Schools block dataset technical specification: 2016 to 2017

For use in schools block allocations

December 2015
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Introduction

This document provides a full technical specification for the school-level data that has been made available to local authorities in the prepopulated Schools Block Data sheet of the Authority Proforma Tool (APT), for use in allocating their 2016 to 2017 schools block funding to schools. We have updated the 2016 to 2017 dataset to use the October 2015 census data. These changes are summarised below but the most significant change is the use of the recently published 2015 IDACI values. As it is five years since the dataset was last updated, there will be a significant degree of movement of pupils between bands at an individual school level. Local authorities using IDACI should therefore review their unit values to ensure that the amounts allocated to individual schools and in total are in line with the authority’s intended use of this factor.

This note accompanies the separate APT User Instructions document which has also been prepared by the Education Funding Agency (EFA).

The data contained in the December 2015 APT is based on autumn (October) 2015 School Census returns, or other existing data collections. The table below outlines what data will be provided, and summarises the source data for each indicator. The indicators and their descriptions were set out in the Operational Guide. This document now provides more explanation on the construction of the data.

<table>
<thead>
<tr>
<th>Data</th>
<th>Breakdown</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>School list</td>
<td>LAESTAB, URN, local authority, phase, primary year groups, secondary year groups.</td>
<td>Mainstream schools on autumn 2015 census. URN is matched from Edubase.</td>
</tr>
<tr>
<td>Academy type</td>
<td>n/a</td>
<td>Taken from the Department’s records – showing status as at 31 October 2015.</td>
</tr>
<tr>
<td>London fringe</td>
<td>n/a</td>
<td>District as mapped from the school postcode in the autumn 2015 census.</td>
</tr>
<tr>
<td>Number on roll (NOR)</td>
<td>Primary, secondary, years 1-3, years 4-6, key stage 3, key stage 4.</td>
<td>autumn 2015 census.</td>
</tr>
<tr>
<td>FSM</td>
<td>Separate primary/secondary.</td>
<td>autumn 2015 census.</td>
</tr>
<tr>
<td>FSM ever 6</td>
<td>Separate primary/secondary.</td>
<td>2015 to 2016 pupil premium</td>
</tr>
</tbody>
</table>
Table 1 Data included in the December APT

<table>
<thead>
<tr>
<th>Data</th>
<th>Breakdown</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>IDACI</td>
<td>Split into six different bands, separate primary/secondary.</td>
<td>ever 6 data mapped to the spring 2015 census.</td>
</tr>
<tr>
<td>Looked-after children</td>
<td>Aggregated information indicating looked-after children (at 31 March 2015).</td>
<td>SSDA903 March 2015 data mapped onto the spring 2015 census via NPD.</td>
</tr>
<tr>
<td>Primary phase prior attainment</td>
<td>Y1-3 who did not achieve a good level of development. Y4-6 who scored below 73 or 78 points on EYFSP.</td>
<td>EYFSP total score mapped to the autumn 2015 census. Mapping on UPN only.</td>
</tr>
<tr>
<td>Secondary phase prior attainment</td>
<td>Level 3 or below in either English or maths at KS2.</td>
<td>KS2 attainment data mapped to the autumn 2015 census. Mapping on UPN only.</td>
</tr>
<tr>
<td>Mobility</td>
<td>Start date in last three academic years; separate primary/secondary.</td>
<td>autumn 2015 census.</td>
</tr>
<tr>
<td>Sparsity</td>
<td>Primary, secondary, middle, all-through.</td>
<td>autumn 2015 census, Edubase.</td>
</tr>
</tbody>
</table>

The autumn 2015 census day was 2 October 2015 and therefore the data reflects the status of schools at that date. The final data used is the data in the database at the point of its closure 30 November 2015. All data for maintained schools will have been first approved by the local authority prior to being used by the department.

The pupil level indicators for numbers on roll, IDACI, free school meals (FSM) eligibility and mobility have been calculated from data collected in the autumn 2015 census. This data has also been linked, using the UPN collected in the autumn census, to data held in the Department’s National Pupil Database (NPD) to create the EAL and prior attainment indicators. This data extract has been prepared prior to the autumn 2015 census being
formally matched into the NPD. The IDACI indicators are based on the relationship between pupil postcode, super output area and IDACI.

Changes made to the dataset for the 2016 to 2017 formula, compared to that used for the 2015 to 2016 formula are:

- IDACI factor in the Schools Block Data has been updated to include the latest published data. The updated Indices of Multiple Deprivation were published in September 2015. The statistical release published by the Department for Communities and Local Government provides more information about the updated data. As it is five years since the dataset was last updated, there will be a significant degree of movement of pupils between bands at an individual school level. Local authorities using IDACI should therefore review their unit values to ensure that the amounts allocated to individual schools and in total are in line with the authority’s intended use of this factor

- primary pupil number breakdown updated to reflect years 1 to 3 and years 4 to 6 pupils on roll. This is used in the calculation of funding through the primary prior attainment factor

More information about the school census can be found in School census 2015 to 2016: guide for schools and LAs.

If you have any queries about this specification, please contact the EFA Funding Reform Team at: ReformTeam.FUNDING@education.gsi.gov.uk.
Using the data to allocate school budgets

For each of the pupil-led factors there are one or more allowable indicators. The pupil led factors are:

- Age Weighted Pupil Units (AWPU)
- Deprivation
- English as an additional language (EAL)
- Prior attainment
- Mobility
- Looked-after children (LAC)

For AWPU, the indicator to be used is the number on roll (NOR) in total and for primary, key stage 3 (KS3) and key stage 4 (KS4). For the other indicators, schools attract funding through pupil units. These pupil units are calculated as the appropriate NOR weighted by the proportion of pupils that qualify under the indicator. So the pupil units for primary FSM would be given by:

\[
\text{NOR Primary} \times \frac{\text{Number of Primary Pupils eligible for FSM}}{\text{Number of Primary Pupils with valid FSM response}}
\]

Or, from the supplied dataset:

\[
\text{NOR Primary} \times \text{Primary FSM proportion}
\]

All the indicator data (except NOR) is presented in the APT in the form of a decimal proportion that should be applied to the NOR. This means that if authorities record a change to a school’s NOR figures in the Inputs & Adjustments sheet of the APT (see the circumstances described on the next page in which adjustments to NOR figures can be made), then the proportion in the schools block dataset can still be multiplied by them to derive the appropriate pupil units. The calculations of the proportions always exclude pupils with a NULL value for the required response. This, plus the facility for local authorities to alter the NOR, can result in pupil units for the indicators which are not whole numbers.
Local adjustments to the supplied schools block data

In some cases it will be necessary to use a local calculation or estimate for an indicator, based on the technical descriptions given in this document, to ensure the data used in the APT to calculate school budgets is representative. This only applies to individual schools. This section describes when and how this should take place. Adjustments should be recorded via the Inputs & Adjustment sheet of the APT, and a clear explanation for the change must be provided in each case.

Schools undergoing change

In the case of a planned amalgamation, the data should be taken from each of the schools as they appear in the Schools Block Data sheet of the APT and then merged using weighted sums for each of the factors. In the example shown in the table below, Old Street Infants and Old Street Juniors are combining to form New Street Primary. The Primary FSM proportion for the new school is calculated as the weighted average of the relevant proportion figures for the former schools. A similar calculation should be done for all the other pupil-led factors.

<table>
<thead>
<tr>
<th>School</th>
<th>NOR Primary</th>
<th>Primary FSM proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old Street Infants</td>
<td>300</td>
<td>0.10</td>
</tr>
<tr>
<td>Old Street Juniors</td>
<td>100</td>
<td>0.05</td>
</tr>
<tr>
<td>New Street Primary</td>
<td>300+100=400</td>
<td>( \frac{(300 \times 0.10) + (100 \times 0.05)}{300 + 100} = 0.0875 )</td>
</tr>
</tbody>
</table>

Table 2 Example weighted average calculation

In the case of a brand new school with no relevant predecessors, or a school converting from the private sector, a local estimate should be used based on similar schools in the local authority for the first year.

We also expect local authorities to request approval from the EFA to vary the pupil numbers used for specific schools where a school has changed, or is going to change, its age range either by adding or losing year groups.

Individual data points that are not representative

For some schools the indicator data contained in the schools block dataset will not be representative. A common example of this relates to the mobility indicator. If a school had opened in April two years ago, then the majority of its pupils will be classed as mobile. This can often occur for sponsored academies, with many pupils classed in the census data as joining the school on the date it became an academy, rather than the date they joined the new school or its direct predecessor. In this case, it would be reasonable to use a local estimate for the mobility indicator, using the method outlined in the mobility
section below. Making such a change does not require prior EFA approval, but clear explanations for any such changes must be provided on the Inputs & Adjustments sheet of the APT.

**Anomalous primary/secondary pupils**

Where a primary school has only one or two secondary phase pupils in the Schools Block Data sheet of the APT, or conversely for a secondary school with a small number of primary phase pupils, this may suggest a school census recording error. Local authorities may wish to verify whether these are errors, and if so amend individual schools’ NOR data accordingly, to avoid incorrect formula allocations. Making such a change does not require prior EFA approval, but clear explanations for any such changes must be provided on the Inputs & Adjustments sheet of the APT.

**Sparsity distances**

Local authorities can make exceptional applications for schools that would have had significantly higher distances if road distances had been used instead of crow flies distances and would not otherwise have qualified for the sparsity factor.

Similarly, exceptional applications can be made for schools that open after the distances have been calculated. An existing school that qualifies for sparsity funding in the data provided will not lose that funding in-year if a new school opened nearby. For schools that may qualify for sparsity funding as a result of another school nearby closing, an exceptional application should be agreed with the relevant Schools Forum, and submitted to the EFA for approval.

Applications must be made by the 31st December 2015 deadline.
Schools block schools and pupils

All mainstream schools that are recorded on the autumn 2015 census are included in the Schools Block Data sheet of the APT. This covers all mainstream schools open on census date except the two City Technology Colleges and free schools opening after September 2015. Special schools, AP/PRUs, early years providers and other institutions without schools block pupils are excluded.

The school filters applied to the census data to identify the schools included in the dataset are:

- the school type code is a value less than 50
- the phase is either ‘PS’ (primary, including academies), ‘MP’ (middle, deemed primary), ‘MS’ (middle, deemed secondary), ‘SS’ (secondary, including academies), or ‘AT’ (all-through excluding PRUs)

The pupil filters applied ensure that only pupils aged 4 or above at the start of the 2015 to 2016 academic year that are in national curriculum year groups R to 11 are counted. Note that pupils are counted as headcount not full time equivalent. These are:

- On_Roll = 1 - the pupil must be recorded in Autumn 2015 census as on roll at a school passing the school-level filter
- Enrol_Status in (‘C’, ‘M’) - the pupil’s on-roll status at the school is either ‘C’ or ‘M’; the pupil must either be solely registered at the school, or if dual-registered have their main registration at the school
- Age_At_Start_Of_Academic_Year >= 4 - the pupil must be aged 4 or more as at 31 August 2015

The dataset only includes pupils which pass both the school and pupil filters.
School information

This section explains how the fields in the dataset which provide information about each school are obtained. It also describes how the London fringe, NOR and reception difference figures are produced.

School information

These fields are taken from the autumn 2015 census, except for URN which is mapped from Edubase:

- URN
- LAEstab
- School name
- Phase
- Number of primary year groups for middle schools
- Number of secondary year groups for middle schools
- Number of primary year groups for all schools
- Number of secondary year groups for all schools

Academy type

This field contains the value 0 for maintained schools and Recoupment Academy for academies. Flagging these in the schools block dataset aims to facilitate correct recording. The valid values for this field are:

- Recoupment Academy
- 0

London fringe

For the five local authorities who have some of their schools within the London fringe area (Buckinghamshire, Essex, Hertfordshire, Kent and West Sussex), we have determined an appropriate uplift that should be applied to the affected schools budgets. The uplift was calculated using the specific cost of teaching staff within the different pay band areas and the proportion of school expenditure that goes on teaching staff. Using the national distribution of teaching staff by pay band spine point (School Workforce Census, 2013) and spine point salary data (School Teachers’ Pay and Conditions Document 2013) we calculated the average uplift between the London Fringe and the rest of England teacher pay band areas to be 2.96%.

Analysis of the financial year 2012 to 2013 Section 251 Outturn reporting lines indicated that 53% of school expenditure goes on teaching staff costs. On this basis, the uplift for London fringe schools was 53% of 2.96% which gives a value of 1.56% to be applied to the school formula funding – excluding factors that should be paid as actual ie rates, PFI, split-site and exceptional circumstances. This is a recalculated value from the 1.63%
uplift used for the formula in the previous two years, and reflects more recent data from the sources described above.

The districts that fall partly in the London fringe are:

- Buckinghamshire: Chiltern, South Bucks
- Essex: Basildon, Brentwood, Epping Forest, Harlow
- Hertfordshire: Broxbourne, Dacorum, East Hertfordshire, Hertsmere, St Albans, Three Rivers, Watford, Welwyn Hatfield
- Kent: Dartford, Sevenoaks
- West Sussex: Crawley

All fringe schools will have the value 1.0156360164 for this indicator; all other schools will have the value 1.

School number on roll

- NOR
- NOR Primary
- NOR Y1-3
- NOR Y4-6
- NOR Secondary
- NOR KS3
- NOR KS4

Pupils have been counted by headcount, irrespective of whether or not they are part time. Pupils recorded in national curriculum year groups R to 6 are classed as in the primary phase and those in year groups 7 to 11 are classed as in the secondary phase. Secondary pupils are additionally split in to key stage groups; KS3 (years 7 to 9) and KS4 (years 10 to 11).

The NOR figures are calculated from the autumn 2015 census as the number of pupils at each school passing the pupil filters described in the “Schools block schools and pupils” section of this document, whose national curriculum year group is in the relevant range. For total NOR, the range is years R to 11.

Reception difference

The difference between the number of pupils on roll in Reception (only those pupils aged 4 and over at the start of the academic year) in each school between the autumn 2014 and spring (January) 2015 censuses is provided in the dataset. This is calculated by subtracting the total number of year R pupils in autumn 2014 from the total in spring 2015, or given as zero if the result of this calculation is negative. If there are no year R pupils at the school then the result is 0. This is illustrated in the table below.
<table>
<thead>
<tr>
<th>URN</th>
<th>Number of pupils in year R (counting rules applied)</th>
<th>(2) – (1)</th>
<th>Reception difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>October 2014 (1)</td>
<td>January 2015 (2)</td>
<td></td>
</tr>
<tr>
<td>xxxx1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>xxxx2</td>
<td>62</td>
<td>62</td>
<td>0</td>
</tr>
<tr>
<td>xxxx3</td>
<td>38</td>
<td>33</td>
<td>-5</td>
</tr>
<tr>
<td>xxxx4</td>
<td>55</td>
<td>62</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 3 Reception difference illustration
Detailed specification for individual factors

For all the indicators, the NOR filters apply at pupil level. Where a pupil does not have a valid response for the indicator in the census or other data source, they are excluded when calculating the indicator. For example, a pupil with no postcode recorded on the census is discounted when calculating a school’s IDACI proportions. The data used for each indicator is taken from the October 2015 census unless otherwise indicated.

Deprivation

The allowable indicators are IDACI, Free School Meals and Free School Meals (Ever 6).

Free school meals

- Primary FSM Proportion
- Secondary FSM Proportion

The proportion of pupils eligible for free school meals according to the autumn 2015 census has been aggregated to school level, with separate indicators for primary and secondary phase pupils.

Free school meals Ever 6

- Primary Ever 6 Proportion
- Secondary Ever 6 Proportion

This counts the proportion of pupils on roll on the spring 2015 census that were recorded as eligible for FSM in any of the censuses (autumn, spring and summer, including the Alternative Provision (AP) and Pupil Referral Unit (PRU) census) over the previous six years. This uses the same data as that used for allocating the pupil premium. As a consequence schools that have opened since the spring 2015 census will not have FSM Ever 6 data. More information on this indicator and the pupil premium can be found here. Where a school has pupils from both phases, the same indicator will be used as this data is not currently available at phase level.

IDACI

- IDACI Primary Proportion Band 0
- IDACI Primary Proportion Band 1
- IDACI Primary Proportion Band 2
- IDACI Primary Proportion Band 3
- IDACI Primary Proportion Band 4
- IDACI Primary Proportion Band 5
- IDACI Primary Proportion Band 6
- IDACI Secondary Proportion Band 0
- IDACI Secondary Proportion Band 1
The IDACI Secondary Proportion Band 2
The IDACI Secondary Proportion Band 3
The IDACI Secondary Proportion Band 4
The IDACI Secondary Proportion Band 5
The IDACI Secondary Proportion Band 6

The Income Deprivation Affecting Children Index (IDACI) is a subset of the Indices of Multiple Deprivation (IMD). It is an area-based measure defined at the level of lower super output area (LSOA) and is based on the data published in September 2015. It is a score between 0 and 1, which can be interpreted as the proportion of families with children aged under 16 in the LSOA which are income deprived. Further information on the updated IDACI figures can be found through the DCLG statistical release.

The IDACI score has been matched to pupil records where the pupil's postcode is known, and this has been placed into six bands as shown below. Only pupils with an IDACI score above 0.2 can be assigned deprivation funding through this factor, meaning there are six bands which can be given different unit values each for primary and six for secondary phase pupils.

<table>
<thead>
<tr>
<th>IDACI Score</th>
<th>IDACI band</th>
</tr>
</thead>
<tbody>
<tr>
<td>x &lt; 0.2</td>
<td>0</td>
</tr>
<tr>
<td>0.2 ≤x&lt; 0.25</td>
<td>1</td>
</tr>
<tr>
<td>0.25 ≤x&lt; 0.3</td>
<td>2</td>
</tr>
<tr>
<td>0.3 ≤x&lt; 0.4</td>
<td>3</td>
</tr>
<tr>
<td>0.4 ≤x&lt; 0.5</td>
<td>4</td>
</tr>
<tr>
<td>0.5 ≤x&lt; 0.6</td>
<td>5</td>
</tr>
<tr>
<td>0.6 ≤x≤ 1</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 4 IDACI bands

For each of the bands, the proportion of pupils on the autumn 2015 census with valid IDACI scores has been aggregated to school level, with separate indicators for primary and secondary phase pupils.

**English as an additional language (EAL)**

- EAL 1 Primary Proportion
- EAL 2 Primary Proportion
- EAL 3 Primary Proportion
- EAL 1 Secondary Proportion
- EAL 2 Secondary Proportion
- EAL 3 Secondary Proportion
There are three allowable indicators for EAL, all based on the Language Code given in the census. Both the short code set and the long code set are grouped so that pupils with an English code (including believed to be English) are “1_ENG”, pupils whose language is unknown or undeclared are “3_UNK” and all other pupils are “2_OTH”.

Pupils attract EAL funding if they are grouped as “2_OTH” from the Language Code on the autumn 2015 census and can be shown to have been in the school system for less than one year, less than two years or less than three years. This is achieved by deriving a pupil level “years in system” count based on the pupil’s presence in the autumn 2012, autumn 2013 and autumn 2014 censuses. Using the years in system indicator and the current national curriculum year, an estimated national curriculum start year can be derived. This is important, as the indicator is offset for pupils who were in Year R, N1 or N2 for any of the interrogation years. This is done because language does not have to be declared in the census for pupils aged less than 5, causing the data for pupils when in year R to be partial and unrepresentative. Also for this reason, pupils in year R are excluded from the measure. Pupils grouped as “3_UNK” are also excluded.

Figure 1 EAL categories by current and starting year group

Figure 1 illustrates which EAL category a pupil who is grouped as “2_OTH” would map to, given their current year group and their starting year group. Pupils in year R and pupils grouped as “3_UNK” are not given a category. Other pupils grouped as “1_ENG” are given the category EAL_0.

A school’s EAL 1 Primary Proportion is calculated as the number of pupils in year groups R to 6 with the EAL 1 value, divided by the total number of pupils in years R to 6 with the EAL 0, 1, 2 or 3 value (ie pupils not given a category are excluded).

A school’s EAL 2 Primary Proportion is calculated as the number of pupils in year groups R to 6 with the EAL 1 or EAL 2 value, divided by the total number of pupils in years R to 6 with the EAL 0, 1, 2 or 3 value.

A school’s EAL 3 Primary Proportion is calculated as the number of pupils in year groups R to 6 with the EAL 1, EAL 2 or EAL 3 value, divided by the total number of pupils in years R to 6 with the EAL 0, 1, 2 or 3 value.

Corresponding calculations are done to obtain the secondary proportions.
Looked-after children

- LAC X Proportion

Details of children looked after by a local authority are returned to the Department on the annual SSDA903 collection. We have produced an extract of the SSDA903 2015 looked-after children data collected from local authorities indicating whether a child has been looked after for one day or more on 31 March 2015.

The data are matched into the National Pupil Database using the Unique Pupil Number (UPN), and extracts are obtained showing where the children were on roll based on the spring 2015 census. The UPN is the main field used for matching purposes but other information about the child is also used such as date of birth, gender, ethnicity and responsible local authority. In 2015, 96.5% of children of school age who had been looked after for at least one day from 1 April 2014 to 31 March 2015 (not including respite care) had a UPN submitted in the SSDA903 data collection; and the remainder had a reason why a UPN does not exist.

The school level weighting for this indicator is given by dividing the number of matched pupils by the NOR in the spring 2015 census.
Prior attainment

The early years foundation stage profile (EYFSP) results and key stage 2 (KS2) attainment data are allowable indicators for primary and secondary prior attainment respectively.

Primary prior attainment

For primary schools, funding can be targeted at pupils who did not achieve a good level of development on the new EYFSP and pupils who achieved either fewer than 78 points or fewer than 73 points on the previous EYFSP.

- Low Attainment under new EYFSP Proportion

Pupils in the autumn 2015 census in years 1 to 3 are matched onto the new EYFSP data using their UPN. A school’s proportion in the dataset is the number of pupils in years 1 to 3 recorded as not achieving a good level of development divided by the number of pupils in years 1 to 3 recorded in the attainment data. Pupils who could not be matched onto the attainment data, or for whom the attainment data does not provide a result, are excluded from this calculation.

- Low Attainment under old EYFSP Proportion 73
- Low Attainment under old EYFSP Proportion 78

Pupils in the autumn 2015 census in years 4 to 6 are matched onto the old EYFSP data using their UPN. A school’s proportion in the dataset is the number of pupils in years 4 to 6 achieving a score of <73 or <78 (respectively) divided by the number of pupils recorded as achieving a score of >=0. Pupils who could not be matched onto the attainment data, or for whom the attainment data does not provide a result or gives an alternative result, are excluded from this calculation.

If a school has primary pupils but no pupils with valid EYFSP results, then they will be given a KS2 proxy in the dataset, using either the KS2 results of secondary pupils currently in the school or the KS2 results of the most recent cohort to be assessed at the school.

Secondary prior attainment

- Low Attainment Secondary Proportion

For secondary schools, funding can be targeted at pupils who achieve a Level 3 or below in either English reading, English teacher-assessed writing, or mathematics at KS2. Specifically, this means pupils scoring ‘2’, ‘3’, ‘B’ or ‘N’ in mathematics; pupils scoring ‘3’, ‘B’ or ‘N’ in English reading; and pupils scoring ‘W’, ‘1’, ‘2’ or ‘3’ in English teacher-assessed writing.
In 2012 the KS2 English assessment methodology was changed to include a separate reading test, a grammar, punctuation and spelling test and teacher assessed writing. For pupils who were assessed prior to this change, the English element will identify those pupils who fail to achieve a level 4 in English (specifically, scoring ‘2’, ‘3’, ‘B’ or ‘N’).

Only pupils who have undertaken assessment have been considered in calculating each school’s proportion. Pupils marked as absent or with a result other than those listed are excluded from this calculation. Pupils in years 7 to 11 in the Autumn 2015 census who could not be matched onto the KS2 attainment data are also excluded.
Mobility

- Mobility Primary Proportion
- Mobility Secondary Proportion

A separate primary and secondary school level proportion is provided based on the number of pupils whose entry date (start at current school) is within the previous 3 academic years and whose start month was not in August or September. If the pupil started in Reception then start months August, September or January will not be counted. Pupils who started the school in nursery classes are not mobile.

A pupil’s start year is calculated by counting backwards from their current national curriculum year group as recorded on the Autumn 2015 census, assuming one academic year per national curriculum year.

Table 4 shows examples of determining whether pupils are classed as mobile. The figures in the dataset are the proportion of pupils classed as mobile for primary and secondary phase pupils in each school.

<table>
<thead>
<tr>
<th>Pupil</th>
<th>NC year actual</th>
<th>Entry date</th>
<th>In previous three academic years?</th>
<th>Entry month</th>
<th>Start year</th>
<th>Mobile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R</td>
<td>09/09/2015</td>
<td>Yes</td>
<td>Sep</td>
<td>R</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>01/01/2012</td>
<td>No</td>
<td>Jan</td>
<td>R</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>01/11/2013</td>
<td>Yes</td>
<td>Nov</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>09/09/2013</td>
<td>Yes</td>
<td>Sep</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>NULL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>09/09/2011</td>
<td>No</td>
<td>Sep</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>09/01/2013</td>
<td>Yes</td>
<td>Jan</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4 Illustration to determine pupil mobility

Funding may be targeted only at those schools experiencing pupil mobility above a 10% threshold, and funding is not provided for the first 10% of mobile pupils. Each school’s mobility proportions given in the Schools Block Data sheet of the APT are their actual mobility proportions as calculated; deduction of the first 10% is done automatically by the APT’s calculations.
Sparsity

- Primary Sparsity av. Distance to 2nd school
- Secondary Sparsity av. Distance to 2nd school

A sparsity distance is provided for each school, which measures the straight-line distance that pupils live from their second nearest school. For each school, those pupils for whom it is their closest school are identified, and then the average (mean) distance to the second nearest school for these pupils is calculated. This is the school’s sparsity distance and is calculated in miles.

For the purposes of this factor, selective grammar schools are not considered when identifying the second nearest school, but faith schools are included. Distances are calculated using the crow flies straight line distance from a pupil’s postcode to a school’s postcode. Postcode information is taken from the autumn 2015 census for pupils and Edubase for schools. Straight-line distances are calculated by deriving easting and northing coordinates from the postcodes, then applying Pythagoras’s Theorem.

Where there is at least one other compatible school in the same postcode as the pupil’s nearest compatible school, all compatible schools in this postcode are considered to be this pupil’s “nearest schools”. The distance to the pupil’s second nearest school is then the same as the distance to the nearest school. Pupils living outside of England are excluded from the sparsity distance calculations. For these pupils, the calculations would pick up each pupil’s nearest and second nearest English schools, and not necessarily their actual nearest schools, and would likely artificially inflate their sparsity distances. Authorities can seek EFA approval to record an adjusted sparsity distance on the Inputs & Adjustments sheet of the APT for a school if they think that excluding pupils resident outside of England has distorted the resulting figure.

The process for producing these figures was as follows:

- using the autumn 2015 census, eligible pupils attending schools in the schools block dataset were identified. Schools are identified together with the age range of pupil that they admit. These datasets contain postcode coordinates for both pupils and schools
- these coordinates are used to identify the nearest and second nearest school for each pupil, and the distance in miles that they live from both schools
- we identify the set of pupils who live nearest to each school
- for each set of pupils we calculate the average (mean) distance to the second nearest school. This is the school’s sparsity distance
A school may attract sparsity funding if it is:

- primary and has fewer than 21.4 pupils on average in each year group, and has a sparsity distance that is greater than or equal to 2 miles
- secondary and has fewer than 120 pupils on average in each year group, and has a sparsity distance that is greater than or equal to 3 miles
- a middle school and has fewer than 69.2 pupils on average in each year group, and has a sparsity distance that is greater than or equal to 2 miles
- an all-through school and has fewer than 62.5 pupils on average in each year group, and has a sparsity distance that is greater than or equal to 2 miles

Local authorities may, if they wish, reduce the pupil numbers and increase the distance criteria (ie they may narrow the criteria), but the criteria quoted above may not be widened. Exceptional applications can also be made on behalf of existing schools that do not attract sparsity funding using the above criteria.