An International Comparison of Housing Need Indicators

Prepared For:

Canada Mortgage and Housing Corporation

By:

Steve Pomeroy, Focus Consulting Inc. Ottawa

In Association with:

- Tony Dalton, Royal Melbourne Institute of Technology, Australia;
- Michael Stegman, University of North Carolina, USA; and
- Steve Wilcox, University of York, UK.

March 2004
Executive Summary

Objectives

The objective of this study is to identify and analyze the housing indicators related to need and conditions used for planning and policy purposes by national governments in Australia, England and the United States. A parallel objective is to compare the methods and use of such indicators in these countries with the core housing need methodology, the primary approach used in Canada.

Although the report cites recent data on housing need in each country, the intent is not to compare relative levels of need, but rather to examine the indicators and methods used to assess and monitor need.

General Overview

The assessment found that the three federations – Australia, Canada and the United States have a similar pre-occupation with a predominant issue of affordability and this tends to be reflected in the primary housing need indicators used in these countries. Canada is unique among the three federated nations in having a more integrated need assessment – the core housing need model integrates three separate housing conditions: affordability, suitability (crowding) and adequacy (physical condition), rather than focusing on affordability alone.

England stands out from the other three countries in the absence of a single mainstream indicator. Instead, there are a number of measures which are used to describe housing conditions as well as broader measures of social exclusion and social deprivation, which include housing among a comprehensive set of measures. The key focus of measurement approaches in the UK relate to administrative requirements and managing funding of existing capital investment programs.

While national surveys collect on data on housing condition (state of repair), and Canada and the US retain this element in their mainstream indicators, this is not generally seen as a critical issue outside of England. In England a specific survey monitors dwelling condition. Similarly the problem of overcrowding is monitored but is not pervasive (and is not part of the mainstream indictor in the US).

In addition to official government measures, all four countries have indicators which are driven largely by private sector interests – the banks and builders. These focus on the issue of homeownership affordability, or more correctly financial accessibility. Generally these are maintained by industry associations or banks and updated on a regular quarterly basis – a much quicker cycle that the other government based indicators. Canada is the only country that previously had an official ownership affordability indicator, but this was discontinued in 1998.

Australia is developing a series of performance measures under the Commonwealth State Housing Agreement, but these relate to efficiency in operation and management of social housing as distinct from broader based housing need and condition indicators.
The primary housing need assessment indicators currently in use in each of the four countries are summarized in the following table. Detailed descriptions of each measure are provided in the main report.

### Summary of Indicators in Use

<table>
<thead>
<tr>
<th>Country</th>
<th>Indicator</th>
<th>Condition Measured</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Core Housing Need</td>
<td>Affordability, Dwelling Condition; Crowding</td>
<td>5 years – based on census (annually prior to 1997 based on HIFE)</td>
</tr>
<tr>
<td></td>
<td>RBC Homeownership Affordability Indicator</td>
<td>Homeownership Financial Accessibility</td>
<td>Quarterly</td>
</tr>
<tr>
<td>Australia</td>
<td>Affordability Index (Housing Stress)</td>
<td>Affordability, Dwelling Condition; Crowding</td>
<td>5 years, from Housing Expenditure Survey</td>
</tr>
<tr>
<td></td>
<td>Ownership Affordability Index</td>
<td>Homeownership Financial Accessibility</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>CBA/HIA Homeownership Affordability Index</td>
<td>Homeownership Financial Accessibility</td>
<td>Quarterly</td>
</tr>
<tr>
<td>England</td>
<td>Generalized Needs Index (GNI), and Housing Need Index (HNI), Comprehensive assessment (array of measures)</td>
<td>Annual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Exclusion Indicators</td>
<td>Comprehensive assessment (array of measures)</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>CML- Ownership Affordability</td>
<td>Homeownership Financial Accessibility</td>
<td>Quarterly</td>
</tr>
<tr>
<td>US</td>
<td>Worst Case Housing Need</td>
<td>Affordability, Unassisted Renters Only</td>
<td>Biennial</td>
</tr>
<tr>
<td></td>
<td>Critical Housing Need</td>
<td>Affordability, Renters and Owners</td>
<td>Biennial</td>
</tr>
<tr>
<td></td>
<td>Housing Wage</td>
<td>Affordability, Renters Only</td>
<td>Annual</td>
</tr>
<tr>
<td></td>
<td>Homeownership Rate</td>
<td>Ownership Rate, All and Minority</td>
<td>Biennial</td>
</tr>
</tbody>
</table>

### Impetus for indicator development

In all countries the existing indicators were originally created to support the planning and administration of housing assistance programs. In Canada the indicators were developed to assist in the objective allocation of federal budget funds. The UK has developed a very complex set of indicators – the GNI and HNI for the similar purpose of assisting government in making capital allocations. In the US, the worst case need measure was originally designed to estimate eligibility for HUD public housing programs. In Australia there is a strong focus on expanding measures related to assessing program outcomes (as distinct from need) under a set of performance indicators developed as part of the Commonwealth State Housing Agreement (CHSA).

In all countries, funding levels for new housing assistance have declined since the 1980’s and in some cases (e.g. Canada and US) funding for new development has for some periods been fully or almost fully eliminated. Without the need to allocate funds or manage new programs, the initial rationale for the indicator is weakened. At the same time almost universal budgetary...
restraint has impacted national statistical agencies, so maintenance of necessary data sources has in some cases been undermined.

In addition to use in program planning and administration, housing need indicators have become widely used by non-governmental and advocacy organizations as a way to identify and track housing need and to argue for renewed or expanded government investment in housing and/or program reforms.

**Availability of regular data is critical**

The capacity to establish, and more importantly to maintain, indicators on a consistent and regular basis depends heavily on available data sources.

England and US have the richest and most regular data sources with annual or biennial surveys related specifically to housing. The publication of such data on a regular and timely basis has spawned the creation of additional indicators by advocacy and non-governmental organizations and has enhanced the capacity of analysts and advocates to profile the need for and funding support.

Canada and Australia have been more constrained by a dependence on census data – taken on 5 year cycles. The census sources provide a rich database and very extensive geographic coverage but their utility is time limited. Typically, data are not available for 2-3 years following the census and over the census cycle data becomes increasingly stale (8-9 years old by the end of the release cycle. At the time of this report (Spring 2004), new core housing need estimates based on the 2001 census - which reflect 2000 incomes had still not been released, and inevitably already be out of date (albeit the only indicators available).

**Developing realistic expectations for indicators**

In preparing the report, leading researchers from each country were asked to provide commentaries on the strengths and weaknesses of the indicators in their own and other countries. In all cases, the list of weaknesses far outweighed the strengths. All highlighted a litany of technical flaws and degrees of imprecision in current indicators. This is an inevitable consequence of putting such a task before experienced researchers, all of whom have an inherent bias toward improving level of detail and accuracy.

Reflecting on this outcome highlights the importance of creating realistic expectations about indicators. Fundamentally, indicators are just that – they provide a gauge or warning light. There is an evident tension between fully comprehensive detailed measures versus a more general assessment, or indication.

Realistically, an indicator should err toward the latter. That is not to say it should not be well founded and based on good data. However, in the trade off between detail and timeliness, the focus of indicators should be on a timely and regular release of information. This can then alert policy makers and analysts to certain trends and issues and stimulate the more detailed research necessary to fully understand the causes and potential remedies of the identified issue.
Potential Opportunities for Canada

In reviewing the assessment international commentators highlight three areas of potential indicator development for Canada:

- Given the widespread interest in ownership affordability as a feature of government policy, there may be merit in exploring the feasibility of developing such an indicator, taking into account the definitional and methodological issues involved in designing indicators on homeowner affordability and accessibility.

- Current indicators in Australia, Canada, and the US focus on the demand measure of affordability. Research has suggested that the lack of, and more significant, ongoing erosion of the lower rent stock represents a housing concern. Some form of supply indicator focusing particularly on availability of low rent stock would be useful to inform the policy process.

- The US concept of a minimum housing wage, which explicitly links housing issues to labour markets, is also a possible area of interest to examine further.

The data foundations to undertake these improvements in Canada already exist.

- Previous research, conducted for CMHC has provided recommendations on a methodology to revise and re-instate an annual indicator of homeownership accessibility (including measure of the relative affordability of new homes and existing resales).

- The annual rental market survey provides a rich and regular source of data on the rent distribution and can readily be used to provide an assessment of the volume of units available in each CMA/CA at rents affordable to households below the HILs.

- With enhancements to Statistics Canada data sources to generate annual income data by household and tenure it may also be possible to augment this supply assessment with data on the income of renters and the consequent requirements for lower rent units, relative to current supply.

- Finally, the availability of HILs and information on minimum wage levels readily facilitate the adoption of the housing wage concept and comparison with minimum wage capacity of low income households.

If Canada wishes to effectively monitor housing need and conditions, some priority must be given to creating a regular (at least biennial) national survey specifically focused on collecting housing related appropriate data. Alternatively enhancement to the sample size of the existing Survey of Household Spending would similarly achieve this objective.
Table of Contents

1. INTRODUCTION .................................................................................................................. 1

2. SETTING THE CONTEXT FOR COUNTRY COMPARISONS ............................................ 1

3. REVIEW OF EXISTING INDICATORS ................................................................................. 4
   3.1. CANADA ......................................................................................................................... 4
   3.2. AUSTRALIA ................................................................................................................... 9
   3.3. ENGLAND ..................................................................................................................... 15
   3.4. UNITED STATES .......................................................................................................... 24

4. RECENT REPORTING OF NEED MEASURES IN EACH COUNTRY ......................... 33
   4.1. CANADA: ..................................................................................................................... 33
   4.2. AUSTRALIA .................................................................................................................. 34
   4.3. ENGLAND ................................................................................................................... 36
   4.4. UNITED STATES ......................................................................................................... 38

5. CRITICAL REVIEW – COMPARATIVE ASSESSMENT OF STRENGTHS AND WEAKNESSES ................................................................................................................................. 41
   5.1. COMMENTARY ON HOUSING NEEDS INDICATORS IN CANADA ...................... 41
   5.2. COMMENTARY ON HOUSING NEEDS INDICATORS IN AUSTRALIA................ 44
   5.3. COMMENTARY ON HOUSING NEEDS INDICATORS IN ENGLAND .................... 47
   5.4. COMMENTARY ON HOUSING NEEDS INDICATORS IN UNITED STATES .......... 50

6. CONCLUSIONS AND POTENTIAL OPPORTUNITIES FOR CANADA ............ 53

7. REFERENCES ....................................................................................................................... 56

APPENDICES

Appendix A: Appendix A: Summary of Indicators

Appendix B: Website Sources for Indicator Updates

1. Introduction

This research was commissioned to build on and update an earlier 1992 study by CMHC. The objective of this current study is to identify and analyze the housing indicators related to need and conditions used for planning and policy purposes by national governments in the United States, England and Australia.

A parallel objective is to compare the methods and use of such indicators in the other three countries with the core housing need methodology, the primary approach used in Canada.

Although the report cites recent data on housing need in each country, the intent is not to compare relative levels of need, but rather to examine the indicators and methods used to assess and monitor need.

Purpose and structure of the report

The 1992 Research Highlight examined the use of indicators from the perspective of needs measurement as the basis for the allocation of housing budget appropriations – the initial purpose of the core need measure in Canada. This report is somewhat broader – it seeks to examine how housing need and condition data is used by national and sub-national governments and agencies as a tool in planning, policy development and program design.

Following this introductory section, Part 2 overview the housing context in each country to provide some perspective for the later comparisons across the four countries.

Part 3 provides a review of indicators in each of the four countries. Based on a literature review, combined with consultations with an expert in each country, this section overviews the current indicators, identifies the data sources that are required to support the indicators, and then outlines how the indicators have previously (and are currently) being used.

Part 4 overviews recent trends in the measurement of housing need in each of the countries to further illustrate how the indicators are used.

Part 5 assesses the respective strengths and weaknesses of the approaches used in each country based on the perspective of a housing research expert in each country.

Finally, Part 6 identifies potential opportunities to refine indicators in Canada.

Scope of Analysis – Defining Housing Indicators

The intent of this analysis is to examine measures of housing need, which extends to encompass consideration of both the condition of habitation and the circumstances and characteristics of the household – more specifically, housing need indicators. This is distinct from market performance indicators, which are outside of the scope of this assessment – although

---

homeownership affordability indicators are examined here since this issue has recent emerged as an area of housing policy interest, especially in Australia, England and the US.

In this report, the examination of housing need is also distinct from the assessment of need in the context of demographic projections of household growth, and related housing requirements, which in some countries (e.g. England) are also referred to as housing need studies.

**Possible Applications of Housing Need Indicators**

Housing needs indicators are typically utilized in three related ways:

1. As a general measure of the magnitude and characteristics of households experiencing housing problems used both for governmental planning and policy analysis and by advocacy organizations.

2. As eligibility criteria to receive assistance (applied at the individual household or project level); and

3. As an objective mechanism to allocate housing assistance budget funds.

In reviewing the practices in each country, these three possible applications are examined.
2. **Setting the Context for Country Comparisons**

The housing need and condition indicators that have evolved are the product of the particular circumstances of the country in which they are being used. To the extent that this research is intended to compare measures across the four countries, it is useful first to establish some context.

**Form of Governance and Responsibility for Housing**

Among the countries being reviewed, three are federations with responsibilities for housing divided between national and state/provincial-territorial levels, while the other (England) is part of a unitary state (the United Kingdom).

In both Canada and Australia, there is ongoing debate about which level of government is, or should be responsible for housing, and where the responsibility is shared, the respective roles of each level. In both, historically at least, the spending powers of the federal (commonwealth) governments have tended to yield greater influence to the national level. In particular, this is the case in Australia which is the most fiscally centralized of the three federations – states do not have authority to collect income taxes, so are more dependent on transfers from the commonwealth government.

While also a shared responsibility for housing in the US, there is nonetheless strong federal involvement and an active policy and funding role – although frequently federal funding is distributed on a formula driven block grant basis and administered by state and local authorities.

**Housing Stock Tenure Patterns**

All four countries are roughly similar in the level of homeownership – approximating two-thirds of households. Recent trends show a slight decline in the homeownership rate in Australia – a trend associated with rising home prices, which have prompted concerns about ownership affordability. There have, however, been significant increases in the ownership rate in the US, England and Canada.

The three federations reflect very similar levels of private rental tenure. England, on the other hand, exhibits a pattern more similar to Europe – with a significant social rented sector and, notably, a much smaller private rented sector.

North American housing analysts are accustomed to identifying housing affordability problems in association with rental tenure – which is dominated by the relatively large private sector. Such analyses would make less sense in the UK, as most renters are in the public/social (non-market) sector and receive some form of housing assistance so are less likely to be paying a high percentage of income on rent. For this reason, England may be a less useful comparable than Australia and the US.

Since the predominant need problem relates to affordability, the volume of socially assisted dwellings (one form of program response to need) is included here as further context. This
excludes various forms of rental and income assistance that supplement income or subsidize shelter costs to improve affordability.\(^2\)

It should be noted that definitive estimates of assisted/social housing stock are becoming increasingly difficult to determine, especially in the US where housing is being supported by different layering of assistance, including various tax expenditure programs.\(^3\) This makes it more difficult to enumerate specific unit outcomes with unique funding programs, as was the practice in the past.

A similar situation is emerging in Canada where recent initiatives (both including and outside of the federal-provincial-territorial programs) have amalgamated multiple funding sources and a new capital funding program is expected to continue this trend. With the capital program providing assistance for both private and non-market rental development there is increasing difficulty in distinguishing between market rental starts and assisted rental starts in published housing data.

### Current Type and Extent of Housing Assistance

As indicated in the stock distribution above, all four counties have historically provided funding assistance both on a project based approach to create publicly or community owned social and to a varying degree in the form of tenant based rental assistance. This is relevant to the issue of need indicators since the predominant form of housing need is affordability.

Again underlining distinct differences among the four countries, ongoing new funding for project based social or affordable housing development remains significant in England, while stagnant or declining in Australia and until very recently in Canada. Directed funding for new production has also been significantly limited in the US, but has been superceded by indirect assistance in the form of tax credits (the Low Income Housing Tax Credit is now the predominant program supporting affordable rental development and rehabilitation).

---

<table>
<thead>
<tr>
<th>Housing Tenure and Assisted Stock</th>
<th>Homeowners</th>
<th>Private Renters</th>
<th>Social Assisted Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia (2001)</td>
<td>71.6</td>
<td>23.5</td>
<td>4.9</td>
</tr>
<tr>
<td>Canada (2001)</td>
<td>65.8</td>
<td>28.7</td>
<td>5.5</td>
</tr>
<tr>
<td>England (2002)</td>
<td>70.1</td>
<td>10.3</td>
<td>19.6</td>
</tr>
<tr>
<td>US (2000)</td>
<td>66.8</td>
<td>28.3</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Sources:**

- Australian Bureau of Statistics (excludes households where tenure unreported in census)
- Canada: Statistics Canada 2001Census
- US –Millenium Housing Commission 2002 (Addition of 1.58million HH with vouchers/certificates in private rental projects raises US social assisted to 4.5%)

---

\(^2\) In comparative studies, the count of 1.58m social assisted households receiving tenant based vouchers and certificates is often included in the overall enumeration of social assisted units in the US. These are excluded here as comparable assistance in UK (housing Benefit), Australia (commonwealth Rent Assistance) and Canada (small shelter allowance programs in four provinces) has also been excluded.

\(^3\) For the US, the socially assisted units in table exclude units developed under Low Income Housing Tax Credit programs, which by 2000 have added just over 1 million units targeted to incomes below 120% of Area Median Income. This would raise the project based percentage to roughly 4% (still excluding further 1.58 million tenant based vouchers and certificates).
In Canada, a similar period of very limited government support for new affordable housing development has recently shifted with the announcements of new capital funding to stimulate affordable rental investment, albeit at a low volume relative to pre 1990 levels.

England, Australia and to a more limited extent, the US and Canada also have various forms of shelter allowances, directed to address affordability issues.

England has a universal means-tested housing allowance (Housing Benefit) which effectively eliminates the issue of high housing expenditure for eligible tenant households (in many cases low income households have no out-of-pocket expenditure for housing) and, accordingly, minimizes the issue of renter affordability, which is far more evident in the other countries. While the housing benefit scheme is not available for low income home owner households, there is, however, a time limited shelter allowance paid to out of work home owners as part of the basic ‘Income Support’ welfare benefits.

Australia has a broad-based shelter allowance – Commonwealth Rental Assistance (CRA). This is specifically targeted at renters eligible for income support, but not already assisted by virtue of living in public or community (non-profit) housing. However, the assistance under the Australian CRA is far less extensive or generous than is housing benefit in England. While helping to lessen the shelter cost burden of private sector renters, CRA does not eliminate this problem. In part, this is a function of the CRA assistance formula which does not recognize significant differences in market rent levels across different states and cities, and limited eligibility that excludes the working poor.

The US has a more limited form of shelter allowance (housing vouchers), which are not universal – housing authorities have allocations of vouchers, which are rationed. New appropriations to expand voucher assistance have recently been severely restricted. 4

In Canada, four provinces have small shelter allowance programs with three of these limited to seniors only. Assistance levels are restricted by maximum rent ceilings and maximum levels of assistance and therefore have only a modest impact in reducing high shelter burdens. In addition, a form of shelter assistance is imbedded as part of general income assistance funded and administered at the provincial/territorial level. 5

In Australia, the USA, and Canada, tenants in the smaller public and social housing sectors are also assisted through the subsidy mechanisms that geared their rent to a percentage of income. England has no such rent geared to income (rgi) mechanism.

---

4 Currently just over 1.5 million renter households (1.5% of all households) are assisted with vouchers.
5 Most analysts note that the shelter benefits embedded within provincial social assistance programs are out of date and far below actual market rents. As a result of these low assistance levels, as well as the formula for calculating core need (does not exclude income assisted households) households on social assistance have a very significant impact on the estimate of core housing need in Canada.
3. **Review of Existing Indicators**

For each of the four countries this chapter reviews, the indicators in use, related data sources and the chronology of indicator development together with an overview of current or recent uses of the measures in each country.

This review begins with Canada, as this is the basis of the international comparisons. Subsequently countries are presented in alphabetical order – Australia, England and the United States.

### 3.1. Canada

**Indicators in Use**

The primary measure of housing need in Canada is the core housing need measure, developed by CMHC in the mid 1980’s as a basis from which to allocate and target federal subsidy funding under a new set of bi-lateral social housing agreements with the provinces and territories.

**Core Housing Need**

This measure includes both owners and renters and is relatively comprehensive in its coverage of housing problems. The core need measure is designed using a two step process, first to assess whether a household experiences one or more of three defined housing problems – adequacy, suitability or affordability. These are defined as:

- **An adequate** dwelling does not, in the assessment of the occupants, require major repairs and has a full bathroom and running hot water.

- **To be affordable**, the shelter cost of a dwelling must be less than 30% of pre-tax household income. Shelter cost for owners includes principal, interest, property taxes, condominium charges (if applicable) and utility payments (water, fuel and electricity). For renters, the shelter payment includes rent and utilities (if the latter are not included in the rent).

- **A suitable** dwelling has enough bedrooms for the size and composition of the occupying household as determined by the National Occupancy Standard, which has the following specifications:
  - Children under five years of age are expected to share a bedroom with one other sibling, regardless of gender;
  - From five through 17 years of age, children are expected to share a bedroom with one other sibling of the same gender;
Each adult (18 years of age and older) is allotted his/her own bedroom, unless they are part of a married or common law relationship, in which case spouses/partners would be expected to share a bedroom.

The second step then assesses whether a household falling below one of these standards has the necessary income capacity to address this issue. An income threshold is derived by market (city-wide) for each household size/bedroom type based on the median rent of alternative market housing that meets all three standards. 6

The last official estimate of core need is from the 1996 Census (based on 1995 incomes) and is considered by most analysts and advocates to be out of date. As discussed below, the measure has not been updated due to changes in national surveys and inadequate data to support the measure. 7

More general indicators of affordability (without the second filter of an income threshold), such as spending more than 30% or 50% of income, have been increasingly used by analysts and advocates – especially since release of the 2001 general census data (and concurrent lack of updated information on core housing need).

Homeownership Affordability Indicators

As in the other countries, access to homeownership has long been a policy concern in Canada.

While the core need measure includes an assessment of owners falling below the three standards, it does not assess affordability or accessibility for potential buyers. To monitor this issue, in 1990 CMHC developed and introduced an Affordability Indicator measuring relative affordability of homeownership for all 26 Census Metropolitan Areas (CMAs), together with an assessment of the level of supply of both newly constructed homes and resales that would be affordable at the derived affordable price levels.

These indicators were published twice per year as part of the CMHC Canadian Housing Markets report and tracked relative improvements or decline in levels of affordability over a time series (CMHC 1998). However, due to concerns about the underlying methodology, as well as data limitations that precluded an improved methodology, the ownership Affordability Indicators were discontinued in 1998 (Pomeroy and Lampert 2000). 8

6 The income threshold is calculated based on number of persons in a household, related to specific unit types. The median rent for a particular unit type (e.g. 2 bedroom) is converted to an income level based on the household (e.g. 3 person) paying 30% of income. So for a 2 bed monthly rent of $700, the income threshold for a 3 person household will be $700/0.30 x 12 months = $28,000. In addition to being used in the estimates of core need, the income threshold, termed Core Need Income Thresholds was also adopted as the basis for eligibility for access to social housing assistance (later re-labeled as Housing Income Limits, HILs).

7 CMHC has undertaken some preliminary analysis for 1997-2000 using the Survey of Housing Spending, but has not formally published updated estimates as the data derived from SHS is not comparable with official estimates from the Census (CMHC 2003). New core need estimates based on the 2001 Census (which used 2000 incomes) had not yet been published at the time this report was completed in March 2004.

8 The Affordability Indicator determined the income required to carry a starter home, including principle, interest, insurance and taxes and compared this to incomes of potential first time buyers – renters aged 20-44. However the method of updating the income of these potential buyers proved to be flawed – it used a composite of the consumer
Although not an official government endorsed measure, throughout this period, and still ongoing, a separate ownership affordability index has been published by the Royal Bank of Canada. A more general measure, RBC Financial Group’s housing affordability index shows the proportion of median pre-tax household income required to service the cost of mortgage payments (principal and interest), property taxes and utilities on a detached bungalow, a typical target home for first-time buyers. The RBC index is based on a 25% down payment and a 25-year mortgage loan at a five-year fixed rate and is estimated on a quarterly basis for each province and for the Montreal, Toronto and Vancouver metropolitan areas.

The RBC index uses household income by annualizing and weighting average weekly earnings from Statistics Canada, by province and for the three larger centres for which data is available. (RBC Financial Group, 2003). With the exception of the three largest metropolitan areas, this indicator has limited local use as housing markets vary significantly between cities within a province. However, it does provide a general indicator to help monitor relative accessibility of homeownership.

**Data Sources Used**

The core housing need measure has been estimated using different data sets, which are not directly comparable. The Census, taken every 5 years, provides by far the richest data source and allows significant geographic disaggregation of results. However, there is generally a 2-3 year lag between when Census is administered and the availability of the household income and expenditure data necessary to develop core housing need estimates. This means, for example, that 1996 data is still the most current in the spring of 2004. While the 2001 Census data on household characteristics, income and shelter costs were released in the summer of 2003, special tabulations necessary to compute core need were still being processed at the time of this report, so new estimates are not available.

Between Censuses, smaller sample survey data has been used – until 1997, the Household Income Facilities and Equipment survey coupled with the concurrent Shelter Cost Survey (HIFE/SCS). HIFE has now been phased out and replaced by the Survey of Household Spending (SHS) which has a smaller household size and consequently placed greater limits on data disaggregation and geographic analysis.

CMHC has stressed that core need estimates derived from the census versus inter-censal data sources are not directly comparable. Each has different methods of data collection (e.g. the self-administered mail-in Census form versus enumerator-administered interview for HIFE and now SHS), differing questions, and much different sample size and scale elements.

Also, where core need is estimated from the Census, CMHC generates a separate and independent measure of the median rent level based on its own Rental Market Survey.

---

price index inflator together with a provincial wage index applied to a 1991 census income base. It was subsequently found (with release of 1996 census data) that actual renter income had significantly diverged from this estimated general income series. Thus this inflator increasingly overestimated the number of renters at each income level and similarly overstated homeownership affordability potential.
The median rents by household size and composition (norm rents) are then grafted onto to the separately collected census income data). In contrast, for estimates derived from HIFE, (now SHS) the median rents (and incomes) are derived directly from the HIFE (SHS) file. Because data on HIFE were not available for distinct cities, estimates of median rent (and thus the income threshold derived from this rent assuming a 30% expenditure ratio) are not market specific, they reflect a general estimate at a regional level (CMHC 1994).

A recent analysis of the SHS data file (Fuller 2003) examined the potential to utilize SHS as a basis for ongoing core need estimates. One improvement available from the SHS is the collection of housing expenditure data and income for the same reference period (HIFE and Census both collected current housing expenditure, but previous year’s income). However, the SHS sample is smaller – roughly 15,000 for the SHS compared with 40,000+ on the former HIFE). This assessment concluded that it would be possible to generate gross estimates of need at the national and regional level, but the sample size does not support reliable estimates of core housing need at more disaggregated levels of geography (Fuller 2003).

**Chronology of Indicator**

The Core housing need measure was developed in the early 1980’s, building on an assessment of existing indicators in use in Canada and the US, through a joint CMHC-HUD study (CMHC 1981). This research determined that while gross measures of affordability provided a crude measure of high shelter burdens, these lacked the refinement to determine voluntary versus involuntary burdens (CMHC 1991 – Core Housing Need in Canada).

Since its inception, the measure has been fairly consistent although to support inter-censal estimates some small refinements have been required. These relate mainly to changing data source elements and changes in data availability.

As noted above the separate CMHC (homeownership) Housing Affordability indicator published from 1990 to 1998 has been discontinued, in part due to methodological and data limitations.

The RBC Housing Affordability Index, has been compiled by RBC since 1985, based on the costs of owning a detached bungalow, a typical target home for first-time buyers.

**Recent Uses in Policy and Planning Applications**

**General Policy and Planning**

As noted above, core need was developed primarily as a tool to facilitate allocation of federal funding on an objective needs basis.

External users have widely adopted the core need method across Canada and it is commonly used at the local, provincial and national level to quantify and characterize the nature and magnitude of housing need, as well as being used as an allocation tool for some provincial housing assistance programs and for the ongoing CMHC cost shared rehabilitation program.
Many researchers and advocacy organizations have used the core need statistics to highlight the extent of housing problems, especially affordability, and to argue for increased program funding levels. Provincial housing agencies have, in the past, used the core need measure for program planning and policy work at the provincial level, although less so in recent years in the absence of up to date estimates. It is however expected that there will be a resurgence in interest once the estimates from the 2001 census data are released (in 2004).

**Program Eligibility**

The income derived from the median rent based on household size and composition and paying 30% for shelter (Core Need Income Thresholds, CNITs) has been adopted as a qualifying criteria for social housing assistance. In most existing housing programs, some portion of units are designated as “targeted” and must be allocated only to households with incomes below these CNITs.

**Budget Allocations**

Initially, the main purpose of core need estimates was to facilitate budget allocations. This utilization ended in 1994 when federal funding for new social housing was curtailed (except for rehabilitation funding, which continued to be allocated based on need for repair – a sub-component of core need). From 1994 to 2002, there have been very limited levels of new funding so the allocation mechanism has been essentially dormant.

Notably, renewed funding for affordable housing development under the Federal-Provincial-Territorial Affordable Housing Framework (total $1 billion from the federal government over the period 2002-2007) is being allocated on the basis of per capita population not on the basis of core housing need.

### Summary of Indicators - Canada

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Purpose</th>
<th>Where published</th>
<th>How often updated</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Housing Need</td>
<td>Assess number and % hh in need; used in budget allocations and for policy planning determining</td>
<td>Various CMHC Publications</td>
<td>5 years – based on census (annually prior to 1997 based on HIFE)</td>
<td>National Census</td>
</tr>
<tr>
<td>Ownership Affordability Indicator</td>
<td>Assess homeownership accessibility</td>
<td>CMHC semi-annual publication (CHM)</td>
<td>Semi-annual 1990-1998 (now discontinued)</td>
<td>CMHC insured loans (prices) and Statistics Canada wage and price index</td>
</tr>
<tr>
<td>RBC Homeownership Affordability Indicator</td>
<td>Homeowner Affordability (broad national/provincial trends only)</td>
<td>Royal Bank of Canada</td>
<td>Quarterly</td>
<td>RBC loan data for prices; Statistics Canada for wage index</td>
</tr>
</tbody>
</table>

---

9 The median rent for each household type/unit size (“norm rents”) are converted to an equivalent qualifying income by dividing by .30 and annualizing this income, rounded to the closest $500 to establish a schedule of Core Need Income Thresholds for each market area.
3.2. Australia

Indicators in Use

A number of indicators have been developed in Australia and are discussed in various publications and academic papers, however there is only limited evidence of regular indicators in the official national statistical series. An annual publication, Australian Social Trends lists an index of affordability for renters and for all households.\(^\text{10}\) Drawing from earlier work on the 1991 National Housing Strategy (NHS), the Affordable Housing National Research Consortium (2001) refer to this as the concept of housing stress.

The Australian Housing Survey (AHS, most recent 1999) lists the following definitions (Australian Bureau of Statistics, ABS 2002):

- **Affordability problems** (stress) – proportion of households (including renters and owners) in the bottom 40% of the income distribution with housing costs above 30% of their disposable income. Housing costs, including rent, mortgage and rate payments, utilities and corporate or strata title payments are calculated as a proportion of the household's disposable income (without adjustment for household size or composition).

- **(Ownership) Affordability index** – the ratio of average household income to the average income needed to meet the repayments for an average established dwelling purchased by a first home buyer. A value of 100 indicates that a household with average income would meet the average income requirements to service the average mortgage. An increase in the index represents an improvement in affordability.

The NHS defined housing stress as:

> Income units (households) are said to be in housing stress if they pay more than 30% of gross income on housing and are in the lower 40% of the income distribution.

Since renters are more heavily represented in the lowest two quintiles, it is inevitable that the incidence of affordability problems based on the 30%expenditure/40\(^{\text{th}}\) percentile income, is substantially greater among renters than owners. As a result, the focus of attention tends to be heavily weighted toward housing stress among renters. In 1999, roughly 5% of outright owners (no mortgage) were found to fall below this benchmark; however, more than half of renters (54.7%) were found to experience housing stress (Berry and Hall 2001).

Some analysts have undertaken detailed analysis and critiqued this general measure for being insensitive to varying household size and composition (Karmel 1998; Senate Committee Report 1997). However, more refined measures have not been developed and adopted in the mainstream analysis – likely because data sources do not support more sophisticated analysis and a general rule of thumb approach has the advantage of simplicity, limited data requirements, and is readily understood.

\(^{10}\) These renter affordability index has not, however, been maintained – the most recent of Australian Social Trends (2003) carries data only for the years 1995 to 1998.
Homeownership Affordability Indicators

As in Canada, while the most severe housing stress included both tenures it is associated with low income renters. Meanwhile there is an increasing concern about ownership affordability and access – especially in larger metropolitan (capital) cities (Winter 1995; Yates 1999; Yates 2002; Wulff 2000; Crowley 2002). This has become the paramount housing issue and has stimulated policy attention, heightened by a formal public inquiry into the affordability and availability of housing for first home buyers (Productivity Commission).11 This inquiry was instigated in the face of rising house prices and increasing difficulty of young first time buyers to enter the homeownership market.

Two unofficial non-government, measures of homeownership accessibility have become fairly widely used, and are regularly updated:

- The Commonwealth Bank of Australia (CBA) in collaboration with the Housing Industry Association (HIA) maintains a Housing Affordability Index (HAI) to monitor the relative affordability of homeownership. This covers major cities, as well as a national composite. The HAI provides the ratio of the average household income to the qualifying income required to meet payments on a typical dwelling. This assumes a deposit of 20% with mortgage payments set at 30% of income with a 25 year conventional mortgage loan. Expressed as an index, this provides an indicator in the movement of homeownership access (FACS Fact sheet #5April 2000).

- Separately, the Real Estate Institute of Australia also publishes a quarterly Home Loan Affordability Report (HLAR). The HLAR incorporates data from all major lending institutions, the Australian Bureau of Statistics and Cannex Ltd. Median weekly family income figures are based on ABS Family Income Surveys, and are updated from ABS Average Weekly Earnings data (see http://www.reiaustralia.com.au/market_reports/).

Housing Conditions

Other measures of housing need and condition – particularly housing suitability or crowding and the physical condition of dwellings – are assessed with data from the Australian Housing Survey (AHS) and Census, but both record a low incidence and are not generally deemed to be significant issues.

In the case of suitability, the ABS examined and adopted the Canadian methodology of national occupancy standards as part of its 1999 AHS survey.12 Using this approach, of the 7.2 million households in Australia, only a small proportion (5%) required one or more additional bedrooms. Almost one-quarter of all households (23%) had the exact number of bedrooms required, while 73% had more bedrooms than were needed to accommodate the occupants. Eight per cent of

---

11 The Productivity Commission is an arms-length agency established by Parliament to conduct reviews and provide advice on macroeconomic issues and regulation. The Commission issued an initial issues paper on homeownership affordability for first time buyers in September 2003 and will be investigating this issue over the next six months.

12 This measure is part of the Australian Housing Survey and consequently, has not been updated since the last survey in 1999 (housing utilization – a count of bedrooms per person is however included in an ABS data series, but not widely used).
both private renters and State or Territory housing authority renters required one or more additional bedrooms, under this standard (ABS, 2000).

Most Australian dwellings were reported to be in good condition, with the majority of households (80%) reporting no major structural problems. For those with problems, cracks in walls or floors were the most often reported (by 473,300 or 7% of households). Other problems were sinking or moving foundations (5%), rising damp (4%), and walls or windows being out of plumb (4%) (ABS, 2000).

**Commonwealth State Housing Agreement – on National Housing Data**

Under the Commonwealth State Housing Agreement (CSHA), in 1999, the Commonwealth and States have entered into a subsidiary agreement – the National Housing Data Agreement (NHDA). This agreement recognizes the need for national standards in housing information. Work is now ongoing to establish sets of indicator definitions developed under the National Performance Indicator Framework for annual reporting against the CSHA. In most cases, data relate to monitoring performance under the programs funded under the CSHA – i.e. measuring program effectiveness – they do not appear to involve broader indicators of need. However, this agreement may lead to some data collection efforts to ensure necessary data are collected to provide general monitoring of housing need. (For details on the National Housing Data Agreement, see [http://www.aihw.gov.au/housing/agreements/index.html](http://www.aihw.gov.au/housing/agreements/index.html)).

**Data Sources Used**

The two primary data sources used are the national Census (taken every 5 years – most recent 2001, with most of this data now published) and the Household Expenditure Survey (HES, also taken on a 5 year cycle – last in 1998-99, next HES will be run in 2003-04.). A further survey, the Australian Housing Survey (AHS) has been undertaken twice (1994, 1999) and used in various publications, although the ABS website suggests that the 1999 edition will be the last AHS.

Historically, data on housing costs were collected in the 1982, 1986 and 1990 Income Distribution Surveys and, since then, in the continuous Survey of Income and Housing Costs (SIHC). The SIHC is an ongoing survey administered monthly with data published annually (with generally a 9 month lag – i.e. report for year ending June 2001 published in February 2002). Basic housing data including housing costs was collected in the 1998/99 Housing Expenditure Survey (HES).

The 1994 Australian Housing Survey (AHS) was conducted in response to user demands for better information about the characteristics, physical condition and quality of housing. The conduct of the survey was a key recommendation of the 1992 National Housing Strategy. The 1999 AHS was conducted to provide further information about the characteristics, physical condition, tenure and quality of housing. The survey provides a follow-on from the 1994 survey, but is not expected to be repeated. Both involved a relatively small sample (roughly 15,000 households), so geographic disaggregation to the metropolitan/capital cities level is limited.
For the Housing Affordability Indicator (HAI), the current gross household income is derived from the quarterly series of National Accounts (ABS National accounts Table 32) and divided by estimated of total households, so it is a fairly high level indicator. The house price used in the HAI is the median house price from a survey of houses financed by the Commonwealth Bank. As such these prices, and index do not take account of changes in the mix of size, location and quality of dwellings financed. Quarter-to-quarter variations therefore reflect any changes in the composition of housing financed, as well as changes in the price of a house of a given size, location and quality. The HAI is published quarterly.

**Chronology of Indicator**

Prior to the 1990’s, the primary indicator was part of a broader poverty measure – *housing related poverty* – which was a measure developed by the Commission of Inquiry into Poverty during the early 1970s. It was a relative poverty measure which gave housing costs a priority in the calculations. Effectively, it deducted housing costs and then asked if what was left was enough. Because it was assessed as a relative poverty issue, it became unpalatable politically during the early/mid 1980s.

Affordable housing was described in the 1991 National Housing Strategy (NHS) as a situation that conveys the notion of reasonable housing cost in relation to income. The NHS noted that affordability issues arise across tenures and accordingly made an explicit distinction between accessibility (i.e. the cost of becoming a homeowner or entering a rental arrangement and more particularly ability to assemble a down payment) and affordability – the ongoing cost of shelter in relation to gross income (National Housing Strategy 1991).

Building on research from Canada, analysts involved in the National Housing Strategy sought to quantify the concept of affordability and in doing so coined the phase *housing stress*. The NHS reiterated a long-standing concern that affordability is intertwined with poverty. This was confirmed in housing expenditure data from the Australian Bureau of Statistics (ABS) which clearly identified a substantially higher shelter cost to income ratio among households in the lower two income quintiles, relative to the 3rd quintile and above (NHS 1991).

Accordingly, the indicator was constructed to focus on the lower two income quintiles. The NHS observed that such households should not spend more than 25% of income on rent if sufficient income were to be available for other necessities. While suggesting that a 25% benchmark would be preferable, a more conservative benchmark of 30% was nonetheless adopted as the basis for an ongoing indicator (Berry and Hall, 2001). Selecting 30% had the benefit of parity with the benchmark used by mortgage lenders in determining borrower eligibility for mortgage loans.  

---

13 Although other authors identify the 30% shelter/income benchmark as recently as 2000, 25% was identified as the rule of thumb (AHURI 2000), suggesting perhaps that the 30/40 rule is not quite as well entrenched as comparable worst case housing need in the US or core housing need in Canada. The ABS reports affordability across a range of shelter/income burdens: 25%, 30%, 40% and 50%. The ABS also notes that shelter/income ratios tend to be significantly higher for households (income units) in the lowest 2 quintiles.
As noted above the current definition of affordability and housing stress was formalized in the 1991 National Housing Strategy, and has remained as a relatively consistent methodology over the past decade.

**Recent Uses in Policy and Planning Applications**

**General Policy and Planning**

A number of scholarly papers (Yates 1997; Yates & Wulff, 2000; Dalton 2002; Berry and Dalton 2002) and general research and advocacy papers (Affordable Housing National Research Consortium 2001, AHURI 2000, HIA 2003) have cited prevailing levels of housing stress and declining ownership affordability and used this data to advocate for additional resources as well as a reorientation of housing policies and programs.

As noted above, the Commonwealth government is currently undertaking a public enquiry into ownership affordability (Productivity Commission) and will employ various indicators to assess access to and affordability of homeownership, a rising concern in Australia.

The ABS web site suggests that the AHS survey results provide benchmark data on the physical condition of Australia's housing stock against which users can establish housing norms, identify populations in housing stress and monitor the effectiveness of housing policy (monitoring would be possible only if the survey and published data are repeated on a cyclical basis). Users include Commonwealth and State and Territory housing authorities, various academic research centres and poverty and housing advocacy groups.

In addition, at a sub-national level, in implementing the CSHA, various state agencies have adopted the 30/40 measure as the basis for defining the magnitude of housing need and developing state and local affordable housing strategies (e.g. NSW 1999, Queensland, 2000).

**Program Eligibility**

Eligibility for assistance under various housing assistance programs is specific to programs and states/territories. In general, targeting criteria reflecting applicant’s income levels are used. However, there is no direct link between the broader measure of need (30/40 housing stress indicator) and program specific criteria.

As part of the emerging performance reporting indicators under the CSHA, states are required to report against a series of performance measures designed and standardized to ensure that the Commonwealth can monitor the outcomes, outputs and objectives outlined in the CSHA National performance reporting framework.\(^{14}\)

The outcome-based indicators in the new framework provide information on how effectively States are focusing resources on those clients who are in the greatest need. The indicators also

---

\(^{14}\) The reporting framework and results are detailed in the annual reports produced under the auspices of the Housing Assistance Act (which provides the legislative authority for the Commonwealth State Housing Agreement - CSSA).
measure the extent to which States are providing stable tenancies for this group, and the level of satisfaction with the service and amenity of the dwelling.

States are required to report on the proportion of allocations made to households in greatest need. One consequence of using this indicator has been an increase in targeting and concentration of extremely disadvantaged households (ghettoization – a phenomenon well known in North America).

**Budget Allocations**

Commonwealth CSHA grants (primarily capital funds for public housing and community housing development) are distributed among states and territories on a per capita basis. The exceptions to this are the Aboriginal Rental Housing Program (ARHP) grants, which are distributed on a needs basis as determined by surveys conducted in 1983 and 1987, and the Commonwealth Rent Assistance Program, which is a universal entitlement program paid as a supplement to the broader income support system.

### Summary of Primary Indicators - Australia

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Purpose</th>
<th>Where published</th>
<th>How often updated</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affordability Index (Housing Stress)</td>
<td>Broad measure of affordability need</td>
<td>Australian Bureau of Statistics ABS</td>
<td>5 years, from Housing Expenditure Survey</td>
<td>Australian Housing Survey &amp; Housing Expenditure Survey (most recent 1999)</td>
</tr>
<tr>
<td>Ownership Affordability Index</td>
<td>To assess accessibility of ownership</td>
<td>ABS Social Trends</td>
<td>Annual</td>
<td>As above (most recent 1999)</td>
</tr>
<tr>
<td>CBA/HIA Homeownership Affordability Index</td>
<td>To assess accessibility of ownership</td>
<td>Commonwealth Bank Australia/Housing Industry Association</td>
<td>Quarterly</td>
<td>Income data from National accounts; home prices from CBA loan data</td>
</tr>
</tbody>
</table>
3.3. England

Indicators in Use

As suggested in Section 2, England is, in many respects, distinctly different from the other three countries in this analysis. Most notably, there is a relatively large social housing sector (21% of total housing stock, a shelter allowance entitlement program for all renters (the Housing Benefit) which caps housing cost burdens, and a highly regulated rent structure.

As a result, there is only a limited policy discourse on affordability in the literature – except in relation to homeownership. For example, shelter burdens (excluding heating and utilities) are generally 25-30% of income for private sector tenants, and 20-25% for social sector tenants. However, once the Housing Benefit is factored in most of these households experience net (after assistance) shelter ratios of 20% and 11% respectively (MacLennan, Stephens and Kemp, 1997) – low levels of shelter expenditure compared with the other counties.

Also distinct from the other counties, the government has deliberately avoided adopting any explicit definition of affordability. However, the representative body for housing association landlords (the National Housing Federation) adopted a policy that less than half of all tenant households (in the housing association sector) should either be in receipt of housing benefit or face rent to income ratios of more than 25% (where incomes are measured after tax and housing benefit is counted as part of the tenants income) (Wilcox, 1999). In addition, a different affordability measure has been used within the model used by the Housing Corporation to determine the levels of grant rate available for new housing association developments (see further below).

Although not identified as a critical issue for tenant households as a whole (because most tenants are in social housing and/or receiving Housing Benefit), affordability is an issue for certain groups – e.g. private tenants where, in a majority of cases, the maximum rent eligible for assistance is significantly lower than prevailing market rent levels. There are also concerns about the work disincentive impacts on low wage tenants in receipt of the Housing Benefit, and for low income home buying households who, except for very limited circumstances, are not eligible for any form of state assistance with their housing costs.

Distinct from affordability, critical housing issues in England relate primarily to access (homelessness) and quality (dwelling conditions) – largely a reflection of the relatively older stock, compared to that in the other countries.

An array of indicators

So, unlike the other countries being reviewed, there is not an obvious primary, or mainstream, indicator of housing need. Instead, there are a number of sets of indicators in use including:

- A set of indicators developed by the Social Exclusion Unit (SEU) – a key new policy area, initiated by the new Labour Government elected in 1997, which encompasses the broad area of poverty and economic disadvantage.
• The government’s Generalized Needs Index (GNI), and Housing Need Index (HNI), both of which are composite indices used almost exclusively by government to allocate capital funding for both modernization and improvement of existing social housing and to fund new development.  

• An implicit rent to income ratio of 33% for low wage working households which is built into the Housing Corporation model that determines grant rates for new housing association development schemes – i.e. grant rates for each area are calculated to generate rent levels that would imply a 33% rent to income ratio (where housing benefit entitlement is netted off the rent) based on the average incomes of working households recently re-housed within the housing association sector.

• Data on house price to income ratios for home owners are routinely published in the quarterly journal of the Council of Mortgage Lenders.

• Data presented in the Annual Housing Finance Review – a compendium of data on both public and private housing and the characteristics of households.

Social Exclusion Indicators

The SEU has developed and monitors a set of 50 key indicators relating the characteristics of social exclusion. The sub-set of measures related to housing are:

• Households without household insurance;
• Homes without central heating;
• Overcrowding;
• Households in mortgage arrears;
• Households in temporary accommodations.

Notably, this series does not identify the issue of affordability – instead key measures relate to dwelling conditions, mortgage arrears (an indirect measure of ownership burdens) and homelessness (temporary accommodations).

---

15 Although identified in the 1992 CMHC Research Highlight, these are not broadly recognized needs measures – rather they are an administrative tool for allocation of government funding. The current study is concerned more broadly with measures being actively used in advocacy, research and policy planning and development.

16 The Annual Housing Finance Review includes each year a chapter devoted to housing need. While in most years the focus is on measures of homelessness. It also includes summaries and critiques of new housing requirements analysis – measures outside the scope of this report.

17 Social exclusion is a shorthand term for what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown (ODPM 2001). The SEU was set up by the Prime Minister to help improve government action to reduce social exclusion by encouraging more comprehensive inter-ministerial “joined-up” solutions to “joined-up problems”
**Capital Allocation Indicators**

The GNI and HNI are used as a budgetary allocation mechanism in England; however, both are fairly technical and consequently do not present a single widely used benchmark of need, comparable to those described in the other countries.

The GNI and HNI are compound statistical indices of the relative need for housing capital expenditure by local authorities (LAs) and registered social landlords (RSLs) in each local authority area. Data are compiled only at the local level to generate a series of comparative indicators for purposes of funding allocations – distinct from the core need measure in Canada there is no national roll-up of data.

The GNI is used in the allocation of housing capital resources to LAs via the housing Annual Capital Guidelines (ACGs). The HNI is used in the allocation of housing capital resources to RSLs through the Housing Corporation’s Approved Development Program (DTLR 2001).

These two indices include elements related to:

- **Overcrowding** – two overcrowding measures, one dealing with 'basic' overcrowding and a second on severe overcrowding, both based on persons per room and bedroom.

- **Involuntary sharers and concealed families** – covering those people/households sharing with others who would prefer separate accommodation of their own.

- **Worst condition private sector unfit dwellings** – relates to the numbers of occupied private sector dwellings which may be subject to clearance/closure and hence require replacement.

- **Elderly in need of specialized accommodation/Disabled in need of specialized accommodation** – based on a study of the housing needs of elderly and disabled people. They relate to the need for very sheltered housing (elderly) and wheelchair housing (non-elderly disabled adults).

- **Households receiving support for housing costs** – covers private sector non-housing association tenants in receipt of housing benefit (HB) and owner-occupiers in receipt of Income Support for mortgage interest payments.

- **Replacement of local authority stock** – aimed at the worst local authority dwellings where there may be a need for replacement by more appropriate social housing or a widening of the tenure mix. It is intended to reflect broad issues about the quality and suitability of the dwellings rather than their condition.

- **Homeless households in temporary accommodation** – included following the 1999 Needs Indices Review to reflect a level of need for additional affordable housing provision.
While the two indexes are consistent in their treatment of individual elements, their overall construction, and the weighting given to each element, differ to reflect the different functions and responsibilities of local authorities and housing associations, as shown in the table below.

<table>
<thead>
<tr>
<th>Components of the GNI &amp; HNI in 2003/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>New provision</td>
</tr>
<tr>
<td>Private sector stock condition</td>
</tr>
<tr>
<td>Local authority stock condition</td>
</tr>
<tr>
<td>Low demand</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

- The new provision indicator is based 20% on overcrowding and 10% on severe overcrowding, 25% on involuntary sharers and concealed families, 5% on worst condition private sector dwellings, 5% on elderly in need of specialized accommodation, 5% on disabled in need of specialist accommodation, 10% on private sector households receiving help with their housing costs, 5% on the need to replace the worst local authority stock, and 15% on the numbers of homeless households placed in temporary accommodation.

- The private sector stock condition factor is based primarily (85%) on the costs of dealing with unfitness and substantial disrepair. The balance comprises a measure of the numbers of households eligible for disabled facilities grants.

- The local authority stock condition indicator is based on the assessed costs of dealing with backlogs of repair and improvement work for dealings of different sizes, ages and construction type.

- The low demand measure is based one third on severe low demand within local authority stock, and two thirds on severe low demand within the private sector stock.

In addition, it should be noted that additional financial support to local authorities to deal with the repair of their own housing stock is provided through a Major Repairs Allowance, as part of the revenue subsidy system for council housing. This is based on a modeled indicator of disrepair in the local authority stock, constructed in similar fashion to the GNI indicator, but based on the expenditure required to maintain stock in good condition, rather than deal with backlogs.

**Ownership Affordability Indicators**

The issue of affordability for potential home buyers has also risen up the political agenda in recent years, following a sustained period of house price rises, linked to a continuing period of economic growth, significant reductions in interest rates, and constraints on the supply of new housing. In consequence, the possible inclusion of an explicit home ownership affordability indicator within the HNI and GNI is now under discussion.
Currently the main indicator of ownership affordability is maintained and published by the Council of Mortgage Lenders (CML), based on the Survey of Mortgage Lenders (SML) funded by the government. The CML calculates an income multiplier – the ratio of house prices to gross income for both first time buyers and movers that already own. While the SML does collect data on refinancing mortgages by existing home owners that do not move, those cases are not included in the calculation of income multipliers.

This is based on mortgage loan applications from member banks, building societies and lenders and draws both the household income and house price directly from the application. Until July 2003, the indicator was based on a 5% sample survey of loans originated, and lenders provided data on a quarterly basis. Recently the survey has begun to collect data on 100% of loans originated (although not all lenders have agreed to participate on this basis).

The main limitation of the CML/SML series is that it relates only to those households able to secure a mortgage, and it does not therefore reflect the variations in the ability of households to access the sector at different stages in economic and housing market cycles. Thus, for example, in the recent years of rapid house prices, the average incomes of first time purchasers have risen more rapidly than earned incomes for the population as a whole, and the average level of the deposit put down towards first time purchases have also increased sharply. Against that, interest rates have fallen quite sharply, so reducing the cost of repayments on larger mortgages.

Over the years there have also been a number of independent studies that have assessed the affordability of home ownership for households in different parts of England, but these do not as of yet have any formal role in policy making (Bramley, 1990 and Wilcox, 2003).

**Mortgage default and repossessions**

The issue of mortgage repossessions is far more prevalent in England than in many other countries, and thus households in mortgage arrears and the volume of mortgage repossessions are far more prominent concerns in the UK. In part, this reflects the relative ease with which lenders can take possession of properties when households fall into arrears, and in part the very limited nature of the state safety net available to home buying households who suffer an adverse change of circumstances (i.e. unemployment, fall in earned income, relationship breakdown).

Home owners are not eligible for housing benefit, and the Income Support scheme does not provide unemployed claimants with any help with their mortgage costs until they have been out of work for nine months. This restriction, introduced in 1995, was intended to promote the take up of private mortgage payment protection policies, but in practice the take up has been limited.

Partly as a consequence of government policies to promote home ownership for lower income households, but primarily as a consequence of post purchase changes of circumstances and the limited state income safety net for home owners, as compared with that for tenant households, England has a very high rate of poverty among owners. In broad terms, they have been assessed to comprise about ‘half the poor’ on a range of before and after housing cost measures (Burrows & Wilcox 2000).
**Homeless measures**

Access, or lack thereof, is reflected in measures of homelessness and use of temporary dwellings–more often an indication of lack of secure accommodation and security of tenure than an absolute lack of accommodation (CIH 2002). This is because, in England, the term homelessness is defined in law and individuals meeting the definition are declared statutorily homeless. The law also imposes a legal obligation on local authorities to provide accommodation to statutory homeless persons, which has evolved into a set of circumstances under which local authorities (i.e. municipalities) resort to renting “temporary” space in bed and breakfast accommodations and hotels. Thus, the concept of temporary accommodations has emerged as a key indicator (Wilcox 2002).

**Other measures**

The related issues of fuel poverty and energy efficiency have assumed increasing importance in England in recent years. Fuel poverty is seen as a distinct issue as fuel (i.e. utility) costs are not covered by the UK housing benefit scheme, and can represent a large element of the budgets of low income households. As one consequence of this the EHCS now considers in far more detail all the property characteristics that relate to energy efficiency issues, including the use of a ‘Standard Assessment Procedure (SAP) rating for all properties.

In the context of global warming, and in the UK it is reckoned that some 30% of all greenhouse gas emissions are linked to the domestic use of energy, such measures may become a more important focus for international policy in the decades ahead.

**Data Sources Used**

Data used to develop the 50 social exclusion indicators draw from a wide range of sources, including the annual Survey of English Housing, homelessness reporting from the ODPM and mortgage arrears data from the CML.

The GNI and HNI indices are constructed from a variety of data sources. These include the Census, the English House Condition Survey (EHCS), the Survey of English Housing (SEH), and various sets of administrative data provided by individual authorities. The Census is undertaken once every ten years, and until very recently the EHCS was undertaken once every five years. It is now undertaken (with a smaller sample) on an annual rolling basis. The SEH is an annual survey, and the various local authority administrative returns are submitted either quarterly or annually.

The indices are updated annually for any new data and their structure/composition is reviewed periodically.

The EHCS and SEH sample sizes are such that they can only provide data at the regional level. Local authority level scores are derived either by modeling that links the Survey data either with local level Census or administrative data. Thus, for example, the local authority stock condition indicator is based on survey estimates of the costs of dealing with disrepair and improvements.
for various dwelling archetypes, while local authority administrative data provides the numbers of each type of dwelling in each area.

In addition, in assessing ownership affordability, annual data is available, or can be constructed from, a range of survey and administrative data. National and regional data is available from the annual Family Expenditure Survey, Family Resources Survey and the Labour Force Survey. National, regional and local earnings data is available from the annual New Earnings Survey, and it is now available both on the basis of place of work, and place of residence.

National, regional and local house price data is available (on a monthly and annual basis) from the Land Registry based on every market transaction. However while this data source provides a very detailed level of spatial disaggregation, it can only provide separate prices for houses and for flats. It does not collect any information about the size of dwellings.

Further detailed national and regional data on house prices and mortgage advances as well as affordability indicators in the form of house price multipliers are available from the CML Survey of Mortgage Lenders (on a quarterly and annual basis), and also from a number of the large lenders (i.e. Halifax, Nationwide).

Data on homeless applications to local authorities, and the numbers of persons/households in temporary accommodations is collected quarterly by the Office of the Deputy Prime Minister, from the statistics reported by localities under their statutory obligations to provide accommodations to eligible homeless persons. This is based on the formal homeless applications made to each authority, and shows whether or not households were found to be homeless, whether or not they were in priority need, the reason they became homeless, and household type. The statistical returns also state the numbers of households placed in temporary accommodation at the end of each quarter.

**Chronology of Indicators**

The composite indicators used in budget allocations date back to the 1980’s, although these have been subject to various revision – with further assessment and refinement currently under consideration.

Given the age of the housing stock in the UK, housing conditions have long been an issue, and have been measured on an ongoing basis in the English House Conditions Survey.

Various methodologies have been used (and continue to evolve) as a basis to monitor ownership affordability, but as yet there is no consensus on an appropriate method and thus there is no mainstream indicator.
Recent Uses in Policy and Planning Applications

General Policy and Planning

As suggested in describing the indicators, there is a strong emphasis on the use of indicators in England as a basis for budgetary allocations – primarily for rehabilitation or new development capital funding, but increasingly to broader community redevelopment and revitalization initiatives involving both housing and broader community development activities. Typically these funds are allocated on a competitive basis, using detailed objective data.

In the policy context, it is a common practice in the UK for government to issue green papers to examine contemporary issues and seek input on proposed solutions and strategies. In this vein, the government released a green paper in 2001 – ‘Quality and Choice: A Decent Home for All’. This outlined the key challenges and the government’s proposed strategies.

It is not obvious which indicators were used to identify issues in the Green Paper, although housing conditions and social deprivation appear to be key concerns. House price inflation and collapse (causing arrears and repossessions) has been a serious issue, but price inflation has recently subsided, so lack of ownership affordability was given less emphasis at that time in favour of improving access and the home transaction process.

Subsequently, government policy has evolved further, and has been set out in a recent policy document ‘Sustainable Communities: Building for the Future’ (ODPM, 2003). This sets out three main policy targets:

- To improve all social sector housing, and private housing occupied by vulnerable households, to a ‘decent homes’ standard;
- To increase the supply of both market and affordable (social) housing in areas of housing stress (and in particular in London and the South East); and
- Through housing and related regeneration programs, tackle areas of low demand for housing, which suffer from a range of social and economic disadvantages. These areas are primarily northern towns and cities that have experienced long term decline in traditional industries, with consequential effects on the housing markets that had originally grown up to provide housing for their workers.

For the first objective, the ‘decent homes’ standard, while modest, has been clearly defined, and this measure was used in the 2001 English House Condition Survey, and is increasingly being used in the local stock condition surveys undertaken by individual local authorities to inform their local housing strategies and policies.

‘Decent homes’ must meet the statutory ‘fitness’ standard, be in a reasonable state of repair, have reasonably modern facilities and services (i.e. a kitchen that its less than 20 years old and a bathroom less than 30 years old), and provide a reasonable degree of thermal comfort. The fitness standard requires that properties be ‘free from disrepair; structurally stable; free from dampness prejudicial to the health of the occupants; adequate provision for lighting, heating and
ventilation, adequate supply of wholesome water; effective system for the draining of foul, waste and surface water; suitably located WC for the exclusive use of the occupants; exclusive use of a suitably located bath or shower and wash-hand basin, each of which is provided with a satisfactory supply of hot and cold water; satisfactory facilities for the preparation and cooking of food; including a sink with a satisfactory supply of hot and cold water’.

The recent sustained period of house price rises, particularly in the south of England, has seen a renewed interest in home owner house price to income and related measures, and these are used in the ODPM ‘Sustainable communities’ report. There is not yet, however, an officially accepted methodology for measuring house price to income ratios, although this topic is now under intensive review both within and outside government (Wilcox 2003). That said the political decision to focus the growth in funding for investment in new affordable housing in London and the South East cuts across any decisions that might be made to revise the content or balance of the GNI and HNI measures.

At a sub-national level, while there is government guidance on the conduct of local housing needs studies (i.e. quantification of new housing requirements), it is not tightly prescriptive. There are difficulties with measures of local household incomes, largely due to the limited aspirations of local housing needs surveys, and the poor response rate to questions on incomes in the postal questionnaires typically used in these surveys. There is also no consensus on the appropriate house price to income multipliers to use in defining the limits of affordability for households seeking to become homeowners.

**Program Eligibility**

There is no direct link between the various indicators in use, as outlined above, and eligibility for either social housing or the shelter allowance (Housing Benefit) which is means tested, and based largely on income. Because the Housing Benefit is delivered alongside a variety of other benefit programs, there is a convoluted formula to tax back assistance to avoid double dipping. Due to overlapping benefits this has become increasingly complex and highly criticized for causing very high effective marginal tax rates.

Those concerns, plus concerns about administrative complexity and the behavioural impact of basing benefit levels on actual rents (subject to complex limits in the private rented sector), led to the proposal in the most recent green paper for fundamental reform of the Housing Benefit (ODPM 2003). Those reforms, currently being piloted in nine areas for private tenants, will base benefits on local allowances set in relation to household size and average rents in each locality, with no reference to the actual rent paid by the individual claimants.

**Budget Allocations**

As noted, a very technical series of indicators are employed to assist in the allocation of central government funding both for the modernization and rehabilitation of social housing stock, as well as for the allocation of capital funding for new development (primarily by housing associations. The recent trend in allocations for regeneration has been to direct funds to areas where the indicators of deprivation and social exclusion identify the most acute issues of
deprivation – compounding low income with social exclusion, poor health, crime and dwellings in poor repair

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Purpose</th>
<th>Where published</th>
<th>How often updated</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalized Needs Index (GNI), and Housing Need Index (HNI),</td>
<td>Composite indices used almost exclusively by government to allocate capital funding for both modernization and improvement of existing social housing and to fund new development.</td>
<td>ODPM (Housing)</td>
<td>Annual</td>
<td>Wide variety of sources, including survey and administrative sources</td>
</tr>
<tr>
<td>Social Exclusion Indicators</td>
<td>Comprehensive set of 50 indicators including 7 related to housing; used to assess social and economic disadvantage on a geographic basis.</td>
<td>National gov’t – Social Exclusion Unit</td>
<td>Annual</td>
<td>Wide variety of sources, including survey and administrative sources</td>
</tr>
<tr>
<td>CML-Ownership Affordability</td>
<td>To assess accessibility of ownership</td>
<td>Council of Mortgage Lenders (CML)</td>
<td>Quarterly</td>
<td>Survey of Mortgage Lenders</td>
</tr>
</tbody>
</table>

### 3.4. United States

**Indicators in Use**

A number of overlapping indicators are being used in the US. The primary and official measure is **Worst Case Housing Need (WCHN)**. **Critical Housing Need (CHN)** is a somewhat broader indicator which covers both tenures and includes the assisted households (excluded in WCHN). The concept of the national **Housing Wage** has been created and fairly well publicized by a national advocacy organization. This is a relative index that compares the wage required to secure appropriate housing compared with the wage needed to afford a fair market rent (FMR) at 30% of income.\(^{18}\) The homeownership rate for underserved and minority households is another widely used indicator.

Various recent publications advocating for a more effective policy and funding response from government cite either worst case housing need (HUD 2001, Dolbeare 2001) or critical housing need (Stegman Davis and Quercia 2003; Lipman 2002; Millennium Housing Commission 2002; National Housing Conference 2003,). In a country policy update prepared for the 2002 Tri-Country Housing Conference, US delegates similarly reference worst case need as the key measure used in the US (Ramirez, Nail & Barreto 2002).

---

\(^{18}\) Fair Market Rent (FMR) is a market specific rent (metropolitan areas or non metropolitan counties) formally established by HUD in an annual schedule and based on the 40\(^{th}\) percentile rent for that area.
In addition to the biennial report to congress and publications by National Housing Conference and National Low Income Housing Coalition, an independent annual assessment (*The State of the Nation's Housing*) is undertaken by the Joint Center for Housing Studies of Harvard University. This report is a broad annual overview of the housing market and includes discussion and tabulation of housing conditions and affordability issues among low income households.

Concurrently, there has been a persistent concern about access to ownership, particularly among minority households (Harvard Joint Center, NHC 2002). Although not specifically identified as a measure of need, the issue of minority homeownership has captured political attention across both Democratic and Republican administrations.

**Worst Case Housing Need**

The primary formal measure of housing need used in the US, is the concept of worst case housing need, which applies only to renter households. This measure assesses the number of very low income households (defined below) that pay more than 50% of gross income for rent, including utilities and/or occupy severely inadequate housing.

Although already in use informally, in 1990, the US Department of Housing and Urban Development (HUD) was mandated to report to Congress on worst case housing needs across the US – the WCHN report. These biennial reports (every 2 years) draw on data collected in a biennial survey – the American Housing Survey (AHS) undertaken by the Bureau of the Census.

The most recent report is *Trends in Worst Case Need for Housing 1978-1999*, which also includes a brief overview of trends from 1999-2001, although not officially published as the 2001 Worst Case Need Report.

The key measures used within the concept of worst case housing need are: ¹⁹

- **Very low income households** – households with less than 50% of Area Median Income (AMI – an income benchmark, or first step in assessing if a household is severely burdened). ²⁰ This definition was created by Congress and applied to HUD rental programs. Statutory adjustments allow for upper and lower caps for areas with high or low ratios of housing costs to incomes and, for non-metropolitan counties, a lower cap equal to the state-wide non-metropolitan average.

- **Severely cost burdened households** – very low income households paying more than 50% of gross income for rent, including utilities.

---

¹⁹ The WCN indicator does not include an assessment of overcrowding, although some local jurisdictions do use crowding as a local preference for program assistance. A crowding standard is included in the American Housing Survey: more than one person per room, excluding bathrooms, porches, balconies, foyers, halls and half-rooms, with an additional “severely crowded” standard of 1.5 people per room.

²⁰ Area Median Income is determined and applied at the scale of Standard Metropolitan Statistical Areas (SMSA) or for non-metropolitan counties.
• **Living in severely inadequate housing.** A unit has severe physical problems if it has any of the following five problems:

  - **Plumbing.** Lacking hot or cold piped water or a flush toilet, or lacking both bathtub and shower, all inside the structure (and for the exclusive use of the unit, unless there are two or more full bathrooms).
  - **Heating.** Having been uncomfortably cold last winter for 24 hours or more because the heating equipment broke down, and it broke down at least three times last winter for at least 6 hours each time.
  - **Electric.** Having no electricity, or all of the following three electric problems: exposed wiring, a room with no working wall outlet, and three blown fuses or tripped circuit breakers in the last 90 days.
  - **Hallways.** Having all of the following four problems in public areas: no working light fixtures, loose or missing steps, loose or missing railings, and no working elevator.
  - **Upkeep.** Having any five of the following six maintenance problems: (1) water leaks from the outside, such as from the roof, basement, windows, or doors; (2) leaks from inside the structure, such as pipes or plumbing fixtures; (3) holes in the floors; (4) holes or open cracks in the walls or ceilings; (5) more than 8 inches by 11 inches of peeling paint or broken plaster; or (6) signs of rats in the last 90 days.

**Assessing Available Supply of Affordable Dwellings**

In addition to measuring need on the basis of demand, the biennial reports on worst case housing need since the mid 1990’s have also included tabulations and discussion on a measure of supply. Specifically this assesses first the number of rental units that have rents below 30% of AMI (and thus affordable to low income households.

The various reports have tracked both the absolute number of units as well as the number of units unoccupied and available below this rent level, by area. The biennial reports, as well as the recent 1979-1999 trend report note that overtime there has been a significant decline in the volume of units in this category. Moreover, there is a much larger count of households in need than units in the stock, mainly because many lower rent units are occupied by households with incomes above the AMI threshold – a problem labeled as a mismatch.

**Critical Housing Need**

The concept of critical housing need (CHN) is an expansion of WCHN and among other things seeks to include assisted households. Because a significant number of assisted renters still have serious housing expense burdens, the CHN measure also includes assisted renters – inclusion of this group focuses attention on the inadequate levels of current housing assistance.

In determining the number of very low income households experiencing a severe cost burden, the universe of households distinguishes between households in receipt of housing subsidy versus unassisted households. A household is defined as receiving assistance if they answer yes to any of three questions in the AHS relating to the form and source of housing assistance. Generally, the data on worst case need is presented only for “unassisted households”, which
excludes households identified as receiving assistance in AHS questions. The WCHN measure excludes such assisted households – they are however included in CHN.

The CHN similarly enumerates households with a severe housing burden or living in severely inadequate housing. However, it is applied across both tenures to households with earnings all the way up to 120% of local area median income and also includes households already receiving housing assistance (which are currently excluded from WCHN).

Thus, CHN complements HUD’s worst case needs with some overlap. The overlap is among unassisted very low income renters with earnings of at least $10,700. The concept was designed and promulgated by the National Housing Conference, a non-profit non-partisan advocacy coalition dedicated to advancing affordable housing and community development causes.

A subset of those households with incomes above $10,700 (the equivalent of one full-time worker, working at the federal minimum wage of $5.15 per hour) is often used to focus attention on housing problems among the working poor.

The idea of CHN is to show that although the vast majority of those with severe problems have very low income, high housing cost burdens are climbing up the income ladder and apply to owners as well as renters. Corroborating this, HUD (2003) reports that between 1999 and 2001 there is a notable increase in CHN among owners.

As discussed below, the CHN measure draws its data from the AHS and accordingly follows the same biennial cycle.

**Housing Wage**

The “Housing Wage” determines the income needed to afford the HUD Fair Market Rent (FMR) for a two-bedroom apartment at 30% of household income. At a national level, based on the median two-bedroom FMR. This theoretical required wage has risen steadily from $11.08 in 1999 to $15.21 in 2003 – nearly three times the current federal minimum wage (note however that the divergence is also influenced by the fact that between 1997-2001 the federal minimum wage was not indexed to inflation).

According to the National Low Income Housing Coalition, 75% of the nation’s states – home to more than 90% of all US renter households – have a Housing Wage of more than twice the minimum wage, while nine states have Housing Wages more than three times the minimum wage.

---

21 In 1997 the AHS questions intended to identify households receiving rental assistance were changed in both content and order from those used earlier. Because the worst case concept was developed to measure the number and characteristics of households having priority for federal rental assistance, households responding that “a state or local government pay[s] some of the cost of the unit” were not included as receiving (federal) rental assistance. These new questions no longer attempt to identify state or local rental assistance.

22 Conceptually, this is very similar to Canada’s core need income threshold, (now called a housing Income Limit HIL) which determines the income required to afford a median rent unit (for specific household size and composition) at 30% of income. In Canada this is developed at the CMA level and for census agglomerations (CA) and is used as an eligibility criteria for access to federally funded or cost shared social housing.
In 2003, the two bedroom Housing Wage ranges from $35.02 in Santa Clara County, CA, to $7.12 in parts of Alabama.

**Homeownership Affordability**

Similar to other countries, the U.S. has unofficial (non-government) indicators of homeownership affordability. A Housing Affordability Index is maintained by the National Association of Realtors, a private trade organization for the real estate broker industry (see website: [http://www.realtor.org/research.nsf/pages/HousingInx](http://www.realtor.org/research.nsf/pages/HousingInx)). It is published both at a national and regional scale.

The calculation assumes a down payment of 20% of the home price and it assumes a qualifying gross debt service ratio of 25%. It is based on a typical home, defined as the national median-priced, existing single-family home as calculated by NAR. The typical family is defined as one earning the median family income as reported by the U.S. Bureau of the Census. The prevailing mortgage interest rate is the effective rate on loans closed on existing homes from the Federal Housing Finance Board and HSH Associates, Butler, N.J. These components are used to determine if the median income family can qualify for a mortgage on a typical home.

The index is defined as “the ratio of median family income to qualifying income. Values over 100 indicate that the typical (median) family has more than sufficient income to purchase the median-priced home.

The index, which stood at 144.3 in March, 2003, up from 139.5 in December 2002, is kept for fixed rate mortgage loans, ARMs, and a composite mortgage. The affordability index moves with changes in median home prices, median household income, and mortgage interest rates.

This housing affordability index is not part of the government’s official housing needs database, nor used for policy purposes, despite its utility, and widespread availability.

**Minority Homeownership Rates**

Both the Clinton and G W. Bush administrations have formally adopted national homeownership goals. Clinton’s goal was to achieve an all-time high homeownership rate of 67% of all households by the year 2000, while the Bush administration’s goal is more narrowly defined as increasing the number of minority homeowners by 5.5 million by the end of this decade (HUD 2002). The way that the Clinton and Bush homeownership goals come together is that you can’t significantly increase the overall national homeownership rate without disproportionately boosting minority rates.

While ownership rates are a fairly uniform indicator, the target homeownership rates for minorities represent more of an application of an indicator (ownership) towards a policy goal as opposed to an indicator in their own right. Since both the Clinton and Bush administrations have adopted homeownership goals, these may lead to new measures of need/aspirations in the future.

---

The Census Bureau recently published homeownership figures (first quarter 2003) showing that nationally 75% of whites own their homes compared to 48% of blacks and 47% of Hispanics.

**Data Sources Used**

The worst case housing need and critical housing need measures are facilitated by data collected in the American Housing Survey. Between 1973-83 this survey was carried out annually – and was accordingly labeled the Annual Housing Survey. Since 1983, it has been administered every two years and relabeled the American Housing Survey (AHS). Due to methodological changes, some data are not directly comparable across the full time series (Bureau of the Census 1999; HUD 2003).

The survey is conducted for HUD by the Bureau of the Census. The AHS collects data on the nation's housing, including apartments, single-family homes, mobile homes, vacant housing units, household characteristics, income, housing and neighborhood quality, housing costs, equipment and fuels, size of housing unit, and recent movers. National data are collected in odd numbered years, and data for each of 47 selected metropolitan areas are currently collected every six years. The national sample covers an average 55,000 housing units. Each metropolitan area sample covers 4,100 or more housing units. Data from the national survey is disaggregated to report at a regional level (with four large regional divisions (Northeast, Midwest, South and West), but the sample size is insufficient to support metropolitan level analysis, except in those years when selected metropolitan area data are collected.

In addition to needs data, the AHS also collects rent data, which are used, together with census data and separate rent surveys, to assist in establishing HUD Fair Market Rents (FMR) for use in defining benefit levels in existing rental programs. This involves determination of a base rent, inflating this to the current year and making adjustments for varying bedroom sizes/occupancy levels. The FMR is not used as an indicator of housing condition, or need, rather it is a program administration tool, used to help set levels of assistance payments. 24 Accordingly it is not discussed in detail here (for reference see http://www.huduser.org/datasets/fmr.html).

**Chronology of Indicator**

The worst case housing need concept was initially developed to measure the number and characteristics of households having priority for federal rental assistance as a way to inform the program and policy development process within HUD. References to the concept of Worst Case Housing Need can be found in publications in the early 1980’s (HUD 1991, McGough 1993). These publications cite trends in worst case housing need back to 1973 – the time of the first Annual Housing Survey.

Estimates of the numbers of households with worst case needs and information on the incidence of these severe housing problems by household income informed deliberations on the Cranston- Gonzalez National Affordable Housing Act of 1990.

24 FMR is, however, used as the basis for determining the housing wage indicator
In the FY 1991 appropriation bill, the Senate Appropriations Committee instructed HUD to report annually to Congress on worst case housing needs. The Committee also strongly urged HUD to develop a strategic plan that “outlines how the Federal Government, despite limited fiscal resources, can help to eliminate or substantially reduce the number of families and individuals … in this worst case needs category.” Worse case housing need has been assessed on a formal basis since HUD was mandated to report on this situation by the Senate Appropriations Committee in 1990.  

The worst case need (severely cost burdened and/or living in severely inadequate housing) measures were not identified in the previous 1992 CMHC research work, even though they were in existence at that time. This reflects the primary emphasis of the earlier CMHC work on allocation models as distinct from need models. The earlier CMHC study references only a Fair Share Formula which involved a composite of 6 individual indicators as the basis used to allocate housing assistance to existing active programs across 250 allocation areas (CMHC 1992).

The Fair Share Allocation is still in existence, and applies to new appropriations for housing vouchers and non-public housing production programs – although there have been very few appropriations in recent years.

The National Low Income Housing Coalition has developed and annually published the housing wage since 1989. In 1998 the NLIHC enhanced this coverage to a comprehensive form that provides data on housing in every county, Metropolitan Statistical Area (MSA), combined non-metropolitan area. Earlier editions provided data for MSAs and states only.

**Recent Uses in Policy and Planning Applications**

**General Policy and Planning**

Worst case housing need became formalized in biennial reports to Congress and was accordingly a key measure in formal submissions for annual appropriations. The most recent detailed biennial report was published in 2001 – based on the 1999 AHS (*Rental Housing Assistance—The Worsening Crisis*).

Subsequently, a longer term trend report (*Trends in Worst Case Need for Housing 1978-1999*) has also been published. While profiling trends from 1979 to 1999 it also includes an overview of trends between 1999 and 2001 (HUD 2003). However it does not fully detail WCN 1999-2001 and accordingly does not appear to be a formal biennial report. In addition to examining these trends, the 2003 report also discusses, at some length a variety of methodological limitations in this indicator and suggests that fairly major revisions are being examined.

---

The reports also use data from the AHS to describe key trends in the rental housing stock – and notably a decline in the volume of units available and affordable to extremely low income renters (previously noted “mismatch problem”). This does not appear to auger well for the future as contracting supply can only lead to upward pressure on rents, especially in the lower part of the rent distribution.

Reflecting the sentiments of others and to a degree the premise of the more refined Critical Housing Need measure, Dolbeare (2001) observes that there may be an excessive pre-occupation with worst case need (focused on unassisted very low income renters) while the real extent of housing need tends to be obscured – she notes that, in addition to the 4.9 million in worst case need, a further 21 million renter households have less critical but still serious problems, paying 30-50% of income and/or living in inadequate conditions. Dolbeare notes that this is a much broader group of households and could be a significant constituency of support in advocacy efforts for more resources (Dolbeare 2001).

The measure of worst case housing need is too broad to be directly used in program planning. More directed surveys and research tend to be used to gather data to help in program design and refinements. The primary use of the measure appears to be as a way to quantify outstanding levels of need as part of the advocacy process and to help justify departmental submissions for new appropriations. Commentators however noted that the magnitude of the problem is overwhelming and therefore publication of the HUD report may have lost its impact.

Its publication does, however, appear to have contributed to a shift in policy away from a more general set of federal housing preference criteria toward explicit targeting on the basis of WCHN (HUD 2003).

The other unofficial measures – Critical Housing Need and the concept of a Housing Wage appear to be emerging in the efforts of advocates and policy analysts as do statistics on minority homeownership rates.

**Program Eligibility**

Worst case housing need is not directly used in program eligibility, although initially it was conceived as a tool to measure potential demand for admission to rental assistance programs. Related concepts of income relative to some percentile of the Area Median Income (AMI) are the primary tools used to establish program eligibility for public housing, vouchers and tax credit funded projects. In most programs, eligibility is based on an income below the 80% of AMI (low income definition) or below 50% of AMI (very low income). Assisted ownership programs provide assistance up to 120% of AMI.

**Budget Allocations**

In recent years, new appropriations for production programs and personal housing assistance (vouchers) have been relatively small by historical standards, or have been funded through indirect assistance – notably the Low income Housing Tax Credit and Mortgage Revenue Bonds.

The main active housing assistance programs for which budgetary allocations are necessary are the Section 8 voucher program, the HOME program, and Community Development Block...
Grants (CBDG). Funding or tax expenditure room and the two tax-based programs are based on a formula-based per capita distribution (not a needs based allocation). The allocation for CBDG is by a complicated formula that attempts to measure local relative levels of need.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Purpose</th>
<th>Where published</th>
<th>How often updated</th>
<th>Source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case Housing Need</td>
<td>Developed to measure the number and characteristics of households having priority for federal rental assistance</td>
<td>HUD (official report to congress; also in State of Nations Housing (Harvard Joint Center))</td>
<td>Biennial</td>
<td>American Housing Survey</td>
</tr>
<tr>
<td>Critical Housing Need</td>
<td>Broader measure than WCHN (includes owners) and incomes up to 120% AMI – used by advocates for promote funding need</td>
<td>National Housing Conference</td>
<td>Biennial</td>
<td>American Housing Survey</td>
</tr>
<tr>
<td>Housing Wage</td>
<td>Developed and used by advocates to promote funding need</td>
<td>Low Income Housing Coalition &amp; Center for Housing Policy</td>
<td>Annual</td>
<td>American Housing Survey</td>
</tr>
<tr>
<td>Homeownership Rate</td>
<td>Measures overall ownership rate as well as minority rates against national goals</td>
<td>HUD: State of Nations Housing (Harvard Joint Center)</td>
<td>Biennial</td>
<td>American Housing Survey; and current Population survey</td>
</tr>
</tbody>
</table>
4. Recent Reporting of Need Measures in Each Country

As a way to illustrate use of the indicators in each country, this chapter briefly highlights the most recent data on need as measured by the primary indicators identified for each of the four countries being reviewed. Appendix B lists relevant websites where the most recent data releases for each country can be sought.

4.1. Canada:

Core Housing Need

At this time revised core need estimates based on the 2001 census are not available. The most recent detailed estimates of core housing need are therefore based on the 1996 census. At that time, a total of 1.7 million households were found to be in core housing need.

Two thirds of these are renters and the incidence of need is much higher among renters (17%) versus among owners (5%). Just over half are non-family unattached individuals.

Detailed breakdown on the nature of the housing problem (affordability predominates) and the absolute number and incidence of need by age, household type and location are also available.

Although detailed data have not been published, and data method differences preclude direct comparison between core need estimates based on the census versus those based on inter-censal survey data, CMHC has also released limited results from an analysis undertaken on Survey of Housing Spending (SHS) from 1997 to 2000. Based on the SHS annual time series data, CMHC found that core need declined marginally over this 4 year period. The number of owners and renters in core need falling by 2.6% and 2.8% respectively. It also reported reduction in need among lone parents and couples while the number of non-elderly singles and seniors both increased. (Canadian Housing Observer, 2003).

Shelter Burdens (Affordability)

For the more general shelter cost ratios more recent data is available from the 2001 Census. Like the SHS core need estimates (1997-2000), this suggests a small improvement in affordability problems since 1996, attributable to a period of strong economic growth and accompanying improvement in incomes, as well as low mortgage rates which have

<table>
<thead>
<tr>
<th>Core Housing Need (1996)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,725,655</td>
</tr>
<tr>
<td>Renters</td>
<td>1,172,270</td>
</tr>
<tr>
<td>Owners</td>
<td>553,385</td>
</tr>
<tr>
<td>Unattached Individuals</td>
<td>878,415</td>
</tr>
<tr>
<td>Families</td>
<td>847,235</td>
</tr>
</tbody>
</table>

Source: CMHC; 1996 Census

<table>
<thead>
<tr>
<th>Proportion of Households with an Affordability Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Owners</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Renters</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Proportion of household gross pretax income spent on gross rent or owner major payments.
Source Census 1996, 2001
positively impacted access to homeownership. Overall the proportion of owners paying either more than 30% or more than 50% declined marginally; there is a more noticeable decline in the number of renter households with these shelter to income ratios – however 1:5 renter households still exceed the 50% level (739,000 renter households). 26

Homeownership Affordability

In terms of ownership affordability, as measured by the RBC housing affordability index this registered a small decline in the latest release (February 2004) In the last quarter of 2003, RBC’s housing affordability index — which measures the proportion of pre-tax household income taken up by ownership costs — eroded only slightly to 32.2% from 31.9% in the previous quarter. For 2003 as a whole, the index averaged 31.9%, very close to the all-time low of 31.7% recorded in 2001.

4.2. Australia

The key measures identified in Australia were housing stress and the housing (ownership) affordability indicator. These are published, together with an array of other measures in an annual statistical report – Australia Social Trends, from which the following table is extracted. As noted earlier the incidence of renter affordability problems has not been reported since 1998.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing interest rate %</td>
<td></td>
<td>15.1</td>
<td>10.0</td>
<td>10.3</td>
<td>8.3</td>
<td>6.7</td>
<td>6.6</td>
<td>7.0</td>
<td>7.6</td>
</tr>
<tr>
<td>Affordability index index no.</td>
<td></td>
<td>111.7</td>
<td>140.9</td>
<td>141.7</td>
<td>169.0</td>
<td>169.0</td>
<td>164.8</td>
<td>145.9</td>
<td>159.6</td>
</tr>
<tr>
<td>Households with affordability problems %</td>
<td>n.a.</td>
<td>10.6</td>
<td>10.5</td>
<td>10.6</td>
<td>11.3</td>
<td>n.y.a.</td>
<td>n.y.a.</td>
<td>n.y.a.</td>
<td></td>
</tr>
<tr>
<td>Renting households with affordability problems %</td>
<td>n.a.</td>
<td>5.8</td>
<td>5.9</td>
<td>6.2</td>
<td>6.8</td>
<td>n.y.a.</td>
<td>n.y.a.</td>
<td>n.y.a.</td>
<td></td>
</tr>
<tr>
<td>First home buyers: average loan size $’000</td>
<td>n.a.</td>
<td>92.9</td>
<td>94.6</td>
<td>104.6</td>
<td>109.9</td>
<td>127.6</td>
<td>133.1</td>
<td>124.8</td>
<td></td>
</tr>
<tr>
<td>Average weekly earnings index index no.</td>
<td>106.6</td>
<td>121.7</td>
<td>127.2</td>
<td>132.1</td>
<td>137.6</td>
<td>142.7</td>
<td>147.4</td>
<td>155.2</td>
<td></td>
</tr>
<tr>
<td>Mean weekly public rent $</td>
<td>n.a.</td>
<td>59</td>
<td>62</td>
<td>64</td>
<td>63</td>
<td>68</td>
<td>71</td>
<td>n.y.a.</td>
<td></td>
</tr>
<tr>
<td>Mean weekly private rent $</td>
<td>n.a.</td>
<td>138</td>
<td>148</td>
<td>153</td>
<td>157</td>
<td>167</td>
<td>166</td>
<td>n.y.a.</td>
<td></td>
</tr>
<tr>
<td>Rental cost index(c) index no.</td>
<td>104.8</td>
<td>108.9</td>
<td>111.7</td>
<td>115.1</td>
<td>118.5</td>
<td>122.0</td>
<td>125.4</td>
<td>129.3</td>
<td></td>
</tr>
</tbody>
</table>

Housing Stress

The specific measure, housing stress is based on Australian Housing Survey, last conducted in 1999. In 1999, 31% of households renting privately and 18% of owners with a mortgage, spent more than 30% of their income on housing. Households in the lowest two income quintiles (the basis for the housing stress indicator) spent a considerably higher proportion of their income on

26 There is a methodological issue in the determination of shelter burdens. Because the Census collects annual income for the year preceding the Census (e.g. 2000), but monthly rent at the time of the Census (i.e. May 2001), there is a mismatch. Household mobility, changing household composition and incomes and underreporting of income all contribute to a problem of this shelter to income calculation generating a significant number of households paying greater than 100% of income for shelter. In the published 2001 data the number paying >100% is explicitly identified and is a very significant number – e.g. 8% of all renters. However, the 1996 published data these values are embedded in the single count of spending >50%. The table above uses the gross unadjusted value in both 1996 and 2001.
housing. While approximately 20% of all households spent more than 25% of their income on housing, the proportion was 32% for those in the two lowest income quintiles.

One parent households with dependent children were twice as likely as couples with dependent children to spend more than 25% of their income on housing (42% compared to 21%). Thirty-four per cent of one parent households with dependent children and 14% of couples with dependent children only, spent more than 30% of their income on housing (table 12).

Data is now available from the 2001 census but a formal release of the housing stress measure has not yet been officially released. ²⁷

**Homeownership Affordability**

There are a number of measures that track homeownership affordability (or more correctly access). The most prominent one is that jointly produced by the Commonwealth Bank of Australia (CBA) and the Housing Industry Association (HIA). It is constructed to measure the affordability of the median-priced established dwelling purchased by first-home buyers. The homeownership indicator is available for the second quarter of 2003.

In recent years there has been a sustained increase in house prices and despite historically low mortgage rates homeownership affordability has experienced a steady decline. This has prompted the Treasurer to convene a detailed inquiry on this problem and ways to improve homeownership access. The current level of affordability is, however still above the low point reached at the end of the 1980s boom, a period when interest rates were exceptionally high and the ratio of house prices to incomes was also at a peak.

Different measures of affordability yield different conclusions about recent trends. For example, an affordability measure comparing full-time earnings with average mortgage repayments between 1985 and 2002, shows that affordability improved slightly in Brisbane over this period, but declined slightly in Melbourne and Sydney. However, different conclusions can be reached when affordability is measured using a ratio of actual average income to the ‘qualifying’ income needed to obtain a typical housing loan (includes down payment consideration) in each location. According to this measure, Melbourne, Sydney and Australia as a whole, experienced significant declines in ownership affordability between 1984 and 2003.

The affordability measure produced by CBA/HIA has fallen by more than other measures over recent years, reflecting the faster rate of increase in the CBA measure of house prices (Housing Industry Association, 2003). ²⁸

²⁷ ABS has not yet formally issued a release, but data are available by request for special tabulations, at a cost, and are expected in various pieces of research forthcoming by AHURI.

²⁸ Until the December quarter 1987, this measure uses an estimate of the median dwelling price based on loans taken out with the CBA by first-home buyers. From 1988, with separate information on loans to first-home buyers no
4.3. England

The earlier discussion noted that distinct from the other three countries being reviewed, there is no single mainstream indicator of dwelling condition or housing need in England that is widely recognized and used by government policy makers and advocates. The analysis did, however, identify a number of more comprehensive indicators, which include specific measures on housing elements.

Key among these are the homeless related measure of persons in temporary accommodations; various measures generated by the social exclusion unit; and in the area of ownership affordability, the CML House Price-Income ratio (Income Multiplier). More recently government policy has also focused on the measure of the numbers on ‘non decent’ homes, rather than the numbers of ‘unfit’ dwellings, dwellings lacking amenities or in serious disrepair.

Temporary accommodations

The data on temporary accommodations are published by the Office of the Deputy Prime Minister (ODPM) and were cited in the 2003 UK Housing Review. These figures show the numbers of households placed in temporary accommodation by local authorities under their legal duties for homeless households, as at the end of each quarter.

<table>
<thead>
<tr>
<th>Homeless households living in Temporary Accommodation (England)</th>
</tr>
</thead>
<tbody>
<tr>
<td>------</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Since the mid 1990’s there has been a significant upturn in the number of households in temporary accommodations. This is influenced by rising house prices which have impacted both on levels of new homeless applications, and in reducing the supply of homes for rent arising when existing social housing tenants move out of the sector.

Indicators of poverty and social exclusion

In December 2002 The New Policy Institute published its fifth annual report of indicators of poverty and social exclusion, which include a number of housing related indicators.

This monitoring program assesses relative direction of change. The accompanying table identifies the indicators related to housing need and shows that:

- Levels of overcrowding have reduced by a third in the last decade. Overcrowding in the social rented sector is two and a half times the level than that for those with mortgages.
- The number of low income households without central heating has reduced by a more than third since 1994/95. Households in the private rented sector are twice as likely other households to be without central heating

longer available, movements in the series are based on movements in the median price paid by all home buyers who financed with CBA.
• The number of mortgage holders in serious arrears is now at its lowest level for a decade.
• A total of 85,000 households were in temporary accommodation in 2002. This is almost double the numbers in 1997. This is based on administrative data as homeless individuals and families are required to register as statutorily homeless in order to qualify for housing assistance.

### Selected indicators from 2002 Summary of the poverty and social exclusion indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td><strong>Over the medium term</strong></td>
</tr>
<tr>
<td>1. Gap between low and median income</td>
<td>Steady</td>
</tr>
<tr>
<td>2. Individuals with low income (below 60% of average income)</td>
<td>Steady</td>
</tr>
<tr>
<td><strong>Communities</strong></td>
<td></td>
</tr>
<tr>
<td>46. Dissatisfaction with local area (%)</td>
<td>Steady</td>
</tr>
<tr>
<td>47. Without central heating</td>
<td>Improved</td>
</tr>
<tr>
<td>48. Overcrowding</td>
<td>Improved</td>
</tr>
<tr>
<td>49. Households in temporary accommodation</td>
<td>Worsened</td>
</tr>
<tr>
<td>50. Mortgage arrears</td>
<td>Improved</td>
</tr>
</tbody>
</table>

### Homeownership Affordability

With respect to ownership affordability, the Council of Mortgage Lenders publish a tabulation that tracks the house price to income multiplier for home purchase loans funded by their members.

The most recent data is for 2002 and illustrates a trend toward higher income multipliers. However falling interest rates have meant that there has not been any similar rise in the repayment to income ratios of home buyers.

### Council Of Mortgage Lenders House Purchase Affordability - First Time And Move Up Buyers

<table>
<thead>
<tr>
<th>Year</th>
<th>First Time Buyers</th>
<th>Movers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of loans</td>
<td>Income multiple (1)</td>
</tr>
<tr>
<td>1996</td>
<td>48</td>
<td>2.36</td>
</tr>
<tr>
<td>1997</td>
<td>45</td>
<td>2.37</td>
</tr>
<tr>
<td>1998</td>
<td>48</td>
<td>2.38</td>
</tr>
<tr>
<td>1999</td>
<td>47</td>
<td>2.41</td>
</tr>
<tr>
<td>2000</td>
<td>44</td>
<td>2.42</td>
</tr>
<tr>
<td>2001</td>
<td>43</td>
<td>2.48</td>
</tr>
<tr>
<td>2002</td>
<td>38</td>
<td>2.67</td>
</tr>
</tbody>
</table>

Source: Survey of Mortgage Lenders

1. Income multiples reflect the income figure provided by buyers in their mortgage application and may reflect one or more incomes. Data exclude cases where the previous tenure of buyers is not known.
2. Figures for percent advance and income multiple are based on median values and should be broadly representative of individual transactions.
4.4. United States

The indicators identified in the US were Worse Case Housing Need, Critical Housing Need and Minority Homeownership Rates. 29

Worse Case Housing Need

The biennial publication of Worse Case Housing Need was published in 2001, based on the 1999 AHS. The 2001 report identified 4.86 million renter households in WCHN (14.3% of all renters and 4.7% of all households). This was the lowest proportion ever recorded (although not the lowest in absolute numbers). The decline over 1997 was attributed to improvements in income levels among very low income renters (HUD 2001).

A subsequent Trends report covering 1979-1999 also includes an overview of trends between the 1999 and 2001 AHS. This most recent edition identifies 5.07 million households in WCHN but notes that this is not deemed to be statistically significant – so effectively there has been no improvement or decline.

The 2003 report also reports on critical housing need and observes that severe housing problems have risen significantly among owners with very low and low incomes.

With respect to the mismatch problem (availability of lower rent units below the FMR), the HUD reports states that

\[
\text{Shortages of housing remained most severe for units affordable and available to renters with extremely low incomes. In 2001, there were still only 42 units affordable and available for every 100 renters with income below 30 percent of AMI, a shortage of 4.9 million units. The number of units affordable to renters with incomes below 50 percent of AMI, however, fell by a statistically significant 4 percent between 1999 and 2001, thus slightly worsening shortages of units affordable in this income range. Nationally there remained a surplus of units affordable and available to renters with incomes below 80 percent of AMI, with 105 units per 100 renters.}
\]

Housing Affordability Burdens

In addition to this brief overview of 1999-2001 trends in the HUD report, more recent detailed data is available from the AHS and has been published by the Harvard Joint Center in their annual State of the Nation’s Housing (SNH) report.

29 As noted earlier, WCHN includes both affordability and condition standards. While the WCHN measure does not include a crowding standard, this information is collected in the AHS and available through the US Bureau of the Census – however it is not a widely used measure. In the later commentary section Michael Stegman suggests that this standard should be more explicitly used as there is evidence of a growing issue of crowding, especially among immigrant households.
Distinct from WCHN, this covers both owners and renters and does not exclude those in receipt of assistance (i.e. is reflects the broader critical housing need dataset). This SNH report also provides data on the incidence of moderately burdened households (paying 30-50\%)

The SNH 2003 report identifies a continuing trend of increasing incidence of housing problems (1997-01), especially affordability.

In 2001, one in three households (14.3 million) were identified with moderate (30-50\%) or severe (greater than 50\% spent on shelter) housing cost burdens.

The incidence of affordability is far higher among renters where 41\% are burdened – 1 in 5 with severe affordability problems. This compared to 24\% among owners (10\% severe)

### Incidence of Housing Affordability Problems 1997-2001

<table>
<thead>
<tr>
<th></th>
<th>1997</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All Households</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No burden</td>
<td>71,426</td>
<td>74,818</td>
</tr>
<tr>
<td>Moderate burden</td>
<td>15,356</td>
<td>17,260</td>
</tr>
<tr>
<td>Severe burden</td>
<td>12,742</td>
<td>14,268</td>
</tr>
<tr>
<td><strong>Renter Households</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No burden</td>
<td>20,168</td>
<td>20,097</td>
</tr>
<tr>
<td>Moderate burden</td>
<td>6,889</td>
<td>7,027</td>
</tr>
<tr>
<td>Severe burden</td>
<td>6,925</td>
<td>6,918</td>
</tr>
<tr>
<td><strong>Owner Households</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No burden</td>
<td>51,253</td>
<td>54,769</td>
</tr>
<tr>
<td>Moderate burden</td>
<td>8,467</td>
<td>10,253</td>
</tr>
<tr>
<td>Severe burden</td>
<td>5,795</td>
<td>7,340</td>
</tr>
</tbody>
</table>

Notes: Severely cost-burdened households are those spending more than 50\% of monthly income on housing. Moderately cost-burdened households are those spending between 30\% and 50\% of monthly income on housing. Severely and moderately inadequate housing units are defined by HUD.


### Critical Housing Need

Echoing the SNH report, the Center for Housing Policy (CHP) recently issued a report on critical housing need focusing on affordability problems among working poor households.

The CHP identified a significant increase in the representation of low-moderate income working families among those with moderate to high shelter burdens.

Specifically using a subset of the Critical Housing Need measure, to assesses households with incomes above the federal minimum wage but below 120\% of the Area Median Income (AMI), the CHP found 4.8 million households to be in Critical Housing Need.

As a proportion of all households with severe burdens, these low-moderate working households increase from 23\% in 1997 to 33.5\% in 2001. To a degree, this increase was influenced by the fact that the federal minimum wage did not rise with inflation between 1997 and 2001, so more people with severe problems crossed the $10,700 floor.
Minority Homeownership

The other key indicator in the US, and an increasing focus of policy attention is the minority homeownership rate. Again, using data from the 2001 AHS, there is evidence that both the overall rate and the rate about visible minorities is improving – the later groups at a faster pace.

| Homeownership Rates by Age and Race/Ethnicity, 1996-2002 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|
| Overall         | 65.4| 65.7| 66.3| 66.8| 67.4| 67.8| 67.9|
| White           | 71.6| 71.7| 72.2| 73  | 73.5| 74.2| 74.7|
| Black           | 44.3| 46.0| 46.6| 46.1| 47.5| 48.4| 48.9|
| Hispanic        | 41.2| 43.1| 44.8| 45.1| 45.5| 46.4| 47.4|
| Asian/Other     | 50.3| 52.7| 53.5| 53.4| 53.9| 53.9| 53.9|

Source: State of the Nation's Housing /AHS
5. **Critical Review – Comparative Assessment of Strengths and Weaknesses**

The purpose of this section is to compare and critique the measures and methods used in each country, based on the opinions of a housing policy expert in each country, and to identify possible lessons for Canada.

5.1. **Commentary on Housing Needs Indicators in Canada**

**Strengths**

Canada has a well established and broadly adopted measure in the core need housing model. Following its introduction in the mid 1980’s it has been adopted as a policy and planning tool by all provincial and territorial housing agencies across the country and is often used in municipal and community housing plans.

The core need measure is distinct across the compared countries in that it integrates three separate housing conditions – affordability, suitability (crowding) and adequacy (physical condition) in a composite indicator as well as reporting separately on the incidence of each of the three housing standards.

The Core Need model employs a market specific income threshold to refine the need measurement. The core need approach derives an income based on local rents. Under this approach, households of higher income in higher cost centers may still be captured (if they fall below one of the three standards). Similarly in areas of lower housing cost the rent derived income filter removes those deemed able to afford the median rent unit (for an appropriate household size), even if they do not meet one of the standards.

**Weaknesses**

The utility of the core need measure, is however, severely undermined by the lack of a data source for timely updating. The key critique of the measure is that it is grossly out of date – with 1996 census data still being used even in late 2003. While this is not a fault on the core need methodology, it is a critical issue. In the short term, the release of new estimates based on 2001 census (but 2000 incomes) will push off some of this urgency, but immediately upon release the

---

30 Commentary by Steve Pomeroy
31 However, such utilization is less frequent than in the past as the since 1996 the Core need estimates have not been updated with inter-censal data and by the early 2000s the 1996 data has become increasingly out of date.
32 This is similar, but subtly different from the US approach where a locally based income filter is also applied (in both WCHN and CHN). The US uses the Area Median Income rather than a theoretical rent based derived income threshold.
data are data, reflecting the 2000/2001 situation, from which much has changed in the intervening 3 years.

With the change in Statistics Canada’s Survey system to remove the former Household Income, Facilities and Equipment (HIFE) survey and replace this with the Survey of Household Spending (SHS) there is an improvement in the data content, but with the unfortunate loss of sample size. While prior to 1997 annual updates to core need estimates were possible, at least at provincial level and for larger Census Metropolitan Areas (CMA’s) from the annual HIFE file (but even here, sample size and scale of analysis was limited, compared to the census), this has not been possible with the smaller SHS. Some estimates have been developed from SHS at a national and regional level, but CMHC has not sought to publish an annual update since 1996 (the trends from 1997-2000 were briefly highlighted in a publication in 2003 (CMHC 2003).

The use of two separate data sources (census versus annual household survey – HIFE or SHS) and separate methodologies for the calculation of “norm rents” – the basis for the calculation of the income thresholds has also been problematic and undermines capacity to track need over time. CMHC has frequently stressed that the data are not intended to be used for time series comparison – but inevitably, many analysts and advocacy organization do seek to use the measure on a comparative basis.

Indeed, if this official measure is to provide a basis as an indicator to help assess progress in housing market outcomes as well as various government subsidy interventions it would be highly desirable to have a system that measures need on a consistent and regular basis.

Data limitations relating to a credible source of renter incomes at a CMA scale have similarly undermined the continuation of CMHC’s home ownership Affordability Indicator so that there is no official estimate of ownership accessibility. 33 An independent measure is published by the Royal Bank (although this too have limited local market coverage and is only a broad national and provincial indicator, plus the 3 major CMA’s).

Leaving aside the lack of timely data some methodological concerns have been identified with the core need measure.

Core need is based on gross income, which totals income from all sources, as declared in the Census (or other Survey). A significant number of households in core need have been found to depend, in part or in whole, on income assistance. However the structure of the provincially based income assistance include two components for the purpose of calculating and paying the benefits: a basic allowance set by formula based on household composition and a shelter component which is paid based on actual rent up to a maximum rent. In most cases the shelter component comprises 45-55% of the total allowance, so simply by receiving assistance any recipient will by definition pay 30% or more of their total income for rent and therefore be captured in core need.

33 Although titled an affordability indicator, this former CMHC measure actually measured capacity to buy, or accessibility, rather than affordability. Ownership affordability, is included in the core housing need measurement, but as already noted there has been no annual updating since 1996, so it does not provide a basis to track access to homeownership.
Thus the core need measure is very heavily influenced by income assistance caseloads – which grew dramatically between 1991-1996 and subsequently declined steadily in the later half of the nineties. Arguably this overstates core need by not correctly assessing the unique nature of income in such cases – a more accurate method would involve separating income assistance recipients (e.g. like the US WCHN, exclude assisted recipients) and only in cases where their actual rent exceeds the maximum shelter component (i.e. they have exhausted their allowance and have to dip into the living allowance portion to cover the rent) would then be defined to be in core need.

Implementing such a refinement may however present a serious methodological challenge. To the extent that shelter components have not been indexed and not adjusted for over a decade, the degree to which this causes an over estimate in core need may be quite limited and declining.

Equally, it is not clear whether households would identify the child benefit tax credit as part of gross income – as discussed in relation to the earned income tax credit in the US, this has become an important part of the income for lower income families and will have an influence on shelter to income ratios.

Other critiques of the core need measure have focused on the imprecision of a flat affordability measure – rather than using a variable shelter to income ratio that reflects differing housing needs and costs among different household types and composition (e.g. single versus family with children, as well as differing non shelter expenditure demands. The issue of indicators for was discussed.

As part of a national consultation social housing in 1994/94 core need was criticized for not addressing other types of need (such as accessibility for persons with disabilities and safety in the case of victims of family violence) and because it does not address the unhoused/homeless (CMHC 1994).

These various concerns are noted here, but should be put in context. They largely spec to the issue of precision. There is a question as to whether an indicator can or should be designed to be precise, versus being designed (on a consistent and accurate basis) to provide a way to monitor trends over time. Other forms of periodic detailed research may be better suited for precise analysis.

**Potential Refinements**

As noted the most critical issue with the core need measure is that it was not designed as an indicator – it was conceived as a budgetary allocation tool. But it has evolved to be used by advocates as an indicator of need. It should be redesigned with this revised primary purpose.

It would be desirable to support the estimates of core need on an annual (or at least biennial) basis and to release as a consistent and comparable time series so policy makers, analysts and advocates can better assess progress (or decline). To do so requires a sample survey with sufficient sample size to generate estimates at least to a provincial level, but ideally down to a CMA or census agglomeration (CA) level.
Similarly for ownership affordability, a previous report prepared for CMHC (Pomeroy and Lampert, 2000) has identified a possible methodology to refine and recommence the publication of a homeownership accessibility indicator. In brief, this requires a credible basis to update the CMA specific income estimates of potential first time buyers (renters aged 20-44). It was recommended that CMHC adopt an index of yr-yr income change for a subset of renter households at a provincial and where possible, CMA level, and apply this to the census income base (for potential first time buyers – renters aged 20-44).

5.2. Commentary on Housing Needs Indicators in Australia

Strengths

The strength of the Australian housing stress measure is the relative simplicity of this indicator, and thus ability to derive estimates from various ongoing survey instruments, on a reasonably timely basis.

Weaknesses

There are a number of concerns with the structure and precision of the Australian system of indicators. Much like the case in Canada, it is important to distinguish detailed issues in assessing need from the parameters of a timely and useful indicator. The following issues relate more to issues of detail.

The focus of Australian indicators is on affordability. This is too narrow because questions of both appropriateness and accessibility are not considered. Appropriateness directs attention to the location of dwellings in relation to employment and urban services in cities and in the broader settlement pattern. In other words, it is possible for a dwelling to be affordable but be inappropriate because of its location.

Accessibility is distinct from affordability because it directs attention to the costs of obtaining housing in addition to on-going housing costs. The distinction between affordability and accessibility was initially recognized by the National Housing Strategy (1991:ix). The report stated:

In looking at affordability issues, the paper distinguishes between accessibility, i.e. the cost of becoming a home purchaser or entering a rental arrangement, and affordability, i.e. the ongoing cost of housing in relation to gross income (italics in the original).

In other words purchasers and tenants have to meet not just the on-going costs of a mortgage and rent but up-front access costs. For purchasers these up-front costs will include stamp duty (title registration, which in Australia is quite a significant cost) and various set-up fees for the

34 Commentary by Tony Dalton, Royal Melbourne Institute of Technology, Australia
mortgage. In the case of tenants this can include rent in advance and a bond (security deposit). Both renters and purchasers will also have to pay security deposits to infrastructure utilities.

Many tenants, especially low income tenants, also experience discrimination exercised by real estate agents and landlords that reduces their accessibility to housing. The problem in the Australian context is that the National Housing Strategy suggestion that accessibility receive systematic consideration has not continued. There has been no systematic monitoring of accessibility following the work of the National Housing Strategy.

The affordability measures themselves are too narrow in terms of their design and presentation of data. Two problems can be identified. First, affordability is measured by relating the broad income and housing cost averages. This means that within the group who are judged to be paying too much for their housing and experiencing housing stress there will be some households who are very stressed and those who are less stressed. The averaging process tends to obscure the very desperate circumstances of some households.

Second, affordability measures do not take sufficient account of location. Because the cost of housing varies greatly, between cities and within cities, averages tend to obscure the affordability problems of very low income households who live in the most expensive cities and in the most expensive parts of cities. In the Australian context where the settlement pattern is characterized by a high rate of urbanisation, concentration of the population in a small number of cities and recent house price inflation with the absence of a spatial dimension obscures an important dimension of the affordability problem (Karmel 1998).

Affordability measures do not take into account housing supply issues which results in insufficient attention being given to whether low income households can actually obtain housing at a rent they can afford. Affordability measures provide no information about whether there is housing available at particular price levels. It is a measure derived by relating income levels to the cost of housing of households who have purchased or are currently renting. It does not report the experience of households at various income levels currently seeking housing, particularly low income households seeking private rental housing.

This is a problem in a context where the supply of private rental housing available for rent by low income households has contracted. Recent research (Wulff, Yates and Burke, 2000; Yates and Wulff 2001; Yates 2002; Wood 2001) shows that although the private rental market grew faster than the number of households in the private rental market in the period 1986-1996 this expanded supply has not benefited all households in this market equally. Two other changes were at work. First, there has been a change in income distribution resulting in a growing number of very low income households. Second, there has been an absolute loss in the number of low rent dwellings in Australian cities. In other words, there is evidence that private rental housing, previously rented by very low income households, is becoming less available at the same time as demand for this housing is increasing. Further, this development has occurred in the context of almost no growth in the number of low rent public housing dwellings.

The debate over supply and the extent that low income households continues. The latest contribution is by Burgess (2003), who from his position in the Commonwealth Department of Family and Community Services, challenges the position put by Yates and Wulff (2000) that the
shortage of supply of low-rent dwellings is a problem. Burgess states (ibid:6) There is a myth that while the supply of private rental accommodation has increased in recent years there has been a contraction in the supply of affordable housing for low-income families. This may have grown out of research based on Census data for the period 1986 and 1996. He then follows up with what he thinks is evidence that undermines the Yates and Wulff findings. Burgess states:

Administrative data does not facilitate a direct examination of trends in dwelling level rents over that period but does enable an assessment of the extent to which income units on very low incomes have fared since 1997. The reality is that real rents have fallen for many family types and the increases that have occurred were not especially concentrated at either end of the market.

The problem with this approach is that it continues to use the rents paid by tenants, in this case small declines in real rent paid, as a proxy for the rental supply. The simple point is that data on rents paid by tenants in rental housing is not an indicator of similarly priced housing being available for other prospective tenants at similar income levels. The next contribution to this debate is being prepared by Yates for as an AHURI Project [60190] Changes in the supply of and need for low rent dwellings in the private rental market (forthcoming). It will update the 1986-1996 to 2001 using cross tabs from the 2001 Census.

**Potential Refinements**

There may be some merit is exploring the more approach profiled in England as an option in Australia. This reflects a far more holistic and comprehensive way to measure housing and related non-shelter outcomes, which are nonetheless impacted by housing circumstances.

In the current context of significant changes in income distribution and the operation of housing markets the broadening out of housing indicators along the lines used in England would assist in increasing our understanding of the significant changes underway in housing markets.

**Opportunities for Canada**

Canadian and Australian housing context have many similarities – e.g. the constitutional framework, similar tenure mix, geographically dispersed metropolitan concentrations of population.

One specific similarity is a shortage in the supply of low rent housing. This leads to a suggestion that effort be put into developing a housing supply indicator that extends demand side affordability measures such as Core Housing Need in the case of Canada and Housing Stress in the case of Australia. This indicator, perhaps called the ‘low rent housing supply indicator’, would provide a measure of the supply of affordable housing available at price points for households in the lower income quintiles (i.e. much like the US mismatch concept cited earlier – see HUD 2003). This indicator would relate an assessment of supply to the number of low income households. It would do this at a city level but ideally would provide an assessment at a sub-metropolitan level for the larger metropolitan cities.
5.3. **Commentary on Housing Needs Indicators in England**

**Strengths**

The strongest established indicators in England relate to stock condition. The five yearly English House Condition Surveys (EHCS) have provided good national and regional data both to identify poor condition housing stock, and to target the allocation of resources to local authorities to tackle those issues. This is linked to clear government targets for dealing with all local authority housing that fails the ‘decent homes’ standard.

The EHCS is now being switched to a rolling annual survey, and will consequently deliver far more timely information on stock condition issues.

In the home owner sector the Survey of Mortgage Lenders provides a long term robust data series on mortgage advance to income ratios. However this does not provide a clear measure of the affordability of home ownership. This is partly because it only measures the incomes of those households that secure a mortgage, rather than those in the wider population.

The wider issue of access and affordability to home ownership for all working households has been tackled in a number of ad hoc studies, and the data sources and methodologies are now available which could be used to construct a robust affordability measure that could overcome the weaknesses of the SML measure. However this has not yet been constructed, although the issue is under consideration in the context of a review of the governments HNI & GNI indicators used to allocate housing investment funds to local authorities and housing associations.

The most established housing needs measures are the administrative records kept by local authorities in respect of homeless households. However, while authorities are governed by a common legal framework in terms of their obligations to provide assistance to homeless households, there are a number of areas where local authorities interpretation and discretion can impact on the decisions as to whether a household should be assisted under that legislation.

**Weaknesses**

The weaknesses on the issues of stock condition are primarily weaknesses of policy and resources. The ‘decent homes’ standard is very basic, and does not reflect social changes and expectations (on matters such as kitchen facilities). The targets set for meeting the decent homes standard in the private sector are very weak, as are the policies and resources available to local authorities to meet those targets. While there are firm targets for meeting the decent homes standard for the council sector there are questions both about the availability of resources, and the willingness of local authorities to adopt the policies required in order to achieve those targets.

---

35 Commentary by Steve Wilcox, University of York, UK
On a related point there is also a growing consensus that the current statutory measure of ‘overcrowding’ (which has not been changed for around half a century) is also becoming increasingly detached from social expectations, and this is now under review.

There is no government set standard on affordability in either the rented or home owner sectors; nor is there any social or professional consensus about how affordability should be defined.

In the rented sector the issue of affordability is made more complex by the impact of the housing benefit scheme, which is often implicitly held to deal with the affordability issue, so that less weight is given to issue of rent levels themselves. Rent reforms are now underway to introduce more ‘coherence’ into the structure of rents in the local authority and housing association sectors, ahead of proposals to reform the structure of the housing benefit scheme in some years time. Those reforms may lead to a renewed concern with the issue of rental affordability.

In relation to the homeownership measure the key SML ratio does not reflect the substantial variations over the housing market cycle in the levels of deposits required towards first time purchases. There has also been a structural shift towards lower interest rates over the last decade, as a result in changes in UK and international government policies on economic management, which has significantly reduced the cost of repayments on mortgage advances. These are not reflected in the primary SML series (although a mortgage repayment to income measure does now appear in the UK Housing Review).

While local authorities maintain waiting lists for other applicants for lettings of council (and often housing association lettings in their area) the terms under which they operate are so variable that they are not regarded as a useful indicator of local variations in levels of housing need.

Local housing needs studies are very widely commissioned by authorities, but not to a fixed template set down by central government. As they are undertaken by a variety of private consultancy firms, with different detailed methodologies, they do not provide a consistent measure of variations in needs between areas. A common weakness of these local housing needs studies is there use of self completion postal questionnaires that ask only for very limited information about household incomes. There is nonetheless typically a high level of non-response to the income questions, and thus concerns about the utility of the results of those studies.

There are, however, pressures to improve the quality of local housing needs studies, as they now play an important part in the local planning system, and in particular are used to justify requirements that developers must provide a given proportion of ‘affordable’ housing alongside market housing as part of all new developments (other than very small developments).

**Refinements or new measures**

There are quite a few refinements and developments that could now usefully be made to the range of housing indicators used in England, but most of these follow from the logic of internal developments in policy and data availability. However, two ideas stand out from the various
measures used in Australia, Canada and the USA, that might be adopted, or given more prominence, in England.

The first would be to identify those households with very high housing cost to income ratios. To some extent this has been done in England, as reflected in the body of tables routinely produced on the basis of the annual Survey of English Housing. Those measures have not, however, been given any prominence, nor has there been any attempt to utilize them as a key measure in terms of constructing and targeting housing policy.

The second idea that would resonate with contemporary debates in England is the concept of the ‘Housing Wage’ as currently used in the USA, and implicit in the Canadian core need approach. This would fit well with current concerns about access to home ownership, especially for public sector workers in areas with high housing prices.

**Opportunities for Canada**

The current English practices have little to offer Canada in terms of established housing condition and needs indicators. The key strength in England is the wide availability of reliable government survey and administrative based data sources, that can be readily used to construct both national and regional measures.

There are also a number of projects under way that are examining ways of making more effective use of those data sources, and that are also looking to develop local as well as national and regional indicators. There is a potential common ground in England and Canada for a more technical consideration of the definitional and methodological issues involved in the construction of robust indicators on home owner affordability and other issues.
5.4. Commentary on Housing Needs Indicators in United States

Strengths and Weaknesses

Strengths:

The data come from official U.S. government sources, and are consistently reported on a regular basis. The American Housing Survey is conducted every two years; and now, there is an annual “American Community Survey” conducted by the U.S. Census Bureau that provide some useful housing data on an annual basis.

In addition to the HUD published report on Worst Case Housing Need additional unofficial measures have also been developed by non-governmental organizations or research organizations. The most prominent of these are the measure of Critical Housing Need (an expansion of WCHN, also drawing from the AHS; and the concept of the housing wage – a measure that assesses the income required to afford a Fair Market Rent (FMR) unit without exceeding 30% of Income.

Over the past 5 biennial reports, HUD has also highlighted an affordable rental supply measure. This assesses the proportion of units per 100 renters that exist at rents below the FMR benchmark, with two assessments: i) affordable to very low income households, and ii) available accessible to them – that is, not occupied by higher income households.

Weaknesses:

WCHN only applies to very low income unassisted renters—so it is too narrow a measure of housing needs—WCHN measure was originally designed to estimate eligibility for HUD public housing programs so it focused on income eligible households with high housing cost burdens and substandard occupancy, who were not living in public housing or receiving HUD rental assistance. Today, lots of households living in assisted rental housing have high cost burdens and/or live in substandard housing, so WCHN, by ignoring these families, understates needs.

Also, today, millions of homeowners have WCHNs, but are not included in official metric because as originally defined, it excluded all homeowners, no matter the severity of their problems.

To a degree these particular weakness are offset but the availability of the broader Critical Housing Need devised for the National Housing Conference—CHN refers to all households with severe cost burdens or substandard housing.

---

36 Commentary by Michael Stegman, University of North Carolina, USA
In data on housing costs and incomes, the numerator and denominator of most of housing measures, are self-reported, so it is not always known how accurate they are, or whether there are systematic biases in how particular income groups or other cohorts report these data.

Also from a reporting standpoint, since housing needs data include household utility payments, which vary from month to month, it is believed that, historically, some variability in the accuracy of the reported total housing cost numbers is due to inaccuracy in household estimates of utility payments. This weakness has largely been addressed in revisions implemented in 1995. Since then, total utility costs are estimated from information on utility receipts requested for 4 specific months during the year and adjusted to agree with totals from the Dept. of Energy’s Residential Energy Consumption Survey.

Due to the limited sample size in the AHS, worst case needs data are not widely available at the local level. At best, they are available for the nation, for census regions, and for the 47 metro areas in which the AHS is conducted. There is not consistent and timely reporting on any of these housing measures at the local level, and housing markets are, by definition, local.

There is little connection between the magnitude of most of our housing needs measures and the policy response. Virtually all of the needs measures are in the millions, and the number of additional, incremental, additions to the assisted housing inventory or voucher rolls, is in the low thousands.

**Potential Refinements**

Currently, housing affordability measures are based on gross income data, which overlooks important income generated through tax credits. The Earned Income Tax Credit (EITC), which is a refundable tax credit received by the working poor in the U.S. – some 20+ million working poor households receive the EITC at a cost to the federal government of more than $20 billion a year.

This is not a housing subsidy, but a wage subsidy, but this refundable tax credit has the effect of reducing after-tax housing cost burdens. Receipt of EITC benefits is not factored into housing needs measures because all of U.S. housing needs measures are calculated using Gross household income before taxes. Recent briefs have outlined how this important form of income support could be more explicitly recognized and particularly highlight its effect on reducing affordability problems.

While data on crowding is collected the Census and American Housing Survey, crowding has never become a component of official measures of U.S. housing need. In part, this seems to be due to the general proposition that crowding represents a misallocation of the housing stock, rather than a supply shortage. Given serious crowding problems among immigrant communities in U.S., and their lack of negotiating power, particularly for those who have come to the U.S. illegally, crowding is becoming a more serious problem in some local housing markets. A formal measure would be valuable in tracking this issue.

**Opportunities for Canada**

The concept of a housing wage standard of need could have utility in Canada, and be developed at national, regional, and local levels, given available data. While the housing wage tells us what a household would have to earn in order to afford decent housing at an affordable share of income.

In the US the needs measure associated with the national housing wage is the percentage of households in a local market that cannot afford to pay HUD’s Fair Market Rent (for a one or two-bedroom apartment) at 30 percent of household income – FMR is based on the 40th percentile of the rent distribution, and a similar statistic could be readily determined in Canada from the annual CMHC rent survey – and in fact is already generated and published in the form of the Housing Income Limits (formerly called Core Need Income Threshold, norm rents).

To implement this approach simply requires comparison against provincial and territorial minimum wage standards. Use of this indicator is a good way to expand the consideration of policy options and to consider those beyond housing supply and rental assistance – such as the potential impact of general income and earnings supplements and tax credits.
6. **Conclusions and Potential Opportunities for Canada**

**Conclusion on Comparative Assessment**

This assessment has found that official measures of housing need have been established and used in all four countries, with Australia, Canada, the US focused primarily on affordability.

England does not have a similar singular focus but rather a variety of measures that broadly assess housing conditions – and physical condition remains an ongoing issue in the UK. Outside of England while the other countries included housing condition questions on national surveys this is not generally seen as a critical indicator – although Stegman has suggested that some attention should be given to more closely monitoring crowding indicators as the increasing incidence of immigrant households appears to be creating such conditions.

While access to ownership is also high in political profile, especially outside of Canada, none of the countries has developed an official, government generated indicator – instead, all rely on industry based indicators – Canada’s official ownership affordability indicator was discontinued in 1998.

England, stands out from the other three countries both in the absence of a single mainstream indicator of housing need, and for the much more comprehensive perspective that has resulted in a broad array of measures that appear to be fairly regularly updated. As Dalton observes, from an outside view, in effect the English approach recognizes the complexity of the housing commodity and the indicators describe a wider range of housing outcomes. The key strength in England is the regular updating and wide (published) availability of reliable government survey and administrative based data sources, that can be readily used to construct both national and regional measures.

One of the common elements in the review for each of the countries is how little official measures of housing need are now used for actual resource allocation decisions (except in England), and more significantly, despite fairly high levels of housing need all countries have had very limited success in attracting political attention and policy responses.

There is a trend toward gradual erosion of indicator quality and publication. In the US, there has been some uncertainty as to whether the official biennial report on Worst Case Housing Need would be continued. Late in 2003 a new report was released, although this is framed as a review of trends 1979-1999 and includes only a brief overview of trends from the 1999-2001 AHS. This report does however extensively review methodological issues related to the measure (many of which were noted by Stegman in part 5 of this report), suggesting that some refinement to the measure and revised reporting may be under consideration.

There is similar concern that the survey that underpins inter-censal provision of housing stress data, the Australian Housing Survey (AHS), last undertaken in 1999, will not be repeated, so currency of data in Australia will decline, as has been the case with core housing need in Canada,
where no inter-censal annual updates have been undertaken (except for a general overview in a single 2003 publication).

The US is the only country in which non-government “unofficial” indicators have surfaced – Critical Housing Need and Housing Wage. Both have been developed and promulgated by non-governmental policy/advocacy organizations, seeking to refocus the policy debate on housing issues. In particular, both seek to capture broader political appeal by focusing of the difficulties faced by working poor households, and implicitly the shelter cost–labour market nexus.

In preparing the report, leading researchers from each country were asked to provide commentaries on the strengths and weaknesses of the indicators in their own and other countries. In all cases, the list of weaknesses far outweighed the strengths. All highlighted a litany of technical flaws and degrees of imprecision in current indicators.

For example, the use of gross income as the denominator and gross rent as the numerator have both been found wanting. The use of a standard norm, such as 30% applied across all households regardless of size or composition was also highlighted as a weak albeit simple measure. Also commentators questioned how well various non-housing benefits, especially tax credits get factored into the assessment of gross income and thus into measures of affordability.

This is an inevitable consequence of putting such a task before experienced researchers, all of whom have an inherent bias toward improving level of detail and accuracy.

Reflecting of this outcome, highlights the importance of creating realistic expectations about indicators. Fundamentally, indicators are just that – they provide a gauge or warning light. There is an evident tension between fully comprehensive and detailed measures and a more superficial assessment.

Realistically, an indicator should err toward the latter. That is not to say it should not be well founded and based on good data. However, in the trade off between detail and timeliness, the focus of indicators should be on a timely and regular release of information. This can then alert policy makers and analysts to certain trends and issues and stimulate the more detailed research necessary to fully understand the causes and potential remedies of the identified issue.

**Potential Opportunities for Canada**

The lack of updated core need estimates since 1996 is in part a consequence of survey revisions at Statistics Canada, particularly the transfer of housing data to a new survey with smaller sample size. However an independent assessment of SHS (Fuller, 2003) has concluded that at least for larger geographic areas, SHS could generate estimates of need. Efforts to work with Statistics Canada to increase the sample size to this end should be pursued (as was previously achieved with the HIFE file, in collaboration with the provinces cost sharing the higher survey cost in 1993). Such enhancement would also cross over into an improved capacity to re-institute homeownership affordability and financial accessibility indicators.

In reviewing the assessment international commentators highlight three areas of potential indicator development for Canada:
Given the widespread interest in ownership affordability as a feature of government policy, there may be merit in exploring the feasibility of developing such an indicator, taking into account the definitional and methodological issues involved in designing indicators on homeowner affordability and accessibility.

Current indicators in Australia, Canada, and the US focus on the demand measure of affordability. Research has suggested that the lack of, and more significant, ongoing erosion of the lower rent stock represents a housing concern. Some form of supply indicator focusing particularly on availability of low rent stock would be useful to inform the policy process.

The US concept of a minimum housing wage, which explicitly links housing issues to labour markets, is also a possible area of interest to examine further.

The data foundations to undertake these improvements in Canada already exist.

Previous research, conducted for CMHC has provided recommendations on a methodology to revise and re-instate an annual indicator of homeownership accessibility (including measure of the relative affordability of new homes and existing resales).

The annual rental market survey provides a rich and regular source of data on the rent distribution and can readily be used to provide an assessment of the volume of units available in each CMA/CA at rents affordable to households below the HILs.

With enhancements to Statistics Canada data sources to generate annual income data by household and tenure it may also be possible to augment this supply assessment with data on the income of renters and the consequent requirements for lower rent units, relative to current supply.

Finally, the availability of HILs and information on minimum wage levels readily facilitate the adoption of the housing wage concept and comparison with minimum wage capacity of low income households.

If Canada wishes to effectively monitor housing need and conditions, some priority must be given to creating a regular (at least biennial) national survey specifically focused on collecting housing related appropriate data.
7. References

Australia

Affordable Housing National Research Consortium (2001): Affordable Housing in Australia: Pressing Need, Effective Solution Policy Options for Stimulating Private Sector Investment in Affordable Housing across Australia


Australian Bureau of Statistics (annual). Measuring Australia's Progress (ABS. Cat. no. 1370.0).

Australian Bureau of Statistics (annual). Surveys of Income and Housing Costs, Australia. (ABS Cat. no. 6553.0).


Housing Industry Association (2003) *Restoring Housing Affordability - The Housing Industry’s Perspective*


New South Wales Department of Urban Affairs and Planning (1999) *Which One of These is Affordable Housing?* Fact Sheet 1

New South Wales Department of Urban Affairs and Planning (1999) *Which of These People Need Affordable Housing?* Fact Sheet 3

**Canada**

Canada Mortgage and Housing Corporation (1991) *Core Housing Need in Canada* CMHC, Ottawa


Canada Mortgage and Housing Corporation (1994) *Priority Need*. Social Housing Consultation Issues Paper, CMHC, Ottawa

Canada Mortgage and Housing Corporation (1998) *Renter to Buyer: CMHC 27 year Historical Affordability Report*. CMHC, Ottawa

Canada Mortgage and Housing Corporation (2003) *Canadian Housing Observer* CMHC, Ottawa


**England**

Bramley, Glen (1990), *Bridging the Affordability Gap*, House Builders Federation and Association of District Councils, London.


MacLennan, Duncan, Mark Stephens and Peter Kemp (1997) *Housing Policy in the EU States* Directorate General for Research Working Document Social Affairs Series W14


Wilcox, Steve (2003) *Can work; - can’t buy: Local measures of the ability of working households to become home owners*, Joseph Rowntree Foundation May 2003


**United States**


Harvard Joint Center for Housing Studies of Harvard University (annual) *The State of the National Housing*


National Low income Housing Coalition (2003) *Out of Reach 2003: America's Housing Wage Climbs*


US Bureau of the Census, American Housing Survey 1999, Appendix C Historical Changes


Appendices

Appendix A: Appendix A: Summary of Indicators

Appendix B: Website Sources for Indicator Updates

Appendix C: Reproduction of 1992 research highlight: *A Comparison of Housing Needs Measures Used in Canada, The United States and England*