

Pupil Forecasting and School Places

1. Introduction

1.1 School place planning predictions are derived mainly from the Council's pupil forecasting model. The model produces forecasts of the number of children and young people in state funded primary and secondary schools in East Sussex (including maintained schools, free schools and academies).

1.2 The model forecasts pupil numbers:

- Countywide
- For each district and borough
- For each primary and secondary school place planning area (based largely on admissions areas)
- For each individual primary (including infant and junior) and secondary school

1.3 In producing pupil forecasts a number of key factors are taken into account. For the purposes of this report these include:

- Existing and planned capacities of school places as well as published intake numbers
- Existing numbers of pupils in schools (from pupil census data)
- Future births (from Office of National Statistics data) and resulting primary reception year intakes
- GP registration data
- Parental preference for primary reception year
- New housing development in each area and the likely pupil yield

1.4 In the absence of live birth data, longer term predictions are based on the Council's Policy Based Population Projections of future births.

2. Accuracy of forecasts

2.1 The Council's forecasts achieve a good standard of accuracy and compare well to other local authorities. For instance the accuracy of the one year ahead total primary number on roll forecast for the last four years is as follows:

One year forward primary number on roll forecast	
Academic Year	Accuracy
2012/13	+ 0.5%
2013/14	+ 0.4%
2014/15	+ 0.4%
2015/16	+ 0.1%

2.2 Note that the Council's forecasts tend to err on the high side.

3. New housing development

- 3.1 Based on data provided by Lewes District Council, the Council's pupil forecasts assume that between 1000 and 1100 new housing units will be completed in Lewes Town in the period 2015/16 to 2029/30. This includes the developments at North Street and Old Malling Farm as follows:

Development	Total Dwellings	Estimated Mix			Estimated Completion Timescale
		Houses	Flats 2 bed +	1 beds	
North Street	365	212	90	63	2017/18 - 2020/21
Old Malling Farm	200	147	13	40	2020/21 - 2024/25

Note: The dwelling totals for North St exclude 51 extra care units which are unlikely to house children

- 3.2 From past experience the Council has found that new housing often does not build out as quickly as completion timescales envisage, so the timescales set out above may be optimistic.

4. Births

- 4.1 Births are the major determinant of pupil numbers, as one birth more or less equates to the need for one school place five years later. Births tend to peak and trough in 10-13 year cycles. In East Sussex, births peaked in 2010/11 and are now in the downward part of the cycle. This downward trend has been evident in Lewes Town as the following table shows:

Live Births, Lewes primary schools area

Year of Birth	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Primary Reception Year	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
	201	195	195	178	137	134

Forecast as at 01.07.16

- 4.2 Based on these figures of actual births, we can be confident that there will be sufficient reception year spaces in the town until the turn of the decade. Beyond that the predictions rely on demographic projections of future births which are derived from the Council's Policy Based Population Projections. These projections take account of factors such as migration, fertility rates and, crucially, levels of planned new housing in the area.
- 4.3 Higher than normal levels of new housing in an area can be expected to boost the number of births as housebuilding aids inward migration and a move to a new home often coincides with people starting a family. Housing data used in the birth projections for Lewes Town are consistent with that used in the pupil forecasts (i.e. 1000 – 1100).
- 4.4 Taking account of this level of housing completion, the projections give a birth total averaging 157 per annum over the time period. To err on the side of caution the reception year pupil forecasts are set at a higher average – of just over 180 - and skewed so that the highest reception year intakes mirror (with an approximate 5-7 year delay) the projected years of highest housing completion in the town.
- 4.5 The table below looks at the historical relationship between births and primary reception year intakes in Lewes over the last seven years.

Births v reception year intakes	2004/05 (2009/10 intake)	2005/06 (2010/11 intake)	2006/07 (2011/12 intake)	2007/08 (2012/13 intake)	2008/09 (2013/14 intake)	2009/10 (2014/15 intake)	2010/11 (2015/16 intake)
Live births (from ONS data)	199	156	178	184	163	199	194
Reception year intakes	192	175	220	189	177	213	198

4.6 As the table illustrates, generally there has been a higher uptake of school places than births in Lewes reflecting either children moving into the town before they reach school age or parents choosing Lewes schools from outside the local area.

4.7 Pupil forecasts for the following academic year (2016/17) are based on admissions allocations on National offer Day and allow the Council to make a firm prediction on numbers.

4.8 Pupil forecasts for the following three academic years (2017/18 to 2019/20) use actual birth data and GP registrations at 31 August 2015. The forecasts take account of the historic relationship between births and GP registrations and the resulting reception year numbers (reception year numbers tend to be higher than births) but also children moving into the area and requiring a reception year place as a result of new housing development.

4.9 The table below provides the birth and GP registration data and the admissions allocations (where applicable) for the next four academic years for the town.

Births and GP registrations	2016/17 (2011/12 births)	2017/18 (2012/13 births)	2018/19 (2013/14 births)	2019/20 (2014/15 births)
Live births (from ONS data)	193	176	136	134
GP registration data at 31 August 2015	212	175	139	124
Admissions allocations April 2016	202	n/a	n/a	n/a

5 Pupil yield from new housing development

5.1 In addition to factoring in the impact of new housing on future births, through its pupil yield factors the Council's pupil forecasts also allow for the impact of families with school aged children moving into new housing and creating additional demand across all academic year groups.

5.2 The Council's primary pupil yield factors are as follows:

Pupil yield per new dwelling by property type and size	Houses 2 bed+	Flats 2 bed+	All 1-bed
Primary school yields	0.25	0.0375	0.00

5.3 Pupil yield factors are based on the surveys of residents of new housing development. In 2014 and 2015 the Council commissioned consultants Cognisant Research to undertake a study to review its pupil yield factors. The Cognisant Survey involved a mixture of face to face interviews and self-completion questionnaires with a sample of over 1000 households living in newly built housing across East Sussex.

5.4 This survey found the following 'direct' pupil yields.

Direct pupil yields per new dwelling by property type and size (Cognisant Survey)	Houses 2 bed+	Flats 2 bed+	All 1-bed
Primary school yields	0.32	0.16	0.01

5.5 However, the survey also found that many families who had moved into new housing had not changed their children's school. Cognisant were commissioned to undertake a further analysis of the survey data to take account of this fact. The study also allowed for the possibility that when households move to a new dwelling, the dwelling they vacate could potentially be occupied by a family with children (a phenomenon known as backfill).

5.6 This study resulted in the following 'net yields' per dwelling:

Net yields per new dwelling by property type and size (Cognisant Studies)	Houses 2 bed+	Flats 2 bed+	All 1-bed
Primary school yields	0.23	0.11	0.06

5.7 For houses (the dwelling type where most school aged children are to be found) the net yield analysis not only resulted in a lower primary pupil yield than the direct yield analysis, the net yield was also lower than the existing yield factor for housing.

5.8 While in many respects the net yield analysis represents a more sophisticated calculation of pupil yield, in view of the risk that it may underestimate the true level of pupil yield, Children's Services Senior Management Team decided to continue using the Council's existing pupil yields which give a slightly higher pupil yield for houses. This means our forecasts will over estimate pupil numbers rather than under estimate.

5.9 The agreed pupil yields are factored into the forecasts for Lewes Town shown above. Note that the entire pupil yield from new housing development will not impact on schools all in one year. It will be spread over a number of years and academic year groups. In consequence, some school places used by some children arising from the new housing will be vacated and, therefore, available to later children arising from the new housing.

5.10 In the early 2020's, in any one academic year, the pupil yield calculation typically adds between 70 and 80 children to the total number on roll primary school forecast for Lewes Town. (Note that this is in addition to the allowance for the impact on new housing on future births referred to above).

6. Case study in Hailsham on the impact of new housing on primary pupil numbers

6.1 The recent experience of Hailsham gives an example of what the impact of large volumes of new housing on pupil numbers might be in practice. In the three years 2011/12 to 2013/14 a total of 736 dwellings were completed in Hailsham and Hellingly. Assuming approximately 75% were houses, based on our existing pupil yields this would give a primary pupil yield of around 145 additional pupils. This assumed yield was checked against actual numbers in Hailsham primary schools between 2011/12 to 2014/15. When the effect on reception year number increases attributable to increases in births five years previously (i.e. before the new housing was built and therefore not arising from it) was discounted, the net increase in pupil numbers in Hailsham primary schools was fewer than 30 pupils. This suggests that the immediate impact on demand for school places from additional children moving into the area to occupy new housing may not be as high as anticipated, and that the major effect of new housing on demand will come via the delayed impact on future births and Reception Intake numbers.

7. Pupil numbers at Pells CE Primary School

7.1 Pells CE Primary School has suffered from very low parental preferences for many years as illustrated in the table below. Even at times of high demand for places in the town the school has been unpopular and unable to attract sufficient pupils.

	2012/13		2013/14		2014/15		2015/16		2016/17	
Published Admission Number (PAN)	1st Prefs	% 1st Prefs Above/ Below PAN	1st Prefs	% 1st Prefs Above/ Below PAN	1st Prefs	% 1st Prefs Above/ Below PAN	1st Prefs	% 1st Prefs Above/ Below PAN	1st Prefs	% 1st Prefs Above/ Below PAN
20	7	-65%	6	-70%	9	-55%	11	-45%	9	-55%

7.2 For 2016/17 only nine first preferences were received by the closing date for applications. This number reduced to four after parents were given the opportunity to re-submit their preferences. A late application was received for Pells so the school is likely to start September with five children in its reception year.

7.3 The take up of reception year places from those who have attended the early years provider on site (Pippa's Group) is low and declining:

2012/13 - 4 out of 8 children (50%)

2013/14 - 5 out of 8 children (63%)

2014/15 - 8 out of 12 children (67%)

2015/16 - 6 out of 13 children (46%)

7.4 In the period 2001/02 to 2003/04 pupil numbers at the school were close to its capacity of 140. Over the last twelve years numbers have been on a downward trend – in the period 2004/05 to 2009/10 numbers were generally between 110 and 120 each year. Since 2010/11 numbers have been less than 100 and as low as 83 in 2013/14.

7.5 Over the last five academic years the percentage of primary age children living on the Landport Estate attending Pells CE Primary School has fallen from 34% (70 pupils) in January 2012 to only 23% (51 pupils) in January 2016. In contrast the percentage of children living on the Landport Estate attending other schools in Lewes has risen from 62% (127 pupils) in January 2012 to 74% (164 pupils) in January 2016. This is illustrated in the tables below.

Pupils living on the Landport Estate as at January School Census	2012	2013	2014	2015	2016
Primary	204	204	210	217	222
Total	204	204	210	217	222

Primary School Pupils living on the Landport Estate, by School/ Location	Number					Trend
	2012	2013	2014	2015	2016	
Pells	70	57	51	50	51	
Other Lewes School	127	143	152	158	164	
Outside Lewes	7	4	7	9	7	
Total	204	204	210	217	222	

Primary School Pupils living on the Landport Estate, by School/ Location	Percentage					Trend
	2012	2013	2014	2015	2016	
Pells	34.3%	27.9%	24.3%	23.0%	23.0%	
Other Lewes School	62.3%	70.1%	72.4%	72.8%	73.9%	
Outside Lewes	3.4%	2.0%	3.3%	4.1%	3.2%	

Lewes schools as described above are those which fall in the three wards covering Lewes town: Lewes Bridge, Lewes Castle and Lewes Priory.

8. Forecasts for Lewes Town

8.1 The latest update to the forecasts for Lewes Town has just been completed. The forecasts are based on the January 2016 Pupil Census.

Year R forecast – Lewes Town

2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
198	202	187	148	159	185	182	177	188	188	190	187	181	174	164	164

Forecast as at 01.07.16

Published Admission Number = 220 (200 excluding Pells)

Total number on roll forecast for Lewes Town

2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
1459	1470	1475	1417	1401	1417	1391	1366	1345	1340	1381	1402	1390	1377	1360	1331

Forecast as at 01.07.16

Capacity = 1600 from 2016/17

1570 from 2018/19 (1430 excluding Pells)

1540 from 2023/24 (1400 excluding Pells)

8.2 The forecasts take account of recent and predicted future trends in births. They make an allowance for migration (through the application of a recent historic average cohort survival factor). They also allow for the impact of planned new housing on pupil numbers.

9. School places available in the local area

9.1 The table below sets out the predicted number of spaces available in other schools in the town were Pells CE Primary School to close in August 2017. The information is based on year group numbers provided by the schools in May and June 2016 rolled forward two academic years. Reception and Year 1 numbers are based on the intake forecasts set out in Table 4 above.

Space available at alternative schools	Predicted number on roll by year group 2017/18							
	R	1	2	3	4	5	6	Total
Pells CE Primary School								
Pupil numbers by year group	6	4	12	15	8	8	8	61
Lewes schools								
Pupil numbers by year group	181	198	184	201	204	192	219	1379
Year Group PANs	200	230	200	200	200	200	230	1460
Spaces available	19	32	16	0	0	8	11	81
Iford & Kingston CE Primary School								
Pupil numbers by year group	25	30	30	31	29	26	25	196
Year Group PANs	30	30	30	30	30	30	30	210
Spaces available	5	0	0	0	1	4	5	14

Source: Data provided by schools to the Admissions Team in May/June 2016

Pupil numbers for Reception to Year 4 are rolled forward for 2017/18 (e.g. current Year 4 is shown as Year 6 in 2017/18)

Pupil numbers for Reception and Year 1 are taken from the provisional intake forecasts for 2016/17 and 2017/18

Year group PANs have been adjusted to take account of existing and proposed bulge classes.

9.2 The Council believes there will be sufficient places available in other schools in Lewes in 2017/18 for children from Pells CE Primary School were it to close, although a shortfall of places would be expected in Years 3 and 4. This would be addressed in collaboration with the other schools in the town. The Lewes Co-operative Trust has already indicated a willingness for schools to exceed PAN if necessary to ensure every child has a place. In the highly unlikely event that there is a short term additional demand for places there is capacity at other schools in the town to provide one off bulge classes if required.