

## Chapter 4: Estimate of Current Housing Need

### Purpose

4.1 The HNDA needs to understand the scale of current housing need because this is about the backlog of need that is not influenced by newly arising households. This is of direct relevance to both Development Plans and Local Housing Strategies for the following reasons:

- Current housing need for new homes along with newly arising need collectively tell Development Plans and Local Housing Strategies about the scale of new build housing that will be needed. This is a contributing factor to the need and demand for new homes that Development Plans need to identify land for and that Local Housing Strategies need to consider in relation to specific needs; and,
- Current housing need also tells Local Housing Strategies about the scale of current housing need that requires both new build housing and in-situ housing solutions. This is important because Local Housing Strategies will need to set out any priorities for funding or arrangements through which councils and their partners will deliver housing solutions.

4.2 The current housing need brings together the backlog of housing need. This is calculated independently of the CHMA's HNDA Tool because data is examined to first derive a gross backlog figure. This chapter explains the process and data used to achieve this. The gross backlog figure is then subject to a calculation to work out the net backlog need that requires new build housing because it cannot be met by in-situ solutions. This was covered by Stage 1 in the Scottish Government's HNDA Guidance (2008).

4.3 The CHMA's HNDA Tool uses the National Records of Scotland 2010-based Household Projections seven variant projections to derive newly arising households. The CHMA's HNDA Tool also uses a mixture of income data to calculate rates of income growth and distribution. It also uses Registers of Scotland data to anticipate different house price change options. Collectively these options help the user to create different scenarios the output levels of newly arising need for new housing. The new housing is split between purchase, private rented, social rented and intermediate sectors. For this HNDA social rented and intermediate sectors are considered to serve as a proxy for affordable housing need. The CHMA's calculation of newly arising households requiring new build social rented and intermediate housing covers Stage 2 of the Scottish Government's HNDA Guidance (2008).

4.4 The net backlog need for net house building is inputted to the CHMA's HNDA Tool to replace the in-built 'Waugh Method' data. This is then added to the calculation of newly arising households to give a total new build figure that is split between purchase, private rented, social rented and intermediate sectors. Stage 3 of the Scottish Government's HNDA Guidance (2008) adds together the need for new affordable housing from both the backlog (Stage 1) and the newly arising need (Stage 2). For this HNDA social rented and intermediate sectors are considered to serve as a proxy for affordable housing need.

<b>Stage 1</b>		<b>Stage 2</b>		<b>Stage 3</b>		<b>Affordable</b>
<b>Current Need</b>	<b>+</b>	<b>Future Need</b>	<b>-</b>	<b>Affordable Need</b>	<b>=</b>	<b>Housing Need</b>

### Using this Chapter

4.5 This chapter is structured around the approach currently set out in the Scottish Government's HNDA Guidance, 2008, which outlines three main stages in the assessment:

**Stage 1: Current Housing Need**

**Stage 2: Future Housing Need**

**Stage 3: Affordable Need**

4.6 Chapter 2: Future Market explains and justifies the assumptions made in using the CHMA's HNDA Tool to construct scenarios. This chapter details the assumptions made about backlog housing need calculations.

### Stage 1: Current Housing Need

4.7 The Scottish Government HNDA Guidance (2008) suggests that estimates of current housing need are provided using the most robust data sources available, including national statistics, local data and other appropriate methods. The approach to assessing the scale of current housing need addresses two research questions:

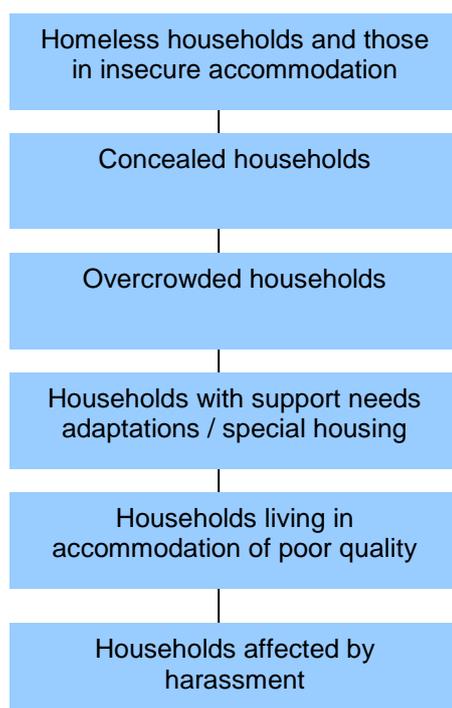
- **What is the total number of households in housing need currently who cannot afford to meet their own needs in the market and whose needs cannot be met in situ?**
- **What are the key characteristics of their unmet need?**

4.8 For this HNDA it has been chosen to use the approach outlined in the Scottish Government's HNDA Guidance 2008. This is for three reasons:

- The CHMA's HNDA Tool does not calculate gross backlog need that includes in-situ solutions and this is needed for Local Housing Strategies. There is no alternative approach to calculating this. Doing this exercise also makes it logical and consistent to then calculate the net backlog for new housing, providing a single and consistent evidence base;
- The CHMA's HNDA Tool in-built 'Waugh Method' uses temporary homelessness accommodation as a proxy for current need for net new build. This does not offer consistency with the gross backlog need calculation approach and does not consider the broader range of information that will be considered using such an approach; and,
- HNDA Guidance 2008 approach enabled consideration of a range of approaches for backlog reduction.

4.9 Figure 4.1 (below) shows the types of information that have been considered in establishing gross housing need.

**Figure 4.1: Components of Gross Housing Need (Based on HNDA Guidance 2008)**



### Calculating gross backlog housing need

4.10 The calculations of gross housing need for the TAYplan region and local authority areas are shown in Figure 4.2 (below). This has been prepared using information that is as consistent as possible for each council area within the TAYplan region.

**Figure 4.2: Gross Current Need in TAYplan and by Local Authority (31 March 2013)**

Households in Need	TAYplan	Angus	Dundee City	North Fife	Perth & Kinross
Homeless	2,065	197	877	264	727
Concealed	3,808	1,430	1,656	226	496
Overcrowded	1,803	171	479	420	733
Support / adaptations	9,503	395	7,000	1,755	353
Support / special forms of housing	390	0	59	132	199
Poor quality	4,986	246	3,352	1,346	42
Other Categories	1,709	69	123	48	1,469
<b>Gross Current Housing Need</b>	<b>24,264</b>	<b>2,508</b>	<b>13,546</b>	<b>4,191</b>	<b>4,019</b>

Source: TAYplan Authorities, 2013 using data sources shown in Figure 4.3

Notes: Other Categories presents an additional category to that shown within the HNDA Guidance 2008

Notes: Households affected by harassment (from Figure 4.1 above) are counted within HL1 data and covered by the Homelessness Category in this and subsequent figures.

### Data sources used to calculate gross backlog housing need

4.11 Although Figure 4.2 (above) shows the gross backlog need using the data sets that have been chosen. This section explains which data sets were used. There were three main requirements for the data. It needed to be:

- available for all council areas within the TAYplan region. This means that it must be possible to create the North Fife geography, which is the only part of Fife within the TAYplan region;
- sourced so as to be as consistent as possible across all four councils within the TAYplan region and where this cannot be achieved the best alternative used which presents the lowest risk to consistency; and,
- available for an up to date and consistent point in time so that the information is universally current and consistent (in as much as it is possible to be) across each council area within the TAYplan region and for each data set.

4.12 The partnership spent several months examining possible data sources during spring 2013. This exercise also involved revisiting a risk schedule prepared by consultants Arneil Johnstone when they prepared the 2009 TAYplan-wide HNDA on behalf of the four councils and TAYplan. This schedule examined the differences in data sets used by each of the councils historically and identified where these differences posed risks to the project outputs. Following this a triangulation exercise was carried out to understand any variations and similarities. The triangulation is shown in Figure 4.3 below. This compares the waiting list data with different national data sets such as the 2001 Census, HL1 Homelessness data, Scottish Household Survey and the Scottish House Conditions Survey. The 2001 Census was, at the time of the work and at the time of writing, the most up to date census position.

**Figure 4.3: Triangulation of possible data sources for calculating gross backlog housing need carried out spring/summer 2013**

Category	LA	Data Used	Comparison 1	Comparison 2	Triangulation
<b>1.1 Homeless households &amp; those in temporary accommodation</b>	Angus	Waiting list - 197	National statistics HL1 - temp acc and threat of eviction = 208	N/A	Agreed that published national statistics do not show snapshot position at 31st March 2013. This is provided through local homelessness waiting lists and in the Fife through using HL1 'live cases'. HL1 and local waiting lists provide a better measure of homelessness than temporary accommodation and threat of eviction as not all homelessness applicants are housed in temporary accommodation.
	Dundee City	Homeless waiting list - 877	National statistics HL1 - temp acc = 317	N/A	
	North Fife	HL1 - 264	National statistics HL1 - temp acc and threat of eviction = 855 *0.195 for Fife split = 166	N/A	
	Perth & Kinross	Housing register - 727	National statistics HL1 = temp acc and threat of eviction = 456	N/A	
<b>1.2 Concealed households</b>	Angus	Waiting list - 1,430	Census 2001 updated - 175	SHCS 2005-06 updated - 515	Homeless Monitor 2012 indicated 7% of households across Scotland were 'concealed'. Waiting list was considered to provide most up to date data around concealed households. However, Fife used Census 2001 updated with 2010-based household projections and deducted the same figure from 'overcrowding' to avoid potential duplication of categories
	Dundee City	Waiting list - 1,656	Census 2001 updated - 431	SHCS 2005-06 updated - 7,190	
	North Fife	Census 2001 updated - 226	N/A	SHCS 2005-06 updated - 324	
	Perth & Kinross	Housing register - 496	Census 2001 updated - 270	SHCS 2005-06 updated - 674	
<b>1.3 Overcrowded households</b>	Angus	Waiting list - 171	SHCS 2003-06 updated - 1,031	N/A	Local Waiting List or Common Housing Register data used in preference to national datasets as most up to date and the split between 'overcrowded' and 'concealed' households could be guaranteed - except Fife with measures taken to ensure no duplication, as shown above
	Dundee City	Waiting list - 479	SHCS 2003-06 updated - 2,157	N/A	
	North Fife	Housing register - 420	SHCS 2003-06 updated - 3,238 * 0.195 for Fife split = 631	N/A	
	Perth & Kinross	Housing register - 733	SHCS 2003-06 updated - 3,372	N/A	
<b>1.4 Support needs / adaptations</b>	Angus	Waiting list - 395	SHCS 2009-11 - 4,000	N/A	Two councils used the CHMA's preferred data source because the accuracy of waiting list data for this purpose could not be assured. Local Waiting List/Common Housing Register data preferred by other two councils because more up to date than SHCS data, not from a sample survey and represents specific requests for adaptations. In majority of cases these figures netted off because can be met in-situ by council or occupant. Triangulation difficult because waiting
	Dundee City	SHCS 2009-11 - 7,000	N/A	N/A	
	North Fife	SHCS 2009-11 - 1,755	N/A	N/A	
	Perth & Kinross	Housing register - 353	SHCS 2009-11 - 4,000	N/A	

					lists are prepared and used differently by each council e.g. in Angus estimate taken for '1.5 Support needs/special forms of housing' below within this row due to difficulty in separating waiting list categories (see also Figure 4.5 below). Therefore data source choice about balancing preferences that recognise difference in how waiting lists prepared and used, how up to date information is and compatibility with other work.
<b>1.5 Support needs / special forms of housing</b>	Angus	Waiting list - 0 (included above)	N/A	N/A	National datasets not identified to allow triangulation
	Dundee City	Specially adapted waiting list - 59	N/A	N/A	
	North Fife	Housing register and SocialWork register - 132	N/A	N/A	
	Perth & Kinross	Housing register - 199	N/A	N/A	
<b>1.6 Poor quality</b>	Angus	Waiting list - 246	SHCS - 2009-11 - urgent disrepair 11,000 or SHQS fails 28,000	**SHCS 2011/12 BTS = 2,014	Mix of Waiting List, Common Housing Register, Private Sector Team BTS and Private Sector Stock Condition Survey data was used due to lack of relevant national data. In two LAs the figures were totally deducted as capable of being provided with an insitu solution and in two remaining LAs a proportion was retained where insitu solutions were not considered to be possible. Triangulation with SHCS 2011/12 national rate applied pro-rata reinforced these decisions. Given the extremes the Operational Group agreed waiting lists were the most realistic source for Angus and Perth & Kinross
	Dundee City	Dundee City Council PSSU BTS list - 3,352	SHCS - 2009-11 - urgent disrepair 22,000 or SHQS fails 43,000	**SHCS 2011/12 BTS = 2,725	
	North Fife	Private Stock Condition Survey - 1,346	SHCS - 2009-11 - urgent disrepair 56,000 or SHQS fails 90,000 (Fife figures)	**SHCS 2011/12 BTS = 1,309	
	Perth & Kinross	Housing register - 42	SHCS - 2009-11 - urgent disrepair 17,000 or SHQS fails 40,000	**SHCS 2011/12 BTS = 2,562	
<b>1.7 Other categories</b>	Angus	Waiting list - 69	N/A	N/A	Complexity of components in 'Other Categories' – See Figure 4.4 below make it impossible to triangulate with national datasets.
	Dundee City	Waiting list - 123	N/A	N/A	
	North Fife	Housing register - 48	N/A	N/A	
	Perth & Kinross	Housing register - 1,469	N/A	N/A	

**Notes:** \*0.195 is the pro-rata percentage application for North Fife (19.5% of Fife housing stock). This is applied where only data for the whole of Fife is available.

\*\*1.6 Poor Quality Comparison 2 – applies the Scotland 2012 level of 3.7% of the housing stock as being Below Tolerable Standard (BTS) to the 2011 dwelling count for each council area within the TAYplan region on a pro-rata basis.

-BTS (Below Tolerable Standard) and -PSSU (Dundee City Council, Housing Department's Private Sector Services Unit)

4.13 The 'other categories' in Figure 4.2 (above) literally covers housing need from other categories on housing registers that could not logically be placed in any of the listed categories in Figure 4.2 (above). However, the data for Perth & Kinross are comparatively high for 'other categories'. This reflects the depth of categorisation within the Perth & Kinross housing register. Some of these detailed categories are not replicated in the housing registers of the other three councils. It was therefore possible to identify larger numbers of people on the register who did not form part of the main listed categories for Perth & Kinross. Figure 4.4 (below) lists the categories that together form the 'other categories' component. Please note that where values were below 10 they have not been published to protect the anonymity of the persons in question.

**Figure 4.4: Categories from council housing registers that make up the 'Other Categories' described above**

Local Authority	'Other Categories'
Angus	<ul style="list-style-type: none"> <li>Applications pending coding – 69</li> </ul>
	<b>Total = 69</b>
Dundee City	<ul style="list-style-type: none"> <li>Redevelopment and emergency housing – 123 (no duplication with homelessness)</li> </ul>
	<b>Total = 123</b>
North Fife	<ul style="list-style-type: none"> <li>Management priority – 19</li> </ul>
	<ul style="list-style-type: none"> <li>Urgent housing – 227 (no duplication with homelessness)</li> </ul>
	<b>Total = 246 * 0.195 to proportion for Fife split = 48</b>
Perth & Kinross	<ul style="list-style-type: none"> <li>Need to leave within 3 months – 13</li> </ul>
	<ul style="list-style-type: none"> <li>Suffered a significant trauma – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>2 bedrooms more than you need – 32</li> </ul>
	<ul style="list-style-type: none"> <li>Property subject to a compulsory purchase or closing order – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>Need to move urgently on grounds of child protection – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>Community Safety – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>2 CHR households wishing to become one household – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>Living in tent, caravan or mobile home on unregistered site – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>One bedroom more than you need – 136</li> </ul>
	<ul style="list-style-type: none"> <li>Reduced priority (2 bedrooms more than you need) – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>Access support or employment in a specific area – 73</li> </ul>
	<ul style="list-style-type: none"> <li>Extended residential access – Below 10</li> </ul>
	<ul style="list-style-type: none"> <li>Living in private rented, tied or HM Forces – 1,138</li> </ul>
	<ul style="list-style-type: none"> <li>Relationship breakdown – 12</li> </ul>
	<ul style="list-style-type: none"> <li>Remain in area for education – 42</li> </ul>
	<b>Total = 1,469</b>

Source: TAYplan councils

4.14 As a result of the triangulation exercise above, it was considered that national datasets did not offer sub-local authority information. The Scottish Household Survey and the Scottish House Condition Survey are also based on sample data. Similarly these and other sources of information did not all share the same time series and where they did were often several years old. The Council Housing Registers could be queried at 31 March 2013 giving a universal and up to date time output. They also allowed the construction of North Fife and offer local information. The Housing Registers also offer a strong degree of familiarity and broadly offer consistency for categories of need across council areas reflecting the other criteria above. Although there are some differences between the Housing Registers (described in Figure 4.3 above and Figure 4.5 below) these were considered to be possible to work through and there is enough commonality to make this a logical and appropriate source of information. Therefore the use of council Housing Registers data was considered to offer the best way of meeting the criteria above.

4.15 Figure 4.5 (below) shows the data source used by each council and explains the nature of any variation, in each instance the variation is about how data is collected or held in different ways by each of the councils. Following the collection of the data and run through of the calculation officers held a joint peer review session to challenge the assumptions and tease out any issues of inconsistency. This discussion was helpful in focusing in on the differences between housing registers across the four councils.

4.16 As a result the councils are satisfied that the information presented in Figure 4.5 is the most useful. It is this information that has been used in the calculation of gross backlog housing need set out in Figure 4.2 above.

**Figure 4.5: Data sources used in Figure 4.2 and explanation for any variations**

Component	LA	Data Source	Comment
<b>Overall</b>	n/a	n/a	The LAs within the TAYplan area jointly considered the data sources available to assess housing need. All preferred to use locally-generated data where possible, to ensure accuracy of need figures; national data often being based around small samples within each LA area. Several sessions were arranged for the LAs to work through each line of need, to agree the approach to deductions and to reach net need figures for affordable housing. Inconsistencies principally arose due to recording differences within each area or where data was unavailable to any particular LA. In all situations 'nil' need was excluded from the figures to account for potential 'aspiration' within the local data.
<b>1.1 Homeless households, those in temporary accommodation and harassment</b>	Angus	Council & RSL Waiting Lists	Choices of source depended on how the data was held locally. Most areas have homelessness data integrated within the Waiting List or Common Housing Register. In Fife not all homelessness applications are held within the Fife Housing Register and hence a figure for live cases within the HL1 system was applied. No affordability deductions were made to this category.
	Dundee City	Homeless Waiting List	
	North Fife	HL1	
	Perth & Kinross	Common Housing Register	
<b>1.2 Concealed household</b>	Angus	Council & RSL Waiting Lists	Choices of source depended on how the data was held locally. Most areas could differentiate between concealed and overcrowded households within the Waiting List or Common Housing Register. This could not be guaranteed in Fife so Census data was used which was deducted from the overcrowded figure in the row below to ensure no double-count. Affordability deductions were applied to this category.
	Dundee City	Housing Waiting List	
	North Fife	Census 2001 / updated	
	Perth & Kinross	Common Housing Register	
<b>1.3 Overcrowded households</b>	Angus	Council & RSL Waiting Lists	Local Waiting List or Common Housing Register data were used. Figures applied reflected local bedroom standards as need would be required to be met locally. Affordability deductions were applied to this category.
	Dundee City	Housing Waiting List	
	North Fife	Fife Housing Register	
	Perth & Kinross	Common Housing Register	

Component	LA	Data Source	Comment
1.4 Support needs / adaptations	Angus	Council & RSL Waiting Lists	Choices of source depended on whether reliable data around the need for adaptations could be accessed locally. Three LAs totally discounted the need for adaptations. Angus Council reflected the Support needs / special forms of housing within this row and did not fully deduct the adaptations figure – presentational difference only.
	Dundee City	Scottish House Condition Survey	
	North Fife	Scottish House Condition Survey	
	Perth & Kinross	Common Housing Register	
1.5 Support needs / special forms of housing	Angus	Nil – see comment	Reflects those needing a special form of housing in three out of four LA areas – Angus figures shown in row above (see comment above). No affordability deductions were applied to this category.
	Dundee City	Specially adapted waiting list + LHS Community care requirements	
	North Fife	Fife Housing Register	
	Perth & Kinross	Common Housing Register	
1.6 Poor Quality	Angus	Council & RSL Waiting Lists	Choices of source depended on how the data was held locally. Dundee City and Fife totally discounted this figure as an in-situ solution. Angus and Perth & Kinross figures reflect that an in-situ solution cannot be provided in all cases.
	Dundee City	DCC PSSU / BTS properties	
	North Fife	Fife Private Sector Stock Condition Survey	
	Perth & Kinross	Common Housing Register	
1.7 Other categories	Angus	Council & RSL Waiting Lists	All LAs included a category of urgent housing need reflected on Waiting List or Common Housing Register at the point of assessment, ensuring no double-count with other need categories.
	Dundee City	Housing Waiting List	
	North Fife	Fife Housing Register	
	Perth & Kinross	Common Housing Register	

Note: DCC PSSU = Dundee City Council, Housing Department's Private Sector Services Unit and BTS = Below Tolerable Standard

#### Determining the net new build required to meet the backlog of housing need

4.17 Figure 4.2 (above) indicates that housing need impacts on 24,264 households in the TAYplan area, this comprising 2,508 households in Angus; 13,546 households in Dundee City; 4,191 households in North Fife (the part within TAYplan); and 4,019 households in Perth & Kinross. Whilst accepting that the calculation of gross needs in an area will have significant implications for Local Housing Strategies, the CHMA Tool requires the calculation of net need figures for calculating the new house building requirement. To achieve this, two forms of adjustment were made to the calculation of gross needs as set out below:

- **Netting off in-situ solutions**

4.18 The purpose of this calculation is to subtract all of those households for whom a solution can be delivered without the need to build a new home. This includes adaptations to properties that allow the occupant to remain where they are. This calculation also removed from the calculation households with support needs requiring an adaptation, the assumption being that these needs could be met through an appropriate adjustment to the existing home. Similarly, households living in dwellings in need of repair were, in many instances, considered capable of being provided with an in-situ solution.

- **Netting off those who can afford to meet their own needs in the market**

4.19 Once those households with issues that can be resolved in-situ have been netted off it is then necessary to understand how many of the remaining households could meet their own needs in the market. This calculation also helps to understand what proportions are not

capable of meeting their own needs in the market and therefore require a new build affordable home. This calculation involves considering CACI data for lowest quartile household incomes is examined with Registers of Scotland data for lowest quartile house prices. Both datasets are also used in Chapter 1: *Current Market* and in the CHMA's HNDA Tool (described in Chapter 2: *Future Market*). These datasets need to be considered against a mortgage and income multiple to understand how borrowing capacity based on CACI income would support achieve lowest quartile house prices based on Registers of Scotland data. This approach uses the lowest quartile because those in this particular group represent many of those who cannot meet their own needs at all or who have limited choices in the market. This is distinct from the population as a whole which is made up of people with a broader mix of market options.

**Which affordability calculation to use**

- A There are two possible income multiples that could be used to calculate this:
- i. **3.2 x income for a 75% loan** (equivalent to 4 x income for a 100% loan) – this is the default assumption contained in the CHMA's HNDA Tool (see Chapter 2: *Future Market*) and is applied to the whole population to split new homes into purchase, private rent, social rent and intermediate sectors. The affordability calculation provided within the CHMA Tool compares a point in price distribution to a point in income distribution based on sales prices for first-time buyers rather than mortgage levels. This broadly equates to a 75% mortgage with purchasers being able to borrow up to 3.2 times their income.
  - ii. **2.6 x income for an 80% loan** (equivalent to just over 3 x income for a 100% loan) – this is based on trends observed by the Council for Mortgage Lenders as stated in the *Scottish Housing Market Review: July 2013*.

B Both calculations were compared in Figure 4.6 below. Each calculation is identical except that the first has used the multiple of 3.2 x income for a 75% loan and the second has used the multiple 2.6 x income for an 80% loan.

**Figure 4.6: Affordability Calculation for Local Authority areas within the TAYplan region using multiple of:**

**Option A: 3.2 x income for an 75% mortgage**

	Angus	Dundee City	North Fife	Perth & Kinross
Households able to afford house purchase	51%	59%	50%	53%
Households unable to afford house purchase	49%	41%	50%	47%

Source: CACI and Registers of Scotland 2011 data based on a mortgage of 3.2 times household income with a 75% loan being provided against the lower quartile house price in each area © [1979]/ [1996] – 2015 CACI Limited. This report shall be used solely for academic, personal and/ or non-commercial purposes.

**Option B: 2.6 x income for an 80% mortgage**

	Angus	Dundee City	North Fife	Perth & Kinross
Households able to afford house purchase	45%	55%	38%	42%
Households unable to afford house purchase	55%	45%	62%	58%

Source: CACI and Registers of Scotland 2011 data based on a mortgage of 2.6 times household income with an 80% loan being provided against the lower quartile house price in each area © [1979]/ [1996] – 2015 CACI Limited. This report shall be used solely for academic, personal and/ or non-commercial purposes.

C It does not automatically follow that the calculation using Option A (3.2 x income for 75% income, above) should be used simply because this is the calculation used in the CHMA's HNDA Tool. The reason being that the group of people on council's housing

registers have a different and distinct socio-economic profile and housing market experience compared with the population as a whole. The 3.2 x income for a 75% loan is applied to the whole population by the CHMA's HNDA Tool.

D The *Scottish Housing Market Review: July 2013* section entitled *Mortgage Product Availability and Cost* explains that most lenders had shifted to a position of 80% loans by quarter 1 of 2013. Also the Government's Help to Buy Scheme offers up to a 20% stake in the value of a property. Collectively an 80% loan to value with a 20% mortgage guarantee from Government would cover 100% of the loan for a new property or appropriate arrangements for shared equity products. There is a strong likelihood that this maximum 20% guarantee by Government will be needed by those on lowest quartile incomes in order to purchase lowest quartile priced homes. This is because loan to value of 75% would leave a 5% funding gap between mortgage and Government Help to Buy (maximum 20% stake). Figure 4.7, below shows this and quantifies the amount of money represented by the 5% using lowest quartile house prices for each and shows this as a proportion of lowest quartile income. In all four councils the 5% gap would be equivalent to one third or more of lowest quartile household incomes.

**Figure 4.7: Examination of 5% funding gap**

	Lowest Quartile House Price	5% funding gap for Lowest Quartile House Prices	Lowest Quartile Household Income	% of Lowest Quartile Household Income Represented by 5%
Angus	£89,000	£4,450	£13,500	33%
Dundee City	£76,000	£3,800	£11,500	33%
North Fife	£126,000	£6,300	£14,500	43%
Perth & Kinross	£100,000	£5,000	£14,000	36%

**Source:** CACI household income data 2011 from Scottish Government Datapack and Lowest Quartile House Prices from Registers of Scotland © [1979]/ [1996] – 2015 CACI Limited. This report shall be used solely for academic, personal and/ or non-commercial purposes.

E. This shows for that those on lowest quartile incomes require at least the 80% loan to value with a 20% guarantee from Government to fund any purchase of lowest quartile house prices. This socio-economic profile is more typical of those on housing registers. Therefore an 80% loan to value is more representative of the typical experience for those presently on housing registers but capable of meeting their own needs in the purchase market. A 75% loan to value does not realistically represent the circumstances necessary to enable house purchase by this group unless they are able to save one third or more of their income as a deposit. Given the rising cost of living this is considered extremely unlikely to be a short term possibility.

F. The *Scottish Housing Market Review: July 2013* section entitled *Mortgage Product Availability and Cost* explains that at Scotland level during 2012, then the most recent position, the mortgage-to-income position was 2.6 times income for an 80% mortgage according to the Council for Mortgage Lenders.

G. Alongside the broader considerations of a more risk averse lending culture for sub-prime or near prime markets (compared with the last decade) the 2.6 x income for an 80% mortgage is considered to best reflect the practicalities of home purchase for those on housing registers. This appropriately captures the distinction between the socio-economic profile of this group compared with the broader population. It also justifies the choice not to use the 3.2 x income for a 75% mortgage applied to the whole population by the CHMA's HNDA Tool.

H. Therefore in order to discount those who can afford to meet their own needs in the housing market from gross backlog need only, set out in Figure 4.2 (above) this HNDA uses

an affordability calculation based on 2.6 times household income for an 80% loan against the lower quartile house price in each council area within the TAYplan region (as shown in Figure 4.6 – Option B above)

I. From an operational perspective this decision meant that this calculation for affordability took place outside of the CHMA's HNDA Tool. When the net backlog need figures were applied to the CHMA's HNDA Tool they were identical for each scenario and the CHMA's HNDA Tool affordability calculator was switched off to avoid double counting. This used data from the same sources as used within the CHMA's HNDA Tool. But the CHMA's HNDA Tool did apply the 3.2 x income for a 75% mortgage to newly arising need.

4.20 Figure 4.8 below shows the net need for new affordable housing as a result of netting of in-situ solutions to meet some of the needs identified in Figure 4.2 (above) and netting off those who can afford to meet their own needs using the results from the affordability calculation in Figure 4.6 for the 2.6 x income for an 80% loan. For clarity this affordability calculation was performed once, but Figure 4.8 (below) sets out the resultant change for each category to allow any comparisons to be made with Figure 4.2; which shows the gross calculation.

4.21 Figure 4.8 estimates that 6,728 households in the TAYplan region require some form of new affordable housing to resolve their current housing issues. At local authority level the net current need for new housing varies between 2,502 households in Perth & Kinross and 845 households in North Fife.

**Figure 4.8: Calculation of Net Current Housing Needs for Social Housing in the TAYplan region and by Local Authority area within the TAYplan region (31 March 2013)**

	TAYplan	Angus	Dundee City	North Fife	Perth & Kinross
<b>Gross housing needs</b>	<b>24,264</b>	<b>2,508</b>	<b>13,546</b>	<b>4,191</b>	<b>4,019</b>
Affordability adjustment / concealed households	1,859	648	916	86	208
Affordability adjustment / overcrowded households	810	78	265	159	308
Affordability adjustment / other categories	84	84	0	0	0
In-situ adjustment / adaptations	9,306	198	7,000	1,755	353
In-situ adjustment / poor quality	4,782	62	3,352	1,346	22
<b>Total Adjustments / Deductions</b>	<b>17,536</b>	<b>1,071</b>	<b>11,602</b>	<b>3,346</b>	<b>1,517</b>
<b>Net current housing needs requiring new build</b>	<b>6,728</b>	<b>1,437</b>	<b>1,944</b>	<b>845</b>	<b>2,502</b>

Source: TAYplan Authorities, 2013

4.22 In assessing the current housing need within TAYplan, the options considered by the constituent authorities included:

- **Method** - the use of the CHMA's HNDA Tool to assess those households currently in housing need or the development of an independent approach based on the HNDA Guidance 2008, with the latter being the preferred method, being more inclusive in reflecting local housing needs;
- **Affordability** – considering the characteristics of that need and the requirement for an affordability test to be applied to differentiate between those that who can / cannot afford their own housing solutions, the preferred method being to provide an affordability test independent of the CHMA's HNDA Tool;
- **Timescale** – the option being to adjust the timescale for clearing the net current need being the preferred approach.

## Stage 2: Future Housing Need

4.23 The approach to assessing the scale of future housing need addresses the following research question:

- **How many newly arising households are likely to be in housing need each year?**

4.24 The main calculation about future or newly arising housing need is performed using the CHMA's HNDA Tool. The tool outputs new house building figures for purchase, private rent, social rent and intermediate sectors. The social rent and intermediate sectors are considered to serve as a proxy for affordable housing or need. This approach was used for each of the scenarios described in Chapter 2: *Future Market* – these scenarios have been set out in the table below for ease:

Scenario 1	Default settings in the CHMA's HNDA tool but with net backlog need from Stage 1 above
Scenario 2	Scale of build in approved TAYplan (2012). No sector splits are set out.
Scenario 3	Anticipated Economic Future
Scenario 4	Better than Anticipated Economic Future
Scenario 4B	Better than Anticipated Economic Future – but with high migration variant
Scenario 5	Worse than Anticipated Economic Future

4.25 There are two ways to calculate future housing need (newly arising need) in the CHMA's HNDA – each gives the same answer. The first is to run the scenarios but to omit the backlog need figure calculated in stage 1. The second way is to run the scenarios including the calculation in stage 1 but to subtract this from the output for social rented and intermediate housing at the end.

4.26 Figure 4.9 (below) shows the total new build affordable housing need (social rent and intermediate housing) for 2012-32 for each of the 6 scenarios for each Council area within the TAYplan region and for the TAYplan region as a whole. Figure 4.9 excludes any backlog need for new affordable housing calculated from Stage 1 (above). This is because this stage is only concerned with affordable housing need associated with newly arising households for the period 2012-32.

4.27 There are no figures for Scenario 2 because this is a comparison scenario of the approved TAYplan (2012) Policy 5. This covers presently planned house building and does not set out affordable housing figures. The levels of sophistication offered by the CHMA's HNDA Tool were not available at that time and therefore there is no direct comparator.

**Figure 4.9: Total future affordable housing need (social rent and intermediate sectors) in TAYplan region and by Local Authority areas within the TAYplan region (2012-32) for Newly Arising Households (excludes Stage 1 backlog need for new affordable housing)**

	TAYplan	Angus	Dundee City	North Fife	Perth & Kinross
Scenario 1	18,478	2,491	4,139	2,219	9,629
Scenario 2	No sector splits were set out in the approved TAYplan (2012)				
Scenario 3	14,138	1,894	3,055	1,701	7,487
Scenario 4	13,701	1,806	2,959	1,572	7,364
Scenario 4B	15,850	1,686	4,393	1,921	7,851
Scenario 5	12,071	1,551	1,328	1,517	7,675

### Stage 3: Affordable Housing

4.28 The purpose of Stage 3 is to bring together the calculations for Stages 1 and 2 to show the total amount of new affordable housing (social and intermediate sectors) that needs to be built for each scenario that was run in the CHMA's HNDA Tool.

4.29 Figure 4.10 (below) combines the information shown in Figure 4.9 (above for Stage 2) with the net backlog need for new affordable housing identified in Stage 1 (Figure 4.8). This is also consistent with the sum of social rented and intermediate sector new homes for each scenario and area set out in Figure 4.11 (below). Figure 4.10 shows that the vast majority of need for new build affordable housing is as a result of net backlog need for new affordable housing.

**Figure 4.10: Total current need (net backlog need as at 31 March 2013) and future need (newly arising need) for new affordable housing (social rented and intermediate sectors) (2012-32) for each scenario in the TAYplan region and from each Local Authority area within the TAYplan region**

	TAYplan	Angus	Dundee City	North Fife	Perth & Kinross
Scenario 1	25,206	3,928	6,083	3,064	12,131
Scenario 2	No sector splits were set out in the approved TAYplan (2012)				
Scenario 3	20,866	3,331	4,999	2,546	9,989
Scenario 4	20,429	3,243	4,903	2,417	9,866
Scenario 4B	22,578	3,123	6,337	2,766	10,353
Scenario 5	18,799	2,988	3,272	2,362	10,177

4.30 Figure 4.11 shows the total net new build outputs (2012-32) for social rented and intermediate housing (affordable housing); privately rented and owner occupied housing (market housing) for each scenario using the CHMA's HNDA Tool. This is also displayed for the local authority areas within the TAYplan region and for the region itself. The social rented and intermediate figures for each scenario can be added together to correspond with the appropriate scenario and geography in Figure 4.10 (above). These outputs are discussed in more detail in Chapter 5: *Joining Up the Evidence Across the Assessment*.

**Figure 4.11: Total new house building (2012-32) for all sectors for each scenario and for each local authority area within the TAYplan region and for the region as a whole**

Sector	TAYplan	Angus	Dundee City	North Fife	Perth & Kinross
<b>Scenario 1</b>					
Social rented	17,318	2,866	4,162	2,160	8,130
Intermediate	7,887	1,062	1,920	904	4,001
Private rented	11,380	1,305	1,394	1,994	6,688
Owner occupied	13,049	1,839	3,220	1,640	6,350
<b>Total</b>	<b>49,634</b>	<b>7,072</b>	<b>10,696</b>	<b>6,697</b>	<b>25,169</b>
<b>Scenario 2</b>					
Social rented	Scenario 2 represents the present position in approved TAYplan (2012). At this time there was no breakdown for social rent, intermediate, private rent and owner occupation. The affordable housing targets and thresholds were to be covered locally.				
Intermediate					
Private rented					
Owner occupied					
<b>Total</b>	<b>43,600</b>	<b>6,600</b>	<b>12,200</b>	<b>6,600</b>	<b>18,200</b>
<b>Scenario 3</b>					
Social rented	14,418	2,483	3,433	1,839	6,663
Intermediate	6,448	848	1,566	708	3,327
Private rented	10,938	1,251	1,220	1,813	6,654
Owner occupied	12,290	1,700	2,727	1,527	6,335
<b>Total</b>	<b>44,093</b>	<b>6,282</b>	<b>8,947</b>	<b>5,887</b>	<b>22,978</b>

Scenario 4					
Social rented	13,767	2,369	3,224	1,693	6,480
Intermediate	6,663	874	1,679	723	3,387
Private rented	12,658	1,500	1,484	2,123	7,552
Owner occupied	11,006	1,539	2,560	1,347	5,560
<b>Total</b>	<b>44,093</b>	<b>6,282</b>	<b>8,947</b>	<b>5,887</b>	<b>22,978</b>
Scenario 4B					
Social rented	13,346	1,138	3,841	1,882	6,486
Intermediate	9,232	1,985	2,496	884	3,867
Private rented	15,673	2,014	2,230	2,620	8,808
Owner occupied	19,551	7,796	3,799	1,653	6,303
<b>Total</b>	<b>57,802</b>	<b>12,933</b>	<b>12,366</b>	<b>7,039</b>	<b>25,464</b>
Scenario 5					
Social rented	14,222	2,390	2,617	1,845	7,370
Intermediate	4,577	598	656	517	2,807
Private rented	7,636	791	577	1,234	5,035
Owner occupied	8,160	1,103	1,199	1,024	4,834
<b>Total</b>	<b>34,596</b>	<b>4,882</b>	<b>5,049</b>	<b>4,620</b>	<b>20,045</b>

Note: Where rows and column do not total this is due to rounding

4.31 It will be for Local Housing Strategies to consider what portion of this need for new build affordable housing (social rented and intermediate) can be accommodated by proposals currently being funded, although not yet built, through programmes like SHIP. Historically some HNDAs have factored such considerations into their calculations. However, discussions with the Centre for Housing Market Analysis suggested that this had presented some operational issues in practice, particularly where such schemes had been later withdrawn or changed as this then had an impact on the HNDA conclusions. For this reason it was advised that such calculations be considered at Local Housing Strategy stage instead.

## Summary

4.32 The approach set out in stage 1 considers a broad range of factors to determine current housing need. This offers a single and consistent evidence base to input current net back log for new build housing into the CHMA's HNDA Tool and also to consider in-situ solutions and adaptations that will need to be considered as part of the Local Housing Strategy.

4.33 This has been prepared, as much as possible, to be consistent across all four council areas within the TAYplan region recognising that housing waiting lists have varying levels of sophistication. It also considers the need for a consistent point in time for data across the region and the ability to access sub-local authority data to construct North Fife in particular. The approach used is considered to appropriately balance the geographical and time series requirements with consistency of data and useable outputs.

4.34 Stages 2 and 3 are now carried out entirely within the CHMA's HNDA Tool which brings consistency of approach for all scenarios and geographies. For both Stage 2 and 3 the affordable housing is made up of social rented and intermediate housing which serve as a proxy of affordable housing need.

4.35 Stage 2 shows the need for new affordable housing from newly arising households based on social rented and intermediate sectors. This excludes the net backlog need for new affordable homes in Stage 1. Stage 3 adds together stages 1 and 2 to show the total amount of new affordable housing needed for both backlog need and newly arising households for the period 2012-32.

4.36 In each scenario the vast majority of new affordable housing need comes from current (or backlog) housing need.