

Conwy County Borough Council

**Population / Household Forecasts
and Dwelling Requirement**

1 WHY DO WE NEED POPULATION AND HOUSEHOLD PROJECTIONS AND FORECASTS?

1.1 Population and household projections aim to identify what future population figures and demographic characteristics will be if current trends continue. Forecasts aim to find the same type of data, but look at future population as related to policy initiatives (i.e. what will the population be if current policies are successful).

1.2 Planning is about ways of proceeding into the future and projections provide basic information about the whole population which is important in order to estimate, project and categorise future social, economic and land use needs. Future housing demand is a particularly important aspect in view of the Government's requirement that local planning authorities have an obligation to:

- Ensure that an adequate and continuous 5 year supply of land is available and suitable for residential development.
- Lay out the scale of provision, and explain how it is derived.
- Ensure results of surveys and research used to determine provision are available for inspection.

1.3 In particular, the production of projections and forecasts supports the housing policy attached to the Unitary Development Plan (though this is only one aspect of people's needs that have to be addressed e.g. employment, recreation) as household projections help determine dwelling requirement in terms of total numbers and household type.

2 IN-HOUSE PROJECTION WORK 1996-8

2.1 In June 1996 the Research and Information Section of the Planning Department began work on producing population and household projections for use in policy formulation for the Unitary Development Plan (UDP).

2.2 This initial set of projections were calculated using the Chelmer Population and Housing Model (CPHM). This projections package is widely used by local authorities in Wales and England, and is also recognised by the House Builders Federation as a valid statistical model.

2.3 The projections were run in conjunction with the other unitary authorities in North Wales in order to produce a uniform approach to population and household projection work in the region. However, when determining migration assumptions differing methodologies were used by individual authorities.

2.4 The results of a series of projections produced by the model using differing migration assumptions were presented to the Council's Planning Committee in July 1998.

2.5 These initial data sets were for the whole of the County Borough of Conwy including that part of the Snowdonia National Park area within County Borough boundaries.

2.6 The base year for calculations was set at 1994. This was for two main reasons:

- 1994 mid year population estimates for the new authorities represented the most current population data available when preparatory work started.
- The latest set of Central Government population projections produced by the Welsh Office use 1994 as the base year, thus it made sense to aim for a comparative run from the North Wales authorities.

The base population for all scenarios run on CPHM was therefore the 1994 mid year estimate of population. The total population for Conwy County Borough at this date was 110,642.

2.7 The model projects over a twenty year period (to 2014) in five yearly intervals.

2.8 It should be noted that the Welsh Office data presented in this report is included for comparative reasons only. A different model and methodology was used to produce that data.

2.9 A range of different options for projections were produced by the Planning Department. These looked at past trends, anticipated trends, and other scenarios which may be politically desirable, but realistically unfeasible (e.g. zero net migration into the Borough). These scenarios were:

- Natural Change - assumes no migration taking place. Changes in population come about through natural causes only - i.e. births and deaths.
- Zero Net Migration - assumes a net result of zero migration. Total inward flows of persons to the area is equal to total outward flows. There may be changes in the population structure over the period however.
- Static Population - total population remains the same over the projection period. The model calculates rates of migration required to achieve this.
- 5 Year Trend - taking the mean of two sets of data that were available for the five year period immediately preceding the base year (1990-94) to give a projection of annual migration. This figure was taken to be constant throughout the projection period.
- 10 Year Trend - one set of data available to calculate a moving average, and thus give a projection of annual migration. Again, this figure was taken as constant throughout the period.
- Policy Led - initially taking the five year trend, then assuming a declining rate of in-migration after 2001.

2.10 Table 1 below shows the resulting projections for population:

Table 1 Population Projections

	Natural Change	Zero Net Mig.	Static Pop. (94)	5 Year Trend	10 Year Trend	Policy Led	Welsh Office
1994	110,642	110,642	110,642	110,642	110,642	110,642	110,669
1996	109,592	109,592	110,642	112,092	112,742	112,092	111,381
2001	107,220	107,033	110,642	115,924	118,236	115,424	113,306
2006	105,411	104,619	110,642	120,215	124,270	117,808	115,539
2011	104,054	102,358	110,642	124,863	130,714	119,387	118,039
2014	103,399	101,081	110,642	127,780	134,720	120,295	119,492
Change 1996-2011	-5,537	-7,233	0	12,772	17,972	7,295	6,658
	-5.05%	-6.60%	0.00%	11.39%	15.94%	6.51%	5.98%

2.11 Projections of population change over the (then) proposed unitary plan period 1996-2011 ranged from a decline of 6.6% (zero net migration option) to growth of almost 16% within those 15 years (10 year trend).

2.12 Household projections showed a slightly different pattern (Table 2). Only the natural change option gave a declining number of households. Due to projected changes in the rate and make-up of household formation, the rate of growth in households is greater than the rate of growth in total population. For example, the rate of growth over the 15 year period for the policy led projections is almost 13% for households, compared to 6.5% for population.

Table 2 Household Projections

	Natural Change	Zero Net Mig.	Static Pop. (94)	5 Year Trend	10 Year Trend	Policy Led	Welsh Office
1994	45,722	45,722	45,722	45,722	45,722	45,722	46,015
1996	45,344	45,646	46,038	46,580	46,823	46,580	46,690
2001	44,568	45,555	46,920	48,917	49,793	48,730	48,338
2006	44,162	45,676	47,992	51,675	53,237	50,761	50,177
2011	44,035	45,930	49,166	54,718	57,007	52,608	52,179
2014	44,048	46,118	49,887	56,626	59,367	53,724	53,304
Change 1996-2011	-1,310	284	3,128	8,138	10,184	6,028	5,489
	-2.89%	0.62%	6.79%	17.47%	21.75%	12.94%	11.76%

2.13 Table 3 below indicates the corresponding dwelling requirements:

Table 3 Dwelling Requirements

	Natural Change	Zero Net Mig	Static Pop(94)	5 Year Trend	10 Year Trend	Policy Led	Welsh Office
Change 1996-2011	0	302	3328	8659	10836	6414	5840

2.14 The dwelling requirements were calculated separately using the vacancy rate recorded by the 1991 Census for the Plan area of 6.4%, excluding second and holiday homes. The dwelling requirements relate to the whole of the County Borough and include part of the Snowdonia National Park.

2.15 The projections were considered by Members at an informal meeting of the Council's Planning Committee on 28th July 1998. Considerable dissatisfaction was expressed by Members at previous high rates of population growth and housing development. The level of growth and development associated with the Welsh Office projection and other higher projections were rejected by Members. The projections were rejected for the following reasons:

- the loss of valued green spaces
- overcrowding in local schools and the long term use of temporary accommodation for pupils
- concerns by GPs in certain areas about growth in patient lists and the pressure on community health services
- the financial burden for the authority arising from the immigration of the elderly
- concerns about infrastructure, particularly the ability of local roads to cope with increased traffic flows and the lack of money to finance road improvements, and over water supply in certain areas

- the effect of immigration on the social and cultural life of local communities.

The general opinion of Members was that growth and development should be related to local need only.

2.16 The views expressed by Members were echoed at Focus Group meetings held during the autumn of 1998. The purpose of the Focus Group meetings was to seek guidance from representatives of the local community on the basic strategy of the UDP. The Focus Groups were attended by representatives of business, community, voluntary and environmental groups.

3 PROJECTIONS WORK FOR REGIONAL GUIDANCE 1999-2000

3.1 In 1998, the Council, in conjunction with other local authorities in North Wales, and encouraged by the Welsh Office (WO)/National Assembly for Wales (NAW), embarked on the preparation of Draft Regional Planning Guidance for North Wales, for the period 1996-2011. Council Officers put forward a provisional figure of 4,500 as the dwelling requirement for the UDP Plan area which excludes any part of the Snowdonia National Park. In doing so, they took into account:

- the views of Members and the Focus Groups expressed in paragraphs 2.14 and 2.15 above.
- that to maintain the population at its then level would require in the order of 3000 additional dwellings
- the Council was actively taking steps to promote economic growth, inward investment and job creation, and to obtain European Objective 1 status.

3.2 It was envisaged that there would be a gradual reduction in the rate of housing development in the County Borough between 1996 and 2011. The proposed figure of 4,500 dwellings was run through the CHPM to provide supporting data on expected migration and population growth rates which would result from this level of housebuilding. On the basis that 4,500 dwellings are built, the population of the County Borough is forecast to rise by approximately 3,600 and the number of households by approximately 4,100, between 1996 and 2011.

3.3 The Council's approach is consistent with Government policy to encourage a more policy led approach, in place of the traditional "predict and provide" philosophy.

3.4 The proposed figure was endorsed by the Planning Committee on 10th March 1999 and later ratified by Full Council.

3.5 In late 1999 the North Wales Planning Officers Group (NWPOG) charged the North Wales Population and Housing Research Group (NWPHRG) with producing a set of reliable, up-to-date population and household projections for North Wales and its constituent Planning Authorities. The production of this data was imperative for two reasons

3.6 Firstly, the WO, (now NAW) had, historically, produced its own population and housing projections for each Unitary Authority in North Wales. These were used to assess and comment on the content of Development Plans prepared by Unitary Authorities, the outcome of which could result in the WO/NAW objecting to housing policies in UDPs. However, the NAW has only published one set of projections to date for Unitary Authorities, based on 1991-94 trends. These were widely criticised not least for the unrealistically short trend time period upon which to base 15/20 year projections, in part due to the difficulties of adjusting data to fit new administrative boundaries. The NAW abandoned producing 1996 based set of projections for similar reasons, and is currently experiencing problems in producing reliable figures for a 1998 based data set.

3.7 The absence of up-to-date NAW figures which had the confidence of users had several implications for North Wales Unitary Authorities:-

- the difficulty of countering challenges to draft UDP figures without an acceptable benchmark
- highlighted the need for UAs to "fill the data gap" ourselves with projections that have a degree of independence and authority

In meeting these challenges the North Wales UAs were also presented with an opportunity to establish local policy and strategic targets solely from UAs own 'means'.

3.8 Secondly, the need for the inclusion of population and household projection figures in a strategic level planning guidance document was also a consideration, particularly in light of the failure of the WO/NAW to produce acceptable data.

3.9 Problems with the extant projections model CPHM and the dispersion of in-house expertise following local government reform led to an agreement that the use of consultants could provide a quick and semi-independent solution to the short term problem of producing up-to-date, consistent and agreed projections for each of the six Unitary Authorities in North Wales.

3.10 In November 1999 the London Research Centre (LRC) was appointed to produce a set of population, household and economic activity rates for North Wales.

3.11 A set of projections was output for the six North Wales Authorities from 1996 to 2016. For Conwy this data was for the whole of the Unitary Authority area including those parts of the Snowdonia National Park within County Borough boundaries.

3.12 Five principal projections were prepared, looking at recent migration and dwelling led trends:

- Incorporating no migration after 1998 (equivalent to a natural change scenario)
- Completions Led - local forecast growth of dwellings, based on average dwelling completions for 1991-96. This examines how recent building trends would effect dwelling need if continued into the future.
- Permissions Led – based on the average annual number of planning permissions granted for dwellings between 1996-99. This examines how recent trends in granting planning permissions for residential development would be extrapolated into the future.
- Migration Trend – based on the continuation of net migration trends for 1994-98 as derived from Mid Year Estimate population
- Welsh Office Migration - using the net migration assumptions of the aborted 1996-based Welsh projections

3.13 Two versions of each projection were prepared using alternative sets of household representative rates. It was not possible to provide up-to-date and accurate household representative rates for the individual authorities as data had not been produced by the WO/NAW as it had in England. Therefore two 'best fit' scenarios were investigated:

- In the projections labelled **Version 1** household representative rates for a range of districts in England were matched against North Wales data and that which had the closest pattern of change was applied to each of the six authorities. These rates were given a local adjustment so that the projected numbers of dwellings in 1996 matched those supplied by the authorities.
- In the projections labelled **Version 2** sets of 1992-based rates from the Chelmer model for the former counties of Clwyd and Gwynedd were made available. The only rates that could

reasonably be used related to persons by gender and five year age groups. These were not specific to household type or to marital status. This provided much less detailed information. They were converted to rates for the five broad age bands and used in the relevant districts with Conwy being the average of the two county sets. As in **Version 1** the rates were ‘tuned’ in 1996 to match the dwelling numbers.

3.14 Tables 4, 5 and 6 below show the resulting projections for population, households and dwellings. These were presented to the NWPOG in July 2000.

Table 4 LRC Population Projections

Version 1	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	110,595	110,595	110,595	110,595	110,595
2001	110,366	116,704	110,954	112,872	113,878
2006	107,460	119,421	110,107	114,067	116,589
2011	104,885	123,800	110,327	115,291	119,155
2016	102,972	126,470	109,461	116,706	121,749
Change 1996-2011	-5,710	13,205	-268	4,696	8,560
	-5.2%	11.9%	-0.2%	4.2%	7.7%
Version 2	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	110,595	110,595	110,595	110,595	110,595
2001	110,366	117,381	111,411	112,872	113,878
2006	107,460	121,571	111,810	114,067	116,589
2011	104,885	127,081	112,838	115,291	119,155
2016	102,972	131,302	113,127	116,706	121,749
Change 1996-2011	-5,710	16,486	2,243	4,696	8,560
	-5.2%	14.9%	2.0%	4.2%	7.7%

3.15 A wide range of scenarios for population growth between 1996 and 2011 (roughly contiguous with plan period) are presented by these projections. In particular it is worth noting that the completions led projections offer growth levels far beyond those expected if current growth rates were extrapolated into the future (actual growth in population has been 3.2% between 1991 and 1999)¹

¹ Based on the Registrar General's Mid Year Population Estimates the 1991 population for Conwy was 108,600 and in 1999 equalled 112,100.

Table 5 LRC Household Projections

Version 1	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	47,652	47,652	47,652	47,652	47,652
2001	48,273	50,088	48,313	49,129	49,513
2006	47,912	52,512	48,976	50,491	51,487
2011	47,316	54,946	49,635	51,813	53,393
2016	47,409	57,374	50,296	53,420	55,567
Change 1996-2011	-336 -0.7%	7,294 15.3%	1,983 4.2%	4,161 8.7%	5,741 12.0%
Version 2	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	47,569	47,569	47,569	47,569	47,569
2001	48,079	49,995	48,226	48,891	49,265
2006	47,360	52,423	48,887	49,787	50,742
2011	46,492	54,853	49,550	50,709	52,203
2016	46,152	57,285	50,216	51,800	53,805
Change 1996-2011	-1,077 -2.3%	7,284 15.3%	1,981 4.2%	3,140 6.6%	4,634 9.7%

3.16 Household numbers are likely to grow at a faster rate than population totals over the period due to a trend towards a reduction in household size.

Table 6 LRC Dwelling Projections

Version 1	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	50,966	50,966	50,966	50,966	50,966
2001	51,661	53,598	51,702	52,571	52,981
2006	51,301	56,231	52,440	54,069	55,137
2011	50,695	58,867	53,178	55,512	57,208
2016	50,822	61,506	53,919	57,269	59,565
Change 1996-2011	-271 -0.5%	7,901 15.5%	2,212 4.3%	4,546 8.9%	6,242 12.2%

Table 6 LRC Dwelling Projections (cont.)

Version 2	No Migration	Completions	Permissions	Mig Trend	WO Mig.
1996	50,870	50,870	50,870	50,870	50,870
2001	51,448	53,502	51,606	52,321	52,718
2006	50,715	56,135	52,348	53,313	54,332
2011	49,814	58,771	53,088	54,328	55,930
2016	49,478	61,409	53,831	55,531	57,679
Change 1996-2011	-1,056	7,901	2,218	3,458	5,060
	-2.1%	15.5%	4.4%	6.8%	9.9%

3.17 On the basis of these figures, Conwy’s preferred projection for inclusion in the Regional Strategic Planning Guidance document was Migration Trend, Version 1 as this projection most closely fitted the capacity based approach adopted by Conwy in 1998.

3.18 However the NWPOG as a whole favoured the Welsh Office Migration, Version 1 projections as a benchmark for North Wales. It was felt that as a benchmark the projections should be based on the best statistical representation of recent trends. This was the set recommended by LRC as the most statistically viable. The Welsh Office migration data was felt to be the most robust, and the household representative rates used in version 1 projections provided more detail and more closely approximated patterns of change in North Wales than the more limited all Wales rates.

3.19 The dwelling projection for the County Borough produced by this method at 6,242 dwellings is, however, significantly higher than the figure for the UDP Plan area agreed by Members.

3.20 The projections have not been considered by Members in all authorities. The NWPOG consider that the projections, like all such projections, provide only a starting point for policy formulation.

3.21 The Draft Regional Planning Guidance for North Wales published in January 1999 remains the only approved and published regional document which sets out proposed maximum housing land requirements for each local planning authority in North Wales.