TABLE OF CONTENTS

1. OVERVIEW ................................................................................................................................. 1
2. CRB HOUSING ASSESSMENT FRAMEWORK DEVELOPMENT ......................................................... 2
3. CRB HOUSING ASSESSMENT ANALYSIS GUIDE ........................................................................ 4
   3.1. Housing Assessment Tool Analysis Approach ............................................................................. 4
   3.2. What are the Regional Housing Stock Characteristics: Dwelling, Age, Type and Condition? .... 5
   3.3. What are the Population and Household Characteristics of the Region (Sub-Region)? ............... 5
   3.4. Household Income Characteristics ............................................................................................ 6
   3.5. What are the Housing Prices and Rents? .................................................................................... 7
   3.6. What are the Housing Needs Based on Suitability, Affordability and Condition? ....................... 8
   3.7. CMHC Core Housing Need estimates ....................................................................................... 9
   3.8. What is the Current Inventory of Non-Market Housing? ............................................................. 9
   3.9. Trends in the overall stock of housing and incomes of occupants .......................................... 10
   3.10. What are the Trends in Housing Stock? (New construction since 2006) ................................. 11
   3.11. What are the Housing Continuum Demand and Supply Gaps and Mis-Match? ..................... 13
   3.12. What is the Rental Market Supply and Affordability by Income Band? .................................. 18
   3.13. What are the Projected Housing Requirements and Need, Short-Medium Term (5-10 years)? .... 18
4. OVERALL HOUSING ASSESSMENT SUMMARY and POLICY CONSIDERATIONS ..................... 19
5. HOUSING DATA, USES and SOURCES ......................................................................................... 20
6. APPENDICIES .............................................................................................................................. 20
   Appendix A: Analysis Plan
   Appendix B: Custom data Requests used to assemble input data
   Appendix C: Detailed methodology to assemble data from custom tabulations
   Appendix D: Glossary of Terms and Acronyms
1. **OVERVIEW**

The Capital Region Board (CRB) developed a Housing Strategy for the Capital Region and wishes to ensure that its’ municipalities support a diverse range of housing types, available to all income levels. In order to develop plans for a balanced mix and distribution of housing opportunities across the Capital Region it is necessary to establish a uniform and consistent analytical assessment of current and planned housing development across each municipality and sub-region. Accordingly, the CRB seeks to promote integrated and coordinated planning of non-market and market-affordable housing at the sub-regional scale.

The project terms of reference described the intent with respect to housing need assessment:

> The Capital Region Board seeks to ensure that its municipalities support a diverse range of housing types, available to all income levels. The Capital Region Board seeks to promote integrated and coordinated planning of non-market and market-affordable housing at the sub-regional scale. An important step toward addressing the housing needs of the region is determining the extent of this need.

This sets the scope more in the sense of “housing requirements”, rather than the more narrowly defined concept of “housing need”, as used by CMHC in its “core housing need” methodology. Accordingly the process to develop the Framework, goes beyond low income housing need (non-market) to consider broad housing requirements – across a range of built form, tenure and price range.

The Housing Assessment Framework (Framework) is an analytical model that, given the availability of appropriate data, can be utilized at any scale to review and assess the current situation, recent trends and likely future patterns of development. It also seeks to identify housing requirements and housing need. While the focus is on assessing requirements for non-market assistance, the Framework allows the examination of recent market performance, as this sets the context and influences non-market issues, such as housing affordability and availability of low-modest priced options. The Framework provides an objective assessment and creates insight through which to consider and develop policy options and to refine land use planning objectives.

The output of the Framework helps to:

- highlight gaps and issues in the housing system (housing continuum) and to
- identify the implications for policy and planning interventions that can be employed to adjust or encourage different outcomes to those that are occurring across the region.

The Framework’s Housing Assessment Tool (HAT) provides a medium to assemble data and undertake analysis to examine housing trends and issues. It is then necessary to review and interpret the results of the analysis.

This User Guide presents an explanation of the steps and tasks followed in order to undertake a housing need assessment. It is expected that by setting out these steps the staff and analysts in each sub region or municipality will be able to prepare an assessment using a consistent approach and consist types of data.
2. **CRB HOUSING ASSESSMENT FRAMEWORK DEVELOPMENT**

The CRB Housing Assessment Framework was developed using the nine steps outlined below. This User Guide and Housing Assessment Tool (HAT) have been created using these steps.

1. **Develop analysis plan.** Determine the key questions to be examined in the needs assessment. This is called the analysis plan, an important first step in any research that helps to define and refine the research focus. By detailing the key questions the requirements for data can be determined and focussed. The analysis plan developed in this exercise is attached as appendix A. Note that while the focus is on determining housing need, the approach taken is broader and seeks to situate the housing need within the broader market context.

2. **Source data.** Based on the analysis plan identify potential data sources from which to obtain baseline and recent data (and for future updates). This may include Statistics Canada, CMHC, the Edmonton Real Estate Board (EREB), the municipality and the Alberta Ministry of Municipal Affairs - Housing Division. For some data, information may be readily available online and can be easily downloaded. Often though, and especially for smaller geographic coverage (local municipality) or aggregations, such as sub regions, customized data is required. To obtain such data it is necessary to develop detailed data specifications and submit these to the source agencies. Usually some discussion is required to clarify the request and discuss issues such as limited data, which will cause data suppression. Typically it may take a few weeks to a few months for custom requests to be provided, and there is usually a cost, which increases with complexity of the request. Appendix B provides copies of the detailed custom requests used in generating the background data in the analysis tool.

3. **Assemble and organize data.** Once data are received, these can be consolidated and extracted into the assessment tool. In some cases it is necessary to use an intermediate step to organize data such that it can be more easily copied or written into the main assessment spreadsheet. For example, Statistics Canada provide custom tabulations in a software called Browser 20/20. This can be useful in creating different cross tabulations with different variables (e.g. may want to cross tabulate tenure by age; or dwelling type by tenure). Some caution is required when extracting from one source into the spreadsheet (this is especially true when extracting from 20/20 into excel).

4. **Input data into assessment tool.** Once collected and assembled it is possible to utilize these various data sources to undertake the need assessment and general analysis. When pasting or entering data into the assessment tool it is set up to accept both overall aggregate regional data as well as a specific geography. Having both (local and aggregate) allows each sub region or individual municipality to compare themselves against the overall regional (CRB) context.

5. **Initiate analysis.** The pre-set need assessment tool (spreadsheet) is set up to accept data and includes some initial illustrative analysis and graphs within each sub theme (e.g. population profile, dwelling characteristics etc.). Once users have the data they may see patterns that raise additional questions. In some cases, additional insight may come in later tabs, and it may be useful to iterate back and forth between spreadsheet tabs (sub themes).
The spreadsheet tool is simply that, a place to undertake review and analysis of data. This may include baseline data (e.g. from the census/National Household Survey), as well as updated more recent data and multi year data that enables some examination of trends over time. Users are encouraged to undertake additional investigation and analysis to help them understand specific issues and trends that may become apparent in the data.

6. **Develop housing needs assessment report.** Import data analysis into discussion paper. Again following the key analytical questions outlined in the analysis plan (and presented in the assessment user guide) users can begin to discuss the patterns and insights available in the data. This can include extracting key tables and charts to further illustrate findings and understanding. In some cases this may not always answer a question, it may simply raise new questions, for example why are housing starts exclusively detached homes, or exclusively targeted to buyers?

7. **Identify gaps - baseline need.** The tool and discussion paper should first aim to describe the current static state. This is a baseline assessment and consolidates the various sources of data to determine two key outputs:
   - What is the depth and nature of unmet housing need
   - What are the gaps in the housing system that contribute to unmet housing need

8. **Identify future need.** The next step is to assess how the existing need (and most likely backlog of need) might trend in the future. This is premised on a growing population and household growth. It is not possible to project future need. However as a simplifying assumption, the incidence of need by age and household type can be used. This implicitly assumes need remains constant and does not adjust to assess if future net new households have greater or fewer challenges to find sound housing that they can afford within the existing stock of in or new supply.

9. **Determine policy implications.** Implicit in steps (7) and (8) is a need to design policy and program interventions to respond to and ultimately reduce unmet housing need. The model does not seek to lay out policy prescriptions. It simply helps to set out and define the nature of the problem. Armed with this insight planners and policy staff in each jurisdiction can begin to identify and develop appropriate responses.
3. CRB HOUSING ASSESSMENT ANALYSIS GUIDE

Housing Assessment Tool Analysis Approach

This section details the type of analysis that can be undertaken in each of the related tabs of the Housing Assessment Tool (HAT). It poses key questions, and provides some illustrative examples of the type of analysis that should be considered under each question.

The Housing Assessment Tool assesses a series of questions ranging from the overall market context through to assessing future need. The questions below are addressed as sequential Excel tabs (worksheets) in the HAT.

Setting the overall market context
  1. What are the regional housing stock characteristics: dwelling, age, type and condition?
  2. What are the population and household characteristics of the Region (Sub-Region)?
  3. What is income profile by tenure?
  4. What are the housing prices and rents?

Determining nature and extent of housing need (households not served by market)
  5. What is nature of housing Need (from NHS 2011, three standards)?
  6. What are estimates of incidence of Core Housing Need (uses 2006 - to be updated with 2011, when available)?

What existing resources help to address need?
  7. What is the existing non-market (social) housing supply in the CRB?

To what extent is the market and ongoing development reducing or exacerbating housing need?
  8. Based on census/NHS how has the historic rent and income distribution changed (this provides a more complete picture than CMHC rent data)?
  9A. What are trends (since 2006) in new housing start (by type)?
  9B. What are rent and price trends (since 2006)?
  10. What is the existing housing gap - based on a housing continuum?
  11. Given that need is more acute among renters, what are gaps in rental supply?

Assessing Future Housing Need
  12. How will population and household growth (projections) impact future need?

The next sections describe the type of analytical steps that should be reviewed under each of these thematic set of questions. To assist readers in understanding illustrative charts are included to demonstrate how data can be used to quickly highlight issues and trends, which form the basis of the assessment. Each subhead refers to spreadsheet tab (i.e. 3.1 = tab 1; 3.3 = tab 3 etc.)
3.1. What are the Regional Housing Stock Characteristics: Dwelling, Age, Type and Condition?

This sets a baseline to describe the existing type of housing – what form (single detached vs apartment, tenure, age and condition is the existing stock?

Comparing this against the type and mix of households that live in the area (next sub-section) helps to refine and further assess whether there is a full range of house types (which also imply price and rent variations)

Some useful analytical questions:

How does the existing housing mix compare to the regional average?

Is there a need to direct new development to create more of certain dwelling types (e.g., more small dwellings – apartments)?

This can also be refined by considering the age profile of households – if the area is predominantly households with persons 55+ there may be emerging need for alternative forms to their existing detached homes – especially if they wish to remain in the neighbourhood/community where they have lived for some time and have established social networks, family etc.

What is the tenure mix – is the area predominantly homeowners? How does the local tenure mix compare to the regional average? Are options available to those that either prefer to rent or cannot afford to buy (at prevailing and expected prices in area)?

3.2. What are the Population and Household Characteristics of the Region (Sub-Region)?

The population profile – type of households that live in the area – to a large extent will reflect the form of the stock. An area that is predominantly single-family dwellings will tend to have a higher proportion of families and few singles, compared to an area with more apartments.

The data can reveal however if there are gaps in supply. For example there may be a number of single persons (both senior or non-senior) currently living in the area, and by default living in detached homes. Would they prefer smaller apartments type options, if available? Will they relocate to other areas to find those options?

Data used are available in the NHS custom tabulations to show family type, age, tenure and income. Note that while some information on the underlying population can be useful, such as historical growth rates by municipality, housing is demanded and consumed by households, so much of the assessment focuses on household characteristics versus individual population statistics.

This base profile is intended to provide some insight on the population and household characteristics of the community. Subsequent analysis explores how this is changing and how it compared to the regional average.
Comparison against the regional average profile can highlight key features and difference – is the population generally older and younger and how might their need and demand change in short-medium future? What type of housing stock will be needed to ensure a range of options to respond to changing needs of existing residents.

How is population likely to change in the future – and will the type and price of stock dictate the type of future households that may move to the area?

What is the mix of small and large households (single person vs. 4+ persons and need for smaller or larger dwellings?

### 3.3. Household Income Characteristics

Alone household type family, (with split for two parent and lone parent and non-family) may not reveal housing preferences and capacity to demand/afford. Combining with age categories and by income levels can help to drill into a more refined sense of housing requirements.

Data are likely to reveal that renters have lower incomes than owners. In part because more renters are single and therefore household income reflects only a single earner; and more affluent households typically (though not always) choose to buy, thus renter income reflect many households unable to buy.
3.4. What are the Housing Prices and Rents?

What is the current distribution of house prices and rents – this is initially based on occupant-assessed values, as reported in the NHS (see sidebox).

This can be augmented with data from Multiple Listing Service (MLS) sales and for rents from the CMHC rental survey (although this covers only purpose built structures of 3+ units, which are less than half of the renter occupied stock). However it is a useful indicator. In some locations, where rentals are in the form of rented houses, no rent data is readily available beyond informal review of classified ads or on line sources such as Kijiji. It may be necessary to tabulate data from these informal sources, or conduct a local survey of the “secondary rental market”.

The objective is to reveal the relative cost to live in the area and determine if this places a barrier for some households and does it provide a sufficient range of options for a changing population?

Rent levels also reflect the form of the rental stock – where the rented units are mainly detached homes the average rent will be higher than for apartments. If there are few lower rent options available it may be appropriate to examine local plans to see if multi-residential development is being encouraged or allowed. Do existing municipal planning policies allow or encourage installation of secondary apartments within homes? Do existing policies and regulations effectively make it uneconomical to build smaller, more modest housing that is more affordable?

Prices of recently completed homes are presented in subsequent section on housing market trends (and adds price data for newly built single and semi-detached homes). This reveals how the market is responding to perceived demand.
3.5. What are the Housing Needs Based on Suitability, Affordability and Condition?

This is a central component of the framework and assessment. The CRB is particularly interested in how need is distributed across the region and this can be used to assist in allocation of resources designed to respond to housing need.

CMHC has developed a measure called core-housing need, which uses a two-step process:

1. Does a household experience any one of or a combination of problems based on three standard measures of suitability (number of bedrooms compared to household composition), condition (need for major repair) and affordability (paying greater than 30%)? And,

2. Is the household’s gross income below a specified threshold, which is separately calculated for each Census Metropolitan Area (CMA) and for each household size, 1 person 2 person etc.?

CMHC will update its core need estimates based on the 2011 NHS and publish these in mid-late 2014. In the absence of these estimates, proxy measures are used. These cover the 3 standards used in the CMHC model, but without the income threshold (i.e. step 1 above). A proxy for core need can be to use those paying greater than 50%, which is often considered an extreme and acute threshold or very heavily rent burdened households. Another proxy is to use a factor of median income, by household type.

For each geography the number and percentage of households experiencing each of the 3 problems problem is available.

This will show that most issues relate to affordability (suitability and condition have a much lower incidence in prior core need estimates, although sometimes combine with affordability). The data can be used to reveal how the incidence of these issues varies across different households.

Reflecting the generally lower incomes among renters, the incidence of need (paying greater than 30%, 50%) tends to be much higher among renters (in CMA 41% renters pay over 30% versus 18% among owners).
3.6. **CMHC Core Housing Need estimates**

As noted above, CMHC has not yet developed or published updated core need estimates, based on the 2011 NHS. The worksheet therefore uses the older 2006 estimates. These should be updated once new 2011 based core need is published (expected fall 2014).

It is useful to drill into the core need data to explore which particular households are most in need (as illustrated lone parents and singles have much higher incidence of problems; seniors also stand out).

Are these issues caused only by lack of income or are problems exacerbated by lack of certain dwelling types – smaller lower cost/rent units?

3.7. **What is the Current Inventory of Non-Market Housing?**

One way to respond to housing need is through direct provision of subsidized housing (social and supportive). An alternate option is rental assistance, or rent supplements, to specifically address affordability problems. The latter option does not necessarily require a change in supply.

Some communities, especially older more central areas may have a higher share of non-market housing than others. What is the current inventory of assisted housing (including low rent, rent geared to income properties)? In addition what is the inventory of special purpose housing, including senior’s lodges, nursing/care homes and special purpose housing (usually with some level of supports) designated to certain target groups such as adults with mental illness etc.

Baseline data is available from the City of Edmonton for municipal non-profit projects, Alberta Municipal Affairs for all cost-shared and provincial unilateral housing units and CMHC for unilateral federal units. The data for the region surrounding Edmonton is much easier to quantify because of the relatively small number of non-market units. The larger portfolio and complexity of delivery models funded by various provincial government departments makes the situation in the City of Edmonton much more difficult to monitor. Data can be updated annually by each government based on new funding and related additions.

How does the existing inventory of non-market compare to the regional average and against identified housing need? For each sub region, the inventory of social/assisted housing should be identified as a percentage of total stock in that sub region; and as a relative share of the aggregate social/assisted stock across the CRB. The percentage of housing need by client group being served by the non-market
portfolio is important in terms of ensuring an equitable supply of market housing in accordance with the need. For example, generally speaking, the existing portfolio is skewed toward families and seniors and provides little supply to singles, some of whom have disabilities and other needs that prevent them from becoming independent, both financially and otherwise.

This step identifies only the supply of social and supportive housing. Quantifying the unmet need for various levels of supportive services requires a much broader set of measures and data, and is beyond the scope of a housing need assessment Framework. As noted above the existing inventory of social and supportive options (i.e. existing supply) can be mapped; but it is not possible to create estimates of unmet supportive need.

Alternatively, discussion of the gaps in required support services can be conducted to provide an qualitative assessment of the issues and gaps that exist within the sub-region. Such information can be gathered via a group discussion with the services funders/providers that work in the sub-region, as an ancillary step in drafting and sharing an assessment report.

The specifics in terms of services and actual costs, especially when it comes to medical care and other complex areas, can only be accurately determined at or near the time of building construction. The information provided through this process is of use, in conjunction with the housing needs assessment, during the planning process to:

- Help determine where in the Sub-Region a new housing facility or initiative should be located;
- Identify which stakeholder sectors need to be involved to ensure that the appropriate type and level of services are coordinated and funded with the additional non-market housing.

### 3.8. Trends in the overall stock of housing and incomes of occupants

The census (2001, 2006) and 2011 NHS provide a useful historical record of the total housing stock. While CMHC data provide useful updates, this is only for additions, it does not capture demolition or transition in tenure (e.g. an owned home is converted into rental apartments, or vice versa). So the Census /NHS can provide deeper and historical insight to augment recent starts and pricing data.

A custom request has been submitted to obtain data for three censuses 2001-11 for all sub region and municipalities; however this has not been received. The workbook uses CMA data to illustrate to type of analysis that can be undertaken. Focusing on rental stock (because that is where more need exists and rent is usually main source of smaller and more affordable options) the available stock between the 2006 and 2011 census is used (this can be augmented when 2001 data available).
The census data show flows within the existing stock. New construction represents a small portion (less than 2% of existing, but over time has some impact on the form, tenure and price distribution. This is separately examined using recent starts data as well as price and rent surveys.

Between 2006-2011 there was an erosion of lower rent units. More than 40,000 units shifted from low rents (under $800) to over $800.

Notably, renter households appear to have shared gains from growing economy – there was a decline in the number of low income renters.

3.9. **What are the Trends in Housing Stock?** (New construction since 2006)

The base profiles of household characteristics and dwelling types have a large influence on the existing stock; new additions tend to represent a small incremental change. The influence of new construction is, however, much more significant in the younger peripheral sub-regions where starts relative to existing stock are high. If there is a desire to alter or augment supply with newer and different structure types and pricing, it is important to understand what the planning and development system is currently creating.

Given potential issues identified in the earlier base characteristics are recent construction trends perpetuating a certain predominant dwelling type and tenure; or is there a different mix of dwelling types and price/rent ranges?
To what extent are recent construction types helping to respond to emerging shifts in requirements or new trends? This dataset tracks new housing construction and distinguishes built form, single family dwellings (SFD), row, apartments etc., as well as whether at the time of construction dwellings were built (intended) as ownership or rental.

The more recent data also provides insight into the rent and price ranges of new additions to the stock and whether these include more modest and affordable options.

The starts data reveal (shown here at CMA level) a shift toward more multiple forms (row and apartment) both in absolute terms and as a share of the market. Detached (singles) fell significantly in the 2008/09 downturn and while recovering somewhat, have not returned to the same volume. Apartments have however picked up the slack – mainly via condos. Rental construction has remained very low, but did surge in 2012-13 (partly due to affordable housing initiatives).

While rental starts are increasing, rent data (from semi-annual CMHC rental survey) show that the rents charged for newly constructed privately owned (i.e. excluding affordable non-profit development) are generally 20-30% higher than the market average (which is weighted by older lower rent units). As such they contribute to overall rental supply, but are not adding to affordable supply.

Recovery of housing market driven more by multi unit types, especially higher volume of rental and condominium.

While rents in newer apartments are roughly 20% above the existing average.
### 3.10. What Are the Housing Continuum Demand and Supply Gaps and Mis-Match?

The concept of a housing continuum has been widely adopted across Canadian municipalities as a way to set the broader context, as well as to help identify where gaps exist between need and demand versus supply. Figure 1 is extracted from the 2012 CRB report *Our Affordable Future*. It presents an overview of the housing continuum from homelessness thru to the full market response. This separates market and non-market aspects of the housing system.  

**Figure 1: The Housing Continuum**

As a concept a continuum can be a useful way to consolidate the full range of housing options and assess both current supply and requirements (based on incomes and household demographics). The non-market part (Fig 1, left side) includes various services that represent an add-on to housing (accommodation). These also provide varying levels of support services reflecting the special needs of the sub-population. This includes emergency shelters (more a social service than housing per se) as well as various forms of housing which incorporate support services either in house (e.g. 24/7 supervision), or delivered separately via community social service agencies (e.g. home care).

The availability of community amenities such as schools, parks and sports facilities, arts and cultural programs, in combination with the supports, are critical factors that should be considered in terms of locating non-market housing, however, these are not included here (they would be considered only at a site specific project level).

The important element from the perspective of quantifying housing need and requirements is that the housing component to facilitate the delivery of such support services is available. In the main this speaks to requirements for subsidized or low rent options where low-income persons transitioning from

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1 Fig 1, extracted from the CRB "Our Affordable Future" uses reference income bands (e.g. subsidized = 65%-80% median Income) that vary from those used in this guide. As described below, these have been calculated as a way to quantify the continuum, and result in different percentages of median income.
homelessness or living with mental health challenges, or with restricted ability to perform activities of daily living can afford to live while receiving additional supports.

Figure 1 presents the continuum as a conceptual framework. While it does include an income related quantum, based on percentage of median income, this was illustrative only. It is possible to refine and quantify the income categories (as percentage of median or average income) more accurately with thresholds for subsidized, affordable and market housing. This can then be used to align each part of the continuum against housing availability. *This does not need to be done for each sub-region, a CRB-wide benchmark is sufficient for developing the benchmarks in the continuum (because it’s a regional housing market).* However the existing requirements and availability in each sub-region should be updated. The approached used to quantify the continuum boundaries draws on income thresholds that define eligibility for social housing.

The standard measures used in Canada as eligibility for social housing, uses an income threshold (Housing Income Limits, (HIL)) derived from median market rents (updated annually from CMHC rent survey). This determines the income required to afford the median rent at 30% of income. These are calculated by household size (number persons) and rounded to the nearest $1,000. HILs are calculated and applied at the CMA scale (i.e. not calculated at any sub-regional level).

<table>
<thead>
<tr>
<th>Rent (2011)</th>
<th>Derived HIL*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Single – Bachelor</td>
<td>713</td>
</tr>
<tr>
<td>2. Person -One-bed</td>
<td>857</td>
</tr>
<tr>
<td>3. Person -Two-bed</td>
<td>1034</td>
</tr>
<tr>
<td>4. Person - Three bed</td>
<td>1191</td>
</tr>
</tbody>
</table>

*(e.g. 2 bed = $1034 divided by 30% times 12 months = $41,360, rounds to $41,000).*

Figure 2: Derived Proxy Housing Income Limits (HILs)

Because median rents are not readily available, a proxy is used here based on average rents. For consistency with the 2011 NHS and 2011 tax file data used in the later analysis, the HILs are calculated against the Oct 2011 Edmonton (CMA) average rents The same methodology can be used to update rents annually. Separately income data is available either from the census NHS or from tax filer data. The census data is available with tenure variables (owner vs. renters) but over time becomes out of date (note the 2011 NHS collected 2010 income). Tax file data is available more frequently and provides an update, albeit with a 18 month time lag - 2012 data (filed in early 2013) will be available in Oct 2014.

Unfortunately, the tax file source does not distinguish tenure, so income of all household, regardless of tenure is used here (with the 2011 tax year data). This facilitates updating in intercensal years (when the only source is the tax filer data)

The NHS reports median and average incomes (2010) for Edmonton (CMA) as $79,090 and $97,516 respectively. Tax filer data also for 2010 reports an average of $82,603 blended across all household

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2 CMHC generates a data set of median rents based on units that include heat. Thus this tends to be slightly different from the published average rent data. Here the average rent is used to estimate HILs because this is readily available in the CMHC semi annual rent survey.
types (it was much higher for 2 parent families and much lower for lone parents and singles). This had increased to $85,414 in 2011.

At $85,000, the overall average (or median) 2011 income for all households is too high to use as a threshold to assess non-market need. It is far in excess of the derived HILs presented in Figure 2 above. A household with an income of $80,000 can afford a rent of $2,000 and a purchase price of $400,000, so this is not a measure of need.

In targeting programs in the US, their method uses 50-60% of area median family income. Separate analysis in Canada has found that 60% of median income roughly approximates the income calculated under the HIL method based on average rent for two-bed units. In our case, 50% of average 2011 income would translate to an income of $40,000 with affordable rent and price of roughly $1,000/month and $200,000 respectively.

Comparing the derived HILs (Fig 2 above), which reflect the upper limit for eligibility for social housing, against the average 2011 income (tax data) it is clear that as a benchmark against median or average household income, the upper limits should be closer to 50% for families and 30-35% for non-family (mainly singles) for whom smaller units with lower rents are appropriate.

<table>
<thead>
<tr>
<th>Household Size</th>
<th>Annual Income</th>
<th>As % 2011 income CMA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Single – Bachelor</td>
<td>29,000</td>
<td>34%</td>
</tr>
<tr>
<td>2 Person -One-bed</td>
<td>34,000</td>
<td>40%</td>
</tr>
<tr>
<td>3 Person -Two-bed</td>
<td>41,000</td>
<td>48%</td>
</tr>
<tr>
<td>4 Person - Three bed</td>
<td>48,000</td>
<td>56%</td>
</tr>
</tbody>
</table>

**Figure 3: Estimated Edmonton HILs and Average Household Income (2011)**

Based on this approach the continuum can be quantified. From the overall average (or median income), each specific threshold in the continuum (e.g. 50% of average) the maximum affordable price and rent can be readily calculated. These rent and price ranges can then be compared against the rent and price distribution in each jurisdiction as a way to identify gaps in the continuum.

A further refinement to the continuum is to include an intermediate market category as a transition between non-market and full market. Given the incomes and distribution of households (families and singles separately, because they have distinctly different incomes and housing requirements) the rent or price that would be affordable to each income band can be readily calculated. This can then be compared against the existing rents and prices in the stock (at the specific geography of a sub region or municipality) as well as against the rents and prices of recently constructed housing.

Unfortunately the census (NHS) data do not distinguish smaller units (bach/one) for singles versus larger family sized units (2 beds). However the NHS custom data file obtained for this work provides reasonable proxies, using structure type. For owners, the file provides dwelling values by structure type. Larger dwellings (sfd, semi, row and mobiles) are assigned as “family housing; apartments and attached units are assigned to non-family housing (singles). For renters the data files specifically include rent

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3 It would be possible to order a custom tabulation distinguishing bed count by household type (family, singles) however such a specification was not included in our order.
ranges with household type, so family and non family can be readily extracted. Similarly the incomes of both family and non family households are available. Counting the number of households within each income range developed in the continuum provides a way to quantify demand and to compare this with supply (availability by rent or price).

**Working example (results in Fig 4):**

The derived HIL for a single person household (above) was roughly 35% of the CMA overall income, so the 35% benchmark was selected. 35% of $85,000 is $29,750. This is set as the income limit for singles seeking social housing. At this income the single could afford a maximum of $744 for rent (30% of income). Using this same amount as the mortgage payment, it is similarly possible to calculate the maximum home price this single could afford (using an assumed mortgage rate of 4.5% and 25 yr amortization and 5% down payment).

The availability of rental and purchase units is then estimated by interpolating from the census data how many units are below this amount. This requires some manual manipulation. Here the rent threshold is determined to be $744. But rent data only publish total units between $600-$799. So to estimate total below $744, we first sum all units under $600; then add 144/200th of the number in the 600-799 range. In the example below this generates a total of 16,607 rental apartments under the $744 rent level.

**Quantifying the Continuum (Families and Singles)**

<table>
<thead>
<tr>
<th></th>
<th>Average CMA income (= base for income % benchmarks)</th>
<th>85,000 *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non Market Social</td>
<td>Intermediate (affordable market)</td>
</tr>
<tr>
<td><strong>Singles (% benchmark)</strong></td>
<td>0-35%</td>
<td>35 -60%</td>
</tr>
<tr>
<td>Income benchmark</td>
<td>$29,750</td>
<td>$51,000</td>
</tr>
<tr>
<td>Max afford rent</td>
<td>$744</td>
<td>$1,275</td>
</tr>
<tr>
<td>Max afford buy</td>
<td>$134,379</td>
<td>$230,364</td>
</tr>
<tr>
<td>Rent units available</td>
<td>16,607</td>
<td>38,556</td>
</tr>
<tr>
<td>Homes priced in range</td>
<td>315</td>
<td>1,946</td>
</tr>
<tr>
<td>Total dwellings in range</td>
<td>16,922</td>
<td>40,502</td>
</tr>
<tr>
<td>Households in income range</td>
<td>47,845</td>
<td>47,794</td>
</tr>
<tr>
<td><strong>Families (% benchmark)</strong></td>
<td>0-50%</td>
<td>50-80%</td>
</tr>
<tr>
<td>Income benchmark</td>
<td>42,500</td>
<td>68,000</td>
</tr>
<tr>
<td>Max afford rent</td>
<td>$1,063</td>
<td>$1,700</td>
</tr>
<tr>
<td>Max afford buy</td>
<td>$191,970</td>
<td>$307,151</td>
</tr>
<tr>
<td>Rent units available</td>
<td>25,189</td>
<td>29,179</td>
</tr>
<tr>
<td>Homes priced in range</td>
<td>5,802</td>
<td>29,476</td>
</tr>
<tr>
<td>Total dwellings in range</td>
<td>30,990</td>
<td>58,655</td>
</tr>
<tr>
<td>Households in income range</td>
<td>44,865</td>
<td>46,974</td>
</tr>
</tbody>
</table>

* The CMA average income is used to determine the upper income range for each segment of the continuum – e.g. 35% x 85,000 = 29,750. This is then converted into a max rents based on paying 30% and a max house price using the rent as the payment and assuming lending parameters of 25 years, 10% down and 4.5% mortgage rate.

Figure 4: Quantifying key elements of the continuum (based on Edmonton CMA data)
This same interpolation method is used for each of the segments of the continuum to determine the total existing stock (rentals and owned units) with values in that range. Household incomes are then used to identify how many households exist in that same affordability range (e.g. incomes up to $29,750 who can afford only up to $744).

Based on the above brief review Fig 4 illustrates the data used to build a continuum. The benchmark rents and prices remain constant, but the count of required and available units will be specific to each sub-region and must be generated from data at that geography. The baseline (2011) existing stock is available in the census (NHS). For additions since census new starts could be added (but there is lack of data on rent and price levels). So it’s possible to assess total supply, but rent and price range are harder to update. This data is then presented graphically below.

Using these benchmarks, and data for the CRB as a whole the following charts illustrate the continuum first for non-family (predominantly) singles, then for families. In each case the continuum shows a shortfall of housing options (either to rent or to buy) against the lower income need.

The first two columns in each affordability band show the number of rentals and owned homes required; the third column shows how many households have incomes in the equivalent affordability range. Generally there tend to be more requirements in the lower (more affordable ranges) than there are
units. This therefore helps to illustrate the gaps in housing provision and affordability. It also tends to reveal a theoretical shortage of units at upper levels – mainly because mid-higher income earners could afford more (at theoretical 30% but most spend a much smaller percentage of the income for shelter costs (so they occupy units priced in more intermediate levels).

3.11. What is the Rental Market Supply and Affordability by Income Band?

As confirmed earlier, renters are identified with a higher incidence of housing need than owners. In part this reflects the typically lower incomes among renters and thus more affordability issues. This assessment is a further exploration of the continuum, but focusing only on rental options. As in the continuum, it converts incomes into equivalent rents, using the 30% shelter to income criteria and then seeks to create income groups that at their boundaries align with rent groups.

Using census (NHS) data it is possible to examine the relative distribution of incomes versus rents. Based on the norm of spending no more than 30% for rent, and based on the number of households in each income band, estimates of the number of rental units required in each rent or income band can be derived.

Comparing this theoretical requirement against the existing range of rents that exists (again from 2011 NHS data) provides a way to identify the gap of mismatch between what renters in the area can afford and what they are currently paying. It also reveals the extent to which there is a shortfall in the number of lower rent units in the area.

Note that the published rent and income ranges are quite wide such that some interpolation is required (as explained in previous section). Customized data requests could obtain narrower rent and income bands and seek to directly align these based on the 30% threshold (i.e. at incomes up to 20,000, maximum rent is $500, so requesting data with rents $250-$500 would allow more direct comparison).

A similar analysis can be conducted against home prices although the prices in the NHS reflect occupants own estimate, not necessarily a market value. For ownership it is also necessary to calculate a mortgage payment and compare this to an affordable income at the same 30% criteria of affordability.

3.12. What are the Projected Housing Requirements and Need, Short-Medium Term (5-10 years)?

The final consideration is: how will housing need change over time? This draws on population and household projections developed for the CRB. The method used to generate used historic fertility, mortality and household formation rates within each sub-region and then aggregated these up to the CRB level. Because projections rely on a range of assumptions they are typically developed to generate
high and low estimates. It is not necessary to generate projections; these are commissioned separately by CRB.

Total household growth under a low and high estimate for the aggregate CRB was examined to assess the implications for future growth in housing need (as identified earlier in tabs 6 & 7, sec 3.6, 3.7). This revealed that across the region household growth over the next seven years (2015-2021) is anticipated to average between 10,200-12,700 households per year.

Using the incidence of core need derived earlier (sec 3.7, using 2006 core need) the incidence of need was applied against expected total growth to estimate growth in need. This generates an estimate of growth in core need, totaling between 1,123 and 1,407 per year at the CRB level.

**CRB Household projections (average annual growth, 2015-2021)**

<table>
<thead>
<tr>
<th></th>
<th>Low Projection</th>
<th>High Projection</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH growth</td>
<td>10,208</td>
<td>12,791</td>
</tr>
<tr>
<td>Growth in need</td>
<td>1,123</td>
<td>1,407</td>
</tr>
</tbody>
</table>

While not insignificant, compared the scale of outstanding need, this is a low value. On this basis it is recommended that sub-regions do not need to separately determine growth. They can simply take a per capital share of the overall value. This should be set as a minimum target for production of new affordable and supportive housing in order that the current backlog of need is capped and does not grow further (i.e. an aggregate target of 1,100 to 1,400 new non-market units should be established annually, just to avoid further growth in need).

### 4. OVERALL HOUSING ASSESSMENT SUMMARY and POLICY CONSIDERATIONS

This section should consolidate insights and findings in the preceding analysis and identify potential policy implications and options.

It can also identify the quantum and type of resources required to respond to the identified type and magnitude of housing need (as suggested for example by setting growth in need as a minimal target for annual new social housing development).

The primary input to the overall assessment will be the gaps revealed through the housing continuum. However the recent market trends will also be important, especially if the type of new development is exacerbating gaps, versus filling them. This will have implications for how each municipality and sub region plans for new development – is the planning system enabling and pro-actively encouraging the type of development necessary to reduce gaps in the housing system? It also highlights the importance of importance of municipal planning systems and ergo the role of municipalities in helping address need and demand for housing.

When consolidated at a regional level, it will be useful to compare across sub-regions and from each sub-region to the region as a whole.

As noted some consideration will need to be given separately to the relative levels of support services ancillary to housing need.
5. HOUSING DATA, USES and SOURCES

In this User Guide data has been assembled from a range of sources:

- 2011 Census National Household Survey (NHS);
- Statistics Canada data series on tax filer incomes (more frequent updates between census data, but lacks tenure variable);
- Canadian Mortgage and Housing Corporation (CMHC) housing market reports (new starts, rents and prices and rental vacancies);
- Edmonton Real Estate Board (EREB) (home prices); and
- Various forms of administrative data related to existing supportive and social housing inventories, provided by the City of Edmonton, Alberta Municipal Affairs and CMHC.

Appendix B presents the custom data requests used to obtain data from these sources. The resulting data has been provided electronically to CRB.

CMHC uses the census/NHS to generate estimates of core housing need, and has announced plans to publish new core need estimates in late summer 2014. For the CRB sub-regions, custom tabulations should be ordered at that time. In short term we use a proxy measure of paying over 30% and over 50% of income, supplemented by the 2006 core needs estimates. This can be refined once CMHC releases the update.

The census provides a rich data set, but is limited by timing, every 5 years, and delay in publication (2-3 years after. So it becomes 8 years out of date by the end of the cycle). Accordingly, other data sources are needed to supplement the census/NHS.

Income data is available from Statistics Canada using Canada Revenue Agency (CRA) tax files data and is updated annually, albeit with a 18 month lag (2011 tax year data currently available; 2012 data will be available in October 2014). This disaggregates by family type (two parent and lone parent), as well as non-family households, but does not provide tenure.

Statistics Canada also updates population estimates and components of population change (natural vs immigration) annually.

Supply data is more frequently available from CMHC monthly surveys and annual publications and is very timely. This includes price data but only for new detached homes (not for condo). Price data for recent sales of existing homes may be available from the Edmonton Real Estate Board. Rental data (rents and vacancies) are surveyed and published semiannually by CMHC providing regular updates on the state of the market.

The Assessment Framework is built largely on the NHS data. It is important going forward that CRB and municipal staff seek out and regularly update data and refresh the assessment as a way to monitor ongoing change in need and demand and to evaluate the impact of any plans and policies related to encouraging a full range and type of supply.

6. APPENDICIES

Appendix A: Analysis Plan
Appendix B: Custom data Requests used to assemble input data

Appendix C: Detailed methodology to assemble data from custom tabulations

Appendix D: Glossary of Terms and Acronyms
Appendix A: Analysis Plan

(used initially to define data requirements)

In order to develop the Housing Assessment Framework, we first need to define the analytical questions and then identify associated data that will be required. The following steps lay out the types of information that will be required and the sources of data. Once data is collected and assessed, additional data elements or types of analysis may be identified.

We may be able to obtain data online although may also want to submit a customized request to Statistics Canada. Even if the required data is readily available in existing published tables, it can be cumbersome to extract and certain predetermined tables may not always have the type of cross tab needed. In such cases a customized request will help to generate more useable data and save time extracting info as well as avoid errors that can occur when extracting such data.

Developing an analysis plan will enable us to define specifically which data and types of cross tabulations will be required. The initial work will be undertaken at the CMA level, however subsequent work will require similar data but with a range of geographies. This must include:

- CRB [1]
- CMA[2]
- Aggregation for each of 6 sub-regions (Gary to specify the related municipalities/counties) [6]
- Each individual municipality/county [24]

Total geographies [33]

Step 1: Creating an overview/profile.

For each sub region, comparison can be made against overall CRB: how similar/dissimilar is it from CRB average? In the initial phase we will develop the assessment framework and will collect and assess data at CRB/CMA scale; a subsequent phase will undertake sub-regional assessments.

As an initial step we need to identify the current housing situation. This can be created with a profile showing the existing population, total households with a breakdown by tenure and built form (sfd/semi, row and apt).

Analysis question 1: What is the current type of housing: sfd/semi, row and apt. And further what is the relative mix of apartment vs. detached and by tenure (own/rent).

We also want to know who currently lives there, so: hh type (family, with split for two parent and lone parent and non-family) and age categories, and by income levels.

Analysis question 2: Who currently lives in the area? Is it primarily younger or older, or close to regional mix? Is it family or non-family oriented?

Analysis question 3: What is the income profile of existing resident, for different household types (family/non-family): are incomes higher, lower or reflective of overall region?
It is likely that there will be some association between type of households, tenure mix and built form. And the population/hh profile will likely reflect the relative cost of housing across different sub-regions.

Accordingly it is useful to add some data on the relative cost of housing in each area. Such data is more readily available both in the census-NHS and CMHC surveys for rents. While the NHS data do provide shelter costs for owners, these are influenced by how long people have lived in that home, so don’t reveal underlying home values. The standard NHS data set does include an owner estimate of home value. This will provide a rough proxy, but is dependent on perception and guess of owner, not a more formal assessment. This will be sufficient for our purpose of the determining the relative price level in a region.

**Analysis question 4A:** what is current rent (shelter cost) distribution by rent range.

**Analysis question 4B:** what is current dwelling value distribution by owners assumed price. How has the distribution changed from 5, 10 years ago?

It is also useful to examine how the existing rent and price distribution has changed from 5, 10 years ago (i.e. is there evidence that stock of low-moderate rent dwellings are contracting or expanding?)? This is examined under trends ((Step 2 below))

As we work through an income and stock rent profile, this will begin to reveal some aspects about housing need in the area. The 2011 NHS had additional questions that reflect the three housing standards used by CMHC (affordability, suitability and adequacy) so these can be identified from 2011 census data. Note this is not “core need” which is derived only when an income threshold is added, but is will provide a general indication on housing issues across the 3 standards and how this area differs from the region as a whole.

In the absence of the CMHC income thresholds (which could potentially be derived from census rents, but this is a complicated step, requiring creation of a new variable) a proxy can be used. The NHS data set includes median income by tenure. Examining Edmonton 2011 medians, the median renter hh income ($47,500) is roughly 60% of the overall hh median $79,000, and roughly approximates the CMHC income threshold for a 2 bedroom dwelling. Another way to focus on more acute affordability need is to use the higher threshold of 50% being spent for housing (This is available in table 99-014-x2013031).

**Analysis question 5:** what is the incidence of affordability, adequacy and suitability problems in the area (by tenure and by hh type)?

**Analysis question 6:** what is count and incidence of households experiencing affordability, adequacy and suitability problems and with incomes below the median renter household income.

---

4 Note CMHC 2011 core need estimates are scheduled for release in summer of 2014, so may provide an update that can be incorporated later.
Related to this more narrowly defined housing need, we can explore the existing distribution of assisted/social housing (i.e. existing supply). Again, the 2011 NHS included for the first time a question about “subsidized housing” and provides a count based on responses. This may provide a general indicator.

Provincial Ministry data has separately been provided which can identify locations of social/supportive housing. This is provided by address so could potentially be mapped or coded by sub region. This also provides a breakdown of type of housing – low rent, versus special purpose – emergency and supportive housing.

**Analysis question 7: What is distribution of social/affordable and supportive housing in the area?**

**Step 2: Recent trends in stock and requirements**

An important consideration is how the existing built form attracts and reinforces (or constrains options) for certain household types. This can be explored by examining recent trends and changes, both in the population (and # hh’s) and in in the type of new housing supply that has been produced.

**Analysis question 8: based on Census-NHS how has the population and more particularly number and type of hh changed since the last census (2001, 2006)**

*Similarly, how has the rent and price distribution changed from 5, 10 years ago (i.e. is there evidence that stock of low-moderate rent dwellings are contracting or expanding?)*

The next layer of questioning relates to causality – have revealed population and hh changes been influenced by what type of housing is available and the form and price of new housing being offered; or has the market responded to demand in developing housing types to meet identified need?

Census data can provide some cross sectional data of the type and change (e.g. number and form as well as rent levels in each area between two census periods. This will show net change across census periods.

Census (NHS) data can also be augmented by CMHC data on housing starts/completions by intended market (freehold vs. condo ownership and rental). This can provide the volume of starts as well as some characteristics of the new supply.

CMHC data can also provide some information on the price of new homes, but only for single and semi, similar data is not published for condo prices or rents.

Rent data are available after new units enter the survey universe for the CMHC rental survey (generally one year after occupancy).

Price profiles across the region and in each sub-region might be available via a request to the Edmonton real estate board. However this data is often not retained in a format that can be aggregated to specific geographic areas (e.g. sub-regions or below).

**Analysis question 9: How has stock changed (what is form of new supply since 2006)?**
Total starts by build form (sfd, semi, row, multiples) and by intended market (freehold ownership, condo ownership, rental, other)

Reflecting on the income profile generated above, what are key trends in housing supply and costs (prices and rents of new homes constructed and changes in prices and rents in existing stock.

*Analysis Question 10: What are current levels and recent trends in new home prices (CMHC), existing home sales (MLS) and rents (CMHC)?*

Drawing on the type of supply and change in household types we also want to investigate how these are influenced. Typical components of growth include: change in total population by age, change in total households and households by tenure

A key influence on demand is immigration, including domestic, inter-provincial and intra-provincial and international, all of which have been significant in Edmonton. Past and projected immigration are incorporated in the population and household projections being developed separately by CRB). These can be used to add perspective on how future supply and demand mismatch (gaps) may persist or narrow. This is discussed below under step 4.

**Step 3: Exploring gaps and patterns**

This will not require new data but will consolidate and assess data collected in prior steps to examine the following questions:

Has demand shifted and has this impacted the overall profile

Which are the predominant types of new housing supply

Which sub groups are being overlooked or underserved by new construction?

Is there a need to alter the type and price/rent range of new housing currently being produced?

What are the gaps in housing provision?
- By dwelling type (built form)
- By tenure type (own/rent)
- By price/rent range

**Step 4 Projecting future requirements**

The preceding steps and tasks develop estimates of current (baseline) outstanding need, as well as identifying issues and influences that have contributed to the gaps (or could help reduce gaps). Going forward, the gaps will be impacted as the population and number of households grows, and will inevitably include growth in need.
CRB population growth will be largely influenced by the state of the Alberta economy and extent to which this continues to attract migrants (inter-provincial and international). Population projections developed by and for the CRB as well as any developed by other agencies (Statistics Canada, CMHC) can provide some estimates of potential future housing requirements. These can be used as the basis for estimating what type of overall housing demand may be required across the CRB.

To project overall household growth and housing requirements it is necessary to apply a range of factors against the population estimates. These typically involved using recent/past propensity by age group. The CRB has commissioned development of population and household projections and these can be used to explore how certain identified sub populations (e.g. lone parents) will change and how this will impact future growth in housing need.
**Summary of data requirements and availability**
(for purpose of specifying custom tabulation).

<table>
<thead>
<tr>
<th>Geographic Specifications</th>
<th>CRB, CMA; Aggregation each of 6 Sub regions; all 24 muni/county</th>
</tr>
</thead>
</table>

**Data source** | **Variables required**                        | **option/comments** | **exist catalogue** |
---|---|---|---|
NHS 2011 | Tenure, structural type dwelling | | x2011026 |
NHS 2011 | Tenure, Age group primary maintainer, total income | | x2011028 |
NHS 2011 | Tenure, Type of HH, total income | Age group primary maintainer | x2011028 |
Census 2001; 2006; NHS 2011 | Renters, rent range (11), income groups | may need to get geographic data set from 2006, 2001 | x2011031 |
Census 2001; 2006; NHS 2012 | Owners, dwell value), income groups | may need to get geographic data set from 2006, 2002 | x2011030 |
NHS 2011 | Tenure, income, affordability, suitability | Requires a custom tab to enable selection of hh above and below median (cat 028)le | x2011028 |

**Analysis question 1:** What is the current type of housing: sfd/semi, row and apt. And further what is the relative mix of apartment vs. detached and by tenure (own/rent).

**Analysis question 2:** Who currently lives in the area? Is it primarily younger or older, or close to regional mix? Is it family or non-family oriented?

**Analysis question 3:** What is the income profile of existing resident, for different household types (family/non-family): are incomes higher, lower or reflective of overall region?

**Analysis question 4A:** What is current rent (shelter cost) distribution by rent range. How has the distribution changed from 5, 10 years ago.

**Analysis question 4B:** What is current dwelling value distribution by owners assumed price. How has the distribution changed from 5, 10 years ago?

**Analysis question 5:** What is the incidence of affordability, adequacy and suitability problems in the area (by tenure and by hh type)?

**Analysis question 6:** What is count and incidence of households experiencing affordability, adequacy and suitability problems and with incomes below median renter
**Analysis question 7:** What is the distribution of social/affordable and supportive housing in the area?

- NHS 2011 for overall est;
- AMS database for detail

**Number of units by type:**
- low rent; supportive, transitional, emergency shelter.

**Analysis question 8:** Based on census-NHS, how has the population and more particularly, the number and type of households changed since the last census (2006)?

- Census 2006;
- NHS 2011

**Tenure, Type of HH, total income**

**Analysis question 9:** How has the stock changed (what is form of new supply since 2006)?

- CMHC (rent survey data);
- and New home price, MLS statistics

**Starts by dwelling structure types:**
- sfd, semi, row multi and tenure

**Average rent each year since 2006; ave home price annual since 2006**

**Analysis question 10:** What are current levels and recent trends in home prices (MLS) and rents?

- CMHC/CREA-MLS
- CRB growth plan and background data/updates

**HH projections by age group and HH type (to match against incidence of need by type)**

**Population and HH Projections**

- CRB growth plan and background data/updates

**HH projections by age group and HH type (to match against incidence of need by type)**

- Being generated separately by CRB for sub regions

---

**CMHC/CREA may need special request to**

- CRB growth plan and background data/updates

**HH projections by age group and HH type (to match against incidence of need by type)**

- Being generated separately by CRB for sub regions
Appendix B: Custom data Requests used to assemble input data

A series of requests were submitted to Statistics Canada

Separate requests were submitted to CMHC and to the Edmonton Real Estate Board

In each case, follow up discussions with data analysis resulted in some adjustment and refinement of the request. The following specifications reflect such adjustments.
Geography:

1. **24 Individual Municipalities:**

Town of Beaumont,
Town of Bon Accord,
Town of Bruderheim,
Town of Calmar,
Town of Devon,
City of Edmonton,
City of Fort Saskatchewan
Town of Gibbons,
Lamont County,
Town of Lamont,
City of Leduc,
Leduc County,
Town of Morinville,
Parkland County,
City of St. Albert,
City of Spruce Grove,
Town of Stony Plain,
Strathcona County,
Sturgeon County,
Town of Legal*,
Town of Redwater*,
Village of Thorsby*,
Village of Wabamun*,
Village of Warburg*.

* GNR’s =>50% please include in data set if any data from the catalogues listed is available. It is understood that Income variable will have additional rules of suppression.
2. **Geography Aggregations:***

1. **Aggregation:** City of St. Albert, Sturgeon County, Bon Accord, Gibbons, Legal*, Morinville, Redwater*
2. **Aggregation:** Lamont County, Town Bruderheim, Lamont (T)
3. **Aggregation:** Fort Saskatchewan, Strathcona County
4. **Aggregation:** Leduc County, Beaumont (T), Calmar (T), Devon (T), Leduc (CY), Thorsby* (V), Warburg* (V)
5. **Aggregation:** Parkland County, Spruce Grove (Cy)), Stony Plain (T), Wabamun *(V)
6. **Aggregation:** All 24 Municipalities (CRB)

---

**GEO: CSDs - 2011 – to be put on 2011 SGC.**

**DATA:**

1. X-tab the following: Household income groups (11)/STIR/Household type (6)/Tenure (3)/Suitability (3)/Condition (3)

   - Reference years 2001, 2006 and 2011 (geos – see above -on 2011 boundaries)
   - Income (nominal $) BT
     - Household Income Groups: (11)
       - Total - Household total income groups in 2010
       - Under $10,000
       - $10,000 to $19,999
       - $20,000 to $29,999
       - $30,000 to $39,999
       - $40,000 to $59,999
       - $60,000 to $79,999
       - $80,000 to $99,999
       - $100,000 and over
       - Median household income $
       - Average household income $

     - STIR: Based on Income Threshold – above and below median income (nominal $) by household type:
       - Total - Shelter-cost-to-income ratio
       - Spending 30% to less than 100% of household total income on shelter costs
       - Spending 50% to less than 100% of household total income on shelter costs

Note: Not applicable (private dwellings on farms or reserves, band housing and private households with a household total income less than or equal to zero)

   - Household types (6)
     - Total
• couple families,
• couple families with no children,
• lone parent families
• non-family – single
• Non-family – other

- Housing Tenure (3)
  - Total
  - Owner
  - Renter

- Housing Suitability (3)
  - Total - Housing suitability
  - Suitable
  - Not suitable

- Condition of Dwelling (3)
  - Total - Condition of dwelling
  - Only regular maintenance or minor repairs needed
  - Major repairs needed

2. X-tab the following: Shel Cost Grps (11)/HHLD Income Grps (11)/STIR/HHLD Type (6)/Tenure (5)
   • Reference years 2001, 2006 and 2011 (geos - see above -on 2011 boundaries)
   • Income (nominal $) BT

- Shelter Cost Groups (11)
  i. Total - Shelter cost groups
  ii. Less than $400
  iii. $400 to $599
  iv. $600 to $799
  v. $800 to $999
  vi. $1,000 to $1,199
  vii. $1,200 to $1,499
  viii. $1,500 to $1,999
  ix. $2,000 or more
  x. Average shelter costs
  xi. Median shelter costs

- Household Income Groups: (11)
  i. Total - Household total income groups in 2010
  ii. Under $10,000
  iii. $10,000 to $19,999
  iv. $20,000 to $29,999
  v. $30,000 to $39,999
  vi. $40,000 to $59,999
  vii. $60,000 to $79,999
viii. $80,000 to $99,999  
ix. $100,000 and over  
x. Median household income $  
xi. Average household income $  

○ STIR: Based on Income Threshold – above and below median income (nominal $) by household type:
  i. Total - Shelter-cost-to-income ratio  
  ii. Spending 30% to less than 100% of household total income on shelter costs  
  iii. Spending 50% to less than 100% of household total income on shelter costs  

Note: Not applicable (private dwellings on farms or reserves, band housing and private households with a household total income less than or equal to zero)  

○ Household types (6)  
  i. Total  
  ii. couple families,  
  iii. couple families with no children,  
  iv. lone parent families  
  v. non-family – single  
  vi. Non-family – other  

○ Housing Tenure (5)  
  i. Total - Housing tenure including presence of mortgage and subsidized housing  
  ii. Owner  
  iii. Renter  
  iv. Subsidized housing  
  v. Not subsidized housing  

3. X-tab: Mobility Status (5) /Age of Primary HHLD Maintainer (6) /HHLD Types (6)/Tenure (3)  
GEO: 2006 on 2011 SGC  

- Mobility Status (5)  
  o Total – Household mobility status 5 years ago  
  o Non-mover households  
  o Mover households  
    - Within the same census subdivision  
    - Not within the same census subdivision  

- Age of Primary Household Maintainer (6)  
  o Total  
  o <25  
  o 25-44  
  o 45-64  
  o 65-74  
  o 75 and over  

- Household types (5)
- Total
- Couple families,
- Couple families with no children,
- Lone parent families
- Non-family – single
- Non-family – other

- Household Tenure (3)
  - Total
  - Owner
  - Tenant
Census Custom Table Specifications

For: Capital Region Board Date: March 19, 2014

Table 3 Title: Private Households by Shelter Cost Groups (17), Household Income Groups (30), Shelter-cost-to-income-ratio (4), Household Type (6) and Tenure (3) for Selected Census Subdivisions and Aggregates in Alberta on 2011 Boundaries, 2006 Census, 20% Sample-based Data

File Format: Beyond 20/20 [2,276,640 cells]

Year, Database: 2001 Census, 20% Sample Database


Geographies: AB, Selected CSDs and Aggregates on 2011 Boundaries [31 geographies]

Note: Data products that are identified as 20% sample-based data refer to information that was collected using the long census questionnaire. For the most part, these data were collected from 20% of the households; however they also include some areas, such as First Nations communities and remote areas, where long census form data were collected from 100% of the households.

Please see geo details at the bottom.

Universe: Private Households in Occupied Private Dwellings

Table Structure: Private Households by Shelter Cost Groups (17), by Household Income Groups (30), by Shelter-cost-to-income-ratio (4), by Household Type (6) and by Tenure (6) [73,440 cells / geog]

Variables:

Household Income Groups (30)

1. Total - Household total income groups in 2000
2. Under $10,000
3. Under $5,000
4. $5,000 to $9,999
5. $10,000 to $19,999
6. $10,000 to $14,999
7. $15,000 to $19,999
8. $20,000 to $29,999
9. $20,000 to $24,999
10. $25,000 to $29,999
11. $30,000 to $39,999
12. $30,000 to $34,999
13. $35,000 to $39,999
14. $40,000 to $49,999
15. $40,000 to $44,999
16. $45,000 to $49,000
17. $50,000 to $59,999
18. $50,000 to $54,999
19. $55,000 to $59,999
20. $60,000 to $69,999
21. $60,000 to $64,999
22. $65,000 to $69,999
23. $70,000 to $79,999
24. $70,000 to $74,999
25. $75,000 to $79,999
26. $80,000 to $99,999
27. $100,000 and over
28. Median household income $
29. Average household income $
30. Standard error of average household income $

Notes: 1) Households with a total income less than or equal to zero included.

Shelter Cost Groups (17)

4. Total - Shelter cost groups
5. Less than $400
6. $400 to $499
7. $500 to $599
8. $600 to $699
9. $700 to $799
10. $800 to $899
11. $900 to $999
12. $1,000 to $1,099
13. $1,100 to $1,199
14. $1,200 to $1,299
15. $1,300 to $1,399
16. $1,400 to $1,499
17. $1,500 to $1,999
18. $2,000 or more
19. Average shelter costs ($)
20. Median shelter costs ($)

Shelter-cost-to-income-ratio (4)

1. Total - Shelter-cost-to-income ratio
2. Private households in non-farm non-band non-reserve dwellings with household income greater than zero
3. Spending 30% to less than 100% of household total income on shelter costs
4. Spending 50% to less than 100% of household total income on shelter costs
Note: 1) Not applicable to the shelter-cost-to-income variable: private dwellings on farms or reserves, band housing and private households with a household total income less than or equal to zero. These households are excluded from categories 2 to 4 but are counted in the total.

Household type (6)

1. Total – Household Type¹
2. Couple-family-only households²
3. Couple-family-only households with no children²
4. Lone parent-family-only households²
5. Non-family households – single
6. Non-family households – 2 or more persons

Notes: 1) Included in the total are multiple-family households and family households with additional non-family persons.
2) Family households will not include households with additional non-family persons.

Housing Tenure (3)

1. Total – Housing tenure³
2. Owned
3. Rented

Note: 1) Band-owned dwellings (if any) included in the total count only.

Geography Details Based on 2011 Boundaries:

**24 Individual Municipalities:**

Town of Beaumont
Town of Bon Accord
Town of Bruderheim
Town of Calmar,
Town of Devon,
City of Edmonton,
City of Fort Saskatchewan
   Town of Gibbons,
Lamont County,
Town of Lamont,
City of Leduc,
Leduc County,
Town of Morinville,
Parkland County,
City of St. Albert,
City of Spruce Grove
Town of Stony Plain
Strathcona County
Sturgeon County
Town of Legal
Town of Redwater
Village of Thorsby
Village of Wabamun
Village of Warburg*.

**Geography Aggregations:**

1. **Aggregation**: Sturgeon County, Bon Accord, Gibbons, Legal*, Morinville, Redwater*, St. Albert
2. **Aggregation**: Lamont County, Town Bruderheim, Lamont (T)
3. **Aggregation**: Fort Saskatchewan, Strathcona County
4. **Aggregation**: Leduc County, Beaumont (T), Calmar (T), Devon (T), Leduc (CY), Thorsby* (V), Warburg* (V)
5. **Aggregation**: Parkland County, Spruce Grove (Cy)), Stony Plain (T), Wabamun *(V)
6. **Aggregation**: All 24 Municipalities (CRB)
CRB Housing Need Framework
Housing data required - Request to CMHC

Geography: 6 sub regions, Consolidated CRB, CMA
1 City of St. Albert, Sturgeon County, Bon Accord, Gibbons, Legal*, Morinville, Redwater*
2 Lamont County, Town Bruderheim, Lamont (T)
3 Fort Saskatchewan, Strathcona County
   Leduc County, Beaumont (T), Calmar (T), Devon (T), Leduc (CY), Thorsby* (V),
   Warburg* (V)
4
5 Parkland County, Spruce Grove (Cy)), Stony Plain (T), Wabamun * (V)
6 City of Edmonton
7 All 24 Municipalities (CRB)
8 CMA total

Time frame: annual data for 2006-2013 inclusive

Construction
Starts, total
Single-detached
Multiple
Semi-detached
Row
Apartment

Starts by intended market, total
Homeownership - freehold
Rental
Homeownership - condominium
Other (co-op and unknown)

Rents and prices - existing
Average rent ($)2
Bachelor
One-bedroom
Two-bedroom
3+ bedroom

Average rent units constructed since 2005
Bachelor
One-bedroom
Two-bedroom
3+ bedroom

New house prices (CMHC has only for single and semi)
Median new house price
1st quartile new house price

Ave MLS price
Detached
Semi/row
Condo apartment
Appendix C: Detailed methodology to assemble data from custom tabulations

The Assessment Framework Model is dependent on various types of data, mainly from Statistics Canada and CMHC. In some cases data is provided in an excel spreadsheet and can be easily extracted and inserted into the model. In the case of Statistics Canada customized data is provided in a data software called Browser 20/20. This is a format that allows multiple sets of variables in the same file and enables users to rearrange and extract different selections of cross tabulations.

For example the variables in a file might include:

- Geography (each municipality and sub region)
- Housing Tenure (owner, renter)
- Household Type (couples, couple plus children, lone parents none family etc.)
- Shelter costs by cost group (e.g. $400-599…)
- Income by income band (e.g. 10,000-19,999)

Any two variables can be cross tabulated, so for example we might examine the distribution (number of HH) in each income band by tenure. This can be further explored by also examining how this varies across different household types. This is illustrated in the following screen shots.
Once cross tabs are selected in browser 20/20 data can be copied and pasted into a spreadsheet, further summarized (e.g. calculate percentages, incidence rates etc.) and then added into the assessment tool.

So, for example, extracting from above into excel:

<table>
<thead>
<tr>
<th>Income in 2010</th>
<th>Total Household total Income groups in 2010</th>
<th>Median household income $</th>
<th>Average household income $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $10,000</td>
<td>16,780</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$10,000 to $15,999</td>
<td>40,820</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$20,000 to $29,999</td>
<td>28,716</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$30,000 to $49,999</td>
<td>19,686</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$50,000 to $74,999</td>
<td>16,666</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$75,000 to $104,999</td>
<td>16,430</td>
<td>79,027</td>
<td>57,429</td>
</tr>
<tr>
<td>$105,000 and over</td>
<td>18,421</td>
<td>79,027</td>
<td>57,429</td>
</tr>
</tbody>
</table>
Appendix D: GLOSSARY of TERMS and ACRONYMS

Canada Revenue Agency (CRA),

Canadian Mortgage and Housing (CMHC),

Capital Region Board (CRB)

Census Metropolitan Area (CMA),

Edmonton Real Estate Board (EREB),

Housing Assessment Tool (HAT)

Housing Income Limits, (HIL)

Multiple Listing Service (MLS)

Single Family Dwelling (SFD)

Rent Geared to Income (RGI)

National Household Survey (NHS)

Market Housing – refers to housing build owned and managed by private sector owners or investment corporations with rents established in the market place.

Non Market Housing – refers to housing that was built with some form of public subsidy (either upfront or ongoing) and is owned and operated by a not for profit corporation or co-operative. Rents are typically subsidized and below fair market levels.

Social Housing – a subset of non-market housing, these are properties in which tenants are assisted via ongoing subsidy and typically pay rent on a rent geared to income (RGI) basis

Affordable Housing – Since 2001 when the federal government reengaged in funding new assisted housing, the term affordable housing has been used to distinguish non-profit and co-op properties which have received some assistance, but do not receive ongoing assistance. Rents are typically benchmarked to the average market rent (but are below the market rent that might be generated by new units.

Supportive Housing – a form of assisted housing where in addition to low (usually RGI) rents the operator also provides various support services to assist residents who have additional needs (e.g. elderly, persons with mental or physical illness).