Projected availability of and demand for primary and secondary school places Projection and forecasting methodology

Cardiff employs a robust projection methodology for planning school places which takes account of NHS GP registration data and school census data submitted by and verified by all Cardiff schools. As projections can only take account of historic and current information the Council also identifies trends within projections, and analyses school preference data and other contextual information to produce forecasts on a city wide basis and in each locality.

Data analysis allows projections to be prepared based on localised patterns at primary school catchment area level, by secondary school catchment and on a city-wide basis. Each of these provide differing contextual information to inform the forecasting on the number of places that may be needed to meet the requirements of each area and of Cardiff as a whole.

The geographical units that are most suitable to analyse the recent and future demand for primary school places in each area are primary school catchment areas. A wider range of geographical information including aggregated primary school catchment areas, secondary school catchment areas, city-wide information and outflow to other admissions authorities informs planning for meeting the demand for secondary school places.

School catchment areas in Cardiff are not coterminous with ward boundaries and often serve all or part of several ward areas.

The geographical unit that is most suitable to analyse the demand for English-medium secondary school places serving Adamsdown and Splott is the Willows High School catchment area.

Separate to forecasts for existing housing in Cardiff, projections are prepared for new housing planned on large scale housing developments, including the strategic Greenfield and Brownfield housing sites identified in the Local Development Plan. These projections take account of census and housing information in Cardiff and allow a calculation of average numbers of pupils in each type of property.

The Education Supplementary Planning Guidance adopted in 2017 sets out the following average yields in each type of property, taking account of the most recent census data.

| Table 1: average yield of pupils in for each house type | | | | | | | | | | |
|---|--------------------------------|--------|--------|--------|--------------------------------|--------|--------|--------|--------|--------|
| V-07 070.10 | Yields from Flats / Apartments | | | | Yields from Houses / Bungalows | | | | | |
| Year group | 1 bed | 2 bed | 3 bed | 4 bed | 5+ bed | 1 bed | 2 bed | 3 bed | 4 bed | 5+ bed |
| | | | | | | | | | | |
| Nursery | 0.0102 | 0.0390 | 0.0567 | 0.0470 | 0.0102 | 0.0210 | 0.0507 | 0.0579 | 0.0610 | 0.0555 |
| Primary | 0.0155 | 0.0749 | 0.1793 | 0.2329 | 0.0649 | 0.0501 | 0.1247 | 0.2290 | 0.2947 | 0.3059 |
| Secondary | 0.0058 | 0.0287 | 0.1125 | 0.1179 | 0.0373 | 0.0336 | 0.0604 | 0.1666 | 0.2553 | 0.2806 |
| 6th Form | 0.0007 | 0.0079 | 0.0345 | 0.0280 | 0.0116 | 0.0092 | 0.0165 | 0.0513 | 0.0864 | 0.1049 |
| | | | | | | | | | | |

Projection data based on average yields cannot, however, be used to accurately forecast the impact of new housing on the demand for places in each year group.

As a significant proportion of families moving to new housing developments are moving within their local area, the increase in the number of school places required locally and city-wide may be less than would be the case if families have moved into Cardiff. Families moving a short distance to a new development may not wish to transfer their child(ren) to a new school. Consequently, families moving into established housing may therefore have greater difficulty in accessing a local place in an established school.

The rate at which housing on planned new developments is built and occupied depends on a number of market-related factors.

Capacity of existing secondary schools

Table 2 sets out the number of places available in each secondary school in Cardiff in, and the most recent Number on roll data in January 2020 for the entry year (Year 7).

| Table 2: Capacity and po | upii on roll in Cardiff se | condary scl | nools | | | |
|---|--------------------------------|--------------|---|---------------------------|---|---|
| School Name | Type of School | Age Range | Total Capacity (including sixth form) | Capacity - Years 7 -11 | Published Admission Number (2020/21) | Number On Roll – Year 7 (January 2020) |
| Cantonian High School | Community - English-medium | 11-18 | 1,046 | 905 | 181 | 153 |
| Cardiff High School | Community - English-medium | 11-18 | 1,635 | 1,200 | 240 | 240 |
| Cardiff West Community High School | Community - English-medium | 11-18 | 1,520 | 1,200 | 240 | 211 |
| Cathays High School | Community - English-medium | 11-18 | 1,072 | 825 | 165 | 175 |
| Corpus Christi Catholic High School | Voluntary Aided - faith | 11-16 | 1,075 | 930 | 215 | 214 |
| Eastern High | Community - English-medium | 11-16 | 1,200 | 1,200 | 240 | 240 |
| Fitzalan High School | Community - English-medium | 11-18 | 1,725 | 1500 | 300 | 298 |
| Llanishen High School | Community - English-medium | 11-18 | 1,800 | 1500 | 300 | 303 |
| Mary Immaculate High School | Voluntary Aided - faith | 11-16 | 795 | 795 | 159 | 161 |
| Radyr Comprehensive School | Community - English-medium | 11-18 | 1,365 | 1,050 | 210 | 207 |
| St Illtyd's Catholic High School | Voluntary Aided - faith | 11-16 | 879 | 879 | 176 | 205 |
| St Teilo's C.W High School | Voluntary Aided - faith | 11-18 | 1,440 | 1,200 | 240 | 249 |
| The Bishop Of Llandaff C.W High School | Voluntary Aided - faith | 11-18 | 1,085 | 900 | 180 | 189 |
| Whitchurch High School | Foundation – English-medium | 11-18 | 2,400 | 1,950 | 390 | 400 |
| Willows High School | Community - English-medium | 11-18 | 1,121 | 1,120 | 224 | 154 |
| Ysgol Gyfun Gymraeg Bro Edern | Community- Welsh- medium | 11-18 | 1,114 | 900 | 180 | 182 |
| Ysgol Gyfun Gymraeg Glantaf | Community- Welsh- medium | 11-18 | 1,500 | 1,200 | 240 | 243 |
| Ysgol Gyfun Gymraeg Plasmawr | Community- Welsh- medium | 11-18 | 1,310 | 1050 | 210 | 182 |
| English-medium community places/ pupils | | | | | 2,100 | 1,981 |
| Foundation places/ pupils | | | | | 390 | 400 |
| Faith School places/ pupils | | | | | 970 | 1018 |
| Welsh-medium community places/ pupils | | | | | 630 | 607 |
| Total permanent places | | | | | 4,090 | 4,006 |

Recent city-wide take up of places of pupils entering secondary education

Tables 3 and 4 (below/ overleaf) set out the most recent verified PLASC (Pupil Level Annual School Census) data as supplied by primary schools in January 2019 and by secondary schools in January 2020. This confirms the number of pupils in each of the English-medium secondary school catchment areas who were enrolled in English-medium, Welsh-medium and faith-based primary and secondary schools in Cardiff.

Comparison of Year 6 and Year 7 census data allows forecasting of the likely proportions of pupils within each catchment area that are likely to promote to English-medium, Welsh-medium and Faith-based secondary schools.

Table 3: Year 6 pupils enrolled in English-medium, Welsh-medium and Faith-based secondary schools in each English-medium secondary school catchment area (data source: PLASC 2019)

| Catchment area | English-medium Community and Foundation school pupils | Welsh-medium Community school pupils Faith-based school pupils | | Total pupils | |
|-------------------------------|--|---|-------|--------------|--|
| Cantonian High School | 119 | 41 | 63 | 223 | |
| Cantonian Figh School | 53.4% | 18.4% | 28.3% | 223 | |
| Cardiff High School | 246 | 32 | 32 25 | | |
| Cardin Flight School | 81.2% | 10.6% | 8.3% | 303 | |
| Cardiff West Community High | 297 | 56 | 94 | 447 | |
| School | 66.4% | 12.5% | 21.0% | 447 | |
| Cathays High School | 88 | 22 | 35 | 145 | |
| Cathays Figh School | 60.7% | 15.2% | 24.1% | 145 | |
| Castorn Ligh | 380 | 81 | 168 | 629 | |
| Eastern High | 60.4% | 12.9% | 26.7% | 029 | |
| Fitzalan High Cahaal | 394 | 124 | 139 | 657 | |
| Fitzalan High School | 60.0% | 18.9% | 21.2% | 057 | |
| Llaniahan High Cahaal | 476 | 72 | 161 | 700 | |
| Llanishen High School | 67.1% | 10.2% | 22.7% | 709 | |
| Dadius Caranashanai sa Cahaal | 173 | 49 | 6 | 000 | |
| Radyr Comprehensive School | 75.9% | 21.5% | 2.6% | 228 | |
| Whitehurch Lligh Cohool | 333 | 99 | 15 | 447 | |
| Whitchurch High School | 74.5% | 22.1% | 3.4% | 447 | |
| Willows High Cohool | 169 | 25 | 82 | 070 | |
| Willows High School | 61.2% | 9.1% | 29.7% | 276 | |
| Total Number or pupils | 2675 | 601 | 788 | 4064 | |
| rotal Number of pupils | 65.8% | 14.8% | 19.4% | 4064 | |

Table 4: Year 7 pupils enrolled in English-medium, Welsh-medium and Faith-based secondary schools in each English-medium secondary school catchment area (data source: PLASC 2020)

| Catchment area | English- medium Community and Foundation school pupils | Welsh- medium Community school pupils | nedium Faith-based school pupils | | Net increase/ loss |
|-------------------------------------|---|--|----------------------------------|-------|-----------------------|
| Cantonian High School | 113 51.6% | 39 17.8% | 67 30.6% | 219 | -4 |
| Cardiff High School | 254 82.2% | 26 8.4% | 29 9.4% | 309 | 6 |
| Cardiff West Community High School | 268 58.4% | 54 11.8% | 137 29.8% | 459 | 12 |
| Cathays High School | 100 64.5% | 23 14.8% | 32 20.6% | 155 | 10 |
| Eastern High | 274 44.2% | 87 14.0% | 259 41.8% | 620 | -9 |
| Fitzalan High School | 384 63.7% | 119 19.7% | 100 16.6% | 603 | -54 |
| Llanishen High School | 348 51.9% | 77 11.5% | 245 36.6% | 670 | -39 |
| Radyr Comprehensive School | 161 71.9% | 45 20.1% | 18 8.0% | 224 | -4 |
| Whitchurch High School | 308 69.4% | 101 22.7% | 35 7.9% | 444 | -3 |
| Willows High School | 157 59.5% | 27 10.2% | 80 30.3% | 264 | -12 |
| Combined Published Admission Number | 2,505 | 600 | 970 | 4,075 | |
| Total Number or pupils | 2367 59.7% | 598 15.1% | 1002 25.3% | 3967 | -97 |
| Surplus places | 138 | 2 | -32 | 108 | |
| Difference: Year 6 / 7 | -308 | -3 | 214 | -97 | |

Comparing Table 3 and Table 4 it is evident in that:

- The proportionate take up of English-medium places in each secondary school catchment area varies significantly across Cardiff ranging from 44.2% to 82.2% at secondary level and to a lesser extent at primary level were the range is between 53.4% and 81.2%.
- The variation of Welsh-medium take- varies less, at both primary and secondary level, ranging from around 9%-22% across the city.
- Faith-based take-up also varies significantly from area to area: the catchment area of Whitchurch High School has the lowest level at both primary and secondary levels as a percentage of the catchment. The highest at primary level is in the catchment area of Willows High School and at secondary level is in the catchment of Eastern High.
- There is an overall citywide reduction in the number of pupils enrolled in Year
 6 in primary education, and the number of pupils enrolled in Year 7 at secondary
 level the following year. The decrease in cohort survival ratio (CSR) is observed

every year, but there are some areas with a significant reduction. The most evident reduction is in the catchment area for Fitzalan High School with a net loss of 54 pupils largely as a result of pupils taking up places in the Vale of Glamorgan. This catchment area also had the largest reduction, between Year 6 and Year 7 pupils, when reviewing the data from the previous two years.

- There is a marginal increase in percentage terms for the CSR in Welsh-medium education (from 14.8% of the cohort, to 15.1%) whereas the increase in the percentage of pupils opting for Faith-based education between Year 6 and Year 7 (from 19.4% to 25.3%) is significant.
- Faith-based secondary schools, for which the Council is not the admissions authority, admitted 32 Cardiff pupils in excess of their Published Admission Number in 2019/20. A further 16 pupils living outside of Cardiff were also admitted.

The parental preference for and take-up of places in each type of school is dependent on number of variables including, but not limited to, the number of places available in each school type relative to the local population, the admission arrangements for that school, and parental perception.

Within the Willows High School catchment area, there is little change in the number of pupils transferring to English-medium community secondary schools compared to those attending English-medium community primary schools. (61.2% at primary level reducing to 59.5% at secondary level).

Forecast city-wide demand for places – existing housing

Each of the Faith-based and Foundation secondary schools has been fully-subscribed or over-subscribed at entry to Year 7 in recent years. The number of children taking up places in these schools has been consistent, and they have operated at or near full subscription whilst total pupil populations were relatively high or low.

As there are no proposals to permanently increase the number of places available in faith-based secondary schools during the Band B period (2020-2024), the relative proportion of the population able to gain admission to faith-based schools will fall as the overall population increases during this period. Consequently the proportionate take-up of places in English-medium community and Foundation secondary schools would increase, in order to accommodate all pupils requiring a place.

It is expected that faith-based schools would continue to have high levels of take up when city-wide populations are projected to fall, in the later part of the decade, and the take up of places within English-medium community schools would proportionately decrease.

The number¹ of pupils taking up places in Faith-based secondary schools in the years 2017-18, 2018-19 and 2019-20 totalled 1006, 1001 and 1018 respectively. In each of

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¹ PLASC Citywide data – Projections 2020

these years, the Faith-based secondary schools were fully subscribed (combined Published Admission Number of 970²), and there was little fluctuation in the number of pupils allocated places in each area of Cardiff.

By analysing the take up of places in recent years in each part of the city, forecasts can be produced for the numbers and resident catchment areas of pupils who may gain admission to Faith-based secondary schools. In turn, this allows forecasting for the number of pupils who require English-medium community places in those area.

| Table 5: forecast take up of places at entry to Year 7 in faith-based secondary schools in each English-medium secondary school catchment areas. (data source: PLASC Jan 2020 – 3 year average) | | | | | | | |
|---|---|--|--|--|--|--|--|
| Catchment Area | Approximate forecast take up of places at faith school places within area | | | | | | |
| Cantonian High School | 59 | | | | | | |
| Cardiff High School | 33 | | | | | | |
| Cardiff West Community High School | 148 | | | | | | |
| Cathays High School | 33 | | | | | | |
| Eastern High School | 255 | | | | | | |
| Fitzalan High School | 93 | | | | | | |
| Llanishen High School | 237 | | | | | | |
| Radyr Comprehensive School | 14 | | | | | | |
| Whitchurch High School | 34 | | | | | | |
| Willows High School | 80 | | | | | | |
| Total projected demand | 986 | | | | | | |

As set out in Table 4, there is a significant difference between the number of pupils enrolled in Year 6 in primary education and the number of pupils enrolled in Year 7 the following year. There are various reasons for this including attendance at secondary schools outside of Cardiff, private education, or education at home.

Parental preference data also indicates that some of these pupils had stated a preference for Cardiff schools, but having failed to gain admission to their preferred school, opted for alternatives at a later date. It would therefore be reasonable to conclude that, to accommodate the latent demand for English-medium community school places, additional places may be required.

Although the highest oversubscription criteria for admissions to faith-based and foundation secondary schools are not geographical based, the number of pupils admitted from each area in recent years is relatively stable and allows approximate forecasting of the number of pupils who may gain admission in future.

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² School Admissions 20/21

Table 6 therefore sets out the net number of places that may be required to meet the demand for English-medium community and foundation places in each secondary school catchment area of the city (existing housing only), having taken account of the forecast take-up of places at faith-based schools in each area.

Table 6: Forecast net demand for places at any English-medium community secondary school in each English-medium secondary school catchment area (at entry to Year 7), allowing for consistent take-up in faith-based schools

| Catchment Area | Forecasts based on PLASC data - Pupils enrolled in primary education | | | | Forecasts based on NHS data | | | |
|---|---|------|------|------|-----------------------------|------|------|------|
| | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
| Cantonian High School | 98 | 106 | 113 | 85 | 78 | 77 | 71 | 70 |
| Cardiff High School | 285 | 252 | 268 | 282 | 281 | 270 | 236 | 195 |
| Cardiff West Community High School | 221 | 200 | 193 | 219 | 173 | 177 | 171 | 150 |
| Cathays High School | 68 | 105 | 87 | 89 | 82 | 69 | 69 | 68 |
| Eastern High School | 326 | 269 | 323 | 283 | 313 | 278 | 298 | 274 |
| Fitzalan High School | 384 | 309 | 328 | 317 | 343 | 265 | 257 | 241 |
| Llanishen High School | 330 | 308 | 302 | 330 | 302 | 281 | 265 | 238 |
| Radyr Comprehensive School | 180 | 176 | 170 | 191 | 159 | 146 | 139 | 132 |
| Whitchurch High School | 353 | 313 | 327 | 320 | 347 | 276 | 295 | 267 |
| Willows High School | 189 | 171 | 150 | 148 | 165 | 142 | 144 | 108 |
| Total demand for English-medium and Community/ Foundation places | 2429 | 2266 | 2308 | 2323 | 2299 | 2094 | 2058 | 1918 |

The above forecasts take account of the most recent take-up of places but do not yet allow for changes of pupil preference patterns expected as a result of planned changes to secondary schools in Cardiff.

Forecast demand for places – existing housing in the Cathays High School catchment area

Tables 5 and 6 indicate that, in the Band B investment period, 68-105 English-medium community secondary school places will be required to serve the existing Cathays High School catchment area, either at the school or at other English-medium community schools. This takes account of c33 places being taken up within Faith-based schools by pupils resident in the area. Intakes peak in 2024 but reduce thereafter.

This suggests that capacity of three forms of entry (90 places per year group) would be sufficient to meet the demand for places within the existing catchment area of Cathays High School beyond the Band B period.

Whilst city-wide pupil populations are relatively stable within the mid part of the decade, pupil numbers decline significantly from 2028 onwards. This pattern is also evident within the Cathays High School catchment area, with forecasted numbers requiring English-medium provision in this area falling to approximately 2.3 forms of entry from 2028 - 2030. This data takes account of the most recent (June 2020) NHS GP registration data for the cohort of children born in the 2018/2019 school year, who are resident in each area of the city.

The numbers of pupils in some year groups, resident within the catchment area of Cathays High School, has fluctuated significantly. In some year groups, cohorts have increased or reduced in number by more than 20 pupils (>20% of the cohort) within three to four years, but the migration patterns are not consistent. This suggests that three forms of entry may not be sufficient to respond to fluctuations in the population.

Intakes to secondary education from 2028 are based on NHS data for pre-school children and reflect the recent parent preferences for English-medium community, Welsh-medium or faith schools as a proportion of the primary school intakes, and could therefore change. A new-build school would be anticipated to have a positive effect on local pupil preferences.

Whilst capacity of three forms of entry is appropriate to meet the demand for places at Cathays High School from within the existing catchment area of the school beyond the Band B period, planned housing in in the south of the city will reduce the area served by Fitzalan High School and will increase pupil numbers at neighbouring schools including Cathays High School and Cantonian High School.

Forecast demand for places – planned/ proposed housing including strategic LDP sites and strategic reorganisation in other areas

The future planning of places must take into account the impact of a new-build 21st Century school, and Band B proposals for other secondary schools, and how this may affect parental preferences. The distribution of capacity between Cathays High School and neighbouring schools should retain sufficient surplus capacity across the wider area to respond to potential future population changes and parental preference patterns.

There are a number of planned residential developments in close proximity to the Cathays High School catchment area, including those with outline or full planning permission within the Fitzalan High School catchment areas which would significantly increase the pupil population:

- International Sports Village, Grangetown
- Clive Lane Embankment
- West of Dumballs Road, Butetown
- Bessemer Fruit Market, Grangetown
- Gas Works site, Ferry Road, Grangetown
- Porth Teigr (Roath Basin), Butetown

Whilst developer contributions have been secured via s106 agreement to accommodate the secondary school age pupil yield from some of these residential

developments, others are at earlier stages of planning and would be expected to further increase the number of pupils in the area.

Forecasts based on existing housing within the Fitzalan High School catchment area, allowing for a indicate that school capacity of 10- 12 forms of entry would be necessary to meet the demand for places within an English-medium community secondary school in Cardiff. Changes to the catchment area of St Cyres Comprehensive School are expected to increase the demand for places within the Fitzalan High School catchment area by approximately 2 forms of entry, to 12-14 forms of entry, as fewer children from the area would gain admission to St Cyres.

The planned replacement of Fitzalan High School with a new, 21st Century School of 10 Forms of Entry would also be expected to have a positive impact on parental preferences within its existing catchment area, further increasing demand for places at the school and in effect reducing the area that the school directly serves.

Planned housing developments within the Fitzalan High School catchment area, including those with outline or full planning permission, would exacerbate this shortfall of places further. This would impact other neighbouring English-medium community schools, including Cathays High School, Willows High School and Cantonian High School, and must be considered when planning provision.

Whitchurch High School, currently 13 FE, is planned to reduce to 12 FE from 2024, reducing surplus in the North of the city. The expansion of Cardiff High School from 8FE to 10FE and consolidation of Willows High School at 6FE are also included in the Band B programme.

Retaining Cathays High School at its existing capacity of 5.5 forms of entry, or a minor expansion to six forms of entry would not be sufficient to meet the demand from within its catchment area and the excess demand from within the neighbouring catchment area of Fitzalan High School.

Recent intakes to Cathays High School

Pupil numbers in Year 7 at Cathays High School have been significantly higher in recent years, reflecting the increased pupil population in neighbouring areas and the school's central and convenient location relative to this population.

Analysis of the last five years of PLASC data (2016-2020) confirms that, on average, approximately 40% of the pupils enrolled at Cathays High School reside within the catchment area of the school, and this percentage had increased as the total number enrolled at the school has grown. The majority of those pupils who live outside of the catchment area come from the neighbouring areas of Fitzalan High School (18%), Willows High School (20%) and Cardiff High School (8%).

A temporary increase to the admission number at Cathays High School, to 240 places, was implemented for the 2020/21 intake and all places were allocated. The central location of the school enabled it to meet the excess demand for places, and to accommodate late applicants, from the south, central and north areas of the city and

retain less than 5% surplus city-wide in the year group. Similar measures, increasing the intake at Cathays High School to 240 places, are likely to be needed in coming years.

It is expected that the school would be fully subscribed at entry to year 7, based on pupil populations in the wider area, until at least 2024, and the school would have eight forms of entry enrolled in some year groups until at least 2028. If Cathays High School was expanded to less than eight forms of entry, additional classrooms and facilities, to accommodate the 'bulge years' intakes, would be required for an extended period of time, for up to five years beyond 2024. This may not be an efficient nor cost effective solution on a constrained site and would severely limit options for providing outdoor sports and social provision for learners.

Within the context of planned changes in provision, an expansion of Cathays High School to eight forms of entry would provide sufficient permanent capacity to meet local demand, to meet the excess demand for places in neighbouring catchment areas and would provide a reasonable level of surplus serving the wider area to respond to fluctuations in the populations in future years.

Summary – Secondary demand

In summary, expanding Cathays High School to 8FE (240 places) from September 2023 would meet the projected demand for places from within the existing catchment area of the school and would provide sufficient surplus capacity to meet part of the excess demand for places within neighbouring catchment areas. This proposed capacity takes account of the existing proportions of pupils that

- (i) Take up places in English-medium community secondary schools
- (ii) Take up places in English-medium faith-based secondary schools
- (iii) Take up places in Welsh-medium community secondary schools

and allows for similar preference patterns in future.

In summary, an expansion of the school to 8FE would:

- Create an efficient class organisation.
- Provide sufficient capacity to allow the projected number of children within the Cathays High School catchment area, requiring a place in an English-medium community high school, to attend.
- Provide surplus capacity to enable the excess demand from neighbouring catchment areas to be accommodated
- Ensure that citywide capacity and surplus places would be appropriately balanced, in the context of projected reductions in secondary school pupil numbers at the end of the decade and potential uplift in the birth cycle in future years.