

## Section 1: demographics

# Demographics: age and the ageing population



a single version of the truth



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<a href="#">Demographics</a>	Burden of ill-health: disability and conditions effecting older people

## Edition

Edition	Version no.	Changes/Comments
2012/13	1	
2013/14	2	Mid-year 2012 population data. 2001 and 2011 census comparison.

## Outcome Frameworks Summary

The Adult Social Care Outcomes Framework<sup>1</sup> is a set of outcome measures, which have been agreed to be of value both nationally and locally for demonstrating the achievements of adult social care.

The Public Health Outcomes Framework for England, 2013-2016<sup>2</sup> outlines the overarching vision for public health as “to improve and protect the nation’s health and wellbeing, and improve the health of the poorest fastest”.

The NHS Outcomes Framework 2012-13<sup>3</sup> sets out how the improvement of healthcare outcomes for all will be the primary purpose of the NHS.

The following indicators from these frameworks have been selected as the ones most relevant to this section.

Framework	Reference	Indicator
Public Health	2.24 / 4.14	Falls and fall injuries / Hip fractures in over 65s
Public Health	4.1	Infant mortality
Public Health	4.3	Mortality from causes considered preventable
Public Health	4.13	Health-related quality of life for older people
Public Health	4.16	Diagnosis rate for people with dementia
NHS	2	Health-related quality of life for people with long-term conditions
NHS	2.6	Enhancing quality of life for people with dementia
Adult Social Care	1.A	Social care-related quality of life
Adult Social Care	2.A	Permanent admissions to residential and nursing care homes, per 100,000 population
Adult Social Care	2.B	Proportion of older people (65 and over) who were still at home 91 days after discharge from hospital into reablement/rehabilitation services

## Executive summary

The population age structure for Wiltshire is broadly similar to the population of the South West region. Currently Wiltshire has a dependency ratio (a simple ratio of those of non working age to those of working age) similar to the South West but higher than England.

Wiltshire's population is ageing more rapidly than England or the South West, reflected by growth of 20.1% in the number of people aged 65 or over between 2002 and 2010. This is significantly greater than the 11.6% increase in England or 14% increase in the South West.

Wiltshire's population is set to increase by 31,100 persons between 2011 and 2021 according to the office for National Statistics (ONS) interim population projections based on the 2011 Census, an increase of 6.6%.

The projected population figures show a steep increase in older people with the percentage of the population in Wiltshire aged 65 or over reaching 22.6% by 2021. This represents a 32% increase in the number of people over 65 in Wiltshire over this 10-year period. The number of Wiltshire's residents aged over 85 years is projected to increase from around 12,000 in 2011 to over 17,000 by 2021 (42.4%).

The dependency ratio is projected to increase by 12.8% between 2011 and 2021 in Wiltshire compared to a 7.4% rise in England. As the ratio increases, there is an increased pressure on the economically active part of the population to maintain the welfare of the economically dependent. This is, to a large extent, a national issue in terms of education, health service, and pension provision. However, care and support is provided by carers such as spouses, partners, family members, friends and neighbours. Informal care and support is, therefore, especially important in Wiltshire.

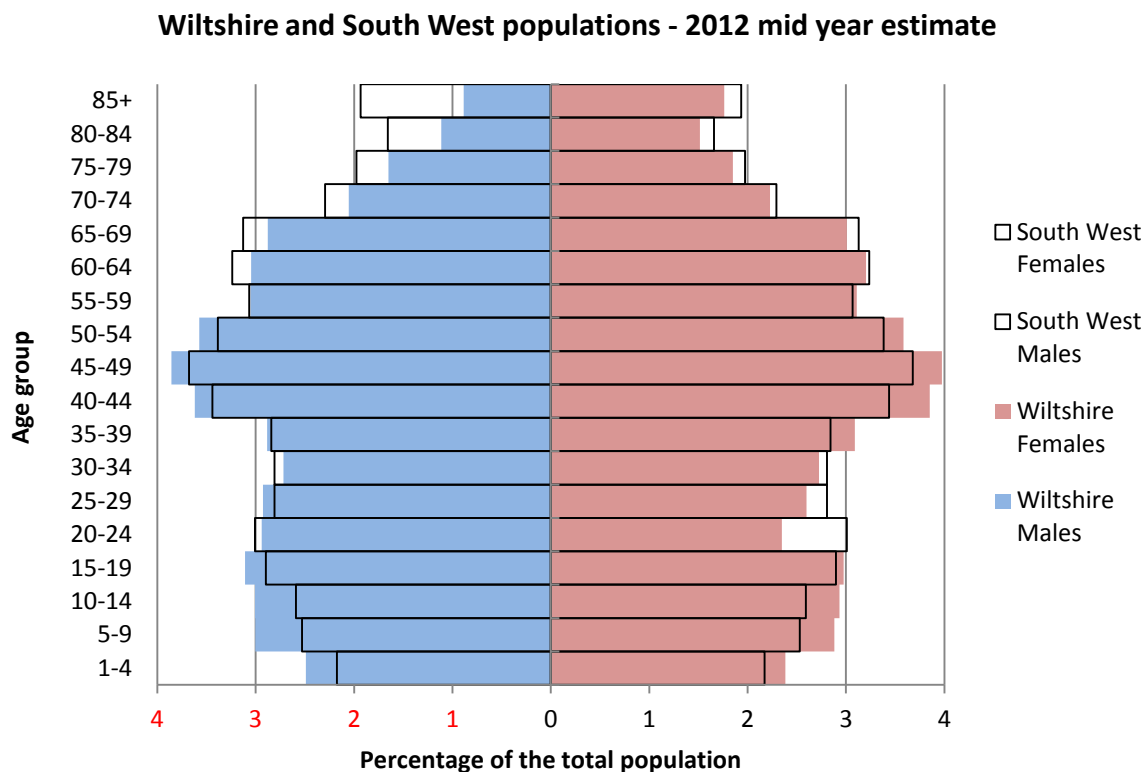
## Introduction

See [introduction section](#) for description of population data sources.

## Current population estimates

The population age structure for Wiltshire (usually presented in a population pyramid) is broadly similar to the population of the South West region.

**Figure 1: Wiltshire and South West populations – 2012 mid-year estimate**



Source: 2012 mid-year estimate, ONS.

## Dependency ratios

A dependency ratio is a simple ratio of those of non-working age to those of working age. As the ratio increases there may be an increased burden on the economically active part of the population. Dependency ratios estimate the percentage of a population that depend on people of working age for support. They do not take account the proportion of people actually working within each age.

Using statistics from the 2011 Census dependency ratios can be calculated which show how many non-working age people are dependent on every 100 working age people. Wiltshire has a dependency ratio of 65.4, higher than the South West at 65.2 and England at 58.9.

The 2012 mid-year estimates show that compared to averages in the South West and England, Wiltshire has a higher percentage (19.2% compared to 17.6%) of its

total population under the age of 16 years. It also shows that, compared to England, Wiltshire has a relatively high percentage of its total population aged 65 or over (18.9%), although slightly less than the South West average (20.3%). The combination of these two facts means that Wiltshire has a relatively low percentage of its population aged between 16 and 64 (63.2%).

Calculation of dependency ratios has been complicated by changes to the state pension age for women. The state pensionable age (SPA) for women will increase by six months every year (one month every two months) between April 2010 and March 2020. The age groupings used in the 2011 mid-year estimates from ONS reflect the SPA for women as of the 30 June 2011. Of the estimated population of females aged 60 on 30 June 2011, 35 per cent are defined as SPA, and the remaining 65 per cent are defined as not SPA.

## **Wiltshire Council estimates and projections**

Wiltshire Council uses a population modelling tool which enables generation of local population projections based on ONS and other administrative datasets. There are numerous benefits to be had in using this population model, not least being able to produce population projections (by individual ages and sex) for bespoke geographies within Wiltshire such as community areas, e.g. the number of 23 year old women in Corsham Community Area in 2014.

### **Wiltshire and Community Area population estimates and projections 2001 to 2026: trend-based**

This document

[\[http://www.intelligenetwork.org.uk/EasysiteWeb/getresource.axd?AssetID=49645&type=full&servicetype=Attachment\]](http://www.intelligenetwork.org.uk/EasysiteWeb/getresource.axd?AssetID=49645&type=full&servicetype=Attachment) provides estimates of population in Wiltshire Unitary Authority and community areas of Wiltshire for 2001 and 2009. It also provides projections for individual years from 2010 to 2016, and for 2021 and 2026. Figures are given for the key variables: age structures and components of change. The projections presented in this document are “trend-based” which means they don’t take account of local policy decisions such as where new houses will be built. The data is available in Excel format from the Intelligence Network [\[http://www.intelligenetwork.org.uk/population-and-census/?opentab=2\]](http://www.intelligenetwork.org.uk/population-and-census/?opentab=2) .

Table 1 and figure 2 show the number and proportion of the populations in different age groups in each Community Area. There is considerable variation between Areas for example only 10% of people in Tidworth are of retirement age compared to 28% in Bradford on Avon.

**Table 1: Community Area populations by broad age range, 2011**

Community Area	0-15	Working age population*	Retirement age population*	Total
Amesbury	6650	21230	5680	33570
Bradford on Avon	2840	9860	4830	17520
Calne	4720	13260	4320	22300
Chippenham	9240	27040	8250	44530
Corsham	3900	11870	4280	20050
Devizes	5820	17900	7300	31030
Malmesbury	3480	11110	4280	18870
Marlborough	3960	9820	4140	17920
Melksham	5400	15360	5820	26590
Mere	790	2850	1750	5390
Pewsey	2400	7970	3350	13730
Salisbury	7850	24220	9290	41370
Southern Wiltshire	3340	11520	6000	20850
Tidworth	3210	12250	1700	17150
Tisbury	1300	3570	2170	7040
Trowbridge	8260	25200	8250	41700
Warminster	4610	15610	5900	26110
Westbury	3850	10510	3920	18280
Wilton	1470	4880	2320	8680
RWB & Cricklade	5380	17460	5940	28790

\* Working age population: males 16-64 and females 16-59

Retirement age population: males 65+ and females 60+

Source: Wiltshire Council, 2011 population projections

**Figure 2: Proportions in each broad age range by Community Area, 2011**



Source: Wiltshire Council, 2011 population projections

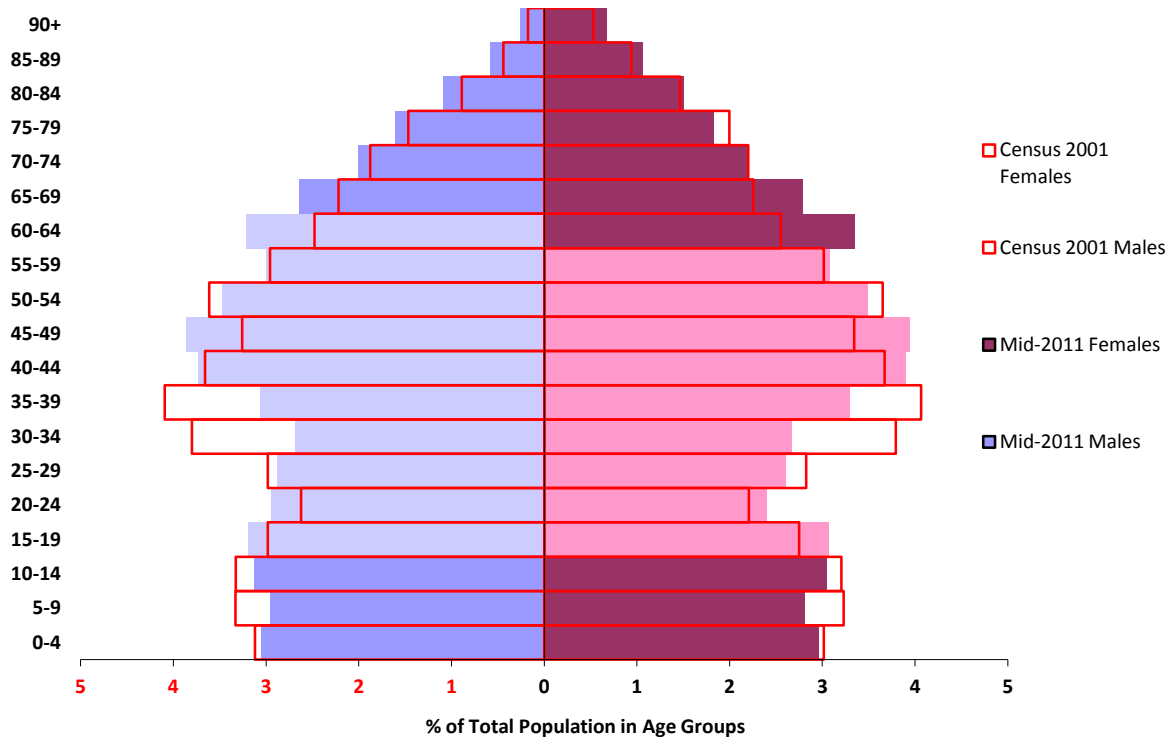
### Historical population change

Wiltshire’s population grew by 9.6% from 2001 to 2011. This growth rate is comparable to that of England (8.1%) as a whole over the same period, though slightly less than the 7.6% growth experienced in the South West. However, Wiltshire’s population is ageing more rapidly than England or the South West, reflected by growth of 24.4% in the number of people aged 65 or over between 2001 and 2011. This is significantly greater than the 14.6% increase in England or 16.9% increase in the South West. A comparison of Wiltshire census 2001 population against the mid-year 2011 population can be seen in figure 3. This increase is common across all community areas. However, 6 of the community areas experienced a 30% increase in the 65 and over population. Further information on the difference between the 2001 and 2011 population can be found on the [intelligence network](#).



**Figure 3: Wiltshire population change, 2001-2011**

Census 2001 and mid-year 2011 population estimates, by 5 year age group and sex, % of total population.



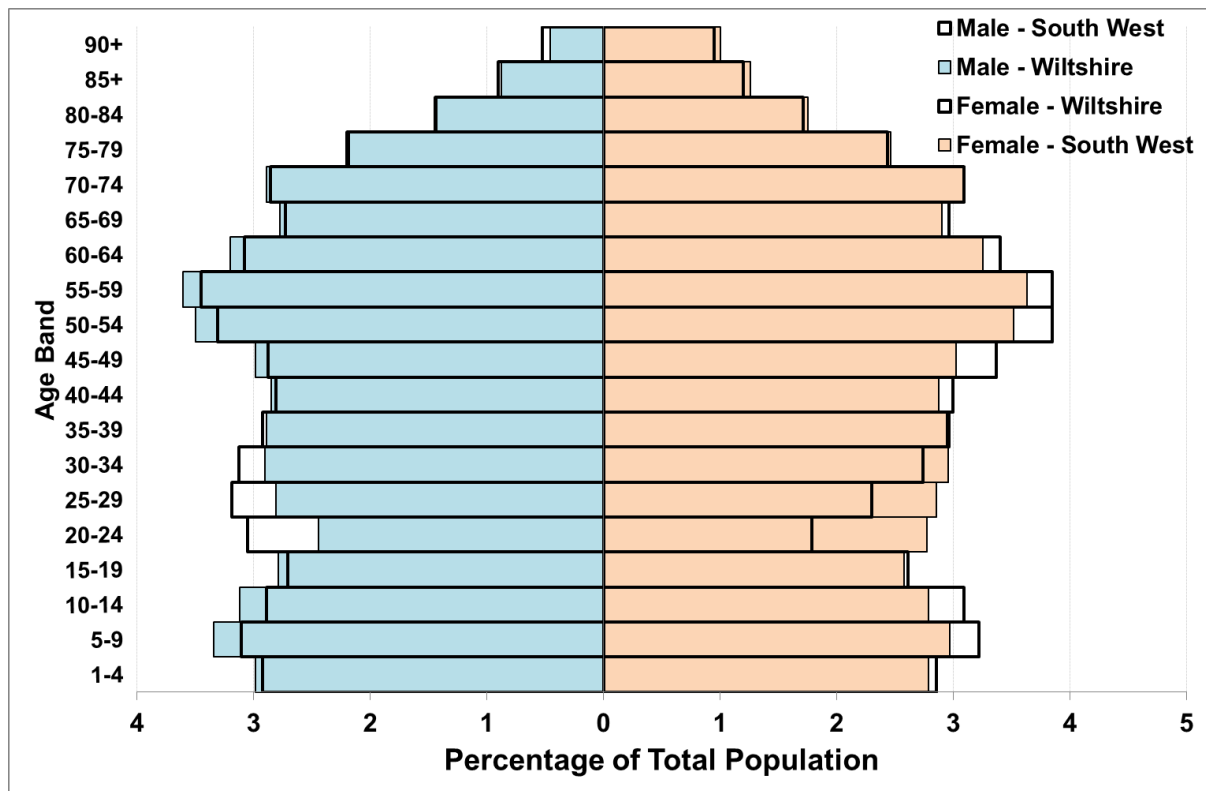
Source: Wiltshire Council

### Future population change

In England, the South West and Wiltshire, the population structure is shifting towards that of an ageing population. Implications of an ageing population are wide in terms of people living longer into older age, with an increased demand for health and well-being services, a reduction in working age people, a reduced contribution to the economy and lower incomes, and increased human resources for care services (paid and unpaid carers).

Population projections are important in order to plan provision of all community services to ensure that the needs of the local population are met. Wiltshire’s population is set to increase by 31,100 persons between 2011 and 2021 according to ONS interim population projections based on the 2011 Census, an increase of 6.6%. However, it is the composition of such growth that is going to pose what is likely to be the greatest challenge to Wiltshire over the forthcoming decades: an ageing population.

Figure 4: Wiltshire and South West populations - 2021



Source: 2011-Census-based interim sub-national population projections, ONS.

There will be a major shift in the population structure over the next 5 to 10 years as the proportion of the population aged over 65 increases. Using ONS projections based on the 2011 Census, 18.2% of the population of Wiltshire is aged 65 and over in 2011. This is higher than the England estimate of 16.4% (Table 2). The projected population figures show a steep increase with the percentage of the population in Wiltshire aged 65 or over reaching 22.6% by 2021. This also represents a 32% increase in the number of people over 65 in Wiltshire over this 10-year period. Health and wellbeing needs increase with age, with a higher burden of chronic disease, susceptibility to the negative impacts of social isolation and an associated raised need for health and social care services and carers. An estimated drop of 4.8% of people of working age in Wiltshire over the next 10 years means there will be further implications in terms of balancing income and pensions.

Table 2: Population projections (by age group) for Wiltshire and England

		Wiltshire			England		
		Men	Women	All	Men	Women	All
% Under 15	2011	18.5%	17.4%	17.9%	18.4%	17.0%	17.7%
	2021	18.9%	17.8%	18.3%	19.1%	17.9%	18.5%
% 15 to 64	2011	64.9%	62.8%	63.8%	66.8%	65.0%	65.9%
	2021	59.9%	58.1%	59.0%	63.6%	62.1%	62.8%
% 65 or over	2011	16.6%	19.8%	18.2%	14.9%	18.0%	16.4%
	2021	21.2%	24.0%	22.6%	17.4%	20.0%	18.7%

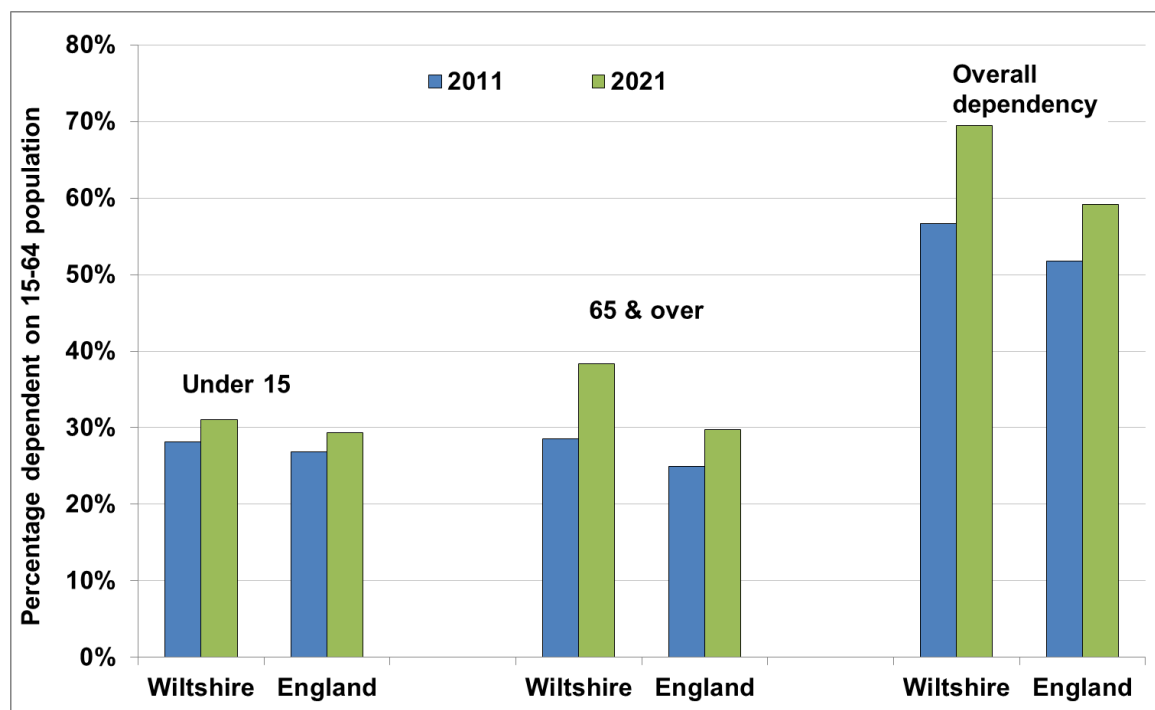
Source: Subnational Population Projections Unit, ONS: Crown Copyright.

Much of Wiltshire's retired population will live active and healthy lives, contributing to their communities for many years. However, it must be noted that the fastest population increase has been, and will continue to be, in the number of people aged 85 years and over. In the 2012 mid-year estimates there are more than twice as many females as males in this population group. The number of males aged 85 years and over is projected to increase by 67% between 2011 and 2021, compared to an increase of only 30% for females of the same age group over the same period. In total, the number of Wiltshire's residents aged over 85 years is projected to increase from around 12,000 in 2011 to over 17,000 by 2021.

## Dependency ratios

Figure 5 shows the predicted changes in dependency ratios over the next 10 years. The 15 to 64 population has been chosen to approximate the working age population in future years. The dependency ratio is projected to increase by 12.8% between 2011 and 2021 in Wiltshire compared to a 7.4% rise in England. Also, the dependency ratio for over 65s in Wiltshire is predicted to grow by 9.8% between 2011 and 2021, with a smaller increase in ratio of 4.8% estimated to occur in England over the same period. This is a result of the ageing population of both Wiltshire and England.

**Figure 5: Projected changes in dependency ratios**



Source: Subnational Population Projections Unit, ONS: Crown Copyright.

As the ratio increases, there is an increased pressure on the economically active part of the population to maintain the welfare of the economically dependent. This is, to a large extent, a national issue in terms of education, health service, and pension provision. However, care and support is provided by carers such as spouses, partners, family members, friends and neighbours. Informal care and support is, therefore, especially important in Wiltshire.

The cost of adult social care is known to rise significantly for this population group. Wiltshire's Working-Age Population (WAP) is projected to decrease from 60.4% to 54.4% of total population but Wiltshire's Retirement-Age Population (RAP) is projected to increase by almost half again from 21.5% to 29.8% by 2026. This will result in enormous pressure on public sector resources to care for Wiltshire's older population in the future.

## Wiltshire Council projections

Using the Wiltshire Council "trend-based" population projections the growth in different age groups can be examined for each Community Area. Table 3 shows the percentage change between 2011 and 2021 for young people; working age people and retirement age people. There is considerable variation between Areas for example the 0-15 population in Tidworth is projected to decrease by 8% whilst it is expected to increase by 7% in Bradford on Avon. Calne is projected to see a 16% increase in its working age population but Tisbury a 13% fall. All Areas are projected to see an increase in their retirement age population and this is shown graphically in figure 6.

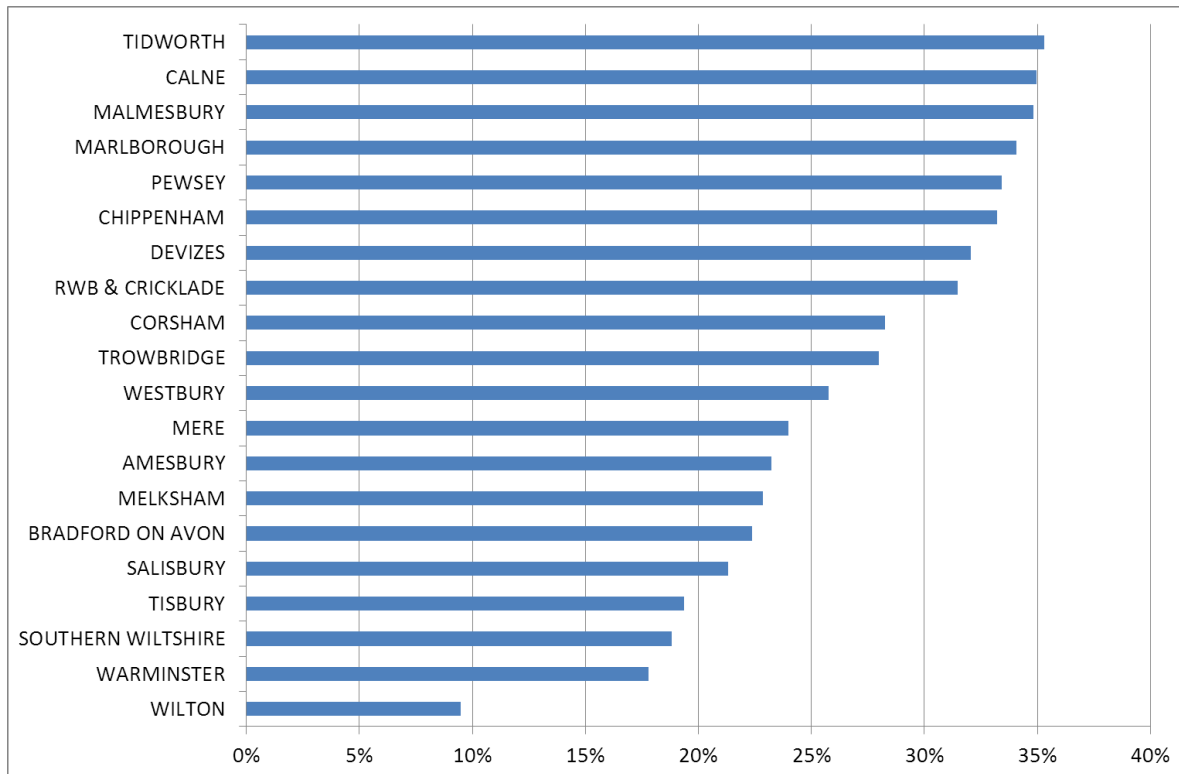
**Table 3: projected % population change (2011 to 2021) by broad age range**

Community Area	0-15	Working age population*	Retirement age population*
Amesbury	-2%	0%	23%
Bradford on Avon	7%	-3%	22%
Calne	4%	16%	35%
Chippenham	-2%	2%	33%
Corsham	4%	6%	28%
Devizes	0%	6%	32%
Malmesbury	-1%	-3%	35%
Marlborough	1%	-5%	34%
Melksham	-1%	6%	23%
Mere	-3%	-7%	24%
Pewsey	-6%	-2%	33%
Salisbury	4%	-2%	21%
Southern Wiltshire	-4%	-3%	19%
Tidworth	-8%	-6%	35%
Tisbury	-4%	-13%	19%
Trowbridge	2%	8%	28%
Warminster	-3%	3%	18%
Westbury	5%	9%	26%
Wilton	-1%	-1%	9%
RWB & Cricklade	-2%	-4%	31%

\* Working age population: males 16-64 and females 16-59

Retirement age population: males 65+ and females 60+

Source: Wiltshire Council, 2011 population projections

**Figure 6: Projected % increase (2011 to 2021) in retirement age population**

Source: Wiltshire Council, 2011 population projections

## Challenges for consideration

The challenges described in this section are taken from the [statistical profile](#) of equity in Wiltshire<sup>4</sup>. This was commissioned by the Resilient Communities Partnership (RCP) as part of their equalities agenda and produced in 2011. It provides a comprehensive statistical baseline of equality and inclusion in Wiltshire. The report looks at nine “protected characteristics<sup>5</sup>” one of which is age; and measures these against dimensions of equality<sup>6</sup>.

- **Barriers to services** - many older people will live active and healthy lives, contributing to their communities for many years, however, for the very old, there may be barriers which prevent them from accessing services, whether these are through poor finances, health or lack of transport.
- **Health** - While people will live longer because of medical and other advances there is expected to be a rise in the years of life spent with a limiting persistent illness or disability and the years spent in poor general health.
- **Employability** - due to the fact that the proportion of people of a working, taxable age will shrink (although less so now that the retirement age is changing) we expect older workers will come to make up a larger share of our labour force than in recent history. We will need to consider whether to: maintain the employability of older workers who wish to remain in work, or cannot afford to retire early without state support; maintain the relevance of

older workers' skills; and ensure that mobility levels<sup>7</sup> are sufficient to adjust to future changes in the location and composition of jobs.

- Pensions - the Prudential's annual Class of 2011 survey (national research), which analyses the expectations of those planning to retire in the forthcoming year, has found that 20% of those planning to retire in 2011 have no private or company pension and will be reliant on the State Pension to fund their retirement; 28% of females and 10% of males. The report states that: "whilst State Pension levels are due to rise to £102 later this year, this still provides a relatively low level of income, even taking into account the means tested Pension Credit or the suggested £140 flat rate, when compared to average salaries for workers in the UK"<sup>8</sup>.
- Acceptable standard of living - according to the Joseph Rowntree Foundation<sup>9</sup>, a single person in the UK needs to earn at least £14,400 a year before tax in 2010, to afford a basic but acceptable standard of living. An average male this year will receive an annual pension income of £19,593 while a woman will receive just £12,169 (Prudential, 2010). This gap can probably be attributed to the fact that as women often stop employment or choose to work part-time when they have children and tend to provide informal care provision, they can miss out on being eligible to receive the full state pension. The gender pay gap may also play a part.
- Caring responsibilities – In the future, not only will this trend continue but the concentration will fall on women who are in their middle years (the intermediate age between youth and old age).

## Contact information

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### With input from:

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<sup>1</sup> Transparency in outcomes: a framework for quality in adult social care: The 2012/13 Adult Social Care Outcomes Framework, Department of Health, March 2012.

<sup>2</sup> Department of Health

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_132358](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_132358)]

<sup>3</sup> The NHS Outcomes Framework 2012/13, Department of Health, December 2011. url:

[http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_131700](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131700)

<sup>4</sup> Equality in Wiltshire: a statistical profile, May 2011.

<http://www.intelligencenetwork.org.uk/community/>

<sup>5</sup> Equality Act 2010

<sup>6</sup> Adapted from the Equalities Review 2007 and the Equality Measurement Framework

<sup>7</sup> Labour market mobility refers to a person moving within the labour market (i.e. from one employer to another) or changing roles without changing employers.

<sup>8</sup> This £140 flat rate has now been proposed to increase to £155

<sup>9</sup> A minimum income standard for the UK in 2010, Joseph Rowntree Foundation, July 2010