

## Projecting Pupil Numbers and Calculating School Capacities

- 1 Why are projections of pupil numbers necessary?
  - 1.1 Local Education Authorities are responsible for making sure that there are sufficient school places in their area for pupils of school age who need them. The Law describes this responsibility as follows:

*"...to ensure that schools in its area are sufficient in number, character and equipment to provide education suitable for the different ages, abilities and aptitudes and special educational needs of pupils of school age ..."* (Education Act 1996)

- 1.2 Buckinghamshire not only seeks to provide sufficient school places for pupils in its area, it also seeks to manage its resources so that it can provide an education service of the highest quality for all its pupils. Projecting the number of pupils who are likely to need school places in future years plays an important role in achieving a balance between the supply and demand for school places.

- 2 What is the process for producing pupil number projections?

- 2.1 Projections are not forecasts. They provide an informed indication of the number of pupils who are likely to need school places in future years based on established trends and information which is available from a number of sources including:

- Each year the numbers of children aged 0-8 from Buckinghamshire Health Authority (and, where appropriate, other Health Authorities outside Buckinghamshire);
- Housing plans from the District Councils and the County Structure Plan;
- Population projections produced on the basis of census or other population survey.

Please note that these projections identify potential demand for school places, and do not take into account (i) changes in parental preference or (ii) factors which may limit the supply of school places such as Admission Number or Net Capacity.

Pupil projections are produced each year in the Spring following a cycle of preparatory work which includes gathering the above information.

- 2.2 The information gathered from the above sources is fed into a formula which takes account of past trends to produce estimates of pupil numbers at given points in the future. The formula used by Buckinghamshire LEA has been developed over a number of years and has provided a reliable basis for planning school places. Over the years, the Authority's projections when compared with actuals have been accurate usually to within 5% or 10 pupils (whichever is the higher). Where this has not been the case, there has in most cases been a change in circumstances which, at school level may involve a change in headteacher or school policy, at area or County level may involve a major local or government policy change, for example, change in the age of transfer, early years initiative etc. When such events occur, they disrupt established trends which means that extra caution is required in interpreting the projections.

- 2.3 It is recognised that some schools may have a high pupil turnover, for example, if they serve communities where armed forces personnel and their families or other itinerant families may be present. In such cases projecting pupil numbers is more problematic as past trends may not be a good indicator of future trends. These factors will, therefore, need to be taken into account when examining the projections for such schools.
- 3 How does the formula work?
- 3.1 The projections are calculated by taking each year group and ageing it onwards by one year taking into account additional children from any new housing, and trends (migration trends) in the numbers of pupils attending different schools eg independent and special schools, maintained schools in other LEAs, pupils coming to Buckinghamshire schools from other LEAs, pupils who receive education outside the school system.
- 3.2 These migration trends are calculated by taking a weighted average of the cohort survival ratios over the past three years - weighted in favour of the most recent year. The cohort survival ratio is the number of pupils in an age group as a proportion of the number of pupils in the same age group in the previous year plus any additional pupils from new housing in the area. A similar process is applied to calculating the number of pupils who stay on into the sixth form. The cohort survival ratios are then applied to the pupils currently in schools and to pupils in feeder schools. This process is repeated for each year of the projection period.
- 3.3 The number of pupils seeking admission to schools is calculated by taking a weighted average of the last 3 years intake (2 years for secondary) as a proportion of the pupils in the school's catchment area - weighted in favour of the most recent year – and applying it to the number of potential pupils in the catchment area for each year of the projection period.
- 4 What projections does the Authority provide?
- 4.1 County projections
- A summary projection is produced for the whole County for both primary and secondary schools to provide an overall picture of the likely demand for school places assuming current trends continue. This is an aggregation of the area projections.
- 4.2 Area Projections (Aylesbury Vale, Chiltern & South Bucks, Wycombe) for Primary Schools
- Area projections for the primary sector are produced for medium to long-term planning and have proved to be particularly reliable because they are based on known pupils who are already at school or on known births as provided by the Health Authority.
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  - Area projections looking ahead five years are based on actual births as recorded by the Registrar General. Projections which look ahead beyond five years are based on future births as projected by the County Council's Performance and Initiatives Group. These future births are calculated on the basis of known birth rates in conjunction with fertility rates and should therefore be treated with more caution.

- Information is also obtained from the District Councils on outstanding planning permissions and future housing as allocated by the County Structure Plan and fed into the formula for producing the area projection.

#### 4.3 Individual School Projections

- These projections are used for short to medium-term planning and are used to estimate the demand for places in individual schools assuming current trends continue. They therefore do not take account of the school's admission number.
- The projections are calculated for a five year period for primary schools based on known births and a six year period for secondary schools based on known pupils in primary school. They take into account also, information on the number of children admitted from within and outside the catchment areas of each secondary and primary school over the past 2 and 3 years respectively.
- Information on new housing development is also taken into account.
- As there is a lower margin of error when projecting pupil numbers over a larger area, a scaling factor has been applied to the individual cohort survival ratios to bring the individual school projections in line with the area projections.

#### 5 How are School Capacities Calculated?

5.1 The capacity of each school is calculated according to a formula devised by the DfES. The capacity is known as the Net Capacity (NC). The school capacities derived from this formula is an important measure of the number of pupils who can be accommodated within the teaching areas of the school premises and is used as the basis for determining whether there will be enough places in the school to accommodate demand in future years. A schedule of each school's accommodation is held by the LEA and updated annually to take account of new buildings, changes in the use of existing teaching areas and changes in pupil numbers.

#### 6 How are the number of spare and deficit places calculated for each school?

6.1 The projections are calculated for specific planning horizons so that the demand for school places can be tracked over a number of years and trends identified.

6.2 The number of spare or deficit places at each school is calculated by matching the projected number of pupils for a given planning horizon eg 2008 with the baseline Net Capacity figure at 2003

6.3 This matching process will provide an indication of whether, across the planning horizons, there is likely to be:

- a reasonable match between the supply of and demand for places at a particular school or in a particular area.
- a substantial number of spare places which will require action to be taken within a given timescale.

- a substantial deficit of places which will also require action to be taken within a given timescale.

6.4 The demand for and availability of school places varies across the County. For planning purposes therefore, the County has been divided into planning areas both for primary and for secondary schools so that matches between supply and demand can be analysed at a local level taking account of infrastructure, urban and rural features, established patterns of pupil movement and school groupings. Fifteen planning areas have been drawn up for primary schools and nine for secondary schools.