

Warwickshire 937

Methodology for Pupil Number Forecasts

The methodology for pupil forecasting in Warwickshire is demonstrated in a diagram below, and summarised as follows:

Reception Intake Year

The Warwickshire forecasts for YR follow the same principal as most other geographically widespread local authorities, of taking GP registration data for children aged 0 to 4, factoring in the parental preference for the last three years including pupils from outside Warwickshire, then accounting for new housing and expected in-year applications.

The GP registration data is collected from NHS Digital and is updated annually, which allows identification of trends relating to the movement of families in and out of each area with pre-school age children. Once the data is updated it is then aggregated across the relevant school priority area by postcode to provide an accurate representation of the number of children born and subsequently resident within each individual school's priority area.

For the last year of the YR forecast, for which GP registration data does not yet exist (as the pupils have not yet been born), the figure used is an average of the previous three years' registrations within that area.

In addition to actual GP registration data, allowance is made within the YR forecast for the expected additional pre-school aged children who will result from housing development approved in the county. This is based on the pupil yield for existing housing stock in each area and the number of new homes expected to be built in the preceding two years.

In order to reflect parental preference the number of children born in each priority area is then transferred to individual schools based on parental preference trend data for the last three academic years. This is calculated as a percentage of the number of children residing in each priority area and the school they are shown to be attending for Reception in the relevant October census.

Applying a Historical Uptake Factor (HUF) accounts for those children who attend an independent Primary school, special school or a school outside Warwickshire and those children are excluded from the forecast at this stage.

Several Warwickshire schools import a significant number of children from across the county borders. The forecast model makes provision for inflow trends to continue with an 'Out of County' (OOC) factor assigned to each school. This is based on historical census data, used to calculate the proportion of each school's YR pupils who live outside of Warwickshire.

Year 7 Intake Year

Secondary level intake (Y7) pupil forecasts are calculated similarly to primary level with the transferring Year 6 cohorts rolled forward and aggregated from primary planning area to secondary school based on parental preference trends. A 'Cohort Migration Rate' (CMR) is also applied, calculated from historical trends in census data of Y6 pupils resident in each Secondary Planning Area as a proportion of pupils who subsequently attend Secondary School in that

Planning Area at Y7 the following academic year. The CMR accounts for those children who attend an independent school, special school or school outside of Warwickshire and those children are excluded from the forecast at this stage.

Several Warwickshire schools import a significant number of children from across the county borders, particularly at Year 7 transfer. The forecast model makes provision for these trends to continue using an OOC factor. These out of county children are only included at school level once Warwickshire cohorts have been accommodated. Should the total Warwickshire children plus the average number of out of county children exceed the school's PAN the number is capped at the PAN and any excess out of county children are excluded from the forecasts.

Other Years 1 - 11

The forecast figures for Reception and Year 7 entry are then rolled through the subsequent year groups with a Cohort Migration Rate applied to account for in year movement of pupils.

Y3 Junior School Intake Year

Warwickshire contains 23 Infant and 18 Junior schools. Forecasts for Junior schools' intake year at Year 3 are based on the population of Y3-aged children who attended an Infant school, adjusted for parental preference. Additional pupils resident outside of Warwickshire are accounted for by applying an 'OOO' rate, based on historical trends.

Housing development impact

Warwickshire is a two tier authority and as such the five Districts and Boroughs act as planning authorities and decide on planning permissions and strategic housing allocations across the county. The forecast model includes all currently approved housing developments across the county that have received full planning permission and those sites currently pending a decision that have a high certainty of delivery within the forecast period.

The pupil yields for all developments are calculated against the expected build out trajectories as provided by the relevant planning authority. However adjustments may be made to trajectories where there are known delays to delivery but have not necessarily been reflected by the planning authority trajectory.

Warwickshire operates a different pupil yield rate for each of the five District and Boroughs which have been calculated based on prior housing development, where this is significant enough to effectively calculate, or the average number of children per household for that area at the 2011 population census. For the purposes of forecasting it is assumed that additional children generated by housing development will be spread across all year groups equally.

As forecasts are made for the end of each academic year, an 'In Year Survival Rate' (IYSR) is applied to each year group. The IYSR for each year group is a calculated proportion of pupils who, having started in September, complete an academic year and also measures those who join during the year.

The figures produced at individual school level are indicative only at this level and take no account of an individual school's published admission number. When there is overall growth in pupil numbers in an area the figures reflect the demand for places rather than the expected number on roll at any individual school for that September. Within each planning area the forecast figure for the individual schools is then totalled to provide an overall forecast of the number of children expected within each planning area.

Post-16

Post 16 pupil forecasts are then calculated for individual schools based on the average transfer rate, between those pupils on roll in year 11 at May census and those in year 12 at the following October census and also between those pupils on roll in year 12 at May census and those in year 13 at the following October census.

	YR	Y1	Y2	Y3*	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Y11
Oct-18	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals	census actuals
2018/19	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)	forecast eoy (cens.)
2019/20	forecast eoy (NHS)	actuals-based	actuals-based	actuals-based	actuals-based	actuals-based	actuals-based	Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2020/21	forecast eoy (NHS)	NHS data-based	actuals-based	actuals-based	actuals-based	actuals-based	actuals-based	Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2021/22	forecast eoy (NHS)	NHS data-based	NHS data-based	actuals-based	actuals-based	actuals-based	actuals-based	Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2022/23	forecast eoy (NHS)	NHS data-based	NHS data-based	NHS data-based	actuals-based	actuals-based	actuals-based	Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2023/24	est. forecast eoy (NHS)	NHS data-based	NHS data-based	NHS data-based	NHS data-based	actuals-based	actuals-based	Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2024/25								Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based
2025/26								Y7 actuals-based	actuals-based	actuals-based	actuals-based	actuals-based

* Junior schools have a different basis for forecast than Primaries at Year 3 as it is an intake year. Based on population of Y3-aged children who attended Infant schools x WGW + OOC x IYSR

census actuals =	actual NOR from October census
forecast eoy (cens.) =	census actuals x IYSR + housing
forecast eoy (NHS) =	(((GP data on resident early years cohorts for each YR intake year x HUF x WGW) + OOC) x YR IYSR) + housing
est. forecast eoy (NHS) =	((average of previous 3 years GP data x HUF x WGW) + OOC) x YR IYSR) + housing
actuals-based =	(number from previous year group last year x CMR x IYSR) + housing
NHS data-based =	(number from previous year group last year x CMR x IYSR) + housing
Y7 =	(((Y6 forecast from previous year - OOC) x WGW x Y7 CMR) + OOC) x IYSR) + housing

OOO, Out of County =

Pupils in Warwickshire schools, resident outside of Warwickshire.

Average OOC numbers per school are calculated from last 3 years census data. Where estimated OOC pupils are applied to forecasts, these are capped not to exceed the school's PAN.

HUF**, Historical Uptake Factor =

Proportion of children living in a school's priority area who take up a place in a Warwickshire school. This removes those who attend independent or special schools and those who attend school outside Warwickshire.

Actual YR intake (census) excluding OOC and special schools ÷ potential YR cohort (NHS) in school priority area.

Average taken of past 3 years (double weighted for latest year)

WGW, 'Who Goes Where' = Applies past trends of where children living in each priority area ultimately attend school, largely based on parental preference. Calculated for YR, Y7 and Y3 (Junior schools only) based on last 3 years census data.

IYSR**, In Year Survival Rate = Proportion of pupils who, having started in September, complete an academic year - also measures those who join during the year.

NOR (start ac. year, Oct) ÷ NOR (end same ac. year, May).

Average of past three years census data is used to calculate the IYSR for each year group for each school.

CMR**, Cohort Migration Rate = Proportion of pupils who complete an academic year, who then commence the next year in the same school.

NOR (start ac. year, Oct) ÷ NOR in previous year group (end previous ac. year, May).

Average of past three years census data is used to calculate the CMR for each year group for each school.

housing = estimated additional pupils generated by approved housing development, applied at school priority area level. These are based on calculated Pupil Yields and Housing Trajectories supplied by Districts and Boroughs.

** these factors will be manually adjusted where necessary to take account of temporary factors such as high levels of new housing or a significant change in parental preference.