Planning Pembrokeshire's Future
Local Development Plan

Cynllunio Dyfodol Sir Benfro
Cynllun Datblygu Lleol

Population, Household and Labour Force Projections

Development Plans

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LOCAL DEVELOPMENT PLAN: POPULATION, HOUSEHOLD AND LABOUR FORCE PROJECTIONS

PREFACE

This report was commissioned by the Development Planning Division of Pembrokeshire County Council to contribute to the evidence base of their emerging Local Development Plan. Besides giving a detailed explanation of the methodology used to produce the three types of projections prepared – population, household and labour force, there is also a description of the results as they relate to Pembrokeshire as a whole, the area of Pembrokeshire Coast National Park, and the area of the county outside the National Park.

LOCAL DEVELOPMENT PLAN: POPULATION, HOUSEHOLD AND LABOUR FORCE PROJECTIONS

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EXECUTIVE SUMMARY

These projections have been developed using standard demographic methods and utilised data from government agencies, particularly the Office for National Statistics. Table 1 summarises the results for the census based projection, which assumed continuation of recent trends of population change in respect of migration, births, fertility and mortality

Table 1: Population, Household and Labour Projections 2001 – 2021

Area	2001	2006	2011	2016	2021	% Change 2001-21
Pembrokeshire						
Population	114,138	117,411	119,591	122,112	124,587	+ 9.2
Households	47,319	49,437	51,337	53,639	55,841	+18.0
Labour Force	48,260	50,550	52,655	54,220	55,075	+14.1
PCNP						
Population	22,537	22,064	21,519	21,079	20,649	-8.4
Households	9,845	9,832	9,768	9,788	9,785	-0.6
Labour Force	9,640	9,635	9,460	9,200	8,825	-8.5
County Outside Park						
Population	91,601	95,347	98,073	101,033	103,938	+13.5
Households	37,474	39,605	41,569	43,851	46,057	+22.9
Labour Force	38,620	40,920	43,200	45,015	46,245	+17.8

The detailed commentary of this report makes the following main conclusions:

1. If recent levels of birth, death and migration rates continue the population of Pembrokeshire is projected to increase by 9% between 2001 and 2021, although this increase will not occur uniformly across the county as the population of Pembrokeshire Coast National Park (PCNP) is projected to decline by 8%, whilst the remaining area of the County will increase by 13.5%.

2. The resident population will become increasingly elderly, with 27% of the total for Pembrokeshire being aged over 65 in 2026. In PCNP this age grouping will make up a larger proportion (32%) of the population whilst in the remainder of the County it will be less (25%).

3. The age composition of migration is a key driver of the aging process as is the fact that people will be living longer. Recent trends indicate that overall the number of residents moving into Pembrokeshire exceeds those moving out by 790 persons, but out-migration of those of child bearing ages exceeds in-migration in these age groups. This is particularly evident in the National Park, where resident flows into and out of the area are very similar, except for those aged 15-34 who are decreasing by approximately 100 per annum.

4. The projected increase in the number of households in the County is much greater than for population. This is due to the decrease in average household size caused mainly by an increase in one person households. Even in PCNP there is a projected increase of 8% in the number of one person households, although in the remainder of the County the increase is expected to be four times as great (35%).

5. The projected changes in household composition suggests that over the fifteen year period from 2006 the County will require a housing completion rate of approximately 360 per annum.

6. The labour force projection results depicted in Table 1 incorporate modest annual increases in the economic activity rates for age groups aged 16+ over the twenty year period to 2021. Pembrokeshire's workforce is estimated to grow by a seventh to 55,100. The predicted aging structure within PCNP would result, over the period, in the labour force falling by 815 or 8.5%. In the remaining area of the County predicted increases in activity would result in an additional 7625 workers, an increase of 17.8%.

7. Alternatively, should existing economically active rates remain constant throughout the period to 2021 then the County labour force would increase by just 1,300 or 2.7%. The decline in the PCNP population, together with its ageing during the period, would cause a dramatic fall of 17.6% or 1,700 workers. In the remainder of the County there would be an increase of 3,000 in the labour force (+7.85%)

LOCAL DEVELOPMENT PLAN: POPULATION, HOUSEHOLD AND LABOUR FORCE PROJECTIONS

INTRODUCTION

The Projections

Population, labour force and household projections have become increasingly important as a planning tool for local government services. They are used to provide an insight into what the demography of an area “might be like” in the future. At a strategic level, changes in population, the labour force and housing requirements need to be considered to make decisions and formulate policy to provide for future service need.

Information on population underpins any attempt at strategic or local planning in that many of the key issues that need to be addressed at these levels stem directly or indirectly from the size and distribution of an area’s population or will impact upon it. Most of the policies that will form the central core of the Local Development Plan/s for Pembrokeshire will relate to new land uses, changes in land use, or provision of services, which are all closely influenced by the level of population, together with its age, sex and socio-economic characteristics. For example the demand for housing, the supply of labour, the provision of health, education, transport, recreational and shopping facilities, are all closely related to the County’s future population, its composition and distribution. Decisions about land uses and the provision of roads, houses, schools and many other basic facilities will need to be informed by some view of the future, despite the inevitable uncertainties. Estimates of future population are therefore fundamental for LDP purposes in assessing how much additional land must be made available for housing, employment and other significant uses.

However, all projections must be treated with caution and provided with caveats highlighting the assumptions used in their production and limitations for their use. Population projections are only a 'best guess' at what may happen given the data and information available at the time. At best they provide us with an indication of the likely direction of growth by age group over the coming years. They are more likely to reflect reality in the near future but this reduces the longer the period in question extends.

It is also important to remember that these projections do not reflect potential constraints to population growth over the next 15 years. An example of this might be the size of the housing stock. Currently the average household size in Pembrokeshire is approximately 2.34, whilst within the area of the Pembrokeshire Coast National Park it is estimated to be lower at 2.21. Population size depends in part on the availability of housing stock and if housing is available population has more capacity to grow. If housing stock is constrained (for example if we assume that growth in household stock cannot continue at the same rate as today indefinitely) population will not have the same capacity to grow. In addition there are factors and trends, other than the demographic that need to be assessed for their potential implications e.g. more people are living alone through choice following the breakdown of their marriage or death of a partner, which will have an effect on reducing household

sizes.

Trend based assumptions assume that past patterns will continue indefinitely into the future. This is not realistic over the longer term as trends do change. For this reason population projections need to be revisited at least every 5 years to reflect actual changes in migration, fertility and mortality trends.

Purpose of Technical Paper

The purpose of this paper is to set out the background to the preparation of population and household projections for:

- Pembrokeshire County
- Pembrokeshire Coast National Park
- Pembrokeshire Outside the Pembrokeshire Coast National Park

This paper relates, to a description of the methodology for these projections that are trend based. Consequently they do not take into account the effects of local or central government policies on future population distribution and change. The results have to be used and interpreted with particular care, recognising that they are merely illustrative of what the future level of population would be if past trends were to be maintained and not reflective of policy aspirations.

The projections, which cover the fifteen year period to 2021 are based on various assumptions about fertility, mortality and migration. Clearly, if any of the assumptions prove to be incorrect then so will the projections. A particular difficulty in population projection work is making reasonable estimates of migration, principally because of a lack of such data. This is especially significant since net migration is a key component of population change generally and for most authorities within Wales.

These projections will provide a bench-mark against which the consequences of strategic policy alternatives can be measured. The projection model can look at the population implications of various long-term scenarios illustrating possible future situations in the area, since, as noted above, the model allows for the ready variation in assumptions regarding fertility, mortality and migration. The assumptions underlying such scenarios will have to be generated as part of the plan-making process, and will of course have to stand up to scrutiny at any public examination of the Local Development Plans.

This paper is divided into three parts, each one being a description of a distinct part of the projection process. Firstly there is a detailed description of the components of the population projection and the part they play in the process. This is followed by a section devoted to showing how the population projections were translated into the number and types of households which will make up the County during the period 2006 - 2021. The last section describes how an estimate of the total number of dwellings that will be required for the period was derived.

THE RESULTS

This section of the report gives a detailed commentary of the population, household and labour force projections for each of the three areas for which they were prepared. The detailed statistical output is contained in the appendices at the back of the document.

PEMBROKESHIRE COUNTY

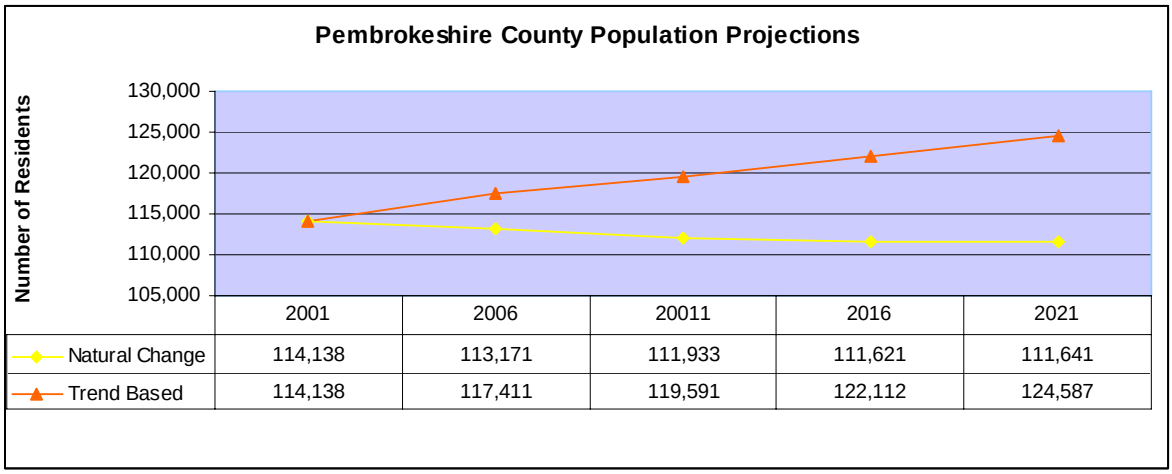
POPULATION PROJECTIONS

Total Population

Figure 1 shows that the natural growth of population in Pembrokeshire is declining. At the current rate, the County is set to lose approximately 1,500 of its population over the next fifteen years as the number of deaths is projected to slightly exceed births by about 100 per annum.

Net migration, however, will increase the population and the growth is forecast to be moderate. If current trends of natural change and migration continue i.e trend-based scenario, the total population of Pembrokeshire will increase by 7,200 (6.1%) over the period 2006-21. This compares with the 4.3% increase that was experience in the previous fifteen year period (1991-2006).

Fig 1 Natural Change and Trend Based Projections: Pembrokeshire



	2001	2006	20011	2016	2021
Natural Change	114,138	113,171	111,933	111,621	111,641
Trend Based	114,138	117,411	119,591	122,112	124,587

The trend-based projection is based on the assumption that migration will continue in a similar trend to the immediate past (mid 2001-mid 06). However, it is important to note the patterns in migration are considered to be cyclical and have a close relationship with the local economy. Furthermore, any future change in migration trends from other European countries, which are currently insignificant, would impact on population growth.

Population Projections by Age

The effect of migration and the age structure of migrants both into and out of the County will significantly change the make-up of the population in the fifteen year period of the Local Development Plan as Table 2 clearly illustrates.

Table 2 Projected Pembrokeshire Population to 2021, by Broad Age Group

Age Grouping	Trend Based Projections 2001-2021					LDP Period % Change 2006 - 2021
	2001	2006	2011	2016	2021	
0 - 4	6703	6075	5993	6139	6148	+1.2
5 - 15	16694	16686	15372	14528	14583	-12.6
16 - 44	37961	37849	37082	36387	36239	-4.3
45 - 64	30871	32996	34960	34784	34485	+4.5
65 - 74	11935	12928	14605	17199	17624	+36.3
75 - 84	7590	8238	8545	9584	11318	+37.4
85+	2384	2638	3034	3490	4190	+58.8
0 - 15	23397	22761	21365	20667	20731	-8.9
16 - 64	68832	70846	72042	71171	70724	-0.2
65+	21909	23804	26184	30274	33132	+39.2

The significance of the projected age structures for Local Development Plan purposes for the County as a whole are:

i) The overall children population in Pembrokeshire is projected to decline by around 2,000 between 2006 and 2021, which amounts to a reduction of 9% over the fifteen year period;

ii) The projections suggest that the County's working age population will effectively remain unchanged over the next fifteen years, but this will result from a rise in the numbers of older age groups (45 – 64) at the expense of a decrease in younger age groups (16 – 44);

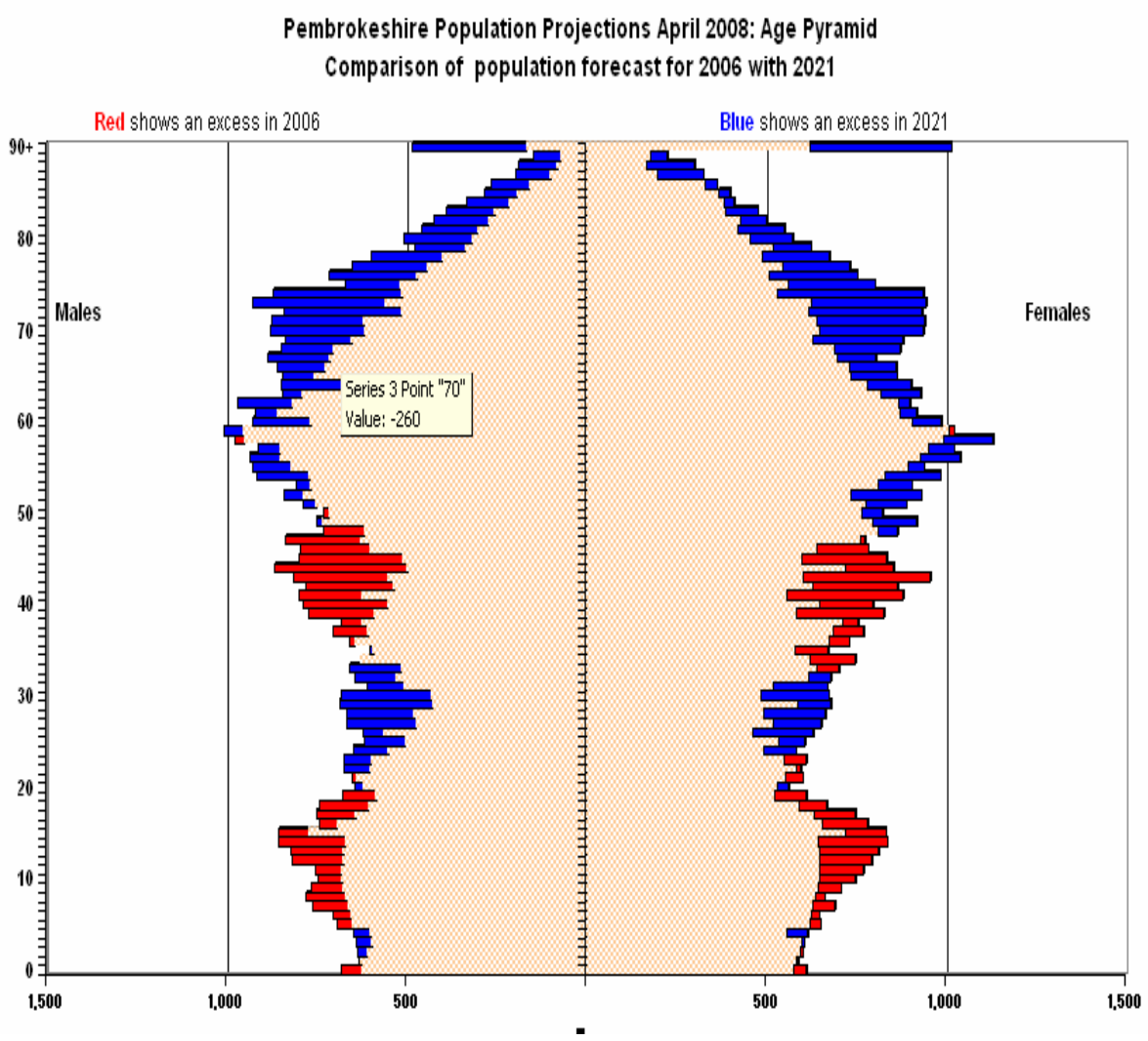
iii) The number of older people aged 65+ in Pembrokeshire is projected to continue to increase from 23,800 to 33,100 in 2021 under the trend-based scenario, representing a rise of 39% over the period;

iv) The combined effect of a growing number of people reaching retirement age and improved longevity is also predicted to result in a sharp increase in the number of elderly people (aged 75+) in the long term. Between 2006 and 2021, the number of people aged 75+ will rise by 4,600 to reach 15,500, a growth of 43% in the trend-based scenario.

Population Pyramid

Perhaps the most illustrative way to show the forecast change of the age structure of the County is by a population pyramid as depicted in Fig 2. It shows that on the basis of the trend-based assumptions the demographic shape of the population will become exceedingly 'top heavy' by 2021, with the number of older people exceeding the number of children by nearly 60 %. In 2006 the ratio of children:older people was just 1:1.04, by 2021 it is predicted to increase to 1:1.60.

Fig 2 Pembrokeshire Population Pyramid 2006-2021



Sensitivity Analysis and Variant Projections

The principal projections that have been produced for the Local Development Plan are based on assumptions judged to be the best that could be made at the time they were prepared, being reflective of the last five years performance within the County in respect of births, deaths and migration. However, due to the inherent uncertainty and volatility of demographic behavior, any set of projections will inevitably be proved wrong, to a greater or lesser extent, as a forecast of future demographic events or population structure. This uncertainty can be illustrated by preparing variant projections based on alternative assumptions of future fertility, mortality and migration. These variant assumptions are intended as alternative scenarios, which may occur in part or in total, but should not be taken as upper or lower limits for what might occur in the future.

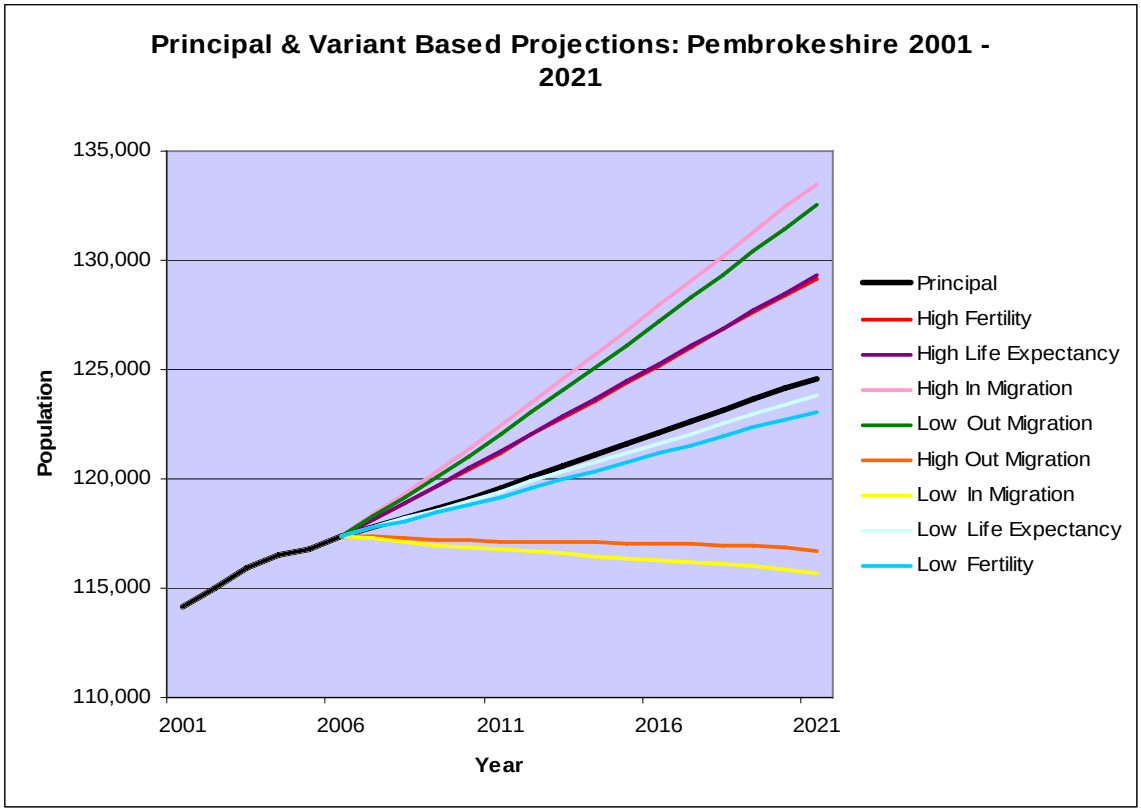
Over the period 1996-2005 the average annual birth rate was 1206. For the basis of the variant projections the fertility variants assume that under a 'High Fertility' scenario average annual births would rise by 10% whilst for the 'Low Fertility' a decrease of 10% was assumed.

Similarly with mortality, indications are that deaths will decrease over the period of the projection as people live longer and the average life expectancy increases for both males and females. Deaths over the period 1996-2005 averaged 1379 per annum so in order to examine the effect of varying mortality levels a 10% increase in annual deaths was assumed for the 'High Mortality' scenario, whilst the 'Low Mortality' assumption assumed a 10% decrease.

In terms of migration variations, examination of the most recent migration movements suggest that it is realistic to predict 10% increases and decreases in both in and out migrants as valid variants to build into the sensitivity analysis.

From the above the following variants were included in the variant projections that were run:

Fig 3 Population of Pembrokeshire according to principal and variant based projections



Under the principal projection, the population for the County rises steadily to 124,600 by 2021, which will result in a rise of 6.3% for the period 2006 – 2021. This compares to a 4.3% rise in the population in the previous 15 years, which also included a significant boundary change. Under the variant projections, the 'high projection' variants of increased births, lower mortality, increased in migration and lower out migration would all significantly increase the projected population, over the trend based projection. In terms of the 'low projection' variants it is evident that lower in migration and higher out migration would have a much more significant affect on projected numbers than lower fertility

or higher mortality rates.

From this range of variants a number of projection runs combining two or more of them have been undertaken. For example, the largest total population size would result from combining the high variant assumptions for fertility, life expectancy and migration. The key summary statistics from selected combination variants, as well as the individual variants are given in the following table.

Table 3 Measures of population structure under the principal projection and selected variants, 2006 and 2021, Pembrokeshire

	Total population		% of population aged under 16		% of population aged 65 & over		Dependants per 1,000 persons of working age	
Projection	**2006**	**2021**	**2006**	**2021**	**2006**	**2021**	**2006**	**2021**
Principal projection	117411	124587	19.4	16.6	20.3	26.6	657	762
High fertility	117411	129165	19.4	19.9	20.3	25.6	657	832
High life expectancy	117411	129268	19.4	16.1	20.3	28.9	657	817
High in-migration	117411	133511	19.4	16.9	20.3	25.8	657	747
Low out-migration	117411	132500	19.4	17.0	20.3	25.7	657	745
High out-migration	117411	116723	19.4	16.2	20.3	27.6	657	779
Low in-migration	117411	115697	19.4	16.3	20.3	27.4	657	778
Low life expectancy	117411	123809	19.4	16.7	20.3	26.2	657	753
Low fertility	117411	123071	19.4	15.5	20.3	26.9	657	738
a) Max/min total population size								
High fertility, high life expectancy, high in-migration, low out-migration	117411	149331	19.4	18.2	20.3	27.0	657	826
Low fertlity, low life expectancy, low in-migration, high out-migration	117411	1066806	19.4	16.6	20.3	27.4	657	786
b) Oldest/youngest age structure								
Low fertility, high life expectancy, low in-migration, high out-migration	117411	127701	19.4	15.0	20.3	29.6	657	806
High fertility, low life expectancy, high in-migration, low out-migration	117411	148041	19.4	18.9	20.3	24.5	657	768
c) Max/min dependency ratios								
High fertility, high life expectancy, high in-migration, low out-migration	117411	149331	19.4	18.2	20.3	27.0	657	826
Low fertlity, low life expectancy, low in-migration, high out-migration	117411	1066806	19.4	16.6	20.3	27.4	657	786

HOUSEHOLD PROJECTIONS

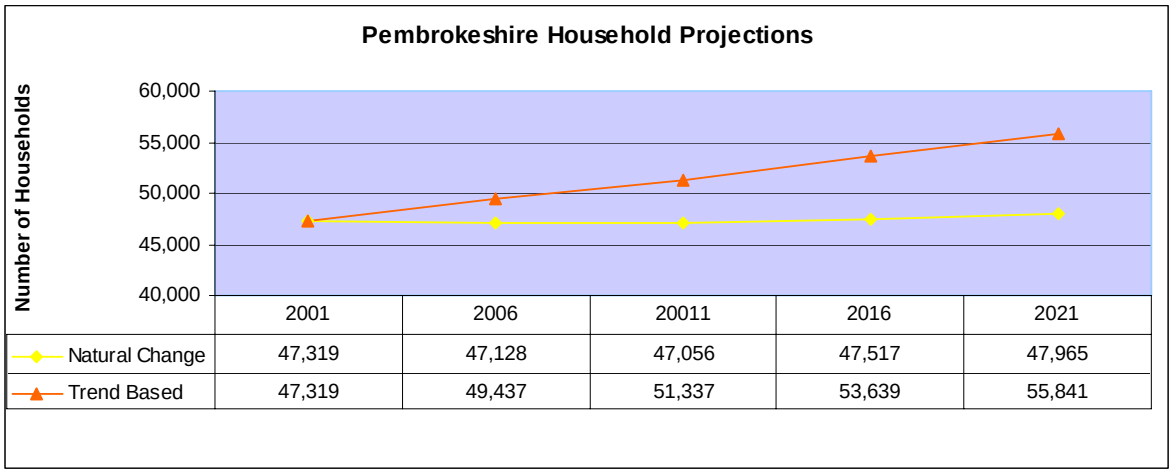
Households

The number of households in Pembrokeshire is projected to increase at a much faster rate than that for population as household formation rates increase, especially in respect of single person households.

Based on indigenous growth alone i.e. natural change scenario, the number of households in the County is forecast to grow by around 850 to 47,965 between 2006 and 2021 (or 2%). This happens despite the forecast decline of population on a natural change basis because household formation is forecast to increase.

The trend-based scenario projects a growth to be seven times as much as by natural change, with 6,400 new households between 2006 and 2021, bringing the total number to 55,850 by 2021. This is an equivalent growth rate of 13% and an annual increase of 430 households each year over the next fifteen years.

Fig 4 Household Projections: Pembrokeshire



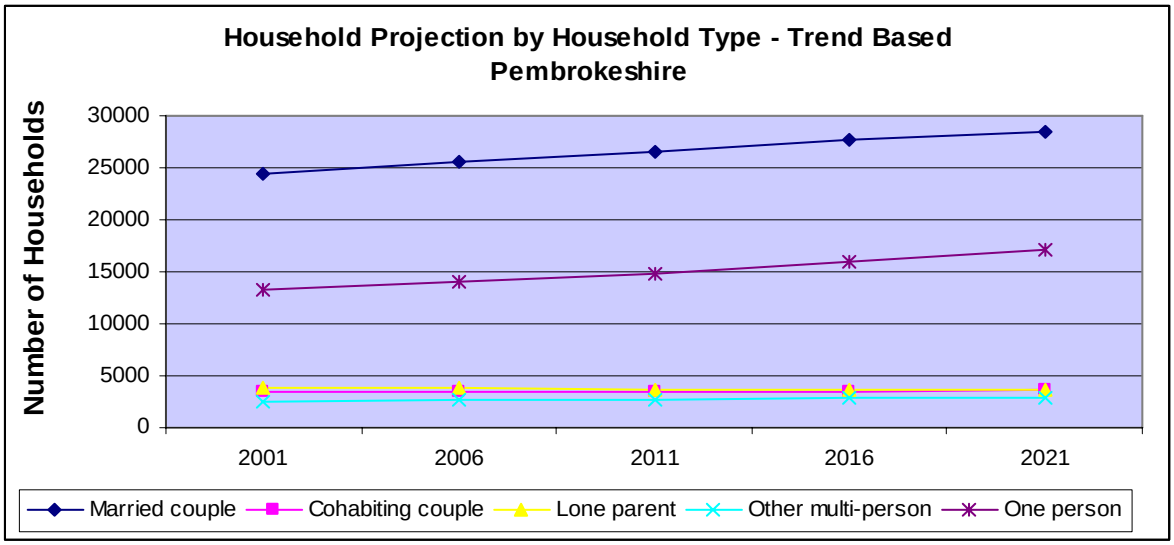
	2001	2006	20011	2016	2021
Natural Change	47,319	47,128	47,056	47,517	47,965
Trend Based	47,319	49,437	51,337	53,639	55,841

Household Type

Key projection results for household types in the County for the period of the Local Development Plan are the continued rise in married couple and other multi-person households and a rapid upward trend in one-person households. The two other types of household are forecast to remain around current levels.

Between 2006 and 2021 the number of one-person households is forecast to increase by over a fifth (22%), married couple households will rise by half this rate (11%), whilst other multi-person households will increase by 13%, although in actual number terms this will only result in and additional 340 households. There will also be an increase in the number of cohabiting couple households, which are

Fig 5 Household Projections by Household Type: Pembrokeshire



forecast to grow at half the rate of married ones (6%). The only type of household predicted to fall are lone parent, with numbers predicted to fall by just 125 over the fifteen year period.

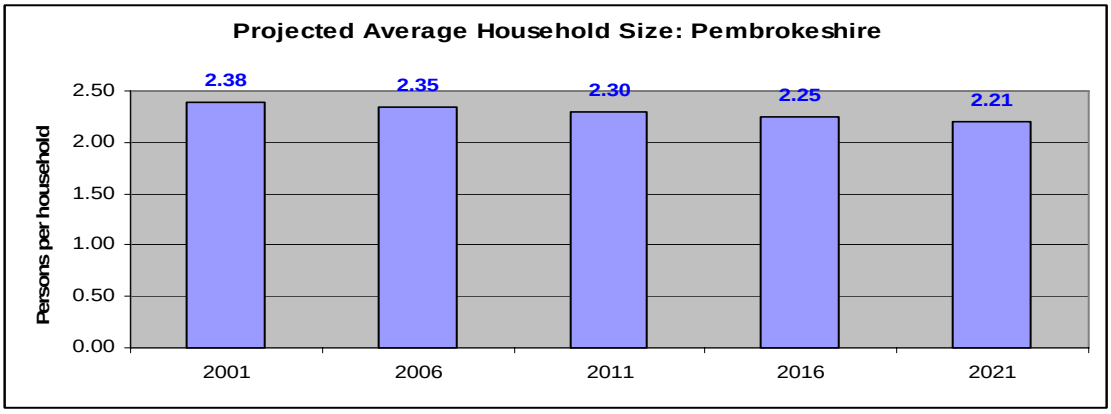
Table 4 Projected Household Types: Pembrokeshire

Household Types	2001	2006	2011	2016	2021	% Change 2006 - 2021
Married couple	24,388	25,632	26,593	27,629	28,550	11.4
Cohabiting couple	3,386	3,372	3,432	3,531	3,580	6.1
Lone parent	3,791	3,762	3,717	3,678	3,637	-3.3
Other multi-person	2,491	2,634	2,771	2,895	2,976	13.0
One person	13,263	14,036	14,825	15,906	17,098	21.8

Projected Household Size

The main reason for the accelerated rise in the number of households over the

Fig 6 Projected Average Household Size: Pembrokeshire



Local Development Plan period is the projected continual decrease in the

average household size, caused predominantly by the increase in one-person households.

Dwelling Requirements

To forecast dwelling requirements, estimates of second homes, holiday accommodation and vacant dwellings, together with shared accommodation are included as 'add-ons to the household projections in order to derive the number of dwellings required for the 2006-2021 period. Demolitions have been set at zero as evidence suggests that dwellings demolished in the County are replaced. (A detailed explanation of this conversion process can be found under the following section of this report – The Method.)

Table 5 - Conversion of projected households to dwellings requirement 2006-2021

Factors		
A2	*fraction of households in non permanent accommodation*	0.010
B2	*fraction of households (permanent) in shared dwellings*	0.0019
C2	*average number of sharing households per shared dwelling*	2.87
D2	*vacant dwellings as a proportion of unshared dwellings*	0.051
E2	*remaining second residences as proportion of unshared dwellings*	0.061
Dwellings Mid 2006		
	Dwellings 2001	54,300
	April 2001 - Mid 2006 :	
	Dwellings completed less estimated demolitions	2,848
A	Dwellings Mid 2006	57,148
Dwelling Projections 2021		
1	Households with residents	55,841
	Conversion to Dwellings :	
2	Households on non-permanent accommodation	558
3	Households in permanent accommodation	55,283
4	Households in shared dwellings	105
5	Shared dwellings	37
6	Unshared dwellings (=unshared household)	55,178
7	Dwellings with residents	55,215
8	Vacant dwellings	2,814
9	Dwellings not used as main residence	3,366
B	All dwellings 2021	61,395
C	Demolitions (2006-2021)	0
	Dwelling requirement 2006-2021	**4,247**

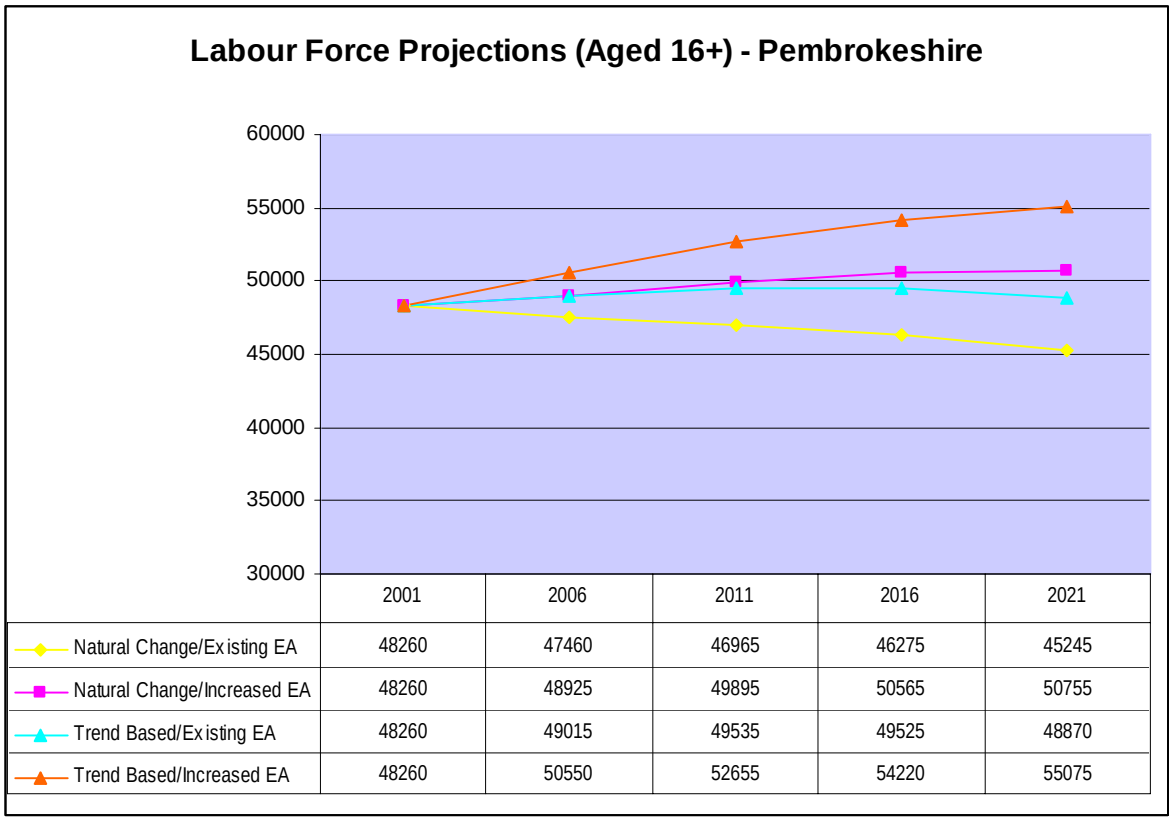
From this calculation it suggests that over the fifteen year period 2006-2021 the County as a whole will require approximately 4,250 new dwellings, which would result in an annual completion rate of 285 units per annum.

LABOUR FORCE PROJECTIONS

Overall Trends

The natural change projections show that without migration the labour force for Pembrokeshire would be expected to fall if current economic activity rates were maintained and increase slightly from 2006 on the basis of modest economic activity rate rises. Should existing population trends prevail and activity rates rise at a modest rate then the total labour force will increase by 9% to 55,075 persons between 2006 and 2021, which would amount to approximately and additional 300 persons becoming economically active per annum.

Fig 7 Labour Force Projections for 16+ Population: Pembrokeshire



	2001	2006	2011	2016	2021
Natural Change/Existing EA	48260	47460	46965	46275	45245
Natural Change/Increased EA	48260	48925	49895	50565	50755
Trend Based/Existing EA	48260	49015	49535	49525	48870
Trend Based/Increased EA	48260	50550	52655	54220	55075

Labour Force Projections by Age

Pembrokeshire, in common with national trends, is set to have an ageing labour force as a result of the current population trends being continued and the perceived changes in economic activity over the period to 2021 being achieved.

In the short term (2006-2011), the economically active people across all age groups will rise to varying extents, except for the 25-44, who will see a fall of 800 persons, a reduction of 3.8% over the period. Should existing activity rates remain there would be falls in the 25-44 and the 55-64 age groups, which would counteract rises in the other groups, resulting in an overall rise of just 1% in the workforce.

Over the remaining period (2011 – 2021), modest economic activity rises will result in most age grouping totals increasing, except for 16 – 24 and the 45 - 54 year olds, both of which experience modest decreases.

Table 6 Labour Force Projections by Age Groupings: Pembrokeshire

Age group	2001	2006	2011	2016	2021	2006-2021		
						Population effect	Activity effect	Total change
With Existing Economic Activity Rates:								
16 - 24	6,440	7,125	7,655	7,580	6,975	-160	0	-160
25 - 44	21,705	20,800	19,575	19,230	19,980	-825	0	-825
45 - 54	12,165	11,820	13,020	13,205	11,590	-230	0	-230
55 - 64	6,850	8,065	7,920	7,905	8,745	685	0	685
65-69	740	825	940	1,120	995	170	0	170
70+	360	380	425	485	585	205	0	205
With Annual Increase in Economic Activity Rates:								
16 - 24	6,440	7,405	8,240	8,435	8,010	-175	780	605
25 - 44	21,705	21,290	20,485	20,565	21,820	-855	1385	525
45 - 54	12,165	12,115	13,675	14,210	12,780	-230	890	665
55 - 64	6,850	8,425	8,645	8,965	10,320	720	1180	1895
65-69	740	905	1,120	1,445	1,380	185	290	475
70+	360	410	490	600	765	220	135	355

PEMBROKESHIRE COAST NATIONAL PARK

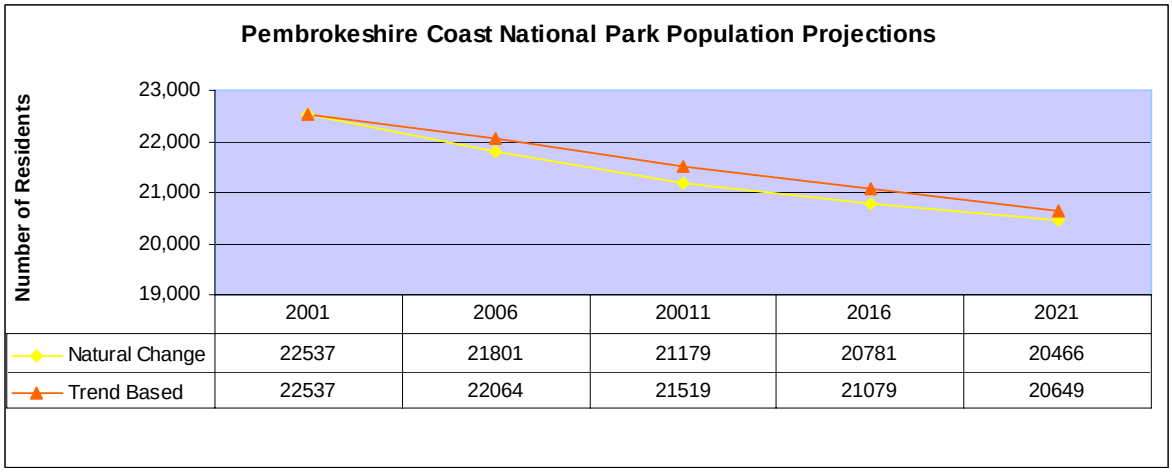
POPULATION PROJECTIONS

Total Population

Figure 8 shows that within the area of the Pembrokeshire Coast National Park (PCNP) the natural growth of population is declining. Over the fifteen year period 2006 – 2021 the National Park is set to lose approximately approximately 1300 of its population, which is 87% of the County decline for the period based on predicted levels for births and deaths.

Net migration will have virtually no effect in offsetting the predicted effects of natural change in that if current trends in migration continue the total population of the National Park will decrease by 6% over the next fifteen years.

Fig 8 Natural Change and Trend Based Projections: Pembrokeshire Coast National Park



	2001	2006	20011	2016	2021
Natural Change	22537	21801	21179	20781	20466
Trend Based	22537	22064	21519	21079	20649

Population Projections by Age

Whilst total net migration will have little effect on the overall population levels in the near future the age structure of migrants both into and out of the National Park will
significantly change the population's composition in the fifteen year period of the Local Development Plan as Table 5 clearly illustrates.

Table 7 Projected Pembrokeshire Coast National Park Population by Broad Age Group

Age Grouping	Trend Based Projections 2001-2021					LDP Period % Change 2006 - 2021
	2001	2006	2011	2016	2021	
0 - 4	1098	865	929	910	863	-0.2
5 - 15	2922	2738	2370	2141	2178	-20.5
16 - 44	6706	6336	5820	5481	5131	-19.0
45 - 64	6751	6919	6851	6268	5803	-16.1
65 - 74	2661	2838	3172	3727	3689	30.0
75 - 84	1835	1804	1760	1930	2265	25.6
85+	564	563	616	623	720	27.9
0 - 15	4020	3603	3299	3051	3041	-15.6
16 - 64	13457	13255	12671	11748	10934	-17.5
65+	5060	5205	5548	6280	6674	28.2

The significance of the projected age structures for Local Development Plan purposes for the County as a whole are:

i) The overall children population in the National Park is projected to decline by around 560 between 2006 and 2021, which amounts to a reduction of 16% over the fifteen year period. The decline is expected to be particularly significant in the older children age group which is predicted to fall by a fifth;

ii) The projections suggest that the National Park's working age population will decline at a slightly greater rate than for children over the next fifteen years, this decrease occurring across all age groups;

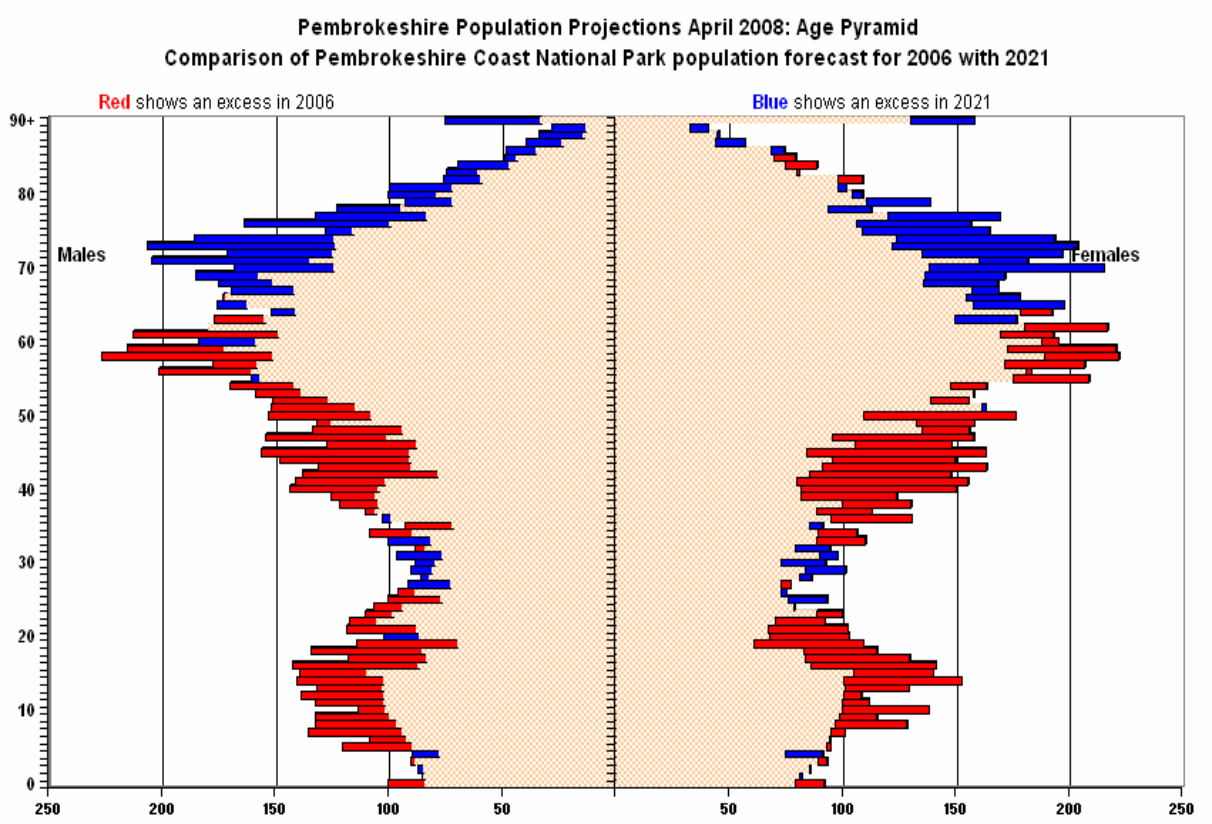
iii) Whilst the rest of its population will decline, the number of older people aged 65+ in the National Park is projected to continue to increase from 5,200 to 6,700 in 2021 under the trend-based scenario, representing a rise of 29% over the period;

iv) Similarly to the County as a whole the combined effect of a growing number of people reaching retirement age and improved longevity is also predicted to result in a sharp increase in the number of elderly people (aged 75+ in the long term. Between 2006 and 2021, the number of people aged 75+ will rise by 600 to reach 3000, a growth of 26% in the trend-based scenario.

Population Pyramid

Fig 9 shows that on the basis of the trend-based assumptions the demographic shape of the National Park's population will reflect that of Pembrokeshire, becoming exceedingly 'top heavy' by 2021, with the number of older people exceeding the number of children by a ratio of 2:1.

Fig 9 Pembrokeshire Coast National Park Population Pyramid 2006-2021



Sensitivity Analysis and Variant Projections

The principal projections that have been produced for the Local Development Plan are based on assumptions judged to be the best that could be made at the time they were prepared, being reflective of the last five years performance within the County in respect of births, deaths and migration. However, due to the inherent uncertainty and volatility of demographic behavior, any set of projections will inevitably be proved wrong, to a greater or lesser extent, as a forecast of future demographic events or population structure. This uncertainty can be illustrated by preparing variant projections based on alternative assumptions of future fertility, mortality and migration. These variant assumptions are intended as alternative scenarios, which may occur in part or in total, but should not be taken as upper or lower limits for what might occur in the future.

Over the period 1996-2005 the average annual birth rate was 1206. For the basis of the variant projections the fertility variants assume that under a ‘High Fertility’ scenario average annual births would rise by 10% whilst for the ‘Low Fertility’ a decrease of 10% was assumed.

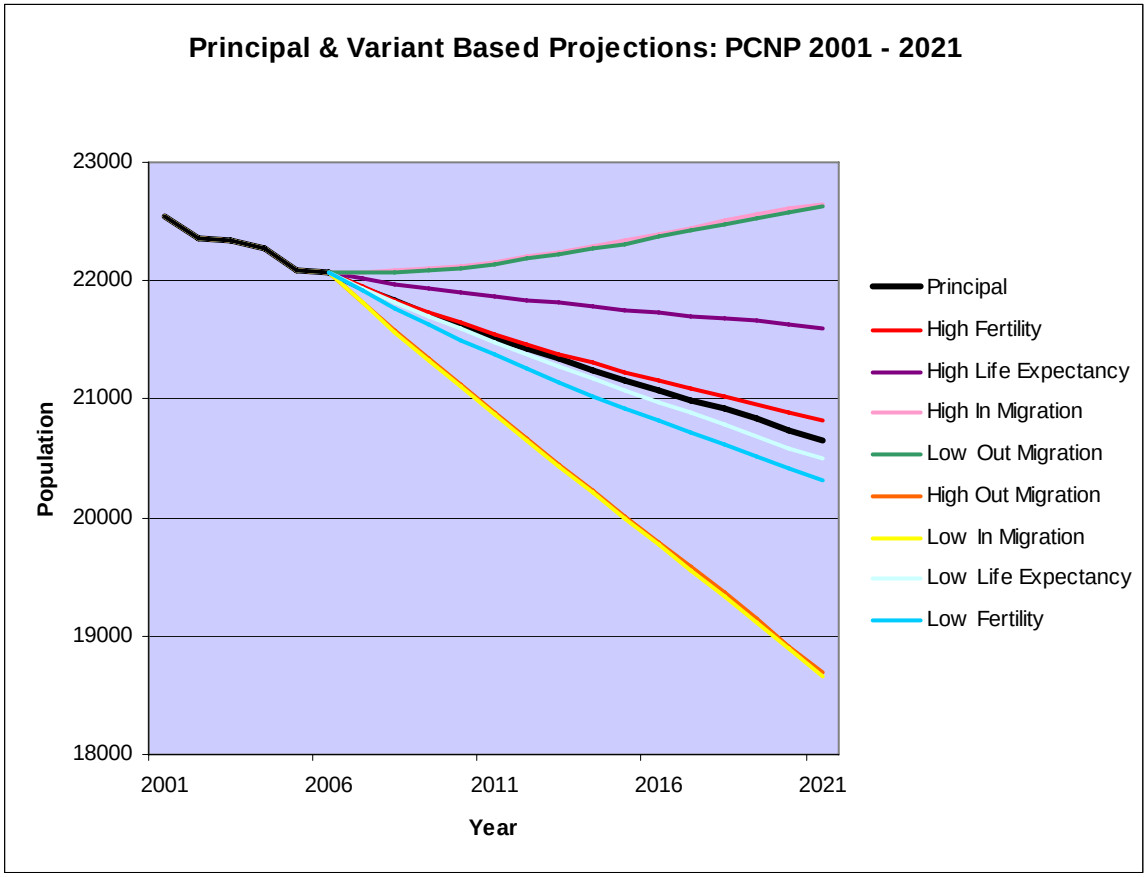
Similarly with mortality, indications are that deaths will decrease over the period of the projection as people live longer and the average life expectancy increases for both males and females. Deaths over the period 1996-2005 averaged 1379 per annum so in order to examine the effect of varying mortality levels a 10%

increase in annual deaths was assumed for the 'High Mortality' scenario, whilst the 'Low Mortality' assumption assumed a 10% decrease.

In terms of migration variations, examination of the most recent migration movements suggest that it is realistic to predict a 10% increases and decreases in both in and out migrants as valid variants to build into the sensitivity analysis.

From the above the following variants were included in the variant projections that were run:

Fig 10 Population of PCNP according to principal and variant based projections



According to the principal projection, the population for the County falls steadily to 20650 by 2021, which will result in a fall of 6.4% for the period 2006–2021. This compares with a decrease of 2.1% in its population between 2001-2006. Under the variant projections, only continued high in-migration or low out-migration would result in an increase in the overall population within the National Park. In terms of the 'low projection' variants it is evident that lower in-migration and higher out- migration would have a much more significant effect on projected numbers than lower fertility or higher mortality rates.

From this range of variants a number of projection runs combining two or more of them have been undertaken. For example, the largest total population size would result from combining the high variant assumptions for fertility, life expectancy and migration. The key summary statistics from selected

combination variants, as well as the individual variants are given in the following table.

Table 8 Measures of population structure under the principal projection and selected variants, 2006 and 2021, Pembrokeshire Coast National Park

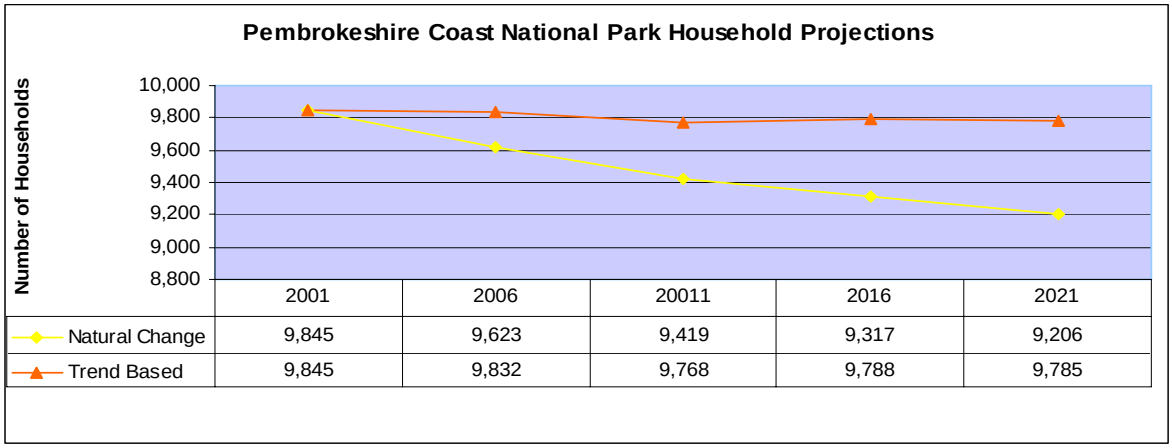
Projection	Total population		% of population aged under 16		% of population aged 65 & over		Dependants per 1,000 persons of working age	
	2006	2021	2006	2021	2006	2021	2006	2021
Principal projection	22064	20649	16.3	14.7	23.6	32.3	665	889
High fertility	22064	20829	16.3	15.5	23.6	32.0	665	906
High life expectancy	22064	21605	16.3	14.2	23.6	34.7	665	954
High in-migration	22064	22652	16.3	15.1	23.6	31.0	665	859
Low out-migration	22064	22633	16.3	15.3	23.6	30.8	665	857
High out-migration	22064	18687	16.3	14.1	23.6	34.0	665	925
Low in-migration	22064	18661	16.3	14.2	23.6	33.8	665	923
Low life expectancy	22064	20492	16.3	14.8	23.6	31.9	665	878
Low fertility	22064	20311	16.3	13.2	23.6	32.9	665	855
a) Max/min total population size								
High fertility, high life expectancy, high in-migration, low out-migration	22064	25353	16.3	13.9	23.6	32.7	665	872
Low fertlity, low life expectancy, low in-migration, high out-migration	22064	16515	16.3	14.5	23.6	34.4	665	954
b) Oldest/youngest age structure								
Low fertility, high life expectancy,high in-migration, high out-migration	22064	21128	16.3	12.8	23.6	35.6	665	935
High fertility, low life expectancy, low in-migration, low out-migration	22064	24336	16.3	14.5	23.6	30.1	665	805
c) Max/min dependency ratios								
High fertility, high life expectancy, high in-migration, low out-migration	22064	25353	16.3	13.9	23.6	32.7	665	872
Low fertlity, low life expectancy, low in-migration, high out-migration	22064	16515	16.3	14.5	23.6	34.4	665	954

HOUSEHOLD PROJECTIONS

Households

Based on just natural change trends prevailing and with net migration at zero, the number of households in the National Park would fall by 420 over the fifteen year period to 2021, a decrease of 4.3%. This decline in household numbers would

Fig 9 Household Projections: Pembrokeshire Coast National Park



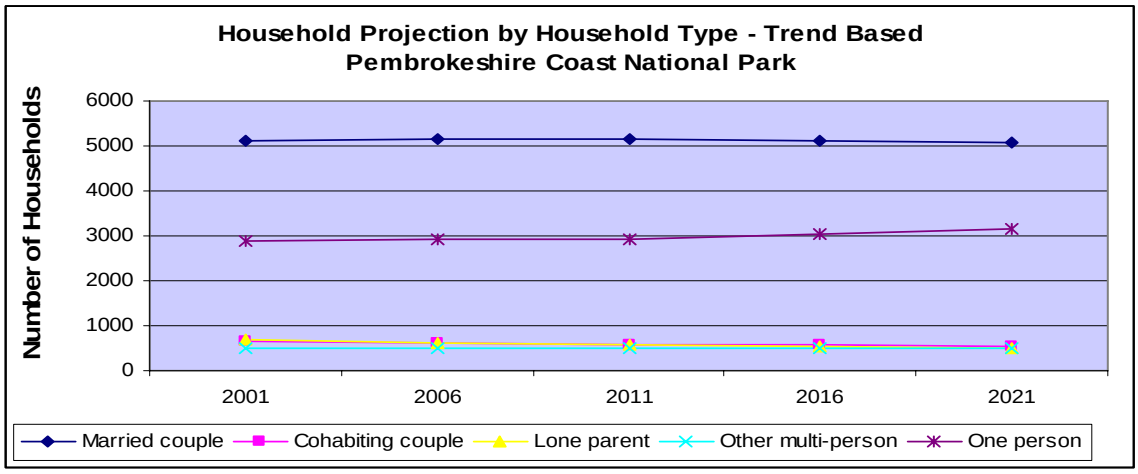
	2001	2006	20011	2016	2021
Natural Change	9,845	9,623	9,419	9,317	9,206
Trend Based	9,845	9,832	9,768	9,788	9,785

occur despite an increase in household formation rates and a fall in household size over the period. The trend-based scenario projection shows that in total the number of households between 2006 and 2021 would remain virtually unchanged, falling by just 47 or 0.5%.

Household Type

The key projection result for household types in the PCNP is that all household types, with the exception of one person households, will decline over the period

Fig 11 Household Projections by Household Type: Pembrokeshire Coast National Park



2006 – 2021. The number of one person households will increase by 226 or 7.8%, but this increase would be offset by an overall reduction of 273 in all other types of households.

The number of married couple households will remain almost static over the period 2006-21, but the number of cohabiting couple households will fall by almost a tenth. The effects of an increasingly ageing population over the period and a significant fall in young persons will have an effect on the number of lone parent households that are predicted to fall by nearly a fifth over the fifteen year period.

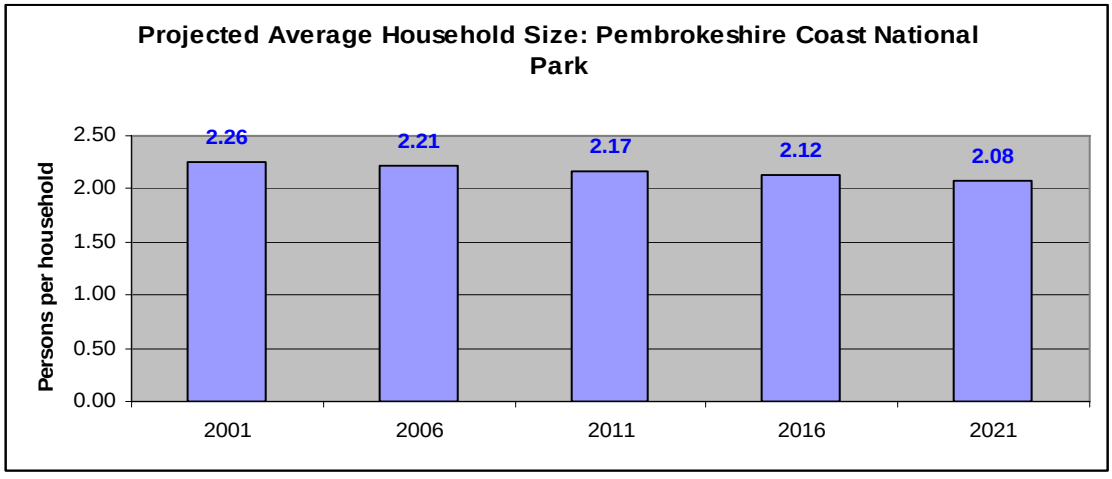
Table 9 Projected Household Types: Pembrokeshire Coast National Park

Household Types	**2001**	**2006**	**2011**	**2016**	**2021**	**LDP Period % Change 2006 - 2021**
Married couple	5,116	5,156	5,135	5,122	5,070	-1.7
Cohabiting couple	642	616	596	577	555	-9.8
Lone parent	679	633	591	553	518	-18.2
Other multi-person	513	517	513	511	506	-2.2
One person	2,895	2,910	2,934	3,026	3,136	7.8

Projected Household Size

Despite a 6.4% fall in the National Park's population between 2006-21 the number of households will remain almost static (-47) over the period, mainly because of a continued decrease in the average household size, caused predominantly by the increase in one-person households referred to above. By 2021, the average household size is predicted to fall to just 2.08 persons.

Fig 12 Projected Household Size: Pembrokeshire Coast National Park



Dwellings Requirement

A dwellings requirement calculation has been undertaken, based on information from the 2001 Census applied to the projected household, to determine how many new dwellings will be needed over the period 2006 – 2021. The calculation estimates that based on the predicted decrease in the National Park's population that the existing stock of dwellings would be more than adequate for numbers of households in 2021.

Table 10- Conversion of projected households to dwellings requirement 2006-2021

Factors		
A2	*fraction of households in non permanent accommodation*	0.012
B2	*fraction of households (permanent) in shared dwellings*	0.0025
C2	*average number of sharing households per shared dwelling*	3.50
D2	*vacant dwellings as a proportion of unshared dwellings*	0.051
E2	*remaining second residences as proportion of unshared dwellings*	0.183
	Dwellings 2001	12850
	April 2001 - Mid 2006 : Completions less estimated demolitions	444
A	**Dwellings Mid 2006**	13294
Dwelling Projections 2021		
1	Households with residents	9785
	Conversion to Dwellings :	
2	Households on non-permanent accommodation	117
3	Households in permanent accommodation	9668
4	Households in shared dwellings	24
5	Shared dwellings	7
6	Unshared dwellings (=unshared household)	9644
7	Dwellings with residents	9651
8	Vacant dwellings	492
9	Dwellings not used as main residence	1765
B	All dwellings 2021	11908
C	Demolitions (2006-2021)	0
	Dwelling requirement 2006-2021	**-1386**

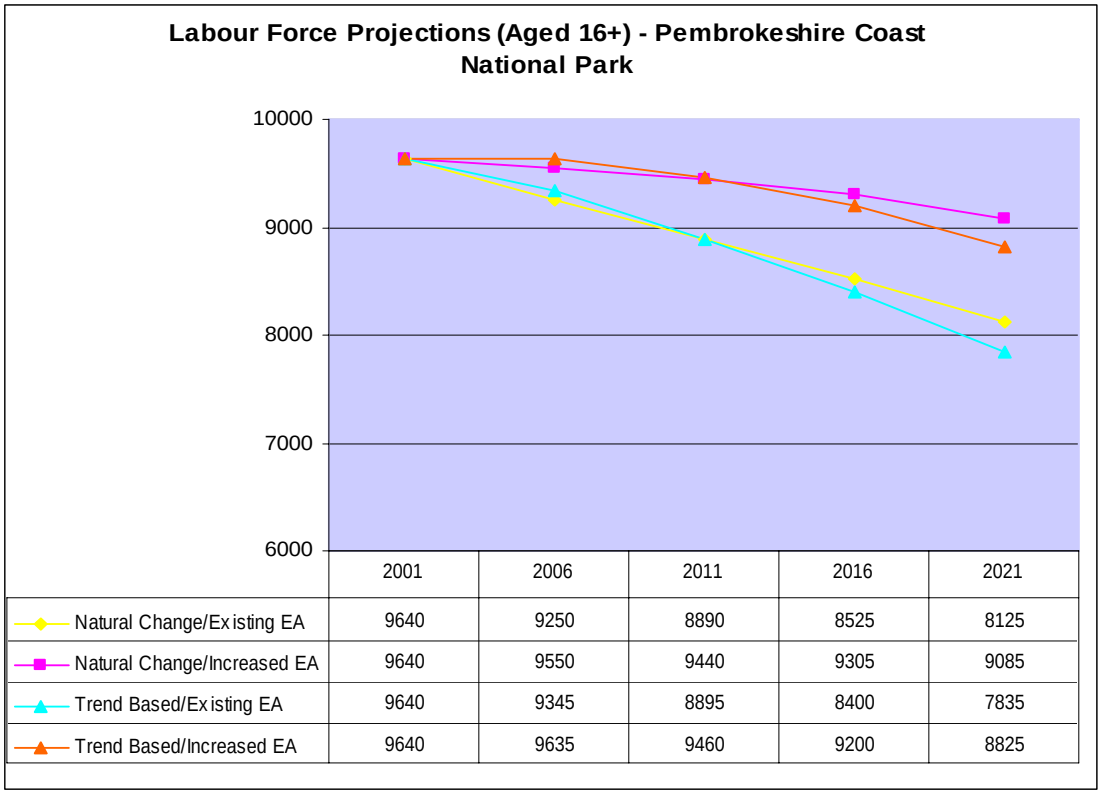
In the above calculation, demolitions have been set at zero as evidence suggests that dwellings demolished in the National Park are replaced.

LABOUR FORCE PROJECTIONS

Overall Trends

The National Park's labour force is predicted to decrease on the basis of the trend based scenario should current activity rates prevail over the period up to 2021, or even if they increase at a modest rate. At current activity levels the

Fig 13 Labour Force Projections: Pembrokeshire Coast National Park



	2001	2006	2011	2016	2021
Natural Change/Existing EA	9640	9250	8890	8525	8125
Natural Change/Increased EA	9640	9550	9440	9305	9085
Trend Based/Existing EA	9640	9345	8895	8400	7835
Trend Based/Increased EA	9640	9635	9460	9200	8825

labour force between 2006-2021 would fall by 1500, or 16%, amounting to 100 residents leaving the labour pool per annum, whilst with increased activity rates the decrease would be just 800, or 54 persons per annum.

Labour Force Projections by Age

As would be expected from the previous analysis of the population projections the predicted decreases in the labour force would be felt in all age groupings between 16-64 at existing economic activity rates, or if activity rates were to increase. It is anticipated that there would be small increases in labour force numbers in persons aged 65 and over. Within individual age groupings, even with increases in economic activity rates, the number of 45-54 year olds in the labour force, would fall by 17%, compared to a 2% fall in 55-64 aged workers.

Table 11 Projected Labour Force by Age: PCNP

Age group	2001	2006	2011	2016	2021	2006-2021		
						Population effect	Activity effect	Total change
With Existing Economic Activity Rates:								
16 - 24	1145	1230	1190	1105	955	-275	0	-275
25 - 44	3885	3505	3160	3000	2955	-550	0	-550
45 - 54	2645	2365	2360	2200	1825	-535	0	-535
55 - 64	1630	1880	1775	1620	1645	-235	0	-235
65-69	220	240	275	320	275	35	0	35
70+	115	125	135	155	180	60	0	60
With Annual Increase in Economic Activity Rates:								
16 - 24	1,145	1,280	1,285	1,230	1,100	-285	105	-180
25 - 44	3,885	3,585	3,305	3,200	3,220	-560	200	-365
45 - 54	2,645	2,425	2,475	2,370	2,010	-550	135	-415
55 - 64	1,630	1,960	1,935	1,830	1,925	-250	210	-40
65-69	220	255	315	390	350	35	60	95
70+	115	130	145	180	220	60	30	90

PEMBROKESHIRE OUTSIDE THE NATIONAL PARK

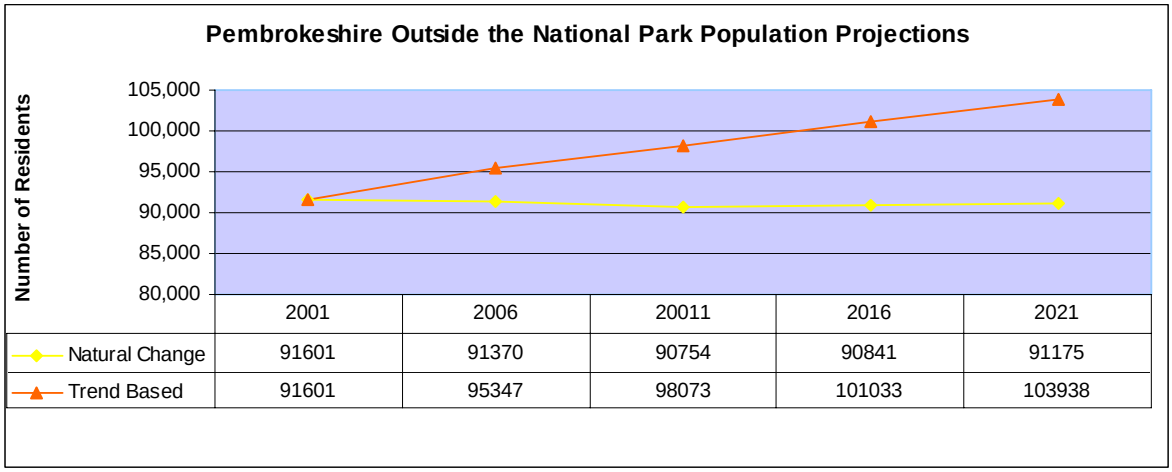
POPULATION PROJECTIONS

Total Population

Figure 14 shows that the natural growth of population in the area of Pembrokeshire outside the National Park is currently declining, but will rise over the second part of the Local Development Plan period. The area is predicted to lose just 200 of its population over the next fifteen years through natural change, as the number of deaths is projected to slightly exceed births by just 13 per annum.

Net migration, however, will increase the population and the growth is forecast to be quite significant. If current trends of natural change and migration continue i.e trend-based scenario, the total population of the area will increase by 8,600 (+9.0%) over the period 2006-21.

Fig 14 Natural Change and Trend Based Projections: Pembrokeshire Outside the PCNP



	2001	2006	20011	2016	2021
Natural Change	91601	91370	90754	90841	91175
Trend Based	91601	95347	98073	101033	103938

Population Projections by Age

The effect of migration and the age structure of migrants both into and out of the area of the County outside the National Park will have a positive effect on the majority of age groups over the fifteen year period of the Local Development Plan.

The significance of the projected age structures on this area of the County for which the County Council will be preparing the Local Development Plan are:

i) The overall children population in Pembrokeshire is projected to decline by just under 1,500 between 2006 and 2021, a reduction of 8%, but the birth rate is predicted to rise over the period. As a consequence the number of 0-4 year olds will increase;

ii) The projections suggest that the County's working age population will rise by a modest 2,200 (4%) over the next fifteen years. Like the County as a whole this will result from a rise of 10% in the numbers of older age groups (45 – 64) at the expense of a slight decrease of 1% in younger age groups (16 – 44);

iii) The number of older people aged 65+ in the area is projected to continue to increase from 18,599 to 26,458 in 2021 under the trend-based scenario, representing a rise of 42.% over the period;

iv) The combined effect of a growing number of people reaching retirement age and improved longevity is also predicted to result in a sharp increase in the number of elderly people (aged 75+) in the long term. Between 2006 and 2021, the number of people aged 75+ will rise by 4,000 to reach 12,500, a growth of 47% in the trend-based scenario.

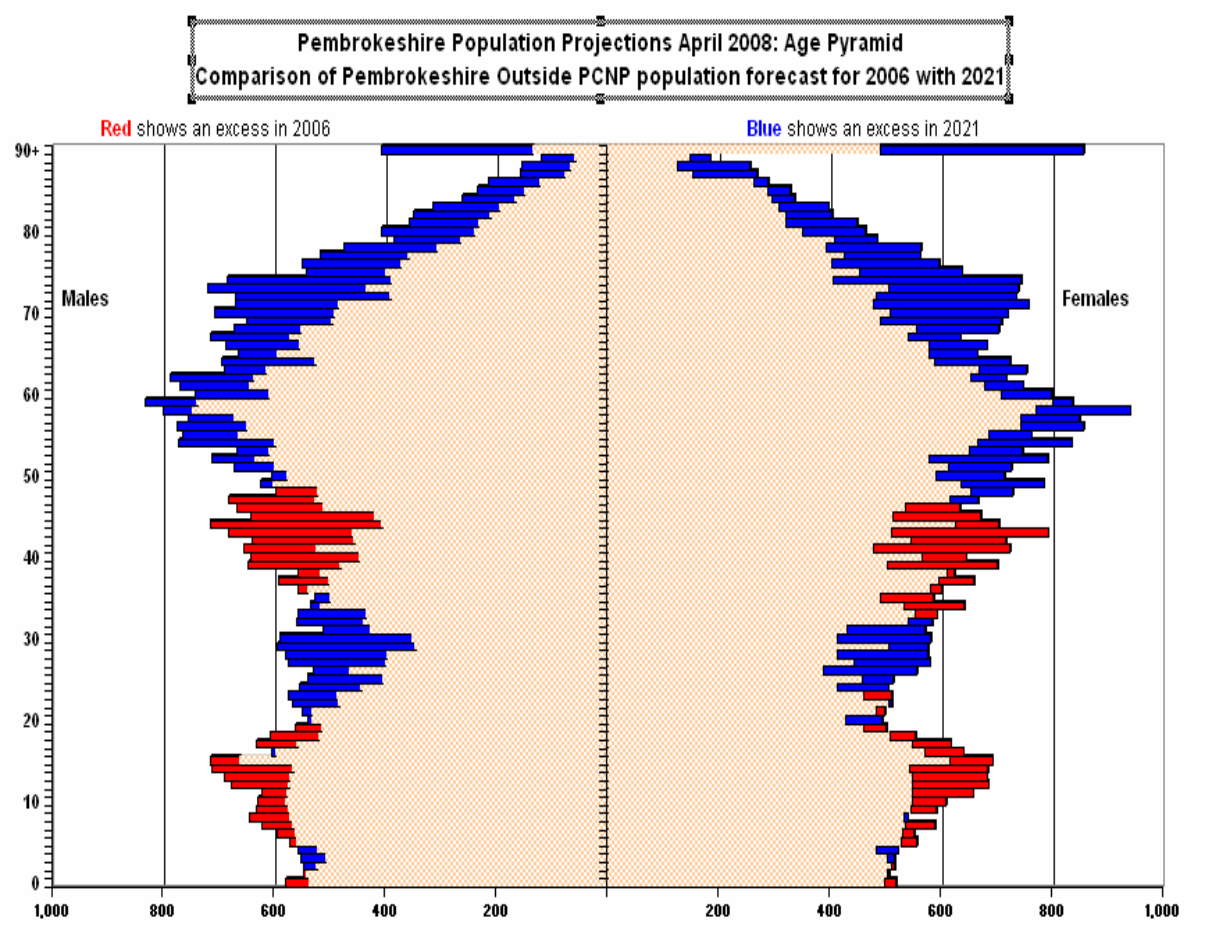
Table 12 Projected Pembrokeshire Population to 2021, by Broad Age Group

Age Grouping	Trend Based Projections 2001-2021					LDP Period % Change 2006 - 2021
	2001	2006	2011	2016	2021	
0 - 4	5605	5210	5065	5228	5286	1.5
5 - 15	13772	13948	13002	12388	12404	-11.1
16 - 44	31255	31513	31262	30906	31107	-1.3
45 - 64	24120	26077	28108	28516	28682	10.0
65 - 74	9274	10089	11433	13472	13935	38.1
75 - 84	5755	6434	6785	7654	9053	40.7
85+	1820	2076	2418	2867	3470	67.1
0 - 15	19377	19158	18066	17616	17690	-7.7
16 - 64	55375	57590	59371	59423	59790	3.8
65+	16849	18599	20636	23994	26458	42.3

Population Pyramid

Perhaps the most illustrative way to show the forecast change of the age structure of the County is by a population pyramid as depicted in Fig 13 . It shows that on the basis of the trend-based assumptions the demographic shape of the population will become exceedingly 'top heavy' by 2021, with the number of older people exceeding the number of children by nearly 60 %. In 2006 children outnumbered the population over 65, but at the end of the next fifteen years the ratio of children to the elderly will be 1:1.5.

Fig 15 Pembrokeshire Outside PCNP Population Pyramid 2006-2021



Sensitivity Analysis and Variant Projections

The principal projections that have been produced for the Local Development Plan are based on assumptions judged to be the best that could be made at the time they were prepared, being reflective of the last five years performance within the County in respect of births, deaths and migration. However, due to the inherent uncertainty and volatility of demographic behavior, any set of projections will inevitably be proved wrong, to a greater or lesser extent, as a forecast of future demographic events or population structure. This uncertainty can be illustrated by preparing variant projections based on alternative assumptions of future fertility, mortality and migration. These variant assumptions are intended as alternative scenarios, which may occur in part or in total, but should not be taken as upper or lower limits for what might occur in the future.

Over the period 1996-2005 the average annual birth rate was 1206. For the basis of the variant projections the fertility variants assume that under a 'High Fertility' scenario average annual births would rise by 10% whilst for the 'Low Fertility' a decrease of 10% was assumed.

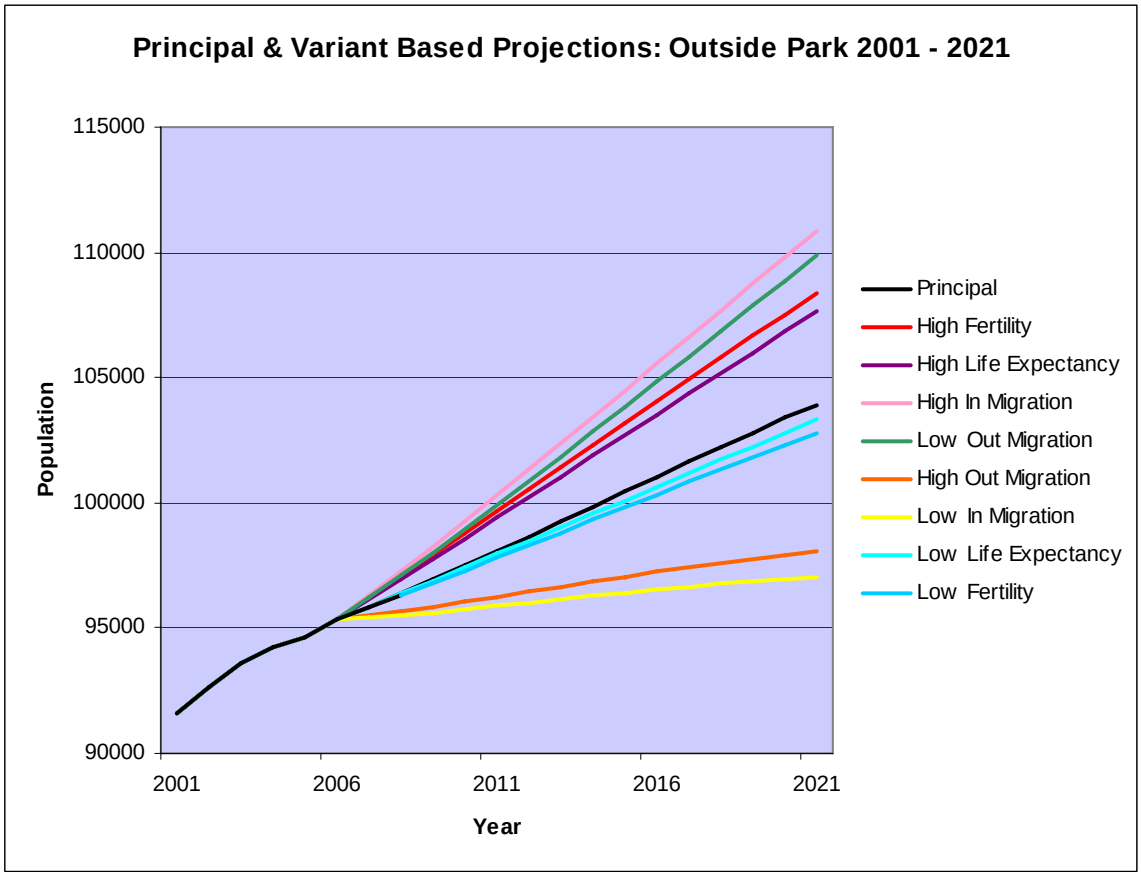
Similarly with mortality, indications are that deaths will decrease over the period of the projection as people live longer and the average life expectancy increases for both males and females. Deaths over the period 1996-2005 averaged 1379 per annum so in order to examine the effect of varying

mortality levels a 10% increase in annual deaths was assumed for the 'High Mortality' scenario, whilst the 'Low Mortality' assumption was for a 10% decrease.

In terms of migration variations, examination of the most recent migration movements suggests that it is realistic to predict 10% increases and decreases in both in and out migrants as valid variants to build into the sensitivity analysis.

From the above the following variants were included in the variant projections that were run:

Fig 16 Population outside PCNP according to principal and variant based projections



Under the principal projection, the population for the area of the County outside the National Park will rise steadily to 103,900 by 2021, which will result in a rise of 9% for the period 2006 – 2021. This amounts to an additional 8,600 residents over the period. Under the variant projections, the 'high projection' variants of increased births, lower mortality, increased in migration and lower out migration would all significantly increase the projected population, Compared to the trend based (principal) projection. In terms of the 'low projection' variants it is evident that lower in-migration and higher out-migration would have a much more significant affect on projected numbers than lower fertility or higher mortality rates.

From this range of variants a number of projection runs combining two or more of them have been undertaken. For example, the largest total population size would result from combining the high variant assumptions for fertility, life

expectancy and migration. The key summary statistics from selected combination variants, as well as the individual variants are given in the following table.

Table 13 Measures of population structure under the principal projection and selected variants, 2006 and 2021, Pembrokeshire Outside PCNP

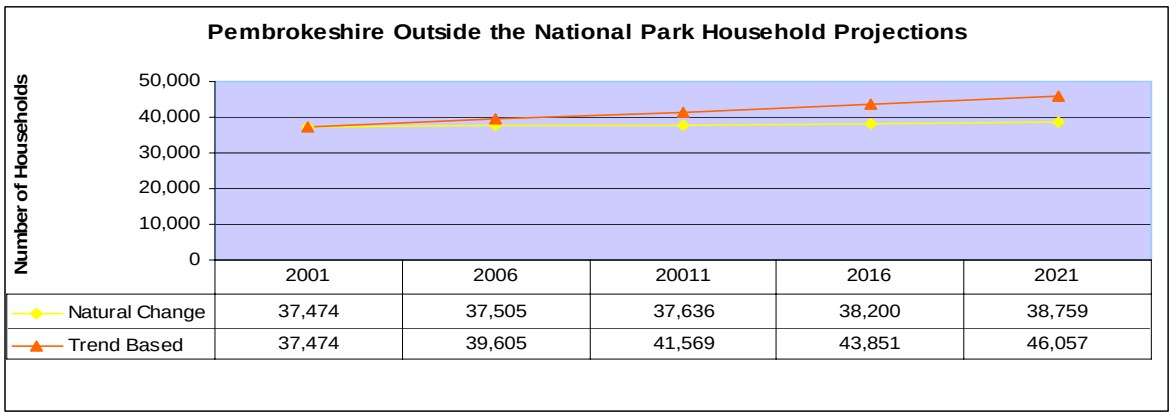
Projection	Total population		% of population aged under 16		% of population aged 65 & over		Dependants per 1,000 persons of working age	
	2006	2021	2006	2021	2006	2021	2006	2021
Principal projection	95347	103938	20.1	17.0	19.5	25.5	656	738
High in-migration	95347	110859	20.1	17.3	19.5	24.8	656	726
Low out-migration	95347	109868	20.1	17.4	19.5	24.6	656	724
High fertility	95347	108336	20.1	20.7	19.5	24.3	656	818
High life expectancy	95347	107663	20.1	16.4	19.5	27.7	656	791
Low life expectancy	95347	103317	20.1	17.1	19.5	25.1	656	730
Low fertility	95347	102760	20.1	16.0	19.5	25.8	656	717
High out-migration	95347	98036	20.1	16.6	19.5	26.4	656	754
Low in-migration	95347	97037	20.1	16.7	19.5	26.2	656	752
a) Max/min total population size								
High fertility, high life expectancy, high in-migration, low out-migration	95347	123378	20.1	19.1	19.5	25.8	656	818
Low fertlity, low life expectancy, low in-migration, high out-migration	95347	90291	20.1	17.0	19.5	26.1	656	758
b) Oldest/youngest age structure								
Low fertility, high life expectancy, low in-migration, high out-migration	95347	106573	20.1	15.5	19.5	28.4	656	783
High fertility, low life expectancy, high in-migration, low out-migration	95347	119550	20.1	19.8	19.5	23.4	656	761
c) Max/min dependency ratios								
High fertility, high life expectancy, high in-migration, low out-migration	95347	123378	20.1	19.1	19.5	25.8	656	818
Low fertility, low life expectancy, low in-migration, high outmigration	95347	90291	20.1	17	19.5	26.1	656	758

HOUSEHOLD PROJECTIONS

Households

The number of households in the area of Pembrokeshire outside the National Park is projected to increase at a rate faster than that of its population under both projection scenarios due to the changes in household formation rates which will result in a continued decline in the occupancy rate.

Fig 17 Household Projections: Pembrokeshire Outside the National Park



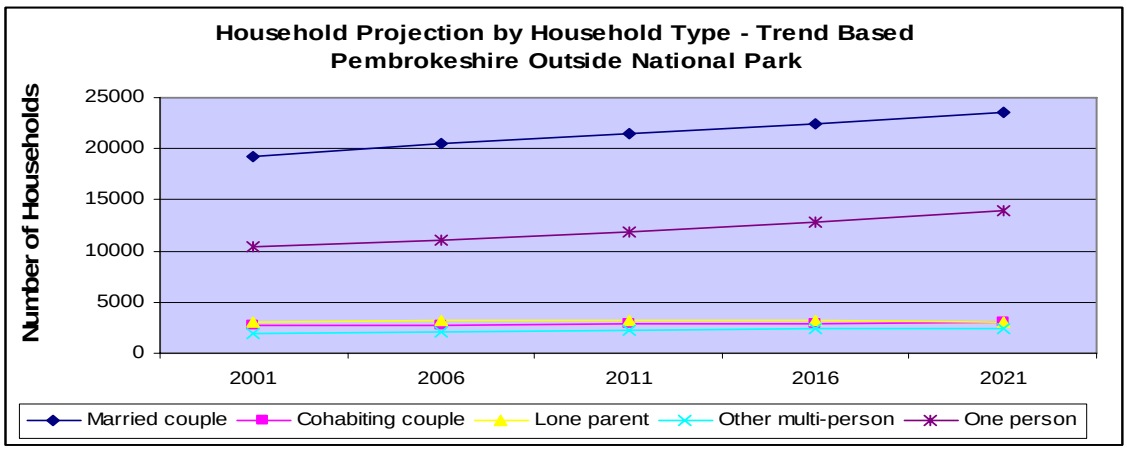
	2001	2006	20011	2016	2021
Natural Change	37,474	37,505	37,636	38,200	38,759
Trend Based	37,474	39,605	41,569	43,851	46,057

Based on indigenous growth alone i.e. no further migration, the number of households in the area is forecast to grow during 2006 – 2021 by 1250 to 38,759 a rise of 3%. The trend-based scenario, which includes growth through migration movements, projects a growth five times as much, bringing the total number of housholds to 46,050 by 2021. This is equivalent to a growth rate of 16.3% and an annual increase of 430 households each year over the fifteen year period.

Household Type

The most significant projection result for household types in the area of

Fig 18 Household Projections by Household Type: Pembrokeshire Outside National Park



Pembrokeshire outside the National park is the forecast rapid upward trend in one-person households, which are projected to increase by a quarter.

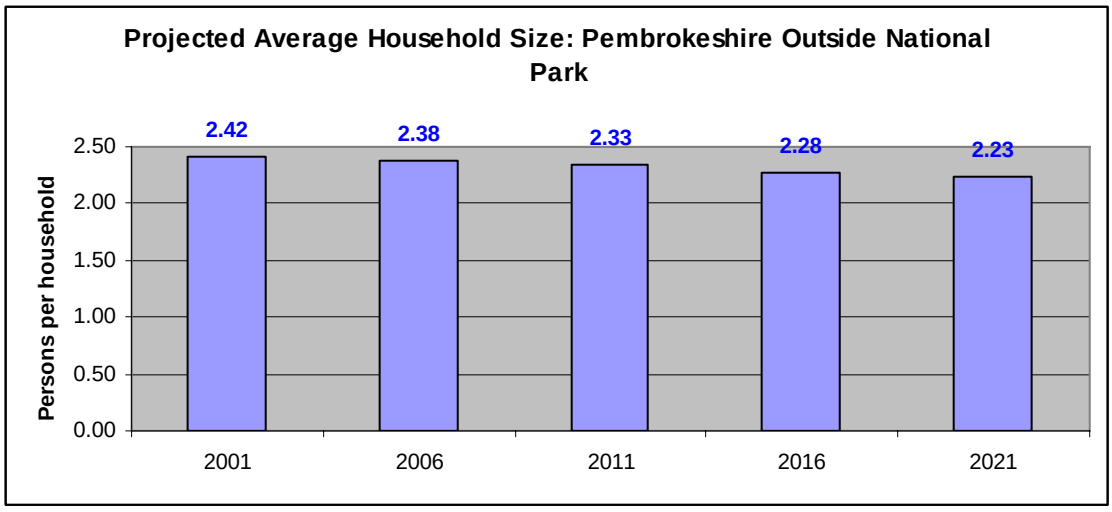
Table 14 Projected Household Types: Pembrokeshire Outside National Park

Household Types	2001	2006	2011	2016	2021	LDP Period % Change 2006 - 2021
Married couple	19,272	20,477	21,458	22,507	23,480	14.7
Cohabiting couple	2,745	2,757	2,836	2,954	3,024	9.7
Lone parent	3,112	3,129	3,126	3,126	3,119	-0.3
Other multi-person	1,978	2,117	2,258	2,384	2,470	16.7
One person	10,367	11,126	11,891	12,880	13,962	25.5

Projected Household Size

The average household size in the area is projected to fall steadily between 2006 and 2021, mainly due to the significant increase in one-person households.

Fig 19 Projected Household Size: Pembrokeshire Coast National Park



Dwellings Requirement

The following table suggests that for the area of Pembrokeshire outside the National Park will require a total of 5155 new dwellings for the period 2006–2021, which equates to an average build of 345 units per annum, which compares with a current average completions rate of approximately 470 dwellings per annum.

Table 15 - Conversion of projected households to dwellings requirement 2006-2021: Pembrokeshire Outside National Park

Factors		
A2	*fraction of households in non permanent accommodation*	0.010
B2	*fraction of households (permanent) in shared dwellings*	0.0017
C2	*average number of sharing households per shared dwelling*	2.53
D2	*vacant dwellings as a proportion of unshared dwellings*	0.052
E2	*remaining second residences as proportion of unshared dwellings*	0.024
E3	*number of second/holiday homes*	
Dwellings Mid 2006		
	Dwellings 2001	41450
	April 2001 - Mid 2006 :	
	Dwellings completed less estimated demolitions	2404
A	Dwellings Mid 2006	43854
Dwelling Projections 2021		
1	Households with residents	46057
	Conversion to Dwellings :	
2	Households on non-permanent accommodation	461
3	Households in permanent accommodation	45596
4	Households in shared dwellings	78
5	Shared dwellings	31
6	Unshared dwellings (=unshared household)	45518
7	Dwellings with residents	45549
8	Vacant dwellings	2367
9	Dwellings not used as main residence	1092
B	All dwellings 2021	49008
C	Demolitions (2006-2021)	0
	Dwelling requirement 2006-2021	**5,154**

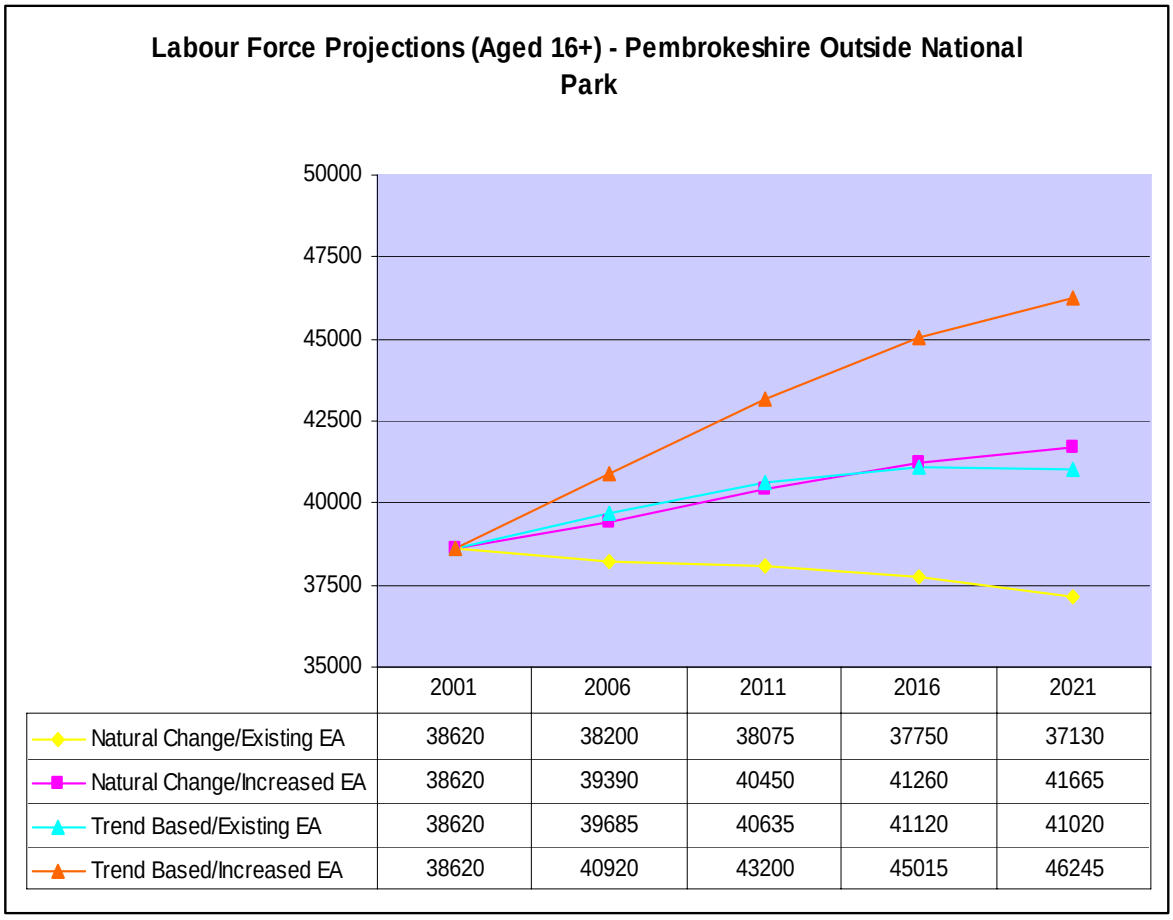
In the above calculations, demolitions have been set at zero as evidence suggests that dwellings demolished in the area are replaced by new build.

LABOUR FORCE PROJECTIONS

Overall Trends

Of the four projections only a natural change/existing economic activity scenario would result in a reduction in the labour force between 2006 – 2021. The most

Fig 20 Labour Force Projections: Pembrokeshire Outside National Park



	2001	2006	2011	2016	2021
Natural Change/Existing EA	38620	38200	38075	37750	37130
Natural Change/Increased EA	38620	39390	40450	41260	41665
Trend Based/Existing EA	38620	39685	40635	41120	41020
Trend Based/Increased EA	38620	40920	43200	45015	46245

significant increase would result from the trend based projection combined with increased economic activity, which would result in a total fifteen year increase of 1350 persons, or 90 per annum.

Labour Force Projections by Age

Contrary to the National Park labour force projections, under both scenarios i.e. with existing or increased economic activity rates, there would be rises in all the labour force age groupings, except for 25 – 44 (existing activity rates). This decrease is reflective of the loss throughout the 2006-2021 period of young persons out of the County, who would have aged over the fifteen year period to almost cover the 25 – 44 age grouping.

Table 15 Labour Force Projections by Age: Pembrokeshire Outside National Park

Age group	2001	2006	2011	2016	2021	2006-2021		
						Population effect	Activity effect	Total change
With Existing Economic Activity Rates:								
16 - 24	5,295	5,895	6,460	6,475	6,010	115	0	115
25 - 44	17,820	17,305	16,410	16,225	17,025	-280	0	-280
45 - 54	9,520	9,460	10,665	11,005	9,760	305	0	305
55 - 64	5,220	6,185	6,145	6,280	7,105	920	0	920
65-69	520	585	665	800	720	135	0	135
70+	245	255	290	335	400	145	0	145
With Annual Increase in Economic Activity Rates:								
16 - 24	5,295	6,125	6,955	7,205	6,910	115	670	785
25 - 44	17,820	17,710	17,190	17,365	18,600	-290	1185	900
45 - 54	9,520	9,695	11,195	11,840	10,770	315	755	1070
55 - 64	5,220	6,460	6,715	7,135	8,395	965	970	1935
65-69	520	650	805	1,050	1,025	150	230	380
70+	245	280	340	420	545	160	105	265

LOCAL DEVELOPMENT PLAN: POPULATION PROJECTIONS

THE METHOD

The Model

The projections have been produced using the suite of POPGROUP software developed by Bradford City Council and Andelin Associates (POPGROUP is now managed by the Cathie Marsh Centre for Census and Survey Research (CCSR) at the University of Manchester[1]). The suite includes POPGROUP, HOUSEGROUP and LABGROUP software and is used widely in the UK by local authorities and has recently been used by Welsh Assembly Government to produce their 2006 based population projections. It uses an established forecasting method known as the 'Cohort Component Model'. This methodology uses a reliable base population at a fixed time, broken down by age and gender for each of the areas to be projected.

The projection software is provided in a series of Excel data sheets in which the user can enter past information, and their assumptions about the future, for births and fertility, deaths and mortality and migration. It then ages the population on for one year (for example, all the children aged 4, will become aged 5), and considers components of change (fertility, mortality and migration). The forecasts project data for the mid year i.e. 30th June and are therefore consistent with data published from ONS. The results in Excel sheets format also include data extraction and chart routines that provide flexible access to detailed and broad summary statistics.

POPULATION PROJECTIONS

Base population

Given the requirement to produce projections for three separate areas and looking at the population bases available it was decided to use the 2001 Census as the base on the basis that:

- It was the most recent dataset for which PCNP population figures are available;
- The population changes derived from the 2003 boundary changes at Clunderwen and St Dogmaels are inbuilt into the 2001 Census figures;
- Five years worth of additional data (births,deaths, migration etc) were available to build into the projection model.

The base line population data required for the projection software is single year age figures. These figures are available for the County and PCNP area from the 2001 Census Standard Tables output. The PCNP figures were then simply subtracted from the County figures to obtain the base population single year age totals for the area of the County outside the National Park. The final base

line population figures that were input into the projection model are depicted in Appendix 1.

Births

The primary source of births information for the County as a whole was the Office for National Statistics Vital Statistics (VS4 Births & Mortality by Ward) for the years 2001-2006, which supplies births data for males and females by electoral division. In order to determine the number of births in the National Park the information for the electoral divisions solely within the Park were aggregated, whilst for split EDs postcoded births data obtained from Health Solutions Wales was geocoded, which enabled the births in the National Park areas of the split Eds to be identified. However there were a number of invalid postcodes in the Health Solutions so the birth figures derived from the geocoding exercise were proportionally increased to bring them in line with ONS's VS4 birth totals for wards as included in the Vital Statistics information. This resulted in the following births information being input into the model:

Table 16 Annual Births 2001 - 2005

		2001	2002	2003	2004	2005
PCNP	Total	211	148	179	168	164
	Male	117	78	91	86	85
	Female	94	70	88	82	79
OUTSIDE PCNP	Total	959	954	974	1017	1037
	Male	532	500	497	521	542
	Female	427	454	477	496	497
PEMBS	Total	1170	1102	1153	1185	1201
	Male	649	578	589	607	626
	Female	521	524	564	578	575

Source: ONS, Vital Statistics VS4 – Births and mortality by ward © Crown copyright

Fertility Assumptions

The model also requires age specific fertility rates per 1000 women to be input for the age range 15-49. The primary source for this information was ONS's annual VS2 – Births by age of mother.

In order to produce the necessary single age information each births total for an age cohort was simply divided by the number of years, except for the two extremes of the age range, where all births in the 11-15 age range were attributed to 15 year olds, whilst in terms of 45+ aged mothers the small number of births were attributed to 45 year olds. In order to calculate an average fertility for the ten year period the average population totals for females aged 11-49 were calculated from the Mid

Table 17 Live births by age of mother 1995 - 2005

Age of Mother	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	10 Yr Total	Average per year
11-15	3	6	3	3	2	2	6	5	5	6	41	4
16-17	7	11	12	6	27	26	29	27	23	30	198	20
18-19	108	96	108	113	87	79	84	77	73	74	899	90
20-24	278	295	261	227	209	260	239	274	278	281	2602	260
25-29	414	432	403	367	373	352	275	274	299	313	3502	350
30-34	331	326	315	328	294	288	306	293	326	295	3102	310
35-39	120	131	139	137	133	133	133	168	144	174	1412	141
40-44	26	26	25	32	28	29	**29**	**34**	**36**	**27**	292	29
45+	0	1	2	1	0	1	**1**	**1**	**1**	**1**	9	1
All ages	1287	1324	1268	1214	1153	1170	1102	1153	1185	1201	12057	1206

Source: ONS, Vital Statistics VS2 - Births by age of mother © Crown copyrigh

Year Estimates of Population. Utilising this information the single year fertility rates were calculated as shown in the following table.

Table 18 Fertility Rate per 1,000 females

Age	Births	Av Pop in 000s	Fertility rate per 1000	Age	Births	Av Pop in 000s	Fertility rate per 1000
15	4	0.7574	5.3	33	62	0.7405	83.7
16	10	0.7496	13.3	34	62	0.7518	82.5
17	10	0.7416	13.5	35	28	0.7723	36.3
18	45	0.6793	66.2	36	28	0.7805	35.9
19	45	0.5143	87.5	37	28	0.7842	35.7
20	52	0.4672	111.3	38	28	0.7875	35.6
21	52	0.4730	109.9	39	28	0.7886	35.5
22	52	0.5050	103.0	40	6	0.7872	7.6
23	52	0.5315	97.8	41	6	0.7781	7.7
24	52	0.5439	95.6	42	6	0.7667	7.8
25	70	0.5579	125.5	43	6	0.7534	8.0
26	70	0.5741	121.9	44	6	0.7444	8.1
27	70	0.5927	118.1	45	1	0.7464	1.3
28	70	0.6125	114.3	46	0	0.7571	0.0
29	70	0.6294	111.2	47	0	0.7743	0.0
30	62	0.6527	95.0	48	0	0.7913	0.0
31	62	0.6867	90.3	49	0	0.8143	0.0
32	62	0.7100	87.3				

Source: ONS, Vital Statistics VS2 - Births by age of mother & Mid Year Estimates of Population © Crown copyright

Finally, in terms of future births and fertility, the fertility assumptions that were produced by the Government Actuary's Department and used in ONS's 2006 regional projections for Wales were downloaded from the PopGroup website and input for the period 2006 – 2021.

Mortality

A similar exercise was undertaken to derive mortality information for the model. The primary source of information was the annual ONS's Vital Statistics, which provide mortality information down to ward level. In terms of calculating total deaths for the areas inside and outside the PCNP the information included in VS4 – Births and mortality by ward was aggregated for wards/electoral divisions (EDs) that are wholly in the National Park. In the absence of a source of postcoded mortality information for determining deaths in split EDs it was decided to derive a proportional split of domestic addresses from the Local Land & Property Gazetteer and apply this ratio for each of the split ED mortality figures. This resulted in the following mortality information being input into the model for the years 2001- 2005

Table 19 Annual Mortality 2001 - 2005

		2001	2002	2003	2004	2005
PCNP	Total	304	310	316	281	301
	Male	153	156	152	129	137
	Female	150	154	164	151	163
OUTSIDE PCNP	Total	1071	1067	1100	1031	1157
	Male	543	525	534	519	556
	Female	529	542	566	513	602
PEMBS	Total	1375	1377	1416	1312	1458
	Male	696	681	686	648	693
	Female	679	696	730	664	765

Source: ONS, Vital Statistics VS4 – Births and mortality by ward © Crown copyright

Mortality Assumptions

The model also requires age specific mortality rates per 1000 males and females to be input for the age range 0 - 90+. The primary source for this information was ONS's annual VS4 – Births and mortality by ward, which gives mortality totals by five year age cohort. The annual ten year average was calculated as depicted in Appendix 2. From this information the single age mortality rate was calculated by simply dividing the number of deaths by the number of years in the cohort. The mortality rates per thousand persons were then calculated to fulfill the models requirements (See Appendix 3)

Finally, in terms of future deaths the mortality assumptions that were produced by the Government Actuary's Department and used in ONS's 2006 regional projections for Wales were downloaded from the PopGroup website and input for the period 2006 – 2021.

Migration

PopGroup allows for the input of a range of migration data including:

- Single year age specific migration rates per 1,000 males/females for in and out migration movements;
- Migrant total movements both into and out of an area;
- Known migration movements by five year age groups.

There are separate spreadsheets within PopGroup to enable this information to be input in respect of :

- In migrants from the rest of the UK
- Out migrants to the rest of the UK
- In migrants from outside the UK
- Out migrants outside the UK

As noted in the Introduction of this technical paper, a particular difficulty with population projection work is lack of data to make reasonable estimates of migration. This is especially significant in Pembrokeshire since net migration is a key component of population change in the county. As a consequence not all the data options in PopGroup have been utilised in these projections.

Table 20 Flows into/from Pembrokeshire with rest of the UK during period 2001- 2005

numbers rounded to nearest 10

	Persons			Males			Females		
Age	**Inflow**	**Outflow**	**Balance**	**Inflow**	**Outflow**	**Balance**	**Inflow**	**Outflow**	**Balance**
0-4	1,420	1,040	380	720	570	150	690	460	230
5-9	1,240	840	400	630	430	200	600	410	190
10-14	1,200	860	340	590	430	160	630	430	200
15-19	1,160	2,650	-1,490	510	1,110	-600	650	1,530	-880
20-24	2,550	2,720	-170	1,020	1,200	-180	1,510	1,530	-20
25-29	1,860	1,750	110	880	900	-20	980	860	120
30-34	1,670	1,360	310	790	690	100	870	680	190
35-39	1,660	1,010	650	790	520	270	870	490	380
40-44	1,390	820	570	730	410	320	670	400	270
45-49	1,150	710	440	570	350	220	580	360	220
50-54	1,230	620	610	610	310	300	610	320	290
55-59	1,410	670	740	710	330	380	710	340	370
60-64	1,110	530	580	570	250	320	540	280	260
65-69	740	460	280	400	250	150	320	210	110
70-74	360	300	60	190	140	50	180	180	0
75+	890	690	200	310	260	50	570	430	140
All ages	21,010	17,070	3,940	10,040	8,150	1,890	10,970	8,940	2,030

Source: Small Area Population Estimates Team, Office for National Statistics © Crown copyright

Until recently information on migration has only been available at a County level from the components of change information that formed part of the yearly Mid Year Estimates for Local Authorities produced by ONS but this information was seen as not detailed enough as it did not include and age breakdown, nor could it be broken down into figures specific to the area of the PCNP.

The Census of Population 2001 included a question on usual address one year before the Census, to be answered for all persons aged 1 year or over.

Whilst this source does allow an age breakdown of migration it was also considered as unsuitable, because the one year period prior to the census is considered unlikely to be representative, especially as migration can vary markedly from one year to another.

Following discussions with the Statistical Unit at the National Assembly for Wales it was decided to contact the Small Area Population Estimates Team at the Office for National Statistics to commission them to abstract five years worth of migration movements into and out of Pembrokeshire and the PCNP as well as movementsbetween the two areas. The migration data for this exercise was based on patient register data and patient re-registration recorded in the National Health Service Central Register. The figures exclude movements within the two areas, merely recording movements into and out the two areas. The aggregated figures for the five individual years received are shown in the table above.

Table 21 Flows To/From PCNP with rest of Pembrokeshire and UK 2001-2005

Numbers rounded to nearest 5

	Males					Females				
Age	Inflow from rest of Pembs	Inflow from rest of UK	Outflow to rest of Pembs	Outflow to rest of UK	Balance	Inflow from rest of Pembs	Inflow from rest of UK	Outflow to rest of Pembs	Outflow to rest of UK	Balance
0-4	70	80	115	45	-5	90	80	95	40	35
5-9	75	110	95	45	40	65	95	100	45	15
10-14	75	110	90	75	20	65	105	100	50	20
15-19	75	75	105	200	-150	90	85	130	250	-205
20-24	65	165	100	200	-65	120	255	140	260	-20
25-29	80	155	105	155	-25	85	170	125	135	-5
30-34	110	140	140	105	5	100	135	165	105	-35
35-39	95	145	130	65	45	115	165	125	70	90
40-44	80	140	125	65	35	80	135	110	55	50
45-49	70	120	100	55	35	65	125	90	65	35
50-54	75	140	105	60	50	65	125	95	45	50
55-59	70	150	70	55	95	80	165	120	65	60
60-64	50	120	85	40	45	50	120	65	45	55
65-69	35	95	55	35	40	20	80	45	40	10
70-74	30	20	45	25	-20	15	25	40	30	-30
75+	50	50	80	65	-45	120	85	180	105	-80
All ages	1100	1825	1545	1285	95	1230	1945	1720	1405	50

Source: Small Area Population Estimates Team, Office for National Statistics © Crown copyright

Similar information was also forthcoming for the area of the PCNP, but in addition the Park information also gave details of flows to and from the rest of Pembrokeshire.

The single year age specific migration rates per 1,000 males/females were then calculated from this commissioned data by creating the five year average and simply dividing each age cohort total by the number of years in the

cohort. The migration rates per thousand persons were then calculated to fulfill the models requirements (See Appendices 4a and 4b).

In terms of the migration movements to and from the UK the five years of data by the broad age bands was input into the model for the two areas of the PCNP and the area of County outside the PCNP, whilst for migration movements for the rest of the projected period (2006-2021) it was decided to merely input a standard total 'in' and a total 'out' figure for each of the 15 years., leaving the model to distribute the total on the basis of the single year age specific migration rates referred to in the previous chapter.

Current international related migration totals to and from the County are relatively insignificant compared to UK based movement of persons and data on such movements is not available for individual age cohorts or for the area of the PCNP. Whilst these migration movements affecting the County may increase significantly in future years it was decided that the average total for the last 5 years should form the basis for the projected trend in respect of both 'in' and 'out' movements.

Table 22 PEMBROKESHIRE: International Migration 2001-2006

Year	In	Out
Mid 2001 - 2002	300	200
Mid 2002 - 2003	300	100
Mid 2003 - 2004	200	200
Mid 2004 - 2005	200	300
Mid 2005 - 2006	300	200
Average	260	200

Source: Office for National Statistics (ONS)

In order to assist the model in distributing these totals information from the 2001 Census in respect of the one year migration question was utilised. Standard Table 8 – *Residency and sex and age by migration*, included analysis of persons moving into the area from outside the UK so this information was treated in a similar way to the UK based inflow information to determine age specific rates for the County for inclusion in the model (See Appendix 5). Unfortunately Standard Table 8 was not created for National Parks.

In terms of movement of persons out of the County to outside the UK it was assumed that the age specific migration rates would reflect in-migration age distribution from outside the UK.

The resultant projections for the three areas together with the components of change within the projections are displayed in appendices 6 & 7.

Natural Change Projection

In addition to the above trend based scenario incorporating all the components of change (births, deaths and migration) an additional scenario was fed into the model which constrained migration over the projection period to zero. This produced a projection of what the natural change would be in the period of the Local Development Plan.

Sensitivity Analysis and Variant Projection

In order to illustrate the uncertainty associated with population projections, variant projections were also run alongside the principal trend based population projection. In total eight variations on the components of change were run, these being:

- High fertility – 10% increase on 1996-2005 average birth rate;
- Low fertility – 10% decrease on 1996-2005 average birth rate;
- High life expectancy - 10% decrease in 1996-2005 average mortality rate;
- Low life expectancy - 10% increase in 1996-2005 average mortality rate;
- High in migration – 10% increase in 2001-2006 average figure;
- Low in migration – 10% decrease in 2001-2006 average figure;
- High out migration – 10% increase in 2001-2006 average figure;
- Low in migration – 10% decrease in 2001-2006 average figure;

Combinations of these variants were also run to see the effect that they would have on the projected numbers. The six combinations that were run were:

- **Maximum Population** – *high fertility, high life expectancy, high in migration and low out migration;*
- **Minimum Population** – *low fertility, low life expectancy, low in migration and high out migration;*
- **Oldest Age Structure** – *low fertility, high life expectancy, high in migration and high out migration;*
- **Youngest Age Structure** – *high fertility, low life expectancy, low in migration and low out migration;*
- **Maximum Dependency Ratio** – *high fertility, high life expectancy, high in migration and low out migration;*
- **Minimum Dependency Ratio** – *low fertility, low life expectancy, low in migration and high out migration;*

HOUSEHOLD PROJECTIONS

The HOUSEGROUP module of the software creates the estimated households for the period of the projections by utilising the results from the POPGROUP scenario and incorporating a number of additional datasets.

Household Population

The household populations for each area were calculated by subtracting the population not in households, which were taken as those residents in communal establishments as defined by the 2001 Census. This data was abstracted from 2001 Census output Table ST001 – Age by Sex and Resident Type for each of the five year age cohorts for both males and females. Without any data about likely future levels of residents in communal establishments the 2001 figures were used as standard throughout the projection period.

Household Categories

A requirement of the Local Development Plan Team was that the household projection results were broken down into specific household types. The maximum set-up that HOUSEGROUP will allow by individual five year age cohorts for males/females as follows:

Household Types:
Married couple
Cohabiting couple
Lone parent
Other multi-person
One person
Concealed family types:
Concealed couple
Concealed lone parent

This information was abstracted from specially commissioned 2001 Census Table C0062b: Persons by Marital Status for Pembrokeshire and as no similar information was available for PCNP the County figures that were created were applied to both sub areas of the County. In addition for these initial projections no changes were made to the 2001 household type proportions for the period up to 2021. The results of these projections are presented in Appendix 8

Dwellings Requirement 2006 – 2021

The projected numbers of households do not equate to dwellings. As can be seen from above there are a number of different household types. A household can be one person living alone, or a group of people (not necessarily related) living at the same address with common housekeeping. In turn, household spaces are the accommodation occupied by a household, but a dwelling can either consist of one household space (an unshared dwelling) or two or more households spaces (a shared dwelling).

Table 23 - Conversion of projected households to dwellings

Factors		
A2	*fraction of households in non permanent accommodation*	
B2	*fraction of households (permanent) in shared dwellings*	
C2	*average number of sharing households per shared dwelling*	
D2	*vacant dwellings as a proportion of unshared dwellings*	
E2	*remaining second residences as proportion of unshared dwellings*	
E3	*number of second/holiday homes*	
Dwellings Mid 2006		
1	Dwellings 2001	
	April 2001 - Mid 2006 :	
2	Dwellings completed less estimated demolitions	
A	Dwellings Mid 2006	
Dwelling Projections 2021		
1	Households with residents	
	Conversion to Dwellings :	
2	Households on non-permanent accommodation	(1 multiplied by A2)
3	Households in permanent accommodation	(1 minus 2)
4	Households in shared dwellings	(3 multiplied by B2)
5	Shared dwellings	(4 divided by C2)
6	Unshared dwellings (=unshared household)	(3 minus 4)
7	Dwellings with residents	(5 plus 6)
8	Vacant dwellings	(6 multiplied by D2)
9	Dwellings not used as main residence	(6 multiplied by E2)
B	All dwellings 2021	(7 plus 8 plus 9)
C	Demolitions (2006-2021)	
	Dwelling requirement 2006-2021	**(B-(A-C)**

In order to make the transition from households to dwellings the results of the household projections were utilised, together with data abstracted from the results of the 2001 Census to produce an estimated dwelling requirement for the period of the Local Development Plans (2006 – 2021). This was achieved by taking the total number of dwellings for the base date of LDP period i.e. 2006 and the total number of dwellings required for the period 2006 - 2021 was then derived from converting the projected number of households in 2021 into dwellings and subtracting the dwelling stock in 2006. This process is summarised in Table 23 above.

In arriving at the dwelling requirement figures for 2021 it was assumed that several
ratios needed for the calculation would remain constant throughout the projection
period. These were as follows:

- the proportion of households in permanent accommodation;
- the proportion of these households in shared dwellings;
- the average number of households per shared dwellings;
- vacant dwellings as a proportion of unshared dwellings;
- dwellings not used as a main residence as a proportion of unshared dwellings;

The variables used to calculate dwellings in 2021 from households were quantified using, in the main, these constant factors derived from the 2001 Census data. The number of dwellings in the base year 2006 was taken to be the estimated number of dwellings in the 2001 Census with subsequent dwellings completed, less estimated demolitions for the period April 2001 – June 2006.

The calculated number of dwellings at 2021 was based on the projected number of households in that year. The number of dwellings does not equate exactly to the number of households. The procedure was therefore to add or subtract categories of dwellings or households as shown, in order to convert the household projection to an equivalent dwelling figure.

In terms of the dwelling requirement 2006 – 2021, Section C of Table 23 outlines this next stage of the process. The dwelling requirement for the period 2006 - 2021 was calculated by subtracting the 2006 dwelling figure from that for 2021.

LABOUR FORCE PROJECTIONS

The third module of the software suite, LABGROUP creates the estimated labour force for the period of the projections by utilising the results from the POPGROUP scenario and applying information on economic activity rates and any perceived changes in these rates for the LDP plan period.

As with the base information on economic activity rates, data was abstracted by five year age cohorts for both males and females from 2001 Census Table ST028 – Sex and Age by Economic Activity (See Appendix 9). Evidence from the Labour Force Survey and Annual Population Survey indicate that economic activity rates have increased since 2001. In addition, bearing in mind that people are living longer and it has been reported that many have not made adequate provision for their retirement, economic activity rates may well rise if people need to work longer to top up pensions. In addition the Pembrokeshire economy has improved in recent years with unemployment reducing significantly and job prospects increasing. These circumstances, should they be maintained may also encourage more persons to become economically active. In addition to putting in base data on economic activity rates LABGROUP allows for an annual increase to be inserted into the model. It was therefore decided to run the model with economic activity rates as they were in 2001 and with annual increases as shown in Appendix 9.

The labour force projections are contained in Appendix 10

APPENDICES

APPENDIX 1 - Single Year Age Group Structure

	Pembrokeshire			National Park			Pembs Outside Park		
Age	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
ALL PEOPLE	114,138	55,039	59,099	22,537	10,907	11,630	91,601	44,132	47,469
0	1,279	666	613	209	120	89	1,070	546	524
1	1,287	677	610	190	103	87	1,097	574	523
2	1,380	732	648	223	130	93	1,157	602	555
3	1,365	737	628	245	125	120	1,120	612	508
4	1,392	719	673	231	121	110	1,161	598	563
5	1,411	703	708	239	105	134	1,172	598	574
6	1,447	713	734	239	128	111	1,208	585	623
7	1,524	772	752	240	131	109	1,284	641	643
8	1,562	784	778	254	125	129	1,308	659	649
9	1,612	814	798	285	137	148	1,327	677	650
10	1,609	818	791	274	137	137	1,335	681	654
11	1,512	740	772	298	151	147	1,214	589	625
12	1,554	771	783	270	133	137	1,284	638	646
13	1,541	796	745	290	158	132	1,251	638	613
14	1,500	766	734	278	140	138	1,222	626	596
15	1,422	732	690	255	111	144	1,167	621	546
16	1,502	750	752	279	143	136	1,223	607	616
17	1,411	686	725	263	139	124	1,148	547	601
18	1,369	668	701	258	130	128	1,111	538	573
19	1,126	602	524	211	123	88	915	479	436
20	1,075	538	537	192	113	79	883	425	458
21	1,067	601	466	187	111	76	880	490	390
22	1,021	501	520	163	83	80	858	418	440
23	982	497	485	176	90	86	806	407	399
24	1,015	445	570	181	90	91	834	355	479
25	893	433	460	160	86	74	733	347	386
26	992	497	495	169	78	91	823	419	404
27	1,109	524	585	170	88	82	939	436	503
28	1,178	510	668	192	81	111	986	429	557
29	1,321	610	711	212	105	107	1,109	505	604
30	1,206	573	633	185	94	91	1,021	479	542
31	1,309	631	678	229	102	127	1,080	529	551
32	1,379	669	710	220	111	109	1,159	558	601
33	1,333	639	694	241	118	123	1,092	521	571
34	1,472	719	753	238	124	114	1,234	595	639
35	1,457	734	723	266	136	130	1,191	598	593
36	1,558	744	814	271	129	142	1,287	615	672
37	1,535	728	807	266	130	136	1,269	598	671
38	1,650	760	890	275	127	148	1,375	633	742
39	1,603	806	797	277	139	138	1,326	667	659
40	1,523	741	782	303	149	154	1,220	592	628
41	1,475	740	735	266	125	141	1,209	615	594
42	1,504	781	723	297	151	146	1,207	630	577
43	1,445	688	757	278	130	148	1,167	558	609

	Pembrokeshire			National Park			Pembs Outside Park		
Age	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
44	1,451	697	754	281	129	152	1,170	568	602
45	1,428	699	729	315	147	168	1,113	552	561
46	1,462	723	739	298	147	151	1,164	576	588
47	1,457	753	704	294	145	149	1,163	608	555
48	1,505	731	774	304	153	151	1,201	578	623
49	1,519	732	787	218	164	154	1,301	568	633
50	1,625	780	845	349	150	199	1,276	630	646
51	1,689	813	876	369	192	177	1,320	621	699
52	1,711	812	899	366	170	196	1,345	642	703
53	1,873	932	941	429	216	213	1,444	716	728
54	1,873	907	966	419	205	214	1,454	702	752
55	1,582	731	851	335	148	187	1,247	583	664
56	1,635	810	825	387	200	187	1,248	610	638
57	1,606	779	827	384	171	213	1,222	608	614
58	1,536	755	781	315	170	145	1,221	585	636
59	1,401	646	755	327	138	189	1,074	508	566
60	1,445	730	715	317	164	153	1,128	566	562
61	1,427	712	715	330	176	154	1,097	536	561
62	1,395	704	691	304	144	160	1,091	560	531
63	1,404	715	689	291	154	137	1,113	561	552
64	1,298	668	630	300	161	139	998	507	491
65	1,307	647	660	272	127	145	1,035	520	515
66	1,333	665	668	313	142	171	1,020	523	497
67	1,222	571	651	282	137	145	940	434	506
68	1,298	624	674	275	141	134	1,023	483	540
69	1,165	586	579	285	146	139	880	440	440
70	1,228	606	622	268	143	125	960	463	497
71	1,130	562	568	249	126	123	881	436	445
72	1,153	530	623	248	105	143	905	425	480
73	1,054	495	559	235	122	113	819	373	446
74	1,045	438	607	234	97	137	811	341	470
75	967	425	542	240	109	131	727	316	411
76	922	415	507	227	102	125	695	313	382
77	914	385	529	230	88	142	684	297	387
78	877	385	492	206	96	110	671	289	382
79	839	333	506	204	78	126	635	255	380
80	839	328	511	198	79	119	641	249	392
81	770	286	484	180	70	110	590	216	374
82	510	199	311	128	51	77	382	148	234
83	457	171	286	118	34	84	339	137	202
84	495	170	325	104	36	68	391	134	257
85	417	121	296	87	25	62	330	96	234
86	389	120	269	94	26	68	295	94	201
87	321	94	227	91	26	65	230	68	162
88	272	78	194	72	20	52	200	58	142
89	218	55	163	43	10	33	175	45	130
90+	767	166	601	177	47	130	590	119	471

Source: ONS, Census of Population Source © Crown copyright

APPENDIX 2 Mortality by age 1996-2005

Males	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Annual Average
Under 1	1	5	7	6	3	6	2	4	2	7	4.3
1-4	3	2	1	1	2	1	1	1	0	0	1.2
5-9	0	1	2	0	0	0	0	0	0	0	0.3
10-14	2	1	0	1	1	0	0	0	2	0	0.7
15-19	2	2	2	1	2	1	3	2	4	1	2.0
20-24	6	3	2	0	4	0	3	3	1	5	2.7
25-29	3	1	2	4	2	3	4	6	2	1	2.8
30-34	5	4	4	5	8	4	5	2	0	6	4.3
35-39	4	4	4	5	5	6	5	9	6	1	4.9
40-44	7	5	5	12	8	13	7	8	7	16	8.8
45-49	7	14	9	10	7	13	8	14	12	18	11.2
50-54	24	18	21	26	15	21	20	14	21	21	20.1
55-59	22	31	22	25	32	41	37	33	36	39	31.8
60-64	43	45	53	37	45	55	39	37	35	39	42.8
65-69	78	74	80	73	63	77	66	68	68	54	70.1
70-74	114	106	109	108	85	88	102	90	87	111	100.0
75-79	133	119	121	138	139	113	108	142	112	107	123.2
80-84	107	140	90	110	118	116	128	124	136	132	120.1
85-89	59	67	79	82	64	93	81	83	74	92	77.4
90+	35	40	46	51	44	45	62	46	43	43	45.5
Females	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Annual Average
UNDER 1	3	5	1	2	3	2	6	1	2	2	2.7
1-4	0	0	1	0	0	0	1	1	0	0	0.3
5-9	1	0	0	1	0	0	0	0	1	0	0.3
10-14	0	1	1	0	0	0	1	0	0	0	0.3
15-19	0	0	1	0	0	1	1	1	5	0	0.9
20-24	0	0	0	2	0	0	2	2	2	1	0.9
25-29	0	2	2	2	1	1	2	1	0	1	1.2
30-34	5	4	0	1	3	2	6	0	2	1	2.4
35-39	2	0	2	3	4	2	5	7	3	4	3.2
40-44	5	1	7	6	2	8	4	4	4	4	4.5
45-49	7	4	8	5	2	4	10	6	12	4	6.2
50-54	8	13	13	14	14	15	10	10	14	6	11.7
55-59	15	21	19	16	17	14	27	27	12	20	18.8
60-64	23	24	40	34	24	27	33	33	25	27	29.0
65-69	47	49	58	44	32	41	44	38	33	33	41.9
70-74	74	63	74	67	65	61	57	66	56	64	64.7
75-79	126	103	111	137	106	109	82	96	88	114	107.2
80-84	129	133	149	134	120	117	132	146	138	140	133.8
85+	114	123	129	135	146	141	122	160	122	159	135.1
90+	118	128	133	139	137	134	151	131	145	185	140.1

Source: ONS, Vital Statistics VS4 – Births and mortality by ward © Crown copyright

APPENDIX 3 Single Year Mortality Rates

MALE MORTALITY			
Age	Deaths	Average Pop 000s	Deaths per '000
Newborn			4.91
0	4.30	0.6407	6.71
1	0.30	0.6586	0.46
2	0.30	0.6825	0.44
3	0.30	0.6996	0.43
4	0.30	0.7164	0.42
5	0.06	0.7367	0.08
6	0.06	0.7491	0.08
7	0.06	0.7583	0.08
8	0.06	0.7668	0.08
9	0.06	0.7706	0.08
10	0.14	0.7694	0.18
11	0.14	0.7754	0.18
12	0.14	0.7656	0.18
13	0.14	0.7561	0.19
14	0.14	0.7537	0.19
15	0.40	0.7541	0.53
16	0.40	0.7568	0.53
17	0.40	0.7616	0.53
18	0.40	0.6952	0.58
19	0.40	0.5564	0.72
20	0.54	0.5232	1.03
21	0.54	0.5341	1.01
22	0.54	0.5298	1.02
23	0.54	0.5304	1.02
24	0.54	0.5360	1.01
25	0.56	0.5338	1.05
26	0.56	0.5388	1.04
27	0.56	0.5378	1.04
28	0.56	0.5565	1.01
29	0.56	0.5840	0.96
30	0.86	0.5882	1.46
31	0.86	0.6120	1.41
32	0.86	0.6408	1.34
33	0.86	0.6826	1.26
34	0.86	0.6918	1.24
35	0.98	0.7107	1.38
36	0.98	0.7228	1.36
37	0.98	0.7357	1.33
38	0.98	0.7352	1.33
39	0.98	0.7477	1.31
40	1.76	0.7341	2.40
41	1.76	0.7424	2.37
42	1.76	0.7351	2.39
43	1.76	0.7390	2.38
44	1.76	0.7302	2.41

FEMALE MORTALITY			
Age	Deaths	Average Pop 000s	Deaths per '000
Newborn			3.19
0	2.70	0.5893	4.58
1	0.06	0.6041	0.10
2	0.06	0.6246	0.10
3	0.06	0.6509	0.09
4	0.06	0.6776	0.09
5	0.06	0.6999	0.09
6	0.06	0.7150	0.08
7	0.06	0.7265	0.08
8	0.06	0.7406	0.08
9	0.06	0.7517	0.08
10	0.06	0.7614	0.08
11	0.06	0.7624	0.08
12	0.06	0.7648	0.08
13	0.06	0.7618	0.08
14	0.06	0.7563	0.08
15	0.18	0.7574	0.24
16	0.18	0.7496	0.24
17	0.18	0.7416	0.24
18	0.18	0.6793	0.26
19	0.18	0.5143	0.35
20	0.18	0.4672	0.39
21	0.18	0.4730	0.38
22	0.18	0.5050	0.36
23	0.18	0.5315	0.34
24	0.18	0.5439	0.33
25	0.24	0.5579	0.43
26	0.24	0.5741	0.42
27	0.24	0.5927	0.40
28	0.24	0.6125	0.39
29	0.24	0.6294	0.38
30	0.48	0.6527	0.74
31	0.48	0.6867	0.70
32	0.48	0.7100	0.68
33	0.48	0.7405	0.65
34	0.48	0.7518	0.64
35	0.64	0.7723	0.83
36	0.64	0.7805	0.82
37	0.64	0.7842	0.82
38	0.64	0.7875	0.81
39	0.64	0.7886	0.81
40	0.90	0.7872	1.14
41	0.90	0.7781	1.16
42	0.90	0.7667	1.17
43	0.90	0.7534	1.19
44	0.90	0.7444	1.21

MALE MORTALITY			
Age	Deaths	Average Pop 000s	Deaths per '000
45	2.24	0.7300	3.07
46	2.24	0.7372	3.04
47	2.24	0.7437	3.01
48	2.24	0.7625	2.94
49	2.24	0.7862	2.85
50	4.02	0.7825	5.14
51	4.02	0.7899	5.09
52	4.02	0.8013	5.02
53	4.02	0.7935	5.07
54	4.02	0.7881	5.10
55	6.36	0.7900	8.05
56	6.36	0.7809	8.14
57	6.36	0.7693	8.27
58	6.36	0.7496	8.48
59	6.36	0.7191	8.84
60	8.56	0.7115	12.03
61	8.56	0.6990	12.25
62	8.56	0.6830	12.53
63	8.56	0.6702	12.77
64	8.56	0.6657	12.86
65	14.02	0.6532	21.46
66	14.02	0.6419	21.84
67	14.02	0.6283	22.31
68	14.02	0.6067	23.11
69	14.02	0.5858	23.93
70	20.00	0.5609	35.66
71	20.00	0.5413	36.95
72	20.00	0.5235	38.20
73	20.00	0.5004	39.97
74	20.00	0.4795	41.71
75	24.64	0.4532	54.37
76	24.64	0.4259	57.85
77	24.64	0.3847	64.05
78	24.64	0.3476	70.89
79	24.64	0.3190	77.24
80	24.02	0.2880	83.40
81	24.02	0.2532	94.87
82	24.02	0.2214	108.49
83	24.02	0.1935	124.13
84	24.02	0.1617	148.55
85	15.48	0.1375	112.55
86	15.48	0.1096	141.30
87	15.48	0.0858	180.51
88	15.48	0.0752	205.80
89	15.48	0.0621	249.13
90+	45.50	0.1686	269.87

FEMALE MORTALITY			
Age	Deaths	Average Pop 000s	Deaths per '000
45	1.24	0.7464	1.66
46	1.24	0.7571	1.64
47	1.24	0.7743	1.60
48	1.24	0.7913	1.57
49	1.24	0.8143	1.52
50	2.34	0.8206	2.85
51	2.34	0.8355	2.80
52	2.34	0.8514	2.75
53	2.34	0.8550	2.74
54	2.34	0.8490	2.76
55	3.76	0.8369	4.49
56	3.76	0.8252	4.56
57	3.76	0.8141	4.62
58	3.76	0.7824	4.81
59	3.76	0.7511	5.01
60	12.20	0.7336	16.63
61	12.20	0.7222	16.89
62	12.20	0.7038	17.33
63	12.20	0.6898	17.69
64	12.20	0.6740	18.10
65	8.38	0.6604	12.69
66	8.38	0.6481	12.93
67	8.38	0.6377	13.14
68	8.38	0.6333	13.23
69	8.38	0.6307	13.29
70	12.94	0.6223	20.79
71	12.94	0.6066	21.33
72	12.94	0.5924	21.84
73	12.94	0.5736	22.56
74	12.94	0.5680	22.78
75	21.44	0.5593	38.33
76	21.44	0.5486	39.08
77	21.44	0.5214	41.12
78	21.44	0.4839	44.31
79	21.44	0.4632	46.29
80	26.76	0.4350	61.52
81	26.76	0.4104	65.20
82	26.76	0.3783	70.74
83	26.76	0.3472	77.07
84	26.76	0.3151	84.93
85	27.01	0.2696	100.20
86	27.01	0.2379	113.54
87	27.01	0.2092	129.13
88	27.01	0.1858	145.38
89	27.01	0.1615	167.26
90+	140.10	0.6078	230.50

Source: ONS, Vital Statistics & Mid Year Estimates © Crown copyright

APPENDIX 4a Migration Data: PCNP

PEMBROKESHIRE COAST NATIONAL PARK										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop
Under 1	0.1200	6.00	50.0000	6.40	53.3333	0.0890	6.80	76.4045	5.40	60.6742
1	0.1030	6.00	58.2524	6.40	62.1359	0.0870	6.80	78.1609	5.40	62.0690
2	0.1300	6.00	46.1538	6.40	49.2308	0.0930	6.80	73.1183	5.40	58.0645
3	0.1250	6.00	48.0000	6.40	51.2000	0.1200	6.80	56.6667	5.40	45.0000
4	0.1210	6.00	49.5868	6.40	52.8926	0.1100	6.80	61.8182	5.40	49.0909
5	0.1047	7.40	70.6754	5.60	53.4841	0.1340	6.40	47.7612	5.80	43.2836
6	0.1280	7.40	57.8125	5.60	43.7500	0.1110	6.40	57.6577	5.80	52.2523
7	0.1310	7.40	56.4885	5.60	42.7481	0.1090	6.40	58.7156	5.80	53.2110
8	0.1250	7.40	59.2000	5.60	44.8000	0.1290	6.40	49.6124	5.80	44.9612
9	0.1370	7.40	54.0146	5.60	40.8759	0.1480	6.40	43.2432	5.80	39.1892
10	0.1370	7.00	51.0949	6.60	48.1752	0.1370	6.80	49.6350	6.00	43.7956
11	0.1510	7.40	49.0066	6.60	43.7086	0.1470	6.80	46.2585	6.00	40.8163
12	0.1330	7.40	55.6391	6.60	49.6241	0.1370	6.80	49.6350	6.00	43.7956
13	0.1580	7.40	46.8354	6.60	41.7722	0.1320	6.80	51.5152	6.00	45.4545
14	0.1400	7.40	52.8571	6.60	47.1429	0.1380	6.80	49.2754	6.00	43.4783
15	0.1110	6.00	54.0541	12.20	109.9099	0.1440	7.00	48.6111	15.20	105.5556
16	0.1430	6.00	41.9580	12.20	85.3147	0.1360	7.00	51.4706	15.20	111.7647
17	0.1390	6.00	43.1655	12.20	87.7698	0.1240	7.00	56.4516	15.20	122.5806
18	0.1300	6.00	46.1538	12.20	93.8462	0.1280	7.00	54.6875	15.20	118.7500
19	0.1230	6.00	48.7805	12.20	99.1870	0.0880	7.00	79.5455	15.20	172.7273
20	0.1130	9.20	81.4159	12.00	106.1947	0.0790	15.00	189.8734	16.00	202.5316
21	0.1110	9.20	82.8829	12.00	108.1081	0.0760	15.00	197.3684	16.00	210.5263
22	0.0830	9.20	110.8434	12.00	144.5783	0.0800	15.00	187.5000	16.00	200.0000
23	0.0900	9.20	102.2222	12.00	133.3333	0.0860	15.00	174.4186	16.00	186.0465
24	0.0900	9.20	102.2222	12.00	133.3333	0.0910	15.00	164.8352	16.00	175.8242
25	0.0860	9.40	109.3023	10.40	120.9302	0.0740	10.20	137.8378	10.40	140.5405
26	0.0780	9.40	120.5128	10.40	133.3333	0.0910	10.20	112.0879	10.40	114.2857
27	0.0880	9.40	106.8182	10.40	118.1818	0.0820	10.20	124.3902	10.40	126.8293
28	0.0810	9.40	116.0494	10.40	128.3951	0.1110	10.20	91.8919	10.40	93.6937
29	0.1050	9.40	89.5238	10.40	99.0476	0.1070	10.20	95.3271	10.40	97.1963
30	0.0940	10.00	106.3830	9.80	104.2553	0.0910	9.40	103.2967	10.80	118.6813
31	0.1020	10.00	98.0392	9.80	96.0784	0.1270	9.40	74.0157	10.80	85.0394

PEMBROKESHIRE COAST NATIONAL PARK										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	2001-05 Average	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	2001-05 Average
32	0.1110	10.00	90.0901	9.80	88.2883	0.1090	9.40	86.2385	10.80	99.0826
33	0.1180	10.00	84.7458	9.80	83.0508	0.1230	9.40	76.4228	10.80	87.8049
34	0.1240	10.00	80.6452	9.80	79.0323	0.1140	9.40	82.4561	10.80	94.7368
35	0.1360	9.60	70.5882	7.80	57.3529	0.1300	11.20	86.1538	7.80	60.0000
36	0.1290	9.60	74.4186	7.80	60.4651	0.1420	11.20	78.8732	7.80	54.9296
37	0.1300	9.60	73.8462	7.80	60.0000	0.1360	11.20	82.3529	7.80	57.3529
38	0.1270	9.60	75.5906	7.80	61.4173	0.1480	11.20	75.6757	7.80	52.7027
39	0.1390	9.60	69.0647	7.80	56.1151	0.1380	11.20	81.1594	7.80	56.5217
40	0.1490	8.80	59.0604	7.60	51.0067	0.1540	8.60	55.8442	6.60	42.8571
41	0.1250	8.80	70.4000	7.60	60.8000	0.1410	8.60	60.9929	6.60	46.8085
42	0.1510	8.80	58.2781	7.60	50.3311	0.1460	8.60	58.9041	6.60	45.2055
43	0.1300	8.80	67.6923	7.60	58.4615	0.1480	8.60	58.1081	6.60	44.5946
44	0.1290	8.80	68.2171	7.60	58.9147	0.1520	8.60	56.5789	6.60	43.4211
45	0.1470	7.60	51.7007	6.20	42.1769	0.1680	7.60	45.2381	6.20	36.9048
46	0.1470	7.60	51.7007	6.20	42.1769	0.1510	7.60	50.3311	6.20	41.0596
47	0.1450	7.60	52.4138	6.20	42.7586	0.1490	7.60	51.0067	6.20	41.6107
48	0.1530	7.60	49.6732	6.20	40.5229	0.1510	7.60	50.3311	6.20	41.0596
49	0.1640	7.60	46.3415	6.20	37.8049	0.1540	7.60	49.3506	6.20	40.2597
50	0.1500	8.60	57.3333	6.60	44.0000	0.1990	7.60	38.1910	5.60	28.1407
51	0.1920	8.60	44.7917	6.60	34.3750	0.1770	7.60	42.9379	5.60	31.6384
52	0.1700	8.60	50.5882	6.60	38.8235	0.1960	7.60	38.7755	5.60	28.5714
53	0.2160	8.60	39.8148	6.60	30.5556	0.2130	7.60	35.6808	5.60	26.2911
54	0.2050	8.60	41.9512	6.60	32.1951	0.2140	7.60	35.5140	5.60	26.1682
55	0.1480	8.80	59.4595	5.00	33.7838	0.1870	9.80	52.4064	7.40	39.5722
56	0.2000	8.80	44.0000	5.00	25.0000	0.1870	9.80	52.4064	7.40	39.5722
57	0.1710	8.80	51.4620	5.00	29.2398	0.2130	9.80	46.0094	7.40	34.7418
58	0.1700	8.80	51.7647	5.00	29.4118	0.1450	9.80	67.5862	7.40	51.0345
59	0.1380	8.80	63.7681	5.00	36.2319	0.1890	9.80	51.8519	7.40	39.1534
60	0.1640	6.80	41.4634	5.00	30.4878	0.1530	6.80	44.4444	4.40	28.7582
61	0.1760	6.80	38.6364	5.00	28.4091	0.1540	6.80	44.1558	4.40	28.5714
62	0.1440	6.80	47.2222	5.00	34.7222	0.1600	6.80	42.5000	4.40	27.5000
63	0.1540	6.80	44.1558	5.00	32.4675	0.1370	6.80	49.6350	4.40	32.1168
64	0.1610	6.80	42.2360	5.00	31.0559	0.1390	6.80	48.9209	4.40	31.6547
65	0.1270	5.20	40.9449	3.60	28.3465	0.1450	4.00	27.5862	3.40	23.4483
66	0.1420	5.20	36.6197	3.60	25.3521	0.1710	4.00	23.3918	3.40	19.8830
67	0.1370	5.20	37.9562	3.60	26.2774	0.1450	4.00	27.5862	3.40	23.4483

PEMBROKESHIRE COAST NATIONAL PARK										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop
68	0.1410	5.20	36.8794	3.60	25.5319	0.1340	4.00	29.8507	3.40	25.3731
69	0.1460	5.20	35.6164	3.60	24.6575	0.1390	4.00	28.7770	3.40	24.4604
70	0.1430	2.00	13.9860	2.80	19.5804	0.1250	1.60	12.8000	2.80	22.4000
71	0.1260	2.00	15.8730	2.80	22.2222	0.1230	1.60	13.0081	2.80	22.7642
72	0.1050	2.00	19.0476	2.80	26.6667	0.1430	1.60	11.1888	2.80	19.5804
73	0.1220	2.00	16.3934	2.80	22.9508	0.1130	1.60	14.1593	2.80	24.7788
74	0.0970	2.00	20.6186	2.80	28.8660	0.1370	1.60	11.6788	2.80	20.4380
75	0.1090	1.45	13.3028	1.80	16.5138	0.1310	2.56	19.5611	3.50	26.7176
76	0.1020	1.45	14.2157	1.80	17.6471	0.1250	2.56	20.5000	3.50	28.0000
77	0.0880	1.45	16.4773	1.80	20.4545	0.1420	2.56	18.0458	3.50	24.6479
78	0.0960	1.45	15.1042	1.80	18.7500	0.1100	2.56	23.2955	3.50	31.8182
79	0.0780	1.35	17.3077	1.80	23.0769	0.1260	2.56	20.3373	3.50	27.7778
80	0.0790	1.35	17.0886	1.80	22.7848	0.1190	2.56	21.5336	3.50	29.4118
81	0.0700	1.35	19.2857	1.80	25.7143	0.1100	2.56	23.2955	3.50	31.8182
82	0.0510	1.35	26.4706	1.80	35.2941	0.0771	2.56	33.2557	3.50	45.4224
83	0.0340	1.35	39.7059	1.70	50.0000	0.0840	2.56	30.5060	3.50	41.6667
84	0.0360	1.35	37.5000	1.70	47.2222	0.0680	2.56	37.6838	3.50	51.4706
85	0.0250	1.25	50.0000	1.70	68.0000	0.0620	2.56	41.3306	3.50	56.4516
86	0.0260	1.25	48.0769	1.70	65.3846	0.0680	2.56	37.6838	3.50	51.4706
87	0.0260	1.25	48.0769	1.70	65.3846	0.0650	2.56	39.4231	3.50	53.8462
88	0.0200	1.25	62.5000	1.70	85.0000	0.0520	2.56	49.2788	3.50	67.3077
89	0.0100	1.25	125.0000	1.70	170.0000	0.0330	2.56	77.6515	3.50	106.0606
90 and over	0.0470	1.25	26.5957	1.70	36.1702	0.1300	2.56	19.7115	3.50	26.9231

Source: Small Area Population Estimates Team, Office for National Statistics © Crown copyright

APPENDIX 4b Migration Data: Rest of the County

REST OF COUNTY										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop
Under 1	0.5460	30.20	55.3114	23.80	43.5897	0.5240	28.20	53.8168	20.40	38.9313
1	0.5740	30.20	52.6132	23.80	41.4634	0.5230	28.20	53.9197	20.40	39.0057
2	0.6020	30.20	50.1661	23.80	39.5349	0.5550	28.20	50.8108	20.40	36.7568
3	0.6120	30.20	49.3464	23.80	38.8889	0.5080	28.20	55.5118	20.40	40.1575
4	0.5980	30.20	50.5017	23.80	39.7993	0.5630	28.20	50.0888	20.40	36.2345
5	0.5983	24.60	41.1168	18.40	30.7540	0.5740	24.20	42.1603	17.20	29.9652
6	0.5850	24.60	42.0513	18.40	31.4530	0.6230	24.20	38.8443	17.20	27.6083
7	0.6410	24.60	38.3775	18.40	28.7051	0.6430	24.20	37.6361	17.20	26.7496
8	0.6590	24.60	37.3293	18.40	27.9211	0.6490	24.20	37.2881	17.20	26.5023
9	0.6770	24.60	36.3368	18.40	27.1787	0.6500	24.20	37.2308	17.20	26.4615
10	0.6810	22.80	33.4802	17.20	25.2570	0.6540	25.00	38.2263	17.80	27.2171
11	0.5890	22.80	38.7097	17.20	29.2020	0.6250	25.00	40.0000	17.80	28.4800
12	0.6380	22.80	35.7367	17.20	26.9592	0.6460	25.00	38.6997	17.80	27.5542
13	0.6380	22.80	35.7367	17.20	26.9592	0.6130	25.00	40.7830	17.80	29.0375
14	0.6260	22.80	36.4217	17.20	27.4760	0.5960	25.00	41.9463	17.80	29.8658
15	0.6210	21.60	34.7826	39.40	63.4461	0.5460	27.80	50.9158	54.80	100.3663
16	0.6070	21.60	35.5848	39.40	64.9094	0.6160	27.80	45.1299	54.80	88.9610
17	0.5470	21.60	39.4881	39.40	72.0293	0.6010	27.80	46.2562	54.80	91.1814
18	0.5380	21.60	40.1487	39.40	73.2342	0.5730	27.80	48.5166	54.80	95.6370
19	0.4790	21.60	45.0939	39.40	82.2547	0.4360	27.80	63.7615	54.80	125.6881
20	0.4250	38.20	89.8824	42.60	100.2353	0.4580	55.80	121.8341	55.60	121.3974
21	0.4900	38.20	77.9592	42.60	86.9388	0.3900	55.80	143.0769	55.60	142.5641
22	0.4180	38.20	91.3876	42.60	101.9139	0.4400	55.80	126.8182	55.60	126.3636
23	0.4070	38.20	93.8575	42.60	104.6683	0.3990	55.80	139.8496	55.60	139.3484
24	0.3550	38.20	107.6056	42.60	120.0000	0.4790	55.80	116.4927	55.60	116.0752
25	0.3470	33.20	95.6772	33.00	95.1009	0.3860	37.40	96.8912	32.40	83.9378
26	0.4190	33.20	79.2363	33.00	78.7589	0.4040	37.40	92.5743	32.40	80.1980
27	0.4360	33.20	76.1468	33.00	75.6881	0.5030	37.40	74.3539	32.40	64.4135
28	0.4290	33.20	77.3893	33.00	76.9231	0.5570	37.40	67.1454	32.40	58.1688
29	0.5050	33.20	65.7426	33.00	65.3465	0.6040	37.40	61.9205	32.40	53.6424
30	0.4790	31.60	65.9708	27.80	58.0376	0.5420	36.00	66.4207	27.00	49.8155
31	0.5290	31.60	59.7353	27.80	52.5520	0.5510	36.00	65.3358	27.00	49.0018

REST OF COUNTY										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop
32	0.5580	31.60	56.6308	27.80	49.8208	0.6010	36.00	59.9002	27.00	44.9251
33	0.5210	31.60	60.6526	27.80	53.3589	0.5710	36.00	63.0473	27.00	47.2855
34	0.5950	31.60	53.1092	27.80	46.7227	0.6390	36.00	56.3380	27.00	42.2535
35	0.5980	31.00	51.8395	22.00	36.7893	0.5930	33.20	55.9865	21.40	36.0877
36	0.6150	31.00	50.4065	22.00	35.7724	0.6720	33.20	49.4048	21.40	31.8452
37	0.5980	31.00	51.8395	22.00	36.7893	0.6710	33.20	49.4784	21.40	31.8927
38	0.6330	31.00	48.9731	22.00	34.7551	0.7420	33.20	44.7439	21.40	28.8410
39	0.6670	31.00	46.4768	22.00	32.9835	0.6590	33.20	50.3794	21.40	32.4734
40	0.5920	28.60	48.3108	17.00	28.7162	0.6280	25.80	41.0828	17.00	27.0701
41	0.6150	28.60	46.5041	17.00	27.6423	0.5940	25.80	43.4343	17.00	28.6195
42	0.6300	28.60	45.3968	17.00	26.9841	0.5770	25.80	44.7140	17.00	29.4627
43	0.5580	28.60	51.2545	17.00	30.4659	0.6090	25.80	42.3645	17.00	27.9146
44	0.5680	28.60	50.3521	17.00	29.9296	0.6020	25.80	42.8571	17.00	28.2392
45	0.5520	22.00	39.8551	14.60	26.4493	0.5610	21.80	38.8592	14.40	25.6684
46	0.5760	22.00	38.1944	14.60	25.3472	0.5880	21.80	37.0748	14.40	24.4898
47	0.6080	22.00	36.1842	14.60	24.0132	0.5550	21.80	39.2793	14.40	25.9459
48	0.5780	22.00	38.0623	14.60	25.2595	0.6230	21.80	34.9920	14.40	23.1140
49	0.5680	22.00	38.7324	14.60	25.7042	0.6330	21.80	34.4392	14.40	22.7488
50	0.6300	23.00	36.5079	13.00	20.6349	0.6460	23.20	35.9133	13.60	21.0526
51	0.6210	23.00	37.0370	13.00	20.9340	0.6990	23.20	33.1903	13.60	19.4564
52	0.6420	23.00	35.8255	13.00	20.2492	0.7030	23.20	33.0014	13.60	19.3457
53	0.7160	23.00	32.1229	13.00	18.1564	0.7280	23.20	31.8681	13.60	18.6813
54	0.7020	23.00	32.7635	13.00	18.5185	0.7520	23.20	30.8511	13.60	18.0851
55	0.5830	25.20	43.2247	13.80	23.6707	0.6640	26.60	40.0602	14.20	21.3855
56	0.6100	25.20	41.3115	13.80	22.6230	0.6380	26.60	41.6928	14.20	22.2571
57	0.6080	25.20	41.4474	13.80	22.6974	0.6140	26.60	43.3225	14.20	23.1270
58	0.5850	25.20	43.0769	13.80	23.5897	0.6360	26.60	41.8239	14.20	22.3270
59	0.5080	25.20	49.6063	13.80	27.1654	0.5660	26.60	46.9965	14.20	25.0883
60	0.5660	21.00	37.1025	10.40	18.3746	0.5620	19.40	34.5196	11.40	20.2847
61	0.5360	21.40	39.9254	10.40	19.4030	0.5610	19.40	34.5811	11.40	20.3209
62	0.5600	21.40	38.2143	10.40	18.5714	0.5310	19.40	36.5348	11.40	21.4689
63	0.5610	21.40	38.1462	10.40	18.5383	0.5520	19.40	35.1449	11.40	20.6522
64	0.5070	21.40	42.2091	10.40	20.5128	0.4910	19.40	39.5112	11.40	23.2179
65	0.5200	21.40	41.1538	10.00	19.2308	0.5150	11.40	22.1359	7.60	14.7573
66	0.5230	14.40	27.5335	10.00	19.1205	0.4970	11.40	22.9376	7.60	15.2918
67	0.4340	14.40	33.1797	10.00	23.0415	0.5060	11.40	22.5296	7.60	15.0198

REST OF COUNTY										
	MALE MIGRANTS					FEMALE MIGRANTS				
		INFLOW		OUTFLOW			INFLOW		OUTFLOW	
Age	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop	Population (000s)	2001-05 Average	Per 000 Pop	2001-05 Average	Per 000 Pop
68	0.4830	14.40	29.8137	10.00	20.7039	0.5400	11.40	21.1111	7.60	14.0741
69	0.4400	14.40	32.7273	10.00	22.7273	0.4400	11.40	25.9091	7.60	17.2727
70	0.4630	8.60	18.5745	5.80	12.5270	0.4970	7.80	15.6942	6.60	13.2797
71	0.4360	8.60	19.7248	5.80	13.3028	0.4450	7.80	17.5281	6.60	14.8315
72	0.4250	8.60	20.2353	5.80	13.6471	0.4800	7.80	16.2500	6.60	13.7500
73	0.3730	8.60	23.0563	5.80	15.5496	0.4460	7.80	17.4888	6.60	14.7982
74	0.3410	8.60	25.2199	5.80	17.0088	0.4700	7.80	16.5957	6.60	14.0426
75	0.3160	4.25	13.4494	3.06	9.6835	0.4110	8.30	20.1946	5.56	13.5280
76	0.3130	4.25	13.5783	3.06	9.7764	0.3820	8.30	21.7277	5.56	14.5550
77	0.2970	4.25	14.3098	3.06	10.3030	0.3870	8.30	21.4470	5.56	14.3669
78	0.2890	4.25	14.7059	3.06	10.5882	0.3820	8.30	21.7277	5.56	14.5550
79	0.2550	4.25	16.6667	3.06	12.0000	0.3800	8.30	21.8421	5.56	14.6316
80	0.2490	4.25	17.0683	3.06	12.2892	0.3920	8.30	21.1735	5.56	14.1837
81	0.2160	4.25	19.6759	3.06	14.1667	0.3740	8.30	22.1925	5.56	14.8663
82	0.1480	4.25	28.7162	3.06	20.6757	0.2339	8.30	35.4783	5.56	23.7662
83	0.1370	4.25	31.0219	3.06	22.3358	0.2020	8.30	41.0891	5.56	27.5248
84	0.1340	4.25	31.7164	3.06	22.8358	0.2570	8.30	32.2957	5.56	21.6342
85	0.0960	4.25	44.2708	3.06	31.8750	0.2340	8.30	35.4701	5.56	23.7607
86	0.0940	4.25	45.2128	3.06	32.5532	0.2010	8.30	41.2935	5.56	27.6617
87	0.0680	4.25	62.5000	3.06	45.0000	0.1620	8.30	51.2346	5.56	34.3210
88	0.0580	4.25	73.2759	3.06	52.7586	0.1420	8.30	58.4507	5.56	39.1549
89	0.0450	4.25	94.4444	3.06	68.0000	0.1300	8.30	63.8462	5.56	42.7692
90 and over	0.1190	4.25	35.7143	3.06	25.7143	0.4710	8.30	17.6221	5.56	11.8047

Source: Small Area Population Estimates Team, Office for National Statistcs © Crown copyright

APPENDIX 5 Migration into Pembrokeshire from outside UK - 2001 Census

	MALES		FEMALES			MALES		FEMALES	
Age	Number	Rate per '000	Number	Rate per '000	Age	Number	Rate per '000	Number	Rate per '000
Under 1	5.00	7.5075	5.00	8.1566	46	0.00	0.0000	1.80	2.4357
1	2.33	3.4417	2.00	3.2787	47	0.00	0.0000	1.80	2.5568
2	2.33	3.1831	2.00	3.0864	48	0.00	0.0000	1.80	2.3256
3	2.33	3.1615	2.00	3.1847	49	0.00	0.0000	1.80	2.2872
4	3.00	4.1725	3.00	4.4577	50	1.40	1.7949	1.80	2.1302
5	2.20	3.1294	2.20	3.1073	51	1.40	1.7220	1.80	2.0548
6	2.20	3.0856	2.20	2.9973	52	1.40	1.7241	1.80	2.0022
7	2.20	2.8497	2.20	2.9255	53	1.40	1.5021	1.80	1.9129
8	2.20	2.8061	2.20	2.8278	54	1.40	1.5436	1.80	1.8634
9	2.20	2.7027	2.20	2.7569	55	1.20	1.6416	1.80	2.1152
10	1.00	1.2225	1.60	2.0228	56	1.20	1.4815	1.80	2.1818
11	1.00	1.3514	1.60	2.0725	57	1.20	1.5404	1.80	2.1765
12	1.00	1.2970	1.60	2.0434	58	1.20	1.5894	1.80	2.3047
13	1.00	1.2563	1.60	2.1477	59	1.20	1.8576	1.80	2.3841
14	1.00	1.3055	1.60	2.1798	60	1.40	1.9178	0.60	0.8392
15	1.00	1.3661	0.00	0.0000	61	1.40	1.9663	0.60	0.8392
16	3.00	4.0000	2.50	3.3245	62	1.40	1.9886	0.60	0.8683
17	3.00	4.3732	2.50	3.4483	63	1.40	1.9580	0.60	0.8708
18	1.50	2.2455	0.00	0.0000	64	1.40	2.0958	0.60	0.9524
19	1.50	2.4917	0.00	0.0000	65	1.40	2.1638	0.80	1.2121
20	3.60	6.6914	3.80	7.0764	66	1.40	2.1053	0.80	1.1976
21	3.60	5.9900	3.80	8.1545	67	1.40	2.4518	0.80	1.2289
22	3.60	7.1856	3.80	7.3077	68	1.40	2.2436	0.80	1.1869
23	3.60	7.2435	3.80	7.8351	69	1.40	2.3891	0.80	1.3817
24	3.60	8.0899	3.80	6.6667	70	0.60	0.9901	0.00	0.0000
25	6.60	15.2425	5.80	12.6087	71	0.60	1.0676	0.00	0.0000
26	6.60	13.2797	5.80	11.7172	72	0.60	1.1321	0.00	0.0000
27	6.60	12.5954	5.80	9.9145	73	0.60	1.2121	0.00	0.0000
28	6.60	12.9412	5.80	8.6826	74	0.60	1.3699	0.00	0.0000
29	6.60	10.8197	5.80	8.1575	75	0.60	1.4118	0.00	0.0000
30	4.60	8.0279	4.40	6.9510	76	0.60	1.4458	0.00	0.0000
31	4.60	7.2900	4.40	6.4897	77	0.60	1.5584	0.00	0.0000
32	4.60	6.8759	4.40	6.1972	78	0.60	1.5584	0.00	0.0000
33	4.60	7.1987	4.40	6.3401	79	0.60	1.8018	0.00	0.0000
34	4.60	6.3978	4.40	5.8433	80	0.60	1.8293	0.00	0.0000
35	3.80	5.1771	4.40	6.0858	81	0.60	2.0979	0.00	0.0000
36	3.80	5.1075	4.40	5.4054	82	0.60	3.0151	0.00	0.0000
37	3.80	5.2198	4.40	5.4523	83	0.60	3.5088	0.00	0.0000
38	3.80	5.0000	4.40	4.9438	84	0.60	3.5294	0.00	0.0000
39	3.80	4.7146	4.40	5.5207	85	0.00	0.0000	0.00	0.0000
40	2.60	3.5088	1.80	2.3018	86	0.00	0.0000	0.00	0.0000
41	2.60	3.5135	1.80	2.4490	87	0.00	0.0000	0.00	0.0000
42	2.60	3.3291	1.80	2.4896	88	0.00	0.0000	0.00	0.0000
43	2.60	3.7791	1.80	2.3778	89	0.00	0.0000	0.00	0.0000
44	2.60	3.7303	1.80	2.3873	90 +	0.00	0.0000	0.00	0.0000
45	0.00	0.0000	1.80	2.4691					

Source: Office for National Statistics: 2001 Census © Crown copyright

APPENDIX 6a - Components of Population Change July 2008 Projections

Pembrokeshire County

	Year beginning July 1st ……																			
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Births																				
Male	578	588	607	627	677	592	602	608	615	621	622	621	621	622	625	626	626	624	622	620
Female	524	565	578	576	601	545	555	560	566	572	573	572	572	573	575	576	576	575	573	571
All Births	1,102	1,153	1,185	1,203	1,278	1,137	1,157	1,168	1,181	1,192	1,195	1,193	1,192	1,195	1,200	1,202	1,202	1,199	1,195	1,191
TFR	1.79	1.89	1.95	2.00	2.15	1.92	1.95	1.96	1.97	1.97	1.96	1.95	1.94	1.93	1.93	1.92	1.92	1.92	1.92	1.92
Births input																				
Deaths																				
Male	681	686	648	693	638	791	783	774	767	762	758	757	759	760	763	767	774	782	792	801
Female	696	730	664	765	687	795	813	804	797	792	787	780	776	771	765	761	761	763	766	768
All deaths	1,377	1,416	1,312	1,458	1,325	1,585	1,595	1,578	1,563	1,554	1,545	1,537	1,534	1,530	1,528	1,528	1,535	1,545	1,558	1,569
SMR: males	99.8	98.8	90.8	94.2	85.0	102.9	100.0	96.7	93.5	90.6	87.9	85.4	83.2	81.1	79.1	77.2	75.5	74.0	72.5	71.0
SMR: females	93.0	95.3	85.7	96.5	87.2	99.3	100.0	97.7	95.3	92.9	90.7	88.6	86.7	84.8	82.8	80.9	79.1	77.4	75.8	74.2
SMR: male & female	96.3	97.0	88.2	95.4	86.1	101.1	100.0	97.2	94.4	91.8	89.3	87.0	84.9	82.9	80.9	79.0	77.2	75.6	74.0	72.5
Expectation of life	78.2	78.6	79.5	79.0	79.8	77.7	77.8	78.1	78.3	78.6	78.8	79.0	79.2	79.5	79.6	79.8	80.0	80.1	80.3	80.4
Deaths input	*	*	*	*	*															
In-migration from the UK																				
Male	2,705	2,700	2,500	2,365	2,390	2,543	2,544	2,546	2,548	2,550	2,552	2,556	2,558	2,559	2,562	2,564	2,569	2,573	2,574	2,576
Female	3,065	2,960	2,780	2,515	2,630	2,779	2,778	2,776	2,774	2,772	2,770	2,766	2,764	2,763	2,760	2,758	2,753	2,749	2,748	2,746
All	5,770	5,660	5,280	4,880	5,020	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322	5,322
SMigR: males	128.6	128.1	118.5	112.2	113.6	120.5	120.0	119.7	119.2	118.9	118.3	117.8	117.5	117.0	116.7	116.4	116.1	115.9	115.6	115.6
SMigR: females	140.3	135.6	126.6	114.4	120.1	126.7	126.5	125.9	125.4	124.7	123.9	123.2	122.6	122.1	121.5	121.2	120.8	120.7	120.6	120.7
Migrants input																				
Out-migration to the UK																				
Male	2,215	2,220	2,170	2,075	2,110	2,166	2,167	2,170	2,172	2,174	2,176	2,180	2,185	2,188	2,193	2,197	2,201	2,204	2,205	2,207
Female	2,555	2,440	2,350	2,245	2,290	2,372	2,371	2,368	2,366	2,364	2,362	2,358	2,353	2,350	2,345	2,341	2,337	2,334	2,333	2,331
All	4,770	4,660	4,520	4,320	4,400	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538	4,538
SMigR: males	134.8	135.1	131.8	126.0	128.3	130.7	130.2	129.9	129.1	128.5	127.6	126.9	126.6	126.1	125.8	125.4	125.1	124.9	124.8	124.9
SMigR: females	134.8	128.9	123.3	118.2	121.3	125.4	125.3	124.9	124.5	123.8	123.0	122.3	121.4	120.9	120.3	120.0	119.6	119.6	119.7	119.9
Migrants input																				
In-migration from Overseas																				
Male	154	155	103	103	155	135	135	135	135	136	136	136	137	137	137	137	138	138	139	139
Female	146	145	97	97	145	125	125	125	125	124	124	124	123	123	123	123	122	122	121	121
All	300	300	200	200	300	260	260	260	260	260	260	260	260	260	260	260	260	260	260	260
SMigR: males	84.3	84.8	56.5	56.5	85.0	73.5	73.8	73.5	73.3	73.0	72.8	72.4	72.0	71.6	71.3	70.8	70.5	70.4	70.2	70.1
SMigR: females	84.3	84.8	56.5	56.5	85.0	73.5	73.8	73.5	73.3	73.0	72.8	72.4	72.0	71.6	71.3	70.8	70.5	70.4	70.2	70.1
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Out-migration to Overseas																				
Male	103	52	103	154	103	103	104	104	104	104	105	105	105	106	106	106	106	106	107	107
Female	97	48	97	146	97	97	96	96	96	96	95	95	95	94	94	94	94	94	93	93
All	200	100	200	300	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200
SMigR: males	56.2	28.3	56.5	84.8	56.6	56.6	56.8	56.5	56.4	56.2	56.0	55.7	55.4	55.1	54.8	54.4	54.2	54.1	54.0	53.9
SMigR: females	56.2	28.3	56.5	84.8	56.6	56.6	56.8	56.5	56.4	56.2	56.0	55.7	55.4	55.1	54.8	54.4	54.2	54.1	54.0	53.9
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Migration - Net Flows																				
UK	+1,000	+1,000	+760	+560	+620	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784	+784
Overseas	+100	+200	0	-100	+100	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60	+60
Summary of population change																				
Natural change	-275	-263	-127	-255	-47	-448	-438	-410	-382	-361	-350	-344	-342	-336	-328	-325	-333	-346	-363	-378
Net migration	+1,100	+1,200	+760	+460	+720	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844	+844
Net change	+825	+937	+633	+205	+673	+396	+406	+434	+462	+483	+494	+500	+502	+508	+516	+519	+511	+498	+481	+466

APPENDIX 6b - Components of Population Change July 2008 Projections

Pembrokeshire Coast National Park

	Year beginning July 1st …….																			
	2001	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Births																				
Male	78	91	86	85	100	95	96	96	96	96	96	94	93	92	92	92	91	89	87	85
Female	70	88	82	79	91	87	88	88	88	88	88	87	86	85	85	84	83	82	80	78
All Births	148	179	168	164	191	182	184	184	184	185	184	181	179	178	177	176	174	170	167	163
TFR	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Births input	*	*	*	*	*															
Deaths																				
Male	158	155	146	152	139	171	168	165	162	159	156	155	154	153	153	152	152	153	153	154
Female	159	164	147	171	152	171	173	169	165	162	159	156	152	150	148	145	144	142	142	141
All deaths	317	319	293	323	290	343	341	334	327	321	315	311	306	303	300	297	296	295	295	295
SMR: males	100	99	91	94	85	103	100	97	93	90	88	85	83	81	79	77	75	74	72	71
SMR: females	92.6	95.4	85.7	96.9	87.3	99.3	100.0	97.7	95.3	92.9	90.6	88.5	86.6	84.7	82.6	80.7	78.8	77.1	75.5	73.9
SMR: male & female	96.2	97.1	88.3	95.5	86.0	101.1	100.0	97.2	94.4	91.7	89.2	86.9	84.8	82.7	80.6	78.7	77.0	75.3	73.7	72.2
Expectation of life	78.2	78.6	79.5	79.0	79.8	77.6	77.8	78.1	78.3	78.6	78.8	79.0	79.2	79.4	79.6	79.8	80.0	80.1	80.2	80.4
Deaths input																				
In-migration from the UK																				
Male	555	640	590	545	585	584	582	582	583	582	583	583	584	586	587	587	588	588	589	590
Female	670	670	635	580	645	636	638	638	637	638	637	637	636	634	633	633	632	632	631	630
All	1,225	1,310	1,225	1,125	1,230	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220	1,220
SMigR: males	139	162	150	139	152	152	153	153	154	155	155	156	158	159	161	162	163	164	165	168
SMigR: females	165.6	168.0	159.7	147.4	165.5	163.2	164.5	165.2	165.7	166.2	166.9	167.5	168.4	169.4	170.2	171.2	172.5	173.9	175.6	177.5
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Out-migration to the UK																				
Male	570	575	555	565	555	565	564	565	566	567	566	567	568	570	570	572	571	572	572	573
Female	690	645	610	565	620	625	626	625	624	623	624	623	622	620	620	618	619	618	618	617
All	1,260	1,220	1,165	1,130	1,175	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190	1,190
SMigR: males	186	190	183	188	187	191	192	193	194	195	196	197	199	201	203	204	204	206	207	211
SMigR: females	204.0	193.7	183.4	172.3	190.6	192.6	193.8	194.7	194.9	195.4	196.9	198.0	199.8	200.0	201.2	201.3	203.3	205.4	207.3	210.2
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
In-migration from Overseas																				
Male	29	28	19	19	28	24	24	24	24	24	23	23	23	23	23	22	22	22	22	22
Female	26	25	17	17	25	21	21	21	21	20	20	20	20	19	19	19	19	18	18	18
All	55	54	36	35	53	45	45	45	44	44	44	43	43	42	42	41	41	40	40	40
SMigR: males	84	85	56	57	85	74	74	74	73	73	73	72	72	72	71	71	71	70	70	70
SMigR: females	84.3	84.8	56.5	56.5	85.0	73.5	73.8	73.5	73.3	73.0	72.8	72.4	72.0	71.6	71.3	70.8	70.5	70.4	70.2	70.1
Migrants input																				
Out-migration to Overseas																				
Male	19	9	19	28	19	19	19	18	18	18	18	18	18	18	17	17	17	17	17	17
Female	17	8	17	25	16	16	16	16	16	16	16	15	15	15	15	15	14	14	14	14
All	36	18	36	53	35	35	35	34	34	34	33	33	33	33	32	32	32	31	31	30
SMigR: males	56	28	56	85	57	57	57	57	56	56	56	56	55	55	55	54	54	54	54	54
SMigR: females	56.2	28.3	56.5	84.8	56.6	56.6	56.8	56.5	56.4	56.2	56.0	55.7	55.4	55.1	54.8	54.4	54.2	54.1	54.0	53.9
Migrants input																				
Migration - Net Flows																				
UK	-35	90	60	-5	55	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Overseas	+18	+36	0	-18	+18	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+9	+9	+9	+9
Summary of population change																				
Natural change	-169	-140	-125	-159	-99	-161	-157	-150	-142	-137	-132	-130	-128	-126	-123	-121	-122	-124	-128	-132
Net migration	-17	+126	+60	-23	+73	+40	+40	+40	+40	+40	+40	+40	+40	+40	+40	+40	+39	+39	+39	+39
Net change	-186	-14	-65	-182	-27	-120	-117	-109	-102	-97	-92	-90	-88	-86	-84	-81	-82	-85	-89	-93

APPENDIX 6c - Components of Population Change July 2008 Projections

Pembrokeshire Outside PCNP

Year beginning July 1st ……..

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Births																				
Male	500	497	521	542	577	498	507	512	519	525	527	527	528	530	532	534	535	535	535	535
Female	454	477	496	497	510	458	467	472	478	483	485	485	486	488	490	492	493	493	493	493
All Births	954	974	1,017	1,039	1,087	956	974	984	996	1,008	1,012	1,012	1,014	1,017	1,023	1,026	1,028	1,029	1,028	1,028
TFR	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Births input	*	*	*	*	*															
Deaths																				
Male	523	531	502	541	499	619	615	609	605	603	602	602	605	607	610	615	622	630	639	647
Female	537	566	517	594	535	623	640	635	631	630	628	624	623	620	617	616	617	621	624	627
All deaths	1,060	1,097	1,019	1,135	1,035	1,243	1,254	1,244	1,236	1,232	1,229	1,226	1,228	1,227	1,227	1,231	1,239	1,251	1,263	1,274
SMR: males	100	99	91	94	85	103	100	97	94	91	88	85	83	81	79	77	76	74	73	71
SMR: females	93.1	95.3	85.7	96.4	87.2	99.3	100.0	97.7	95.3	92.9	90.7	88.6	86.7	84.8	82.8	80.9	79.1	77.5	75.8	74.2
SMR: male & female	96.3	97.0	88.1	95.4	86.2	101.1	100.0	97.2	94.4	91.8	89.3	87.0	85.0	83.0	80.9	79.1	77.3	75.7	74.1	72.6
Expectation of life	78.2	78.6	79.5	79.0	79.8	77.7	77.8	78.1	78.3	78.6	78.8	79.0	79.2	79.5	79.6	79.8	80.0	80.1	80.3	80.4
Deaths input																				
In-migration from the UK																				
Male	2150	2060	1910	1820	1805	1959	1961	1964	1965	1967	1969	1973	1974	1973	1975	1977	1981	1985	1986	1986
Female	2,395	2,290	2,145	1,935	1,985	2,143	2,141	2,138	2,137	2,135	2,133	2,129	2,128	2,129	2,127	2,125	2,121	2,117	2,116	2,116
All	4,545	4,350	4,055	3,755	3,790	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102	4,102
SMigR: males	126	120	111	106	105	113	113	112	112	111	111	110	109	108	108	107	107	107	106	106
SMigR: females	134.5	128.3	119.3	107.2	110.3	118.8	118.4	117.6	116.9	116.0	115.1	114.2	113.4	112.7	112.0	111.5	110.9	110.6	110.3	110.2
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Out-migration to the UK																				
Male	1645	1645	1615	1510	1555	1602	1603	1605	1607	1607	1610	1613	1618	1619	1622	1625	1630	1632	1633	1634
Female	1,865	1,795	1,740	1,680	1,670	1,746	1,745	1,743	1,741	1,741	1,738	1,735	1,730	1,729	1,726	1,723	1,718	1,716	1,715	1,714
All	3,510	3,440	3,355	3,190	3,225	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348	3,348
SMigR: males	123	123	120	112	115	118	117	116	115	115	114	113	112	111	111	110	110	110	110	109
SMigR: females	119.7	115.0	110.6	106.9	106.9	111.5	111.2	110.7	110.3	109.5	108.4	107.5	106.4	105.9	105.1	104.8	104.2	104.0	103.9	103.9
Migrants input	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
In-migration from Overseas																				
Male	125	126	84	84	127	110	111	111	112	112	113	113	114	114	114	115	116	116	117	117
Female	120	120	80	81	121	104	104	104	104	104	104	104	103	103	104	104	103	103	103	103
All	245	246	164	165	247	215	215	215	216	216	216	217	217	218	218	219	219	220	220	220
SMigR: males	84	85	56	57	85	74	74	74	73	73	73	72	72	72	71	71	71	70	70	70
SMigR: females	84.3	84.8	56.5	56.5	85.0	73.5	73.8	73.5	73.3	73.0	72.8	72.4	72.0	71.6	71.3	70.8	70.5	70.4	70.2	70.1
Migrants input																				
Out-migration to Overseas																				
Male	84	42	84	126	85	85	85	86	86	86	87	87	88	88	88	88	89	89	90	90
Female	80	40	80	121	80	80	80	80	80	80	80	80	79	80	80	80	80	80	79	80
All	164	82	164	247	165	165	165	166	166	166	167	167	167	167	168	168	168	169	169	170
SMigR: males	56	28	56	85	57	57	57	57	56	56	56	56	55	55	55	54	54	54	54	54
SMigR: females	56.2	28.3	56.5	84.8	56.6	56.6	56.8	56.5	56.4	56.2	56.0	55.7	55.4	55.1	54.8	54.4	54.2	54.1	54.0	53.9
Migrants input																				
Migration - Net Flows																				
UK	1035	910	700	565	565	754	754	754	754	754	754	754	754	754	754	754	754	754	754	754
Overseas	+82	+164	0	-82	+82	+50	+50	+50	+50	+50	+50	+50	+50	+50	+50	+50	+51	+51	+51	+51
Summary of population change																				
Natural change	-106	-123	-2	-96	52	-287	-281	-260	-240	-225	-218	-214	-214	-210	-205	-204	-211	-222	-235	-246
Net migration	+1,117	+1,074	+700	+483	+647	+804	+804	+804	+804	+804	+804	+804	+804	+804	+804	+804	+805	+805	+805	+805
Net change	+1,011	+951	+698	+387	+700	+517	+523	+543	+564	+579	+586	+590	+590	+594	+599	+600	+593	+582	+570	+559

APPENDIX 7a Population Projections and Estimates

Pembrokeshire Population Projections July 2008

Area: Pembrokeshire County

Persons

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
0-4	6703	6485	6337	6162	6051	6075	6112	6120	6110	6087	5993
5-9	7556	7429	7337	7268	7135	7055	6813	6637	6465	6402	6412
10-14	7716	7905	8071	8072	8088	7946	7799	7675	7583	7477	7401
15-19	6830	6971	7009	7045	7094	7401	7576	7642	7672	7659	7541
20-24	5160	5141	5414	5565	5731	5852	5995	6043	6138	6160	6374
25-29	5493	5219	5016	4923	4934	5047	5083	5316	5507	5710	5783
30-34	6699	6650	6550	6306	5977	5685	5368	5157	5030	5053	5204
35-39	7803	7792	7626	7532	7324	7159	7034	6908	6651	6341	6031
40-44	7398	7658	8025	8176	8343	8391	8390	8163	8107	7925	7708
45-49	7371	7384	7403	7561	7682	7887	8163	8493	8634	8851	8922
50-54	8771	8532	8249	8083	7897	7722	7723	7760	7926	8055	8273
55-59	7760	8344	8806	9029	9164	9241	8966	8663	8465	8287	8133
60-64	6969	7175	7356	7669	7934	8146	8707	9126	9318	9467	9631
65-69	6325	6458	6584	6768	6873	7042	7162	7347	7611	7887	8082
70-74	5610	5612	5786	5768	5865	5886	5973	6056	6225	6349	6523
75-79	4519	4569	4559	4657	4687	4798	4762	4852	4821	4928	4973
80-84	3071	3194	3357	3512	3456	3441	3428	3417	3462	3493	3572
85-89	1617	1678	1641	1637	1719	1852	1943	2046	2134	2107	2080
90+	767	767	773	802	782	787	810	793	788	872	954
Total	**114138**	**114963**	**115900**	**116533**	**116738**	**117411**	**117807**	**118213**	**118647**	**119109**	**119591**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
0-4	6054	6091	6117	6131	6139	6146	6154	6160	6159	6148
5-9	6451	6459	6446	6422	6322	6385	6423	6448	6461	6466
10-14	7147	6962	6782	6715	6726	6764	6771	6756	6729	6622
15-19	7408	7294	7215	7111	7040	6783	6607	6447	6392	6424
20-24	6535	6605	6642	6646	6549	6435	6334	6258	6169	6103
25-29	5934	5981	6077	6100	6315	6476	6547	6581	6585	6484
30-34	5238	5480	5678	5888	5963	6118	6163	6259	6279	6500
35-39	5695	5467	5330	5351	5511	5544	5796	6003	6223	6300
40-44	7575	7440	7162	6825	6490	6129	5882	5734	5752	5923
45-49	8921	8679	8619	8426	8193	8053	7906	7608	7249	6888
50-54	8563	8911	9059	9287	9362	9360	9106	9042	8838	8594
55-59	8135	8174	8350	8486	8717	9022	9388	9545	9786	9865
60-64	9352	9046	8844	8667	8512	8520	8567	8752	8895	9139
65-69	8652	9085	9288	9447	9617	9350	9055	8865	8696	8549
70-74	6652	6847	7113	7388	7582	8133	8554	8755	8914	9075
75-79	5082	5193	5368	5506	5680	5813	6005	6255	6510	6697
80-84	3574	3686	3705	3828	3905	4025	4151	4318	4459	4621
85-89	2105	2127	2188	2232	2313	2338	2447	2494	2607	2692
90+	1012	1061	1107	1140	1178	1237	1287	1361	1417	1498
Total	**120086**	**120586**	**121088**	**121597**	**122112**	**122631**	**123142**	**123640**	**124121**	**124587**

APPENDIX 7b Pembrokeshire Population Projections July 2008

Area: Pembrokeshire Coast National Park

Persons

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
0-4	1098	1019	961	907	879	865	898	901	916	936	929
5-9	1257	1205	1213	1199	1149	1163	1079	1010	951	919	898
10-14	1410	1410	1392	1373	1318	1296	1259	1268	1268	1237	1213
15-19	1266	1267	1261	1245	1273	1283	1296	1265	1238	1192	1175
20-24	899	890	958	993	1019	1014	1019	1016	1004	1004	1017
25-29	903	876	850	823	823	824	836	871	914	946	941
30-34	1113	1062	1028	981	918	893	838	806	785	783	802
35-39	1355	1329	1301	1264	1212	1133	1114	1064	1014	948	920
40-44	1425	1421	1450	1452	1459	1469	1437	1412	1369	1322	1224
45-49	1529	1504	1488	1504	1482	1485	1505	1524	1511	1548	1538
50-54	1932	1846	1745	1683	1615	1600	1567	1551	1569	1542	1543
55-59	1748	1868	1994	1985	1988	2019	1937	1821	1758	1699	1675
60-64	1542	1591	1613	1703	1769	1815	1923	2057	2060	2060	2096
65-69	1427	1443	1452	1483	1488	1527	1555	1585	1677	1753	1786
70-74	1234	1244	1263	1281	1321	1311	1312	1317	1329	1343	1386
75-79	1107	1081	1058	1041	1019	1005	1013	1016	1022	1059	1053
80-84	728	756	776	816	808	799	773	753	730	714	707
85-89	387	378	367	360	374	400	422	430	449	444	437
90+	177	163	168	181	174	163	159	158	156	167	179
Total	**22537**	**22351**	**22337**	**22272**	**22091**	**22064**	**21943**	**21826**	**21717**	**21615**	**21519**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
0-4	931	929	924	917	910	903	896	888	877	863
5-9	933	936	953	974	967	971	969	964	958	950
10-14	1125	1053	992	959	939	975	979	997	1020	1013
15-19	1146	1157	1154	1119	1097	1009	949	895	865	854
20-24	1026	1002	983	946	929	903	909	907	881	862
25-29	947	943	933	932	945	954	933	914	878	862
30-34	814	849	891	923	920	926	922	911	909	922
35-39	863	828	807	805	826	838	873	917	950	947
40-44	1205	1153	1098	1029	998	938	901	879	877	900
45-49	1506	1481	1436	1389	1287	1268	1215	1157	1085	1052
50-54	1565	1585	1573	1613	1604	1572	1547	1501	1453	1346
55-59	1642	1626	1646	1619	1621	1646	1670	1658	1702	1693
60-64	2014	1897	1835	1777	1756	1723	1709	1732	1706	1712
65-69	1896	2032	2040	2044	2083	2005	1893	1834	1779	1762
70-74	1417	1448	1537	1613	1644	1750	1880	1888	1895	1927
75-79	1063	1074	1090	1108	1147	1179	1207	1286	1353	1382
80-84	720	731	742	779	782	797	812	830	850	883
85-89	428	421	414	410	412	425	438	450	480	486
90+	188	192	202	207	212	215	216	223	226	234
Total	**21427**	**21337**	**21249**	**21163**	**21079**	**20998**	**20916**	**20831**	**20742**	**20649**

APPENDIX 7c Pembrokeshire Population Projections July 2008

Area: Pembrokeshire Outside National Park

Persons

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
0-4	5605	5466	5376	5255	5172	5210	5214	5219	5193	5151	5065
5-9	6299	6225	6124	6069	5986	5891	5734	5627	5514	5483	5514
10-14	6306	6496	6679	6699	6771	6650	6540	6407	6315	6239	6188
15-19	5564	5704	5748	5799	5821	6118	6280	6376	6434	6467	6366
20-24	4261	4251	4456	4572	4712	4838	4976	5027	5134	5156	5357
25-29	4590	4344	4165	4100	4111	4223	4247	4445	4594	4764	4842
30-34	5586	5588	5522	5324	5059	4792	4530	4351	4245	4269	4402
35-39	6448	6462	6324	6268	6112	6026	5920	5844	5638	5393	5111
40-44	5973	6237	6576	6724	6884	6923	6952	6750	6738	6602	6484
45-49	5842	5879	5915	6058	6200	6402	6658	6970	7123	7303	7384
50-54	6839	6686	6504	6399	6282	6122	6156	6209	6357	6513	6731
55-59	6012	6476	6812	7044	7176	7223	7029	6842	6707	6588	6458
60-64	5427	5584	5743	5965	6164	6331	6785	7069	7258	7407	7535
65-69	4898	5015	5131	5285	5384	5515	5607	5762	5934	6134	6296
70-74	4376	4368	4523	4487	4544	4575	4660	4739	4897	5006	5137
75-79	3412	3489	3502	3616	3668	3793	3750	3835	3800	3869	3919
80-84	2343	2438	2581	2697	2648	2641	2655	2664	2732	2779	2866
85-89	1230	1300	1275	1277	1345	1452	1520	1616	1685	1663	1643
90+	590	604	605	621	608	624	651	635	632	705	775
Total	**91601**	**92612**	**93563**	**94261**	**94647**	**95347**	**95864**	**96386**	**96930**	**97494**	**98073**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
0-4	5122	5162	5193	5214	5228	5243	5257	5271	5282	5286
5-9	5518	5523	5494	5448	5355	5414	5454	5484	5504	5516
10-14	6022	5909	5790	5757	5787	5789	5792	5759	5709	5609
15-19	6263	6137	6061	5992	5943	5775	5658	5552	5527	5569
20-24	5509	5603	5659	5700	5619	5532	5426	5351	5288	5241
25-29	4987	5038	5143	5168	5370	5522	5614	5667	5707	5622
30-34	4424	4632	4786	4965	5043	5193	5242	5348	5370	5578
35-39	4833	4639	4523	4545	4685	4705	4924	5086	5273	5352
40-44	6370	6287	6063	5797	5492	5192	4981	4855	4875	5023
45-49	7415	7198	7183	7037	6907	6784	6691	6451	6165	5836
50-54	6999	7326	7487	7674	7758	7789	7559	7541	7386	7247
55-59	6493	6548	6704	6867	7095	7376	7718	7887	8084	8172
60-64	7338	7148	7009	6890	6757	6797	6858	7019	7189	7427
65-69	6756	7052	7248	7403	7535	7344	7162	7031	6917	6787
70-74	5235	5399	5576	5775	5937	6383	6674	6867	7020	7148
75-79	4019	4119	4278	4398	4532	4634	4797	4969	5157	5315
80-84	2854	2955	2963	3050	3122	3228	3339	3488	3609	3738
85-89	1677	1706	1773	1822	1901	1912	2009	2043	2128	2206
90+	824	868	905	933	966	1021	1071	1139	1190	1264
Total	**98659**	**99249**	**99839**	**100433**	**101033**	**101633**	**102226**	**102809**	**103379**	**103938**

APPENDIX 8 – HOUSEHOLD PROJECTIONS

PEMBROKESHIRE					
Household Types	**2001**	**2006**	**2011**	**2016**	**2021**
Married couple	24,388	25,632	26,593	27,629	28,550
Cohabiting couple	3,386	3,372	3,432	3,531	3,580
Lone parent	3,791	3,762	3,717	3,678	3,637
Other multi-person	2,491	2,634	2,771	2,895	2,976
One person	13,263	14,036	14,825	15,906	17,098
All Households	47,319	49,437	51,337	53,639	55,841
Private household population	112,760	116,029	118,212	120,738	123,208
Average household size	2.38	2.35	2.30	2.25	2.21
Concealed married couple	113	109	106	110	112
Concealed cohabiting couple	85	86	90	94	94
Concealed lone parent	144	142	142	145	143
All concealed families	342	336	339	349	349

PEMBROKESHIRE COAST NATIONAL PARK					
Household Types	**2001**	**2006**	**2011**	**2016**	**2021**
Married couple	5,116	5,156	5,135	5,122	5,070
Cohabiting couple	642	616	596	577	555
Lone parent	679	633	591	553	518
Other multi-person	513	517	513	511	506
One person	2,895	2,910	2,934	3,026	3,136
All Households	9,845	9,832	9,768	9,788	9,785
Private household population	22,248	21,773	21,229	20,791	20,361
Average household size	2.26	2.21	2.17	2.12	2.08
Concealed married couple	21	19	18	18	17
Concealed cohabiting couple	15	15	15	14	14
Concealed lone parent	25	23	22	21	20
All concealed families	61	58	55	53	50

PEMBROKESHIRE OUTSIDE NATIONAL PARK					
Household Types	**2001**	**2006**	**2011**	**2016**	**2021**
Married couple	19,272	20,477	21,458	22,507	23,480
Cohabiting couple	2,745	2,757	2,836	2,954	3,024
Lone parent	3,112	3,129	3,126	3,126	3,119
Other multi-person	1,978	2,117	2,258	2,384	2,470
One person	10,367	11,126	11,891	12,880	13,962
All Households	37,474	39,605	41,569	43,851	46,057
Private household population	90,512	94,256	96,983	99,947	102,847
Average household size	2.42	2.38	2.33	2.28	2.23
Concealed married couple	92	89	88	92	95
Concealed cohabiting couple	69	71	76	80	80
Concealed lone parent	120	118	120	124	124
All concealed families	281	278	284	296	299

APPENDIX 9 ECONOMIC ACTIVITY RATES

Age Grouping	PEMBROKESHIRE					PEMBROKESHIRE COAST NATIONAL PARK					COUNTY OUTSIDE NATIONAL PARK				
	Total Persons	Econ Active	% Econ Active	Estimated % Annual Increase	Estimated EA Rate 2021	Total Persons	Econ Active	% Econ Active	Estimated % Annual Increase	Estimated EA Rate 2021	Total Persons	Econ Active	% Econ Active	Estimated % Annual Increase	Estimated EA Rate 2021
Males:															
16 to 19	2,705	1,363	50.39	0.50	60.39	530	243	45.85	0.50	55.85	2,175	1,120	51.49	0.50	61.49
20 to 24	2,583	2,191	84.82	0.40	92.82	488	422	86.48	0.40	74.48	2,095	1,769	84.44	0.40	92.44
25 to 29	2,572	2,321	90.24	0.20	94.24	444	404	90.99	0.20	94.99	2,128	1,917	90.08	0.20	94.08
30 to 34	3,233	2,892	89.45	0.20	93.45	552	497	90.04	0.20	94.04	2,681	2,395	89.33	0.20	93.33
35 to 39	3,771	3,295	87.38	0.25	92.38	661	588	88.96	0.25	93.96	3,110	2,707	87.04	0.25	92.04
40 to 44	3,646	3,184	87.33	0.25	92.33	685	615	89.78	0.25	94.78	2,961	2,569	86.76	0.25	91.76
45 to 49	3,635	3,107	85.47	0.25	90.47	750	641	85.47	0.25	90.47	2,885	2,466	85.48	0.25	90.48
50 to 54	4,245	3,372	79.43	0.25	84.43	934	758	81.16	0.25	86.16	3,311	2,614	78.95	0.25	83.95
55 to 59	3,720	2,490	66.94	0.40	74.94	828	567	68.48	0.40	76.48	2,892	1,923	66.49	0.40	74.49
60 to 64	3,530	1,546	43.80	0.50	53.80	799	378	47.31	0.50	57.31	2,731	1,168	42.77	0.50	52.77
65 to 69	3,093	435	14.06	0.25	19.06	697	129	18.51	0.25	23.51	2,396	306	12.77	0.25	17.77
70 to 74	2,628	233	8.87	0.10	10.87	590	74	12.54	0.10	14.54	2,038	159	7.80	0.10	9.80
Females:															
16 to 19	2,699	1,228	45.50	0.50	55.50	478	194	40.59	0.50	50.59	2,221	1,034	46.56	0.50	56.56
20 to 24	2,578	1,657	64.27	0.50	74.27	416	289	69.47	0.50	79.47	2,162	1,368	63.27	0.50	73.27
25 to 29	2,920	1,967	67.36	0.50	77.36	464	334	71.98	0.50	81.98	2,456	1,633	66.49	0.50	76.49
30 to 34	3,471	2,427	69.92	0.50	79.92	567	411	72.49	0.50	82.49	2,904	2,016	69.42	0.50	79.42
35 to 39	4,025	2,855	70.93	0.50	80.93	698	495	70.92	0.50	80.92	3,327	2,360	70.93	0.50	80.93
40 to 44	3,752	2,762	73.61	0.50	83.61	738	551	74.66	0.50	84.66	3,014	2,211	73.36	0.50	83.36
45 to 49	3,734	2,725	72.98	0.50	82.98	776	580	74.74	0.50	84.74	2,958	2,145	72.52	0.50	82.52
50 to 54	4,527	2,960	65.39	0.50	75.39	1,000	665	66.50	0.50	76.50	3,527	2,295	65.07	0.50	75.07
55 to 59	4,039	2,034	50.36	0.50	60.36	926	499	53.89	0.50	63.89	3,113	1,535	49.31	0.50	59.31
60 to 64	3,440	781	22.70	0.25	27.70	744	188	25.27	0.25	30.27	2,696	593	22.00	0.25	27.00
65 to 69	3,235	304	9.40	0.20	13.40	729	91	12.48	0.20	16.48	2,506	213	8.50	0.20	12.50
70 to 74	2,979	126	4.23	0.10	6.23	641	42	6.55	0.10	8.55	2,338	84	3.59	0.10	5.59

Source: Office for National Statistics: 2001 Census © Crown copyright

APPENDIX 10 LABOUR FORCE PROJECTIONS

TREND-BASED/INCREASED ECONOMIC ACTIVITY RATES

	LABOUR FORCE ESTIMATES					ECONOMIC ACTIVITY RATES				
	2001	*2006*	*2011*	*2016*	*2021*	*2001*	*2006*	*2011*	*2016*	*2021*
Age group	*PEMBROKESHIRE*					*PEMBROKESHIRE*				
16-19	2595	2890	3180	3100	2875	47.9%	50.5%	53.2%	55.8%	58.3%
20-24	3845	4515	5060	5335	5135	74.6%	77.1%	79.3%	81.5%	84.1%
25-29	4290	4045	4760	5310	5560	78.1%	80.2%	82.3%	84.1%	85.7%
30-34	5315	4585	4305	5055	5625	79.3%	80.7%	82.7%	84.8%	86.6%
35-39	6155	5775	4960	4650	5445	78.9%	80.6%	82.2%	84.4%	86.5%
40-44	5945	6885	6460	5550	5190	80.4%	82.1%	83.9%	85.5%	87.6%
45-49	5835	6390	7385	6930	5945	79.1%	81.0%	82.8%	84.6%	86.3%
50-54	6330	5725	6290	7280	6835	72.2%	74.2%	76.0%	77.7%	79.5%
55-59	4525	5600	5120	5675	6625	58.3%	60.6%	62.9%	65.1%	67.2%
60-64	2325	2825	3525	3290	3695	33.4%	34.7%	36.6%	38.7%	40.4%
65-69	740	905	1120	1445	1380	11.7%	12.8%	13.9%	15.0%	16.1%
70+	360	410	490	600	765	6.4%	7.0%	7.5%	7.9%	8.4%
All Ages	**48260**	**50550**	**52655**	**54220**	**55075**	**59.8%**	**60.3%**	**60.8%**	**61.4%**	**62.3%**
	PEMBROKESHIRE COAST NATIONAL PARK					*PEMBROKESHIRE COAST NATIONAL PARK*				
16-19	440	460	445	440	340	43.4%	45.8%	48.4%	51.0%	53.3%
20-24	705	820	840	790	760	78.7%	80.7%	82.8%	85.1%	88.0%
25-29	735	690	800	820	765	81.2%	83.7%	85.2%	86.7%	88.5%
30-34	905	740	685	795	815	81.1%	82.8%	85.1%	86.7%	88.2%
35-39	1080	925	770	710	830	79.7%	81.6%	83.5%	86.0%	87.7%
40-44	1165	1230	1050	875	810	81.9%	83.8%	85.6%	87.6%	89.9%
45-49	1225	1215	1285	1100	920	80.0%	81.7%	83.6%	85.5%	87.5%
50-54	1420	1210	1190	1270	1090	73.6%	75.6%	77.2%	79.1%	81.0%
55-59	1065	1275	1100	1095	1185	60.8%	63.2%	65.6%	67.6%	69.9%
60-64	565	685	835	735	740	36.7%	37.7%	39.8%	41.8%	43.2%
65-69	220	255	315	390	350	15.4%	16.7%	17.6%	18.8%	20.0%
70+	115	130	145	180	220	9.4%	9.9%	10.6%	10.9%	11.5%
All Ages	**9640**	**9635**	**9460**	**9200**	**8825**	**59.8%**	**59.8%**	**59.7%**	**59.5%**	**60.3%**
	COUNTY OUTSIDE NATIONAL PARK					*COUNTY OUTSIDE NATIONAL PARK*				
16-19	2155	2430	2740	2660	2535	49.0%	51.6%	54.1%	56.7%	59.1%
20-24	3140	3695	4215	4545	4375	73.7%	76.4%	78.7%	80.9%	83.5%
25-29	3555	3360	3960	4490	4795	77.5%	79.5%	81.8%	83.6%	85.3%
30-34	4410	3845	3625	4260	4810	79.0%	80.3%	82.3%	84.4%	86.3%
35-39	5075	4850	4190	3940	4615	78.7%	80.5%	82.0%	84.1%	86.3%
40-44	4780	5655	5415	4675	4380	80.0%	81.7%	83.5%	85.2%	87.2%
45-49	4610	5175	6100	5830	5025	78.9%	80.8%	82.6%	84.4%	86.1%
50-54	4910	4520	5095	6010	5745	71.8%	73.8%	75.7%	77.5%	79.3%
55-59	3460	4320	4020	4580	5440	57.6%	59.8%	62.2%	64.6%	66.6%
60-64	1760	2140	2695	2555	2955	32.4%	33.8%	35.7%	37.8%	39.8%
65-69	520	650	805	1050	1025	10.6%	11.8%	12.8%	14.0%	15.1%
70+	245	280	340	420	545	5.6%	6.1%	6.7%	7.1%	7.6%
All Ages	**38620**	**40920**	**43200**	**45015**	**46245**	**59.7%**	**60.5%**	**61.0%**	**61.8%**	**62.7%**