

Asfordby – neighbourhood planning - housing requirements, type/size mix, and need for Affordable Housing

1 Background and methodology

As part of the evidence base for the Asfordby parish local neighbourhood plan, this research explores and interprets detailed data from various sources, using models developed in SHMAs and similar projects, to estimate:-

- the overall requirement for housing in the parish over the next 20 years or so,
- the estimated best mix of types, sizes, tenures and
- the Affordable Housing with capital subsidy required to meet the demographic demand and needs in Asfordby for the next ten to twenty years.

This is inevitably an imprecise exercise, albeit fully based on the available evidence and data, with various possible future scenarios which require different assumptions to model.

The methodology is to compare data on household types and ages, or 'lifestages', from the 2011 Census and in the CLG 2011 based household projections and interpret these to give an estimate of the increase in number of households in the parish, as well as the 'optimum' mix of housing required to best fit this projected future demographic profile. This can then be compared with the actual existing stock in Asfordby parish to see where the proportions of different types and sizes may need to be adjusted.

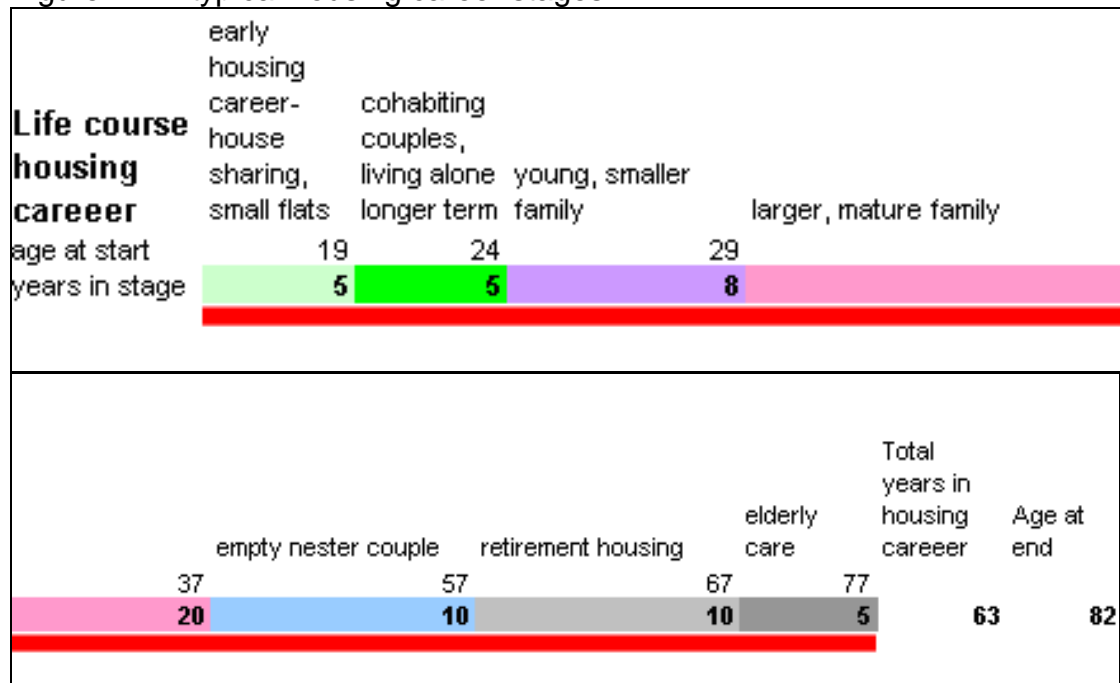
This means using assumptions of what types and sizes of accommodation will be suitable for, and acceptable to, various different 'lifestages' For example it assumes that families with children will require family houses with sufficient bedrooms, while young childless couples will need a one bedroom flat, or perhaps shared housing with their own bedroom, as a minimum. These could be varied according to local perceptions, policies and preferences, and are set out in the table below.

Table 1. – lifestages and accommodation types –typical optimum fit

general accommodation type	suitable and affordable for, and acceptable to	housing 'career stage'
1bed flats, shared housing	mainly younger single or couple households at the start of housing pathway	1
2 bed upsizing flats	childless couples or older singles	2
2 bed houses	couples, smaller families, single parents, singles with child access and frequent visitors	2 and/or 3
3 bed houses & larger	typical families with children	2, 3, 4
3 bed flats/cluster	young people/students sharing at start of housing career, students, extended older families, non traditional household groups	1, 5, etc
2 bed downsizing houses, flats, bungalows	younger old empty nesters, downsizers	5
1 /2 bed elderly/care	older frail elderly singles	6

This reflects a typical 'housing career' which many, but not all, households tend to go through.

Figure 2. – typical housing career stages



However, many household tend to 'over-consume' housing, especially when they can afford it – having a big house is an accepted sign of wealth – or when they have 'needed' it in the past but no longer do so – some 70% of 'empty nesters' aged over 55 have at two bedrooms or more 'spare'. This

can be incorporated into the modelling as a additional variable, although data and evidence to identify the level of over-consumption to apply is not easily available, and likely to change with economic circumstances.

Whatever the result steering the stock profile towards a better fit will necessarily be a slow and long term process. New stock typically adds less than 1% a year to the overall stock totals, and in a village it may be considerably less than this, or may occur in fits and starts with schemes several years apart.

1.1 Demographic and lifestage profiles - comparison of Asfordby with Melton

Using data from the 2011 Census Household Lifestage (QS111EW) table mapped in a Geographical Information System (GIS) at Output Area level and selected as close to just the Asfordby parish as possible, and comparing this with Melton borough overall shows that the parish is fairly close to the overall profile. It has 2.3% more 25-34 year old households and 1.6% fewer households aged over 55. However the comparison will not be quite right because Output Area and parish geographies are not co-terminus, so the selected Output Area data covers a wider area around the parish.

Table 3. – comparison of Melton and Asfordby lifestage profiles

Lifestage	Melton total	% of total	Totals %	Asfordby	Asfordby %	Totals %	Difference
All Usual Residents 16 and Over	40816	100%		2699	100%		
16 to 24; Total	4832		12%	293		11%	
16 to 24; No Depndnt Children	2184	5%		145	5%		0.0%
16 to 24; Depndnt Children	2648	6%		148	5%		-1.0%
25 to 34; Total	5088		12%	398		15%	
25 to 34; No Depndnt Children	2842	7%		216	8%		1.0%
25 to 34; Youngest Depndnt Child 0 to 4	1748	4%		144	5%		1.1%
25 to 34; Youngest Depndnt Child 5 to 10	383	1%		26	1%		0.0%
25 to 34; Youngest Depndnt Child 11 to 15	83	0.2%		8	0.3%		0.1%
25 to 34; Youngest Depndnt Child 16 to 18	32	0.1%		4	0.1%		0.1%
35 to 54; Total	14915		37%	996		37%	
35 to 54; No Depndnt Children	7062	17%		509	19%		1.6%
35 to 54; Youngest Depndnt Child 0 to 4	1981	5%		121	4%		-0.4%
35 to 54; Youngest Depndnt Child 5 to 10	2443	6%		147	5%		-0.5%
35 to 54; Youngest Depndnt Child 11 to 15	2432	6%		156	6%		-0.2%
35 to 54; Youngest Depndnt Child 16 to 18	997	2%		63	2%		-0.1%
55 to 64; Total	7006		17%	458		17%	
55 to 64; One Person	1035	3%		64	2%		-0.2%
55 to 64; Two or More Person ; No Depndnt Child	5487	13%		373	14%		0.4%
55 to 64; Depndnt Children	484	1%		21	1%		-0.4%
65 to 74; Total	4951		12%	304		11%	
65 to 74; One Person	950	2%		55	2%		-0.3%
65 to 74; Two or More Person ; No Depndnt Child	3898	10%		242	9%		-0.6%
65 to 74; Depndnt Children	103	0.3%		7	0.3%		0.0%
75 and Over; Total	4024		10%	250		9%	
75 and Over; One Person	1742	4%		116	4%		0.0%
75 and Over; Two or More Person	2282	6%		134	5%		-0.6%
	40816	100%	100%	2699	100%	100%	

Source: 2011 Census Household Lifestage (QS111EW) table

The Council Tax band data shows that Asfordby ward has more band A and B properties than Melton overall, and fewer band D and larger homes. The small variations in household lifestages may reflect these differences in the housing stock of Asfordby, with fewer large houses more likely to be occupied by older and wealthier households.

Table 4. - Council Tax band comparison Asfordby and Melton overall

Council Tax band	Melton overall	Asfordby
A	16%	33%
B	30%	40%
C	17%	15%
D	15%	7%
E	10%	4%
F	6.0%	0.7%
G	4.1%	0.2%
H	0.4%	0.0%
U	0.0%	0.0%
Unallocated	0.0%	0.0%
No of dwellings	21,245	1,444

This is also reflected in house prices -in 2012/13 the average house price in Melton overall was £192,750 on 607 sales , while in Asfordby it was £171,000 on 38 sales – 11% lower – , although of course there will be variations by submarket throughout the borough, - even in Asfordby the centre has an average price of £125,000 in 2012/13, while Asfordby outer has an average price of £173,500.

1.2 Household Projections

The next step is to consider how the number, age, type and size of households will change over the coming years. Evidence on this is provided by *Household Projections*, which are trend-based estimates to indicate the number of additional households that would form if recent demographic trends continue. Household figures for local authority districts are derived by the Department for Communities and Local Government (DCLG) from the household projections model using sub-national population figures from the Office for National Statistics (ONS). The breakdown of the household projections into the detailed household types is given by a projection of headship rates from the 2001 and 2011 Census.

The projections are only available for whole local authority areas, so to apply them more locally to parishes such as Asfordby requires a little manipulation, such as application of weightings and variable factors, and evidence for this is what the lifestages profile set out above provides.

It should be emphasised that these are **trend** based, and so if trends change so would the outcomes of the projections. So if birth, death or migration rates change, this would be reflected in different numbers coming out of the projection models. These factors are difficult to forecast, but can perhaps be

anticipated to some extent based on the prevailing economic and social environment – for example there may be fewer migrant workers moving to an areas in recession. On the other hand, local people will still exist, form households and require housing even if the economy is less buoyant.

The latest set of household projections from DCLG are the 2011 based interim projections. They are interim because they were required more quickly by the government for their policy making to include 2011 Census findings¹. They only go up to 2021 , whereas the full projections go to 2033. These show a total number of households for Melton of some 23,500, compared to 21,700 in 2011, an increase of approaching 9%. For comparison, these figures are higher than the previous 2008 based household projections, which gave figures of 22,500 in 2021 and 20,900 in 2011².

While the totals are always imprecise and subject to changing factors, the trends in the mix of different types, sizes and ages of households are much more reliable, because they reflect the likely 'life course' of many households that already, or will probably, exist if typical life patterns shown in figure 2 above continue as they have done. This has been incorporated into a 'Household Projections and Current Market Position model' (HPCMP) , developed in Strategic Housing Market Assessments and similar projects.

The table below shows the mix as projected for 2021, derived by a cross tabulation of the detailed household projections. The colour coding is to show the general type/ages of households to indicate what sort of housing they may require.

Table 5. Projected household types and ages for Melton in 2021

Melton	2021									
household type \ age band >	15_24	25_34	35_44	45_54	55_59	60_64	65_74	75_84	85&	TOTAL
A couple and one or + other adults : 1 dependent child	3	25	13	83	130	7	1	0	0	262
A couple and one or + other adults: 2 dependent children	0	10	11	81	12	1	0	0	0	115
A couple and one or + other adults: 3+ dependent children	0	7	14	23	0	0	0	0	0	44
A couple and one or + other adults: No dependent children	23	90	9	383	297	453	322	49	0	1626
A lone parent and one or + other adults: 1 dependent child	5	42	33	70	0	0	0	0	0	150
A lone parent and one or + other adults: 2 dependent children	0	15	49	19	4	0	0	0	0	87
A lone parent and one or + other adults: 3+ dependent children	0	9	8	3	0	0	0	0	0	20
One family : Couple: 1 dependent child	27	411	520	614	163	19	22	14	0	1790
One family : Couple: 2 dependent children	7	183	1041	533	121	9	2	0	2	1898
One family : Couple:	0	38	287	115	5	0	0	0	0	445

¹For further explanation see:-

<https://www.gov.uk/household-projections-notes-and-definitions-for-data-analysts>

² The household projections are inevitably imprecise, so rounded figures are given, although the models produce spuriously accurate numbers.

3+ dependent children										
One family : Couple: No dependent children	17	373	417	1086	1314	1006	2343	779	161	7496
One family : Lone parent: 1 dependent child	170	248	132	181	34	0	0	25	0	790
One family : Lone parent: 2 dependent children	25	203	151	102	0	0	18	0	0	499
One family : Lone parent: 3+ dependent children	0	50	46	16	0	0	0	0	0	112
One person households: Female	59	290	174	569	354	223	924	1068	424	4085
One person households: Male	23	384	384	413	163	221	365	649	375	2977
Other households	65	101	37	81	50	40	125	325	300	1124
Totals	424	2479	3326	4372	2647	1979	4122	2909	1262	23520

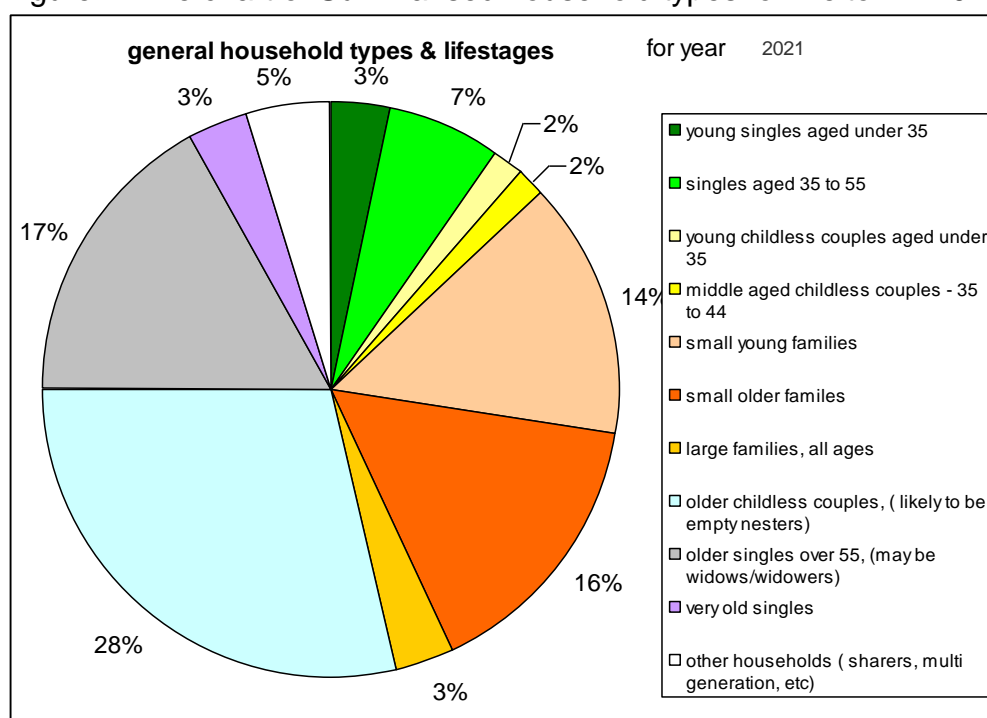
Source; CLG 2011 based household projections

This can then be condensed, albeit by applying some arbitrary distinctions, into more general household types and ages.

Table 6. Summarised household types

young singles aged under 35	756	3%
singles aged 35 to 55	1540	7%
young childless couples aged under 35	390	2%
middle aged childless couples - 35 to 44	417	2%
small young families	3361	14%
small older families	3654	16%
large families, all ages	823	3%
older childless couples, (likely to be empty nesters)	6689	28%
older singles over 55, (may be widows/widowers)	3967	17%
very old singles	799	3%
other households (sharers, multi generation, etc)	1124	5%

Figure 7. Pie chart of Summarised household types for Melton in 2021



It can be seen that large groups are of older childless couples and older singles over 55, who may be widows/widowers. Many of these may also be 'empty nesters', unless they have already downsized or moved into retirement housing. Close behind are small young and older families, who will generally require family houses. Other household types are each considerably lower proportions, though add up to almost 30% in total.

2 Estimated increase in number of households

Since the demographic profile of Asfordby is quite close to that of Melton overall, a pro rata distribution of the local authority level household projections should give a reasonable estimate of the parallel increase in the parish alone.

Table 8. Increase in number of households in Melton and pro rata for Asfordby 2011 to 2031

	2011	2016	2021	2026	2031	Total increase over 20 years
Melton all LA households	20863	21667	22541	23325	24032	3169
Melton increase		804	874	784	707	
% increase		3.7%	3.9%	3.4%	2.9%	15%
Asfordby households	1648	1709	1775	1835	1889	241
pro rata increase per year		12	13	12	11	15%
				increase/year		12.1

Source: CLG 2008 based household projections.

The later set of CLG 2011 based household projections only go to 2021, with the overall increase up to 2021 higher than for the 2008 based projections by nearly a thousand households, at around 23,500 compared to 22,500.

Table 9. – Melton LA - 2011 based CLG projections

	2011	2016	2021	Total increase
Melton	21532	22551	23518	
increase		1019	967	1986
% increase		4.7%	4.3%	9.2%

This suggests that on recent trends an additional 250 or so additional households would live in Asfordby by 2031, if, of course, it can accommodate them. This equates to just over 12 additional household per year, with a higher requirement in the earlier years of up to 15 a year based on the 2011 projections.

However it is clearly not the case that new or emerging households or those in housing need will simply move into new housing built in the parish, as this will depend on its type, size, cost –either to buy or rent - and hence its

affordability. For new housing supply to meet this projected demographic demand either it would need to be allocated according to some criteria of need, as for social and affordable housing rather than in the open market; and/or there would have to be some process of 'filtering down', by which households could move 'up the housing ladder' as these are vacated if others household move into the new homes.

CLG guidance now says : - *Market signals are affected by a number of economic factors, and plan makers should not attempt to estimate the precise impact of an increase in housing supply. Rather they should increase planned supply by an amount that, on reasonable assumptions and consistent with principles of sustainable development, could be expected to improve affordability, and monitor the response of the market over the plan period.*

There is little evidence as to how much and how fast any such process of filtering down to meet demographic housing demand and need does take place for current patterns and rates of new building. There is, however, evidence that new building in some localities does not meet this demand³, and the nature of much new building , especially on 'appeal sites' in attractive rural areas, has prompted concerns that it does not address the underlying nature of housing demand and need.

It is therefore important that the Parish Planning process also carefully considers what it should encourage or specify to be built within its area (considered in the next section); and monitors what is actually built, how it sells, who – in general terms – moves into it, and the overall effects on housing demand and need in the parish. This may require anonymised data on types, prices and sales from developers, and this could be included as part of the requirements of the Local Plan.

If, for example, new homes are mainly targeted at and sold to wealthy migrants from farther afield and have little effect on local households this could be a basis for reviewing the response of the market and steering it in another direction.

3 Optimum housing stock mix to meet the projected demographic profile

Deriving an 'optimum' mix to meet this profile then requires application of assumptions about what types of home will be suitable **and** acceptable to these different households. This is inevitably an imprecise and debateable process, which will be subject to inaccuracy because people will not necessarily live in the housing most 'suitable' for them, but will consume more housing if they can afford it or if they have it already. So attributing 'suitable' types of accommodation can only give a starting point from which to consider other influences and pressures.

³ <http://www.london.gov.uk/sites/default/files/Barriers%20to%20Housing%20Delivery.pdf> and <http://www.channel4.com/news/property-foreign-buyers-house-prices-speculation-tax>

The table below therefore attributes a property type and size which is likely to be suitable and acceptable to each household age and type. However the allocation already makes some allowance for the current market position of households by allowing 2 bedrooms for “younger old empty nesters and downsizers” because although this group may only ‘need’ one bedroom they are more likely to already be in family houses, and are unlikely to readily move to one bedroom homes, so two beds are a minimum

Figure 10. Typical housing type/sizes and lifestages

colour code	general accommodation type	suitable and affordable for, and acceptable to	housing career stage
	1bed flats, shared housing	mainly younger single or couple households at the start of housing pathway	1
	2 bed upsizing flats	childless couples or older singles	2
	2 bed houses	couples, smaller families, single parents, singles with child access and frequent visitors	2 and/or 3
	3 bed houses & larger	typical families with children	2, 3, 4
	3 bed flats/cluster	young people/students sharing at start of housing career, students, extended older families, non traditional household groups	1, 5, etc
	2 bed downsizing houses, flats, bungalows	younger old empty nesters, downsizers	5
	1 /2 bed elderly/care	older frail elderly singles	6

The colour coding links to the table above, and so begins to provide the basis on which to estimate the optimum stock profile.

If this ‘optimum’ fit were to apply, the future housing requirement would be something like:-

Figure 11. – summary type/sizes required for optimum fit of households & stock

shared housing	0%
upsizing houses, flats	15%
family housing	44%
downsizer houses, bungalows, apartments/Elderly Persons	32%
with care	4%
other	5%

However such an optimum is unrealistic, because we must start from the unequal distribution of housing that exists, not some idealised omnipotent

egalitarian position. One of the most important of these realities is intergenerational housing differences, in that the older 'baby boomer' generation, - now at or approaching retirement age -, were able to buy houses in the 70's and 80's which they have typically lived in for 20+ years, own outright, and have seen increase in value dramatically.

These households are at the top of the housing ladder, and tend to stay there. Evidence⁴ shows that they are less inclined to move than other types of household – about 2-3% of households aged over 55 move each year, compared to an overall average of about 10% + , or more for younger households in city areas.

The model therefore makes an allowance for older empty nester households not downsizing, but staying to under-occupy their erstwhile family houses – in which case more family houses will be needed to replace those that do not become available for the families that will emerge. This is done by a variable downsizing factor, which is set, up to 2021, based on between 2 - 3% of older household downsizing each year, so $10 \times 2.5\% = 25\%$ in total. When this factor is applied, the optimum profile becomes:-

Figure 12. – aspiration adjusted summary type/sizes required for best fit of households & stock

shared housing	0%
upsizing houses, flats	15%
family housing	68%
downsizer houses, bungalows,apartments/EP	8%
with care	4%
other	5%

This is still for Melton overall, so for Asfordby needs to be adjusted a little to allow for the slightly different demographic profile.

Figure 13. – Asfordby & Melton – differences in household lifestages profile

relative accommodation types required	Melton overall		Asfordby		Difference for Asfordby
shared housing					
small starter flats, shared housing	2184	5.4%	145	5.4%	0.0%
upsizing houses, flats	2842	7.0%	216	8.0%	1.0%
family housing	20396	50.0%	1354	50.2%	0.2%
downsizer houses, bungalows,apartments/EP	13652	33.4%	868	32.2%	-1.3%
with care	1742	4.3%	116	4.3%	0.0%
other					

4

<http://www.npi.org.uk/files/New%20Policy%20Institute/Housing%20for%20older%20people%20-%20Choice,%20Quality%20of%20Life,%20and%20Under-Occupation.pdf>

This makes barely any difference, and certainly not a significant one in view of the other uncertainties in the process.

Figure 14. – Asfordby adjusted summary type/sizes required for optimum fit of households & stock

Summary	Melton	Asfordby difference	Asfordby optimum profile
shared housing	0.0%		0.0%
upsizing houses, flats	15.4%	0.0%	15.4%
family housing	67.7%	1.0%	68.4%
downsizer houses, bungalows, apartments/EP	8.1%	0.2%	8.1%
with care	4.1%	-1.3%	4.0%
other	4.8%	0.0%	4.8%

There is another adjustment for reality that can be applied, which is that many households will want homes larger than they 'need', if they can afford or obtain it. This is readily shown by housing consumption patterns of rich households, who invariably live in large, or numerous, homes – indeed it is a hallmark of wealth.

This factor can be incorporated by allowing a proportion of each accommodation type requirement to consume more housing than it 'needs', which gives more larger homes. However finding data and evidence to quantify this is not easy. There is data to suggest that as many households aged under 55 under-occupy as those over 55, but their more specific circumstances will be more variable than those in the empty nester lifestage.

Figure 15. – Asfordby specific aspiration adjusted summary type/sizes required for best fit of households & stock

aspiration adjusted mix	proportion of that element of demographic demand with 1 bedroom extra	proportion of overall mix	
bedsize 'entities'			
1 beds	10%	5%	
2 beds	25%	29%	includes downsizing homes
3 beds	10%	52%	
4 beds	10%	13%	
5 beds	0%	2%	

3.1 Applying the housing mix in practice

This optimum mix should then apply to the **whole** of the stock in Asfordby, **not** just new housing. So the 'direction of travel' for planning should also depend on the mix of the existing stock, and if a particular type /size of housing is in short supply then this is what planning policies should aim to encourage.

Data on the existing stock⁵ is now available from the Valuation Office Agency, which sets Council Tax bands. This is provided at a fairly detailed Lower Super Output Area (LSOA) level – averaging about 800 households -, so the profile more or less specifically for Asfordby can be obtained, although LSOAs do not fully match parish boundaries. Melton Mowbray town is shown for comparison.

Table 16. existing stock type/size mix in Asfordby 2012

Property type	Asfordby	Asfordby % of total	Melton town	Melton town % of total	Summary type/size	Totals	% of type/size
Bungalow1	50	3.2%	30	0.2%	Asfordby		
Bungalow2	100	6.4%	730	6.1%			
Bungalow3	20	1.3%	470	3.9%	1 bedroom	90	6%
BungalowZ	0	0.0%	-	0.0%	2 bedrooms	420	27%
Flat_Mais1	40	2.6%	750	6.2%	3 bedrooms	930	60%
Flat_Mais2	40	2.6%	430	3.6%	4 bedrooms	110	7%
Flat_Mais3	0	0.0%	70	0.6%	Z- other /unknown	10	1%
Flat_MaisZ	0	0.0%	10	0.1%	total	1560	100%
House_Terraced1	0	0.0%	90	0.7%			
House_Terraced2	190	12.2%	860	7.2%	bungalows	170	11%
House_Terraced3	150	9.6%	1,760	14.7%	flat/maisonette	80	5%
House_TerracedZ	0	0.0%	-	0.0%	terraced house	340	22%
House_Semi1	0	0.0%	-	0.0%	semi detached	690	44%
House_Semi2	80	5.1%	510	4.2%	detached	270	17%
House_Semi3	580	37.2%	3,260	27.1%	unknown	10	1%
House_Semi4	30	1.9%	180	1.5%	total	1560	100%
House_SemiZ	0	0.0%	-	0.0%			
House_Detached1	0	0.0%	-	0.0%			

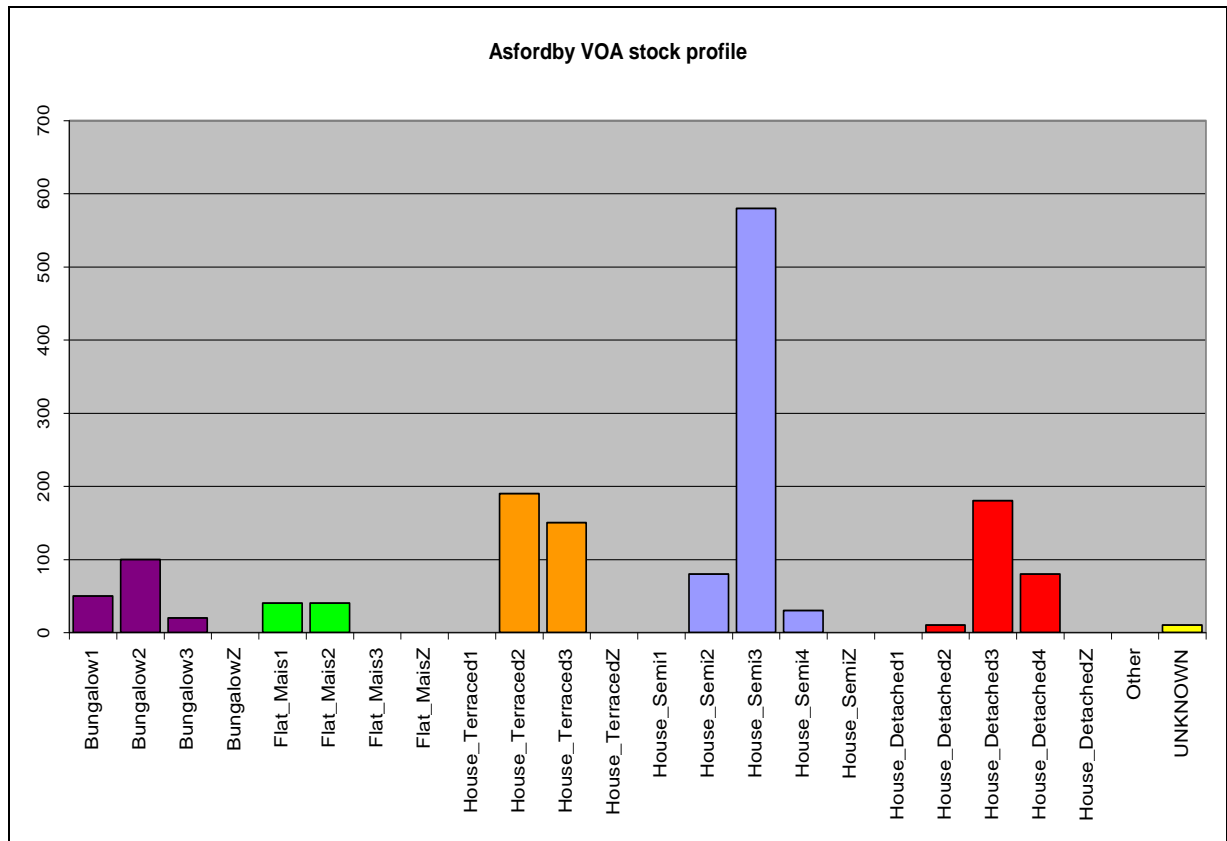
⁵ <http://www.voa.gov.uk/corporate/statisticalReleases/120927-CouncilTaxPropertyAttributes.html>

House_Detached2	10	0.6%	60	0.5%
House_Detached3	180	11.5%	1,230	10.2%
House_Detached4	80	5.1%	1,490	12.4%
House_DetachedZ	0	0.0%	-	0.0%
Other	0	0.0%	40	0.3%
UNKNOWN	10	0.6%	40	0.3%
total stock	1560	100.0%	12,010	100.0%

Source: Valuation Office Agency

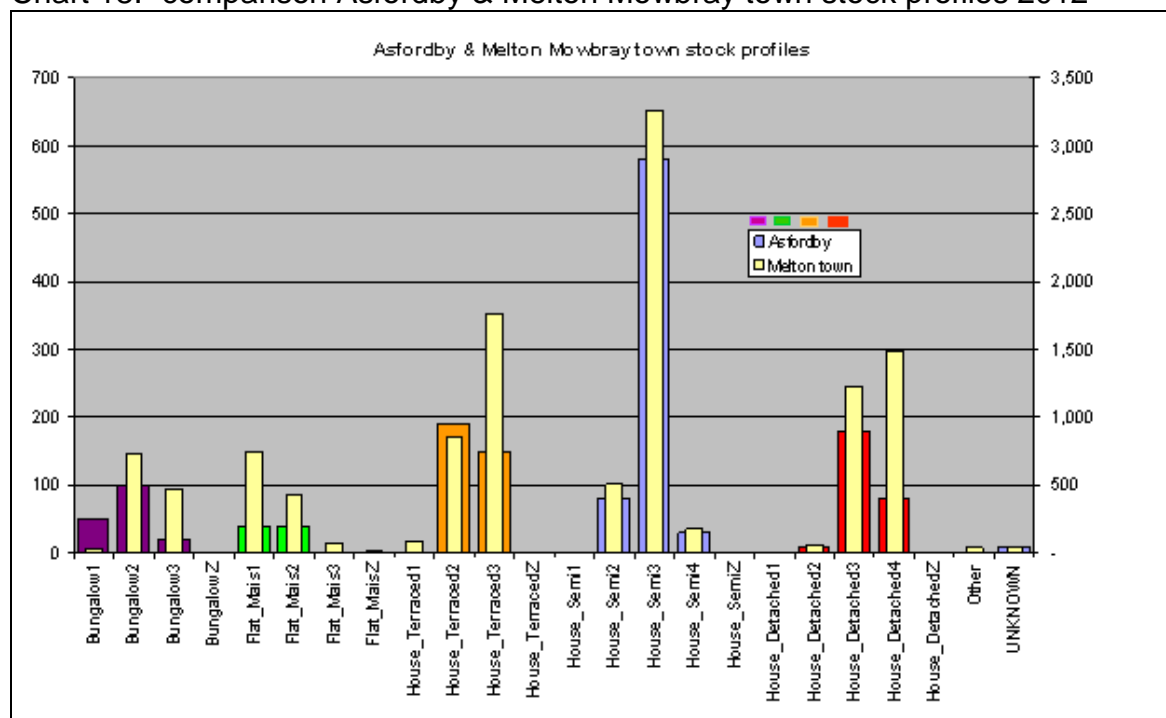
This is easier to understand as a chart. The data can also be seen in map form at <http://hi4em.derby.gov.uk/Web/Hi4em%20Maps/VOA.aspx>.

Chart 17.- existing stock type/size mix in Asfordby 2012



It can be seen that 3 bed semi detached houses are the most common housing type at 37% of the total, with 3 bed detached houses another 11.5%, totalling almost half the stock. Terraced 3 beds are another 10%, making the total of 3 bed houses some 60%. The profile is shown compared to Melton Mowbray town in the chart below

Chart 18.- comparison Asfordby & Melton Mowbray town stock profiles 2012



3.2 Who lives in what housing

To estimate the sort of mix required to house the future population of Asfordby then requires some knowledge of what households currently live in. It cannot be assumed that they occupy the most appropriate housing for their circumstances – indeed it is likely that many will not, due to timing, age and wealth differences.

Census data is aggregated to avoid disclosure of personal information, and the smallest scale at which it is available is Output Area, each about 125 households. So it is not possible to see from this data who actually lives in what types and sizes of home, but the data does allow a general and aggregated interpretation.

Table 19.– occupancy levels in Asfordby and Melton Mowbray town

All Households	+2 or More	1	0	-1	-2 or Less	total
Asfordby	847	312	180	27	6	1372
	62%	23%	13%	2%	0%	
Melton town	5666	2026	1422	402	108	9624
	59%	21%	15%	4%	1%	

3.3 Summary – type and size mix

The generalised overall ‘optimum’ projected mix for the whole of housing stock Asfordby in 2021 derived by this method of using the likely future demographics derived from household projections, and linked with likely current market positions of existing residents, is broadly:-

Figure 20. – Asfordby specific aspiration adjusted summary type/sizes required for best fit of households & stock

aspiration adjusted mix	proportion of that element of demographic demand with 1 bedroom extra	proportion of overall mix	
bedsize 'entities'			
1 beds	10%	5%	
2 beds	25%	29%	includes downsizing homes
3 beds	10%	52%	
4 beds	10%	13%	
5 beds	0%	2%	

However how this mix could and should be reached starting from the current stock mix, and how the available housing is distributed and 'consumed' by residents will depend on many other complex local and difficult to predict behaviour patterns and other variables, such as general economic circumstances, house and land price movements, development viability, mortgage availability and interest rates.

The best this kind of data based assessment can offer is as an evidence base for judgments which are also informed by local knowledge. They cannot give precise or definitive answers to what should be built or encouraged in local neighbourhood plans, but can provide a better, - if still complex and uncertain - , understanding of the future direction of travel of housing in the parish which would best meet future demographic, market and housing needs pressures.

4 Need for Affordable Housing

The need for affordable housing in the parish has been assessed has been estimated using a version of the 'Bramley' model, which has been used in SHMAs and tested at various Core Strategy Examinations in Public, including Leicester, Hinckley & Bosworth, Oadby & Wigston, Harborough, and others.

This model does not attempt to include all the detailed interactions of the housing market, or to cover all aspects of need. It is essentially a stylised, systematised and simplified model, which takes account of the major factors influencing housing need using reasonably readily available and consistent bulk or compiled secondary data. In essence it considers various key components to model and justify a minimum level of housing need.

However it is relatively simple to follow and understand, and can be modified easily and calibrated to capture differences between areas, and versions of it can be applied at different spatial scales, with appropriate data and caveats. It can be rerun periodically when new data becomes available, as here. It also enables visualisation of the effects of changes in input assumptions on housing need, and hence helps to give a better understanding of the market and interactions

The basic format of the model is:-

Figure 4:1 Bramley Affordability Model

The basic model for estimating affordable housing need is:-	
Net Need (units per year)	=
Gross Household Formation x % aged under 35 unable to buy (adj for wealth)	
+ proportion (33%) x net migration (household equiv) x % <35 unable to buy	
+ proportion (0.234%) x owner occupier households (moving to social renting)	
+ proportion of backlog to be housed per year, (e.g. 10% over 10 years, 20% over 5 years) x waiting list 'backlog' above need threshold	
Supply	
'- net relets of social rented housing and Intermediate sales	
-Does not cover all aspects of need - e.g. homelessness, transient and transitional need, non trend in-migration, ..	

For current housing market circumstances the model has been adapted to make allowance for more difficult to obtain mortgages. The credit crunch of 2008 and a continuing tighter lending regime, despite government efforts and incentives, have meant that mortgages have become harder to obtain, and fell nationally from an average of over a million loans a year from 1998 to 2007, to less than half a million in 2008. It has improved a little since but not to anywhere like the previous levels. This addition was incorporated into the needs model by adding a function to adjust the number who, though they could afford to buy on the basis of household income and entry level prices,

were now less likely to be able to get a mortgage. This seeks to capture the effect that even though entry level house prices may have fallen to some extent, First Time Buyers still cannot afford them because they cannot get mortgages without larger deposits.

The model requires various data inputs , shown in the following tables:-

Figure 21. Affordable housing need estimates - model

Inputs - Needs	
lower quartile entry level price	£ 117,250
deposit	10%
balance to fund	90%
income: mortgage multiplier	3.5
Policy period	5
<i>resources from other sources</i>	10%
Backlog need – pro rata of Housing register	59
factor for owners falling into need	0.020%
all owner occupiers with mortgage	544
net in-migration	0

Outputs - Needs	
emerging households	16
percentage unable to afford	51.6%
unable to afford on income	8
proportion now unable to obtain mortgage	51.1%
unable to get mortgage in current circumstances	4
unable to afford or get mortgage	13
need from emergers adjusted for resources from other sources	11
backlog need per year over policy period	12
owners falling into need	0
in migration additional need	
Total Annual Need	23

LQ entry level multiplier	70%
modified entry level	£ 82,075
cannot afford at modified entry level	37.0%
possible need for Intermediate of all new affordable provided	28%

if substantial proportion on benefits Intermediate inappropriate

<i>Input - Supply Side</i>	
All affordable lettings gross LA & RSL	17
Transfers & exchanges not meeting new need	
Net Lettings	17
Net Intermediate Sales	
Current rate of new affordable supply RSL new lets, sales, rent to buy	
Net Supply	17

Net shortfall per year	6
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The net result based on these inputs is for a requirement for an additional six affordable units a year. However this does depend on judgements on some inputs for which the data for a small settlement such as Asfordby is either almost impossible to obtain, - like resources from other sources such as parental assistance with deposits; or very variable, - such as supply of affordable lets. If these figures alter the effect on the net need can be quite substantial.

It is also the case with smaller areas that housing, - either affordable or market - , will not come along at a regular annual rate, but rather will be developed and provided in batches as sites and opportunities become available and are progressed through the relevant systems and obstacles to deliver. So needs or demand may be met in full or even slightly exceeded for a period by intermittent peaks of supply, but will then build up again to absorb the new provision. Local knowledge should enable neighbourhood plans to monitor this and be flexible enough to anticipate and cope with the unevenness of delivery.