent entre autres :

- possibilité de formation en cours d'emploi en vue d'acquérir des compétences en construction;
- potentiel de mieux exploiter les initiatives, les ressources et l'ingéniosité locales;
- potentiel de profits accrus pour les promoteurs privés au sein du secteur de l'habitation à faible revenu;
- réduction des subventions;
- sens accru de la propriété de la part des propriétaires-constructeurs.

Afin de réduire l'écart entre le concept et l'action, cette étude définit également les principales composantes organisationnelles qui sous-tendent la mise en oeuvre réussie de la Pro-maison. Ces composantes incluent des éléments organisationnels (p. ex. des partenariats), des dispositions (p. ex. un modèle organisationnel) et des processus (p. ex. des processus de mise en oeuvre graduelle).

Il ressort de cette étude que la Pro-maison sera mise en oeuvre par le secteur privé, de concert avec des partenaires, tels que le secteur public et des producteurs de logements sans but lucratif. De plus, les parties IV et V de cette étude ont été préparées en étroite collaboration avec un promoteur immobilier dynamique et un grand fabricant de maisons préfabriquées, les deux désirant participer à d'éventuels projets de démonstration conçus pour la ville de Toronto.

L'approche Pro-maison destinée à la production de logements offre une stratégie concrète et viable visant à rendre plus accessible et plus abordable l'accès à la propriété, non seulement à Toronto mais également dans d'autres collectivités canadiennes. Planifiée et mise en oeuvre de façon adéquate, l'approche Pro-maison permettra à une proportion beaucoup plus grande de résidents d'avoir accès à une maison ou à un logement abordable, permanent et non subventionné tout en procurant l'avantage secondaire d'élargir l'offre de logements locatifs par le biais d'appartements accessoires optionnels.



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Introduction

Overview

In many respects, the circumstances are propitious. The need for affordable housing has rarely been more pressing. At the same time, because of high unemployment and public debt, the ability and willingness of governments to spend money on social housing is at a post-war low. Again, many countries, both in Europe and in North America, are faced with large and growing immigrant populations, among whom traditions of self-help are often strong. Those who wish to make the case for self-help housing might usefully point out that this type of policy is not a recent innovation that has only been seriously tested in a Third World context. Its origins are long, diverse, and – if this matters – impeccably European. Its time may yet come (Harris 1996a).

The challenge of providing affordable housing in major urban areas of the world is neither unique nor new, and local responses to meeting this challenge vary considerably. In cities in developing countries, where up to 70% of the urban population can typically be considered homeless or under-housed, lower income populations have generally taken matters into their own hands by developing informal, often illegal, settlements.

The residents of such communities have invested, and continue to invest, millions of dollars in the continuous upgrading of these informal settlements. While such settlements have provided access to housing for large numbers of people in need without any government subsidy, they are rarely well serviced or planned, with large portions often located in inaccessible, unhealthy or marginal urban or suburban areas.

To address the need for better settlement and housing opportunities in urban areas of developing countries, international agencies like the World Bank and the United Nations Centre for Human Settlements (UNCHS) have developed a panoply of approaches to housing provision since the 1960s. Probably the most popular strategy has been the "sites-and-services" approach, through which households gain access to legally surveyed sites and basic water, sanitation, roads, storm drainage, and in some cases, electrical services. Subsequently, residents are encouraged to build, or manage the construction of, their own houses using either their own funds or a variety of supportive programs which may lend either cash, or building materials in lieu of cash.

Interestingly, a similar approach to the provision of housing existed in North America during the 1920s and 1930s. Notably, this approach was developed by persons who saw the opportunity to introduce market-driven approaches to land development for lower income households. With the institutionalisation of standardised building and planning codes, however, the prevalence – as well as the legality and acceptability – of this approach subsided in the post-war period.

Although inadvertently, the institutionalisation of standardised building and planning practices led to a fundamental transition in homebuilding in which housing as a *process*, affordable to the great majority of the population, was replaced by housing as a *product* that was less affordable if not unaffordable to middle and lower income households.

As elaborated in this Study, the Pro-Home combines two historic approaches to housing development – the "unplanned progressive" and the "fully-planned product" – to adequately satisfy the needs and means of the full range of residents seeking long-term housing in urban areas, or other communities for that matter.

Objectives and Scope

This Study seeks to describe an incremental or progressive approach to residential development – and examine its potential to increase access to affordable homeownership in Canada. More specifically, this Study seeks to:

- Define the context and rationale for developing an incremental approach to housing development in Canada, including the potential target market for the Pro-Home.
- Examine a number of Canadian and international precedents to gain a better understanding of how an incremental approach to housing development operated in an unplanned context prior to 1950, and what "lessons learned" can be gleaned from these examples.
- Describe the Pro-Home concept, including its key features and progressive approach to housing development.
- Explore the feasibility and potential of the Pro-Home concept through a hypothetical application scenario at a potential demonstration site.
- Propose an implementation framework that identifies key organisational elements that would facilitate bridging the gap between concept and action.

Definition of Concept

Pro-Home refers to an incremental approach to housing development whereby households enter the market at a level they can afford, and over time, alter or expand their housing in accordance with their financial means and housing needs. Using lessons learned from the unplanned residential developments that took place in Toronto prior to 1950, the Pro-Home proposes a planned and progressive approach to housing development. Key elements of the Pro-Home concept include the following features:

- *Incremental*: the Pro-Home can be constructed in an incremental manner, with homeowners choosing a "starter" home they can afford, and then expanding or altering it over time in consonance with their evolving social and financial situation.
- *Affordable*: the Pro-Home approach increases access to affordable homeownership by focusing on a development process that treats housing as a process, rather than a fully finished end-product.
- *Flexible*: the Pro-Home can be either contractor or owner-built, or a combination of both, and provides for the option of an accessory unit as a source of income for prospective buyers.

The Pro-Home concept combines the new home and renovation markets, and accommodates both ownership and rental opportunities. Pro-Home embraces the flexibility and affordability of incremental housing development, while also providing the benefits of access to municipal services and infrastructure expected by contemporary consumers in the North American context.

Methodology

To examine the various aspects embodied in the proposed approach to incremental housing development, the research methodology for this Study included:

- data collection and analysis,
- a selective review of historic precedents of incremental and owner-built housing development,
- the preparation of design drawings to illustrate the Pro-Home concept as well as its application at a potential demonstration site,
- the preparation of a detailed cost proforma and an initial review of constraints,
- consultation with builders, developers, potential non-profit partners and staff at CMHC and the City of Toronto.

Organisation

This Study is organised in the following five parts:

- Part I outlines the *context* underpinning the Pro-Home concept, namely, the need to introduce new and practical solutions to address the growing problem of housing affordability in major urban areas in Canada.
- Part II reviews a number of Canadian and international *precedents* of owner-built or incremental housing, tracing how progressive approaches to residential development have facilitated access to affordable homeownership and what lessons can be derived from these experiences.
- Part III provides a general description of the Pro-Home *concept*, illustrating its key features and design elements.
- Part IV presents a detailed *application* scenario of the Pro-Home approach to housing development, including a cost proforma and analysis of possible constraints to implementation.
- Part V proposes an *implementation* framework for incremental housing development, focusing on organisational elements such as partnerships, an organisational model and an implementation process.

Part I: Context

Overview

Growing poverty, declining real incomes, the elimination or reduction of federal and provincial support for new social housing, the loss of affordable rental stock, and a private housing industry that caters to predominantly upper income levels have all exacerbated the lack of affordable housing in Canada. The growing level of homelessness and shelter use in most Canadian cities underlines this lack of affordable housing, and the inadequacy of current housing policies, approaches and programs in Canada to meet the housing needs of lower income households. It is against this backdrop that the Pro-Home concept is proposed as a practical strategy for increasing the supply of affordable ownership housing in Canada.

Housing Affordability

In November 1999, the Big Cities Mayors Caucus of the Federation of Canadian Municipalities (FCM) passed a resolution declaring homelessness a national disaster and called on the federal government to take immediate action on the lack of affordable housing in Canada. To argue their case and recommend options for action, the FCM subsequently produced the *National Housing Policy Options Paper – A Call for Action* (1999). The Options Paper provides evidence of a number of disturbing national trends and figures:

- Between 1990 and 1995, the number of households in Canada paying more than 50% of their income on rent increased by 43%. In 1996, 1.7 million or 43% of all tenants paid more than 30% of their income on rent and 800,000 households paid more than 50% of their income on rent.¹
- The number of tenant households in "core housing need" in Canada increased by one-third from 1991 to 1996, rising from 849,000 to 1,151,000 households.²
- There are at least 96,000 households on assisted housing waiting lists in Canada's larger urban centres, such as Vancouver, Calgary, Edmonton, Saskatoon, Regina, Winnipeg, Windsor, Kitchener-Waterloo, Hamilton, Toronto, Ottawa, Montreal and St. John's.
- While comprehensive national figures are not available for all cities, the data that is available points to substantial increases in emergency shelter use in Calgary, Edmonton, Hamilton, Montreal, Ottawa, Regina, Toronto, Vancouver and Winnipeg. Presently, the use of homeless shelters on an average night is about 300 people in Vancouver, 700 in Calgary, 800 in Edmonton, and over 4,000 in Toronto.

In addition to other reports, the FCM Options Paper highlights the mounting problem of housing affordability and the pressing need for action on affordable housing in finding workable and effective solutions in communities across Canada.³

¹ In Canada, 30% of gross income spent on shelter is the accepted yardstick for defining affordable housing, leaving enough remaining income for food, clothing, transportation and other household necessities.

² Canada Mortgage and Housing Corporation (CMHC) defines core need as those households unable to afford a suitable (e.g. appropriate to household size and composition), affordable (e.g. shelter costs less than 30% of household income) and adequate (e.g. full bathroom facilities, in good repair) home.

³ See for example, *Where's Home? A Picture of Housing Needs in Ontario*. 1999. Toronto: Ontario Non-Profit Housing Association and the Co-operative Housing Federation of Canada (May).

Market Analysis – The Case of Toronto

Background

The lack of affordable housing is particularly apparent in cities with low vacancy rates and high housing costs such as Toronto. As documented by the Report of the Mayor's Homelessness Action Task Force (1999), a significant number of families and individuals in Toronto lack access to affordable housing and are either homeless, at risk of homelessness, or inadequately housed. For example:

- In 1996, approximately 213,000 households paid more than 30% of their income in rent and another 106,000 households used more than 50% of their income for rent.
- The number of families on the social housing waiting list is growing, with more than 100,000 families on the list in 1998, including 31,000 children.
- Almost 26,000 different individuals used the City's hostels in 1996. An estimated 4,400 people stayed in a hostel for a year or more in 1996.
- An estimated 5,300 children were homeless in 1996.
- The fastest growing groups of hostels users are youth under 18 years of age and families with children. In 1996, families accounted for 46% of the people using hostels in the City.

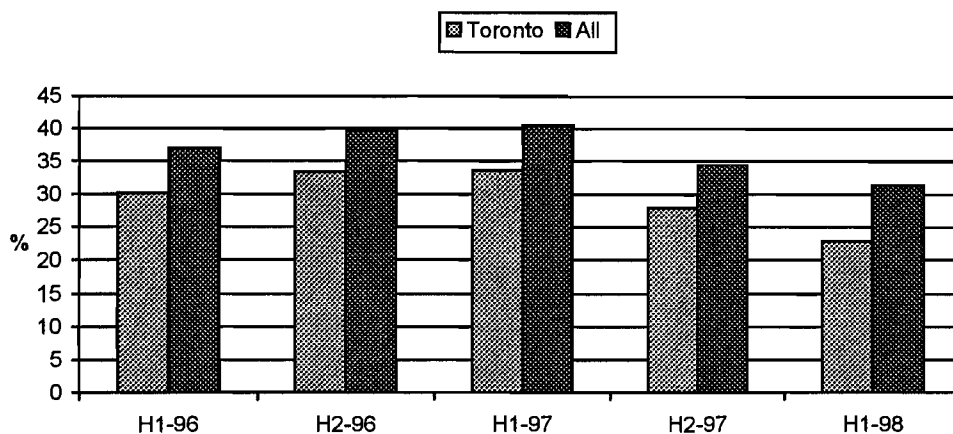
Between 1991 and 1996, average family incomes in Toronto fell by 12.5%, with the income of the 40% of families at the low end of the income scale falling by more than 20%. While the household incomes of many families are either in decline or remain stagnant, the availability of affordable housing decreases and housing prices continue to rise.

According to figures published by CMHC (1998a), the average starter house price in the Toronto Census Metropolitan Area (CMA) was \$201,337 in the first half of 1998, an increase of 7% from \$187,483 in the first half of 1997. As a result, the estimated annual household income required to carry the costs associated with an average starter house (i.e. mortgage costs, annual property taxes, annual 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% (CMHC 1998a).

A recent CMHC (1998b) survey of households in the Toronto area seems to underline these affordability concerns. The survey found that an estimated 11.5% of households intend to buy a home soon. Nearly two-thirds of those ready to "buy now" are renters, an indication of the importance of the first-time buyers market in Toronto. However, most of these households earn more than \$40,000 per year, whereas only 4.5% of households earning less than \$20,000 per year have thought about buying a home in the past year.

These survey findings are supported by other CMHC research documenting the declining proportion of renters who can afford to buy a starter home, a trend found not only in the Toronto CMA, but also replicated in other major metropolitan areas in Canada (Figure 1). Notably, the mid-year affordability rate of 31.4% for all major metropolitan areas in Canada in 1998 was the lowest since 1995 (CMHC 1998a).

Figure 1: Proportion of Renters Who Can Afford a Starter Home (1996-1998)



Notes:

- "Toronto" refers to the Toronto Census Metropolitan Area (CMA).
- "All" refers to other major CMAs in Canada.
- "H1" and "H2" refers to the first half and second half of the year indicated.

Source: CMHC, 1998a.

As a result of the increasing cost of home purchases, the most affordable homes in the Toronto CMA, accessible to buyers with down payments of 10% and less, were generally in shorter supply in the first half of 1998 than a year earlier (Table 1).

Table 1: Supply Affordable to First-Time Buyers, Toronto CMA (1997 & 1998)

CATEGORIES OF AFFORDABLE HOUSE PRICES	AFFORDABLE RESALE SUPPLY (%)		MOST PREVALENT HOUSE TYPE	AFFORDABLE NEW CONSTRUCTION (%)	
	1997-first half	1998-first half		1997-first half	1998-first half
Regular (10%)	50.8	47.7	Single, Semi	61.0	56.7
FHLI (5%)	32.0	32.0	Semi, Row	18.9	20.9

Source: CMHC 1998a.

While the building market appears to be focusing on more upscale products, the housing affordability problems of lower income households continue to grow. In sum, both supply and demand indicators for housing affordability are not promising for the home buying prospects of lower and middle-income households.⁴

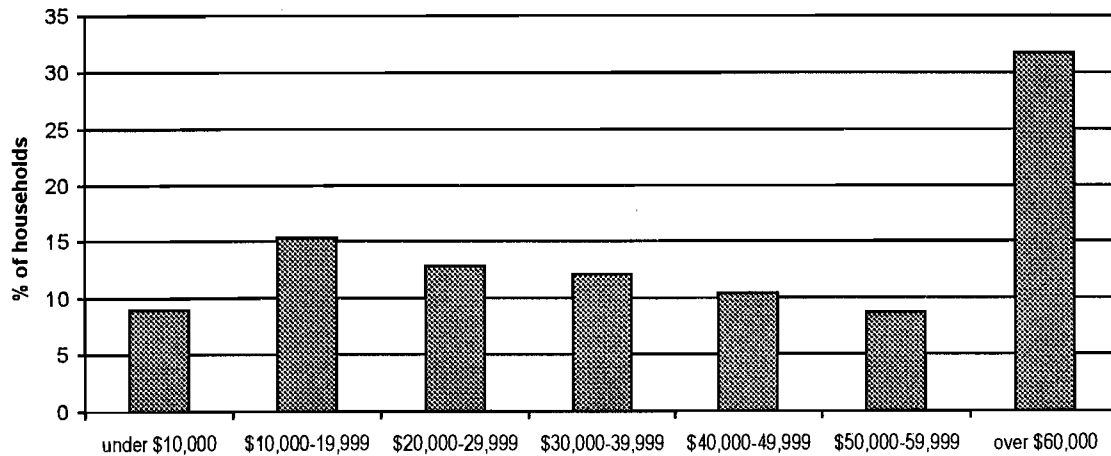
⁴ CMHC defines the *supply indicator* as the percentage of new and existing homes for sale on the market at or below the maximum affordable house price and the average prices paid by home buyers who meet the eligibility criteria of CMHC's 5% and 10% programs. The *demand indicator* refers to the income required to purchase a property based on the average starter home price, including carrying costs.

Target Market

In general, the primary target market for Pro-Home are first-time buyers of low to moderate household income levels – with the intent of increasing access to affordable homeownership, while also creating the benefit of additional rental units through secondary suites.

According to Statistics Canada income figures for the City of Toronto, the majority of households (i.e. 68.3%) in the City make less than \$60,000 per year, and therefore cannot afford the average starter home available under current market conditions (Figure 2).

Figure 2: Proportion of Households by Income Category, City of Toronto (1996)

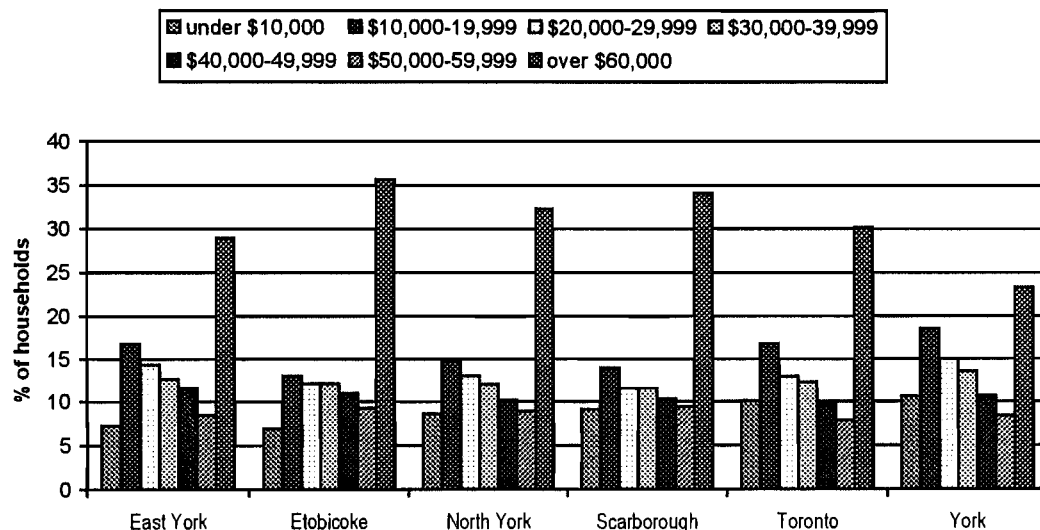


Source: Census of Canada, Statistics Canada (1996)

As only 31.7% of all households make more than \$60,000 per year, most households in the City can no longer afford the average starter home. While not all of the 600,000 households making less than \$60,000 are necessarily looking to purchase a home, the high cost of the average starter home would be out of reach of those interested in doing so.

Households making less than what is currently required to afford the average starter home are distributed across the City, with the highest concentration of lower income households in the former municipality of York, now part of the amalgamated City of Toronto. As shown by Figure 3, the former municipality of York contains the highest percentage of households in all of the four lowest income percentiles.

Figure 3: Distribution of Household Income, Former Municipalities of Toronto (1996)



Source: Census of Canada, Statistics Canada, 1996.

As evident from both Figures 2 and 3, there is not only a sizeable potential target market for the Pro-Home in Toronto, but also one that is distributed across the City. While the size and geographic distribution of the potential target market for the Pro-Home – or other forms of incremental housing for that matter – will vary in other urban areas, trends regarding the lack of access to affordable housing in many other cities suggest a similar need for finding and implementing practical solutions to this challenge.

Summary

Evidence from across Canada points to increasing problems of housing affordability for low- and middle-income households in major urban areas. The lack of affordable housing is attributable to a plethora of factors, and the range of needed solutions is admittedly both vast and varied. While a comprehensive review of the affordability issue is beyond the scope of this Study, the market analysis presented here underlines some of the supply and demand factors that undermine access to affordable housing.

The analysis of the City of Toronto situation points to the affordability problems associated with current conventional housing development practices, in which the average price of a starter home – as a fully finished product – is beyond the financial reach of households making less than \$60,000 per annum within the City. Although not all of these households may wish to purchase a home, those interested in doing so would be unable to purchase even the most affordable homes currently on the market.

While the market analysis referred to here focuses on Toronto, the evidence regarding the lack of affordable housing in communities across Canada is also compelling. Although local and regional market dynamics and specific housing priorities may vary across the country, the lack of affordable housing represents a challenge of national proportions, as recognised by pan-Canadian organisations such as the Federation of Canadian Municipalities. It is within this context, coupled with the limited funding available for new affordable housing initiatives, that we propose the Pro-Home concept as a practical approach to increasing access to affordable homeownership in Canada.

Part II: Precedents

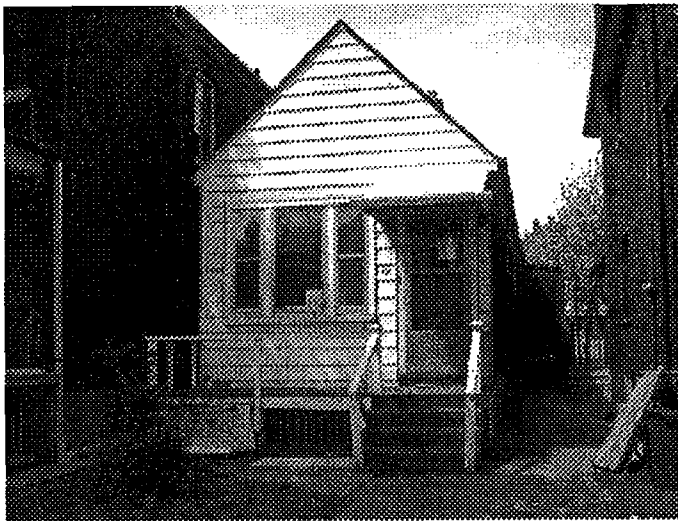
Overview

In contrast to widely held perceptions, suburbs have not always been homogeneous, mass-produced or planned residential enclaves for the middle or upper-middle classes. As documented by Harris' research (1996b), large portions of some Canadian cities were developed by lower income, immigrant families, most of whom built their homes using their own, and/or their neighbours' labour and capital.

In the case of Toronto, for example, small land developers often initiated such developments by subdividing park or farm lots and selling them to prospective settlers. While these unevenly developed and unserved working-class suburbs were not the ideal “candidates for myth-making” (Harris, 1996b: 286) that their contemporary counterparts became in the post-war period, they provided access to affordable homeownership for many families.

According to some estimates, as much as 25% of housing built in Toronto between 1900 and 1913 was self-built, using basic materials such as wood, tarpaper and brick (Relph 1997). Among others, early self or owner-built house types include the cottage (1850s), the tarpaper shack (1910-20s), the Eaton's home (1918), the cottage (1930s), the basement home (1950s), and the bungalow-and-basement (1960s). The early kit house and early developer homes are shown in **Photos 1 and 2**.

Photo 1: Early Kit House, Toronto (1998)



Source: John van Nostrand

Photo 2: Early Developer Houses, Coxwell/Gerrard Area, Toronto (1912)



Source: City of Toronto Archives (R68-18-4).

These housing developments were typically unplanned and unregulated, and were realised on an incremental or progressive basis, using cash or very limited short-term loans garnered from relatives, neighbours or local businesses. Once a plot of land was purchased, owner-built starter "shacks" or houses were constructed and then expanded gradually as funds permitted. As municipal infrastructure networks were extended and outlying areas annexed by the expanding City of Toronto, urban services including roads, storm drainage, water, sewerage, electricity, and transit were also gradually introduced.

At the turn of the century, the introduction of new building, planning and public health regulations in Toronto began to impede the kind of unrestricted incremental housing development practised by many blue-collar owner-builders. Among others, these regulations included stricter building standards requiring the use of expensive fire-resistant materials and public health by-laws compelling property owners to install basic plumbing facilities. While many of these changes were promulgated by civic reformers for the public good, they inadvertently increased the cost of homeownership.

Although such regulations were codified in municipal by-laws, they were not enforced equally in all parts of the City, with enforcement being more lax in fringe areas. As a result, many owner-builders either moved to outlying areas or completely beyond City limits to escape the costs associated with municipal building regulations and services (Harris 1996b). By the mid-1940s, however, Toronto's blue-collar suburbs began to decline. With the introduction of the Metropolitan Plan in the late 1940s and early 1950s, larger-scale, land development practices began to exclude the more modest owner-builder, grow-as-you-go solutions in favour of fully planned and serviced new developments like Thorncrest Village and eventually Don Mills.⁵

In these planned communities, prospective residents were offered a range of fully completed houses. While these developments addressed the needs of an affluent new market segment, they undermined the needs of persons who could not afford to access housing as a finished product. 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* targeted at more affluent households.

⁵ See van Nostrand (1983).

During the post-war period, this trend in residential development became prevalent throughout Toronto and most other North American cities. Depending on interest rates, households below the 50th to 60th income percentile lost the option of developing their own properties on a gradual and affordable basis. As a result, many households were either forced to leave the City, or to become tenants in one of the new high-rise towers that began to characterise redevelopment within the inner-city during the 1960s.

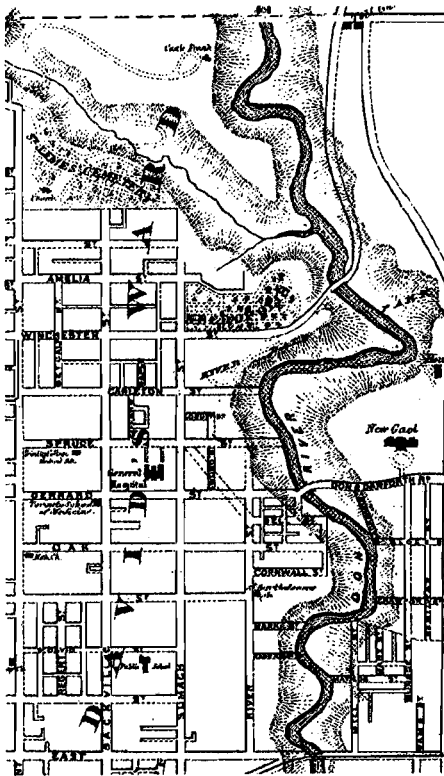
Whereas in many North American cities, such as Toronto, the state has either ignored or undermined incremental housing through the introduction of restrictive building and zoning regulations, other countries have actually pursued programs of *aided* self-help housing – housing built by families for their own use *with* state assistance (Harris 1996a). Although often dismissed as being primarily relevant to developing countries, this form of incremental housing development was first adopted in Europe as a pragmatic way of providing much-needed housing after World War I. The following review of precedents highlights both Canadian and international examples, a testament to the diverse range of social, political and economic contexts in which incremental housing has been implemented at various times.

Canadian Examples

Cabbagetown, Toronto

Cabbagetown is located at the eastern end of the original boundary of the City of Toronto. Bounded by Bloor Street to the north, Parliament Street to the west, Queen Street to the south and the Don River on the east (Figure 4), Cabbagetown is comprised of Victorian houses built mostly between 1860 and 1880.

Figure 4: Map of Cabbagetown, Toronto



Source: *Illustrated Historical Atlas of County of York, 1878.*

Along with other areas of the Town of York, the Cabbagetown area began as a series of 100-acre park lots granted to government officials and military personnel by John Graves Simcoe, the first Lieutenant Governor of Upper Canada. In addition to these park lots, a large portion of the area was designated as a timber reserve to ensure a supply of raw materials for shipbuilding activities.

Cabbagetown remained relatively remote and sparsely populated until around 1840. With the growth of industry and the railway in eastern Toronto beginning in the 1850s, the area became more populated, especially with working-class residents seeking accommodation in close proximity to their workplace. Between 1847 and 1854, Cabbagetown's population increased further with the influx of immigrants fleeing Ireland and the Irish Potato Famine.

With the influx of Irish immigrants to the area, more extensive residential settlement began along the northern boundary of the City at the time (i.e. Queen Street), in conjunction with the construction of a number of new community institutions such as St. Paul's Church (1829), the Trinity Church (1843), the Enoch Turner Schoolhouse (1848). In addition to these uses, park lots were also subdivided for hospital purposes, cemeteries and private commercial development.

Until the onset of gentrification in the 1970s, Cabbagetown remained a predominantly working-class area within the City. Although originally intended as a place for the emerging new civic elite of the Town of York, Cabbagetown's reputation as a swampy, unhealthy low-lying area near the Don River paved the way for its eventual settlement by citizens of more modest means. While active in subdividing park lots in other parts of the City, large developers were not extensively involved in the development of Cabbagetown. Instead, a combination of small builders, minor speculators and residents developed Cabbagetown as a district of small residences on narrow lots in an incremental manner (Photo 3).

Photo 3: Gilead Place, Cabbagetown, Toronto (1936)



Source: City of Toronto Archives (R68-33-62).

As building permits were not required by the City until 1887, earlier homes in Cabbagetown were erected without such permits, a practice that continued for some time after they were required by the City (Rust D'Eye 1984). Early development included shacks and utilitarian frame houses with roughcast plaster, no central heating and privies in the back. Over time, these structures were upgraded with additions or the replacement of brick for plaster.

Up until the 1880s, Cabbagetown was also poorly served by the municipal water system. With the introduction of sanitary reforms by Toronto's Medical Health Officer in the late 1880s, water mains and indoor plumbing were introduced to areas like Cabbagetown. These municipal infrastructure improvements were reflected in rising property assessment levels for the area between 1870 and 1890 (Careless 1985).

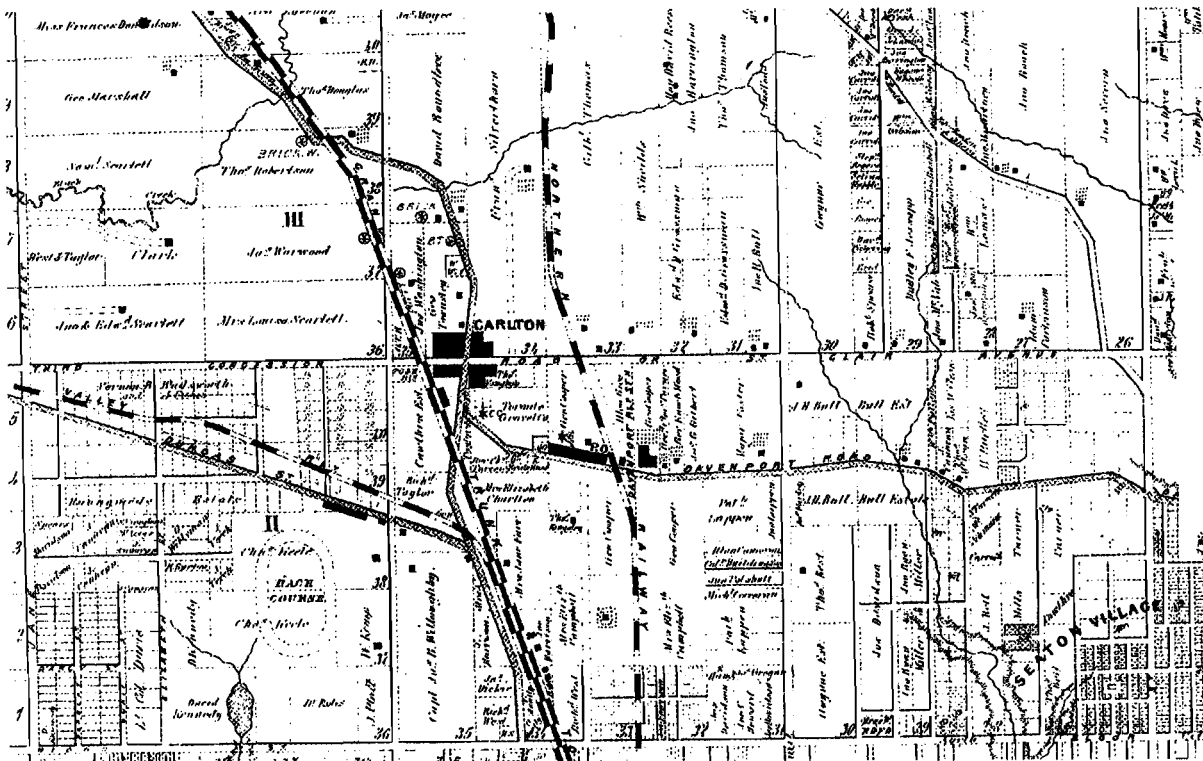
Even though largely unplanned in comparison with contemporary standards, the incremental development of Cabbagetown extended and reinforced the grid pattern of the existing street pattern established by the Town of York's original ten-block settlement. Today, Cabbagetown remains a vibrant, relatively mixed-income community, and has served as a prototype for the design of contemporary "new urbanist" communities such as Cornell in Markham, Ontario.

Earlscourt, Toronto

Earlscourt and places like it speak to us of a different time, about what one contemporary referred to as a "separate sort of thrift," when people made what they could for themselves and used only what they could afford (Harris 1996b: 286).

Earlscourt is an example of a relatively typical, early 20th-century working-class neighbourhood developed on an unplanned basis. Earlscourt is centred along St. Clair Avenue West in Toronto, between Dufferin and Oakwood Street to the west and east, and Morrison and Geary Avenue to the north and south (**Figure 5**).

Figure 5: Map of Earlscourt, Toronto

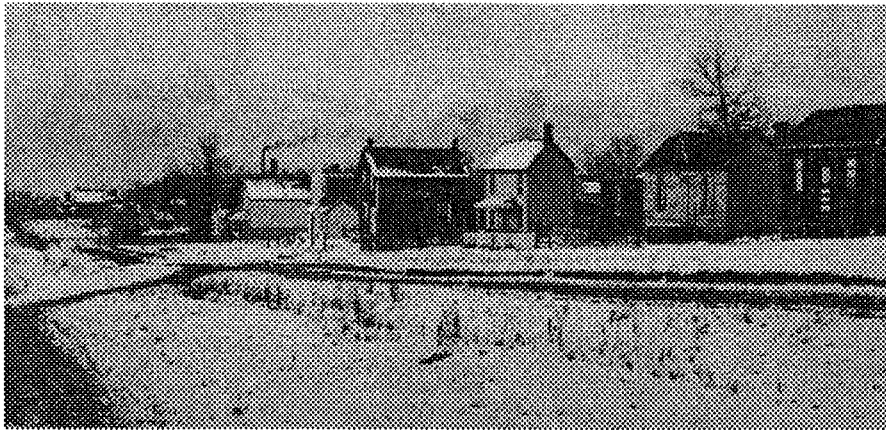


Source: *Illustrated Historical Atlas of County of York, 1878.*

Whereas Earlscourt is now located in the central-western area of the contemporary City of Toronto, it was located on the outskirts of the City at the time of its initial settlement. The name Earlscourt is derived from one of the area's oldest and largest estates that was subdivided and developed on the west side of Dufferin Street in 1906 (Byers and Myrvold 1997).

Like Cabbagetown, Earlscourt was originally surveyed in large lots intended for members of Toronto's burgeoning civic elite. In the end, however, most lots were subdivided into smaller lots, sold and then developed as smaller parcels of land, mostly to owner-builders of more modest means (**Photos 4 and 5**). Although several street names have changed and a few cul-de-sacs added, the original nineteenth century plan of subdivision for Earlscourt remains essentially intact.

Photo 4: Earlscourt Street, Toronto (circa 1910)



Source: City of Toronto Archives (SC244-7274).

Photo 5: Earlscourt under Development, Toronto (circa 1916)



Source: City of Toronto Archives (SC244-2418).

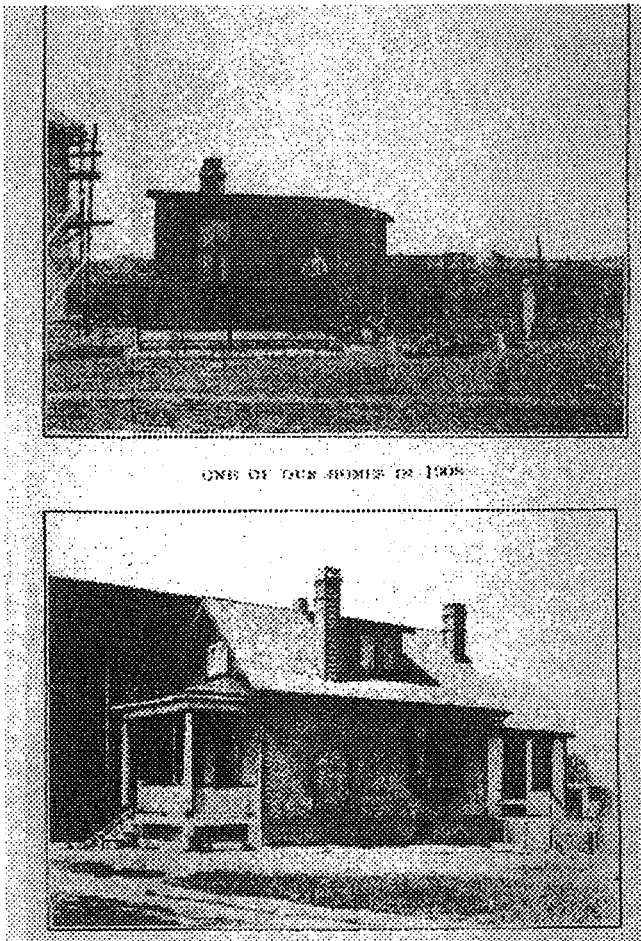
Many of the original inhabitants were attracted by the availability of cheap land in the outlying Earlscourt area and the possibility of homeownership, something out of the reach for many working families in central city areas. In contrast to the central city, land in outlying areas such as Earlscourt was not only was land cheaper, but self-building was unencumbered by building regulations and permits (Byers and Myrvold 1997). Many of the area's owner-builders constructed self-built frame houses and tarpaper shacks that gave Earlscourt its early nickname of "Shack Town". Often these shacks were erected at the back of a lot to be used as a temporary home until either a new home was completed at the front of the lot (**Photo 6**), or the original structure was renovated and upgraded (**Photo 7**). Relying on both mutual aid and personal thrift, owner-builders in Earlscourt organised "building bees" with their neighbours to build homes, often using scavenged construction materials from demolition sites (Harris 1996b).

Photo 6: Starter Shack and End Product, Earlscourt, Toronto (1916)



Source: Byers and Myrvold, 1997.

Photo 7: Upgraded Starter Shack, Earlscourt, Toronto (1908-1910)



Source: United Church of Canada.

Up until its annexation by the expanding City of Toronto in 1909-1910, the Earlscourt area was a relatively rural area, with sparse development along St. Clair Avenue West, a population of 5,000 and few homes with indoor plumbing or running water (Byers and Myrvold 1997). In 1913, the City began installing water, sewers and paved roads in Earlscourt, a process that was mostly completed by the onset of the First World War (Harris 1996b).

From the City's perspective, annexation was seen as a way of improving health conditions and controlling the outbreak of disease in outlying, unserviced areas adjacent to the City (Relph 1997). While many local residents saw annexation as a way of gaining better access to municipal services, others resisted it to avoid the incumbent costs and taxes associated with stricter building regulations and municipal services. Consistent with other blue-collar suburbs, annexation usually coincided with the dissipation or elimination of incremental housing development and/or owner-construction activities (Harris 1996b). In their place, some Earlscourt developers began to build more expensive row and semi-detached brick homes on their properties to market to more affluent prospective buyers in anticipation of its annexation and the extension of municipal services (Byers and Myrvold 1997).

With annexation, the area not only expanded but also changed considerably. By 1917, Earlscourt's population had increased to 17,000 people. Municipal infrastructure and services were introduced and streetcar service expanded along St. Clair Avenue (**Photo 8**).

Photo 8: St. Clair Avenue, Earlscourt, Toronto (1907)



Source: *City of Toronto Archives (SC244-509)*.

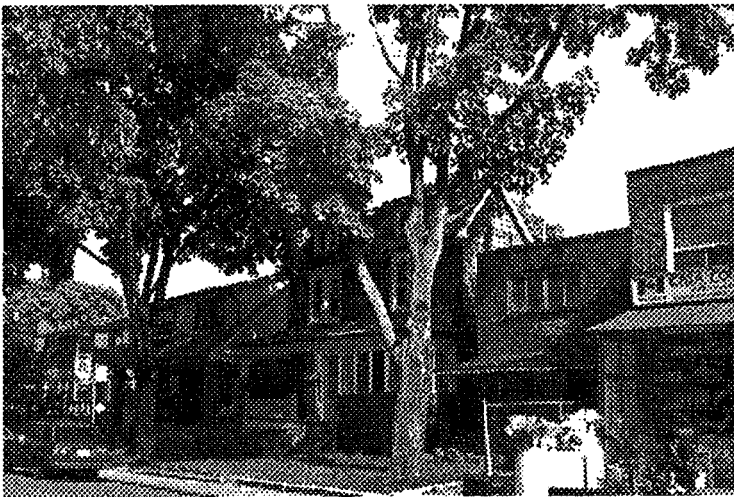
The enforcement of new municipal codes significantly altered subsequent residential development. New regulations permitted frame construction with clapboard or shingle siding, but prohibited tarpaper shacks. Two-storey attached brick homes replaced detached frame bungalows as the area's predominant house type. New regulations limited the scope of owner-builders and incremental housing development, and along with the provision of municipal services and transit, contributed to the increasing cost of homeownership (Byers and Myrvold, 1997).

The increasing costs of homeownership are poignantly captured in Victor Lewis' 1920 Master's Thesis on Earlscourt for his degree in Sociology at the University of Toronto:

Incorporation within the city meant building restrictions and thus a workman became handicapped in acquiring a home of his own. He could no longer build a shack and *add a little to his home from time to time as his means permitted*. He must either pay rent or run the risk of mortgaging the future (Byers and Myrvold, 1997: 70-72, italics added by authors).

By the mid-1920s, the heyday for incremental, owner-built housing in Earlscourt had passed (Harris 1996b). By the 1930s, most of the area was settled, and new development slowed down during the subsequent depression years (Byers and Myrvold, 1997). Like Cabbagetown, Earlscourt is a vibrant downtown neighbourhood in the heart of the City of Toronto today, with a great deal of the built form heritage from its humble beginnings still intact (**Photo 9**).

Photo 9: Earlscourt Street, Toronto (1998)



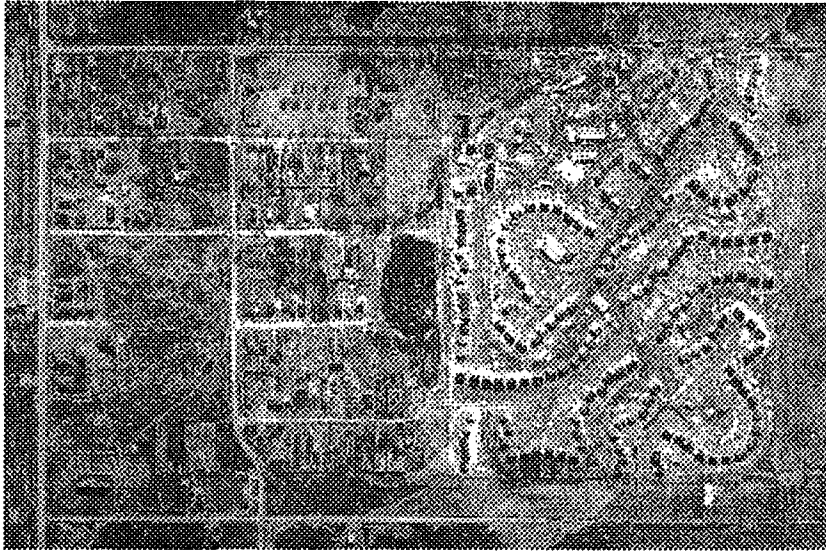
Source: John van Nostrand

Veterans Land Act, Pan-Canadian

According to Harris (1996a), the Department of Veteran Affairs (DVA) in Canada developed the only policy of national scope in support of owner-builders in North America. Enabled by the 1942 Veterans Land Act (VLA), returning war veterans in need of housing and with limited financial resources were able to access home financing. While the name of the VLA is a bit of a misnomer, it allowed veterans to obtain loans not only for land and land improvements, but also for building materials, livestock and farm equipment.

At its inception, the program contracted local builders to construct homes on laid-out subdivisions. By 1949, the DVA's approach began to increasingly emphasise a "Build-Your-Own-Home" policy in which the Government offered veterans technical assistance, construction courses, on-site inspections and guidance. While the VLA helped to reintroduce the pockets of owner-constructed homes more commonly found prior to the 1920s, planned residential development remained the norm (Harris 1996b).

Photo 10: Aerial View of Topham Park, Etobicoke, Toronto



Source: Harris, 1996b.

Post-World War I schemes combined mutual self-help construction programmes with access to small, intensive agricultural holdings, to encourage families to attain food self-sufficiency. Post-World War II schemes were developed close to industrial employment. These wartime housing communities (**Photos 10 and 11**) remain as important "starter" neighbourhoods in most cities throughout Canada, including Toronto.

Photo 11: Houses in Topham Park, Etobicoke, Toronto



Source: Harris, 1996b.

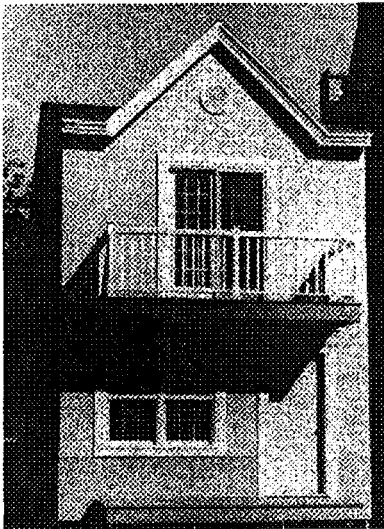
The Grow Home, Montreal

“Grow Home” refers to an affordable housing study undertaken by the Affordable Homes Program at the School of Architecture at McGill University. As described by Rybczynski et al (1990), the project endeavoured to design and build an affordable starter house for a family or household making a combined annual income of \$50,000 in Montreal. To reduce costs and increase affordability, the project examined three essential factors: area, complexity and quality.

In the end, the approach adopted by the project sought to minimise space requirements and architectural complexity, but maintain a high quality of materials and finishes. The name “Grow Home” was adopted for the project because of the requirement that prospective residents participate in completing or later upgrading some of the finishing work on the home.

A prototypical Grow Home (i.e. a narrow, two-storey 93 square meter unit, see **Photo 12**) was constructed as a demonstration project on the McGill University campus in May 1990.

Photo 12: Prototypical Grow Home



The Grow Home approach includes a basic, no-frills base model, coupled with a range of interior and exterior options. These options include choices related to configuration (e.g. choice of foundations, balconies, decks, roof styles, unpartitioned space), interior finishes (e.g. choice of materials, kitchen sizes and cabinetry) and exterior finishes (e.g. choice of materials for façade, windows).

While providing the prospective homeowner with the ability to adapt components to suit their needs, this approach also allows for a continuum of choices based on economic circumstances. Demonstrating that a market exists for such housing, over 600 units were built by developers in the Greater Montreal Region within 10 months of the construction of the Grow Home prototype (Friedman and Raphael, 1996).

Source: Friedman and Raphael, 1996.

The project articulated the following seven principles for the Grow Home model:

- a narrow rowhouse site to permit higher density construction,
- small house size to increase affordability,
- unpartitioned space to create more in-house flex space to accommodate varying households needs,
- do-it-yourself components that permit cost-savings and household customisation,
- a traditional appearance to maintain simplicity and a cohesive street façade,
- cost-effective and energy-efficient materials that are durable,
- some degree of prefabrication to produce cost savings.

The design of the Grow Home not only considered affordability and cost-effectiveness, but other urban design factors such as a higher density land use plan to support the more efficient provision of municipal infrastructure and less car-reliant communities (Figure 6). Using these principles as a guide, the estimated cost of the Grow Home was \$65,000 in 1990, subject to changing land prices.

Figure 6: Drawing of Typical Housing Row of Grow Homes



Source: Friedman and Raphael, 1996.

Sprout Home

Sprout refers to a starter home prototype researched and developed by Sevag Pogharian Design (1994). Similar to its antecedents such as the Grow Home, the purpose of the Sprout prototype was to enhance the affordability of homeownership for first-time buyers. For a conceptual rendering of the Sprout process for one-and-a-half and two-storey models, see Figures 7 and 8.

Three principles underpin the Sprout design concept: participation, flexibility and incrementalism. Participation refers to the enhanced role for consumers in shaping the form of the house over time, flexibility includes the ability of the house to expand or change with time, and incrementalism implies a gradual but continuous construction process in completing a home. In this way, “flexibility describes attributes of a house, incrementalism describes a process, and participation describes the spark that sets the process in motion” (Sevag Pogharian Design, 1994: 13).

Like the Grow Home, the Sprout model addresses itself to the affordability problems experienced by middle-income homebuyers. The development of the Sprout model aims to reduce the required down payment and the carrying costs involved in homeownership. The Sprout House is based on a small, initial starter home of approximately 900 to 1,100 square feet that is designed to accommodate expansion. Although the home can be expanded, its initial size is modest to increase its financial accessibility to households of more modest economic means. It is estimated that a new Sprout Home can be built for between \$85,000 and \$110,000, excluding land costs – making the home affordable to a family with an income of about \$40,000.

Unlike the Grow Home, the Sprout model was designed to accommodate *exterior* expansion - and not just interior change or customisation - to adapt to the changing space needs and/or economic situation of households. Among other benefits, the expansion of a Sprout home may allow homeowners to introduce an accessory apartment as a source of revenue.

Figure 7: Progression of 1.5 Storey Sprout House

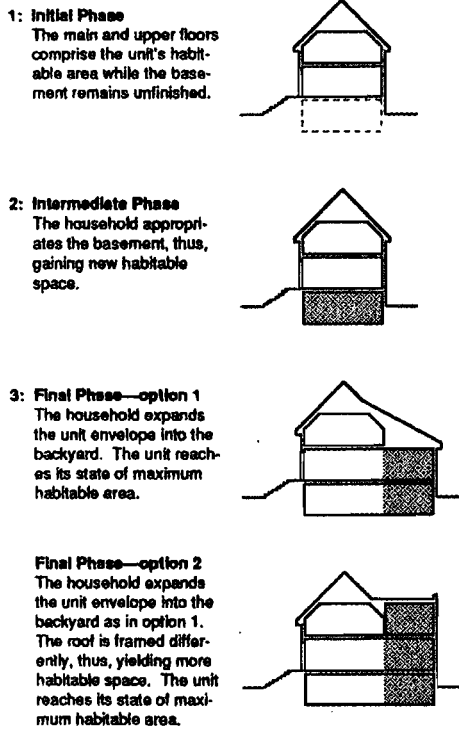
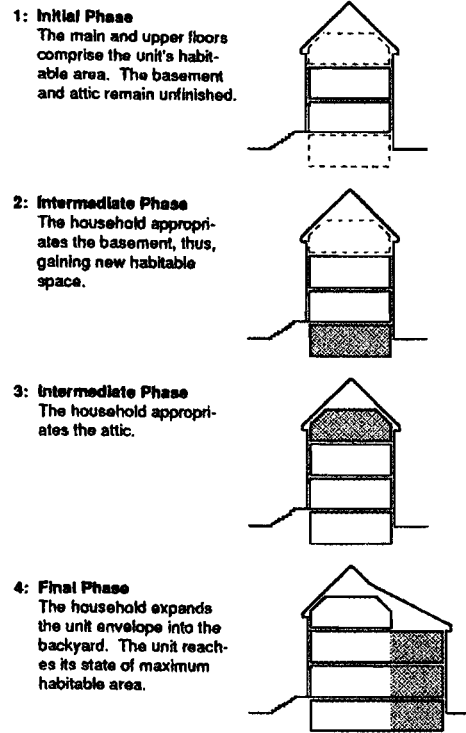


Figure 8: Progression of 2 Storey Sprout House



Source: Sevag Pogharian Design, 1994.

International Examples

Self-Built Homes, Sweden

As elaborated in his research on Swedish precedents, Harris believes Sweden was probably one of the first countries to support an *aided* self-help housing program, a term coined by American planner Jacob Crane in 1945. Beginning in 1904, Sweden supported a national "Own Homes" Loan Fund. The fund was established to grant loans to mostly rural owner-builders. While there are numerous examples of European governments assisting self-help housing programs, Sweden and the City of Stockholm in particular, supported one of the more systematic plans to assist aided self-help housing.

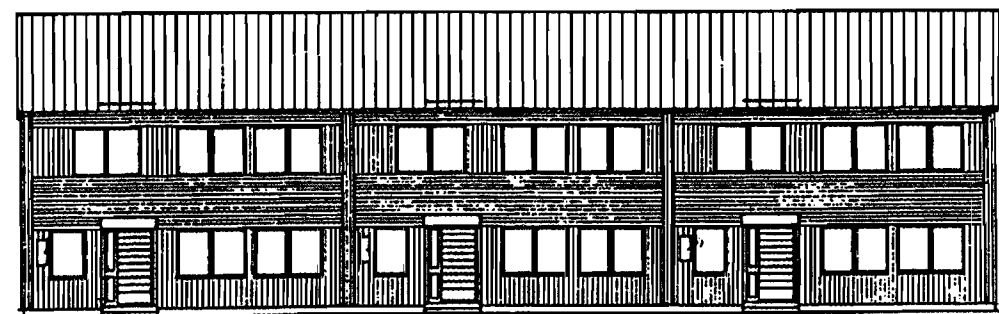
At the turn of the century, the City of Stockholm began to acquire land, layout subdivisions and then offer it for sale to private buyers at affordable prices. Many of the private buyers were workers who constructed their own homes on the purchased sites on an incremental basis. This practice ceased with the growing involvement of speculators who constructed and sold finished homes to higher income groups.

In the face of post-war housing shortages, however, owner-construction picked up again. In 1920, a number of new self-help and mutual-help housing groups were formed to meet this need, including *Homes by Your Own Labour*. In 1926, the City of Stockholm launched a larger-scale trial program of 200 self-built homes (Baltay 1996). At first, the City of Stockholm experimented with owner-built projects without basic services, but decided these posed unacceptable health risks.

Subsequently, the City of Stockholm embraced a more comprehensive, aided self-help approach in which the City offered land with basic services, long leases, favourable mortgage terms, building materials, supervision and technical services for participating owner-builders. The program also incorporated the use of prefabricated wall and construction components and became known as the “Magic House” program (Harris 1996a). While the program relied on a “do-it-yourself-mentality,” the City’s housing division carefully monitored the implementation of the program. Only reliable male wage earners with families were permitted to participate in the program. The program offered participants a limited range of house plans, and required them to accept close supervision and a strict, albeit incremental, building schedule.

The program was regarded as a success – it involved no government subsidy and provided good quality housing for people in need. By 1939, an estimated 3,000 units were built through this program. Notably, the program was considered a model considered worth replicating in other Scandinavian cities such as Helsinki (Harris 1996a). The self-build program initiated by the Small House Division of the Stockholm Housing and Real Estate Board (SMAA) of the City of Stockholm has become an integral part of the City’s affordable housing program. Since its inception in the late 1920s, the program has facilitated the construction of over 17,000 houses on a break-even basis. Many of the self-built communities are known for their active social networks and associations, a by-product of the bottom-up approach to community building espoused by the City’s approach to providing affordable housing. All houses built by the program conform to minimum housing standards, and the designs have been adapted to different site conditions (Figures 9 and 10).

Figure 9: Typical Rowhouse, Self-Built, Sweden (1975)



Source: Baltay, 1996.

Figure 10: Two-Family Typehouse, Self-Built, Sweden (1988)



Source: Baltay, 1996.

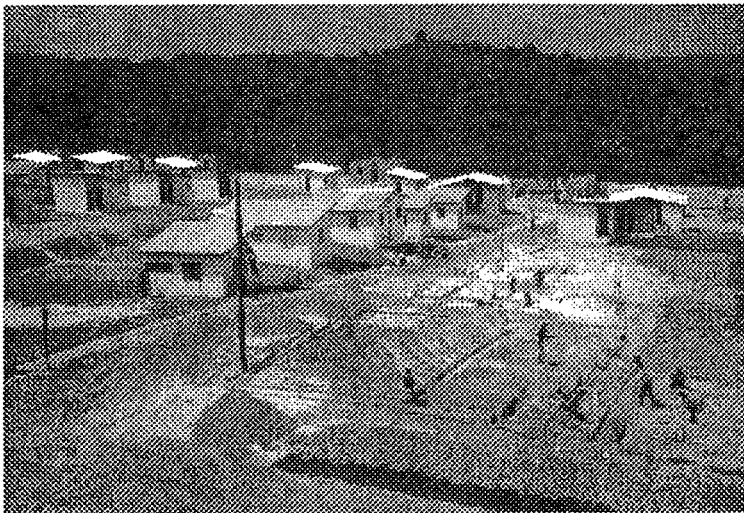
In terms of innovative financing schemes, the program assumed that the labour of the builder was equal to ten percent of the value of the house, with the City financing the remaining ninety percent. This allowed self-builders to deploy their own labour as a down payment or a kind of “sweat equity.” In reality, the self-builders’ work usually added value to the house, increasing its value and reducing the City’s mortgage to about seventy-five percent of the house’s value (Baltay 1996).

Although initially associated with the negative social stigmas related to social housing, the development of self-built neighbourhoods into “solid and respectable places to live” has significantly improved public perception (Baltay, 1996: 96). The program has evolved over time in consonance with changes in construction techniques and materials, building codes and standards, and contemporary house designs. For example, self-built houses tend to more expensive now, and contractors lay the foundations and serviced lots are sold outright to residents rather than leased. As of 1990, eligible self-builders needed a combined income of \$52,000 USD/year and the ability to provide a five percent down payment to participate in the program. There is no upper income limit for self-builders (Baltay 1996).

Tarkwa Resettlement Area, Ghana

In 1996, John van Nostrand Associates was appointed by Gold Fields Ghana to co-ordinate the voluntary negotiation, relocation and resettlement of up to 20,000 existing residents of Tarkwa, Ghana, the site of what is likely to be the fourth largest gold deposit in the world. After extensive negotiations with local residents and traditional leaders in the area, construction of a new resettlement area was initiated in June 1997 (**Photo 13**).

Photo 13: View of Construction Site, Tarkwa, Ghana



Source: John van Nostrand

The goal of the resettlement program was to design and build a community that improved the quality of life for the people who reside in the new resettlement area. In the original settlements on the site, approximately 60% of the housing was constructed of wattle and daub (i.e. bamboo frames and mud filling). Communal sanitation and refuse facilities were virtually non-existent, with only 6 potable water sources serving a population of 8,000. As such, the resettlement program offered an opportunity to improve the quality of building construction and infrastructure provision.

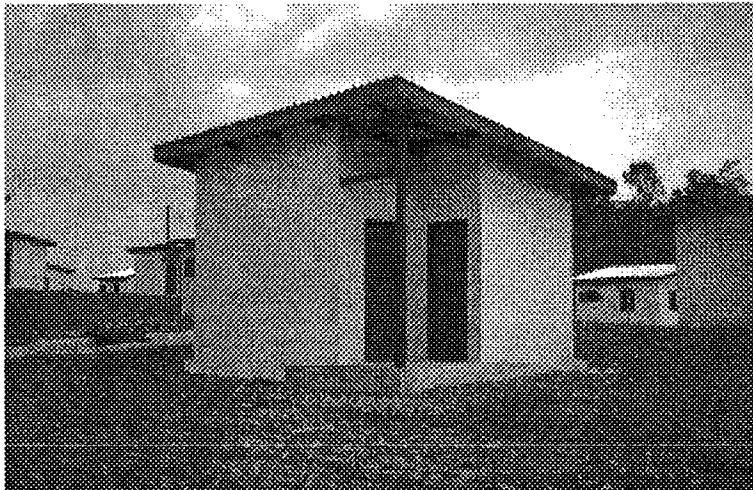
The new resettlement area includes basic services, housing and public facilities for 700 families on 35 hectares. For families relocating to the resettlement area, each household received a replicate model of their original home, selected from a range of pre-designed prototypes developed for a previous housing project completed by Planning Alliance in Lesotho, Africa (**Photo 14**). These prototypes were designed to easily accommodate incremental renovations, upgrades and/or additions (**Photos 15 and 16**).

Photo 14: Prototype Housing Models, Lesotho



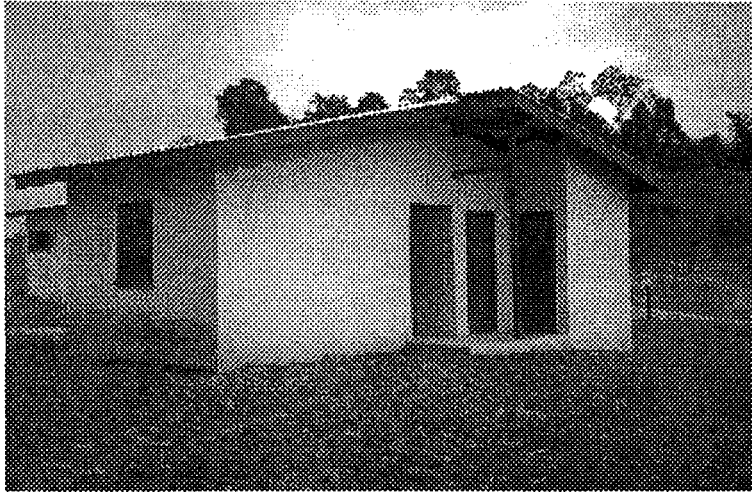
Source: John van Nostrand

Photo 15: Incremental Housing – 1 Bedroom, Tarkwa, Ghana



Source: John van Nostrand

Photo 16: Incremental Housing – 2 Bedroom, Tarkwa, Ghana



Source: John van Nostrand

In terms of infrastructure and services, the same approach was also used. For example, families with in-house sanitary infrastructure and electricity at the original site received the same level of services at the new resettlement area, while other households now have the opportunity to upgrade their level of access to services through connecting to the newly constructed infrastructure and electrical grid.

Currently, existing urban services include public water stand posts as well as on-plot and in-house supply, and communal latrines as well as on-plot KVIP latrines and in-house toilets with septic tanks. At its completion, the resettlement area housed families with a very broad range of incomes through a progressive approach to housing and urban servicing, combined with comprehensive, long-term planning.

Summary

As this review of selected precedents illustrates, the number and variation of incremental forms of housing development are vast. Schemes range from planned and assisted self-help schemes involving government support and the provision of municipal infrastructure (e.g. Sweden) to less planned approaches with no services that relied on the individual or mutual efforts of owner-builders and their families, friends and/or neighbours (e.g. Earls Court). In each case, incremental approaches to residential development, usually in combination with the efforts of owner-builders, have facilitated the availability of affordable homeownership to a wider range of income groups than would otherwise be possible, both with, and more often without, state assistance.

As the Grow Home confirms, Pro-Home is not the first scheme to propose owner-directed progressive approaches to housing development. While both the Grow Home and the Pro-Home emphasise the benefits of flexible design, the two approaches differ in important ways. Most notably, the Pro-Home places greater emphasis on the staged expansion of the home, than simply on the types and reconfiguration of its interior that characterise the Grow Home and its follow-on, the Next Home. The Sprout House lies somewhere between the two, combining aspects of each.

Finally, it is important to clarify that these historical precedents of owner-built housing are intended to serve as examples, rather than exemplars *per se*. By alluding to past examples of unplanned and unregulated housing, this Study does not seek to glorify lower housing and municipal service standards, or introduce a two-tiered housing system for rich and poor households. Instead, these precedents are meant to show how incremental residential development has facilitated access to affordable homeownership.

In terms of the Pro-Home approach proposed in this Study, self-building represents one potential part of a larger, integrated housing development framework comprised of land, infrastructure and housing designed to increase access to affordable homeownership without compromising accepted standards of housing and service provision. In this regard, the essential difference between the Pro-Home approach and more conventional methods relates primarily to the process of housing development, and not the overall quality of the home produced. The key features of Pro-Home concept are further elaborated in the next section of the Study.

Part III: The Pro-Home Concept

Overview

In its review of the problem of housing affordability in many Canadian cities, the Federation of Canadian Municipality's *National Housing Policy Options Paper* (1999) underlines the need for a national housing strategy to address the need for housing repair, the relief of affordability problems and the demand for new supply. Given the current context of limited public funding for affordable housing initiatives, the Options Paper also points to the need for strategies that encourage private investment and mobilise community-based housing action.

Although not developed as a specific response to the Options Paper, the Pro-Home concept responds to at least several of the housing priorities identified by the report. More specifically, the Pro-Home concept represents a strategy to leverage private sector investment and community-based action to increase the supply of affordable homeownership. As seen in the previous section on precedents, incremental housing development is not a new concept and has been deployed at other times and in various jurisdictions to provide affordable forms of housing. There is now an opportunity to revisit these incremental approaches as one possible way of mitigating the lack of affordable housing supply.

As briefly outlined in the Introduction of this Study, the Pro-Home concept emphasises the following key features:

- an incremental and affordable housing development process.
- can be contractor or owner-built, or a combination of both.
- combines new home and renovation markets.
- combines home ownership and rental opportunities.

Together, these features are designed to increase access to affordable homeownership by reducing the down payment and carrying costs of a starter home, and to make the provision of such housing feasible for private or non-profit housing developers from a financial perspective. While not a comprehensive solution to the lack of affordable housing, an incremental approach to housing development offers considerable promise for increasing access to affordable homeownership for low- and middle-income households. A secondary but important benefit of the Pro-Home concept also includes the creation of accessory units that not only provide a source of income for owners, but also additional rental stock for prospective tenants.

It should be noted that while the Pro-Home provides the option of progressive or staged housing development, the staging process itself does not necessarily follow a linear trajectory. Rather, it offers an incremental and flexible approach whereby homeowners begin with what they can afford in terms of the range of models offered for a particular development, and then expand or alter their home in consonance with their social and economic situation.

The following section provides an overview and graphical illustration of the Pro-Home concept, taken from the perspective of how a Pro-Home community – and not just individual homes – may be developed. As such, the elaboration of the Pro-Home concept deals with both housing and site development attributes.

Housing Development

Housing Types and Mix

The Pro-Home concept allows for a range of house types and various approaches to housing development itself. With respect to the identification of proposed housing types, there are two generic approaches to adopt – incremental or shell – whatever the mix of housing types. Both approaches would include the construction of a starter unit to standards permitting its immediate or long-term occupancy.

These two types of housing development can be summarised as follows:

- *Incremental (or Progressive) Housing*: the house is completed in sections, beginning with an initial starter room or "core" section that can be added to in stages, either horizontally and/or vertically. Each stage is fully habitable (**Figure 11**).
- *Shell Housing*: the complete exterior "skin" of the house is constructed and the interior is left unfinished. Bathrooms and kitchens are "roughed in" and the owner assumes responsibility for varying degrees of the interior partitioning and finishing. The owner can reside in the enclosed space or basement, while completing the remaining superstructure (**Figure 12**).

Figure 11: Progressive Approach to Housing Development

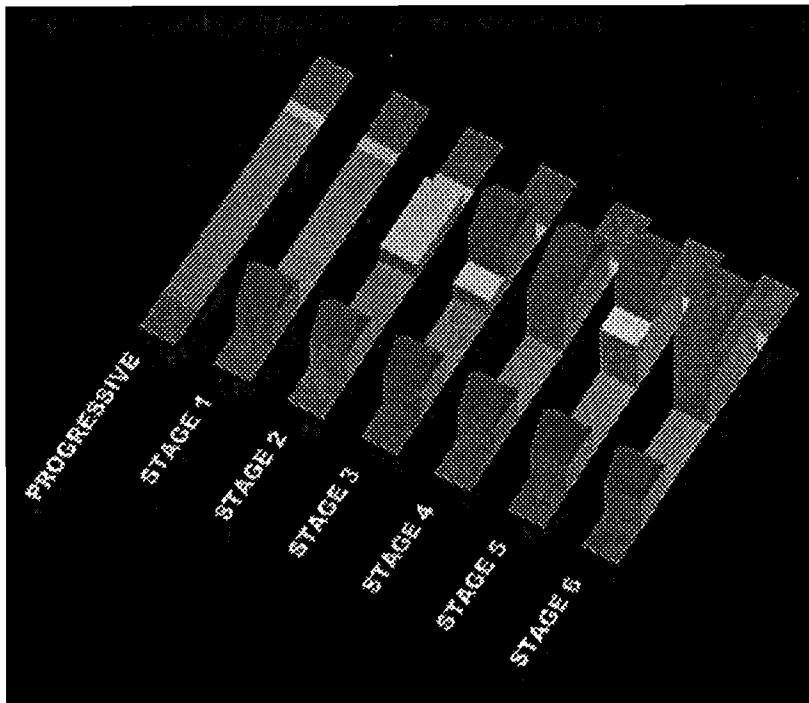
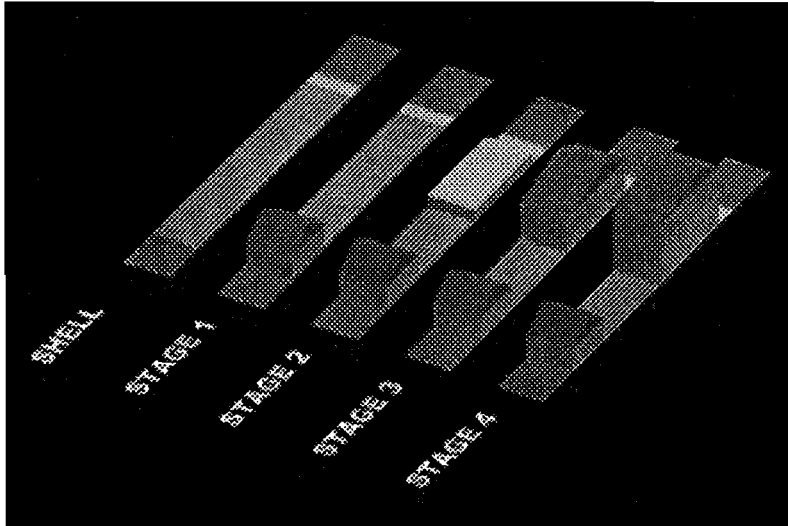


Figure 12: Shell Approach to Housing Development



A variety of housing types can be erected under either of these generic development approaches, including single-family detached, semi-detached, row, and/or congregate housing. Single-family detached, which is likely to prove the most popular, provides the greatest degree of flexibility for the individual household, and the least need for co-ordination with neighbours. However, single-family detached tends to be more expensive than either the semi-detached or row models, and the latter may prove preferable in situations where a number of households elect to develop their housing jointly or in collaboration.

Housing development schemes may include main house units along with coach houses constructed at the rear of lots, or focus exclusively on main house units. Although not essential, coach houses provide the option of a more moderately priced starter unit, while also offering the option of an accessory rental unit to generate income for the homeowner as a "granny flat."

Whether or not these house types are built in the shell or incremental format is a question to be decided by prospective households, developers, local municipalities or others involved in the housing development process. Some municipal planning departments are likely to favour the "shell" approach as the form and appearance of the housing is established from the outset and it adheres more closely to conventional housing developments where homes look completed.

The determination of types and mix is a critical part of the design process as it, in turn, can dictate the mix of lot types and sizes. Alternatively, incremental lot sizes that permit the development of a mix of housing types can also be used.

Model Homes

The developer(s) may wish to identify a range of housing models and styles, all of which should be capable of being built in either the shell or progressive formats. These can be based on popular existing models or prefabrication packages that, in turn, are "deconstructed" to enable their realisation either in their entirety or in stages. (More detailed information and illustrations of potential home designs are provided in the next section).

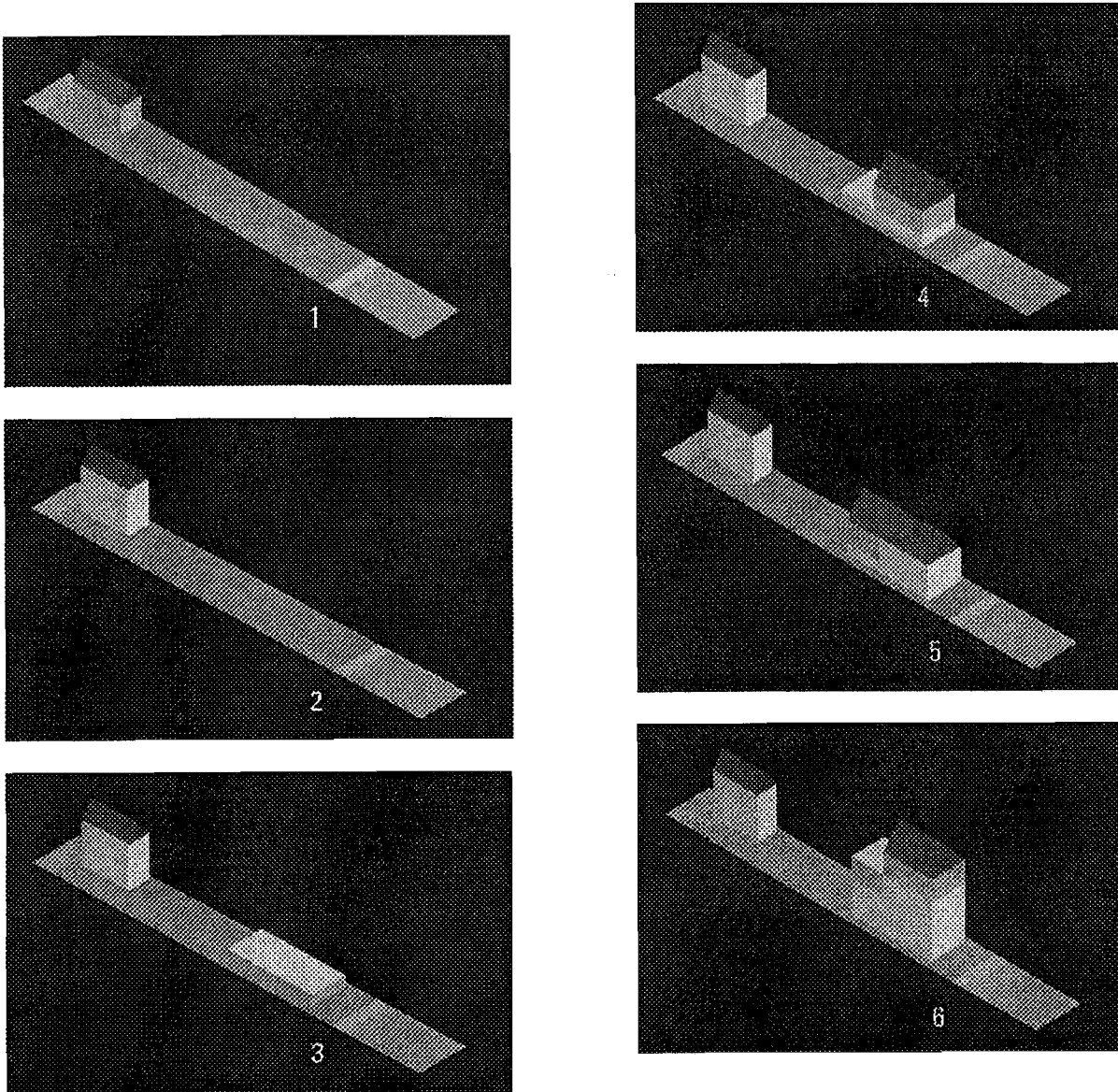
Stages of Housing Development

Model homes should be illustrated in progressive format, outlining potential development from a very basic 'starter' unit through to a fully completed residence. A sample progression might include the following stages (Figure 13):

- Stage 1: single-storey, rear-lot, coach house unit.
- Stage 2: two-storey, rear-lot, coach house unit.
- Stage 3: front-lot starter house (basement and ground).
- Stage 4: front-lot starter house (ground extensions).
- Stage 5: front-lot house (second floor extensions).
- Stage 6: completed 3-storey residential and rear garage/coach house.

As mentioned previously, it should be noted that a staged approach to housing development does not necessarily imply a linear progression from one stage to the next. Rather, Pro-Home is designed to offer an incremental and flexible approach to residential development, where homeowners start with what they can afford, and then expand or alter their home as their social needs or financial circumstances evolve over time. As mentioned previously, homes may be contractor or owner-built, or a combination of both.

Figure 13: Sample Housing Progression



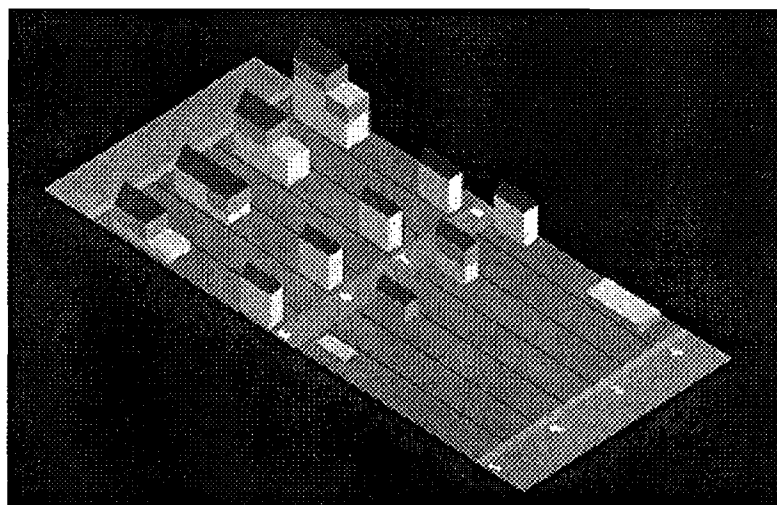
Detailed Design

Following the review and approval of the housing types, mix, and models, the developer's architect should prepare detailed housing designs, showing how the house can be constructed in stages, or in shell, and illustrating how construction would occur, in the event that prospective households elect to build their own homes.

Each stage must be capable of existing as a stand-alone, habitable structure. Particular attention needs to be paid to facilitating the homeowner's ability to supplement their income through renting or subletting portions of their home to offset carrying costs (e.g. mortgage payments).

In developing a Pro-Home community, the developer should prepare cost estimates for the construction and financing of each stage on either a progressive basis or as the initial entry point, based on the preparation of detailed house designs referred to previously. Along with detailed house designs, this information provides prospective buyers with an overview of their housing options (**Figure 14**).

Figure 14: Incremental Housing – Stages of Development

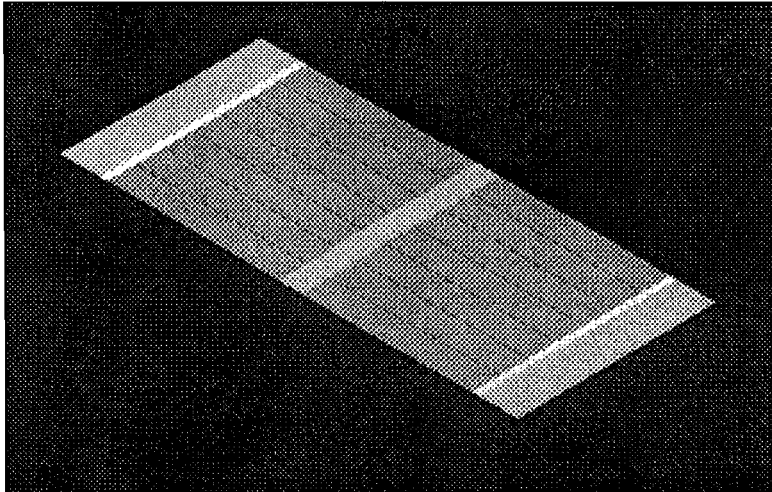


Site Development

Plan of Subdivision

A Plan of Subdivision should be used to identify residential areas or blocks, as well as lots for public facilities such as parks and schools based on the anticipated long-term population. The residential portion of the Plan of Subdivision should be subdivided into incremental lots (**Figure 15**), based on the smallest size capable of supporting permanent housing when fully developed. The latter can be identified following an analysis of typical lot areas within the surrounding neighbourhood or district. In central Toronto, for example, such a lot may measure 15 to 20 feet wide by 80 to 100 feet long. In the older suburbs, such lots may grow to 20, 30, or even 40 feet by 100 to 150 feet.

Figure 15: Site Subdivided into Residential Plots



Allocation

As the land is surveyed into increments, prospective buyers are then able to purchase house lot(s). The lot pattern allows for both immediate and long-term intensification. A buyer who purchases more than one lot should be encouraged to build within an envelope that facilitates future intensification.

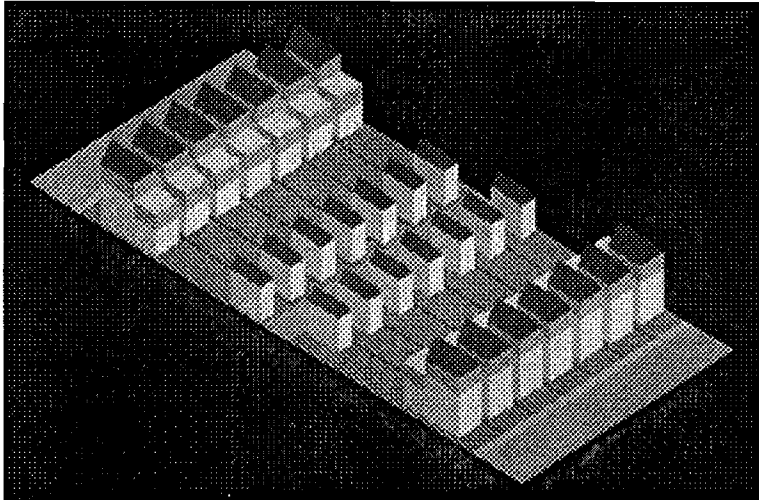
Land Tenure Options

The developer should identify the potential tenure under which lots can be held, and recommend the preferred form(s) of tenure. Such tenures include:

- Freehold purchase - outright ownership by the resident.
- Condominium - common ownership vested in a condominium body.
- Land Trust - common community ownership by the residents.
- Leasehold - the developer retains ownership, thus reducing the cost of purchase by the resident.
- Lease-to-Buy - residents pay for the cost of the lot over time, thus spreading out their expenses.

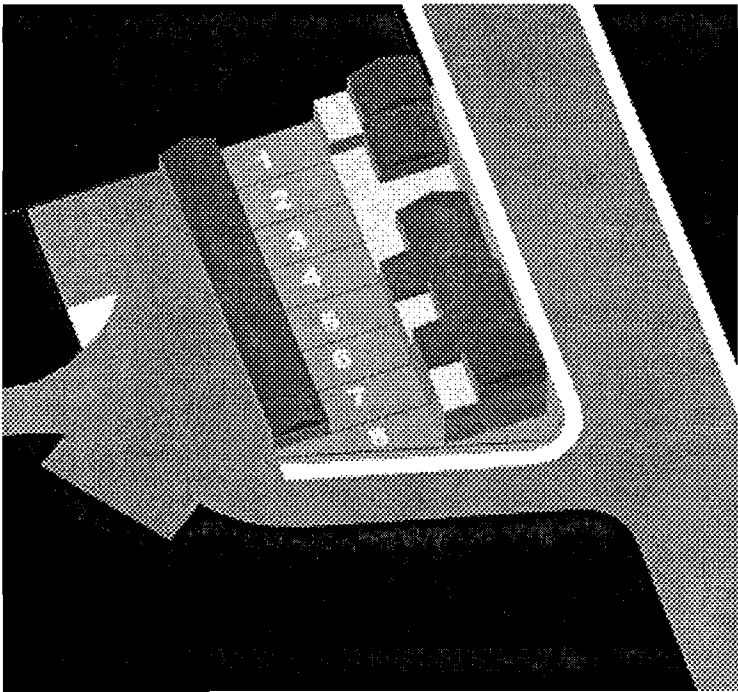
A detailed Plan of Subdivision can also be used to illustrate the anticipated 'end-state' of the development to provide information to surrounding communities, prospective buyers and investors, and to the local municipal planning and building department (**Figure 16**).

Figure 16: A Fully Developed Residential Community



As presented below, **Figure 17** presents a theoretical image of what a Pro-Home development might look like when completed, showing how various stages of development fit together to produce a new block of infill homes in relation to an existing street.

Figure 17: Completed Pro-Home Community as an Infill Development



Summary

A progressive, planned approach to housing provision is directed at allowing a greater proportion of income groups to access homeownership through affordable starter homes than is currently available through conventional approaches to residential development. As the description of the concept here illustrates, the following are key underlying features of the Pro-Home approach:

- *Incremental*: the Pro-Home can be constructed in an incremental manner, with homeowners choosing a "starter" home they can afford, and then expanding or altering it over time.
- *Affordable*: the Pro-Home approach increases access to affordable homeownership by focusing on a residential development process that treats housing as a process, rather than a finished end-product.
- *Flexible*: the Pro-Home can be either contractor or owner-built, or a combination of both, and provides for the option of an accessory unit as a source of income for prospective buyers.

The incremental approach to development embodied by the Pro-Home allows buyers to start with the home they can afford, and then expand and renovate their starter unit in consonance with social and financial circumstances. In conjunction with the option of incorporating secondary suites, the inherent flexibility of the Pro-Home approach facilitates not only the initial purchase of a home, but also reduces the burden of ongoing carrying costs. Finally, the option of homeowners participating in the home-building process itself helps to reduce the cost of owning and maintaining a home.

Part IV: Application of the Concept

Overview

Taking the concept elaborated in the previous section, the following part of the Study presents an application of the Pro-Home on an *in situ* basis at a potential development site. In this particular case, the development site represents a possible demonstration site identified by the City of Toronto. Although the application scenario is somewhat particular to Toronto, it is intended to provide a more concrete and generic understanding of the potential for implementing the Pro-Home concept, as well as outlining some of the constraints to its implementation

Application Scenario

Site Description

The City-identified demonstration site is located near the Manse-Lawrence Avenue Road intersection in Toronto's East End. The site presents an infill development opportunity in the outer-suburban area of the City. The site is City-owned and was originally purchased to accommodate the Scarborough Expressway and other infrastructure developments in the former City of Scarborough. The site is a long-narrow strip, adjacent to existing residential lots between Lawrence Avenue and Coronation Drive. Lawrence Avenue is a major arterial road within Toronto that is relatively well-served by public transit.

Development Plan

Table 2 outlines the key elements of the proposed development plan for the 17.42 acre Manse-Lawrence site. The proposed plan includes open space and an assortment of house types, including detached, semi-detached, quads and townhouses, and the development of 165 units at a density of 12.6 units per acre.

Table 2: Proposed Development Plan for Manse-Lawrence Site, Toronto

ELEMENT OF PLAN	DETAILS/DIMENSIONS
<i>Total Site Area</i>	17.42 acres (7.0 hectares)
<i>Park Area</i>	4.35 acres (1.75 hectares)
<i>Total Developable Area</i>	13.1 acres (5.3 hectares)
<i>Total Street Frontage</i>	5,000 feet (1,525 metres)
<i>Lot Sizes</i>	
Detached	2,750 square feet
Semi-detached	2,350 square feet
Quads	1,800 square feet
Townhouses	1,350 square feet
<i>Unit Breakdown</i>	
Detached	40 units
Semi-detached	70 units
Quads	28 units
Townhouses	<u>27 units</u>
Total	165 units
<i>Density</i>	12.6 units/acre

Housing Development

Consistent with the Pro-Home concept, prospective residents at the Manse-Lawrence site could choose from a variety of house types and models at various stages of completion. The range of choices available provides owner-occupants with greater financial flexibility by increasing the number of potential affordable “entry points” to homeownership, and by introducing the option of income-generating secondary suites.

Figures 18 and 19 show building sections and floor plans of the six possible stages of housing development proposed for this particular application scenario. These stages of development are similar to the stages outlined in the previous section:

- Stage 1: single-storey, rear-lot coach house.
- Stage 2: two-storey, rear-lot coach house.
- Stage 3: split-level basement and ground floor.
- Stage 4: second-level addition.
- Stage 5: third-level addition.
- Stage 6: fourth-level addition.

As mentioned previously, it is important to note that progressive development of the Pro-Home does not necessarily imply a *linear* progression or trajectory. Depending on the financial situation of the buyer, any of the stages can serve as a starting point for prospective buyers. So, for example, one household may start at Stage 1 and then proceed to Stage 3 over a period of two years, and another household may start and finish at Stage 6. These options provide both social and financial flexibility in terms of space utilisation for potential homebuyers and emphasise the flexibility of the Pro-Home approach that views housing as a *process* and a *resource*, rather than just a product.

In addition, it is important to recognise that the coach house is not an essential element of a Pro-Home community. Some buyers may choose to construct only the main house, or some development sites may not be suitable for the integration of rear-lot coach house units. Where desired and appropriate, however, coach houses can be constructed in rear yard locations to provide a modest starter unit, an eventual granny flat for tenants or even a studio-workspace for home-based businesses. In the proposed scenario, coach houses can be developed as a one-storey unit or as a two-storey unit (Figure 18).

Similar to the coach house, there are also several options for developing the main house. The main house can be developed over, or bought at, four different stages of development (Figure 18), with or without the coach houses. In addition to the flexibility presented by the various development stages, each stage itself may also offer flexibility to prospective buyers. For example, the Stage 3 home is “split” from back to front to facilitate the isolation of different parts of the house from each other, allowing for different configurations of ownership, rental or work-at-home options.

Incremental Construction Process

Building incrementally is fundamental to the construction method of the Pro-Home. While not essential to the building process itself, the use of pre-fabricated parts designed particularly for the Pro-Home concept would facilitate incremental house construction. Just as one can buy prefabricated building materials such as doors and windows off the shelf in most building supply stores, the Pro-Home owner would be able to buy *Pro-Home parts* off the shelf from either a supplier or store.

Consistent with this scenario, a Pro-Home owner could order prefabricated roofs, walls and floors from a particular commercial housing manufacturer, or in some cases, these parts could be available through a building supply store. Either way, a Pro-Home owner would be able to purchase different packages of house parts related to whichever stage they are deciding to build. If in the future, they decide to expand their house, Pro-Home owners could then purchase a new package of parts corresponding to the next stage of construction.

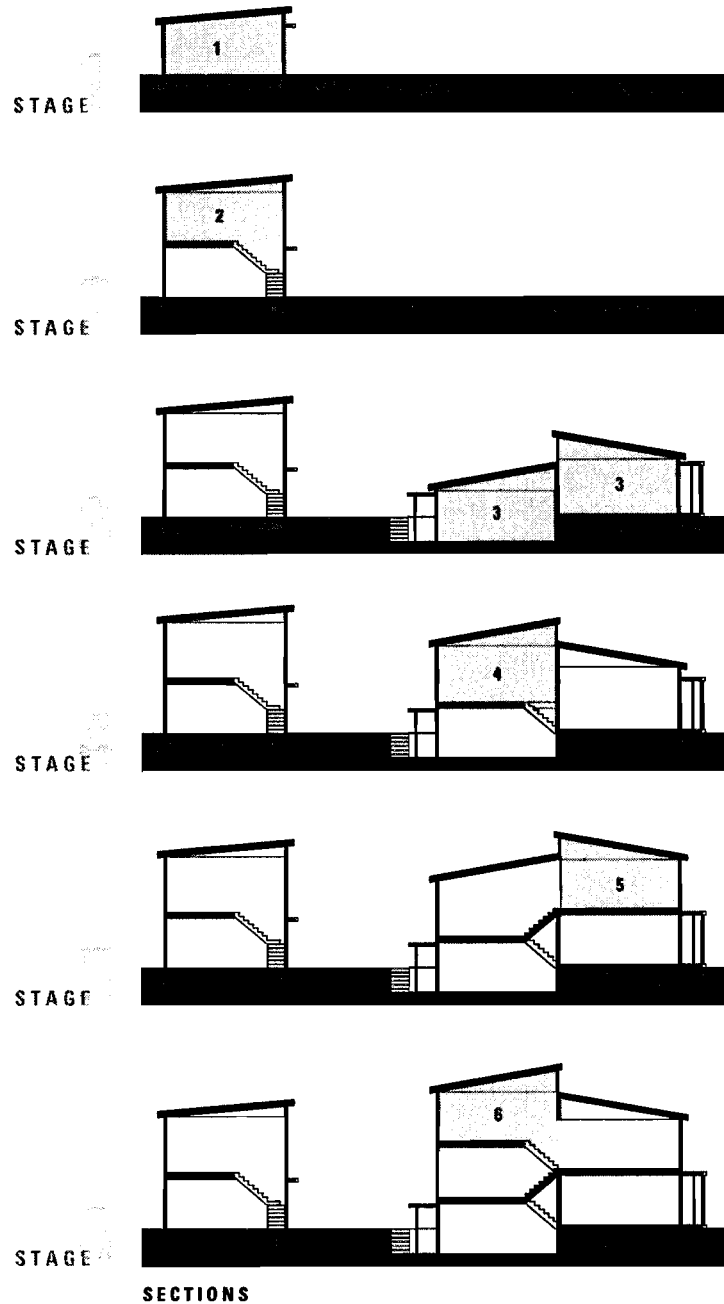
The construction process itself would accommodate varying levels of participation by a Pro-Home owner. They may opt to hire a contractor to complete all of the construction, or choose to undertake some of the construction work themselves. For example, an owner may decide to hire a contractor to complete the heavier erection work, while completing the finishing work themselves. Whichever option is preferred, the ensuing incremental construction process would be owner-directed, flexible and amenable to varying levels of participation on the part of interested owners.

The Pro-Home Design

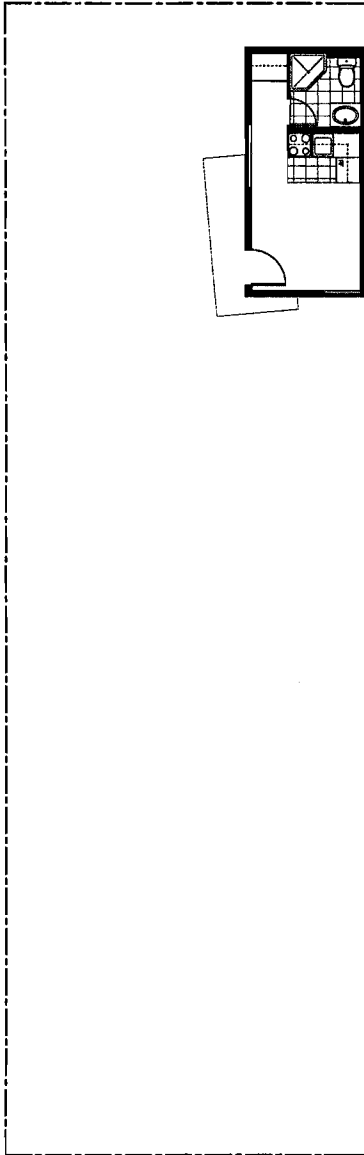
The layout and the split-level design of the Pro-Home (**Figures 18 and 19**) creates a simple and expandable housing form. The floor plate of Pro-Home is based on a standard size of 20 feet by 20 feet. Each additional floor, for each additional stage, is the same standard size. The walls and roofs are also standardised to match the floor plate in order to facilitate a simple expansion and renovation process. The floor plan is flexible and can be configured to accommodate rental units, live-in flats or can be laid out according to the specific needs of the owner.

As the house is expanded from one phase to another, the roof of the first phase 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. The exterior walls fully support the roof, allowing for open and flexible interior space. The prefabricated floors are framed to incorporate future phase additions. The stair openings in the floor, for example, are a pre-framed panel that could be removed during the construction of the next phase. In the same manner, openings for future mechanical services can be incorporated and capped off for future expansion.

In this way, the design of the Pro-Home is tailored specifically to support an incremental, affordable and flexible construction process.



Floor Plans (Stages 1-3) figure 1

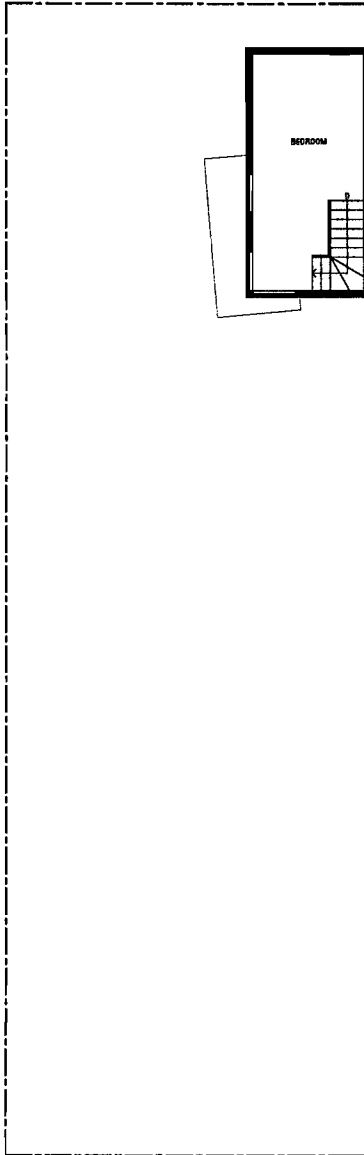


FLOOR PLAN
COACH HOUSE 200 sf



SECTION

STAGE 1

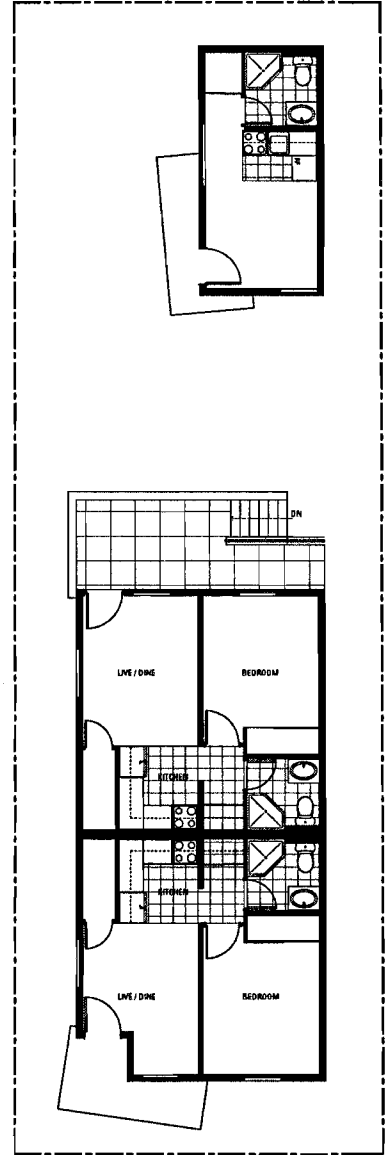


FLOOR PLAN
COACH HOUSE 400 sf



SECTION

STAGE 2



FLOOR PLAN
COACH HOUSE 200 sf
MAIN HOUSE 800 sf (basement rental unit)

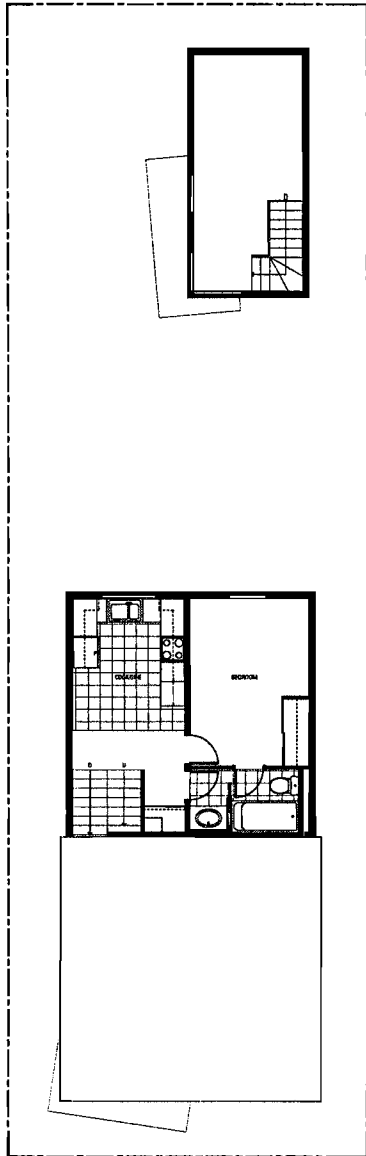


SECTION

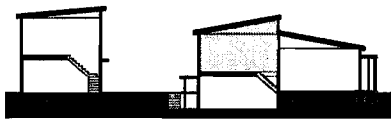
STAGE 3

PROHOME
A progressive, planned approach to affordable home ownersh

PLANNING ALLIANCE

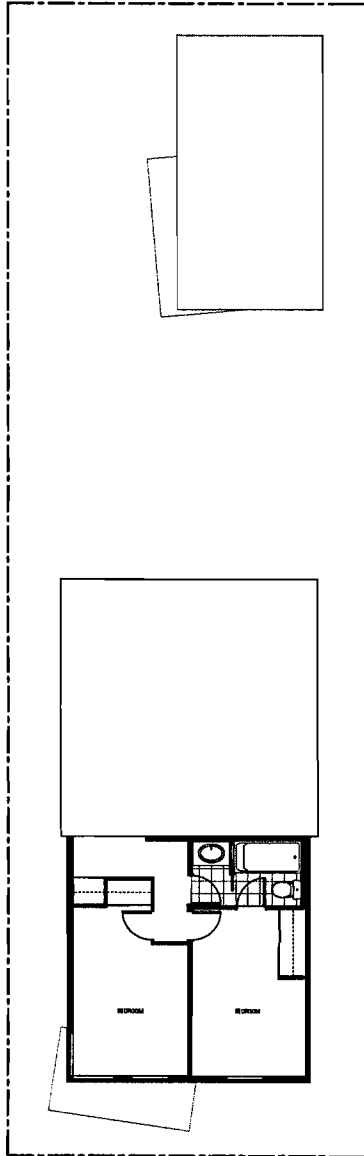


FLOOR PLAN
COACH HOUSE 400 sf
MAIN HOUSE 1200 sf

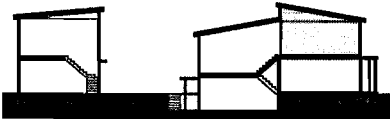


SECTION

STAGE 4

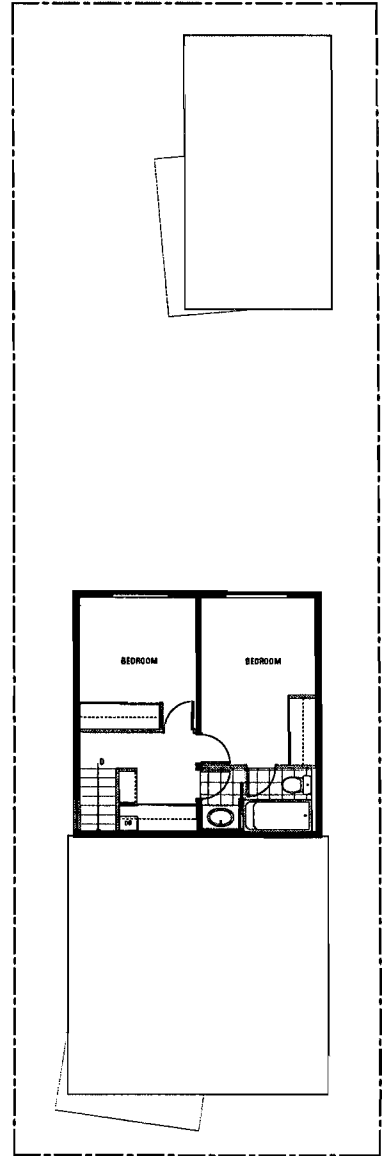


FLOOR PLAN
COACH HOUSE 400 sf
MAIN HOUSE 1600 sf

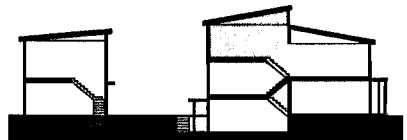


SECTION

STAGE 5



FLOOR PLAN
COACH HOUSE 200 sf
MAIN HOUSE 2000 sf



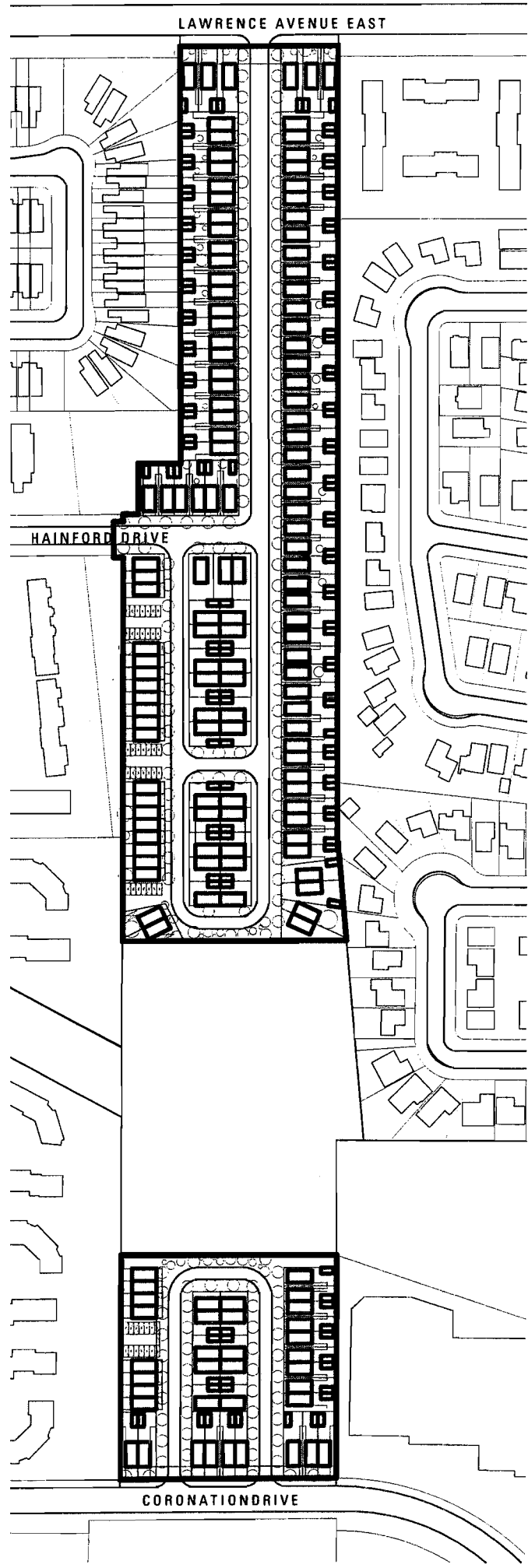
SECTION

STAGE 6

Site Development

Figure 20 presents the proposed Site Plan for the Manse-Lawrence site. In the proposed plan, conventional, fully completed houses developed using the shell approach would be constructed on the most visible perimeters of the site, along the Lawrence and Coronation frontages. The staged or incremental housing units would be located in the interior of the site. While most of the homes shown on the Site Plan have coach houses, others do not.

The Site Plan also shows how the Pro-Home approach may be used as an innovative infill development strategy, and how with an overall site plan to guide development, it is both a highly adaptable approach to residential development and one that can be congruent with the existing scale and character of more conventionally developed neighbourhoods. Even with homes at various stages of progressive development, a Pro-Home community displays a coherent, albeit varied, overall built form (**Figure 21**).



Proposed site plan for Manse/Lawrence site

FIGURE

AREA SUMMARY Site Area = 12.6 acres

UNIT DIMENSIONS (main house) = 20 ft x 40 ft
(coach house) = 10 ft x 20 ft

NUMBER OF UNITS:

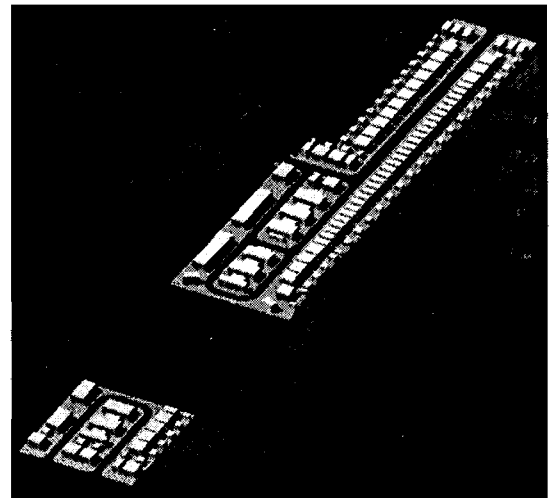
DETACHED = 40 units

SEMI DETACHED = 178 units

TOWNHOUSES = 59 units

TOTAL = 165 units

AVERAGE LOT SIZE = 2760 sf



PROHOME

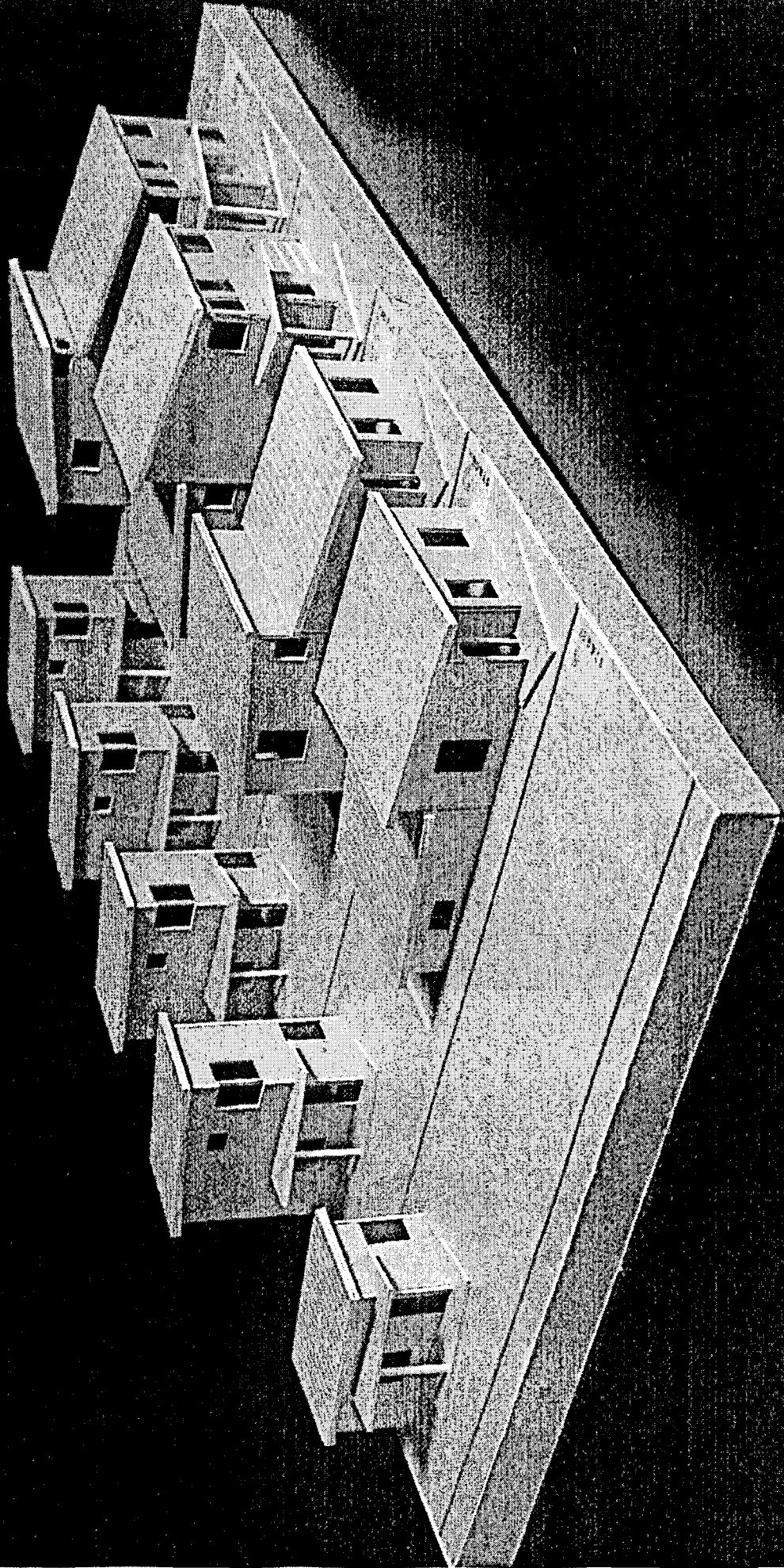
A progressive, planned approach to affordable home ownership

PLANNING ALLIANCE



21

FIGURE



PROHOME
A nonsectarian planned approach to affordable home ownership

Financial Analysis⁶

Introduction

A preliminary development proforma and construction budget were developed for the Manse-Lawrence site to illustrate the feasibility of the Pro-Home approach. These demonstrate that the Pro-Home approach can work in the current market context. Specifically, they demonstrate that:

- *no* subsidy is required.
- *no* reduction in land market value is required.
- *no* reduction to development levies is required.
- there is financing available for the Pro-Home approach.

Land Value

To estimate the cost of the land of the Manse-Lawrence site, a comprehensive list of comparable land sales was compiled and reviewed (**Appendix A**). Based on this analysis, we would conclude that the land value of the Manse-Lawrence site is approximately \$281,000 per acre.

“Soft Second” Adjustment

To help ensure that the lands at the Manse-Lawrence site are maintained for affordable housing and not subject to speculation, the proposed financial plan would incorporate a “soft second” mortgage program. While capital appreciation is not to be discouraged, a “soft second” mortgage program, similar to that commonly used in California to assist homebuyers of marginal qualifying income, could serve a dual purpose. First, the “soft second” mortgage may represent increased land value to the City of Toronto on a present value basis, and secondly, it can operate to ensure that homes remain targeted to affordable purchasers on subsequent conveyance.

Ultimately, the “soft second” mortgage program offers a strong incentive to original purchasers to ensure that subsequent conveyances are made to qualifying purchasers and provides a market value benefit to the City of Toronto – or the respective landowner – as a consequence. See **Appendix B** for a more detailed account of how the “soft second” mortgage program operates.

Costing and Affordability

To determine development and construction costs, a detailed proforma was developed for the Manse-Lawrence site (**Appendix C**). The proforma assumes that the Manse-Lawrence site would be developed on a not-for profit basis. Development management fees of 3.5% of development costs (net of land) are included, but fall below the industry standard of 4%. The absence of a profit margin makes construction financing more difficult to secure, requiring that land financing be provided by the City for 100% of purchase price and that it further subordinate to development/construction financing.

The development proforma, along with construction budget estimates, were then used to calculate the minimum income levels at which a purchaser could afford to acquire either a Stage 1 (single-storey, rear-lot coach house) or Stage 3 (split-level basement main house) Pro-Home, based on a number of assumptions (**Appendix D**).

⁶ This section draws heavily on the input and expertise of Alon Szpindel of Sundance Development Corporation.

As shown in **Table 3**, with a purchase price ranging from \$63,000 to \$80,000, it is estimated that a qualifying income between approximately \$23,000 and \$28,000 would be required to purchase the Stage 1 Pro-Home, depending upon the land value used.

Table 3: Estimated Net Qualifying Income for "Starter Coach House" (Stage 1)

	100% LAND VALUE (\$)	75% LAND VALUE (\$)	50% LAND VALUE (\$)	25% LAND VALUE (\$)
Purchase Price	80,108	74,531	68,953	63,376
5% Down Payment	4,005	3,727	3,448	3,169
Mortgage Balance	76,103	70,804	65,506	60,207
CMHC Mortgage Insurance	2,854	2,655	2,456	2,258
Mortgage Required Payment (annual)	78,957 (6,757)	73,459 (6,287)	67,962 (5,816)	62,465 (5,346)
Monthly Costs				
Payment (monthly)	(563)	(524)	(485)	(445)
Property Taxes (1.2% purch. price)	(80)	(75)	(69)	(63)
Utilities & Insurance	(130)	(130)	(130)	(130)
Total Monthly Costs	(773)	(728)	(684)	(639)
Qualifying Income	28,995	27,316	25,636	23,957
Rental Income	0	0	0	0
Net Qualifying Income	(28,995)	(27,316)	(25,636)	(23,957)

As shown in **Table 4**, with a purchase price ranging from \$105,000 to \$122,000, it is estimated that a qualifying income between approximately \$36,000 and \$41,000 would be required to purchase the Stage 3 Pro-Home, depending upon the land value used.

Table 4: Net Qualifying Income for "Starter Main House" (Stage 3)

	100% LAND VALUE (\$)	75% LAND VALUE (\$)	50% LAND VALUE (\$)	25% LAND VALUE (\$)
Purchase Price	122,452	116,874	111,297	105,719
5% Down Payment	6,123	5,844	5,565	5,286
Mortgage Balance	116,329	111,030	105,732	100,433
CMHC Mortgage Insurance	4,362	4,164	3,965	3,766
Mortgage Required Payment (annual)	120,691 (103,29)	115,194 (9,858)	109,697 (9,388)	104,200 (8,917)
Monthly Costs				
Payment (monthly)	(861)	(822)	(782)	(743)
Property Taxes (1.2% purch. price)	(122)	(117)	(111)	(106)
Utilities & Insurance	(130)	(130)	(130)	(130)
Total Monthly Costs	(1,113)	(1,068)	(1,024)	(979)
Qualifying Income	41,745	40,065	38,386	36,707
Rental Income	10,200	10,200	10,200	10,200
Net Qualifying Income	(31,545)	(29,865)	(28,186)	(26,507)
Total Monthly Costs (less rent)	(513)	(468)	(424)	(379)

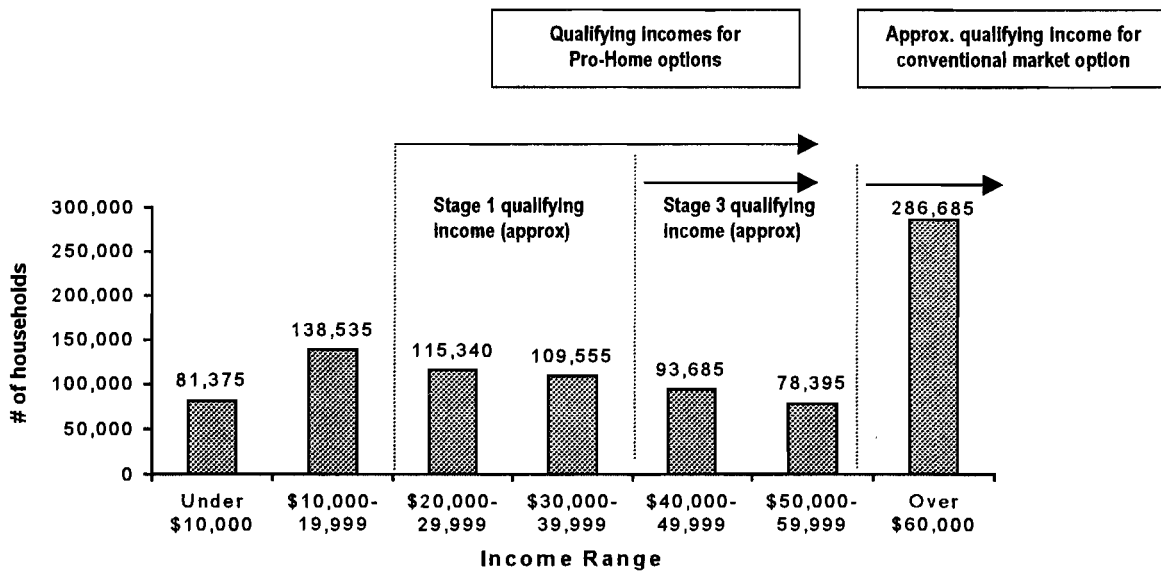
Assuming a rental income of \$10,200 per year or \$850 per month, the net qualifying income range for the Stage 3 Pro-Home would drop to \$26,507 to \$31,545 per annum. Moreover, total monthly costs, even for the 100% land value scenario, would amount to \$513 per month – close to the shelter allowance for a couple living on social assistance in Ontario, for example.

For each of these Stages, there is the potential to further reduce costs exists by virtue of the do-it-yourself modular design of the housing package. For example, if the owner were to elect to contribute 50% of the labour costs towards the construction of Stage 3, the monthly carrying cost would drop to approximately \$358 per month – only \$33 per month more than the shelter portion for a single person living on social assistance in Ontario. While development and installation of major systems requires expert construction handling, other labour intensive elements may be undertaken by the purchaser to further reduce costs.

Depending on the particular development scenario, the proposed Pro-Home approach has the potential to increase access to affordable homeownership by a significant margin. In Toronto, for example, the above analysis shows that a far greater number of households would be in the qualifying income bracket for a starter home developed using the Pro-Home approach. Using even a 100% land value development scenario for Stage 3, the qualifying income for a Pro-Home is estimated to be \$41,745. This is \$23,000 lower than the current estimated annual household income required for an average existing starter house (e.g. \$64,750).

Although difficult to pinpoint precisely given Statistics Canada’s set income categories, the Stage 3 Pro-Home (without any rental income) would appear to allow an estimated 172,000 additional households in the City of Toronto, for example, to own a starter home than is currently possible under conventional development scenarios (Figure 22). The results are even more pronounced for the Stage 1 Pro-Home that would extend this opportunity to approximately 224,000 more households.

Figure 22: Comparing Qualifying Incomes, Pro-Home versus Conventional Market, Toronto



Notes:

- Stage 1 refers to the single-storey, rear-lot coach house; Stage 3 refers to the split-level basement and ground floor main house unit.

Source: Private household income figures from Statistics Canada, Census of Canada, 1996.

Constraints Analysis

As is often the case with any novel – albeit in this instance not entirely new – way of doing something, there is bound to be certain constraints or barriers to implementation. Some of the regulatory constraints to incremental housing development are briefly discussed below.

Ongoing Construction

Concern regarding the ongoing construction inherent in an incremental development process is likely to act as a barrier to public acceptance of progressive housing models. Inevitably, some community residents will have concerns about the state of perpetual construction associated with progressive housing developments. This constraint or barrier to development may be particularly significant in neighbourhoods concerned with the impact of unfinished homes on adjacent property values. While it may be true that many neighbourhoods within the older portions of cities are, and always have been, in a constant state of construction, the scale or magnitude of construction for progressive housing developments is likely to be larger and more concentrated in spatial terms.

There are, however, feasible and relatively straightforward strategies for addressing these concerns. For example, through contextual and sensitive urban design and planning approaches that carefully consider impacts on existing neighbourhoods, concept plans may configure a site so that completed homes are constructed on the more visible perimeters of a particular development, fronting existing homes in the surrounding neighbourhood. By locating shell housing on the exterior of the development and incremental housing at the interior of the development, the concept plan proposed for the Manse-Lawrence site reflects this sensitivity to community planning and design.

Planning and Building Approvals

There are likely to be both generic and site-specific constraints to Pro-Home developments. On a general level, planning and building approvals by local municipalities, relevant provincial authorities and federal funding agencies are likely to prove difficult in the first instances because of the unconventional nature of incremental housing development in the contemporary context. Clearly, planning and building codes and approvals are currently focused on fully – planned and completed communities – not those in progress. Municipalities need to be assured that while development may occur gradually, one step at a time, it is governed by a comprehensive, long-range plan that establishes an overarching framework for guiding the full development of an incremental residential community, including adherence to existing building standards.

On a site-specific basis, it is anticipated that the proposed concept plan for the Manse-Lawrence site would require a number of planning approvals, such as decreases to minimal lot sizes, frontages, and setbacks. Other planning approvals would include permission for coach-houses to serve as accessory units located on the back of lots, and a reduction in parking requirements. Obviously, site-specific constraints will also vary from site to site with the planning and zoning by-laws of particular municipal areas and jurisdictions. While some of these planning approvals may take some time to receive, none of them can be considered insurmountable.

Pilot projects would not only demonstrate the viability and benefits of the Pro-Home approach, but also help to refine implementation processes and overcome regulatory hurdles, but also facilitate future planning approvals for subsequent incremental housing developments.

Summary

This section of the Study has illustrated the practical application of the Pro-Home approach, using a potential demonstration site in Toronto. As shown by the application scenario, and by the financial analysis presented for the Manse-Lawrence site, the flexible approach and modular design embodied in the Pro-Home concept can significantly increase the possibilities for affordable homeownership.

Taking the Manse-Lawrence site as an example of incremental housing development, it is clear that the Pro-Home approach would necessitate planning and building code approvals for certain aspects of the development. Admittedly, these approvals would vary in consonance with the planning and zoning by-laws of particular municipalities. While obtaining these approvals may be time-consuming, especially in the beginning, the attainment of such changes cannot be construed as insurmountable to the introduction of a progressive approach to housing development.

Aside from the benefits of increasing access to affordable homeownership, some of the opportunities and benefits associated with progressive housing development might include the following:

- *Job Creation*: as documented both during earlier periods of owner-construction in North America, and current comparable programs in developing cities, the progressive approach to development creates jobs in the construction business, especially for small contractors.
- *Skills Development*: there is considerable opportunity for owner-builders in progressive housing development schemes to develop new skills in renovation and construction techniques. While these skills may be self-taught through hands-on experience, it is also possible to establish a more structured and formal system for skills training and development with the introduction of a construction coordinator. The role of such a coordinator could involve the organisation of specific workshops and on-site consultation sessions with owner-builders on particular aspects of renovation.
- *Income Generation*: Pro-Home facilitates the creation of opportunities for income generation for owners through accessory rental units. For lower-income households, these possibilities for income generation through secondary suites not only lowers the net qualifying income required to purchase a Pro-Home, but also helps to ensure that lower-income households can then carry the costs associated with homeownership.
- *Secondary Suites*: while the inclusion of rental units serves to generate income opportunities for owner-occupants, the creation of such secondary suites also helps to create a greater supply of rental units for others in need of affordable housing.

Finally, as the application scenario elaborated in this section indicates, it is possible to increase access to affordable homeownership and associated rental space without any form of government subsidy. As such, the Pro-Home concept would seem to represent a concrete, pragmatic and feasible strategy for increasing the supply of affordable housing worthy of further exploration and action.

Part V: Implementation

Overview

While the implementation of incremental housing will necessarily vary with particular site conditions or across communities, the approach may incorporate a number of generic organisational components. The following section articulates an implementation framework for the Pro-Home concept, focusing on organisational elements (e.g. partnerships), arrangements (e.g. organisational model) and processes (e.g. step-by-step implementation process). Moreover, it should be noted that the step-by-step implementation process is primarily geared towards the introduction of a pilot project that would serve to highlight deficiencies and refine aspects of the initial framework, leading to the development of an improved approach to implementing the Pro-Home concept.

Partnerships

While not essential to the establishment of an incremental housing development, partnerships – either between the private and public sectors or exclusively within the private sector – can facilitate the implementation process. Of particular importance, innovative partnerships with non-profit housing providers are likely to increase a development’s potential for creating affordable homeownership options. The following section briefly outlines the rationale and benefits of forming such partnerships.

Manufacturers of Pre-Fabricated Housing

As described in the review of selected historical precedents, particularly in the case of Sweden, self-help and incremental housing developments have often incorporated pre-fabricated building methods. Beyond these precedents, it is important to note that companies such as Viceroy Homes Limited have expressed interest in the Pro-Home concept. Viceroy Homes was instrumental in pioneering the concept of pre-engineered homes over thirty-five years ago, and today operates in this field in North America and other parts of the world.

There are obvious points of confluence between the work of building and supply companies such as Viceroy and the Pro-Home concept. These include, but are not limited to, the following:

- prefabricated components lend themselves to the possibilities for renovation on the part of owner-occupants by allowing for the identification – and separation – of labour costs from each building component, and by facilitating the provision of specific and functional building components as needed, while also maintaining a high level of structural integrity and construction quality.
- manufacturers of prefabricated building materials are able to offer clients a more affordable product by eliminating a myriad of mark-ups through “middlemen”.

Non-Profit Housing Providers

While there are many possible non-profit housing providers with which to form potentially beneficial partnerships, as an example, the Pro-Home concept would seem to be particularly congruent with the objectives and approach of Habitat for Humanity. The self and mutual help approach embodied in the work of Habitat for Humanity would dovetail well with the Pro-Home concept.

Through joint partnerships with prospective homeowners, business, individual donors and volunteer workers, Habitat for Humanity constructs homes for families who make a gross income of between \$18,000 and \$40,000 per annum.⁷ All homes are built or renovated through volunteer labour. Future homeowners complete a minimum of 500 hours of "sweat equity" prior to moving into their own home. This work offers the opportunity to learn new skills, work in partnership with others, reduce overall costs and contribute to the building of Habitat for Humanity projects, including but not restricted to, the homes of individual prospective homeowners.

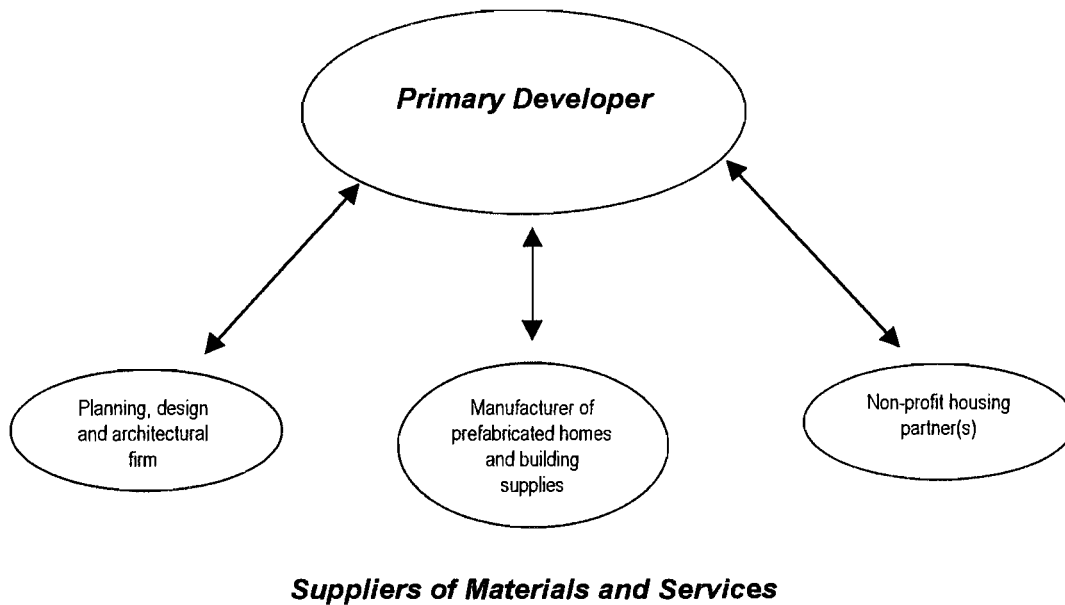
To increase affordability, Habitat for Humanity offers no-interest mortgages and requires homeowners to make monthly instalments and no interest payments over a 20 to 25 year period. The mortgage is based on the cost of building the home, not including the volunteer labour. These payments are earmarked towards the construction of future Habitat for Humanity homes. The organisation estimates that it can build one new home in Toronto for every eleven homes built in the City. While Habitat for Humanity accepts government assistance in acquiring streets, land or houses for rehabilitation, it does not accept government funds for the construction of new homes.

A partnership with Habitat for Humanity would facilitate the targeting of certain pro-homes towards low-income households through a greater contribution of sweat equity to reduce costs and increase affordability. As such, potential partnerships between Habitat for Humanity and the implementors of a progressive approach to housing offers promising benefits worthy of further consideration.

Organisational Model

While there are many possible variations, **Figure 23** presents a generic organisational model for implementing a Pro-Home development.

Figure 23: Proposed Organisational Model for Pro-Home Development



⁷ Families living on social assistance do not participate in Habitat for Humanity programs as the government places a lien on any property owned by these families.

The proposed model involves a number of key parties with specific roles and responsibilities:

- a developer – to secure financing, pull together a development team, produce a development plan, address and resolve regulatory constraints, oversee construction and project marketing.
- a planning, design and architectural firm – to develop concept, site and housing plans, and facilitate community consultation processes as appropriate.
- a manufacturer of prefabricated homes and building supplies – to ensure a consistent and affordable supply of building materials and resources, and to provide a construction coordinator and liaison advisor for owner-occupants involved in renovation activities.
- a non-profit housing partner – to increase the number of homes affordable to low-income households than would otherwise be possible through an exclusively market-led approach.

It is important to recognise that the marketing role played by the developer assumes more importance and a slightly different role than at more conventional residential developments. Given the nature of a Pro-Home development, marketing would be closely related to client services, particularly for those households looking at buying a particular stage of construction.

Conventional marketing strategies would be complemented by on-site training sessions in construction, for those who may be interested in building all or part of their own home. The designated manufacturer of prefabricated homes and developer could jointly run these sessions from a building "store", preferably located on site.

The building store would also display the various designs, options, and kits, and in theory, would remain in place until all homes were fully completed. Kits and building components for various stages of construction would be available through the store. When its initial purpose has been exhausted, the store could be converted to a community centre, day care or some other function of interest to the community.

Implementation Process

Incorporating the fundamental aspects of an incremental housing development elaborated above, as well as possible partnerships to facilitate the implementation process, the following section presents a proposed, step-by-step implementation process for launching a pilot Pro-Home demonstration project from the perspective of a municipality.

As mentioned previously in this Study, the implementation of such a demonstration project would serve to refine implementation processes, resolve constraints, and establish a precedent for incremental housing development at other sites.

Step # 1- Identify Demonstration Sites

The first step involves the identification of suitable demonstration sites to launch one or more pilot projects to test the feasibility of this approach for housing development. Demonstration sites should be at least 5 to 10 acres in size. Preferably, these demonstration sites would include a variety of urban and suburban settings, such as downtown sites, older inner-suburbs and newer outer suburbs. Federal, provincial and municipal lands may also serve to provide suitable demonstration sites.

Step # 2 – Solicit Proposals for Developers

With the demonstration sites identified, a request for proposals could be launched by the respective landowner(s) to solicit proposals from interested developers. A developer would then be chosen from among the proposals submitted to proceed in developing a more detailed concept plan and housing proposal.

Step # 3 - Develop Concept Plan and Housing Proposal

The successful applicant/developer would then proceed to develop a concept plan and housing proposal for the site in question. The concept plan and housing proposal would help to establish the overall design and planning parameters to guide development and identify the intended market segments reached by the project. This proposal should include supportive illustrated materials and other media required for presentation to the public and potential partners.

Step # 4 - Conduct Consultation/Focus Groups

With the aid of illustrated concepts, the next step would include the presentation of the general housing proposal for comment and feedback from potential public sector partners and potential target market groups.

Step # 5 - Form Private/Public Partnership(s)

Depending on the source of land or demonstration sites for a particular project, the proponent would then consider establishing private/public partnership(s) with various levels of government, private developer(s), suppliers of pre-fabricated housing, non-profit associations and provincial or municipal housing agencies to put a team in place to realise implementation.

Step # 6 - Prepare Detailed Implementation Plan

Following the selection of a preferred site or sites, a detailed implementation package would be prepared including documents suitable for planning approval, including planning amendments or rezoning (as required), a detailed plan of subdivision, housing designs, and detailed cost estimates.

Step # 7- Subdivide Land

Subdivide land as per approved Development Plan.

Step # 8 - Construct Model Homes

Construct and begin marketing of model homes as per detailed housing designs.

Step # 9 – Establish Building Store/Resource Centre

The next step is to construct a building store, preferably in close proximity to the model homes, to serve as an information and marketing resource centre for prospective owner-occupants/builders. As construction proceeds, the building store would assume an important role in providing building materials and resource centre for owner-builders.

A resource person, who could not only provide marketing information, but also information related to building techniques, supplies and materials, would ideally operate the store. As referred to earlier in this Study, this resource person would essentially function as a community-based construction consultant to owner-builders.

Step # 10 – Construction

Begin construction of housing development.

Summary

This section of the Study has outlined a possible implementation framework for commencing a progressive housing community. This framework focuses on the key organisational elements to developing a Pro-Home community. To meet the overriding objective of providing more affordable homeownership, the proposed organisational model involves partnership between both the private and non-profit sectors, with room for public sector involvement left open (e.g. through the donation or provision of land). While there are numerous possible variations to the proposed framework, the articulation of these various elements helps to formulate a viable implementation framework for moving forward on the Pro-Home concept, and for bridging the gap between concept and action.

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Appendices

Appendix A – Land Value Analysis, Manse-Lawrence Area, Toronto

Comparable land sales

DATE	BUYER	ACRES	LOCATION	PRICE/ ACRE	STRUCTURE	INTEREST FREE PERIOD	MORTGAGE TERM
09/16/96	Viewmark Homes	18.1	McCowan Rd/ Eglinton Ave E	\$281,768	100% cash	N/A	N/A
03/30/99	Paradise Homes	28.0	Nielson Rd, south of Finch	\$211,195	100% cash	N/A	N/A
01/22/99	Yorkwood Homes	5.1	Lawrence Ave, east of Port Union	\$428,214	100% cash	N/A	N/A
01/05/99	Castle Rock Homes	8.9	Ellesmere Rd/ Midland Ave	\$435,025	100% cash	N/A	N/A
03/31/98	Graywood Investment s	82.6	Warden hydro corridor	\$375,000	16% cash 84% VTB	9 months	2 yrs @ 6.15%
06/27/97	Rockport Homes	12.4	Sheppard Ave E/ Meadowdale	\$248,557	20% cash 80% VTB	0 months	1 yr @ 8.0%

Source: RealInfo Transaction Records, RealNet Canada.

Of the above land sales, the Viewmark Homes purchase is the most relevant and comparable, being the most similar in terms of size, yield (8.4 units/acre) and product mix (99 freehold townhomes and 52 semi-detached homes). The Paradise Homes sale is north-east of the Manse-Lawrence site at Finch and Neilson Road. The Yorkwood acquisition is in the Port Union area, an area in high demand because of its proximity to Lake Ontario. The fifth comparable land sale is that of the Hydro Corridor lands by Graywood Investments, lands that the marketplace has keenly pursued. The fourth and sixth comparable land sales include condominium lands. Other Scarborough land sales are included but are considered less comparable due to the acquisition by a user, a local church and other non-market factors.

The most comparable sale listed above – the Viewmark Homes purchase – is dated September 1996 and is 3 years old. While the real estate market is more active in Toronto currently than it was 3 years ago, land prices are not necessarily higher. Lot prices in the desirable markets of Markham, Richmond Hill and Woodbridge decreased between 1996 and 1999, while west end values increased substantially and east end prices marginally during the same period.

Based on the above analysis, we would conclude that the land value of the Manse-Lawrence site is equal to that of the Viewmark Homes purchase at \$281,000 per acre.

Appendix B – Soft Second Mortgage Program for Manse-Lawrence

The “soft second” mortgage operates as follows:

- on conveyance of the home to the purchaser, a \$30,000 second mortgage payable to the City of Toronto is registered on title.
- the second mortgage carries no principal or interest and is payable in whole at the end of 30 years.
- the mortgage further carries a provision that it is assumable subject to an income test to ensure affordability is preserved, failing which the “soft” second mortgage is due and payable on conveyance.
- based on an 8% discount rate (a 235 basis point premium to 30 year Canada Bond Yield of 5.65%), a \$30,000 “soft second” represents a present value of \$2760.48 per home.

Multiply the present value by the proposed development yield of 12 units per acre and the present value per acre price increases by \$33,125 for a total land value of \$314,125 or greater depending on default (i.e. the rate of sale to non-qualifying subsequent purchasers).

Appendix C – Development Proforma for Manse-Lawrence Site

EXPENSES		DESCRIPTION	SUBTOTAL (\$)	TOTAL (\$)	TOTAL/F.F. (\$)
Land Statistics		Conversion Table		Lot Dimensions	
Total developable area – 13.1 acres		1 ha – 2.47 acre		Townhouse lot – 1,359 s.f.	
Net residential developable area 13.1 acres		1 metre – 3.28 feet		Quad lot – 1,801 s.f.	
Total road/laneway length – 1,035 metres		1 square meter – 10.76 square feet		Semi-detached – 2,338 s.f.	
Total saleable frontage – 2,970 feet		1 ha – 10,000 metres square		Detached – 2,761 s.f.	
Total lots – 165		1 acre – 43,560 square feet			
Land costs				3,724,592	1,254
▪	land cost	13.1 acres @ \$281,000	3,681,100		
▪	acquisition cost	1.0% of \$3,681,100	36,811		
▪	realty taxes/insurance	13.1 acres @ \$510/acre	6,681		
Pre-development costs				511,822	172
▪	planning	allowance	35,000		
▪	engineering	10% of servicing costs	229,241		
▪	landscape	165 units @ \$250	41,250		
▪	legal	165 units @ \$100	16,500		
▪	traffic	allowance	15,000		
▪	geo-technical	allowance	7,500		
▪	noise	allowance	7,500		
▪	environmental	allowance	10,000		
▪	soil testing	165 units @ \$175	28,875		
▪	topographic survey	allowance	7,500		
▪	surveying	165 units @ \$500	82,500		
▪	subwatershed	allowance	12,500		
▪	archaeological	allowance	5,000		
▪	5% contingency	excludes engineering	13,456		
Site preparation				118,421	40
▪	site prep	allowance	15,000		
▪	demolition	allowance	0		
▪	strip topsoil	15,911 m3 @ \$3.00	47,733		
▪	cut/fill	18,563 m3 @ \$3.00	55,688		
Internal servicing				2,221,410	748
▪	9 metre road ROW	319 m @ \$1,400	446,460		
▪	6 metre road ROW	716 m @ \$1,200	859,200		
▪	driveway aprons	builder cost	0		
▪	hydro service	165 units @ \$2,500	412,500		
▪	water connections	165 units @ \$1,850	305,250		
▪	sanitary sewer	165 units @ \$1,200	198,000		
External servicing				50,000	1
▪	watermain – St. Clair	allowance	25,000		
▪	watermain – other	allowance	25,000		
▪	sanitary works	allowance	0		
Stormwater management				21,000	7
▪	SWM facilities – reserve	allowance	20,000		
▪	SWM facilities - landscape		1,000		
Landscaping (hard costs)				96,200	32
▪	street trees	builder cost	0		
▪	streetscape upgrades	allowance	15,000		
▪	blvd parking	allowance	10,000		
▪	park development	5% cash-in-lieu for 20% park shortfall	56,200		
▪	perimeter fence landscaping	allowance	15,000		
▪	noise fence	allowance	0		
Municipal charges				19,170	6
▪	Toronto hydro	4% of engineering (\$229,241)	9,170		
▪	MOEE fee	allowance	10,000		
▪	water meter	builder cost	0		
Development charges				584,430	197
▪	City of Toronto	165 units @ \$3,542 average	584,430		
▪	Education	165 units @ \$0	0		
Management Costs					
▪	management/admin	3.5% subtotal (\$3,622,453)	126,786	126,786	42.69
Total Development Costs				7,473,831	2,501

Source: Sundance Development Corporation.

The Proforma is predicated on a land value of \$281,000 per acre, representing full market value, and housing material and construction costs are shown at approximately \$20,000 for Stage 1 and \$60,000 for Stage 3. PST has *not* been deducted, but likely can be under current Provincial legislation.

Development costs require more detailed engineering and planning study, but include full development charges and planning application fees. Building permit fees are included in the construction budget. Construction costs likewise assumes market costs such as sales and marketing, sales commissions, Ontario New Homes Warranty Program (ONHWP) registration premiums, legal costs and GST.

It is proposed that the Manse-Lawrence site would be developed on a not-for profit basis. Development Management Fees of 3.5% of development costs (net of land) are included and fall below the industry standard of 4%. Subdivision Costs of \$6,000 per unit account for superintendent, construction office, management costs and other on-site costs.

The absence of a profit margin makes construction financing more difficult to secure, requiring that land financing be provided by the City for 100% of purchase price and that it further subordinate to development/construction financing.

The development and construction proformas yield a total unit cost of \$80,108 and \$122,452 for the entry level (Option A) and base case (Option B) units, respectively. To calculate the minimum income level at which a purchaser could afford to acquire a unit of such cost, the following assumptions are employed:

- full market land value and costs including levies, permit fees and others have been allocated without discount,
- an amount of no more than 32% of gross annual income should fund total housing costs,
- realty taxes are assessed at 1.2% of house value or \$1,469 per annum (\$122 per month) based on the purchase price above,
- insurance costs are estimated at \$360 per annum or \$30 per month,
- utility costs are estimated at \$30 per month for water, \$50 per month for gas and \$20 per month for hydro for at total of \$100 per month or \$1,200 per annum,
- as a conservative measure, prospective purchasers are assumed to carry an additional \$100 per month in debt obligations,
- purchasers shall receive 1% discount to current mortgage rates (as per market standard),
- standard terms include 25 year amortisation, 5 year term,
- purchasers are assumed to make 5% down payment and pay 3.75% CMHC Insurance Fee as part of mortgage amount,
- to each figure at line 4 in sections 3.2 and 3.4 below closing costs of \$1,200 should be added to calculate cash required to close,
- the lower level Bachelor suite is assumed to rent for \$400 per month and may be included as gross income calculation.

Appendix D – Assumptions Used to Calculate Minimum Income Level Required to Purchase Pro-Home (Stage 1 and 3)

To calculate the minimum income level at which a purchaser could afford to acquire a unit of such cost, the following assumptions were employed:

- full market land value and costs including levies, permit fees and others have been allocated without discount,
- an amount of no more than 32% of gross annual income should fund total housing costs,
- realty taxes are assessed at 1.2% of house value or \$1,469 per annum (\$122 per month) based on the purchase price above,
- insurance costs are estimated at \$360 per annum or \$30 per month,
- utility costs are estimated at \$30 per month for water, \$50 per month for gas and \$20 per month for hydro for at total of \$100 per month or \$1,200 per annum,
- as a conservative measure, prospective purchasers are assumed to carry an additional \$100 per month in debt obligations,
- purchasers shall receive 1% discount to current mortgage rates (as per market standard),
- standard terms include 25 year amortisation, 5 year term,
- purchasers are assumed to make 5% down payment and pay 3.75% CMHC Insurance Fee as part of mortgage amount,
- to each figure at line 4 in sections 3.2 and 3.4 below closing costs of \$1,200 should be added to calculate cash required to close,
- the lower level Bachelor suite is assumed to rent for \$400 per month and may be included as gross income calculation.