Parish places - Initial proportionality and subsequent redistribution example

Initial parish places formula

This formula is used by all single sex schools that use parish proportionality rules to determine how many places should be assigned to each individual parish within the priority area. The calculation is undertaken after places have been allocated to children qualifying under a higher admission rule.

$$\frac{\text{Total on-time applicants from the individual parish (\textit{inclusive of applicants qualifying under a higher admission rule}) } \mathbf{x} \text{ Number of places remaining for allocation under parish proportionality rules}}{\text{Total number of on-time applications from all parishes in the priority area (\textit{inclusive of applicants qualifying under a higher admission rule})}}$$

Example of single sex parish proportionality calculation

This example illustrates how parish proportionality places are calculated, and if necessary, redistributed. It does not reflect a previously administered allocation process and is provided purely to demonstrate both how the calculations work and how they are applied to each parish.

In this example, the school has a total of 100 places to allocate based on its Published Admission Number (PAN).
50 places are allocated to children who qualify for a place under a higher admission rule (SEN, Children Looked After, Social/Medical, Siblings, Children of Staff etc.)

Initial proportionality workings and parish places

A	Total number of places available at school (Published Admission Number)	100
B	Number of applicants allocated under higher admission rules	50
C	Number of places remaining for allocation under parish proportionality	50
D	Number of on-time applications received from all parishes in the priority area	79

After places have been allocated to higher admission rules, there are 50 places available for allocation to parishes in the priority area under the proportionality rules. The initial proportionality and parish places calculation for this example is as follows:

Parish in the priority area	(E) Total on-time made applicants from parish	(F) Initial allocation of places for parish (E x C / D)	Target allocation % for parish (F / C x 100)	Adjusted allocation of places for parish *
Parish A	12	7.59494	15.18987	7
Parish B	9	5.69620	11.39241	6
Parish C	1	0.63291	1.26582	1
Parish D	5	3.16456	6.32911	3
Parish E	5	3.16456	6.32911	3
Parish F	0	0.00000	0.00000	0
Parish G	14	8.86076	17.72152	9
Parish H	25	15.82278	31.64557	16
Parish I	6	3.79747	7.59494	4
Parish J	2	1.26582	2.53165	1
Total	**79**	**50.00000**	**100.00000**	**50**

*The flowchart below explains how the adjusted allocation of places for each parish is determined. The remainder of the allocation process will retain this distribution of places across all parishes, unless a parish cannot fulfil its quota (i.e. there are no remaining children in that parish requiring a place). In the event that a parish cannot meet its quota, any unfulfilled places are redistributed to other parishes in the priority area.

Step 1	Step 2	Step 3
Truncate decimal places of the places available for each parish (Initial allocation of places for parish). Sum the total of truncated decimal places. This will give a whole number that can be allocated to the parish.	Assign each place (of summed truncated decimal places) in turn to the parish with the highest decimal place (maximum of 1 for each parish). If there is more than 1 parish with the same decimal place, the place will be allocated to 1 of those parishes randomly.	We now have adjusted parish places. The target allocation percentage for each parish is used throughout the iterative process where there is the need to redistribute places i.e. where a parish cannot fulfil its initial quota.

Results of first iteration (round of allocations) and preparation for redistribution of places for second iteration

The table below is designed to give an example of what could happen under the parish proportionality rules if a parish no longer needs their full quota of places.

Priority area parishes	Adjusted initial allocation of places for parish	Allocations made under parish proportionality rules during iteration 1 *	Target allocation % for parish (Initial allocation of places for parish / Number of places for allocation under parish proportionality rules x 100)	% Currently allocated to parish (Allocations made to parish under parish proportionality / Total number of places available at school for allocation under parish proportionality x 100)	Applicants still requesting place under parish proportionality rules (pre iteration 2)	Parish does not have any remaining pupils requesting a place and therefore the place(s) must be redistributed to other parishes in the priority area (for iteration 2)
Parish A	7	5	15.18987	10.00000	0	2
Parish B	6	6	11.39241	12.00000	2	
Parish C	1	0	1.26582	0.00000	0	1
Parish D	3	3	6.32911	6.00000	0	
Parish E	3	3	6.32911	6.00000	1	
Parish F	0	0	0.00000	0.00000	0	
Parish G	9	9	17.72152	18.00000	4	
Parish H	16	16	31.64557	32.00000	8	
Parish I	4	4	7.59494	8.00000	2	
Parish J	1	1	2.53165	2.00000	0	
Total	**50**	**47**	**100.00000**	**94.00000**	**17**	**3**

* The number of allocations to some parishes can be less than the adjusted initial allocation figure as a result of applicants being offered a place at a higher preference school during an iteration. Looking at the table above, Parish A was entitled to 7 places but as all children in the parish have been satisfied or allocated a higher preference school; the parish has 5 children allocated and 2 unfilled places at the end of the iteration.

In this particular example, the outcome of the first iteration has meant that two parishes (A and C) have places remaining (3 in total) that are no longer required and need to be redistributed to other parishes in the priority area that still have children requesting a place.

Redistribution of 'unfilled' parish places (pre iteration 2)

There are 3 places available for redistribution. Each of these places must be redistributed individually, by first determining which is the most under-allocated or least over-allocated parish. The most under-allocated and least over-allocated parishes are determined by working out the percentage of places a parish is currently allocated and deducting this figure from the parish target percentage calculated at the start of the process, as demonstrated below:

First parish place to be redistributed

Priority area parishes	Adjusted initial allocation of places for parish	Allocations made under parish proportionality rules *(pre iteration 2)*	Target allocation % for parish *(Initial allocation of places for parish / Number of places for allocation under parish proportionality rules x 100)*	% Currently allocated to parish *(Allocations made to parish under parish proportionality / Total number of places available at school for allocation under parish proportionality x 100)*	Applicants still requesting place from parish under parish proportionality rules *(for iteration 2)*	Most under allocated/least over allocated parish *(% Currently allocated to parish - Target allocation % for parish)*
Parish A	7	5	15.18987	10.00000	0	- 5.18987
Parish B	6	6	11.39241	12.00000	2	0.60759
Parish C	1	0	1.26582	0.00000	0	- 1.26582
Parish D	3	3	6.32911	6.00000	0	- 0.32911
Parish E	3	3	6.32911	6.00000	1	`- 0.32911`
Parish F	0	0	0.00000	0.00000	0	0.00000
Parish G	9	9	17.72152	18.00000	4	0.27848
Parish H	16	16	31.64557	32.00000	8	0.35443
Parish I	4	4	7.59494	8.00000	2	0.40506
Parish J	1	1	2.53165	2.00000	0	- 0.53165
Total	**50**	**47**	**100.00000**	**94.00000**	**17**	

The first parish place to be redistributed is assigned to **Parish E** because it is the 'most under allocated' parish with applicants still requesting a place (as shown by the negative figure).

Parish E is assigned an additional place, and this is incorporated into the calculation before the second parish place is redistributed.

Second parish place to be redistributed

The unfilled placed redistributed to Parish E above has been reflected in the table below. The most under-allocated and least over-allocated parishes are re-determined by working out the percentage of places a parish is currently allocated and deducting this figure from the parish target percentage calculated at the start of the process, as demonstrated below:

Priority area parishes	Adjusted initial allocation of places for parish	Allocations made under parish proportionality rules *(pre iteration 2)*	Target allocation % for parish *(Initial allocation of places for parish / Number of places for allocation under parish proportionality rules x 100)*	% Currently allocated to parish *(Allocations made to parish under parish proportionality / Total number of places available at school for allocation under parish proportionality x 100)*	Applicants still requesting place from parish under parish proportionality rules *(pre iteration 2)*	Most under allocated/least over allocated parish *(% Currently allocated to parish - Target allocation % for parish)*
Parish A	7	5	15.18987	10.00000	0	- 5.18987
Parish B	6	6	11.39241	12.00000	2	0.60759
Parish C	1	0	1.26582	0.00000	0	- 1.26582
Parish D	3	3	6.32911	6.00000	0	- 0.32911
Parish E	3	4	6.32911	8.00000	0	1.67089
Parish F	0	0	0.00000	0.00000	0	0.00000
Parish G	9	9	17.72152	18.00000	4	0.27848
Parish H	16	16	31.64557	32.00000	8	0.35443
Parish I	4	4	7.59494	8.00000	2	0.40506
Parish J	1	1	2.53165	2.00000	0	- 0.53165
Total	**50**	**48**	**100.00000**	**96.00000**	**16**	

The second place to be redistributed is assigned to **Parish G** as it is the 'least over allocated' parish with applicants still requesting a place. Unlike the previous redistributed place, none of the parishes that are 'under allocated' (shown with a negative figure) have applicants still requesting a place; therefore a place is not needed by those particular parishes.

Parish G is assigned an additional place and this is incorporated into the calculation before the third parish place is redistributed.

Third parish place to be redistributed

The unfilled placed redistributed to Parish G above has been reflected in the table below. The most under-allocated and least over-allocated parishes are re-determined by working out the percentage of places a parish is currently allocated and deducting this figure from the parish target percentage calculated at the start of the process, as demonstrated below:

Priority area parishes	Adjusted initial allocation of places for parish	Allocations made under parish proportionality rules *(pre iteration 2)*	Target allocation % for parish *(Initial allocation of places for parish / Number of places for allocation under parish proportionality rules x 100)*	% Currently allocated to parish *(Allocations made to parish under parish proportionality / Total number of places available at school for allocation under parish proportionality x 100)*	Applicants still requesting place from parish under parish proportionality rules *(pre iteration 2)*	Most under allocated/least over allocated parish *(% Currently allocated to parish - Target allocation % for parish)*
Parish A	7	5	15.18987	10.00000	0	- 5.18987
Parish B	6	6	11.39241	12.00000	2	0.60759
Parish C	1	0	1.26582	0.00000	0	- 1.26582
Parish D	3	3	6.32911	6.00000	0	- 0.32911
Parish E	3	4	6.32911	8.00000	0	1.67089
Parish F	0	0	0.00000	0.00000	0	0.00000
Parish G	9	10	17.72152	20.00000	3	2.27848
Parish H	16	16	31.64557	32.00000	8	0.35443
Parish I	4	4	7.59494	8.00000	2	0.40506
Parish J	1	1	2.53165	2.00000	0	- 0.53165
Total	**50**	**49**	**100.00000**	**98.00000**	**15**	

The third and final place to be redistributed is assigned to **Parish H** because it is the 'least over allocated' parish with applicants still requesting a place. As with the previous redistributed place, none of the parishes which are 'under allocated' (shown with a negative figure) have applicants still requesting a place; therefore a place is not needed by those particular parishes.

Parish H is assigned the final place in this redistribution process.

Finalised parish redistribution workings prior to iteration 2

Priority area parishes	Adjusted initial allocation of places for parish	Allocations made under parish proportionality rules *(pre iteration 2)*	Target allocation % for parish *(Initial allocation of places for parish / Number of places for allocation under parish proportionality rules x 100)*	% Currently allocated to parish *(Allocations made to parish under parish proportionality / Total number of places available at school for allocation under parish proportionality x 100)*	Applicants still requesting place from parish under parish proportionality rules *(pre iteration 2)*	Most under allocated/least over allocated parish *(% Currently allocated to parish - Target allocation % for parish)*
Parish A	7	5	15.18987	10.00000	0	- 5.18987
Parish B	6	6	11.39241	12.00000	2	0.60759
Parish C	1	0	1.26582	0.00000	0	- 1.26582
Parish D	3	3	6.32911	6.00000	0	- 0.32911
Parish E	3	4	6.32911	8.00000	0	1.67089
Parish F	0	0	0.00000	0.00000	0	0.00000
Parish G	9	10	17.72152	20.00000	3	2.27848
Parish H	16	17	31.64557	34.00000	7	2.35443
Parish I	4	4	7.59494	8.00000	2	0.40506
Parish J	1	1	2.53165	2.00000	0	- 0.53165
Total	**50**	**50**	**100.00000**	**100.00000**	**14**	

The redistributed places are then allocated to the children who best meet the admission criteria from within each parish, i.e. nearest applicants will qualify for a place before random applicants. The second iteration is then complete.

If additional places are returned during any iteration, the redistribution process described above will reoccur. The iterative process continues until all children have been allocated their highest preference school possible.

Frequently asked questions about the parish proportionality calculation, the admission rules and the redistribution process

1. **The parish I live in was only assigned 2 places in the previous 2 years admission rounds. Does this mean it will receive 2 places again this year?**

   No. The proportionality calculation is based entirely on the number of applications received from parishes in the priority area in that specific year. The number of applicants changes from year to year and the number of children allocated under the higher admission rules can also have an impact.

2. **Is it possible for children living in the priority area who qualify on a random basis to be allocated and those that have it as their "nearest school" not?**

   Yes. Once the parishes are assigned their quota using the parish proportionality calculation, the admission rules are applied to each parish individually. It is therefore possible that a parish local to the school, where children qualify under the "nearest school" rule, may not have enough places available under the proportionality calculation for all children for whom it is the "nearest" school. A more distant parish may only have children who qualify for the school on a random basis, and therefore will only allocate children under this rule.

3. **I live in a priority area parish and have established that I will be considered for the school on a random basis. Do I stand a better chance of being allocated the single sex school if I put it down as my first preference?**

   No. Every applicant considered on a random basis is treated equally. Every applicant is assigned an individual random number prior to each iteration[1] and this number will be used during the allocation process.

4. **During the redistribution process, what happens in the event that 2 or more parishes are equally entitled to the next place?**

   The parish is selected randomly by the system.

5. **What happens if a child allocated under a higher admission rule is then successful in obtaining a place at a higher preference school later in the iterative process? Is this place redistributed for allocation to a parish in the priority area?**

   Yes. Any places which are returned from higher admission rules later in the process are reallocated through the redistribution process. The parish entitled to the place will be the parish that is the most under allocated / least over allocated at that point in time.

6. **What happens during the iterative process if there are not enough applicants in the priority area to allocate up to the school's Published Admission Number (PAN)?**

   The school would move on to the next admission rule in their arrangements, which will normally involve children living outside of the priority area.

[1] *School Admissions Code – December 2021: Section 1.35*