

Demographic and Housing Projections

Member Seminar

Cheltenham Borough Council

September 14th 2011

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1: How population and housing projections are done

2: the Structure Plan approach to calculating housing requirements

3: Housing requirements for the Regional Spatial Strategy

4: Current trends in population and housing

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How population and housing projections are done

OR

How do we know how many people there will be around here in 20 years time?

2 key elements are

'natural' change
migration

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Natural Change

Starting with a good estimate of the current population

How many people do we expect to be born over the next 20 years?

How many people do we expect to die over the next 20 years?

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Natural Change

Future Deaths/Mortality

Using current (past 5 years trend) Age and Gender Specific Mortality Rates to run a Cohort Survival Model

OR

At current rates, how many of today's 76 year-olds will 'survive' to be 77

Apply a mortality trend over time

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Natural Change

Future Births/Fertility

Using current (past 3 years trend) Age Specific Fertility Rates

OR

If we have 1000 women aged 27, then we can expect them to deliver, say, 150 babies in the next year

Apply a fertility trend over time

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Migration

How many people do we expect to move out of the area?

And how many do we expect to move in?

Apply current (past 5 years) trends in 'internal' and 'international' migration

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Migration

Internal Migration

Based on NHS GP registrations

Identifies who has moved here from somewhere else in UK and

Who has moved from here to elsewhere in UK

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Migration

Internal Migration

more than 100,000 Gloucestershire residents moved address within Gloucestershire between September 2006 and January 2010

40% of these moves were very local i.e. within one mile

70% of these moves were local, within 3 miles

A quarter of moves between districts were within 3 miles

66,000 people moved to Gloucestershire between September 2006 and January 2010

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Migration

International Migration

Who has moved here from outside the UK?

International Passenger Survey
Worker Registration Scheme
National Insurance

Not just totals but
How long do they stay?
How old are they?
Are they men or women?

Council tax.

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Migration

International Migration

Who has moved abroad from our area?

ONS modelling of International Passenger Survey
Assumptions about length of stay of migrant workers

The least robust element of population projection

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Population Projection

Applying the current mortality, fertility and migration trends to this year's population gives us a projection of next year's population

Applying the trends to next year's population gives us the population for the year after

And so on

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Household Projection

Once we have our future, year-on-year population projections we can use them to do a 'household projection'

Using age and gender specific 'headship' rates (modelled from Census) to 'convert' population numbers into households

Basically, how many of the people in our population projection will be 'heads of households'...

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Structure Plan approach to calculating housing requirements

Forecasting future housing requirement is a two stage process. The first part involves estimating the increase in numbers of households in the County. The second involves additional elements to produce an overall housing total.

Concealed households

Second homes

Vacancy rate

2.8%
grows.
47,000
53,000

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Regional Spatial Strategy (RSS) Housing requirements

The figure in the original draft RSS, of 23,060 new dwelling per annum (2006-2026), was based on a synthesis of

Trend-based population/household projection

Economic Growth forecasts (projection constrained to jobs)

Capacity assessment

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Regional Spatial Strategy (RSS) Housing requirements

The Secretary of State proposed that the RSS annual housing requirement be increased by 28.5%, from 23,060 to 29,623 because

Original Draft RSS economic growth assumption regarded as too conservative at 2.8% - SW should be planning for 3.2% growth per annum

Office for National Statistics revised their household formation rates, significantly increasing the numbers of future households expected

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Population and Household Projections

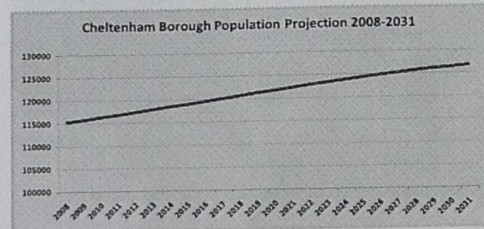
Housing Trend Analysis

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Population Projections for Cheltenham Borough

Population increase of 11,450, or 9.9%, between 2008 and 2031 (from 115,300 to 126,750)



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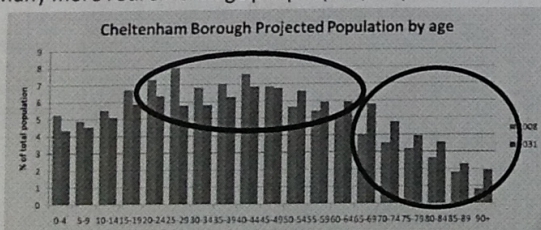
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Population Projections for Cheltenham

Fewer children (-1,100)

More working-age people (+2,300)

Many more retirement age people (+11,200)

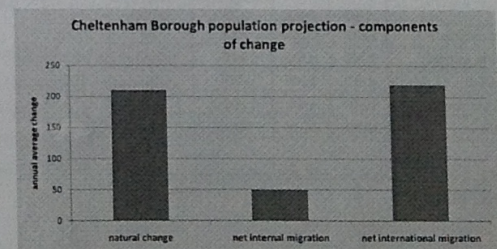


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Population Projections for Cheltenham Borough

'Components of change'

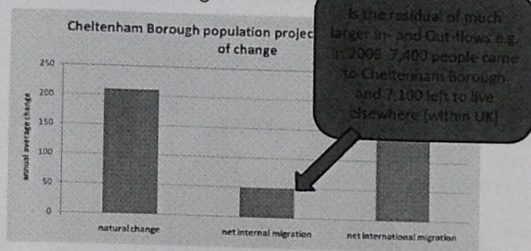


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Population Projections for Cheltenham Borough

'Components of change'



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Household Projections for Cheltenham Borough

Additional 11,400 households 2008-31, 52,000 in 2008 to 63,400 in 2031

9.9% increase in population generates 21.9% increase in households

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Household Projections for Cheltenham Borough

	2008	2031	change 2008 to 2031	% change 2008 to 2031
married couples	19,800	19,300	-500	-2.5
cohabiting couples	6,100	8,500	2400	39.0
lone parents	3,200	3,300	100	3.1
other multi-person	4,100	4,800	700	17.1
one person	18,700	27,500	8,800	47.1

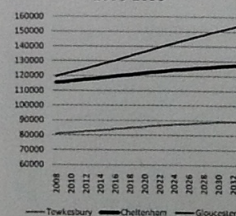
Around half of one person households will be persons aged 65 or over by 2031

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Projections for Cheltenham, Tewkesbury & Gloucester

Population projections 2008-2033

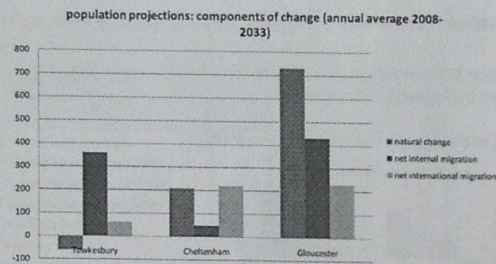


	population 2008	population 2031	population change 2008-2031	% change 2008-2031
Cheltenham	115300	126750	11450	9.9
Tewkesbury	80730	89320	8590	10.6
Gloucester	119710	151690	31980	26.7

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Projections for Cheltenham, Tewkesbury & Gloucester



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Projections for Cheltenham, Tewkesbury & Gloucester

population projections 2008-2031: changing age profile

	0 to 19	20 to 64	65 plus
Cheltenham	-4.2%	3.0%	59.9%
Tewkesbury Borough	-7.1%	-4.9%	81.3%
Gloucester	16.1%	22.1%	80.7%

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Projections for Cheltenham, Tewkesbury & Gloucester

	households 2008	households 2031	change 2008-2031	% change 2008-2031
Cheltenham	52,000	63,400	11,400	21.9
Tewkesbury Borough	35,400	43,500	8,100	22.9
Gloucester	51,600	72,100	20,500	39.7

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Housing Trend Analysis

Key trends 1991 to 2009/10

Housing completions
Household formation
Migration
Employment
Commuting

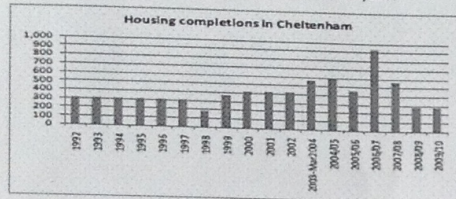
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Housing Trend Analysis

Housing completions

Between 1992 and 2009/10, a total of 7,258 new dwellings were delivered in Cheltenham. It is estimated that by 2009/10, the total number of dwellings in Cheltenham was around 54,100.



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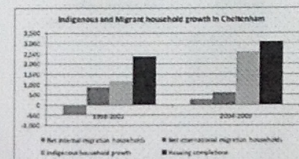
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Housing Trend Analysis

Household formation

between 1998 and 2009, an estimated 5,020 new households were formed in Cheltenham Borough

1,270 of these were the result of in-migration

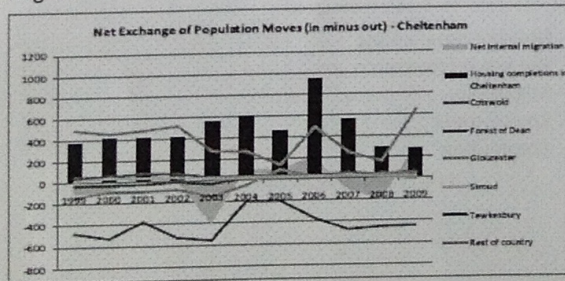


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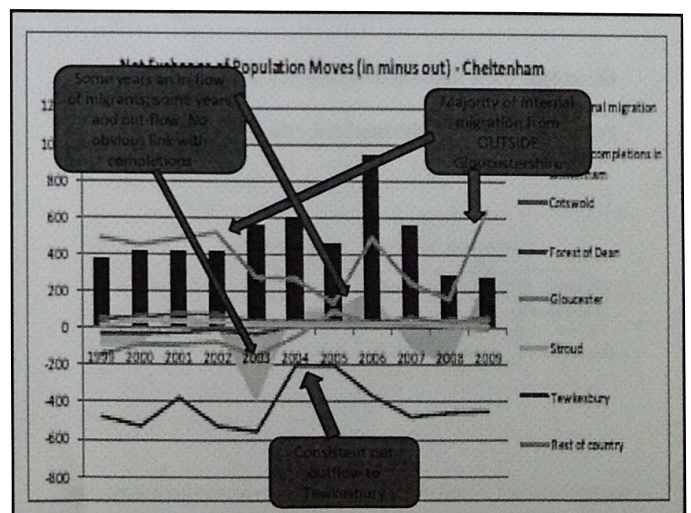
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Housing Trend Analysis

Migration



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Housing Trend Analysis

Migration to new developments

Figure 2.1.8: Distance moved to selected new developments in Cheltenham

	GCHQ Oakley		Persimmon Gardens	
	n	%	n	%
'in-county' moves under a mile	91	17.4	45	22.5
'in-county' moves between 1 & 3 miles	156	29.8	45	24.5
'in-county' moves between 3 & 10 miles	55	12.4	24	12.0
'in-county' moves more than 10 miles	22	4.2	19	9.5
total 'in County' movers	334	63.9	137	68.5
no move	0	0	0	0.0
migrants from Out of County	189	36.1	63	31.5
total moving to	523		200	

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Housing Trend Analysis

Migration to new developments

Figure 2.1.9: District of origin of movers to selected new developments in Cheltenham

	GCHQ Oakley		Persimmon Gardens	
	n	%	n	%
'in county' movers from Cheltenham	246	47.0	94	47.0
'in county' movers from Cotswold	10	1.9	8	4.0
'in county' movers from Forest of Dean	4	0.8	6	3.0
'in county' movers from Gloucester	19	3.6	9	4.5
'in county' movers from Stroud	7	1.3	5	2.5
'in county' movers from Tewkesbury	48	9.2	15	7.5
'Out of County' movers	189	36.1	63	31.5

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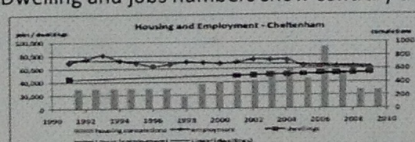
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Housing Trend Analysis

Employment

Number of jobs in Cheltenham Borough fell by 7,600 between 1991 (69,300 jobs) and 2009 (61,700 jobs)

Dwelling and jobs numbers show contrary trends



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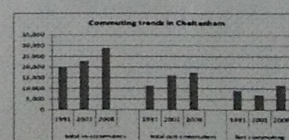
Housing Trend Analysis

Commuting

In 2008 an estimated 77% of Cheltenham workers worked in Cheltenham, up from 70% in 2001

Growing volumes of in and out-commuting, net inflow of c10,000 at 2008

Around 1 in 3 Tewkesbury resident workers work in Cheltenham



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