

GLA SCHOOL ROLL PROJECTIONS (SRP) FORECAST METHODOLOGY

What is the SRP process in 2018?

The SRP process in 2017 is summarised below.

- 1) LAs provide GLA with development data as an input to population projections
- 2) GLA provides LAs with csv templates for submitting school level roll data (early March)
- 3) LAs complete and return the data as csv files (starting mid-March)
- 4) LAs complete an optional template containing context information (starting mid-March)
- 5) GLA runs SRP model and returns school roll projections (starting mid-March)

The GLA envisages that, as before, roll projections are typically returned to LAs within two working days of receipt of roll data in the correct format.

What data do the projections use?

The three key data inputs for the model are:

- Ward-level population projections
- Pupils on roll data for each school
- National Pupil Database records with pupils' home wards

Population projections

The model uses GLA generated population projections. Local Authorities can have school roll projections run based on the following three population projection variants for their borough:

- Borough Preferred Option (BPO) incorporating development data provided by the borough
(This is what Southwark uses)
- The latest GLA ward level SHLAA-capped AHS (average household size) population projections for all wards in your LA.
- Zero Development variant

The default population projection used is the BPO; however this is dependent on the Local Authority having provided development data. If no development data has been provided then the GLA will give the option to wait until development data is received, or run the school roll projections with the SHLAA based population projection. The zero development based school roll projections can be used as a comparator to school roll projections based on the other two population projections to give an idea of the effect of developments.

Areas other than the wards in your LA take their population projection from the latest GLA ward level SHLAA-capped AHS (average household size) population projections

The population projections incorporate annual birth, death and migration data to mid-2015. Future birth trends in fertility and mortality are based on the principal assumptions from ONS's 2012-based National Population Projections (NPP) for England. Household formation rates are taken from the 2012-based DCLG (Department for Communities and Local Government) subnational household projections. Past dwelling completions are taken from the London Development Database. Assumed future housing trajectories are derived from the 2013 Strategic Housing Land Availability Assessment..

School roll data

For 2017, subscribing LAs should provide roll data for individual schools split by age of child (at 31st August) and gender for both primary and secondary schools separately. LAs also provide the school DfE number, any previous DfE number that the school has had in the relevant time period, and indicate which planning area each school sits within. LAs can also split their secondary schools into planning areas if they wish.

School/pupil related data

The model also uses additional school related data.

- 1) School maximum pupil age – this is taken from Edubase
- 2) School minimum pupil age – this is taken from the school roll data provided by LAs because of inconsistencies in Edubase
- 3) National Pupil Database (NPD) years 2012 to 2016 – a cut from the January school census at pupil level including pupil residence (mapped to LSOA), school attended, age and gender

How are school roll projections produced?

The methodology for producing school roll projections has been slightly changed in 2017 following the major update in 2016. The main change this year has been extending the number of years of pupil level data available from the NPD to model mobility patterns and new intake numbers.

Overview

For each ward of residence in London and year of age (ages 4 to 18) and sex, the proportion of children attending each state school is calculated. This proportion is carried forward as the children age so that the proportion for a 6-year old living in ward x and attending school y in 2017 is the same as the proportion for a 7-year old living in ward x and attending school y in 2018. Attrition rates are not explicitly calculated except for projections of 6th form – it is assumed that any net loss or gain of pupils as they age through a school is purely due to temporal variations in the population projection of that cohort.

For new children entering a school, for example at age 4, there is currently no information on where members of this cohort are resident. In this case the proportions are calculated as averages over past years, with 4 being the default number of years used, but there is the option to use a different number. The same approach is used at ages 11 and 16, even if the school is a through-school as it is assumed that there will be significant changes in the cohort at this point.

These proportions are then applied to the population projections to give projections of the number of children on roll by school by age and sex. These are then aggregated to planning areas and borough totals.

Projections of pupils aging through 6th form are produced using attrition rates calculated from previous years' data.

Why have the projected rolls changed since last year?

There are many reasons why a LA's projected rolls may have changed when compared to a previous year. LAs should consider the following:

- **Development**

The amount of development projected in a LA will affect that authority's population projections and in turn its school roll projections. More development generally means that the LA will attract more people and its population will therefore rise. If population increases, there will consequently be more children and so school roll projections will also rise.

LAs should assume that significant changes in assumed development will be accompanied with corresponding changes in projected rolls. If LAs are unsure what development assumptions have been used in the past, the GLA is able to provide this information.

LAs should liaise with their demography and planning contacts within their LA to ensure that the most up to date development data is used.

- **Births**

The number of births in an area will have a direct effect on the number of children on roll four years later. 2012 saw the highest number of births in London with these children starting school in either academic year 2016-17 or 2017-18 depending on when in the year they were born.

Many areas have seen a fall in birth numbers since and this has led to subsequent projections of future births and therefore rolls, being correspondingly lower.

ONS releases LA level mid-year birth data as part of the mid-year estimates at the end of June each year. Calendar year birth data at local authority level follows in August. The GLA commissions ward-level mid-year birth data from ONS each year which is usually available in November/December.

- **Migration**

In recent years a number of LAs have reported an increase in in-year applications as a result of children moving to the area from both overseas and elsewhere in the UK. Migration therefore could explain why projected rolls have changed.

The GLA has created an Excel based dashboard that allows boroughs to see in-, out- and net flow of children to/from their LA from elsewhere in London. It is available to download from the London Datastore and will be updated annually: <http://data.london.gov.uk/dataset/internal-migration-flows-school-age-children-visualisation>

ONS releases both mid-year international and internal migration data by single year of age and sex at the end of June each year. The former is released as part of the mid-year components of change and the latter as part of the internal migration estimates series.

- **Cross border mobility**

Not all children will go to school in their LA of residence. This is particularly the case in London where the geographic size of local authorities is relatively small and where excellent transport networks mean that children can travel further afield easier than in other parts of the UK. Additionally for children who live close to a borough boundary, their closest school may in fact be in a neighbouring authority.

A school's reputation may affect parental preference when applying for schools. This may mean that some schools will see changes in applications and attendance from children outside of the authority resulting in increasing cross border mobility.

The SRP model explicitly takes into account cross border mobility as pupil level data is used that gives both home and school locations.

A neighbouring borough opening a school could draw pupils from your LA.