

**CABINET: THURSDAY, 19 JANUARY 2023 at 2.00 PM**

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A Cabinet Meeting will be held in CR 4, County Hall and as Multi Location Meeting on 19 January 2023 at 2 pm

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**A G E N D A**

- 1 Minutes of the Cabinet meetings held on 15 and 22 December 2022 *(Pages 3 - 12)*

**Culture, Parks & Events**

- 2 Weed Control Trial *(Pages 13 - 110)*

**Education**

- 3 Annual Report on Investment in the Education Estate *(Pages 111 - 260)*

**Finance, Modernisation & Performance**

- 4 Response to the Policy Review and Performance Scrutiny Committee Task and Finish Group Inquiry on Home and Agile Working *(Pages 261 - 328)*

- 5 Mid Year Assessment of Performance 2022/23 *(Pages 329 - 378)*

**Investment & Development**

- 6 International Sports Village *(Pages 379 - 862)*

**Social Services**

- 7 Children's Services Strategy *(Pages 863 - 1014)*

**PAUL ORDERS**

Chief Executive

This document is available in Welsh / Mae'r ddogfen hon ar gael yn Gymraeg

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**CARDIFF COUNCIL  
CYNGOR CAERDYDD**



**MINUTES**

CABINET MEETING: 15 DECEMBER 2022

Present: Councillor Huw Thomas (Leader)  
Councillors Peter Bradbury/ Julie Sangani (job share)  
Councillor Jen Burke-Davies  
Councillor Dan De'Ath  
Councillor Russell Goodway  
Councillors Norma Mackie/ Ash Lister (job share)  
Councillor Sarah Merry  
Councillor Chris Weaver  
Councillor Caro Wild

Observers: Councillor Joe Carter  
Councillor Jon Lancaster

Officers: Paul Orders, Chief Executive  
Chris Lee, Section 151 Officer  
Davina Fiore, Monitoring Officer  
Sarah McGill, Corporate Director  
Joanne Watkins, Cabinet Office

Apologies: Councillor Lynda Thorne

**56 MINUTES OF THE CABINET MEETING HELD ON 17 NOVEMBER 2022**

The minutes of the Cabinet meeting held on 17 November 2022 were approved

**57 RACE EQUALITY TASK FORCE- RESPONSE**

Following the publication of the Race Equality Task Force report in March 2022, the Cabinet considered the response to the report. It was proposed that all 28 recommendations be accepted and the response outlined actions that the Council would take towards addressing racial inequality and making services responsive to and reflective of the diversity of the city.

**RESOLVED:** that the Council's response to the recommendations of the Race Equality Taskforce as set out in Appendix 1 be approved

## 58 ONE PLANET CARDIFF ANNUAL REVIEW

The Cabinet received a report outlining progress on the One Planet Cardiff Action Plan. Since the action plan was considered, it was reported that the Welsh Government carbon reporting framework methodology had been amended to “activity” based reporting under a number of headings. It was therefore difficult to compare this year’s reporting with the Council’s published baseline. The report however contained details of progress against the various elements of the action plan and contained a review of future actions required.

**RESOLVED:** that

- 1) the progress made on carbon reduction in the first year of One Planet Cardiff Action be noted
- 2) the Pathway modelling methodology be approved as a tool for onward monitoring and decision making
- 3) the refinement and progress of the One Planet Cardiff Action Plan be noted and approved
- 4) the intention to hold a Climate Change Convention in 2023 be approved

## 59 LOCAL AIR QUALITY MANAGEMENT

The Local Air Quality Management Annual Progress report was received, which provided details of the ratified data for air quality monitoring in 2021 within Cardiff. The report also outlined details of the legal direction in relation to Castle Street and it was reported that work was ongoing to produce a final plan to comply with the direction.

**RESOLVED:** that

1. the monitored results gathered in 2021 be noted and accepted and approval be given to the 2022 Annual Progress Report (as attached as Appendix 1) for submission to Welsh Government for approval by the 31<sup>st</sup> of December 2022.
2. the receipt of the updated Air Quality Legal Direction issued on the 21<sup>st</sup> September 2022 be noted and it be noted that work to comply with the Direction is being progressed.

## 60 ST DAVID’S HALL

**Appendices 1-7 of this report are not for publication as they contain exempt information of the description contained in paragraphs 14 and 16 of Part 4 of Schedule 12A of the Local Government Act 1972. In all the circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information.**

*Councillor Norma Mackie declared a personal interest in this item as a 'Friend of St David's Hall'*

The Cabinet considered a report outlining options for the future operation of St David's Hall following an offer made by Academy Music Group to secure investment in the building and to protect the long-term delivery of the classical music programme. It was reported that a Voluntary Ex-Ante Transparency notice would be published to provide transparency to the market of the intention to enter into the proposed contractual arrangements. It was also proposed that consultation on the future of St David's Hall would take place as part of the budget consultation.

It was reported that the report had been considered by the Economy & Culture Scrutiny committee and their comments had been circulated at the meeting. An Addendum to the report, containing information originally contained within the Confidential Appendices to the report was circulated at the Cabinet meeting and published on the website.

**RESOLVED:** that

1. the Outline Business Case attached at Confidential Appendix 4 be noted
2. Approval, in principle be given to the offer from AMG (set out as Option 2 in this report) and further described in the Outline Business Case at Confidential Appendix 4, the draft Heads of Terms at Confidential Appendix 5 and authority be delegated to the Director of Economic Development in consultation with the Cabinet Member for Culture, Parks and Events, the Section 151 Officer and the Legal Officer to progress negotiations with AMG and for Legal Services to prepare proposed contractual documentation.
3. It be noted that consultation will be undertaken as follows:
  - a. Public consultation as part of the Council's budget setting process, and;
  - b. Consultation with affected staff in relation to a potential transfer to AMG under the Transfer of Undertaking (Protection of Employment Regulations 2006 ("TUPE").
4. It be noted that the findings of the consultation, together with an assessment of best value of the AMG offer will be brought back to Cabinet for consideration as part of a final decision on whether to proceed with the offer from AMG.

**61 SCHOOL ORGANISATION PROPOSALS: MOORLAND EARLY YEARS UNIT AND REPLACEMENT FLYING START: PROCUREMENT OF CONTRACTOR FOR CONSTRUCTION**

**Appendices 2 and 5 to this report are exempt from publication on the basis that it contains information of the description set out in paragraphs 14 and 21 of Part 4 of schedule 12 A of the Local Government Act 1972 and in all the**

**circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information.**

The Cabinet received a report seeking authorisation for the contract required from the Council's Education Asset Renewal programme, subject to Ministerial approval for the enhanced Flying Start Welsh Government contribution, to enable the Moorland Primary School project to establish a special resource base to commence. It was noted that details of the project had been subject to previous Cabinet reports and that this report related to the authorisation of funds only.

**RESOLVED:** that

- (i) Authorisation be given for the funds for the main contract required from the Council's Education Asset Renewal programme, subject to Ministerial approval for the enhanced Flying Start Welsh Government contribution, to enable the Moorland Primary School project to commence.
- (ii) subject to Ministerial approval for the enhanced Flying Start Welsh Government contribution, responsibility be delegated to the Director of Education (in consultation with the Director of Economic Development and S151 Officer) for all matters relating to the procurement of the project (up to and including award) and completion of ancillary documents (as applicable).

**62 AGREED SYLLABUS FOR RELIGION, VALUES AND ETHICS (CARDIFF) AND TERMS OF REFERENCE**

A report containing the Cardiff Agreed Syllabus for Religious Education, the Cardiff Agreed Syllabus for Religion, Values and Ethics and the revised Terms of Reference for the Standing Advisory Council for Religious Education was received.

**RESOLVED:** that

1. the readoption of the current Cardiff Agreed Syllabus for Religious Education attached at Appendix 1 be supported and agreed.
2. the new Cardiff Agreed Syllabus for Religion, Values and Ethics attached at Appendix 2 be supported and agreed
3. the revised Terms of Reference (Revised Constitution of SACRE/SAC for RVE, October 2022) attached at Appendix 3 be agreed

**63 COUNCIL HOUSING RENT & SERVICE CHARGE SETTING 2023/24**

Cabinet considered a report detailing the proposed approach to the setting of rents and service charges on council owned dwellings in the Housing Revenue Account for the financial year 2023/4. It was noted that the main source of income into the HRA was in the form of rents and service charges and it was proposed that the rent and service charges be increased by 6.5%, which was below the current level of inflation at 11.1%. A review - using the Joseph Roundtree formula

- had shown that the rents remain affordable to those on low earnings. It was reported that even with the rent increase there would still be a deficit within the HRA of £2.2 millions which would be met through efficiencies

**RESOLVED:** that the proposed approach for rent and service charge setting for Council owned dwellings for financial year 2023/2024 be approved

## 64 CARDIFF BAY REGENERATION

***Appendices 2, 3, 4 6,7, 8 and 9 of this report are not for publication as they contain exempt information of the description contained in paragraphs 14, 16 and 21 of Schedule 12A of the Local Government Act 1972.***

An update on the Council's priority to establish Cardiff Bay as a leading UK urban visitor destination was received. As part of this priority authority was sought for the disposal of land to attract two new attractions in Cardiff Bay. Nordic Urban were seeking to deliver a sea pool and Finnish sauna attraction at the derelict graving docks. The Council was not being asked for a financial contribution to the project, other than providing the land at a nominal rent.

A second company Skyview Towers were seeking to locate their first UK based rotating viewing platform attraction on land above the Butetown Tunnel. It was proposed to enter into an agreement to lease restricted to leisure use.

**RESOLVED:** that

- 1) Agreement in principle be given to dispose of land to Nordic Urban in accordance with the Heads of Terms set out in Confidential Appendix 3.
- 2) Agreement in principle be given to dispose of land to Skyview Towers Ltd in accordance with the Heads of Terms set out in Confidential Appendix 7.
- 3) authority be delegated to the Director for Economic Development in consultation with the Cabinet Member for Investment and Development, the Section 151 Officer and the Legal Officer to deal with all matters relating to the completion of the disposals set out in recommendations (1) and (2) above.

## 65 CORPORATE SAFEGUARDING POLICY 2022-2025

The Cabinet received the refreshed Corporate Safeguarding Policy which described both the policy commitment that the Council makes and the arrangements it has in place to ensure that all of its Directorates, employees and people working on behalf of the Council play their part in safeguarding and promoting the well-being of children and adults who may be at risk of harm.

**RESOLVED:** that the Cardiff Council Corporate Safeguarding Policy (2022-2025) be approved

## 66 CORPORATE RISK MANAGEMENT - QUARTER TWO 2022/23

An update on the risk management position at quarter two 2022/23. During quarter 2, two risks were escalated in relation to financial resilience and budget monitoring.

**RESOLVED:** that the content of the Corporate Risk Register be noted

## 67 CALCULATION OF COUNCIL TAX BASE 2023/24

The Cabinet considered the Council Tax Base for 2023/24 which the authority is required to calculate in accordance with the statutory provisions governing Council Tax under Part 1 of the Local Government Finance Act 1992.

**RESOLVED:** that

- (1) the calculation of the Council's tax base for the year 2023/24 be approved.
- (2) that pursuant to this report and in accordance with the Local Authorities (Calculation of Tax Base) (Wales) Regulations 1995, as amended, the amount calculated by Cardiff Council as its Council Tax Base for the year 2023/24 shall be 150,482.
- (3) that pursuant to this report and in accordance with the Local Authorities (Calculation of Tax Base) (Wales) Regulations 1995, as amended, the amounts calculated by the Council as the Council Tax Base for the year 2022/23 in the community areas subject to a precept shall be as follows:

Lisvane	2,866
Pentyrch	3,605
Radyr	4,057
St. Fagans	1,941
Old St. Mellons	2,485
Tongwynlais	826

- (4) that the arrangements for the payment of precepts in 2023/24 to the Police and Crime Commissioner for South Wales be by equal instalments on the last working day of each month from April 2023 to March 2024; and to the Community Councils, be by one payment on 1 April 2023, reflecting the same basis as that used in 2022/23; and the precepting authorities be advised accordingly.

## 68 COUNCIL TAX PREMIUMS

The Cabinet considered a report providing information in relation to the discretionary powers the Council has to charge higher amounts of Council tax on certain properties as defined by the Housing (Wales) Act 2014. The Council currently charged 150% on long term empty dwellings since 1 April 2019 (a premium of 50%). It was proposed to consult to increase this premium to 100% (a charge of 200%) from April 2023.



It was further proposed to consult on the proposal to place a premium of 100% on dwellings that are occupied periodically. A year's notice was required for this so it was proposed to take effect from April 2024.

**RESOLVED:** that

- (1) the information in respect of the discretionary powers relating to Council Tax Premiums as outlined in this report be noted
- (2) approval be given to the undertaking of a consultation exercise on the application of a Council Tax Premium for periodically occupied dwellings and increasing the level of premium for long term empty dwellings.
- (3) It be noted that the results of the consultation exercise will inform a final decision to be taken at Council early in 2023.

69 **LOCAL BROADBAND FUND - IMPROVING CONNECTIVITY TO POORLY SERVED PREMISES**

Cabinet received a report outlining details of a grant funding award from Welsh Government for the delivery of gigabit capable fibre broadband to areas which are currently poorly served by the commercial marketplace.

**RESOLVED:** that

1. the funding awarded to Cardiff Council by Welsh Government for the roll-out of gigabit capable fibre broadband to premises identified as outside commercial roll-out plans for the next 3 years be accepted
2. authority be delegated to the Chief Digital Officer in consultation with the Cabinet Member for Finance, Modernisation and Performance to deal with all aspects of the procurement process and ancillary matters up to and including award of contract.

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**MINUTES**

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**CABINET MEETING: 22 DECEMBER 2022**

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**Present:** Councillor Huw Thomas (Leader)  
Councillors Peter Bradbury/ Julie Sangani (job share)  
Councillor Jen Burke-Davies  
Councillor Dan De'Ath  
Councillor Russell Goodway  
Councillors Norma Mackie/ Ash Lister (job share)  
Councillor Sarah Merry  
Councillor Lynda Thorne  
Councillor Chris Weaver  
Councillor Caro Wild

**Observers:** Councillor Adrian Robson  
Councillor Rhys Taylor

**Officers:** Paul Orders, Chief Executive  
Chris Lee, Section 151 Officer  
Sarah McGill, Corporate Director  
Joanne Watkins, Cabinet Office

**70 2023/24 BUDGET MODELLING UPDATE AND PROPOSALS FOR  
CONSULTATION**

*Councillor Norma Mackie declared a personal interest in this item as a 'Friend of St David's Hall'*

The Cabinet received a report providing an update on the approach to the Budget 2023/24. The provisional settlement for Local Government was received on 14 December 2022 and Cardiff would receive a 9% increase in Aggregate External Finance which was an improvement on the amount the Council had been planning for. However there was still a predicted budget gap of £23.497 million and the report contained budget proposals for public consultation. These proposals would be supplemented by a range of efficiency savings.

**RESOLVED:** that

- (1) the updated Budget Position for 2023/24 at Provisional Settlement Stage be noted
- (2) the proposed approach to Budget Consultation for 2023/24 be agreed and it be noted that the formal budget consultation will commence on the 23rd December 2022 and run until 29th January 2023. The results of the consultation process will then be considered by Cabinet in preparing their final 2023/24 budget proposal

DRAFT

**CARDIFF COUNCIL  
CYNGOR CAERDYDD****CABINET MEETING: 19 JANUARY 2023**

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**WEED CONTROL TRIAL****CULTURE, PARKS & EVENTS (COUNCILLOR JENNIFER BURKE-DAVIES) & TRANSPORT AND STRATEGIC PLANNING (COUNCILLOR DAN DE'ATH)****AGENDA ITEM: 2**

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**Reason for this Report**

1. To report back to Cabinet on the outcomes from the Weed Control Trial and to agree the approach to the future use of glyphosate based products within the public realm.

**Background**

2. Through its Duty of Care responsibilities, the Council implements weed control regimes in the public realm as uncontrolled growth can, over time, result in risks including trip hazards to pedestrians, visibility hazards to road users and the erosion of and damage to hard infrastructure.
3. In addition to potential litigation the presence of uncontrolled weeds can also impact significantly on the look and feel of place and appropriate management regimes are essential from a wider economic perspective.
4. The Council has a well-established integrated approach to weed management across its landholdings using multiple control methods including, hand weeding, hoeing, forking, mulching, hand and mechanical sweeping, and the application of approved herbicides.
5. Where there are no viable alternatives to control, the Council applies glyphosate based products, the predominate use being for the control of weeds on hard surfaces. Under current arrangements three treatments are made annually, throughout the growing season to provide sufficient control.
6. Glyphosate is a systemic herbicide which enters the foliage and works its way through to the root killing the entire plant. Glyphosate is approved for use in the public realm in the United Kingdom, by the Chemicals Regulations Division of the Health and Safety Executive. The licence for

the use of glyphosate in the United Kingdom extends to the 15<sup>th</sup> December 2025. No hazard warnings are contained on the product label.

7. The scale of pavement weed control is significant with the Council's responsibilities extending over a length excess of 2,000 kilometres. The Council is also responsible for the control of weed on hard surfaces across other Council land holdings including parks and housing land.
8. The application of herbicides within the public realm is delivered, under contract and through the Council's weed control partner, Complete Weed Control (South & Central Wales) Ltd.
9. Where glyphosate based products are used, the herbicide is applied at minimum quantity through the targeting of plant chlorophyll detected by precision sensors fitted to the application machines. The quantity of herbicide used is further reduced by the inclusion of spray additives which support efficacy. Precision targeting and the use of spray additives allows dilution rates lower than manufacturers recommendations.
10. In September 2019, the Environmental Scrutiny Committee published a report titled Managing Biodiversity & Natural Environment in Cardiff. The report contained forty recommendations one of which centred around the use of glyphosate based products for the purposes of weed control throughout the city, the report is attached as a background paper.
11. In response to the Committees recommendations concerning the use of alternative weed control products, and through a Cabinet report in November 2020 it was determined that a trial utilising such should take place and a budget allocation was made through the financial resilience mechanism for 2021/22. The Cabinet report and relevant appendix is attached as a background paper.

## **Issues**

12. The Council undertook a trial, focusing on pavement weed control which commenced in the Spring of 2021 and commissioned an independent assessment of the process and outcomes through Advanced Invasives Ltd, a leading invasive plant consultancy in the United Kingdom. Complete Weed Control (South & Central Wales) Ltd, the Council's weed control partner carried out the control methods.
13. The trial sought to measure the cost, environmental, customer and quality factors associated with the use of the alternative products trialled, along with the standard glyphosate based product used. A full life cycle analysis exercise was also undertaken quantifying the use of water and fuel.
14. The two alternative products used were, acetic acid within the Riverside ward and hot foam within the Pontprennau & Old St. Mellons ward. The Penylan ward was used as a reference ward where the standard regime using a glyphosate based product was applied.

15. The table below summarises the outcomes from the trial measured against the four key criteria.

Control Method	Cost	Environmental	Customer	Quality
Glyphosate	Low	Low	High	High
Acetic Acid	Medium	Medium	Low	Low
Hot Foam	High	High	High	High

16. The trial concluded that, based on the key criteria, the glyphosate based product used provided the most effective and sustainable weed control. hot foam was proven to be effective but unsustainable, with acetic acid ineffective and unsustainable. The final project report is attached at Appendix A.
17. In terms of cost factors and based on operational experience and outcomes from the trial it is estimated that the cost of utilising acetic acid on pavement surfaces, when compared with the use of glyphosate based products would result in a rise of 667% from £196,020 to £1,306,800. With regard to the utilisation of hot foam it is estimated that costs would rise to £1,960,200 an increase of 1000%.
18. The manufacturers of all products used in the trial were invited to comment on a draft Trial Report, responses were received from two manufacturers and updates were made to the report, and comments noted as a consequence.
19. The report cites trials undertaken by other organisations, over time, of a small scale and short-term nature and where controls are not directly compared. The Cardiff Trial is the most comprehensive scientific evidence led trial undertaken by a local authority in the United Kingdom, on a large scale, considering long term outcomes with direct control comparisons.
20. Non-herbicide weed control is undertaken through our network of friends of groups and volunteers, both in parks and the wider public realm, under the supervision of the Council and through robust risk assessments. This approach helps to improve environmental quality while also engendering a sense of ownership within the local community.
21. The Council is committed to reducing the area(s) of land over which herbicides are used which will, in turn have an impact on reducing the

volume of glyphosate based products used. The volumes of herbicide used will however fluctuate based on factors that include climatic conditions, infrastructure condition and mechanical and non-mechanical sweeping regimes.

22. In its 2019 report the Environmental Scrutiny Committee also recommended that the Council publishes details of herbicide use, this recommendation was implemented on the close of the 2020 season and an annual update is provided.
23. The Council continually monitors research and product development relating to weed control, and shares information with Greenspace Wales, the Parks Core Cities Group, the Association of Public Service Excellence and Amenity Forum, in order to inform practice.
24. The most recent information note relating to glyphosate was published by Welsh Government in August 2018. The note sets out the policy position for Welsh Government, the regulatory requirements for its use, the benefits of appropriate use and the importance of best practice and research, citing the important role undertaken by the Amenity Forum. The information note can be found at Appendix B.
25. In August 2022, the Amenity Forum, the United Kingdom's lead industry body representing the amenity sector promoting best practice principles in the use of products to control weeds, pests and diseases published an update on the use of glyphosate. Safety concerns generated by the International Agency for Research on Cancer who in 2015 classified glyphosate as carcinogenic are challenged by the Forum. The Forum contends that decisions made by global and regulatory research agencies, over time, render the IARC assessment as flawed. The update can be found at Appendix C.
26. The most recent briefing by the Association of Public Service Excellence, Glyphosate - Where Do Local Authorities Stand ? was published in 2019. The briefing, which is attached at Appendix D, sets out the key issues faced by local authorities, but is inconclusive.

### **Local Member consultation**

27. Briefings were held with local ward members in wards where alternative products were used, on a pre and post trial basis.

### **Reason for Recommendations**

28. To determine the most appropriate herbicide for use by the Council as part of its integrated approach to weed management, taking into account, cost, environmental customer and quality criteria.

### **Financial Implications**

29. This report recommends the continuation of the current weed control management approach and does not identify any additional funding



requirements. The ongoing processes and related costs will be managed within existing budgets.

### **Legal Implications**

30. The legal implications arising from the matters raised in this report are highlighted in the body of and appendices to this report. Appendix D, in particular refers in more detail to the position for local authorities' use of weed control products. Specific legal advice should be sought on any individual matters on a case by case basis that may arise from use of such products.

### ***Equalities & Welsh Language***

31. In considering this matter the decision maker must have regard to the Council's duties under the Equality Act 2010 (including specific Welsh public sector duties). Pursuant to these legal duties Councils must, in making decisions, have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. Protected characteristics are: (a) Age ( b ) Gender reassignment ( c ) Sex (d) Race – including ethnic or national origin, colour or nationality, (e) Disability, (f) Pregnancy and maternity, (g) Marriage and civil partnership, (h) Sexual orientation (i) Religion or belief –including lack of belief.
32. When taking strategic decisions, the Council also has a statutory duty to have due regard to the need to reduce inequalities of outcome resulting from socio-economic disadvantage ('the Socio-Economic Duty' imposed under section 1 of the Equality Act 2010). In considering this, the Council must take into account the statutory guidance issued by the Welsh Ministers ([WG42004 A More Equal Wales The Socio-economic Duty Equality Act 2010 \(gov.wales\)](#)) and must be able to demonstrate how it has discharged its duty.
33. An Equalities Impact Assessment aims to identify the equalities implications of the proposed decision, including inequalities arising from socio-economic disadvantage.
34. The decision maker should be mindful of the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards.

### **The Well-being of Future Generations (Wales) Act 2015**

35. The Well-Being of Future Generations (Wales) Act 2015 ('the Act') places a 'well-being duty' on public bodies aimed at achieving seven national well-being goals for Wales - a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible. In discharging its duties under the Act, the Council has set and published well being objectives designed to maximise its contribution to achieving the national well being goals. The well being objectives are set out in Cardiff's Corporate Plan 2020 -23.

36. When exercising its functions, the Council is required to take all reasonable steps to meet its wellbeing objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the wellbeing objectives and must be satisfied that all reasonable steps have been taken to meet those objectives.
37. The wellbeing duty also requires the Council to act in accordance with a 'sustainable development principle.' This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:
- Look to the long term
  - Focus on prevention by understanding the root causes of problems
  - Deliver an integrated approach to achieving the seven national wellbeing goals
  - Work in collaboration with others to find shared sustainable solutions
  - Involve people from all sections of the community in the decisions which affect them

The decision maker must be satisfied that the proposed decision accords with the principles above; and due regard must be given to the Statutory Guidance issued by the Welsh Ministers, which is accessible on line using the link below: <http://gov.wales/topics/people-and-communities/people/future-generations-act/statutory-guidance/?lang=en>

### **HR Implications**

38. The recommendations contained in this report have no HR implications.

### **Property Implications**

39. There are no further specific property implications in respect of the Weed Control Trial Report. Where there are any further trails or treatment works to take place on council owned or occupied land, where appropriate, the Estates Department asset management team should be consulted beforehand to consider any estate management issues.

## **RECOMMENDATIONS**

Cabinet is recommended to

1. Note the content of this report and the content of the Weed Control Trial 2021 - Final Project Report.
2. Continue with the current approach of integrated weed control management and use of glyphosate based products.

3. Continue to take measures to reduce the use of the glyphosate based products on all Council landholdings, employing alternative control measures as appropriate.
4. Continue to monitor product development for the purposes of weed control within the public realm and consider for future use based on environmental, quality, cost and criteria.
5. Continue to support the role and work of Friends of Groups and volunteers in the management of weeds throughout the city.

<b>SENIOR RESPONSIBLE OFFICER</b>	<b>Neil Hanratty</b> <b>Director for Economic Development</b>
	13 January 2022

*The following appendices are attached:*

*Appendix A - Weed Control Trial 2021 - Final Project Report*

*Appendix B - Welsh Government Information Note – August 2018*

*Appendix C - Amenity Forum Glyphosate Update - August 2022*

*Appendix D - APSE Briefing - Glyphosate - Where Do Local Authorities Stand ? - 2019*

*The following background papers have been taken into account*

*Managing Biodiversity and Environment in Cardiff Summary Report – Environmental Scrutiny Committee, September 2019*

*Cabinet Response to Environmental Scrutiny Committee - Managing Biodiversity & Natural Environment in Cardiff, 19<sup>th</sup> November 2020 & Appendix 1.*

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# Cardiff Council

## Testing & Evaluation

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Weed Control Trial 2021: Final Project Report

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**Advanced Invasives**

Version 2 | 28<sup>th</sup> October 2022

**ADVANCED INVASIVES**

## Document

**Final report:** this document contains the final project report for testing and evaluation of pavement weed control methods by Advanced Invasives on behalf of Cardiff Council.

## Authors

- Draft:** Dr Daniel Jones  
Dr Trisha Toop (Life Cycle Analysis Report)
- Review:** Dr Daniel Jones  
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- Release:** Dr Daniel Jones

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## Advanced Invasives

**Advanced Invasives is the leading invasive plant species consultancy in the UK.**

We solve invasive plant species problems, with a specialist focus on Japanese knotweed and the complex technical, legal and public relations challenges faced by large landowners, private companies and herbicide manufacturers.

Based in South Wales, Advanced Invasives was founded in 2016 by Dr Dan Jones (PhD, MSc, BSc, MA, CIEEM) from Swansea University's Department of Biosciences out of a desire to set a new standard of evidence-led invasive species management.

We work across six main areas with our clients: expert witness, research and product testing, best practice strategy, complex ecological projects, continuing professional development (CPD) and public guidance services.

## Summary of research findings

In 2021 Cardiff Council and its weed control contractor trialled three pavement weed control methods across the City of Cardiff to find out how effective and sustainable each method was, as measured against four key criteria: cost, environmental, customer satisfaction and quality. Control methods trialled included glyphosate-based herbicide (applied three times per year), acetic acid-based herbicide (applied four times per year) and hot foam herbicide (applied three times per year). Efficacy and sustainability results showed that glyphosate was the most sustainable, being cost effective, with low environmental impacts and high customer satisfaction and quality. In contrast, acetic acid delivered intermediate costs and environmental impacts with low customer satisfaction and quality, while hot foam generated high costs and environmental impacts, but high customer satisfaction and quality.

Based on the cost, environmental, customer and quality criteria (efficacy and sustainability criteria) measured, the most effective and sustainable weed control method currently available for pavement weed control in the UK involves the use of glyphosate-based herbicide.

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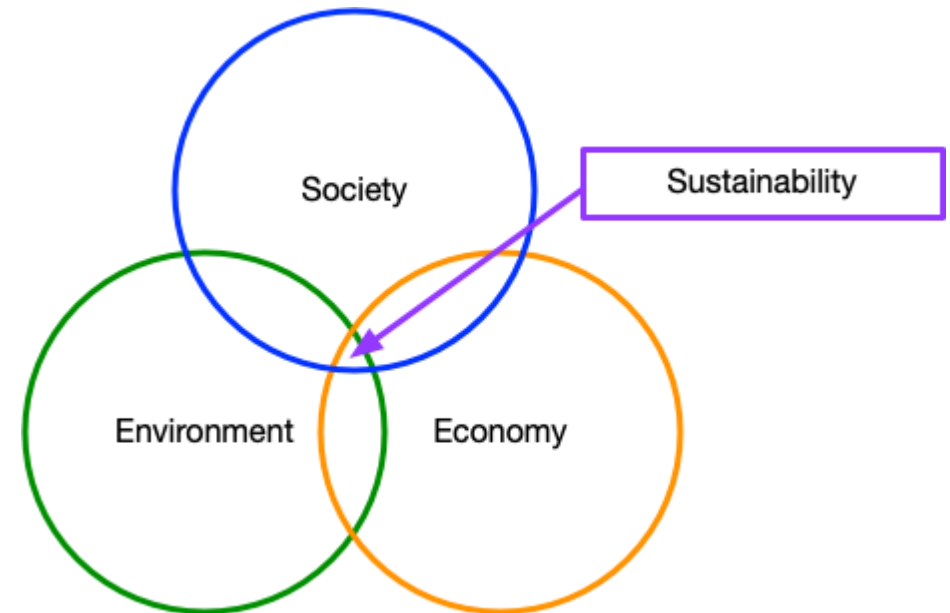
## 1. Introduction

### 1.1 Sustainability

Sustainability is an often-used term with a wide range of meanings and interpretations. Commonly, sustainability means that current economic activities are carefully considered in order that such decisions do not place an unequal burden on future generations (Foy 1990, Tisdell 1996, Giddings et al. 2002). In practice, this means that we reduce our impacts on the environment now, rather than continuing with ‘business as usual’ and leaving future generations to deal with the problems that we cause today. More generally, sustainability is now often used in the context of the capacity for Earth’s biosphere and human civilisation to co-exist in the present and in the longer term.

Sustainability involves three sectors, including environment (ecology), society (people, including those who manage weeds) and economy (monetary; Figure 1.1). Sustainability in the context of the three sectors is difficult to resolve because of the timescales in which they operate: economic timescales are shorter than social, which are in turn shorter than ecological. Further, although sustainability is presented as bringing the three sectors together in a balanced way and resolving conflicts, this is often not the case. Economic considerations are frequently placed above societal and environmental concerns and land management systems will not be sustainable unless they are economic in the present and remain so in the future. Crucially, a project may be economically viable in the short-term, yet in the longer term could be unsustainable with respect to other sectors (Foy 1990, Tisdell 1996, Giddings

et al. 2002).



**Figure 1.1:** Sustainability in the context of the environment (ecology), society (people, including those who manage weeds) and economy (monetary). Note that ‘sustainability’ occupies a small area of overlap between these three sectors.



There are at least two ways in which sustainability is used in the context of land management systems:

1. Describe properties or features of outputs from the system and/or
2. Refer to whether use/adoption of a system will be continued or maintained in the longer term.

Even when sustainability is used in the context of long-term adoption (second context), sustainability in the sense of system outputs (first context) will be relevant as it should determine whether a system will be adopted or maintained. From an environmental and/or societal perspective, weed management practices cannot be judged without consideration of impacts beyond the area of interest (Tisdell, 1996, Jones, 2015).

Focussing on the amenity sector, calculating how sustainable processes are is made difficult by different ways of measuring things (multiple evaluation criteria), working in different places and over different time periods (i.e., a range of assessment criteria at different spatial and temporal scales). This is often made worse by the lack of evidence-based research investigating the efficacy of control methods and their respective environmental and economic costs (Tisdell 1996, Hanegraaf et al. 1998, Giddings et al. 2002, Jones and Eastwood 2019). However, control methods are most likely to be adopted sustainably when they:

- Are less costly than the alternatives
- Involve (comparatively) low levels of investment or financial requirements
- Create little risk or uncertainty (i.e., they are evidence-based)

- Define control and management timeframes through evidence-based research (Cobb & Reade 2010, Wynn et al. 2014, Jones and Eastwood 2019).

### Welsh Government sustainability legislation

In 2015 Welsh Government introduced The Well-being of Future Generations (Wales) Act 2015 which requires public bodies in Wales to think about the long-term impacts of their decisions, to work better with people, communities and each other, and to prevent persistent problems such as poverty, health inequalities and climate change (Welsh Government 2015). This legislation that is unique to Wales aims to ensure that future generations have at least the same quality of life as we do now, i.e., ensuring that sustainability underpins long-term decision-making at the local level through to the national scale. Effective control of pavement weeds requires such long-term thinking and where this is informed by evidence-based research, the impacts of these processes on climate change can be minimised, particularly where the results can be scaled to the Wales-level.

### 1.2 Pavement weed control

In the UK, there are three key sectors where weed management is practised extensively:

1. **Agricultural** - e.g. arable and pastoral farming.
2. **Horticultural** - non-agricultural (e.g. flower production, landscape design).
3. **Amenity** - non-agricultural (e.g. public sports grounds, hard surfaces).

Amenity hard surfaces are defined as:

*‘areas with a ground-covering, such as asphalt, paving-stone and concrete, or surfaces with a top layer of sand, gravel or crushed material.’*

Weeds grow easily in the open spaces present, such as joints and cracks (Rask & Kristoffersen 2007). Within the urban environment, weed management on hard surfaces is undertaken to:

- Ensure public safety - minimise the risk of slips, trips and falls to the public and ensure adequate surface drainage of roads (weed growth can reduce water flow).
- Reduce infrastructure asset maintenance costs - weed growth impairs the function of hard surfaces and the growth of roots reduces their useful lifetime (i.e., replacement or renewal of pavement materials are required).
- Improve the visual appearance of infrastructure (highly subjective; Hansson et al. 2006, Ramwell 2006, Fagot et al. 2011, Rask et al. 2013, East Malling Research 2015).

Local government has a duty of care to maintain safe pavements for residents (i.e., removing weed trip hazards), minimise the cost of infrastructure asset maintenance and maintain clean pavements for residents. Further, Different pavement types need different levels of weed control (Rask et al. 2013). To successfully achieve these objectives, control methods must be effective in addition to being economically sustainable (practical and cost-effective) to remain viable. Further, methods should aim to minimise herbicide, fuel and

water use to ensure the environmental sustainability of weed management (Wynn et al. 2014).

However, herbicide-based weed control on amenity hard surfaces often leads to different environmental issues compared with their agricultural use. Hard surfaces are normally constructed for rapid penetration of water or to encourage run-off to avoid flooding. As a result, contamination of nearby ditches, drains, sewage systems or ground water with herbicide may occur, as these compounds do not stick to the surface (absorption) and degrade over time as they would in agricultural soils. As a result of this, some Northern European countries have restricted the use of herbicides for weed control in urban areas, increasing the need to investigate alternative control methods (Kempenaar & Saft 2006, Rask & Kristoffersen 2007, Fagot et al. 2011).

### 1.3 Herbicide regulation

In response to public concern and medical evidence demonstrating the harmful effects of pesticides on human and wildlife health, the most common herbicide-based weed control methods are coming under considerable scrutiny. While increasingly restrictive national and supranational legislation has minimised the range of herbicide active ingredients (herbicide types) that can legally be applied and reduced the overall quantities of herbicide used, there is considerable appetite for alternative weed control methods to be found which can reduce overall herbicide use still further. However, few of these alternative weed control methods have been evaluated in terms of control method efficacy (weed killing ability) and overall environmental and economic impact and sustainability.

To address this knowledge gap, Advanced Invasives recommended independent evaluation of pavement weed control methods trialled by Cardiff Council under realistic ‘real world’ conditions. Further, to determine treatment sustainability, key economic and environmental criteria associated with treatment deployment were considered to inform overall council decision-making.

#### **1.4 Integrated Pest Management (IPM)**

Amenity sector weed management may be achieved using a range of weed control methods, including:

- Cultural (preventative)
- Physical (mechanical)
- Biological (biocontrol or bioherbicides)
- Chemical (herbicides, also known as plant protection products; PPPs)
- Integrated Pest Management (IPM)

True IPM systems combine cultural, physical, biological and/or chemical methods, helping to mitigate selection of resistant weed populations (Van der Weide et al. 2008, Harker & O’Donovan 2013, Cordeau et al. 2016). Figure 1.2 summarises the pros and cons of IPM weed control methods available to the UK amenity sector. Ideally, pavement weed control should be directed toward immature annual and perennial plants for a short period after plant emergence. This is because at this time, weeds have accumulated fewer resources from which to recover from control method application (Rask & Kristoffersen 2007).

**Figure 1.2:** Pros and cons of Integrated Pest Management (IPM) weed control methods available to the UK amenity sector (De Cauwer et al. 2013, Rask et al. 2013, EMR 2015b, Bristol City Council 2017, Hanson et al. 2006, Kempenaar & Saft 2006, SKL 2006, Kempenaar et al. 2007, Rask & Kristoffersen 2007, Neal & Senesac 2018, APSE 2019a, APSE 2019b, APSE 2020, Martelloni et al. 2020, APSE 2021, Corbett pers comm. 2021, Kay pers comm. 2021, Mason pers comm. 2021, South Lanarkshire Council 2021, City of York Council 2022).

Control category	Desired effect	Control method(s)	Examples	How do they work?	Does it work?	Positives	Negatives
Cultural	Prevent and/or minimise weed population growth	Design and build of infrastructure	Planning and initial design integration	Prevent and/or minimise weed population growth	Yes	- Long-term reduction in costs and carbon emissions associated with weed management	- Costly, resource and carbon intensive in the short-term - Long lead-in time
Physical	Bring weed population under control	Machine-based	<b>Cutting:</b> - Mower - Flail	Destroy above ground weed growth	Yes	- Does not use herbicides	- Costly and carbon intensive in the short to longer-term - Increased treatment frequency relative to glyphosate-based herbicides
			<b>Friction:</b> - Steel brushes	Destroy above ground weed growth	Yes	- Does not use herbicides	- Costly, resource and carbon intensive in the short to longer-term (e.g. production of steel for brushes is carbon intensive) - Brush systems involve very heavy work (reduce shift length to minimise occupational vibration) - Increased treatment frequency relative to glyphosate-based herbicides
			<b>Thermal:</b> - Flame - Hot water - Hot foam - Electricity	<b>Flame, hot water &amp; hot foam:</b> - Destroy above ground weed growth  <b>Electricity:</b> - Destroy above and below ground weed growth	<b>Flame &amp; hot water:</b> - No  <b>Hot foam &amp; electricity:</b> - Yes	- Does not use herbicides  <b>- Hot foam:</b> 1) Fewer excluded areas 2) Can be applied in all weather conditions	- Costly, resource and carbon intensive in the short to longer-term - Currently use is unregulated - Increased treatment frequency relative to glyphosate-based herbicides - H&S risks may arise  <b>- Flame:</b> excluded areas as flame poses a significant H&S and environmental risk (cannot be used near parked cars/other flammable materials (e.g. leaves)
		Labour-based	<b>Cutting:</b> - Mower - Strimmer - Brush cutter	Destroy above ground weed growth	Yes	- Does not use herbicides	- Costly and carbon intensive in the short to longer-term - Increased treatment frequency relative to glyphosate-based herbicides - Can cause overuse injuries to operator

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Figure 1.2 continued.

			<b>Friction:</b> - Hoe	Destroy above ground weed growth	Yes	- Does not use herbicides	- Costly in the short to longer-term - Increased treatment frequency relative to glyphosate-based herbicides - Can cause overuse injuries to operator
			<b>Thermal:</b> - Flame	<b>Flame:</b> - Destroy above ground weed growth	Yes	- Does not use herbicides	- Currently use is unregulated - See H&S risks above
<b>Biological</b>	Bring weed population under control	Biocontrol or bioherbicides	N/A	Minimise weed population growth	N/A	N/A	N/A
<b>Chemical (PPPs)</b>	Bring weed population under control	Machine and/or labour-based	<b>Systemic herbicide:</b> - e.g. glyphosate	Destroy above and below ground weed growth	Yes	- Low costs and carbon emissions in the short to longer-term	- Uses herbicides
			<b>Non-systemic:</b> herbicide (e.g. acetic and pelargonic acids)	Destroy above ground weed growth	Variable	- Less costly and carbon intensive in the short to longer-term than other physical control methods	- More costly and carbon intensive in the short to longer-term - Increased treatment frequency relative to glyphosate-based herbicides - Products are significantly more expensive than glyphosate-based herbicides
<b>Integrated pest management (IPM)</b>	Bring weed population under control	Combine cultural, physical, biological and/or chemical methods	IPM system (e.g. brush cutter + systemic herbicide)	Destroy above and below ground weed growth	Yes	- Can be more effective than the use of individual control methods in isolation	- Do not integrate weed control methods unnecessarily, for example by treating twice with two different methods where one effective method would be sufficient (doubling the treatment mileage)

### 1.5 Aims

To test the efficacy and sustainability of three pavement weed control methods in the City of Cardiff. All three weed control methods will be compared with sites throughout the city receiving no weed management (i.e., untreated scientific 'controls'). Further, acetic acid and hot foam weed control methods will be benchmarked against the existing glyphosate-based control method under realistic 'real world' conditions.

Weed control methods will be evaluated against four key criteria:

1. **Cost** - labour is the largest cost component of weed management activities and here it is used to provide a relative economic evaluation of all weed control methods. Costs are a key consideration for the long-term economic sustainability of weed control programmes.
2. **Environmental** - frequently, the environmental impacts of weed management activities are not quantified due to cost considerations. To address this information gap, in the present study the following key variables were measured to address control method environmental sustainability:
  - **Product use (total)** - to include all herbicides and/or other compounds added to the water used for each weed control method.
  - **Water use (total)** - to include all water used in each weed control method.
  - **Fuel use (total)** - to include all hydrocarbons (diesel and petrol) used in each weed control method.
  - **Life Cycle Analysis (LCA)** - this will quantify carbon dioxide

emissions (CO<sub>2</sub>) and other environmental burdens (e.g. primary energy) associated with each control method.

3. **Customer satisfaction** - public complaint data held by Cardiff Council will be used to assess satisfaction with each of the three weed control methods; these results will be compared with previous years (i.e., change in public complaints between 2020 and 2021).
4. **Quality** - direct evaluation of weed control method efficacy (weed level). This will be undertaken 4 times, once before (pretreatment) and three times after (post treatment) weed control methods are applied.

## 2. Methods

### 2.1 Experimental design: Cost and environmental data

Prior to undertaking any of the tested weed control methods, Advanced Invasives in consultation with Dr Trisha Toop (Agri-EPI Centre) specified the data required to evaluate control method cost and environmental impacts (e.g. water use), and undertake Life Cycle Analysis (LCA) of control method processes. Data was collected and supplied by Complete Weed Control Ltd (CWC), Cardiff Council and Advanced Invasives (Figure 2.1); details of the equipment, products and materials required to undertake application of the three weed control methods are provided in Appendix 1.

LCA may differ in objectives, scope, simplicity and data intensity. However, all provide a structured, comprehensive and internationally standardised approach to environmental assessment. LCA quantifies all relevant emissions and resources consumed and the related environmental and health impacts and resource depletion issues that are associated with the entire life cycle of any goods or services ('products'). Increasingly, this approach is being recognised as an important technique for managing the environmental impacts of human activities. LCA can be defined as:

*'the interdisciplinary process of identification, analysis and appraisal of all the relevant natural and human processes, which affect the quality of the environment and environmental resources.'*

(Kempenaar & Saft 2006)

Life Cycle Analysis (LCA) treatment modelling was undertaken in SimaPro, with report preparation complying to the relevant ISO standards for LCA (Appendix 2).

Data & materials	Supplier
Product specifications (e.g. glyphosate)	CWC Cardiff Council
Product Material Safety Data Sheets (MSDS)	CWC Advanced Invasives
Equipment specifications	Cardiff Council CWC
Product required to undertake the weed control methods	CWC
Water required to undertake the weed control methods	CWC
Fuel required to undertake the weed control methods	CWC
Time taken to undertake the weed control methods	CWC

**Figure 2.1:** Data & materials specified to evaluate control method cost and environmental variables, and undertake Life Cycle Analysis (LCA) of control method processes. Data & materials suppliers are shown.

**Note:** only direct labour costs of control method application were included in the cost (economic) and LCA analyses.

**2.2 Experimental design: Customer satisfaction**

Public complaints regarding weed control standards across the City of Cardiff are collected routinely by Cardiff Council staff via telephone and email correspondence. Prior to analysis, Cardiff Council staff ensured that complaints for the three evaluation wards (Penylan, Riverside Ward, Pontprennau & Old St Mellons) related only to public perception of weed control standards and not ‘missed streets’ (i.e., streets which have not received weed control).

**Note:** a ward is a local authority area that is frequently used for electoral purposes.

**2.3 Experimental design: Quality Evaluation wards**

Three pavement weed control methods (glyphosate, acetic acid and hot foam) were assigned and trialled in three separate wards of the City of Cardiff and selected areas across the city received no weed management (i.e., untreated scientific ‘controls’): weed control methods were applied across the whole of each evaluation ward (Figure 2.2).

Ward	Weed control method	Frequency
Penylan	Glyphosate-based herbicide (Monsanto Amenity Glyphosate XL)	3 times per year
Riverside	Acetic acid-based herbicide (New-Way Weed Spray)	4 times per year
Pontprennau & Old St Mellons	Hot foam herbicide (Foamstream®)	3 times per year

**Figure 2.2:** Evaluation wards showing weed control method tested and frequency of control method application.

**Monitoring sites**

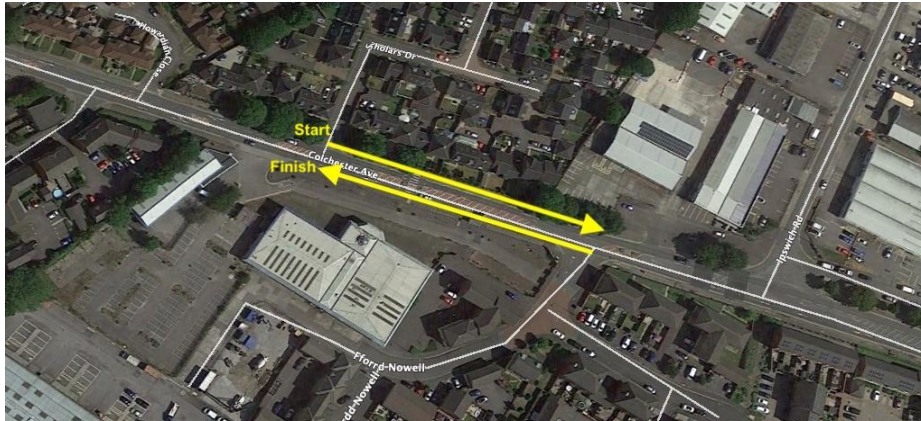
Six monitoring sites were identified in each of the three evaluation wards (total number = 18), with a further six untreated control monitoring sites (receiving no weed management) across the City of Cardiff (overall total = 24).

Monitoring sites for each evaluation ward and the untreated control monitoring sites included two:

- Main thoroughfare routes
- Representative residential street routes
- Residential street routes in close proximity to open space/parkland

Details of all monitoring sites are provided in Appendix 3. All monitoring site routes were provided with a route map (see Figure 2.3 below) showing the start and finish of the data collection route.





**Figure 2.3:** Example of monitoring site route map, showing start and finish point of route (image acquisition date 2021; map data © 2022 Google).

### Data collection

The overall aim of data collection was to evaluate treatment efficacy throughout 2021 on an on-going basis (i.e., to take comparative ‘snapshots’ of treatment efficacy throughout the growing season). Data collection was undertaken four times at each monitoring site:

1. Pretreatment - completed by 17/04/21
2. Post treatment 1 - completed by 23/06/21
3. Post treatment 2 - completed by 14/09/21
4. Post treatment 3 - completed by 02/11/21

Data collection involved digital photographic image capture (minimum image resolution settings: 4032 x 3024 pixels). Pretreatment data collection was undertaken by Advanced Invasives, while Cardiff Council staff performed all three post treatment assessments. Cardiff Council staff data collection was preceded by training from Advanced Invasives, supported by a data collection Method Statement (28/04/21).

Digital photographic image capture was undertaken 8 times total per monitoring site (four times on each side of each monitoring site route; Figure 2.3), to include:

- Start of route (looking forwards; image 1)
- Middle of route (looking backwards; image 2)
- Middle of route (looking forwards; image 3)
- End of route (looking backwards; image 4)
- **Repeated for second (opposite) side of route (images 5 to 8)**

Logical landmarks were selected as fixed point photography locations (e.g. street signs, drain covers, lamp posts) during the pretreatment assessments as opposed to marking the pavement as paint may be removed for a variety of reasons during the experiment. Landmark images preceded data image capture to ensure that the same images were captured (including landmarks) at each assessment time.

**Weed level**

Digital photographic images were retained prior to ‘batch’ image assessment by one individual (Dr Jones). Each image was assigned a ‘weed level’ following methods described by East Malling Research (2015a, b) and Bristol City Council (2017) and training received from Cardiff Council staff (Figure 2.4); weed levels were subsequently used to compare weed control method efficacy.

Criteria			Score	Level	Description
Height (mm)	Weed diameter /length (mm)	Joint coverage (mm)			
<10	<50	<10	<3	1	No noticeable weeds
10-50	50-100	0-20	4-6	2	Occasional small weeds
50-100	100-150	20-30	7-9	3	Patchy weed growth with some flowering weeds
100-150	150-200	30-40	10-12	4	Numerous weeds, many flowering, view annoys/irritates public
150-200	200-300	40-50	13-15	5	Numerous large weeds presenting risk, slip and/or trip hazard
>200	>300	>50	16-18	6	Numerous large weeds, many tall and flowering causing an obstruction

**Figure 2.4:** Weed level scale and evaluation criteria (adapted from East Malling Research (2015a, b) and Bristol City Council (2017)).

Assessments were based on the following:

- 8 observations per street (mean weed level score 1-6)
- 6 streets per ward
- 4 wards (mean weed level score 1-6)
- 192 observations per assessment
- 4 assessments
- 768 observations overall

Weed levels were based on the following areas of operation:

- Pavement
- Base of trees and tree pits

The following areas were excluded from the assessment:

- Gutters
- Gully pots (drains)
- Roads
- Landscaping

**2.4 Data analysis**

**Cost data**

Number of treatment applications (treatment frequency), treatment application time (hrs), equipment cleaning time (hrs) and the number of operators required to undertake each weed control method were calculated to provide:

- *Labour time/treatment (hrs/person)*
- *Total labour time (hrs/person)*

**Note:** due to changes in how the hot foam machine was vehicle mounted and the reduced working day length in the second and third treatments, relevant cost data was averaged across the three treatments, to provide working day mean values supplied in Figure 2.5.

Process	Average time (mins)
Equipment pickup - yard	60.0
Fill up tank (780 L)*	45.0
Empty tank**	72.9
Fill up tank (780 L)*	45.0
Empty tank**	72.9
Lunch	60.0
Fill up tank (780 L)*	45.0
Empty tank**	72.9
Equipment drop - yard	60.0
<b>Total time</b>	<b>533.8 mins (8.9 hrs)</b>

**Figure 2.5:** Working day mean values for hot foam application processes based on three treatments undertaken by CWC. Where: \*tank fill using street hydrant - this time is longer using lower pressure mains supply from a residential property (c.1 hr); \*\*tank emptying speed is based on mean time per tank, averaged across the three treatments. **Note:** older residential areas also do not have as many street water hydrants, meaning that that tank filling is slower than in newer residential areas. Application time can be increased further through operator and equipment downtime and obstacles such as inaccessible roads etc.

### Environmental data - product, water and fuel use

Number of spray tanks, spray volume (L), total product use per treatment (L) and the product/tank (L) required to undertake each weed control method were calculated to provide:

- *Total product use (L)*
- *Total water use (L)*

Treatment (machine) fuel (L), vehicle fuel (L) and fuel use/treatment (L) required to undertake each weed control method were calculated to provide:

- *Total diesel use (L)*
- *Total petrol use (L)*

### Treatment distance and units of analysis

Distance per treatment (km; glyphosate, acetic acid, hot foam) was calculated from ward route data supplied by CWC. These data were then used to calculate:

- *Labour (hrs)/km*
- *Product use (L)/km*
- *Water use (L)/km*
- *Diesel use (L)/km*
- *Petrol use (L)/km*

### Life Cycle Analysis (LCA) data

Product, water and fuel use per unit distance (km) were used to assemble the LCA.

### Customer satisfaction data

Public complaint data supplied by Cardiff Council before (2020) and after (2021) the application of the pavement weed control methods (glyphosate, acetic acid and hot foam) was used to highlight any change in customer satisfaction across three Cardiff electoral wards (Figure 3.5).

### Quality data

Following 'batch' image assessment, a single overall average (mean) weed level was calculated for the glyphosate, acetic acid and hot foam treatments and untreated control at each assessment before (pretreatment) and three times after (post treatment) weed control methods were applied.

### 2.5 Data collection and reporting

Data collection and archiving was conducted in accordance with ORETO standards (certification held by Swansea University; Advanced Invasives operate under this certificate).

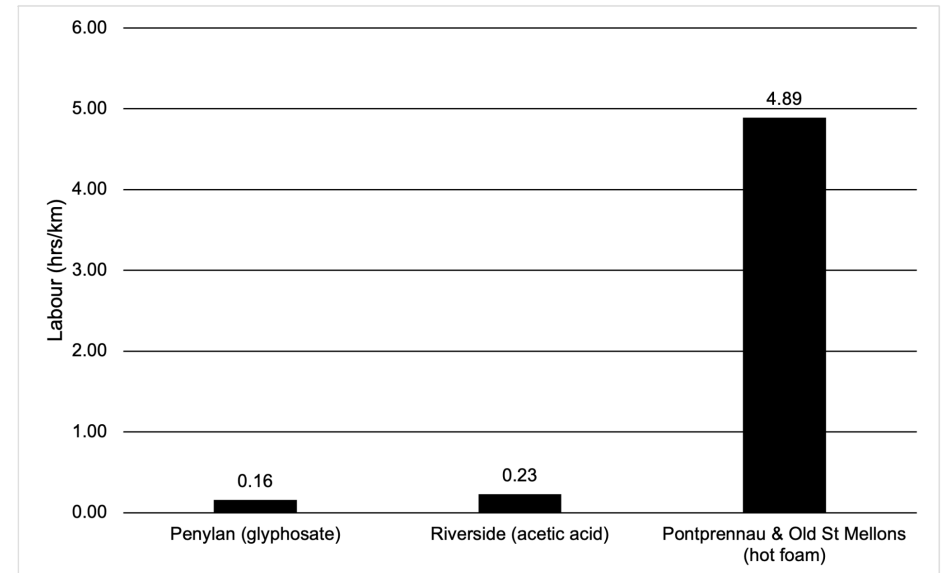
Further to the final report provided in journal format style, the following has been made available:

- Raw data
- Statistical package analysis outputs
- Graph images (high resolution)
- Digital photograph record pre and post treatment (high resolution)

### 3. Results

#### 3.1 Cost comparison

Glyphosate was the least labour intensive of the three pavement weed control methods tested with a labour requirement of 0.16 hrs/km to undertake (Figure 3.1). Acetic acid was more labour-intensive than glyphosate requiring 0.23 hrs/km to undertake. The labour requirement of hot foam was the largest, being 31 times greater than that of the glyphosate-based weed control method (4.89 hrs/km).

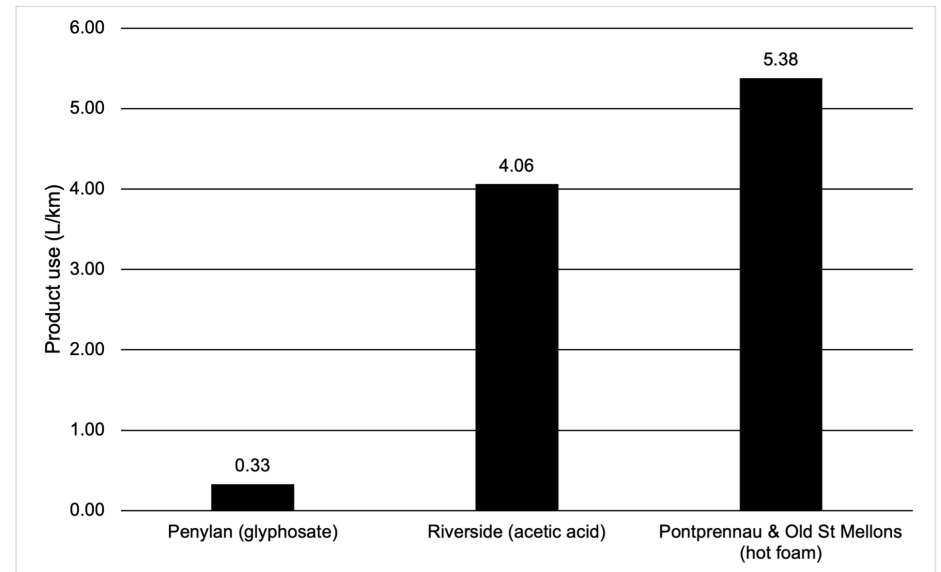


**Figure 3.1:** Total labour requirement (hours per kilometre) to undertake three pavement weed control methods (glyphosate, acetic acid and hot foam) across three Cardiff electoral wards.

**3.2 Environmental comparison**

**Product use (total)**

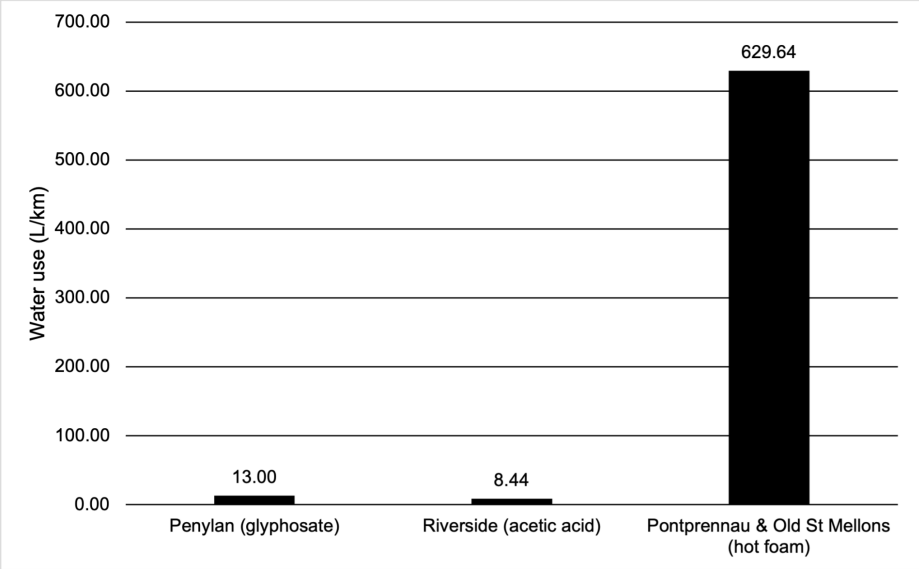
Glyphosate required the least product of the three pavement weed control methods tested using 0.33 L/km of glyphosate (Figure 3.2). Acetic acid used 4.06 L/km of acetic acid i.e., 12 times more herbicide than glyphosate. The product requirement of hot foam was the largest, being 16 times greater than that of glyphosate (5.38 L/km).



**Figure 3.2:** Total product use (litres per kilometre) to undertake three pavement weed control methods (glyphosate, acetic acid and hot foam) across three Cardiff electoral wards.

**Water use (total)**

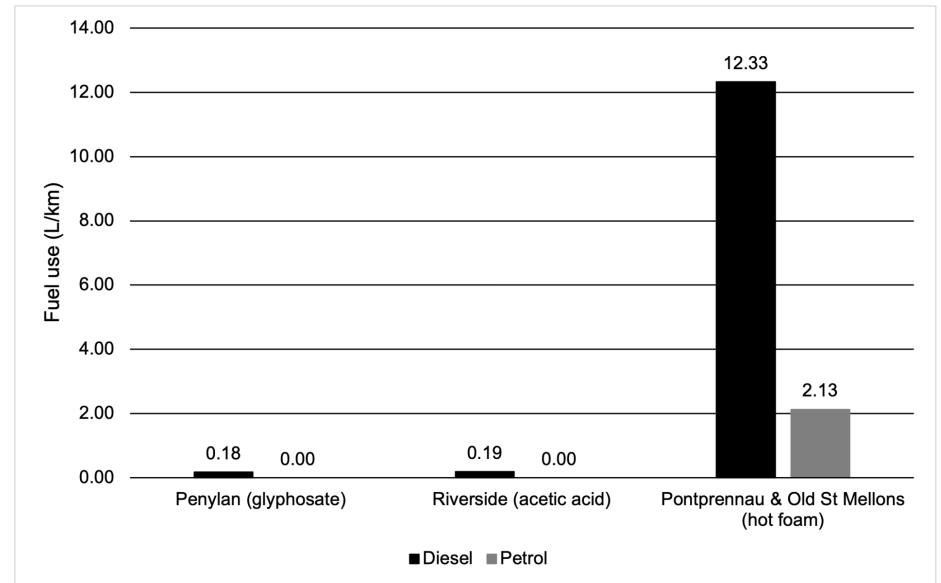
Glyphosate used 13.00 L/km of water to apply (Figure 3.3), while acetic acid used 8.44 L/km i.e., less water than glyphosate to apply. Water use of hot foam was significantly greater than that of the glyphosate or acetic acid-based weed control methods and was 48 times larger than that of glyphosate (629.64 L/km).



**Figure 3.3:** Total water use (litres per kilometre) to undertake three pavement weed control methods (glyphosate, acetic acid and hot foam) across three Cardiff electoral wards.

**Fuel use (total)**

Glyphosate used the least fuel of the three pavement weed control methods tested requiring 0.18 L/km of diesel and no petrol (Figure 3.4). Acetic acid-based weed control used more fuel than glyphosate requiring 0.19 L/km diesel and no petrol. The fuel use of hot foam weed was greater than that of glyphosate or acetic acid-based weed control: hot foam diesel use was 63 times greater (12.33 L/km) and petrol use was 100 % greater (2.13 L/km) than that required for the glyphosate-based weed control method (12.33 and 0.00 L/km, respectively).

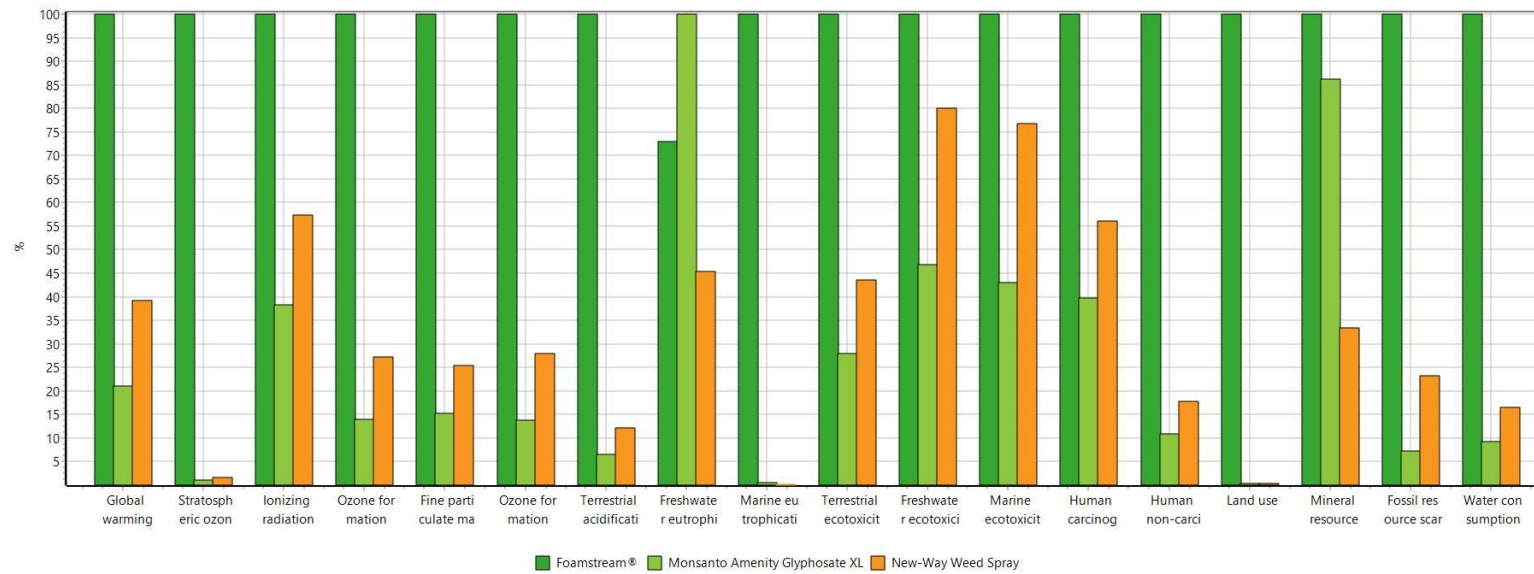


**Figure 3.4:** Total fuel use (litres per kilometre) to undertake three pavement weed control methods (glyphosate, acetic acid and hot foam) across three electoral wards in the City of Cardiff.



### 3.3 Life Cycle Analysis (LCA)

Direct comparison was made between all weed control methods per 1 km of pavement treated (Figure 3.5; Appendix 2). Foamstream® has higher environmental impacts in all impact categories calculated except for freshwater eutrophication.



Method: ReCiPe 2016 Midpoint (H) V1.04 / World (2010) H / Characterisation  
 Comparing 1 p 'Foamstream®', 1 p 'Monsanto Amenity Glyphosate XL' and 1 p 'New-Way Weed Spray';

**Figure 3.5:** LCA comparison of three pavement weed control methods (hot foam, glyphosate and acetic acid) environmental impacts across three electoral wards in the City of Cardiff. Relative percentage (%) contribution of each treatment to assessed impact categories is shown.

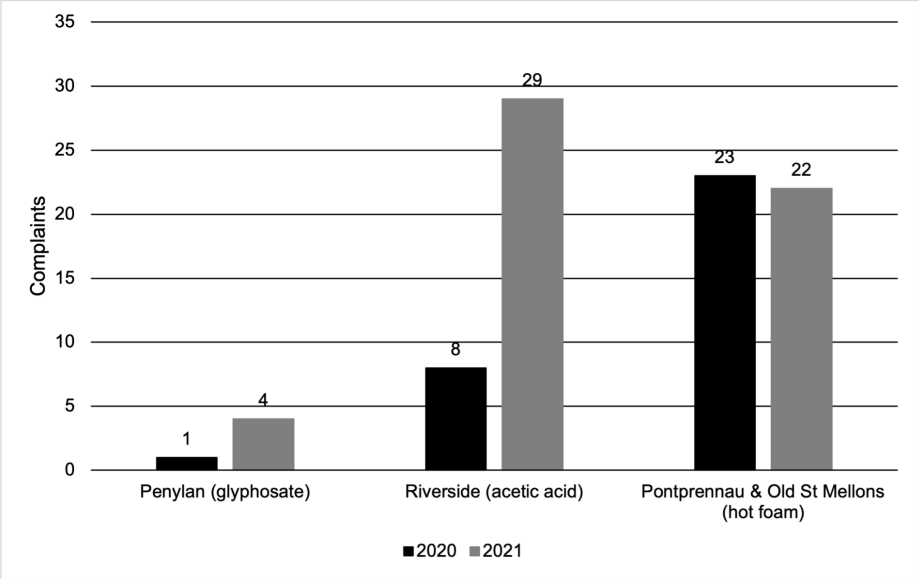
Details of the environmental impacts for the weed treatments tested are shown in Figure 3.6 (see Appendix 2). All impacts relate back to the functional unit of 1 km of pavement treated.

Impact category	Unit	Monsanto Amenity Glyphosate XL	New-Way Weed Spray	Foamstream®
Global warming	kg CO2 eq	3.725906632	6.920265219	17.62954775
Stratospheric ozone depletion	kg CFC11 eq	0.00	3.71233E-06	0.000219686
Ionizing radiation	kBq Co-60 eq	0.333211153	0.499734199	0.870118201
Ozone formation, Human health	kg NOx eq	0.008903155	0.01745232	0.064022231
Fine particulate matter formation	kg PM2.5 eq	0.00736806	0.0123352	0.048506821
Ozone formation, Terrestrial ecosystems	kg NOx eq	0.009142212	0.0186019	0.066531821
Terrestrial acidification	kg SO2 eq	0.014106715	0.02609239	0.215053388
Freshwater eutrophication	kg P eq	0.005180359	0.002346239	0.003780149
Marine eutrophication	kg N eq	0.000345545	0.000150603	0.059807027
Terrestrial ecotoxicity	kg 1,4-DCB	16.26066476	25.29477007	58.13958906
Freshwater ecotoxicity	kg 1,4-DCB	0.250487795	0.427871658	0.534874363
Marine ecotoxicity	kg 1,4-DCB	0.31026383	0.554566163	0.72170849
Human carcinogenic toxicity	kg 1,4-DCB	0.167244915	0.236177538	0.421593391
Human non-carcinogenic toxicity	kg 1,4-DCB	4.463951492	7.370060901	41.27578609
Land use	m2a crop eq	0.101314072	0.127103301	33.33581954
Mineral resource scarcity	kg Cu eq	0.064759475	0.025142473	0.075130588
Fossil resource scarcity	kg oil eq	1.337191228	4.259576156	18.29370741
Water consumption	m3	0.104360548	0.186825836	1.133128599

**Figure 3.6:** Results from the LCA comparison of the environmental impacts of three pavement weed control methods (glyphosate, acetic acid and hot foam) across three electoral wards in the City of Cardiff.

**3.4 Customer satisfaction comparison**

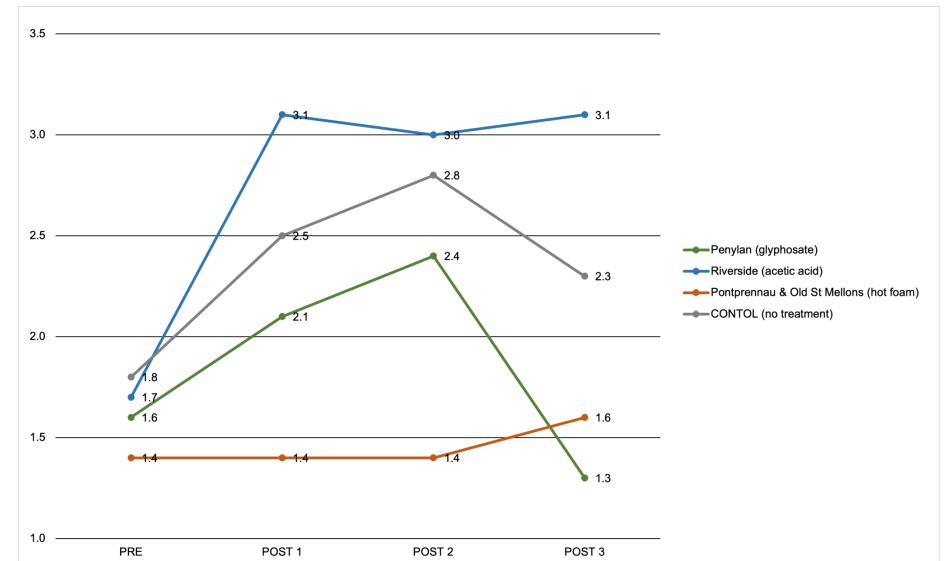
From a single complaint in 2020, glyphosate weed control complaints rose four-fold to 4 in 2021, though this control method overall received the fewest complaints in 2020 and 2021 (Figure 3.7). Between 2020 and 2021 public complaints more than tripled following the application of acetic acid from 8 complaints in 2020 to 29 complaints in 2021. Only hot foam public complaints declined between 2021 and 2020 from 23 to 22 complaints.



**Figure 3.7:** Total public complaints before (2020) and after (2021) the application of three pavement weed control methods (glyphosate, acetic acid and hot foam) across three Cardiff electoral wards.

### 3.5 Quality

Figure 3.8 shows average (mean) weed levels for all weed control methods and the untreated control. In Penylan (green line), Riverside (blue line) and the untreated control (grey line) spring growth of annual and perennial weeds is underway in April (weed level range 1.6 to 1.8), despite extended cold conditions in spring 2021. As summer approaches in June (weed level range 2.1 to 3.1), maximum weed level is reached for Riverside (acetic acid; 3.1) and this is maintained until early November 2021. Independently, Penylan (glyphosate) and CONTROL (no treatment) weediness increases to September (POST 3) though both show a decline thereafter; it is notable that glyphosate-based weed control provides the greatest reduction in between assessment weed level of the three pavement weed control methods (glyphosate, acetic acid and hot foam) from 2.4 in POST 2 to 1.3 in POST 3 (lowest observed value). The Hot foam control method maintains the weed population at a low level throughout the year (1.4 from PRE to POST 2), before the weed level rises slightly to 1.6 in POST 3.



**Figure 3.8:** Weed level (low = 1; high = 6) before (PRE) and after (POST 1-3) the application of three pavement weed control methods (glyphosate, acetic acid and hot foam). Where: Pretreatment (PRE) completed by 17/04/21; Post treatment 1 (POST 1) completed by 23/06/21; Post treatment 2 (POST 2) completed by 14/09/21; Post treatment 3 (POST 3) completed by 02/11/21.

## 4. Discussion

### 4.1 Key criteria - results summary

Section 3 reports on pavement weed control testing results in the context of four key criteria (cost, environmental, customer satisfaction and quality). These results are summarised in Figure 4.1 and discussed further in the context of efficacy, practicality and sustainability at the UK and European levels below.

Control method	Cost	Environmental	Customer	Quality
Glyphosate	Low	Low	High	High
Acetic acid	Medium	Medium	Low	Low
Hot foam	High	High	High	High

**Figure 4.1:** Summary of pavement weed control results evaluated against four key criteria (cost, environmental, customer satisfaction and quality). Where: red = negative outcome vs. key criteria; orange = intermediate outcome vs. key criteria; green = positive outcome vs. key criteria. Environmental criteria include: product use (total), water use (total), fuel use (total) and Life Cycle Analysis (LCA) outputs.

### 4.2 Cost

#### Project evaluation

Labour is the largest cost component of weed management programmes and here it is used to provide a relative economic evaluation of the weed control methods. Glyphosate required the least labour to undertake (0.16 hrs/km Figure 3.1). Acetic acid took longer to undertake (0.23 hrs/km), while hot foam took 4.89 hrs/km to undertake; this is 31 times greater than the glyphosate-based weed control method (0.16 hrs/km). This is because glyphosate-based herbicides provide almost complete kill of most pavement weed species, while other control methods mainly affect the above ground plant parts (Figure 1.2; Rask et al. 2013). Therefore, control methods which do not involve the use of glyphosate require repeated treatments and increased costs and may lead to the unnecessary waste of energy (Rask et al. 2013).

Based only on labour costs, application of hot foam alone is therefore 31 times more expensive than glyphosate; however, it is notable that this estimated cost does not account for the greater equipment purchase costs associated with hot foam treatment compared with the application of both acetic acid and glyphosate. From a practical standpoint, all control methods were tested on individual wards and it should be emphasised that if control methods were to be applied at the city scale (29 wards), these costs would rise substantially (in part due to the impracticalities of hot foam application).

Based on the Cardiff Council weed control contract route (c. 2,000 km), Chris Phillips (Managing Director, CWC) estimated the following labour requirement for glyphosate and hot foam control methods citywide:

- Glyphosate
  - 8 weeks labour (40 hr weeks)
  - 2 machines, 2 people per machine
- Hot foam
  - 248 weeks labour (40 hr weeks)
  - 5 machines, 3 people per machine
  - Machines would be working constantly

This research and practical understanding of control method application demonstrates the economic sustainability of glyphosate and, to a lesser extent, acetic acid (Figure 4.1). In contrast, the economic sustainability of hot foam is limited, particularly over larger spatial areas (i.e., citywide), though this control method may prove useful in smaller (discrete) areas where it is earmarked for specific tasks (e.g. children's play areas).

**Note:** it is possible to rebuild the Weed-IT machines for acetic acid application by changing the internal seals to minimise clean down times between treatments (Bristol City Council 2017, Phillips pers comm. 2021).

**Wider context**

In the UK, North Yorkshire County Council tested hot foam in 2021 and due to cost and logistical considerations in more rural areas of the county they will not be deploying this control method in the coming years (City of York Council

2022). During ‘The Cotham Trial’ undertaken by Bristol City Council (UK), Bristol Waste Company (BWC) estimated that the relative cost of each control method trialled:

- Glyphosate = £60,000 per application
- Acetic acid = £216,000 per application
- Hot foam = £392,000 per application

BWC noted the difficulty of assembling these cost estimates. Further, cost estimates were based on the 20 km distance of The Cotham Trial; in contrast the total treatment distance of the Cardiff Council Trial was 10 times larger (c.235 km), meaning that cost estimates (and the comparability of these) is based on more extensive data. Regardless, the BWC cost estimate for acetic acid treatment was 3.6 times greater than glyphosate, while hot foam treatment was 7 times more than that of glyphosate. In short, as Bristol City Council state:

*‘What is clear is that the use of acetic acid and hot foam are always considerably more expensive than glyphosate.’*

(Bristol City Council 2017)

**Note:** New-Way Weed Spray is the only legally approved and available professional acetic acid based herbicide in the UK. For comparative purposes other pavement weed control trials in the UK and Europe utilising acetic acid-based herbicides are referred to in this section, though application details (i.e., product formulation and application rates) are frequently not reported. It is notable that New-Way Weed Spray has a very low acid content, relative to

diluted acetic acid and other non-optimised product formulations tested 10-15 years ago, being specifically co-formulated with adjuvants, spreaders etc. to increase herbicidal activity.

In the Netherlands, Kempenaar & Saft (2006) reported the cost of hot water being approximately 4 times greater than that of glyphosate-based weed control (Figure 4.2), while Kempenaar & van Dijk (2006) reported costs of physical weed control methods being 2-8 times greater than those of glyphosate-based weed control. ‘The Thanet Trial’ undertaken by East Malling Research on behalf of Defra provided similar cost estimates, with hot foam being upto 8 times more expensive to apply than the application of glyphosate alone (EML 2015b). It is likely that the increased costs reported in the present Cardiff Council Trial reflect the size (spatial scale) of the experiment and the smaller number of control methods tested, providing detailed comparison of relative treatment costs at the citywide scale (i.e., ‘like-for-like comparisons’; Rask & Kristoffersen 2007, Fagot et al. 2011, Martelloni et al. 2020).

It is notable that few weed control experiments outside of the agricultural sector are big enough (scaled appropriately) that strong (robust) conclusions can be made and later applied practically over large areas. Rather, large-scale management recommendations are based on small-scale case studies and experiments which do not provide enough information to inform wider best practice management (Jones et al. 2018).

System	Threshold weed growth specification			
	Little weed growth*		Very little weed growth**	
	Frequency	Costs (€ m <sup>-2</sup> )	Frequency	Costs (€ m <sup>-2</sup> )
1. Brushing	3	0.19-0.38	3.5-5	0.20-0.40
2. Flame	N/A	N/A	5	0.15-0.35
3. Hot water	2.5	0.22-0.32	3-4	0.30-0.40
4. Herbicides	2	0.05-0.08	2.5	0.07-0.10

**Figure 4.2:** Annual frequency of application and cost per square metre (m<sup>-2</sup>) of four pavement weed control methods in the Netherlands in 2005. Where: \*little weed growth means less than 25 % of bare soil in the pavement is covered by weeds, very few weeds taller than 5 cm and no clumps of weeds; \*\*very little weed growth means less than 5 % of bare soil is covered by weeds, no weeds taller than 5 cm and no clumps of weeds (adapted from Kempenaar & Saft 2006).

### 4.3 Environmental - product, water and fuel use

Weed control practices in the UK amenity (non-agricultural) sector differ from those in agriculture. For example, while ‘blanket’ herbicide application in agricultural crops may be permitted, in the amenity sector such treatments in paved areas (i.e., non-porous hard surfaces) are not permitted as there is little surface absorption of pesticide and consequently, there is a high risk of run-off to drains and water bodies (HSE 2012). Therefore, to meet legislative

requirements, pavement weed control methods are 'spot treatments' made to visible weed vegetation only when the plants are actively growing. In practice, all control methods evaluated in the present study (acetic acid, glyphosate and hot foam) are spot treatments and were not applied in a blanket fashion along the whole length of the Cardiff Council weed control contract route (c. 2,000 km).

### Product use

Understanding that pavement weed control involves the direct targeting of weeds is important for understanding product use volumes (Figure 3.2). Glyphosate application used the least product (0.33 L/km), while acetic acid and hot foam used larger product quantities (4.06 and 5.38 L/km, respectively). The low product application volume associated with glyphosate is the result of a number of key factors:

- Glyphosate poisons whole plants effectively at low application rates (i.e., it is highly specific and 'systemic' through all parts of the plant).
- Precision targeting of herbicides directly at living green plant material (via near infra-red (NIR) light) using devices such as the Weed-IT.
- Effective, low herbicide application rates achieved through the inclusion of appropriate spray additives such as water conditioners that buffer acid-base balance (pH) in the herbicide spray, freeing up glyphosate molecules to do more work.

The larger acetic acid product application volume mainly relates to the fact this molecule is not specifically poisonous (herbicidal) to plants, does not work at low concentrations and does not move around all parts of the plant (i.e., it is

not systemic). Consequently, despite the use of Weed-IT machines, the product application rate is far greater than that associated with glyphosate-based weed control. This presents a logistical challenge for operators as large product volumes are required for relatively small areas of pavement, reflecting results reported by Hansson et al. (2006) in Sweden.

Hot foam required the most product per unit distance, in part due to the application of hot foam with a hand lance as opposed to precision equipment. Importantly, the herbicidal component of hot foam is not the product, but rather the (non-specific) hot water applied with the foaming product mix; therefore, a larger volume of water and product are required compared with specific chemical control methods such as glyphosate. Further, the hot foam product contains plant oils and sugars and such molecules require sourcing, processing, manufacture and transport to the point of use. Therefore, the environmental burdens of such processes are high and accompanied by greater overall product use (16 times more hot foam product is used than glyphosate), which may lead to wider human health and ecotoxicological concerns (see: Life Cycle Analysis (LCA); section 6.4 Report statement: impact of weed control methods on pollinators).

### Water use (total)

Understanding that pavement weed control involves the direct targeting of weeds is important for understanding water use volumes (Figure 3.3). Acetic acid application used the least water (8.44 L/km), while glyphosate used 13.00 L/km and hot foam application used 629.64 L/km; this represents a water use 48 times greater than that of glyphosate application. The large associated



water use of hot foam is principally due to the use of hot water as a non-specific herbicide. While this is addressed in the Life Cycle Analysis (LCA) section, it is important to note that the abstraction, supply and subsequent heating of drinking (potable) water to 98 °C (Appendix 1) requires large amounts of energy and consequently, these carbon intensive processes undermine both the economic and environmental sustainability of hot foam for pavement weed control.

**Note:** less water is used to apply acetic acid compared with glyphosate as the herbicide product volume per unit distance is much greater than that of glyphosate i.e., more herbicide and less water is required for application.

#### Fuel use (total)

Per unit distance, glyphosate and acetic acid-based control methods required the least fuel to undertake, with glyphosate requiring 0.18 L/km petrol and 0.00 L/km diesel (Figure 3.4) and acetic acid requiring 0.19 L/km petrol and 0.00 L/km diesel. The slightly higher petrol requirement of the acetic acid control method is due to the additional treatment per year (four), compared with glyphosate (three; Figure 2.2). In contrast, hot foam requires 12.33 L/km petrol and 2.13 L/km diesel i.e., 100 % more petrol than glyphosate or acetic acid application and 63 times more diesel than glyphosate application. There are two main reasons for the greater hydrocarbon requirement of the hot foam control method:

- Hot foam was originally applied using an L12 Foamstream machine mounted on a flatbed truck; in the second and third treatment, the machine was remounted on a Toyota Hilux. In contrast, Weed-IT

machines are mounted on much smaller quad vehicles with lower fuel requirements.

- Water in the hot foam control method is heated by the Foamstream machine to 98 °C (Appendix 1) prior to application and this requires very large amounts of energy, particularly when this control method is applied over larger areas.

Hot foam is therefore a carbon intensive control method, the environmental sustainability of which should be carefully considered prior to widespread deployment as a pavement weed control method (see Life Cycle Analysis; Figure 4.1; APSE 2020).

#### Wider context - product, water and fuel use

Often, hard surface weed control methods which are not based on the use of systemic herbicides (normally glyphosate) lack information about their product, water and fuel use. Further, due to the need for more frequent treatments, their use of product, water and fuel are often greater than control methods based on the use of glyphosate (Figure 1.2). More frequent treatments are required using these methods because they mainly affect the aboveground plant parts, whereas systemic herbicides (i.e., glyphosate) kill the entire plant and therefore only require one or two treatments per year (Rask & Kristoffersen 2007).

Treatment frequency depends on factors including:

- Type of hard surface
- Weed control method
- Weed acceptance level
- Weed cover
- Climate
- Weed species composition

In Denmark, experiments evaluating different thermal methods and brushing on pavements during a three year period suggested that 11-12 treatments per year were necessary to achieve acceptable weed control on areas heavily infested with perennial weeds, regardless of the method applied. In the Netherlands, experiments on pavements used fewer treatments, with 4-6 brushing treatments, and 3-5 flame and hot water treatments per year. In general, treatment at an early developmental stage reduced fuel inputs, increased driving speed and reduced labour costs (Rask & Kristoffersen 2007).

In the UK, Bristol City Council (2017) estimated that hot foam application used between 75-85 times more water (15,000 to 17,000 L/hectare) than glyphosate application (200 L/hectare). While the estimated units provided by Bristol City Council differ from those provided in the present Cardiff Council Trial (L/hectare as opposed to L/km); proportional estimated hot foam water use compared with glyphosate application was greater in Bristol (75-85 times more water) than that recorded in the Cardiff Council Trial (48 times greater). City of York Council (2022) reported that hot foam application used on

average between 1,000 to 1,500 litres of water per day, depending on how soiled/weeded the treatment area; this equates to around 0.5 tonnes carbon dioxide (CO<sub>2</sub>) emissions per day. Reported water use in the City of York (2022) was less than that recorded in The Thanet Trial (c.4,000 to 6,000 litres of water per day; EMR 2015b) and the Cardiff Council Trial (2,340 litres of water per day; Figure 2.5). In summary, product, water and fuel use was consistently lower for glyphosate application than all other control methods tested in The Thanet Trial, the Cardiff Council Trial and by the City of York (EMR 2015b, Bristol City Council 2017, City of York Council 2022). Bristol City Council note:

*‘The operational speed, problems with transporting large amounts of water combined with high energy use give a high price and environmental impact. Whether the high energy doses needed for thermal treatments can be considered as sustainable needs careful consideration.’*

(Bristol City Council 2017)

#### 4.4 Environmental - Life Cycle Analysis (LCA)

Foamstream<sup>®</sup> had the highest environmental impacts in all categories except for that of freshwater eutrophication, where Monsanto Amenity Glyphosate XL had the higher impact (Figures 3.5 & 3.6; Appendix 2). Both Monsanto Amenity Glyphosate XL and New-Way Weed Spray control methods have an overall lower environmental impact than Foamstream<sup>®</sup>; and the treatment that has the lowest overall environmental impact is Monsanto Amenity Glyphosate XL. These impact assessment results were not surprising given the higher number of inputs into the Foamstream<sup>®</sup> system. Further information from the

manufacturers on the overall composition of the control method product (Foamstream® V4) would give more accurate results.

**Note:** a conservative approach was taken on how to determine the composition of the Foamstream® V4 product from information that was available and this will have resulted in an underestimation of the environmental impact. If further information becomes available at a later date it is recommended that the LCA be recalculated.

#### **Wider context - Life Cycle Analysis (LCA)**

In summary, the overall LCA conclusion is that Monsanto Amenity Glyphosate XL has less environmental impact than the other control methods tested in this study. Results found in the Cardiff Council Trial above are comparable to those found in a similar UK study of weed treatments for controlling weeds on hard surfaces (The Thanet Trial; EMR 2015b). East Malling Research (EMR) found that freshwater impacts are the only ones where glyphosate-based control methods are higher than those of non-herbicide approaches. However, EMR only investigated the use of integrated (IPM) treatment approaches, making direct comparison of figures difficult, but broadly comparable in general.

In the Netherlands, an LCA investigating pavement weed control methods (Kempenaar & Saft 2006) also found that freshwater impacts (aquatic ecotoxicity) contributed toward elevated glyphosate-based control method results, but noted that physical control methods (brushing, flaming and hot water) produced less favourable results than herbicide application.

#### **4.5 Customer satisfaction**

Customer satisfaction was measured by comparing the change in public complaints between 2020 and 2021 for each pavement weed control method (Figure 3.7). Between 2020 and 2021, glyphosate showed a small increase in complaints (from 1 to 4), while hot foam showed a small decrease in complaints (from 23 to 22). In contrast, the application of acetic acid more than tripled public complaints between 2020 and 2021, from 8 to 29. Consequently, customer satisfaction is rated high for glyphosate and hot foam, but low for acetic acid (Figure 4.1).

In the UK, City of York Council (2022) reported public complaints only following the application of acetic and pelargonic acids. In contrast, complaints were received by Bristol City Council (2017) following application of all control methods in equal numbers. Due to differences in trial approach, it is not possible to make more general comments regarding customer satisfaction following the application of pavement weed control methods.

#### **4.6 Quality**

Weed control method efficacy was measured four times using a weed level (low = 1; high = 6) before (PRE) and after (POST 1-3) the application of the three pavement weed control methods (Figure 3.8). The quality of acetic acid was poor throughout the year, while glyphosate took some time to bring the pavement weed population under effective control following plant growth in spring and summer. In contrast, the hot foam control maintained the weed population at a low level until late in the year, when the weed level increased slightly from 1.4 to 1.6 in POST 3. This late increase in weed level is likely to

reflect regrowth of weeds with deeper roots treated earlier in the year; hot foam does not kill the root systems of perennial pavement weeds allowing recovery from control method application.

Glyphosate and hot foam were the most effective control methods, though the underlying design and build of pavements in the respective wards are likely to have influenced treatment efficacy. Paving in Pontprennau & Old St Mellons (hot foam) consisted of sealed tarmac paths which leave few gaps for weed growth; in contrast, footpaths in Riverside and Penylan (acetic acid and glyphosate, respectively) consist of slab paving with many more gaps available for weed colonisation and subsequent growth. These differences in design and build should be considered in the context of overall treatment quality (Figure 4.1; Rask & Kristoffersen 2007).

#### **Wider context - quality**

In the UK, Bristol City Council (2017) state that acetic acid can be as effective as glyphosate for weed control if it is applied more frequently; however the treatment frequency and likely costs associated with this are not provided, though they are likely to be prohibitively expensive (Bristol City Council 2017). Following the application of acetic and pelargonic acids, City of York Council reported that weeds survived application of the control methods and continued to grow, resulting in more public complaints (Bristol City Council 2017, City of York Council 2022). Mirroring trial results in the UK, Hasson et al. (2006) state that acetic acid does not work against perennial weeds growing in paved areas, resulting in increased treatment frequency and presumably greater negative environmental impacts (Figure 4.1).

In Belgium, Fagot et al. (2011) note that while there are a large number of alternative (non-herbicide) weed control methods available for use on hard surfaces, these are less effective than glyphosate-based herbicides, requiring more frequent treatments. Further, the effectiveness of alternative control methods is strongly related to weed species and growth stage at the time of treatment. For example, weeds which grow flat on the ground (prostrate), with protected growth points (meristems) and narrow, thick leaves such as Procumbent Pearlwort (*Sagina procumbens*), show a greater tolerance to thermal treatments. This is because lethal heat transfer to the growing points and deeper plant tissues is reduced compared with upright plants which are fully exposed to treatment. Similarly, mechanical weed control methods are less effective in removing deep-rooted, broad-leaved perennials with protected growth points near or below ground level (e.g. Dandelion, *Taraxacum officinale*; Broadleaf Plantain, *Plantago major*). Further, these species can regrow quickly, even after full removal of all aboveground plant growth (defoliation; Rask & Kristoffersen 2007, Fagot et al. 2011).

Rask et al. (2013) reported that there was no significant difference between the number of required treatments per year with hot water or glyphosate. However, while hot water, air and steam are safer than flame (Figure 1.2), the energy consumption associated with these control methods are greater. Further, while hot foam systems may be practical in certain settings (e.g. traffic islands), the purchase price of the equipment is high compared with flamers on the market (Rask & Kristoffersen 2007, Rask et al. 2013). Broadly, these findings align with those of the present Cardiff Council Trial; while hot foam is an effective control method, the costs and environmental impacts of

the system are in most cases greater than those of glyphosate-based pavement weed control methods (Figure 4.1).

Due to the efficacy, ease of use and low cost of glyphosate, this herbicide is the mainstay for weed control on hard surface areas such as roads and pavements in the UK and Europe (Hasson et al. 2006, Rask & Kristoffersen 2007, Bristol City Council 2017, City of York Council 2022). However, a concern with the frequent use of glyphosate in urban areas is that despite having a safe environmental profile, if it is the only herbicide used in these settings it is highly likely that it will be detected in surface waters due to the total quantity being used (Ramwell 2006). Correct (legal) use of glyphosate is therefore fundamental to minimising the environmental risks posed by this compound. For example, avoiding gully pots (drains) reduced potential contamination of water courses with glyphosate-based herbicides in the Netherlands by 15 % (Ramwell 2006, Kempenaar et al. 2007).

## 5. Conclusions

### 5.1 Overview of findings

Previous pavement weed control trial experiments have been limited by:

- **Small-scale studies** - logistical problems and increased environmental and economic costs (e.g. equipment access, water use) may not show up in smaller trials and are only seen when the control methods are scaled up to larger areas.
- **Short-term studies** - studies that are very short (less than one month) often overestimate the effectiveness of weed control methods that damage aboveground weed growth as the experiment does not last long enough to observe any weed regrowth.
- **Not comparing 'like with like'** - control methods are not compared directly with one another or are compared with non-standard approaches; this may result in overestimating control method efficacy and sustainability (Rask & Kristoffersen 2007, Fagot et al. 2011, EMR 2015b, Martelloni et al. 2020).

Further, previous research has found that in all but a few limited settings, the efficacy of a number of physical weed control methods (friction, thermal, covering) has been limited (Kempenaar et al. 2007, De Cauwer et al. 2013, Wynn et al. 2014).

To deliver sustainable weed management over large areas it is essential that control methods are examined scientifically to determine how well they work (efficacy) and how large their environmental and economic impacts are i.e.,

using an Integrated Pest Management (IPM) approach to testing (Jones & Eastwood 2019). The scientific (reproducible) approach followed in the current experiment enables us to find out what works under 'real world' conditions and then make evidence-based decisions on how we want to manage weeds. This is in sharp contrast to the 'trial and error' approach normally taken, which frequently results in the application of more expensive and environmentally harmful control methods due to increased resource use (labour, water, product) and carbon dioxide (CO<sub>2</sub>) emissions. Further, there is a misunderstanding that IPM means that herbicides should not be used. What IPM actually means is that weed control methods should be sustainable; where experiments show that control methods which are not based on herbicides are ineffective and unsustainable, they should not be used to ensure that overall sustainability criteria are met. The IPM approach to testing control method efficacy and practicality followed in the Cardiff Council Trial is crucial to ensuring treatment sustainability in the longer-term.

If pavement weed control is understood to be necessary, it must be accepted that the management approach selected will involve compromises - it is unlikely there is a 'silver bullet' control method. The results of the present trial, based on testing over large areas (large spatial scales e.g. citywide) show that glyphosate was the most effective and sustainable weed control method tested, while hot foam was effective but unsustainable and acetic acid was both ineffective and unsustainable. However, glyphosate is not without proven drawbacks, such as freshwater eutrophication (Figure 3.5; Appendix 2) which has led to its use in water being banned in all but a few European countries (Kudsk & Mathiassen 2020). Understanding the pros and cons of each control

method enables us to make reasoned decisions on how we reduce the environmental and economic impacts of weed control, ultimately improving management sustainability at the landscape scale.

### 5.2 Wider context - overview

Urban areas throughout Europe spend a great deal of time and money on hard surface weed control. Historically, because of the effectiveness, low cost and ease of use of glyphosate, it was widely used as the main tool used for weed management in these settings. However, as pesticide use has been restricted at the EU-level through to the regional scale in some EU countries, alternative control methods have been sought (DIAS Report No. 126 2006).

However, ‘alternative’ implies a ‘substitute’ for glyphosate-based herbicides; presently, there are no comparable control methods available for the large-scale management of weeds in urban and rural areas. To illustrate this, many Swedish municipalities implemented a total ban or restrictions on the use of glyphosate and other herbicides since 1996. In 2006, reporting on 10 years of glyphosate restrictions, SKL reported that

*‘The situation is in several cases so critical that one must at the strategic decision level decide to either increase the resource allocation for sanitation and weed control, or start a long-term work to phase out hardened surfaces to reduce the resource-intensive area in the long run.’*

(SKL 2006)

Consequently, SKL (2006) recommended that more research was required to better understand alternatives and find effective and sustainable control method substitutes for glyphosate before banning the use of this herbicide outright (SKL 2006).

### 5.3 Pavement weed control: sustainable approaches

Figure 5.1 summarises IPM sustainability considerations for the effective reduction of pavement weed populations. Further details of pros and cons of IPM weed control methods available to the UK amenity sector are provided in Figure 1.2.

To achieve more sustainable control of pavement weeds, Cardiff Council has considered its use of glyphosate within the context of IPM approaches. Total herbicide use has been reduced by the council through the sparing and targeted use of glyphosate, specifically:

- Improved herbicide efficacy by the inclusion of appropriate spray additives.
- Reduced herbicide application volumes, achieved by diluting the glyphosate-based herbicide product 166 times more than legal guidelines.
- Use of precision sensors to target actively growing weeds i.e., through the use of contractor Weed-IT machines (Figure 5.1).

**Figure 5.1:** Integrated Pest Management (IPM) approach for the sustainable management of pavement weeds control methods (SKL 2006, Kempenaar et al. 2007, Rask & Kristoffersen 2007, Fagot et al. 2011, De Cauwer et al. 2013, APSE 2019a, Kay pers comm. 2021, Mason pers comm. 2021, Phillips pers comm. 2021).

Control category	Desired effect	Approach
<b>Cultural (preventative)</b>	Prevent and/or minimise weed population growth	Weed growth can be limited, and control method application can be reduced on hard surface areas by changing the design of the surface and by selecting suitable materials and construction techniques. However, the conversion of surfaces will take a long time and incur high investment costs.
	Permit weed population growth in other areas	Set-aside areas of unmanaged land to which minimal/no control methods will be applied.
<b>Physical (mechanical)</b>	Bring weed population under control	Sweeping pavements regularly for maintenance will remove soil and other detritus, thereby reducing the chances of weed establishment and growth. However, sweeping is expensive, it can be difficult to coordinate sweeping with weed control operations and removal of soil and surface joint material (particularly in older urban areas) should be avoided. <b>Note:</b> sweeping is not included in Figure 1.2 as it is not defined as a standalone weed control method.
<b>Chemical (herbicides)</b>	Bring weed population under control	<b>Increase herbicide efficacy</b> Pavement weed control methods should be directed toward immature annual and perennial plants early in the growing season. This is because at this time, weeds have accumulated fewer resources from which to recover from control method application and control methods are therefore more likely to be successful.
		<b>Reduce herbicide application volumes</b> Herbicide use (mainly glyphosate) was reduced by 11–66 % compared to standard practice, with weed control levels maintained in the Netherlands. Cardiff Council’s contractor (Complete Weed Control Ltd; CWC) has been applying glyphosate at low application volumes for some time, using a glyphosate-based product diluted 166 times lower than legal guidelines (0.00288 milligrams of active ingredient per litre).
		<b>Use of precision sensors</b> Precision sensors developed in agriculture can also be used in UK amenity settings. CWC uses the Weed-IT system (Appendix 1) to reduce herbicide usage (60-80 %) through precision targeting of active weed growth and avoid gully pots, drains etc. which are the principal points through which glyphosate-based herbicides may enter water infrastructure.
		<b>Increase number of herbicide applications</b> Counterintuitively, increasing treatment frequency using glyphosate-based herbicides is likely to reduce overall herbicide use through better management of the weed population. For example, increasing from two to three sprays means that successive treatments are targeting smaller, less mature plants and/or plants which have recovered from previous treatments; these weeds can be managed at lower application rates. Further, if weeds are controlled before they flower, any pollinator exposure to herbicides will be reduced.
<b>Integrated Pest Management (IPM)</b>	Bring weed population under control	Over time, approaches to weed management based on single control methods may run the risk of stimulating herbicide resistance in pavement weeds. However, the pressure imposed on pavement weed populations by herbicides that may lead to resistance development is much smaller in the amenity sector than in agriculture because: - Fewer weeds are sprayed - Weeds are sprayed less often - Weed may be larger (deep-rooted) and not killed outright by herbicide application  Wider integration may be possible in the future once effective and sustainable alternatives are identified; it is important that it is not done ‘for the sake of it’. For example, application of ineffective alternatives followed by glyphosate application doubles treatment mileage, reducing the environmental and economic sustainability of weed control.

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#### 5.4 What happens if we do nothing?

Within the one-year timeframe of the Cardiff Council Trial, council staff observed some local residents in the untreated areas of the city beginning to undertake their own management of pavement weeds. In this specific case, it was likely that residents had been using hot water to control the weeds, but the use of bleach, salt and diesel have been reported by other local government organisations in Wales. Not only are bleach, salt and diesel unregistered products (i.e., they cannot legally be used for weed control), they are also non-specific, meaning that a lot must be used to kill weeds. Further, salt and diesel are persistent compounds that are toxic to most forms of life, despite being 'natural' in origin (Adam and Duncan, 1999; Sobhnaian et al., 2011). Possible increasing and widespread use of these chemicals is likely to result in greater environmental burdens and risks posed to environmental and public health and safety (APSE 2021a).

Given these concerns, it is notable that some local government organisations are beginning to recommend a range of DIY weed control methods to reduce herbicide use. However, these recommendations are not evidence-based and have the potential to pose risks to public safety and the environment. To minimise environmental and societal risks associated with weed control methods and enhance their sustainability, it is suggested that professional use should be the preferred option for the safe maintenance of infrastructure assets.

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## 6. Summary statements

### 6.1 Report statement: herbicide regulation

The European Union (EU) Pesticide Reduction Strategy was developed in response to public concern and medical evidence demonstrating the harmful effects of pesticides on human and wildlife health. This legal framework (which the UK currently remains a part of) is the most stringent and comprehensive strategy in place worldwide for the sustainable use of pesticides (including herbicides; Hillocks 2012, Hillocks 2013, Kudsk & Mathiassen 2020). Since introduction of the strategy, around 75 % of herbicides used in Europe before 1993 have been withdrawn from the market with this process continuing to the present day. While this ongoing work is important, it is also essential that further herbicide withdrawals do not outpace development of alternative (effective) control measures (i.e., how and where do we strike the balance; Hillocks 2012, Hillocks 2013).

Hazards, such as herbicides are something that can cause harm, while a risk is the chance, high or low, that a hazard (e.g. pesticides) will actually cause somebody harm. Currently, there a highly contentious debate between:

- Those who advocate a precautionary (preventative) approach to pesticide regulation, where potential hazard is viewed as a benchmark for pesticide removal and
- Those who hold the view that the risk of harm posed by pesticides is effectively managed through strict regulation of use (Hillocks, 2013).

Regardless of the position held by the reader, it is very important to note that there are serious concerns regarding approval based upon hazard: a product may be potentially hazardous, though there is little risk to health or environment from a chemical, if correctly used (Hillocks, 2012). Assessment of potential hazard is also frequently complex and subjective and there is no clear definition of hazard, or scientific definitions of some hazard criteria (e.g., endocrine disruptors; Hillocks, 2012; Hillocks, 2013). Further, consideration of the significant benefits conferred through pesticide use are often omitted, particularly in the smaller amenity and horticultural sectors (Hillocks, 2012; Jones and Eastwood, 2019).

### 6.2 Report statement: glyphosate controversy and sustainability

The widespread use of herbicides (and pesticides more widely) has been debated since the 1960's. However, the publication of an International Agency for Research on Cancer (IARC) report in 2015 which found that glyphosate was 'probably carcinogenic to humans' (Group 2A) sparked intense debate worldwide, specifically around the safe use of glyphosate-based herbicides (Guyton et al. 2015). Glyphosate is considered to be one of the least toxic and environmentally safe herbicides in use and all other regulatory agencies have asserted that glyphosate is safe to use, including the European Food Safety Authority (EFSA), the European Chemicals Agency (ECHA), the Joint Meeting on Pesticide Residues of FAO and WHO, in addition to the United States (US) EPA and the Australian, Canadian and New Zealand pesticide authorities (Kniss 2017, Neal & Senesac 2018, Kudsk & Mathiassen 2020).

There are two key differences which may go some way to explaining the

differences in the findings of IARC and EFSA:

1. IARC only assessed reports published in scientific journals, while EFSA also considered confidential research done by the manufacturers.
2. EFSA only assesses the active ingredient i.e., glyphosate, whereas IARC assessed reports on glyphosate and formulated commercial products (Kudsk & Mathiassen 2020).

However, regardless of any differences in safety evaluation, some countries have moved to limit the use of this herbicide, while others work toward an outright ban on use. In part, such government restrictions on glyphosate use are in response to:

- Ongoing scientific debate around the widespread use of glyphosate in agriculture;
- Difficulties associated with translating carcinogenicity research into appropriate public health policies and recommendations for risk management and
- Court rulings in the United States (US) which awarded multi-million dollar damages to citizens who claimed that the long-term use of glyphosate has caused them to develop cancer (The Lancet Oncology 2016, Duke 2017, Andreotti et al. 2018).

In short, ongoing scientific debate, and perhaps more importantly United States (US) court rulings have driven increasingly cautious government decision-making and led many users to reconsider glyphosate's safety as well as the possibility of legal action being taken against them. However, these

decisions are somewhat independent of scientific evidence of the risks and hazards posed by the use of glyphosate (Neal & Senesac 2018).

In the UK 95 % of PPPs (percentage of a.i. by mass) applied are herbicides (Wynn et al. 2014, fera 2016). Application of glyphosate in the UK totals around 2 million kilos per year, constituting approximately 25 % of total herbicide use (Kudsk & Mathiassen 2020). While agriculture accounts for approximately 90 % of use (fera 2016), the amenity sector accounts for just 8-10 % of the total amount of herbicide applied in the UK (much of this will be glyphosate-based). However, it is important to note that while agriculture can switch to other effective synthetic herbicides, the amenity sector cannot because the market for such products is relatively small, while the cost of re-registration continues to grow. Manufacturers are consequently reluctant to re-register products for 'minor use', despite these products being essential for maintaining efficacy and profitability of operation within the amenity sector (Hillocks 2012). Therefore, once such products are removed from sale they are likely to be lost forever, regardless of whether the alternative control methods that replace them perform as effectively.

At present, there are few safe and truly sustainable alternatives to glyphosate, with many alternative weed control methods and herbicide products delivering far less effective weed control along with larger environmental and economic costs (Kniss 2017, Neal & Senesac 2018). Examples of alternative herbicides based on naturally occurring chemicals such as acetic acid, pelargonic acid and other 'natural oils' are largely ineffective and in many cases prohibitively expensive (APSE 2020, APSE 2021a, APSE 2021b). Further, some are more

toxic than the synthetic herbicides which they are replacing and operators must therefore carefully avoid contact with the skin or eyes, and avoid inhaling fine sprays (Neal & Senesac 2018). Also, of the weed control methods which are comparable to glyphosate in their ability to control weeds, these are often much more expensive and/or environmentally damaging than the targeted use of glyphosate.

In short, there is no 'magic bullet' for weed control in any sector of the economy and each control method comes with its own set of drawbacks. So, it is essential to consider all of the positives and negatives of each control method, rather than deciding on what the 'ideal' weed control method is and working back from this position. To restate, in order that weed control methods are adopted sustainably, they must:

- Be less costly than the alternatives.
- Involve (comparatively) low levels of investment or financial requirements.
- Create little risk or uncertainty (i.e., they are evidence-based).
- Have well-defined control and management timeframes, provided by evidence-based research (Wynn et al. 2014).

#### **6.4 Report statement: impact of weed control methods on pollinators**

There is a current focus on the negative impacts of herbicides on pollinators and other bugs (invertebrates), particularly in the agricultural sector (Lundin et al. 2021). Also, it has been suggested that herbicides (glyphosate in particular) are having negative effects on microorganisms in the soil (soil biota; Kepler et al. 2020) and larger animals such as invertebrates via a

number of mechanisms, such as reduced invertebrate movement and a reduction in beneficial gut flora (Gaupp-Berghausen et al. 2015, Motta et al. 2018). Further research has identified direct toxicity of herbicide products against Honey bees (*Apis mellifera*), though this research suggests that it is the co-formulants (also termed adjuvants, spreaders etc.) which are toxic, as opposed to the glyphosate molecule itself (Straw et al. 2021).

However, the evidence for these impacts at the landscape scale remains blurred even for the scientific community. For example, Kepler et al. (2020) found no evidence that glyphosate increased the relative abundance of soil pathogens, while the experiments of Gaupp-Berghausen et al. (2015) and Motta et al. (2018) were small to conclude effects (extrapolate) at the landscape scale. In the case of the Straw et al. (2021), experiments tested herbicide products available to the public on Bumble bees (*Bombus* spp.). Here the results suggested that it was not the herbicide itself killing bees, but the other co-formulants in the spray. Quite reasonably Straw et al. (2021) conclude that use of such products in agricultural and urban settings should be carefully considered; the author agrees and adds that herbicides and other non-chemical control methods in general should be undertaken by trained professionals, as opposed to the public.

While there is a growing body of predominantly laboratory-based research investigating lethal and non-lethal effects of pesticides on a range of organisms, there is surprisingly little research into the impacts of non-chemical control methods, which may be equally damaging to wildlife in agricultural settings (Vincent et al. 2003, Lundin et al. 2021). For example, while the

application of steam to control the Colorado beetle (*Leptinotarsa decemlineata*) is ineffective, the steam applied will kill other invertebrates in the treated area. Further, other methods (e.g. trenches) which are technically and environmentally acceptable, are impractical, costly and carbon intensive relative to the use of effective pesticides (Vincent et al. 2003). Vincent et al. (2003) also note that successful implementation of physical control methods tends to occur in postharvest situations i.e., once the plant is removed from the field.

These considerations raise two key questions:

1. Can the findings of agricultural research be transferred directly to our understanding of the impacts of pavement weed control methods, and herbicides in particular, on pollinators?
2. Are alternative weed control methods applied in urban areas equally damaging to pollinators as the application of herbicides?

In response to the first question, the use of herbicides to control pavement weeds involves herbicide spot treatments directly to growing plants, with herbicides being applied 1-3 times per year. In contrast, agricultural herbicide application may involve blanket sprays of different herbicides made several times throughout the year, depending on the crop being grown. Therefore, the scale of herbicide use is entirely different and so too are the impacts of the use of herbicides on pollinators, if only due to the relative product volumes used in the agricultural and amenity sectors, respectively. In short, we must be careful about generalising the impacts of herbicides on pollinators across economic sectors, particularly where the negative impacts are being debated

and the cost of losing effective herbicides such as glyphosate are so great.

With respect to the second question, presently, the impacts of non-chemical weed control methods in agriculture have not been measured scientifically (Vincent et al. 2003, Lundin et al. 2021) and this is also the case in the amenity sector. However, there is an assumption that a reduction in herbicide use will automatically lead to increased biodiversity as non-chemical control methods and/or IPM systems do not have negative impacts on biodiversity: this assumption remains to be measured (quantified). From a common-sense perspective, it is likely that the application of lethal heat (flame, hot water, foam) and mechanical damage (metal brushes) to plants and animals will cause immediate death, in contrast with debated sub-lethal effects of herbicides on these organisms (APSE 2020, City of York Council 2022, Corbett pers comm. 2021). Another key consideration is that effective and regular weed management counterintuitively reduces pollinator exposure to any weed control method as flowers are less likely to be produced, reducing the attraction of weeds to pollinators.

To summarise, in 2020 the scientific journal Science published a letter entitled '*Support Austria's glyphosate ban*' (Peng et al. 2020), based on the idea that alternative weed control methods such as root exudates, crop rotation or mulching can replace, like-for-like, the use of glyphosate. In response Pergl et al. (2020) published a response to this article entitled '*Don't throw the baby out with the bathwater – ban of glyphosate use depends on context*'. In the response published in the scientific journal NeoBiota, the authors argued that:

*'risks associated with using this herbicide on a large scale exist, but on a small scale, such as in invasive plant control, glyphosate has an important role and is not easy to replace. Therefore, the context and scale need to be taken into account when applying such bans.'*

(Pergl et al. 2020)

This concept of scale and proportion are also key to sustainable pavement weed control. Without supporting experiments to determine the efficacy and sustainability of alternative control methods, removing glyphosate as a weed control tool is likely to result in difficult situations such as those reported in Sweden by SKL (2006), where:

*'The situation is in several cases so critical that one must at the strategic decision level decide to either increase the resource allocation for sanitation and weed control, or start a long-term work to phase out hardened surfaces to reduce the resource-intensive area in the long run.'*

(SKL 2006)

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## Appendix 1 - Equipment, products and materials

### Foamstream® machine (Weedingtech™ Ltd., London, UK)

Brief technical specifications:

- Foamstream® machine L12
- Small lance used
- Water and foam mix leaves nozzle at 98 °C

The combined heater unit and water tank is mounted on the rear of a vehicle and driven to the site. Water is heated and mixed with a biodegradable foam which is applied through a lance onto the weeds or area being treated. The foam helps concentrate the heat onto the plant by reducing heat loss to the atmosphere. To kill plants, a minimum temperature of 58 °C is required (Weedingtech n.d., Bristol City Council 2017).

### WEED-IT (Weed Economical Eradication Detection – Intelligent Technology) machine


Brief technical specifications:

- WEED-IT is a computer controlled herbicide application system specifically designed for use on hard surface areas.
- The system consists of a shrouded spraying head mounted on the front of a purpose-built, articulated carrier vehicle.
- Within the shrouded head are sensor units and spray nozzles. Sensor units detect the presence of weeds and trigger the appropriate spray nozzles to apply accurately the correct amount of herbicide just to those weeds and their immediate surroundings (CWC n.d.).

### Monsanto Amenty Glyphosate XL - product label

March 2017

LABEL


- Herbicide

## MONSANTO AMENITY GLYPHOSATE XL

A foliar applied translocated herbicide for the control of emerged weeds in industrial and amenity situations, in forestry and on hard surfaces.

Degraded by micro-organisms/microbes in the soil.

A soluble concentrate containing 360 g/l glyphosate, present as 41.6 w/w of the isopropylamine salt of glyphosate

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work

MAPP Number: 17997

Contents **e** 5 litres

PROTECT FROM FROST

Imported

Not for reformulation or repackaging.  
No licence is granted under any patent.

© Monsanto 2017  
Lot number/production date:



This label has been produced according to the Crop Protection Association Voluntary Initiative (VJI) guidance.

March 2017

FRONT LABEL

**MONSANTO AMENITY GLYPHOSATE**

A soluble concentrate containing 360 g/l glyphosate present as (41.6% w/w) of the isopropylamine salt of glyphosate

MONSANTO (UK) LIMITED,  
PO Box 663, Cambridge, CB1 0LD  
Tel: (01954) 717550  
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Website: www.monsanto-ag.co.uk

**In case of emergency day or night, telephone National Chemical Emergency Centre: (01865) 407333**

**IMPORTANT INFORMATION**

FOR PROFESSIONAL USE ONLY AS AN INDUSTRIAL/AMENITY/FORESTRY HERBICIDE

**Crops/situations:**

Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil, hard surfaces;  
Amenity vegetation;  
Forest nursery, forest (weed control, stump application and chemical thinning).

**Maximum individual dose:** }  
**Maximum number of treatments:** } Full details are given in  
**Latest time of application:** } the attached leaflet  
**Other specific restrictions:** } (see Crop Specific Information - marked #)

**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

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BACK & BASE LABEL

**SAFETY PRECAUTIONS**

**Operator protection**

*Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:*

\*WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or handling contaminated surfaces.

\*WEAR SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held controlled droplet application, (CDA) equipment.

\*WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held weed wiper.

*\* However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.*

WHEN USING DO NOT EAT DRINK OR SMOKE.  
WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

**Environmental protection**

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

**Storage and disposal**

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.  
KEEP OUT OF REACH OF CHILDREN.  
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.  
RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinse three times. Add washings to sprayer at time of filling and dispose of safely. Triple rinsed containers may be disposed of as non-hazardous waste.

**Medical advice**

Medical guidance is available on a 24 hour basis by telephoning the National Chemical Emergency Centre on 01865 407333 or for doctors, from the National Poisons Information Service on 08448920111

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**DIRECTIONS FOR USE**

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

**Warnings**

EXTREME CARE SHOULD BE TAKEN TO AVOID SPRAY DRIFT AS THIS CAN SEVERELY DAMAGE NON-TARGET PLANTS. DO NOT MIX, STORE OR APPLY MONSANTO AMENITY GLYPHOSATE XL IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS. DO NOT leave spray mixtures in tank for long periods and make sure tanks are WELL VENTED.

**Restrictions**

A period of at least 6 hours and preferably 24 hours rain-free must follow application of Monsanto Amenity Glyphosate XL.

Do not spray onto weeds which are naturally senescent, or where growth is impaired by drought, high temperatures, a covering of dust, flooding or frost at, or immediately after application, otherwise poor control may result.

Do not spray in windy conditions as drift onto desired crops or vegetation could severely damage or destroy them.

After application, large concentrations of decaying foliage, stolons, roots or rhizomes should be dispersed or buried by thorough cultivation before crop drilling.

Applications of lime, fertilizer, farmyard manure and pesticides should be delayed until 5 days after application of Monsanto Amenity Glyphosate XL.

**Weeds controlled**

Monsanto Amenity Glyphosate is a foliar acting herbicide which controls annual and perennial grasses and most broad-leaved weeds when used as directed. It is important that all weeds are at the correct growth stage when treated, otherwise some re-growth may occur and this will need re-treatment.

Apply Monsanto Amenity Glyphosate herbicide once grasses and broad-leaved weeds have emerged and they have ACTIVELY GROWING green leaves.

- PERENNIAL GRASSES must have a full emergence of healthy, green leaf. (Common Couch, for example, becomes susceptible at the onset of tillering and new rhizome growth commences which usually occurs when plants have 4-5 leaves, each with 10-15cm of new growth).
- PERENNIAL BROAD-LEAVED WEEDS are most susceptible around the flowering stage.
- ANNUAL GRASSES AND BROAD-LEAVED WEEDS should have at least 5 cm of leaf, or 2 expanded true leaves, respectively.
- OTHER SPECIES - recommendations for specific Areas of Use are given in the Recommendation Tables, pages 6 and 7
- This product will not give an acceptable level of control of Horsetails (*Equisetum arvense*) – repeat treatment will be necessary.

**Following Crops**

Upon soil adsorption the herbicidal properties of Monsanto Amenity Glyphosate XL are lost permitting the drilling of crops 48 hours after application. Planting of trees, shrubs etc may take place 7 days after application. Grass seed may be sown from 5 days after treatment.

**#Crop specific information**

COMPLIANCE WITH THE FOLLOWING CONDITIONS OF USE AND ALL SAFETY PRECAUTIONS MARKED* IS A LEGAL REQUIREMENT	
Crops/situations:	Maximum individual dose (litres product/ hectare):
Natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil, hard surfaces	5.0
Amenity vegetation	5.0
Forestry, forest nursery:	5.0
• Weed control	
<b>Other specific restrictions:</b>	
The maximum individual dose must not exceed 22.5g/l glyphosate for hydraulic knapsack sprayers. When applying through rotary atomisers the spray droplet spectra produced must be of a minimum Volume Median Diameter (VMD) of 200 microns.	
Weed wipers may be used in any crop where the wiper or chemical does not touch the growing crop.	
For weed wiper applications, the maximum concentrations must not exceed the following:	
Weed wiper Mini	1:2 dilution with water } Refer to weed wiper guidance under
Other wipers	1:1 dilution with water } 'Mixing & Spraying' section
<b>READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.</b>	

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RECOMMENDATION TABLES

AREA OF USE	TARGET WEEDS/USAGE	CROP/SITUATION	WEED INFESTATION	APPLICATION RATE l/ha	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, RAILWAY BALLAST	Vegetation management	Including roadsides, paths, and along fences & total weed control on industrial sites	Annual weeds	1.5	Hydraulic sprayers : 80-250 l/ha or Rotary atomisers* water volumes 40 l/ha or hand-held equipment. See Mixing & Spraying section.	Use areas include: Cleaning up weeds ground prior to planting or sowing and as a directed spray in ornamental plantings. Hydraulic sprayers, rotary atomisers or weed wipers may be used. DO NOT USE IN OR ALONGSIDE HEDGEROWS, DO NOT USE UNDER POLYTHENE OR GLASS
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		
Hard surfaces (excluding railway ballast)	Vegetation management	Including roadsides, paths, concrete and alongside walls	Annual weeds	1.5	Hydraulic sprayers : 80-250 l/ha or Rotary atomisers* water volumes 40 l/ha or hand-held equipment. See Mixing & Spraying section.	Apply this product carefully. Ensure spraying takes place only when weeds are actively growing (normally March to October) and/or confined only to visible weeds including those in the 50cm swath covering the kerb edge and road gully - do not overspray drains
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		
AMENITY VEGETATION	Vegetation management	Areas of semi-natural or ornamental vegetation including trees. Areas of bare soil around ornamental plants or areas intended for ornamental planting or clearance of allotments	Annual weeds	1.5	80-400 l/ha*	Hydraulic sprayers, rotary atomisers or weed wipers may be used DO NOT USE IN OR ALONGSIDE HEDGEROWS, DO NOT USE UNDER POLYTHENE OR GLASS
			Perennial grasses and broad-leaved weeds	4.0 - 5.0		

\* Rotary atomisers may be used at a water volume of 40 l/ha. Ensure droplet diameter falls within the range 200-300 microns.

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**Mixing and spraying**

Monsanto Amenity Glyphosate XL mixes readily with water and can be applied in spray volumes ranging from 80-400 l/ha using tractor mounted, knapsack, rotary atomisers and hand-held sprayers. Specialised application equipment such as weed wipers and spot gun applicators may be used where indicated.

Correctly calibrate all sprayers under field or use conditions prior to application.

**a) Tractor mounted and powered sprayers**

These should be capable of applying accurately 80-400 l/ha within a pressure range of 1.5-2.5 bars (20-35 psi).

Half fill the spray tank with clean water, start gentle agitation, and then add the correct amount of Monsanto Amenity Glyphosate XL. Top up the tank with water to the required level. To avoid foaming do not use top tank agitation. Use of a defoamer may be necessary.

All applications using hydraulic sprayers (including knapsack sprayers) to be as 'MEDIUM' or 'COARSE' spray quality (BCPC definition).

**Medium Volume application (150-300 l/ha)**

Avoid high water volumes (>300 l/ha) which may lead to run-off from the treated vegetation, resulting in reduced control. Low drift nozzles such as air induction and pre-orifice types producing a medium or coarse spray (BCPC definition) should be used to minimise the risk of drift.

**Low Volume Application (minimum 80 l/ha)**

Low volume application can be achieved by reducing pressure and the appropriate nozzle selection. Low drift nozzles which produce a medium spray quality (BCPC definition) should be used to minimise the risk of drift.

**b) Knapsack sprayers**

Recommended delivery range is 80 - 300 l/ha. Half fill the spray tank with clean water, add the correct amount of Monsanto Amenity Glyphosate XL and top up with water. Fill according to best practice as given on the CPA's Voluntary Initiative website ([www.vauntaryinitiative.org.uk](http://www.vauntaryinitiative.org.uk))

When used at a walking speed of 1 m/sec to apply a swath of 1 m width, most knapsack sprayers fitted with a Hypro AN 0.6-AN2.4 or similar nozzle deliver approximately 200 l/ha spray volume (or 10 l per 500 m<sup>2</sup>). To apply 5.0 l/ha of MONSANTO AMENITY GLYPHOSATE XL, therefore, use 50ml of product for each 2 litres of spray liquid required. Similarly, knapsack sprayers fitted with low volume nozzles such as - D/0.23/1 - D/0.68/1 typically deliver approximately 100 l/ha spray volume. To apply 5.0 l/ha MONSANTO AMENITY GLYPHOSATE XL in this case, use 100ml of product for each 2 litres of spray liquid required.

**c) Rotary Atomisers**

Tractor-mounted boom sprayers and hand-held machines are suitable for use in some situations to apply a minimum spray volume of 40 l/ha.

When rotary atomisers are used to apply Monsanto Amenity Glyphosate XL ensure that the droplet diameter falls within the range 200-300 microns for all uses.

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Forestry weed control

Monsanto Amenity Glyphosate XL can be used for site preparation and for weed control in planted out trees.

AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE l/ha	WATER VOLUME	APPLICATION TIMING & GUIDANCE
Forestry: - Pre-planting	Arable land, planting, replanting, & grassland areas	Arable weeds	4.0	Hydraulic sprayers: 80-250 l/ha or rotary atomisers: 40 l/ha*	All tree species may be planted 7 days or more after treatment. *Where rotary atomisers are used their droplet diameter must fall within the range 200-300µm.
		Grassland weeds	5.0		
Forestry: - Post-planting (directed) in conifers & broad-leaved trees	Clean-up around trees with knapsack applications.	Annual/perennial grasses and broad-leaves	4.0	Knapsack: 200-250 l/ha or Weed wiper mini: apply as a concentration of 1 part Monsanto Amenity Glyphosate XL to 2 parts water (see Mixing & Spraying section)	It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season, treat bracken after frost has set but before senescence. Treat heather (late August) to end September. All other woody weeds are treated June-August before seed senescence (but after new growth of crop has hardened).

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Stir the correct amount of Monsanto Amenity Glyphosate XL to control the particular target species into the sprayer bottle half filled with clean water. Top up with water, close the top and shake gently to ensure good mixing.

Do not tank mix Monsanto Amenity Glyphosate XL when using rotary atomiser sprayers.

d) Weed Wipers

For rapewick applicators use a concentration of 1 part Monsanto Amenity Glyphosate XL to 2 parts of water and add a water-soluble dye if required. Care should be taken to avoid dripping onto wanted vegetation.

For new generation weed wipers, use 1 part Monsanto Amenity Glyphosate XL to 10 or 20 parts of water or as directed by manufacturer's instructions or as directed by manufacturer's instructions.

e) Spot Gun Applicators

Spot gun applicators are for the treatment of individual weeds. Apply 5 ml of spray to target weed, using a narrow cone TG-3 or TG-5 nozzle.

Spot Diameter (metres)	Amount of Monsanto Amenity Glyphosate XL (ml) per 5 litres spray solution for targeted dosages of:		
	3.0 l/ha	4.0 l/ha	5.0 l/ha
0.3	20	28	35
0.6	85	110	140

**Compatibility**

Do not tank mix Monsanto Amenity Glyphosate XL with adjuvants, pesticides or fertilisers except as advised by Monsanto. For up to date information on compatible products contact Monsanto UK Limited (Tel: 01954 717575).

For hydraulic sprayers: maintain continuous agitation when using Monsanto Amenity Glyphosate XL in tank mixture.

For knapsack sprayers: mix thoroughly and use immediately when using Monsanto Amenity Glyphosate XL in tank mixture.

**COMPANY ADVISORY INFORMATION**

This section is not part of the Product Label under the Plant Protection Products Regulations 1995 and provides additional advice on the product.

**General Information**

Monsanto Amenity Glyphosate XL herbicide is a foliar-acting herbicide with broad-spectrum activity. It is taken up by foliage and translocated to underground roots, rhizomes and stolons, providing control of both annual and perennial grasses and broad-leaved weeds. Monsanto Amenity Glyphosate XL is rapidly adsorbed onto particulate matter in soils and water and is quickly degraded by the micro-organisms present in soil and aquatic bottom sediments. Upon adsorption, the herbicidal properties of Monsanto Amenity Glyphosate XL are lost, permitting drilling of crops within 48 hours of application. When used as directed, any water subjected to Monsanto Amenity Glyphosate XL spray drift may be used immediately for irrigation purposes. Until degraded, the active ingredient in Monsanto Amenity Glyphosate XL, glyphosate, is practically immobile in soils and is, therefore, unlikely to contaminate groundwater.

To maximise the safe use of Monsanto Amenity Glyphosate XL to operator, consumer and environment, the label recommendations and the DEFRA/HSC/NAW publication "Code of Practice for Using Plant Protection Products" of January 2006, should be adhered to.

**Symptoms on the weeds**

Symptoms of treatment are generally first seen 7-10 days, or longer (if growth is slow), after spraying. These take the form of leaf reddening followed by yellowing and are usually quicker to appear on grasses than on broad-leaved weeds. Reaction of nettles is slow.

**Effects of weather**

See Directions for Use (Restrictions).

Monsanto Amenity Glyphosate will remain efficacious at low but not freezing temperatures however the onset of symptoms will be delayed.

A covering of dew may reduce efficacy where run-off occurs. Reduced control is likely where weed growth is impaired by natural senescence, drought, high temperature, a covering of dust, flooding or severe/prolonged frost at, or immediately after, application.

**Weed resistance strategy**

There is low risk for the development of weed resistance to Monsanto Amenity Glyphosate XL. There are no known cases of weed resistance to glyphosate in UK.

Strains of some annual weeds (e.g. Black-grass, Wild oats and Italian Ryegrass) have developed resistance to herbicides which may lead to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer (Monsanto).

Growers are encouraged to implement a weed resistance strategy based on (a) Good Agricultural Practices and (b) Good Plant Protection Practices by:

- Following label recommendations
- The adoption of complimentary weed control practices
- Minimising the risk of spreading weed infestations
- The implementation of good spraying practice to maintain effective weed control
- Using the correct nozzles to maximise coverage
- Application only under appropriate weather conditions
- Monitoring performance and reporting any unexpected results to Monsanto UK Ltd (01954 717575)

**General Cautions**

Take extreme care to avoid drift, particularly when using near or alongside hedgerows. The use of low drift nozzles such as 'air induction' and 'pre-orifice' nozzles are recommended.

After application, large concentrations of decaying foliage, stolons, roots or rhizomes should be dispersed or buried by thorough cultivation before crop drilling.

**New Generation Weed Wipers**

Logic Contact 2000  
Carrier Rollmaster  
Allman Ecowipe



Monsanto Amenity Glyphosate XL - material safety data sheet (MSDS)

Rotawiper (UK) Ltd  
C-Dax™ Eliminator  
Weedswiper™

**Sprayer Maintenance**

Ensure the sprayer is in good working order and replace damaged, worn or malfunctioning parts before use. Carry out maintenance according to the instructions of the sprayer manufacturer.

**Sprayer Hygiene**

It is essential to thoroughly clean out spray tanks, pumps and pipelines and nozzle or disc assemblies, with a recommended detergent cleaner, between applying this product and other pesticides to avoid contamination from pesticide residues. Traces of Monsanto Amenity Glyphosate XL left in the equipment may seriously damage or destroy crops sprayed later.

**Calibration**

All sprayers should always be calibrated before use. This is essential when nozzles are changed or if a different dose of product is to be applied.

**Unused Spray Mixture**

Once Monsanto Amenity Glyphosate XL has been diluted in the spray tank, it should be used as soon as possible. However, if unexpected delays occur the diluted spray can be safely stored. Agitate well before use. Storage for longer than 3 days may result in reduced efficacy.

**Disposal**

Follow the guidance on the disposal of surplus spray solution, tank washings, concentrate and containers as given in Section 5 of the DEFRA/HSC/NAW publication "Code of Practice for Using Plant Protection Products", January 2006.

**Environmental Information Sheet**

An Environmental Information Sheet for this product is available from the CPA's Voluntary initiative website ([www.voluntaryinitiative.org.uk](http://www.voluntaryinitiative.org.uk))

**Material Safety Data Sheet**

A material safety data sheet for this product is available on request (telephone 01954 717575) or can be downloaded from the Monsanto website: [www.monsanto-ag.co.uk](http://www.monsanto-ag.co.uk)

**Trade Mark References**

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Monsanto does not warrant that the purchase or use of equipment mentioned in this document will not infringe any patent or trade mark registration.

March 2017

MONSANTO Europe S.A./N.V.  
Monsanto Amenity Glyphosate XL

Version: 1.0

Page: 1 / 10  
Effective date: 03/02/2017

**MONSANTO Europe S.A./N.V.**  
Safety Data Sheet  
Commercial Product

**1. PRODUCT AND COMPANY IDENTIFICATION**

**1.1. Product identifier**

**Monsanto Amenity Glyphosate XL**

**1.1.1. Chemical name**

Not applicable for a mixture.

**1.1.2. Synonyms**

None.

**1.1.3. CLP Annex VI Index No.**

Not applicable.

**1.1.4. C&L ID No.**

Not available.

**1.1.5. EC No.**

Not applicable for a mixture.

**1.1.6. REACH Reg. No.**

Not applicable for a mixture.

**1.1.7. CAS No.**

Not applicable for a mixture.

**1.2. Product use**

Herbicide

**1.3. Company/(Sales office)**

MONSANTO Europe S.A./N.V.  
Haven 627, Scheldelaan 460, B-2040  
Antwerp, Belgium  
Telephone: +32 (0)3 568 51 11  
Fax: +32 (0)3 568 50 90  
E-mail: [safety.datasheet@monsanto.com](mailto:safety.datasheet@monsanto.com)

**1.4. Emergency numbers**

Telephone: Belgium +32 (0)3 568 51 23

**2. HAZARDS IDENTIFICATION**

**2.1. Classification**

**2.1.1. Classification according to Regulation (EC) No. 1272/2008 [CLP], National classification: U.K.**

Not classified as dangerous.

Hxxx

Not applicable.

**2.2. Label elements: U.K.**

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**Hazard pictogram/pictograms: U.K.**

Not Applicable

**Signal word: U.K.**

Not applicable.

**Hazard statement/statements: U.K.**

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Hxxx Not applicable.  
**Precautionary statement/statements: U.K.**  
 P234 Keep only in original container  
**Supplemental hazard information: U.K.**  
 EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

- 2.3. Other hazards**  
 0% of the mixture consists of ingredient/ingredients of unknown acute toxicity.  
 0% of the mixture consists of ingredient/ingredients of unknown hazards to the aquatic environment.
- 2.3.1. Potential environmental effects**  
 Not expected to produce significant adverse effects when recommended use instructions are followed.
- 2.4. Appearance and odour (colour/form/odour)**  
 Pale yellow /Liquid / Odourless

Refer to section 11 for toxicological and section 12 for environmental information.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

- 3.1 Substance:** Not applicable.  
**3.2 Mixture:** Yes.

**Composition/information on ingredients**

Components	CAS No.	EC No.	EU Index No./ REACH Reg. No./ C&I ID No.	Concentration	Classification
Isopropylamine salt of glyphosate	38641-94-0	254-056-8	015-184-00-8 / - / 02-2119693876-15- 0000	41,50 %	Aquatic Chronic - Category 2; H411; (c)
Quaternary ammonium compound			- / - / -	9,50 %	Skin corrosion/irritation - Category 2; Eye damage/irritation - Category 1; Aquatic Chronic - Category 3; H315, 318, 412
Water and minor formulating ingredients			- / - / -	49,00 %	Not classified as dangerous.

**Active ingredient**  
 Isopropylamine salt of N-(phosphonomethyl)glycine; {Isopropylamine salt of glyphosate}

Full text of classification code: See section 16.

**4. FIRST AID MEASURES**

Use personal protection recommended in section 8.

**4.1. Description of first aid measures**

- 4.1.1. Eye contact**  
 Immediately flush with plenty of water. Continue for at least 15 minutes. If easy to do, remove contact lenses. If there are persistent symptoms, obtain medical advice.
- 4.1.2. Skin contact**

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Take off contaminated clothing, wristwatch, jewellery. Immediately wash affected skin with plenty of water. Wash clothes and clean shoes before re-use.

**4.1.3. Inhalation**

Remove to fresh air.

**4.1.4. Ingestion**

Rinse mouth thoroughly with water. Remove particles from mouth. Immediately offer water to drink. Do NOT induce vomiting unless directed by medical personnel. If symptoms occur, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

**4.2.1. Potential health effects**

**Likely routes of exposure:** Skin contact, inhalation, eye contact, ingestion  
**Eye contact, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.  
**Skin contact, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.  
**Inhalation, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.  
**Single ingestion:** Not expected to produce significant adverse effects when recommended use instructions are followed.

**4.3. Indication of any immediate medical attention and special treatment needed**

**4.3.1. Advice to doctors**

This product is not an inhibitor of cholinesterase.

**4.3.2. Antidote**

Treatment with atropine and oximes is not indicated.

**5. FIRE-FIGHTING MEASURES**

**5.1. Extinguishing media**

**5.1.1. Recommended:** Water, foam, dry chemical, carbon dioxide (CO2)

**5.2. Special hazards**

**5.2.1. Unusual fire and explosion hazards**

Minimise use of water to prevent environmental contamination. Environmental precautions: see section 6.

**5.2.2. Hazardous products of combustion**

Carbon monoxide (CO), Phosphorus oxides (PxOy), nitrogen oxides (NOx), Ammonia (NH3)

**5.3. Advice for firefighters**

Self-contained breathing apparatus. Equipment should be thoroughly decontaminated after use.

**5.4. Flash point**

Does not flash.

**6. ACCIDENTAL RELEASE MEASURES**

Use handling recommendations in Section 7 and personal protection recommendations in Section 8.

**6.1. Personal precautions**

Use personal protection recommended in section 8.

**6.2. Environmental precautions**

Minimise spread. Keep out of drains, sewers, ditches and water ways. Notify authorities.

**6.3. Methods for cleaning up**  
 Absorb in earth, sand or absorbent material. Dig up heavily contaminated soil. Refer to section 7 for types of containers. Collect in containers for disposal. Flush residues with small quantities of water. Minimise use of water to prevent environmental contamination.

Refer to section 13 for disposal of spilled material.

**7. HANDLING AND STORAGE**

**7.1. Precautions for safe handling**  
 Good industrial practice in housekeeping and personal hygiene should be followed. Avoid contact with eyes. When using do not eat, drink or smoke. Wash hands thoroughly after handling or contact. Wash contaminated clothing before re-use. Thoroughly clean equipment after use. Do not contaminate drains, sewers and water ways when disposing of equipment rinse water. Refer to section 13 of the safety data sheet for disposal of rinse water. Emptied containers retain vapour and product residue. FOLLOW LABELLED WARNINGS EVEN AFTER CONTAINER IS EMPTIED.

**7.2. Conditions for safe storage, including any incompatibilities**  
**Compatible materials for storage:** stainless steel, fibreglass, plastic, glass lining  
**Incompatible materials for storage:** galvanised steel, unlined mild steel, see section 10.  
 Minimum storage temperature: -5 °C  
 Maximum storage temperature: 35 °C  
 Keep out of reach of children. Keep away from food, drink and animal feed. Keep container tightly closed in a cool, well-ventilated place. Keep only in the original container. Minimum shelf life: 2 years.

**7.3. Specific end use(s)**  
 Not applicable.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters**

Airborne exposure limits	
Components	Exposure Guidelines
Isopropylamine salt of glyphosate	No specific occupational exposure limit has been established.
Quaternary ammonium compound	No specific occupational exposure limit has been established.
Water and minor formulating ingredients	No specific occupational exposure limit has been established.

**8.2. Exposure controls**

**Engineering controls**

No special requirement when used as recommended.

**Eye protection:**

No special requirement when used as recommended.

**Skin protection:**

If repeated or prolonged contact: Wear chemical resistant gloves. Chemical resistant gloves include those made of waterproof materials such as nitrile, butyl, neoprene, polyvinyl chloride (PVC), natural rubber and/or barrier laminate.

**Respiratory protection:**

No special requirement when used as recommended.

When recommended, consult manufacturer of personal protective equipment for the appropriate type of equipment for a given application.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

**9.1 Information on basic physical and chemical properties**

Colour/colour range:	Pale yellow
Form:	Liquid
Odour:	Odourless
Odour threshold:	No data.
Physical form changes (melting, boiling, etc.):	
Melting point:	Not applicable.
Boiling point:	Not available.
Flash point:	Does not flash.
Explosive properties:	No explosive properties
Auto ignition temperature:	460 °C
Self-accelerating decomposition temperature (SADT):	No data.
Oxidizing properties:	Not available.
Specific gravity:	1.167 @ 20 °C / 4 °C
Vapour pressure:	No significant volatility; aqueous solution.
Vapour density:	Not applicable.
Dynamic viscosity:	24.9 mPa·s @ 20 °C
Kinematic viscosity:	Not available.
Density:	1.167 g/cm <sup>3</sup>
Solubility:	Water: Soluble
pH:	5.0 @ 10 g/l
Partition coefficient:	log Pow: < -3.2 @ 25 °C (Glyphosate)

**9.2 Other information**

Evaporation rate:	No data.
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**10. STABILITY AND REACTIVITY**

**10.1. Reactivity**

Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.

**10.2. Chemical stability**

Stable under normal conditions of handling and storage.

**10.3. Possibility of hazardous reactions**

- Reacts with galvanised steel or unlined mild steel to produce hydrogen, a highly flammable gas that could explode.
- 10.4. Conditions to avoid**  
None
- 10.5. Incompatible materials**  
Incompatible materials for storage: galvanised steel, unlined mild steel, see section 10.  
Compatible materials for storage: see section 7.2.
- 10.6. Hazardous decomposition products**  
Hazardous products of combustion: see section 5.

**11. TOXICOLOGICAL INFORMATION**

This section is intended for use by toxicologists and other health professionals.

**11.1. Information on toxicological effects**

**Classification according to Regulation (EC) No. 1272/2008 [CLP]**

- Acute oral toxicity:** Based on available data classification criteria are not met.
- Acute dermal toxicity:** Based on available data classification criteria are not met.
- Acute inhalation toxicity:** Based on available data classification criteria are not met.
- Skin corrosion/irritation:** Based on available data classification criteria are not met.
- Eye corrosion/irritation:** Based on available data classification criteria are not met.
- Skin sensitization:** Based on available data classification criteria are not met.
- Respiratory sensitization:** Based on available data classification criteria are not met.
- Mutagenicity:** Based on available data classification criteria are not met.
- Carcinogenicity:** Based on available data classification criteria are not met.
- Reproductive/Developmental Toxicity:** Based on available data classification criteria are not met.
- Specific Target Organ Toxicity - Single Exposure:** Based on available data classification criteria are not met.
- Specific Target Organ Toxicity - Repeated Exposure:** Based on available data classification criteria are not met.
- Aspiration hazard:** Based on available data classification criteria are not met.

**Most important symptoms and effects, both acute and delayed**

- Potential health effects**
- Likely routes of exposure:** Skin contact, inhalation, eye contact, ingestion
- Eye contact, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.
- Skin contact, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.
- Inhalation, short term:** Not expected to produce significant adverse effects when recommended use instructions are followed.
- Single ingestion:** Not expected to produce significant adverse effects when recommended use instructions are followed.

Data obtained on product and components are summarized below.

- Acute oral toxicity**  
Rat, LD50 (Method: OECD 401): > 2.000 mg/kg body weight  
Slightly toxic.
- Acute dermal toxicity**

- Rat, LD50:** > 2.000 mg/kg body weight
- Skin irritation**  
Rabbit, number of animals unknown, OECD 404 test:  
Non-irritant
- Eye irritation**  
Rabbit, number of animals unknown, OECD 405 test:  
Non-irritant
- Skin sensitization**  
Guinea pig, Negative.  
No skin sensitization

**N-(phosphonomethyl)glycine; glyphosate acid**

**Genotoxicity**  
Not genotoxic.

**Carcinogenicity**

- Not carcinogenic in rats or mice.
- Reproductive/Developmental Toxicity**  
Developmental effects in rats and rabbits only in the presence of significant maternal toxicity.  
Reproductive effects in rats only in the presence of significant maternal toxicity.

**12. ECOLOGICAL INFORMATION**

This section is intended for use by ecotoxicologists and other environmental specialists.

Data obtained on product and components are summarized below.

**12.1 Toxicity**

- Aquatic toxicity, fish**  
**Rainbow trout (Oncorhynchus mykiss):**  
Acute toxicity, 96 hours, LC50: > 100 mg/L
- Aquatic toxicity, invertebrates**  
**Water flea (Daphnia magna):**  
Acute toxicity, 48 hours, EC50: > 100 mg/L
- Aquatic toxicity, algae/aquatic plants**  
**Green algae (Scenedesmus subspicatus):**  
Acute toxicity, 72 hours, ErC50 (growth rate): 54,5 mg/L
- Green algae (Scenedesmus subspicatus):**  
Acute toxicity, 72 hours, NOEC (growth rate): 4,8 mg/L

**12.2 Persistence and degradability**

No data.

**12.3 Bioaccumulative potential**

Refer to section 9 for partition coefficient data.

**12.4 Mobility in soil**

No data.

**12.5 Results of PBT and vPvB assessment**

Not a persistent, bioaccumulative or toxic (PBT) nor a very persistent, very bioaccumulative (vPvB) mixture.

**12.6 Other adverse effects**  
 Not expected to produce significant adverse effects when recommended use instructions are followed.

**12.7 Additional information**  
 If available, data obtained on similar products and/or on components are summarized below.

**N-(phosphonomethyl)glycine; glyphosate acid**

**Avian toxicity**

**Bobwhite quail (*Colinus virginianus*):**  
 Acute oral toxicity, single dose, LD50: > 3.851 mg/kg body weight

**Arthropod toxicity**

**Honey bee (*Apis mellifera*):**  
 Oral, 48 hours, LD50: 100 µg/bee

**Honey bee (*Apis mellifera*):**  
 Contact, 48 hours, LD50: > 100 µg/bee

**Bioaccumulation**

**Bluegill sunfish (*Lepomis macrochirus*):**  
 Whole fish: BCF: < 1  
 No significant bioaccumulation is expected.

**Dissipation**

**Soil, field:**  
 Half life: 2 - 174 days  
 Koc: 884 - 60.000 L/kg  
 Adsorbs strongly to soil.

**Water, aerobic:**  
 Half life: < 7 days

**13. DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

**13.1.1. Product**

Follow all local/regional/national/international regulations on waste disposal. Follow current edition of the General Waste, Landfill, and Burning of Hazardous Waste Directives; and the Shipment of Waste Regulation. Keep out of drains, sewers, ditches and water ways. According to the manufacturer self-classification, following Regulation (EC) No. 1272/2008 [CLP], the product can be disposed as a non-hazardous industrial waste. Disposal in a waste incinerator with energy recovery is recommended.

**13.1.2. Container**

Follow all local/regional/national/international regulations on waste disposal, packaging waste collection/disposal. Follow current edition of the General Waste, Landfill, and Burning of Hazardous Waste Directives; and the Shipment of Waste Regulation. Do NOT re-use containers. Triple or pressure rinse empty containers. Pour rinse water into spray tank. Properly rinsed container can be disposed as a non hazardous industrial waste. Store for collection by approved waste disposal service. Recycle if appropriate facilities/equipment available. Recycle the non-hazardous container only when a proper control on the end use of the recycled plastic is possible. Suitable for industrial grade recycling only. Do NOT recycle plastic that could end in any human or food contact application. This package meets the requirements for energy recovery. Disposal in a incinerator with energy recovery is recommended.

Use handling recommendations in Section 7 and personal protection recommendations in Section 8.

**14. TRANSPORT INFORMATION**

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

**ADR/RID**

- 14.1 UN No.: Not applicable.
- 14.2 **Proper Shipping Name (Technical Name if required): Not regulated for transport under ADR/RID Regulations.**
- 14.3 **Transport hazard class: Not applicable.**
- 14.4 **Packing Group: Not applicable.**
- 14.5 **Environmental hazards: Not applicable.**
- 14.6 **Special precautions for the user: Not applicable.**

**IMO**

- 14.1 UN No.: Not applicable.
- 14.2 **Proper Shipping Name (Technical Name if required): Not regulated for transport under IMO Regulations**
- 14.3 **Transport hazard class: Not applicable.**
- 14.4 **Packing Group: Not applicable.**
- 14.5 **Environmental hazards: Not applicable.**
- 14.6 **Special precautions for the user: Not applicable.**
- 14.7 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.**

**IATA/ICAO**

- 14.1 UN No.: Not applicable.
- 14.2 **Proper Shipping Name (Technical Name if required): Not regulated for transport under IATA/ICAO Regulations**
- 14.3 **Transport hazard class: Not applicable.**
- 14.4 **Packing Group: Not applicable.**
- 14.5 **Environmental hazards: Not applicable.**
- 14.6 **Special precautions for the user: Not applicable.**

**15. REGULATORY INFORMATION**

- 15.1. Safety, health and environmental regulations/legislation specific for the substance/mixture**  
 SP1 Do not contaminate water with the product or its container.
- 15.2. Chemical Safety Assessment**  
 A Chemical Safety Assessment per Regulation (EC) No. 1907/2006 is not required and has not been performed.  
 A Risk Assessment has been performed under Regulation EC 1107/2009.

**16. OTHER INFORMATION**

The information given here is not necessarily exhaustive but is representative of relevant, reliable data. Follow all local/regional/national/international regulations. Please consult supplier if further information is needed. This Safety Data Sheet has been prepared following the Regulation (EC) No. 1907/2006 (Annex II) as last amended by Regulation (EC) No. 2015/830  
 || Significant changes versus previous edition.  
 In this document the British spelling was applied.

Classification of components

New-Way Weed Spray - product label

MONSANTO Europe S.A./N.V. Page: 10 / 10  
 Monsanto Amenity Glyphosate XL Version: 1.0 Effective date: 03/02/2017

Components	Classification
Isopropylamine salt of glyphosate	Aquatic Chronic - Category 2 H411 Toxic to aquatic life with long lasting effects.
Quaternary ammonium compound	Skin corrosion/irritation - Category 2 Eye damage/irritation - Category 1 Aquatic Chronic - Category 3 H315 Causes skin irritation. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.
Water and minor formulating ingredients	Not classified as dangerous.

Endnotes:  
 (a) EU label (manufacturer self-classification)  
 (b) EU label (Annex I)  
 (c) EU CLP classification (Annex VI)  
 (d) EU CLP (manufacturer self-classification)

Full denomination of most frequently used acronyms: BCF (Bioconcentration Factor), BOD (Biochemical Oxygen Demand), COD (Chemical Oxygen Demand), EC50 (50% effect concentration), ED50 (50% effect dose), I.M. (intramuscular), I.P. (intraperitoneal), I.V. (intravenous), Koc (Soil adsorption coefficient), LC50 (50% lethality concentration), LD50 (50% lethality dose), LDLo (Lower limit of lethal dosage), LEL (Lower Explosion Limit), LOAEC (Lowest Observed Adverse Effect Concentration), LOAEL (Lowest Observed Adverse Effect Level), LOFC (Lowest Observed Effect Concentration), LOEL (Lowest Observed Effect Level), MFL (Maximum Exposure Limit), MTD (Maximum Tolerated Dose), NOAEC (No Observed Adverse Effect Concentration), NOAEL (No Observed Adverse Effect Level), NOEC (No Observed Effect Concentration), NOEL (No Observed Effect Level), OEL (Occupational Exposure Limit), PEL (Permissible Exposure Limit), PI (Primary Irritation Index), Pow (Partition coefficient n-octane/water), S.C. (subcutaneous), STEL (Short-Term Exposure Limit), STOT SE (Specific Target Organ Toxicity, Single Exposure), STOT RE (Specific Target Organ Toxicity, Repeated Exposure), TLV-C (Threshold Limit Value-Ceiling), TLV-TWA (Threshold Limit Value - Time Weighted Average), UEL (Upper Explosion Limit)

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, MONSANTO Company or any of its subsidiaries makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for the purposes prior to use. In no event will MONSANTO Company or any of its subsidiaries be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR TO THE PRODUCT TO WHICH INFORMATION REFERS.

Safety Data Sheet (SDS) Annex

Chemical Safety Report:  
 Read and follow label instructions.

000000063347

End of document

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**headland**  
AMENITY PRODUCTS

**NEW-WAY WEED SPRAY**

Contains 240g/l acetic acid in a soluble concentrate MAPP 15319

For weed control in parks, amenity areas and church yards, on pathways, around domestic, industrial and public buildings, and similar situations.

Distributed by Headland Amenity Limited  
1-3 Freeman Court, Jarman Way,  
Royston, Hertfordshire, SG8 5JW.  
Tel: 01763 255550  
Web: www.headlandamenity.com

5 litres e

ST12000 1250L

**NEW-WAY WEED SPRAY** 5 Litres e

Distributed by Headland Amenity Limited, 1-3 Freeman Court, Jarman Way, Royston, Hertfordshire, SG8 5JW. Tel: 01763 255550 Web: www.headlandamenity.com

Contains Alcohol ethoxylate, C13 EC 931-138-8; Acetic acid 240g/l EC 200-580-7 MAPP 15319  
For weed control in parks, amenity areas and church yards, on pathways, around domestic, industrial and public buildings, and similar situations.

The Control of Substances Hazardous to Health (COSHH) Regulations may apply to the use of this product at work.

**DANGER**  
H318 Causes serious eye damage.  
H315 Causes skin irritation.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P552 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P361+P354 Take off contaminated clothing and wash it before reuse.  
ELR401 To avoid risks to human health and the environment, comply with the instructions for use. A safety data sheet is available on request. Do not contaminate water with the product or its container.

**IMPORTANT INFORMATION FOR USE ONLY AS A PROFESSIONAL HERBICIDE AND MOSSKILLER**  
Situations: Natural surfaces not intended to bear vegetation. Permeable surfaces overlying soil.  
Hard surfaces.  
Maximum individual dose: 25 ml product per m<sup>2</sup>.  
Maximum number of treatments: 6 per year.  
Other specific restrictions: A minimum interval of 7 days must be observed between applications.  
**READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.**

**SAFETY PRECAUTIONS**  
**Operator protection**  
Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment. WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACE SHIELD) when handling the concentrate. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection. Wear suitable gloves and eye/face protection. Avoid contact with eyes. Do not breathe spray/FUMES. WASH SPLASHES from skin or eyes immediately. WHEN USING DO NOT EAT, DRINK OR SMOKE. WASH HANDS before eating and drinking and after work. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Take off immediately all contaminated clothing. Use only in well-ventilated areas. Use appropriate containment to avoid environmental contamination.  
**Environmental protection**  
Do not apply where rainfall is expected within 6 hours of application. Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads). To protect aquatic organisms respect an ungrazed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1m of the top of the bank of a static or flowing water body. Aim spray away from water. RISK TO NON-TARGET INSECTS OR OTHER ART-HOPPODS. See Directions for use. Applications must not be made via tractor mounted horizontal boom sprayers.  
**Storage & Disposal**  
KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. This material and its container must be disposed of in a safe way.

To avoid risks to man and the environment, comply with the instructions for use. Safety data sheet available for professional users on request. This product is approved under the Plant Protection Product Regulations.

**DIRECTIONS FOR USE**  
**IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.**

New-Way Weed Spray is a non-selective weed and moss killer active against most soft plant tissue with which it comes in contact. Weeds and moss are controlled by covering their foliage completely and evenly with spray. Soon after spraying, the foliage of treated weeds and moss begins to wither and die. Plant roots are not killed and new foliage may grow, particularly from the roots of perennial weeds. Annual weeds with small roots and moss may die back completely but re-treatment will usually be necessary, especially to keep down perennial weeds. Best results are achieved against tender, small weeds less than 10cm high. Ideally spray in spring and repeat as necessary over the growing season. Minimize drift from the target area.

**Areas of use**  
New-Way Weed Spray may be used to control weed or moss growth in a wide variety of situations, such as in parks, amenity areas and churchyards, on pathways, around domestic, industrial and public buildings, and similar situations. Keep spray off vegetables, flowers, shrubs and lawns.

**Application**  
Apply as a COARSE spray so that the moss or the weed leaves and stems are fully wetted but before the point at which spray solution drips from the leaves. Repeat against surviving weeds after a few days if necessary when fresh growth is seen.

**Mixing**  
Mix 1 volume of New-Way Weed Spray with 3 volumes of clean water, e.g. for a 16 litre knapsack sprayer mix 4 litres of New-Way Weed Spray with 12 litres of water:  
1. Fill 1/3 the spray tank with clean water.  
2. Add the required amount of New-Way Weed Spray.  
3. Fill the tank with more clean water to the required level.  
4. Agitate thoroughly before use.

**Weather**  
Apply New-Way Weed Spray on a dry day when rain is not expected. Rain after spraying may wash spray away from the leaves leading to a poor result. Do not apply where rainfall is expected within 6 hours of application.

Apply this product carefully. Ensure spraying takes place only when weeds are actively growing (normally March to October) and is confined only to visible weeds including those in the 20cm swath covering the herb edge and road gully - do not overgraze drains.

**After spraying**  
Wash out sprayer after use. Keep people and animals off dense patches of weeds or moss until the spray has dried, often just 15-20 minutes. However, this is not necessary for treated areas containing only occasional low or prostrate weeds or moss such as may be found on pathways. Use of New-Way Weed Spray may cause some surfaces to become slippery for a short time after application.

**Subsequent planting**  
There are no residual effects of New-Way Weed Spray in the soil. Sowing or planting may be undertaken as soon as the moss or the weeds have died.

**Care of equipment**  
Wash the sprayer and utensils, both inside and outside, thoroughly after use and allow to dry.

**Authorisation Holder and Marketing Company**  
Purys Innovation ApS, Almøvej 180, DK-2250 Gilleleje, Denmark.  
Tel: +45 4830 1727

ST12000/1250L

New-Way Weed Spray - material safety data sheet (MSDS)

Revision date: 24/03/2021

Revision: 5

Supersedes date: 24/09/2019



**SAFETY DATA SHEET  
NEW-WAY WEED SPRAY**

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name NEW-WAY WEED SPRAY  
Product number PST012/5

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Identified uses As a horticultural/industrial herbicide and mosskiller.

**1.3. Details of the supplier of the safety data sheet**

Supplier Headland Amenity Ltd.  
1-3 Freeman Court  
Jarman Way  
Royston  
Hertfordshire  
SG8 5HW  
+44 (0)1763 255550  
sds@headlandamenity.com

Contact person Wendy Johnson

**1.4. Emergency telephone number**

Emergency telephone +44 (0)1763 255550 (09.00 - 17.00 GMT Monday - Friday)

National emergency telephone number 111

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

**2.2. Label elements**

**Hazard pictograms**



Signal word Danger

Hazard statements H315 Causes skin irritation.  
H318 Causes serious eye damage.

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**NEW-WAY WEED SPRAY**

**Precautionary statements** P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/ doctor.  
P332+P313 If skin irritation occurs: Get medical advice/ attention.  
P362+P364 Take off contaminated clothing and wash it before reuse.

**Supplemental label information** EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

**Contains** ACETIC ACID

**2.3. Other hazards**

**SECTION 3: Composition/information on ingredients**

**3.2. Mixtures**

<b>ACETIC ACID</b>	<b>24% (240g/l)</b>
CAS number: 64-19-7	EC number: 200-580-7 REACH registration number: 01-2119475328-30-XXXX

**Classification**  
Flam. Liq. 3 - H226  
Skin Corr. 1A - H314  
Eye Dam. 1 - H318

<b>ALCOHOL ETHOXYLATE, C13</b>	<b>3-10%</b>
CAS number: 69011-36-5	EC number: 500-241-6

**Classification**  
Aquatic Chronic 3 - H412

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**Inhalation** Remove person to fresh air and keep comfortable for breathing. Get medical attention if symptoms are severe or persist.

**Ingestion** Rinse mouth thoroughly with water. Get medical attention if symptoms are severe or persist.

**Skin contact** Take off contaminated clothing and wash it before reuse. Wash skin thoroughly with soap and water. Get medical attention if symptoms are severe or persist after washing.

**Eye contact** Remove any contact lenses and open eyelids wide apart. Rinse immediately with plenty of water. Get medical attention immediately. Continue to rinse.

**4.2. Most important symptoms and effects, both acute and delayed**

**Inhalation** Irritating to respiratory system.

**Ingestion** Irritates mucous membranes in mouth and gastrointestinal tract.

**Skin contact** Redness.

**Eye contact** Eye contact may result in deep caustic burns, pain, tearing and cramping of the eyelids. Risk of serious damage to eyes. Loss of sight.

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NEW-WAY WEED SPRAY

4.3. Indication of any immediate medical attention and special treatment needed

Specific treatments Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The mixture is not classified as flammable. Use fire-extinguishing media suitable for the surrounding environment.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Product decomposes in fire and may release toxic gases such as carbon monoxide and hydrocarbons.

5.3. Advice for firefighters

Protective actions during firefighting Move containers from fire area if it can be done without risk. Avoid breathing fire gases or vapours.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate.

6.2. Environmental precautions

Environmental precautions Do not discharge onto the ground or into water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wipe up with an absorbent cloth and dispose of waste safely. Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Use only in well-ventilated areas.

Advice on general occupational hygiene Eye wash facilities and emergency shower must be available when handling this product. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep out of the reach of children. Keep away from food, drink and animal feeding stuffs. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ACETIC ACID

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Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m<sup>3</sup> vapour  
Short-term exposure limit (15-minute): WEL 20 ppm 50 mg/m<sup>3</sup> vapour  
WEL = Workplace Exposure Limit.

ACETIC ACID (CAS: 64-19-7)

DNEL Workers - Inhalation; Short term local effects: 25 mg/kg  
Workers - Inhalation; Long term local effects: 25 mg/kg  
General population - Dermal; Short term local effects: 25 mg/kg  
General population - Inhalation; Long term local effects: 25 mg/kg

PNEC - Fresh water; 3.06 mg/l  
- Sediment (Freshwater); 11.4 mg/kg  
- Soil; 0.478 mg/kg  
- STP; 85 mg/l

8.2. Exposure controls

Eye/face protection Use approved safety goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection Wear protective gloves. Butyl rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection Wear protective clothing. Boots.

Hygiene measures

Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and protective equipment before entering eating areas.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Gas filter, type E. Respiratory protection must conform to one of the following standards: EN 136/140/145.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Liquid  
Colour Colourless.  
Odour Characteristic.  
Odour threshold No information available.  
pH pH (concentrated solution); 3.19  
Melting point No information available.  
Initial boiling point and range 100°C  
Flash point No information available.  
Evaporation rate No information available.  
Evaporation factor No information available.  
Flammability (solid, gas) No information available.  
Upper/lower flammability or explosive limits No information available.

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NEW-WAY WEED SPRAY

Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.065
Solubility(ies)	Miscible with water
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	372 mPa s @ °C
Explosive properties	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

**SECTION 10: Stability and reactivity**

10.1. Reactivity

Reactivity Strong reducing agents. Strong oxidising agents. Strong alkalis.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid None known.

10.5. Incompatible materials

Materials to avoid Strong reducing agents. Strong oxidising agents. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Toxicological information on ingredients.

ACETIC ACID

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD <sub>50</sub> mg/kg)	3,310.0
Species	Rat
ATE oral (mg/kg)	3,310.0
<u>Acute toxicity - Inhalation</u>	

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<u>Acute toxicity inhalation (LC<sub>50</sub> vapours mg/l)</u>	40.0
<u>Species</u>	Rat
<u>ATE inhalation (vapours mg/l)</u>	40.0

ALCOHOL ETHOXYLATE, C13

<u>Acute toxicity - oral</u>	
Acute toxicity oral (LD <sub>50</sub> mg/kg)	2,000.9
Species	Rat
ATE oral (mg/kg)	2,000.9

**SECTION 12: Ecological information**

12.1. Toxicity

Ecological information on ingredients.

ACETIC ACID

Acute aquatic toxicity

<u>Acute toxicity - fish</u>	LC <sub>50</sub> , 96 hours: 300.82 mg/l, Freshwater fish LC <sub>50</sub> , 96 hours: 300.82 mg/l, Marinewater fish LC <sub>50</sub> , 21 days: 52.2 mg/l, Oncorhynchus mykiss (Rainbow trout) NOEC, 21 days: 34.3 mg/l, Oncorhynchus mykiss (Rainbow trout)
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<u>Acute toxicity - aquatic invertebrates</u>	EC <sub>50</sub> , 48 hours: >300.82 mg/l, Daphnia magna NOEC, 21 days: 31.4 mg/l, Daphnia magna
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<u>Acute toxicity - aquatic plants</u>	EC <sub>50</sub> , 72 hours: >300.82 mg/l, Skeletonema costatum
--	---

<u>Acute toxicity - microorganisms</u>	NOEC, 16 hour: 1150 mg/l, Pseudomonas putida
--	--

ALCOHOL ETHOXYLATE, C13

Acute aquatic toxicity

<u>Acute toxicity - fish</u>	LC <sub>50</sub> , 96 hour: 2.5 mg/l, Brachydanio rerio (Zebra Fish) EC <sub>50</sub> , 30 days: 1.097 mg/l, Pimephales promelas (Fat-head Minnow)
------------------------------	---

<u>Acute toxicity - aquatic invertebrates</u>	EC <sub>50</sub> , 48 hours: 1.5 mg/l, Daphnia magna EC <sub>50</sub> , 21 days: 0.74 mg/l, Daphnia magna
---	--

<u>Acute toxicity - aquatic plants</u>	ErC20, 72 hours: 0.979 mg/l, Desmodium subspicatus ErC50, 72 hours: 2.5 mg/l, Scenedesmus subspicatus NOEC, 72 hours: 1.7 mg/l, Scenedesmus subspicatus
--	---

<u>Acute toxicity - microorganisms</u>	EC <sub>50</sub> , 3 hours: 140 mg/l, Activated sludge EC <sub>50</sub> , 16.9 hours: > 10g, Pseudomonas putida
--	--

12.2. Persistence and degradability

Persistence and degradability The product is biodegradable.

12.3. Bioaccumulative potential

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Revision date: 24/03/2021

Revision: 5

Supersedes date: 24/09/2019

NEW-WAY WEED SPRAY

**Bioaccumulative potential** Bioaccumulation is unlikely.

**Partition coefficient** No information available.

**12.4. Mobility in soil**

**Mobility** The product contains at least one substance with low soil mobility.

**12.5. Results of PBT and vPvB assessment**

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

**12.6. Other adverse effects**

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**General information** Avoid discharge to drain or surface water. Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.

**SECTION 14: Transport information**

**14.1. UN number**

UN No. (ADR/RID)	2790
UN No. (IMDG)	2790
UN No. (ICAO)	2790
UN No. (ADN)	2790


**14.2. UN proper shipping name**

<b>Proper shipping name (ADR/RID)</b>	ACETIC ACID SOLUTION
<b>Proper shipping name (IMDG)</b>	ACETIC ACID SOLUTION
<b>Proper shipping name (ICAO)</b>	ACETIC ACID SOLUTION
<b>Proper shipping name (ADN)</b>	ACETIC ACID SOLUTION

**14.3. Transport hazard class(es)**

ADR/RID class	8
ADR/RID classification code	C3
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

**Transport labels**



**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III

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Revision: 5

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NEW-WAY WEED SPRAY

**ICAO packing group** III

**ADN packing group** III

**14.5. Environmental hazards**

**Environmentally hazardous substance/marine pollutant** No.

**14.6. Special precautions for user**

<b>EmS</b>	F-A, S-B
<b>ADR transport category</b>	3
<b>Emergency Action Code</b>	-2R
<b>Hazard Identification Number (ADR/RID)</b>	80
<b>Tunnel restriction code</b>	(E)

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**EU legislation** Product Registration Number: MAPP 15319.

**15.2. Chemical safety assessment**

A chemical safety assessment has been carried out.

**SECTION 16: Other information**

**Revision comments** Section 2.2 'Supplemental label information' updated. Section 12.6 'Other adverse effects' updated. Supplier company address updated. Emergency contact details updated.

**Revision date** 24/03/2021

**Revision** 5

**Supersedes date** 24/09/2019

**Hazard statements in full**

H226 Flammable liquid and vapour.  
 H314 Causes severe skin burns and eye damage.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

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Foamstream® - product label



Foamstream® - material safety data sheet (MSDS)

**weedingtech**  
Weeding Technologies Ltd, Unit 2  
Westpoint Trading Estate  
Alliance Road, London, W3 0RA, UK

## SAFETY DATA SHEET. FOAMSTREAM V4 (IN USE).

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING**

- 1.1. Product identifier  
Product name: FOAMSTREAM V4 (IN USE)
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Use of substance / mixture: As part of a weed killing system
- 1.3. Details of the supplier of the safety data sheet  
Company name: Weeding Technologies Limited  
Unit 2 Westpoint Trading Estate  
Alliance Road  
London  
W3 0RA  
United Kingdom  
Tel: +44 (0)203 909 0050  
Email: info@weedingtech.com
- 1.4. Emergency telephone number  
Emergency tel: +44 (0)203 909 0050 (Mon- Fri 09:00-17:00)

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1. Classification of the substance or mixture  
Classification under CLP: This product has no classification under CLP.
- 2.2. Label elements  
Label elements: This product has no label elements.
- 2.3. Other hazards  
PBT: This product is not identified as a PBT/vPvB substance.

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

- 3.1. Mixtures

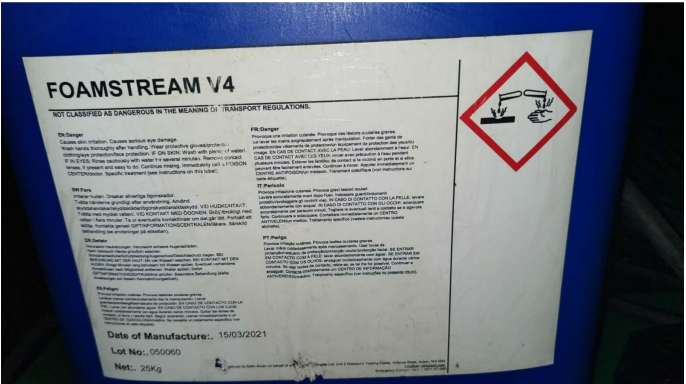
Substance Name	CAS	PBT / WEL	CLP Classification	Percent
WATER	7732-18-5	-	-	99.5%

**SECTION 4: FIRST AID MEASURES**

- 4.1. Description of first aid measures
  - Skin contact: Wash immediately with plenty of soap and water.
  - Eye contact: Bathe the eye with running water for 15 minutes.
  - Ingestion: Wash out mouth with water.
  - Inhalation: Not applicable.

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SECTION 4: FIRST AID MEASURES (CONTINUED)

- 4.2. Most important symptoms and effects, both acute and delayed
  - Skin contact: There may be mild irritation at the site of contact.
  - Eye contact: There may be irritation and redness.
  - Ingestion: There may be irritation of the throat.
  - Inhalation: No symptoms.
  - Delayed / immediate effects: Immediate effects can be expected after short-term exposure.
- 4.3. Indication of any immediate medical attention and special treatment needed
  - Immediate / special treatment: Not applicable.

SECTION 5: FIRE-FIGHTING MEASURES

- 5.1. Extinguishing media
  - Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.
- 5.2. Special hazards arising from the substance or mixture
  - Exposure hazards: None identified.
- 5.3. Advice for fire-fighters
  - Advice for fire-fighters: Fire fighters should wear protective clothing and breathing apparatus as appropriate.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1. Personal precautions, protective equipment and emergency procedures
  - Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leakside up to prevent the escape of liquid.
- 6.2. Environmental precautions
  - Environmental precautions: Contain the spillage using bunding.
- 6.3. Methods and material for containment and cleaning up
  - Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.
- 6.4. Reference to other sections
  - Reference to other sections: Refer to section 8 of SDS.



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SECTION 7: HANDLING AND STORAGE

- 7.1. Precautions for safe handling
  - Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
- 7.2. Conditions for safe storage, including any incompatibilities
  - Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.
  - Suitable packaging: Must only be kept in original packaging.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1. Control parameters
  - Workplace exposure limits: No specific control limits available
- 8.2. Exposure controls
  - Engineering measures: Ensure there is sufficient ventilation of the area.
  - Respiratory protection: Not usually required. Use in well ventilated areas and avoid formation of spray or aerosols.
  - Hand protection: Protective gloves.
  - Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.
  - Skin protection: Protective clothing.
  - Environmental: No special requirement.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1. Information on basic physical and chemical properties
 

State:	Liquid.	Flash point°C:	No data available.
Colour:	Pale yellow.	Autoflammability°C:	No data available.
Odour:	Characteristic odour.	Relative density:	No data available.
Evaporation rate:	Negligible	VOC g/l:	No data available.
Oxidising:	Non-oxidising (by EC criteria)	Melting point/range°C:	No data available.
Solubility in water:	Miscible	upper:	No data available.
Viscosity:	No data available.	Part.Coeff. n-octanol/water:	No data available.
Boiling point/range°C:	No data available.	Vapour pressure:	No data available.
Flammability limits %: lower:	No data available.	pH:	No data available.



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SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity  
Reactivity: Stable under recommended transport or storage conditions.
- 10.2. Chemical stability  
Chemical stability: Stable under normal conditions.
- 10.3. Possibility of hazardous reactions  
Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.
- 10.4. Conditions to avoid  
Conditions to avoid: Heat.
- 10.5. Incompatible materials  
Materials to avoid: Strong oxidising agents. Strong acids.
- 10.6. Hazardous decomposition products  
Haz. decomp. products: May release fumes of carbon monoxide and carbon dioxide if heated to decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

- 11.1. Information on toxicological effects  
Toxicity values: This product is not considered to be acutely toxic.
- 11.2. Symptoms / routes of exposure
 

Skin contact:	There may be mild irritation at the site of contact.
Eye contact:	There may be irritation and redness.
Ingestion:	There may be irritation of the throat.
Inhalation:	No symptoms.
Delayed / immediate effects:	Immediate effects can be expected after short-term exposure.
Other information:	Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

- 12.1. Toxicity  
Ecotoxicity values: Not expected to be toxic in the environment.
- 12.2. Persistence and degradability  
Persistence and degradability: Biodegradable.
- 12.3. Bioaccumulative potential  
Bioaccumulative potential: No bioaccumulation potential



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SECTION 12: ECOLOGICAL INFORMATION (CONTINUED)

- 12.4. Mobility in soil  
Mobility: Readily absorbed into soil.
- 12.5. Results of PBT and vPvB assessment  
PBT identification: This product is not identified as a PBT/vPvB substance.
- 12.6. Other adverse effects  
Other adverse effects: Negligible ecotoxicity.

SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1. Waste treatment methods  
Disposal operations: Dispose of in accordance with local regulations.  
Disposal of packaging: Clean with water. Dispose of as normal industrial waste.

SECTION 14: TRANSPORT INFORMATION

Transport class: This product does not require a classification for transport.

SECTION 15: REGULATORY INFORMATION

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Specific regulations:
  - Proposition 65 (California)- None of the ingredients is listed
  - TSCA (USA): All ingredients are listed
  - EPA (Washington): Foamstream does NOT need registration under FIFRA

SECTION 16: OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.  
\* indicates text in the SDS which has changed since the last revision.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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Appendix 2 - LCA report

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1. INTRODUCTION

Life Cycle Assessment (LCA) is a structured, comprehensive and internationally standardised method. It quantifies all relevant emissions and resources consumed and the related environmental and health impacts and resource depletion issues that are associated with the entire life cycle of any goods or services ("products").

The framework used to conduct a LCA is shown in Figure 1. This shows the stages of an LCA and the direct applications of the results.

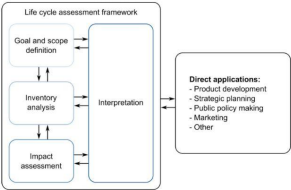


Figure 1 – Life cycle assessment framework adapted from EN ISO 14040:2006.

The LCA detailed in this report has been conducted to the international standards in LCA ISO 14040 and 14044 (Arvanitoyannis, 2008). And uses best practice outlined in the International Reference Life Cycle Data System (ILCD) which was developed to provide guidance for consistent and quality assured Life Cycle Assessment data and studies (European Commission - Joint Research Centre, 2010).

An evaluation of the efficacy of different pavement weed control methods was undertaken across the City of Cardiff by Advanced Invasives for Cardiff Council. Full details of the methodology and results can be found in that report. As part of the evaluation three different weed control treatments were evaluated all inputs of the treatment were measured and this data was used for calculations in this LCA.

There have been studies on weed treatment techniques in amenity areas done previously but none have applied a full LCA done by an independent expert on the treatment systems in this study to assess the environmental impacts of the different methods.

2. GOAL OF THE STUDY

The goal of the study is to compare the weed treatments tested in the study to determine which has the lowest environmental impacts. Therefore, a comparative LCA will be completed on all three treatments tested in the study conducted with primary usage data provided by Advanced Invasives.

This study will be presented to Cardiff Council for decision making on pavement weed treatments. A peer review has been undertaken externally by Dr Sophie Hocking (Department of Biosciences, Swansea University) on the study which allows for this use following ISO guidelines.

The intended audience for this LCA is weed control specialists within Advanced Invasives who have experience of accessing LCA results and members of Cardiff Council who have not. Therefore, methodologies for non-expert distribution have been followed so normalisation and weighting of results





will not be used. This LCA report should be used in conjunction with the weed control trial report in which the methodology for the trial and data collection is detailed.

3. SCOPE OF THE STUDY

Functional unit

The function of the products in this study are to treat pavements for weed control. The functional unit was determined as 1 km of pavement treated. The efficacy of treatment is assessed in a report that preceded the completion of the LCA. The functional unit quantifies the amount of each product used to give weed control to an equal efficacy.

System boundaries

All inputs into the production of the treatments have been included in the system along with the inputs into the production of tap water which was used by many of the treatments. Petrol and diesel use have been included where used in the treatment system. Production of equipment used to apply the products and transport to the treatment site has not been included. A general system boundary is shown in Figure 2.

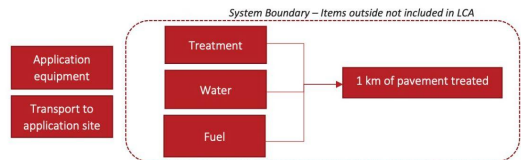


Figure 2 – General system boundary

The Ecoinvent database 3 in Simapro release 9.3.0.3 was used in all aspects of the LCA.

Where possible European data was used for the inputs into the process with global data only selected when that was not available.

This LCA was conducted in 2022 using the data available for production, use, emissions and waste scenarios available at that time in Ecoinvent and Simapro. The LCA will need to be updated regularly to capture changes and to keep the results current. This particularly important if product formulations or usage changes.

Allocation is embedded into the database on the following principles. The system model 'allocation, recycled content' or 'cut-off' is based on the approach that primary production of materials is always allocated to the primary user of a material. If a material is recycled, the primary producer does not receive any credit for the provision of any recyclable materials. The consequence is that recyclable materials are available burden-free to recycling processes and secondary (recycled) materials bear only the impacts of the recycling processes. Also, producers of wastes do not receive any credit for the recycling or re-use of products resulting out of any waste treatment.



Assumptions and limitations

Information on the treatments and their constituents were gained from product information printed on product packaging and MSDS sheets.

Further clarification on product composition was requested in the case of Foamstream but no further information was gained from the manufacturer. Due to being unable to get an exact composition of the product Rapeseed oil was used as the reference product for the LCA as information obtained indicated that this was the majority constituent. Other items such as plant husks are also referenced but not included as no details as to the amounts in the product could be obtained. This omission in the data will result a very small underestimation of the emissions for this treatment and further modelling would be recommended if more product details could be obtained.

Standard Ecoinvent database data was used for all other products based on the information provided by the manufacturer.

Impact categories and impact assessment method

ReCiPe 2016 Midpoint (H) V1.04 / World (2010) (Hierarchist) method was used to calculate the impact categories which are as shown below in Table 1.

Table 1 – Impact categories used in LCA as calculated by ReCiPe 2016 Midpoint (H) V1.04 / World (2010) H method.

Impact category	Unit
Global warming	kg CO2 eq
Stratospheric ozone depletion	kg CFC11 eq
Ionizing radiation	kBq Co-60 eq
Ozone formation, Human health	kg NOx eq
Fine particulate matter formation	kg PM2.5 eq
Ozone formation, Terrestrial ecosystems	kg NOx eq
Terrestrial acidification	kg SO2 eq
Freshwater eutrophication	kg P eq
Marine eutrophication	kg N eq
Terrestrial ecotoxicity	kg 1,4-DCB
Freshwater ecotoxicity	kg 1,4-DCB
Marine ecotoxicity	kg 1,4-DCB
Human carcinogenic toxicity	kg 1,4-DCB
Human non-carcinogenic toxicity	kg 1,4-DCB
Land use	m2a crop eq
Mineral resource scarcity	kg Cu eq
Fossil resource scarcity	kg oil eq
Water consumption	m3

Normalisation and weighting

Due to the target audience for the LCA no allocation or weighting was used in the production of the results.



4. LIFE CYCLE INVENTORY ANALYSIS

Process flowcharts

Detailed process flows are shown in the figures below for all treatments. The process flow for the Glyphosate treatment used is shown in Figure 3.

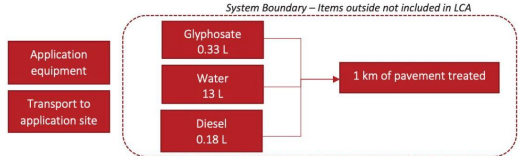


Figure 3 – Process flow for Glyphosate treatment used to treat 1 km of pavement.

The process flow for the New Wave treatment is shown in Figure 4.

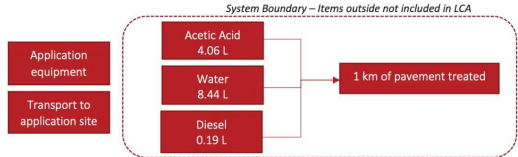


Figure 4 – Process flow for New Wave treatment used to treat 1 km of pavement.

The process flow for the Foamstream treatment is shown in Figure 5.

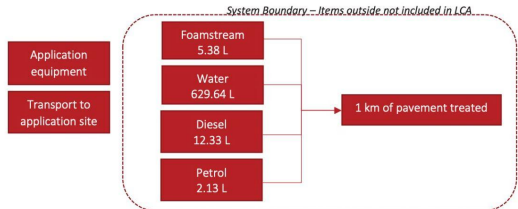


Figure 5 – Process flow for Foamstream treatment used to treat 1 km of pavement.



Data

Primary data was collected as part of the trial conducted by Advanced Invasives on all treatments. Aggregated data was provided to Agri-EPI Centre to use for the LCA along with raw data for reference and query if needed.

Clarification was sought from the data provider to ensure that an accurate representation of the treatments was being made and all figures used were checked by Advanced Invasives prior to inclusion in the LCA and were reviewed during the peer review process. The figures used to calculate the emissions are shown in Table 2.

Table 2 – Data used in LCA calculations for comparison of treatments.

Control Method	Product Use L/km	Water Use L/km	Diesel Use L/km	Petrol Use L/km
Glyphosate	0.33	13.00	0.18	0.00
New Wave	4.06	8.43	0.18	0.00
Foamstream	5.37	629.64	12.33	2.13

5. Results

The results of the LCA are as follows in this section. A direct comparison was made between all treatments on km of pavement treated, the results of which are shown in Figure 6.

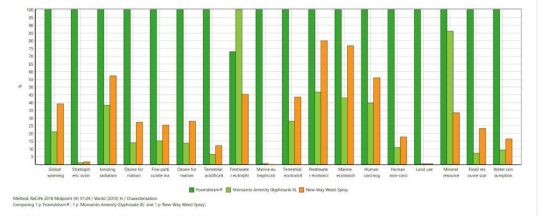


Figure 6 – Comparison of pavement weed treatments environmental impacts.

It can be seen from above that Foamstream has higher environmental impacts in all impact categories calculated except for freshwater eutrophication.

The details of the environmental impacts for the weed treatments tested are shown in Table 3 below. All impacts relate back to the functional unit of 1 km of pavement treated.



Table 3 – Results from comparison of pavement weed treatments environmental impacts.

Impact category	Unit	Monsanto Amenity Glyphosate XL	New-Way Weed Spray	Foamstream®
Global warming	kg CO2 eq	3.725906632	6.920265219	17.62954775
Stratospheric ozone depletion	kg CFC11 eq	0.00	3.71233E-06	0.000219686
Ionizing radiation	kBq Co-60 eq	0.333211153	0.499734199	0.870118201
Ozone formation, Human health	kg NOx eq	0.008903155	0.01745232	0.064022231
Fine particulate matter formation	kg PM2.5 eq	0.00736806	0.0123352	0.048506821
Ozone formation, Terrestrial ecosystems	kg NOx eq	0.009142212	0.0186019	0.066531821
Terrestrial acidification	kg SO2 eq	0.014106715	0.02609239	0.215053388
Freshwater eutrophication	kg P eq	0.005180359	0.002346239	0.003780149
Marine eutrophication	kg N eq	0.000345545	0.000150603	0.059807027
Terrestrial ecotoxicity	kg 1,4-DCB	16.26066476	25.29477007	58.13958906
Freshwater ecotoxicity	kg 1,4-DCB	0.250487795	0.427871658	0.534874363
Marine ecotoxicity	kg 1,4-DCB	0.31026383	0.554566163	0.72170849
Human carcinogenic toxicity	kg 1,4-DCB	0.167244915	0.236177538	0.421593391
Human non-carcinogenic toxicity	kg 1,4-DCB	4.463951492	7.370060901	41.27578609
Land use	m2a crop eq	0.101314072	0.127103301	33.33581954
Mineral resource scarcity	kg Cu eq	0.064759475	0.025142473	0.075130588
Fossil resource scarcity	kg oil eq	1.337191228	4.259576156	18.29370741
Water consumption	m3	0.104360548	0.186825836	1.133128599

The process flow of Foamstream was further investigated to determine the major factors contributing to its environmental impacts and are shown in Figure 7.

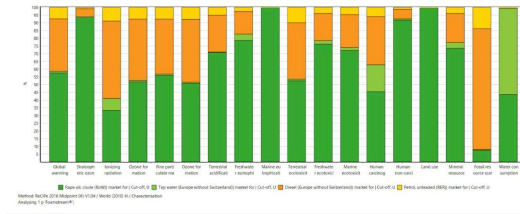


Figure 7 – Processes contribution to impacts for Foamstream®

As there is no one contributing factor no further investigation was made at this stage.

6. CONCLUSIONS

The goal of the study was to compare the three pavement weed treatments detailed in the work done by Advanced Invasives for Cardiff Council. Data was collected in a detailed, systematic way which allowed for accurate calculation of the amount of product used to treat 1 km of pavement for treatment type.

As shown in Figure 6 and Table 3, Foamstream has higher environmental impacts in all categories calculated except for that of freshwater eutrophication in which Monsanto Amenity Glyphosate had a higher impact.

The conclusions that can be made from these results is that both Monsanto Amenity Glyphosate and New Wave weed treatments have an overall lower environmental impact than Foamstream; and the treatment that has the lowest overall environmental impact is Monsanto Amenity Glyphosate.

The results from the impact assessment were not surprising given the higher number of inputs into the Foamstream system. Further information from the manufacturers on the overall composition of the treatment would give more accurate results. A conservative approach was taken on how to determine the composition of the product from information that was available and this will have resulted in an underestimation of the environmental impact. If further information becomes available at a later date it is recommended that the LCA be recalculated.

The results above are comparable to those found in a similar study of weed treatments for controlling weeds on hard surfaces (Department for Environment, Food and Rural Affairs, 2015). They found that freshwater impacts were the only ones that Glyphosate were higher than those of non-herbicide approaches. They had an integrated treatment approach which makes direct comparison of figures difficult but the findings were comparable in general.

The conclusions from the LCA are that overall Monsanto Amenity Glyphosate has less environmental impact than the other treatments in this study. However, these are not stand alone results and this report should be used in conjunction with the full study compiled by Advanced Invasives. (Arvanitoyannis, 2008).



## References

- Arvanitoyannis, I. (2008). ISO 14040: Life Cycle Assessment (LCA) – Principles and Guidelines. ISO/TC 207/SC 5 Life cycle assessment.
- Department for Environment, Food and Rural Affairs. (2015). *Development of zero and minimal herbicide regimes for controlling weeds on hard surfaces and determining their emissions*. East Malling: Department for Environment, Food and Rural Affairs.
- European Commission – Joint Research Centre. (2010). *Institute for Environment and Sustainability: International Reference Life Cycle Data System (ILCD) Handbook - General guide for Life Cycle Assessment - Provisions and Action Steps*. Luxembourg: Publications Office of the European Union.

### Appendix 3 - Details of all monitoring sites

Six monitoring sites were identified in each of the three evaluation wards (total = 18), with a further six untreated control monitoring sites across the City of Cardiff (overall total = 24). Monitoring sites for each evaluation ward and the untreated control monitoring sites included two:

- Main thoroughfare routes
- Representative residential street routes
- Residential street routes in close proximity to an open space/parkland

All monitoring sites are provided in the Figures below, together with monitoring site route distances.

Route type	Street name	Route distance (m)
Main thoroughfare A	Cathedral Road (Dogo Street to Berthwin Street)	81
Main thoroughfare B	Cowbridge Road (Market Road to Llandaff Road)	120
Residential street A	Dispenser Place (Beauchamp Street to Clare Street)	78
Residential street B	Sneyd Street (Kings Road to Plasturton Avenue)	90
Residential street + open space/parkland A	Dispenser Gardens (Beauchamp Street to Clare Street)	80
Residential street + open space/parkland B	Plasturton Gardens (Plasturton Place to Plasturton Avenue)	141

**Figure:** Riverside Ward monitoring sites, showing route type, street names and route distances (m).

Route type	Street name	Route distance (m)
Main thoroughfare A	Colchester Avenue (Scholars Drive to Fforrd Nowell)	116
Main thoroughfare B	Penylan Road (Ty-Draw Road to Boleyn Walk)	118
Residential street A	Amesbury Road (Blenheim Road to Waterloo Road)	93
Residential street B	Baron's Court Road (Dorchester Avenue to Hampton Court Road)	178
Residential street + open space/parkland A	Waterloo Gardens (Waterloo Road to turning point)	133
Residential street + open space/parkland B	Sandringham Road (Trafalgar Road to Grenville Road)	81

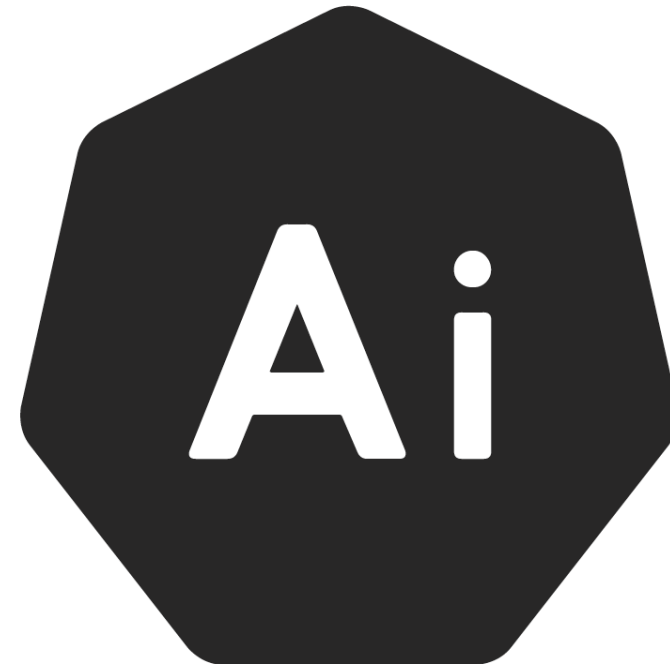
**Figure:** Penylan Ward monitoring sites, showing route type, street names and route distances (m).

Route type	Street name	Route distance (m)
Main thoroughfare A	Heol Glandulais (Clos Nant Y Cor to Sindercombe Close)	95
Main thoroughfare B	Heol Pontprennau (Kenmare Mews to Youghal Close)	96
Residential street A	Speedwell Close	119
Residential street B	Idencroft Close	75
Residential street + open space/parkland A	Cottingham Drive	108
Residential street + open space/parkland B	High Bank	45

**Figure:** Pontprennau & Old St Mellons Ward monitoring sites, showing route type, street names and route distances (m).

Route type	Ward	Street name	Route distance (m)
Main thoroughfare A	Llanedeyrn	62-82 Llanedeyrn Road + Bro Ederm	79
Main thoroughfare B	Fairwater	Plas-Mawr Road (Clos-Y-Nant to Poplar Road)	108
Residential street A	Ely	Moore Road (Windsor Clive Primary to Moore Close)	105
Residential street B	Trowbridge	58-66 Coleford Drive	105
Residential street + open space/parkland A	Splott	23-57 Whitaker Road	105
Residential street + open space/parkland B	Rhiwbina	42-62 Ty Wern Road	105

**Figure:** Untreated control monitoring sites confirmed across the City of Cardiff, showing route type, ward, street names and route distances (m).



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# GLYPHOSATE

## INFORMATION NOTE – AUGUST 2018

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It is the policy of the Welsh Government to reduce to the lowest possible level the effect of pesticide use on people, wildlife, plants and environment while making sure pests, diseases and weeds are effectively controlled. All pesticide products available in the UK have to meet strict regulatory standards to ensure they do not pose a threat to human or animal health and the environment. The regulatory authorities undertake ongoing scientific research to make sure such chemicals are safe to use and have no long-lasting effect on the environment.

Glyphosate is the active substance in many herbicides and is widely used around the world. All pesticide active substance approvals are subject to periodic review and the approval of glyphosate has recently gone through this process. In November 2017, the European Union re-approved the continuing use of glyphosate from 16 December 2017. Reviews of the scientific data by the European Food Safety Authority (EFSA) and the European Chemicals Agency's Committee for Risk Assessment have found no safety concerns that would prevent continuing approval, and UK scientists agree with this assessment. The new approval lasts until 15 December 2022; use beyond that date would be subject to a further decision.

Risks associated with the use of pesticides in amenity areas, such as parks, is specifically considered as part of the authorisation process. Legally enforceable conditions of use are imposed on the way products can be applied to ensure the public are not exposed to levels of pesticides that would harm health or have unacceptable effects on the environment.

Pesticides in amenity areas should be used responsibly and only as part of an integrated programme of control. They can help deliver substantial benefits for society which include: management of conservation areas, invasive species and flood risks; access to high quality sporting facilities; and safe public spaces (for example, by preventing weed growth on hard surfaces creating trip hazards), industrial sites and transport infrastructure.

In regards to glyphosate use for controlling invasive non-native plant species you may wish to note recent research undertaken by Swansea University examining the physical and chemical control of Japanese knotweed. These were the largest field trials of their kind ever undertaken worldwide. Initial [results were published](#) earlier this year. Though no control treatment delivered complete eradication of Japanese knotweed glyphosate applied at an appropriate dose, phenological stage and level of coverage was found to be the most effective control treatment. They made a recommendation for stakeholders to discontinue the use of other widely used herbicides for control of Japanese knotweed and unnecessary physical control methods that add equipment and labour costs and increase environmental impacts, without improving control compared to spraying alone.

The Welsh Government works with industry bodies and others to promote best practice in vegetation and weed management in the amenity sector. We support the work of the [Amenity Forum](#) in promoting the importance of sustainable pesticide use and developing user practice so that all amenity pesticide users are operating to consistently high standards. We strongly encourage engagement with the Amenity Forum, particularly at Local Authority level, so we can be assured that amenity pesticide users in Wales are conforming to the standards expected under the UK [National Action Plan for the Sustainable Use of Pesticides](#) and EU law. The Amenity Forum's main objective is to be the collective body representing the amenity industry, in relation to pesticide use and weed and pest control within the sector. To deliver on this, the Forum has developed a number of activities which include issuing [guidance notes](#) to support 'Best Practice' messages, organising conferences and workshops and working closely with the Chemicals Regulation Division of the Health and Safety Executive to ensure the amenity sector meets the requirements of the Nation Action Plan.

Please find below information from the [Health and Safety Executive website](#) regarding obligations tailored for those in the amenity sector using professional pesticide products.

Those who use, or cause or permit others to apply, plant protection products or who store and/or dispose of products are subject to a number of legal requirements. Key points to note are:

- Use of plant protection products should be considered as part of an integrated programme of control. The [Amenity Forum](#) provides practical advice on how this can be done.
- Anyone who applies pesticides as part of their professional activities must (including those previously operating under grandfather rights) hold a [recognised specified training certificate](#).
- All those purchasing professional plant protection products must reasonably believe that products are used by someone holding a specified certificate.
- All application equipment, except knapsacks and hand-held, must possess a certificate demonstrating that it has passed an officially recognised test conducted by the [National Sprayer Testing Scheme](#). Equipment has to be tested on either a three, five or six yearly basis thereafter depending on when the most recent test was conducted and the type of equipment. All equipment must be calibrated on a regular basis.
- Users, or those who cause or permit use, must ensure that: all reasonable precautions are taken to protect human health and the environment; applications are confined to target areas; and in certain areas (including public spaces and conservation areas) that the amount used and frequency of use is as low as reasonably practicable.
- Priority is given to particular products where there are risks to water quality.
- Professional users and distributors take all reasonable precautions to ensure handling, storage and disposal operations do not endanger human health or the environment.
- Storage areas are constructed in such a way as to prevent unwanted releases of products.

A key role for the Amenity Forum is to keep members updated on issues that impact the Amenity Sector. We are continually asked for information on Glyphosate and updates on what is happening globally. (The article has hyperlinks included just click blue text to access further information and the articles referenced)

It is often quoted in the press that many councils in the UK, are banning the use of glyphosate. None of these decisions have been made on the basis of science. They are all political decisions by elected representatives who are unlikely to be experts in the field of such complex situations. The Forum supports the integrated use of any vegetation management techniques, but we all need to know the science and real impacts of these techniques. The update below hopefully brings you up to speed on Glyphosate.

### Glyphosate Update

The European Chemicals Agency's (ECHA) Committee for [Risk Assessment \(RAC\)](#) published the results of their latest review on 30th May 2022. The Committee for Risk Assessment (RAC) recommended no change in the classification of Glyphosate. They agreed that there was no scientific reason to change the classification of glyphosate. Based on a wide-ranging review of scientific evidence, the committee again concludes that [classifying glyphosate](#) as a carcinogen is not justified. The Formulated products will continue to be classified as non-hazardous.

The EU review [timetable for Glyphosate](#) has been modified and in effect delayed by 1 year. It is not expected that member states will vote on the continued registration of the active substance until December 2023.

In the UK, HSE/CRD has already announced a 3 year extension of the active substance [registration to 15/12/2025](#)

Most newspaper articles reference the [WHO, IARC sub group 2015 decision](#) that Glyphosate should be classified as "probably carcinogenic" category, along with such dastardly things as eating processed meat, sunbathing too long and working as a hairdresser or barber. Interestingly all the other sections of WHO do not agree with this classification. What does IARC consider much more dangerous than glyphosate? Drinking wine or beer or eating salty fish.



Following the IARC ‘hazard analysis,’ 19 other agencies including the UN itself and agencies in Europe, Asia, Africa, Canada, New Zealand, Australia and the United States have reviewed the “probably carcinogenic” conclusion and rejected it outright, often with a scathing rebuke of the IARC, which has been mired in scandal since issuing its report. Two of the experts on the IARC panel were being paid by lawyers who were part of the syndicate looking to obtain compensation from Monsanto/Bayer. It is now widely known that 80% plus of the compensation payments being claimed from Bayer will be eaten up by fees from the legal profession.

The following table summarises quotes from the major registration authorities, all of whom have access to all the papers and are experts in this field.

This article and tables may be helpful to pass on to clients wishing to know more real scientific information rather than interpretation of data to generate headlines.

A good example of this occurred in an article this July in the *The Guardian*: [‘Disturbing’: weedkiller ingredient tied to cancer found in 80% of US urine samples](#) .

A number of articles have been published recently on how this data is incorrectly interpreted.

A critique by Kevin Folta entitled [Glyphosate detected in 80% of Urine samples reason for alarm or deception and distortion](#) of data

Also another article from the [Atlanta business journal](#) goes into more detail.

These make interesting reading and demonstrate how data can be used to distort facts when taken out of context.

The Amenity Forum will be pulling together as much information as possible on all aspects of integrated vegetation management. Many of these will be presented at the Amenity Forum Annual conference at Kettering Conference Centre on 13<sup>th</sup> October 2022 entitled.

## ***“Change, Challenge and Opportunity”***

If you are interested in attending, contact [admin@amenityforum.net](mailto:admin@amenityforum.net)



What do global **regulatory** and **research** agencies conclude about the health impact of

# GLYPHOSATE?

**Risk Assessment** What is the likelihood this will cause harm, based on dose and exposure?








 <b>EPA</b> United States Environmental Protection Agency	USA	"Human health risk assessment concludes that glyphosate is <b>not likely to be carcinogenic to humans...</b> [and] <b>no other meaningful risks to human health</b> when the product is used according to the pesticide label"	2017
 <b>EPA</b> United States Environmental Protection Agency Office of Pesticide Programs	USA	"Not strong support for... 'suggestive evidence of carcinogenic potential...' based on the weight-of-evidence... Even small, non-statistically significant changes... were contradicted by studies of equal or higher quality. The strongest support is for 'not likely to be carcinogenic to humans'"	2017
 <b>NTP</b> National Toxicology Program U.S. Department of Health and Human Services	USA	"Little evidence of toxicity, and there was no evidence of glyphosate causing damage to DNA"	1992
 <b>Health Canada</b>	Canada	"Products containing glyphosate <b>do not present unacceptable risks to human health</b> or the environment when used according to the revised product label directions... Risks to [occupational] handlers are not of concern for all scenarios"  "No pesticide regulatory authority in the world currently considers glyphosate to be a cancer risk to humans at the levels at which humans are currently exposed"	2017  2019
 <b>ECHA</b> EUROPEAN CHEMICALS AGENCY	Europe	"Based on the epidemiological data as well as on data from long-term studies in rats and mice, taking a weight of evidence approach, <b>no hazard classification for carcinogenicity is warranted</b> "  "ECHA's Committee for Risk Assessment (RAC) agrees to keep glyphosate's current classification as causing serious eye damage and being toxic to aquatic life ...[but] again concludes that <b>classifying glyphosate as a carcinogen is not justified.</b> "	2017  2022
 <b>efsa</b> European Food Safety Authority	Europe	"Glyphosate is <b>unlikely to be genotoxic or to pose a carcinogenic threat to humans...</b> Neither the epidemiological data nor the evidence from animal studies demonstrated causality between exposure to glyphosate and the development of cancer in humans"	2015
 <b>European Commission</b> Assessment Group on Glyphosate	Europe	"Taking all the evidence into account i.e. animal experiments, epidemiological studies and statistical analyses... The AGG proposes that a classification of glyphosate with regard to <b>carcinogenicity is not justified.</b> "	2021
 <b>anses</b> agence nationale de sécurité sanitaire alimentation, environnement, travail	France	"Level of evidence of carcinogenicity in animals and humans is considered to be relatively limited"  "36 [glyphosate-based] products ... will no longer be allowed for use from the end of 2020, due to a <b>lack or absence of scientific data</b> which would allow all genotoxic risk to be ruled out"	2016  2019
 <b>BfR</b> Bundesinstitut für Risikobewertung	Germany	"Available data <b>do not show carcinogenic or mutagenic properties</b> of glyphosate nor that glyphosate is toxic to fertility, reproduction or embryonal/fetal development in laboratory animals"	2015
 <b>Federal Department of Home Affairs FDHA</b> Federal Food Safety and Veterinary Office FSVO	Switzerland	"Residues of glyphosate in the foods investigated <b>do not represent a risk of cancer</b> "	2018
 <b>Australian Government</b> Australian Pesticides and Veterinary Medicines Authority	Australia	"Glyphosate <b>does not pose a carcinogenic risk to humans....</b> Products containing glyphosate are safe to use as per the label instructions"	2016

Our brands:








What do global regulatory and research agencies conclude about the health impact of **GLYPHOSATE?**

 Environmental Protection Authority Te Mana Rauhi Taiao	New Zealand	"Unlikely to be carcinogenic to humans or genotoxic (damaging to genetic material or DNA) and should not be classified as a mutagen or carcinogen"	2016
 <b>ANVISA</b> Agência Nacional de Vigilância Sanitária	Brazil	"No evidence to indicate that the herbicide glyphosate is carcinogenic"	2019
 Food Safety Commission of Japan	Japan	"No neurotoxicity, carcinogenicity, reproductive toxicity, teratogenicity, and genotoxicity"	2016
 Rural Development Administration	Korea	"Epidemiological studies on glyphosate... found no cancer link"	2017
 World Health Organization Food and Agriculture Organization of the United Nations	Global	"Glyphosate is unlikely to be genotoxic at anticipated dietary exposures. Glyphosate is unlikely to pose a carcinogenic risk to humans from exposure through the diet"	2016
 World Health Organization Drinking-water quality guidelines	Global	"Under usual conditions, the presence of glyphosate and AMPA [aminomethylphosphonic acid, glyphosate's primary metabolite] in drinking-water does not represent a hazard to human health"	2004
 World Health Organization International Programme on Chemical Safety	Global	"Available data on occupational exposure for workers applying Roundup indicate exposure levels far below the NOAELs [no observed adverse effect levels] from the relevant animal experiments"	1994

**Longitudinal Study** How glyphosate impacted 54,251 pesticide applicators since 1993.

 <b>Agricultural Health Study</b>	USA	"No association was apparent between glyphosate and any solid tumors or lymphoid malignancies overall, including non-Hodgkin's lymphoma and its subtypes... some evidence of increased risk of AML [acute myeloid leukemia] among the highest exposed group that requires confirmation"	2018
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**Hazard Assessment** What is the potential to cause harm, regardless of dose or exposure?

 <b>International Agency for Research on Cancer</b>  World Health Organization	Global	"Limited evidence in humans for the carcinogenicity of glyphosate... Evidence in humans is from studies of exposures, mostly agricultural [e.g. not from dietary exposure]... A positive association has been observed for non-Hodgkin lymphoma... There is 'strong' evidence that exposure to glyphosate or glyphosate-based formulations is genotoxic"  IARC placed glyphosate in its hazard category "Group 2A: probably carcinogenic to humans" along with red meat, hot beverages, and working as a barber. The evidence on carcinogenicity was less robust than for agents such as bacon, salted fish, oral contraceptives and wine.	2015
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**Genetic Literacy Project**  
SCIENCE NOT IDEOLOGY

Click on the bolded conclusions to take you to the document issued by the regulatory or research agency.  
Infographic by [Kayleen Schreiber, PhD](#), adapted from infographic by [Maixime Pinazzi](#) and [Lida Ruishalmé](#). [Maixime Pinazzi](#) is a media blogger focusing on skeptical analysis of online science news and author of [ChixersPensante.fr](#) (media analysis, critical thinking). [Lida Ruishalmé](#) is a biologist specializing in biomedical research and author of [Thoughtscapism.com](#).

Our brands:





## **APSE briefing: Glyphosate- Where do local authorities stand?**

This briefing is provided to all APSE member authorities but will be of particular interest to those officers responsible for grounds maintenance, parks and street cleansing services.

### **Key Issues:**

- Following the publication of a report from the International Agency for Research on Cancer (IARC) in 2015 which found that glyphosate was “a probable human carcinogen”, there has been a great deal of debate across the world as to whether the herbicides which include glyphosate are safe to use.
- This debate has been heightened by recent court rulings in the United States which have awarded multi-million dollar damages to citizens who have claimed continued use of glyphosate has caused them to develop cancer.
- National agencies across the world have declared glyphosate to be safe to use, suggesting it poses no threat. However some countries have now decided to ban glyphosate or severely curtail its use.
- Regarding the UK, it continues to say glyphosate based products are safe to use, but local authorities now find themselves caught between legal advice and the moral question of knowing there have been successful claims that glyphosate has caused cancers.
- APSE has therefore produced this briefing note, itself taking legal advice, as to where local authorities stand in this situation.

### **Background**

The mention of glyphosate tends to drive people into two camps: those who advocate its use as a cheap, effective and readily available herbicide, essential to grounds maintenance and agricultural practices all over the country, and a second group who see it as a potentially dangerous carcinogenic substance which should be banned from use.

Glyphosate as a product is rarely used on its own, but as part of a group of chemicals in products such as Roundup, Pathclear or Weedol, which in themselves are far more toxic than glyphosate on its own.

Local authorities across the country still use glyphosate-based products in large quantities, despite calls to reduce chemical use and move towards a more integrated weed management approach.

There are few alternatives to glyphosate and even those which are seen as alternatives are often still in a pilot phase and much more expensive to use, which considering the budget cuts many local authority parks and grounds maintenance services have suffered, do not make these products attractive.

However, recent United States court rulings against Monsanto, the supplier of one of the world's leading glyphosate-based products, Roundup, has led to the awarding of millions of dollars in damages to plaintiffs who claim to have contracted cancer as a result of the prolonged use of glyphosate-based products. Currently there are over 18,400 lawsuits alleging links between Roundup pesticide and cancer going through, or about to go through the US courts. This situation has led many users to reconsider glyphosate's safety as well as the possibility of legal actions being taken against them.

These concerns has resulted in some UK local authorities joining a growing group of organisations and countries around the world which have banned the use of glyphosate and glyphosate-based herbicides.

Therefore the question has to be asked, where does a local authority stand in relation to using a European Union licenced product which has scientific backing as being safe to use, against the possibility of legal action being taken by employees or residents who claim the use of glyphosate has given them cancer.

## **Safety concerns**

The original safety concerns over the dangers from glyphosate came out of a report from the International Agency for Research on Cancer (IARC) in 2015 which found that glyphosate was "a probable human carcinogen".



This report has been roundly attacked by the manufacturers of glyphosate and called into question by many countries' regulatory bodies which argue that glyphosate is safe to use; it has over 40 years of use and 800 studies behind it. However, critics of glyphosate state that many of these studies can be called into question, as a large proportion were commissioned by the industry which created glyphosate and therefore cannot be trusted.

Despite assurances from national and regulatory bodies (such as the European Food Safety Authority) some UK local authorities have taken the decision to either ban glyphosate and glyphosate-based herbicide use totally, or at least in specific areas, such as schools, playgrounds, parks and pavements i.e. areas where there is a high public footfall or where high risk groups are present.

Against such a complicated and conflicting catalogue of information, where do local authorities stand in relation to the continued use of glyphosate-based products whilst at the same time being aware of the potential hazards and legal implications of using this herbicide?

### **Where do local authorities stand?**

Claims to date have mainly been against the suppliers. For instance, in the US, a groundskeeper at a California county school was awarded \$79 million after arguing that his cancer was caused by several years of exposure to Roundup. As noted above, there are numerous other claims ongoing in the US and we are now also seeing litigation outside of the US. A recent claim has been brought in Australia against Bayer (the parent company of Monsanto) claiming that glyphosate was linked to a claimant's cancer. In addition to this claim there are also reportedly landscape gardeners, council workers and farmers seeking to bring further lawsuits.

As the use of glyphosate-based products is still legal in the UK (glyphosate is an approved active substance on the EU Pesticides Database until 15 December 2022), local authorities cannot be criminally prosecuted simply for using these products. Nevertheless, the Health and Safety Executive (**HSE**) enforce regulations relating to the advertisement, sale, storage, supply and use of pesticides as part of a work activity to ensure the health and safety of employees and persons affected by such work activity is protected. Local authorities themselves are required to enforce controls in respect of the advertisement, sale, supply, storage and use of pesticides for those areas not under the HSE's jurisdiction, including sports grounds, gardens and parks.

In particular, the Plant Protection Products (Sustainable Use) Regulations 2012 (**the Regulations**) require a person who uses or permits an individual to use a plant protection product (pesticide) to ensure that all reasonable precautions are taken to protect human health and the environment and specifically notes that the amount of pesticide used and the frequency of use must be as low as reasonably practicable when pesticides are used in areas used by the general public or by vulnerable groups. Failure to comply with the Regulations, as well as general health and safety legislation requiring an organisation to protect the health, safety and welfare of its employees and those affected by their undertaking, can result in a criminal prosecution and fine.

It is therefore imperative that local authorities using glyphosate products are aware of their legal obligations and continue to use these pesticides accordingly. Conducting thorough risk assessments to understand the impact of using these products and putting in place suitable control measures, including the provision of information, instruction, training and personal protective equipment to persons using pesticides directly is fundamental.

Local authorities should also consider the possibility that future civil claims could be made against them by persons exposed to glyphosate-based products. Much like asbestos-related claims, if it can be proven that exposure to glyphosate during the course of employment has links to cancer, there may be the possibility of a compensation claim. The robustness of the risk assessments undertaken and control measures implemented by local authorities will therefore be fundamental to ensuring any such claims can be prevented or challenged in the future.

For members of the public, such as park users, it is likely to be much more difficult (although not necessarily impossible) for them to establish that regularly using a park treated with Roundup or another glyphosate-based product would have caused or contributed to their cancer therefore limiting the ability for successful claims against local authorities. Nevertheless, local authorities should note increasing pressure from resident groups and other interested parties have been seen elsewhere, with members of the public campaigning for organic pesticides to be used or for no pesticides to be used.

In New York, legislation has been introduced to ban glyphosate-based products from public parks and other properties. Other countries, such as Italy and Portugal, have also

imposed bans on the use of glyphosate-based products in public areas. France and Germany, are seeking to phase-in prohibitions on glyphosate use.

In the UK, a number of local authorities have taken their own steps to impose restrictions on the use of glyphosate-based products and other pesticides and herbicides. For example Croydon, Lewes, Glastonbury, Wadebridge and the London Borough of Hammersmith & Fulham are all reportedly banning the use glyphosate-based products in public areas.

Whilst glyphosate currently remains an approved pesticide in the EU, in light of the successful prosecutions around the world and the growing concerns about glyphosate, it may be prudent for all local authorities to carefully consider the scale of glyphosate use, the likely risks arising, the potential to limit the reliance on glyphosate-based products and the ability to find a suitable alternative product to prepare for the future.

### **Financial implications**

Banning glyphosate-based products will come at a cost. The Crop Protection Agency (whose members include major producers of pesticides and herbicides) stated that banning glyphosate-based products would cost councils an estimated £228 million in higher costs to use alternatives. There may also be additional costs involved in terminating contracts and re-procuring alternatives.

The anti-glyphosate lobby argue that there are organic methods to manage weeds and use manual or other mechanical methods (such as foamstream). However, these alternatives also have cost implications for local authorities and glyphosate-based products remain particularly cost-effective for invasive type weeds.

At this stage, local authorities have a choice. The continued use of glyphosate products responsibly (and in accordance with legal requirements) is permitted and allows for a cost effective solution to the need for pesticide use. Alternatively, local authorities may feel public pressure to limit the use of glyphosate products, or ban their use entirely. Either way, all local authorities need to give serious consideration to the future of using glyphosate products.

As the levels of public interest surrounding these products and the number of successful claims continues to grow, the risk of the products being banned in the EU increases as, no doubt, does the appetite of potential claimants. Local authorities should take the

opportunity whilst the use of glyphosate remains lawful to identify an appropriate, cost effective solution and potential alternative products to ensure the financial implications of using glyphosate can be appropriately managed.

As a footnote, Bayer has recently committed to spend £5.6 billion on weed killer research which will reduce its environmental impact by up to 30% through more targeted and reduced use of chemicals. In addition, Bayer has recently signed an agreement with a UK company for exclusive world-wide rights to commercialise its pollinator friendly bioinsecticide. Therefore whilst still claiming there is a place for glyphosate, Bayer are clearly looking at alternative and more nature-based products.

### **APSE Comment**

Unfortunately there is no right or wrong answer to the question is it safe to continue to use glyphosate products.

Some will argue that 40 years evidence proves it is safe to use whilst others will argue a good deal of the research which proves this has come from the manufactures of glyphosate.

There is the issue of successful claims in court that the continued use of glyphosate has led to cancer together with thousands more cases awaiting judgement. There is also the concern that these claims are now appearing in several countries across the globe and if such a case were to be brought in the UK, whether Local Authorities would be able to cope with paying any damages awarded against them, as well as the cost of finding alternatives.

Equally now that we have seen this 'link', proven or not, then morally should we continue using a product which although highly effective and affordable, could potential pose a threat to our residents.

It appears the only realistic option at the moment, until affordable and effective alternatives can be found is to use glyphosate products as sparingly as possible and away from high public footfall areas. The adoption of more integrated weed control approaches is clearly the way to go as this reduces exposure to chemicals and can also improve levels of biodiversity. Obviously there may be a need for the public to accept higher levels of

weeds as a result, but perhaps this is a price they would be willing to accept if it means the potential threat from chemical spraying can be avoided.

Despite protestations from the manufacturers of glyphosate that they are being unfairly treated and the claims are based more on public opinion rather than hard scientific facts, they are now looking at more natural weed and pest control methodologies such as bioinsecticides, which perhaps in the long-run will be the most positive outcome of this debate.

***APSE thanks Walker Morris, LLP for their guidance and advice on this briefing. This briefing does not constitute direct legal advice to local authorities and local authorities and other parties should always secure their own independent legal advice on the matters of litigation, risk and health and safety of workers and the public referred to in this briefing.***

Wayne Priestley, APSE Principal Advisor

Richard Butterworth  
Senior Associate, Walker Morris LLP

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**ANNUAL REPORT ON INVESTMENT IN THE EDUCATION  
ESTATE**

**EDUCATION (COUNCILLOR SARAH MERRY)**

**AGENDA ITEM: 3**

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**Reason for this Report**

1. To provide Cabinet with an update on the progress of the programme and any considerations that will impact on the strategic planning of future investment including considerations for the next 12 months
2. This report is the first of this type after and is intended to be presented to Cabinet and the Children and Young People Scrutiny Committee annually to enable greater visibility of progress and enhance opportunities for input from elected members to inform strategic planning going forward.
3. It is an annual report that primarily updates against agreed programme priorities and will be brought forward before the end of each financial year. It will also identify any potential notable changes that could impact on the planning and sequencing of any forward investment in the education estate in light of the recent Welsh Government (WG) announcement regarding the next round of funding.

**Background**

National and local context

4. There are a wide range of national and partner influences that impact on how education is to be delivered at a local level. These must be considered when planning for change to ensure provision is able to adapt to expectations and can continue to deliver and improve the quality of access to education and the learning opportunities in Cardiff. These include but are not confined to the following:
  - Cymraeg 2025 and Cardiff Welsh in Education Strategic Plan;
  - Curriculum for Wales;
  - Additional learning Needs (ALN) Reform;
  - Community Focussed Schools;
  - A Nation (and City) of Sanctuary;

- Starting Well Partnership;
  - Move More Cardiff – Physical Activity & Sport Strategy; and
  - One Planet and Active Travel.
5. In 2019, the Council and its partners outlined in a clear vision for education in the city, 'Cardiff 2030: a ten-year vision for a capital city of learning and opportunity', which built upon its achievements from its Cardiff 2020 strategy. Outlined within Cardiff 2030 is the commitment to realising the delivery of the New National Curriculum for Wales, high quality learning environments that are fit for purpose and high-quality school places for young people which meets the needs of Cardiff's growing and changing population.
  6. In order to build on the high standard of education delivered in Cardiff as recognised by the recent Estyn Inspection, the Council has reiterated its commitment to making every school in Cardiff a good school, where every child can receive a great education.
  7. This includes continued commitment to elevated levels of investment in new and existing school buildings alongside continuing to drive up educational attainment and delivering on the commitment to put the views of children and young people at the heart of the Council's policy agenda. In doing so, the Council is keen to place a particular focus on supporting Cardiff's most vulnerable children, from supporting them and their families in their early years and through school, to the world of work and higher education.
  8. The Council later published its 'Stronger, Fairer, Greener' document in June 2022, setting out the key themes and commitments for the next five years with a strong focus on putting children and young people front and centre of their ambitions for the city. Central to this is the explicit belief that good education is the surest route out of poverty and, in turn that, the long-term prosperity of the city relies on firm support for our children and young people to reach their potential.
  9. Education is consistently ranked as the top priority for children and young people in Cardiff, a key social and cultural right which plays an essential role in overcoming poverty and disadvantage.
  10. Through the 'Stronger, Fairer, Greener' document commitments are made for projects including 'new campuses for Willows, Cathays, Cantonian, Fitzalan and Cardiff High schools through Band B of the 21st Century Schools programme'. There are also commitments to close the gap for our most vulnerable learners with a particular focus on children in care, those educated other than at school and children from the most deprived communities; to promote the benefits of bilingualism, expanding uptake in Welsh-medium education in line with Cymraeg 2050; and provide additional funding to support maintenance in schools not covered by the Sustainable Communities for Learning capital investment programme (formerly called 21<sup>st</sup> Century Schools).



## Programme context

11. At its meeting on 12th October 2017, the Cabinet received a report on the development of the education estate in Cardiff. The report set out the Council's proposed vision for its Band B 21st Century Schools programme to address the most acute sufficiency and condition issues in Cardiff. All properties across the school estate were given a rating from A to D for the following issues, with D being the worst category:
  - Sufficiency of places available;
  - Condition of the school buildings; and
  - Suitability of the environment for teaching.
12. Priority schemes were identified based on these ratings which took account of the building condition and suitability information available, and the most recent birth rate and school census information as at 2016/17.
13. To address the eight form of entry sufficiency requirement that was projected to be required in the secondary age phase during and beyond the investment cycle, schemes for five English-medium secondary schools were proposed. In addition, priority schemes for the Band B programme included an approach to the delivery of a significant level of provision for learners with ALN through the development and expansion of provision in Cardiff schools. A further four schemes in Band B were included to increase Welsh-medium and English-medium primary provision to meet projected localised demand.
14. At its meeting on 14 December 2017 Cabinet approved the prioritised schemes under Band B of the 21<sup>st</sup> Century Schools Programme ahead of implementation from the start of the 2019/20 financial year.
15. The opportunities presented through Band B were further supplemented because of the Cabinet decision in its meeting in February 2018 to allocate an additional £25m to education asset renewal, of which circa £6m would be used to implement plans to ensure the suitability of existing provision to meet Additional Learning Needs. Combined with the existing £3m each year, this brought together a total of £40m over a 5-year period to be invested in improving the condition and suitability of the school estate.
16. In the 2021 budget, the Council also allocated an additional £10m invest to save towards the Education capital programme and secured Welsh Government Capital Grant funding of c£2.8m to support the reorganisation and expansion of Welsh-medium primary school provision.
17. Recently in November 2022, WG advised Local Authorities that the Sustainable Communities for Learning programme will transition away from fixed bands of funding to a more agile rolling programme. Cardiff Council already delivers its large-scale school estate investment on a rolling programme basis as it delivers on a project-by-project basis. This is a key mechanism to control cost and to ensure affordability is maintained within the programme envelope.

18. It is expected as Local Authorities near completion of the Band B programme, there will be a requirement to submit new Strategic Outline Programme (SOP) which would initiate the start of the rolling programme with the latest submissions to this programme to be before March 2024.
19. This is to be a nine-year rolling capital programme, including an indicative funding forecast for the nine years to be submitted and the following will apply:
  - Band B projects can be included at the beginning of our 9 Year Capital Programme if appropriate;
  - Current intervention rates would be retained to support the deliverability and affordability of delivery partners' individual programmes; and
  - Projects identified for delivery under the Education Mutual Investment Model (MIM) delivery framework will continue to be classified as Band B projects.

## **Programme Progress**

### Sustainable Communities for Learning Investment Programme

20. The Sustainable Communities for Learning Investment Programme is a collaboration between the WG and Local Authorities. It is a major, long-term, and strategic, capital investment programme with the aim of creating a generation of excellent zero carbon learning facilities at the heart of their communities across Wales. The programme focuses resources on the right schools in the right places, from early years through to post-16.
21. The first wave of investment, (Band A) of the Programme, was under the banner of 21st Century Schools and Education, and in Cardiff this represented a £164million investment over the five-year period ending 2018/19. It expanded the number of both English and Welsh medium places between 2014 and 2019. Band A delivered two new high schools: Eastern High in collaboration with Cardiff & Vale College and Cardiff West Community High School, as well as six primary schools.
22. Significant education improvement is evident in the Band A schools that received investment. Achievements include the proportion of schools in the former National School Categorisation rated Green rising from 34.78% in 2014 to 70.3% in 2019 and a decrease in the proportion of Red and Amber schools, from 39% in 2014 to 7.4% in 2019. Parental perception of schools has also changed positively: for example, at Eastern High its intake grew from 122 in 2014 to 240 in 2018.
23. The Council also developed a strategic approach to the procurement of primary schools through a value for money batch procurement of three schools: Howardian Primary School, Ysgol Hamadryad and Ysgol Glan Morfa.

24. The second tranche (Band B) began in 2019 and represented investment of £284m in Cardiff, which is significantly bigger than any other allocation in Wales. The projects identified by Cabinet in 2017 include:
- Fitzalan High School;
  - Cathays High School;
  - Fairwater Community Campus (Cantonian High School, Riverbank Special School, and Woodlands High School);
  - St Mary the Virgin CiW Primary School;
  - Willows High School;
  - The Court Special School;
  - Fairwater Primary School;
  - Greenhill Special School;
  - Cardiff High School;
  - Ysgol Nant Caerau; and
  - Ysgol Pen Y Pil.
25. Band B of the Sustainable Communities for Learning Programme is being funded through a combination of traditional capital, along with a revenue funding stream known as the Mutual Investment Model (MIM). The WG grant intervention rates vary depending on the type of project and whether it is capital or MIM funded.
26. The programme envelope has since increased to £298.6m for Cardiff as the Cathays High School MIM project allocation is now additionality over and above the programme. In addition to the programme envelope approved Cardiff Council was also successful in securing £15m additional funding from WG for the acquisition of the Willows High School sites.
27. Like with all Local Authorities, WG is also funding contributions for Net Zero Carbon (NZC) standards, which currently equates to circa £21m for Cardiff.
28. The Band B programme of investment is ongoing with a range of projects progressing with a total committed spend to date at circa £257m (excluding NZC). Fitzalan High School has progressed the furthest – it is developing well on site, despite the impact of the pandemic, and is to be complete by Spring/Summer 2023.
29. A number of other schemes are progressing well through the design process, including the Council's flagship project – Fairwater Community Campus. Fairwater Community Campus is understood to be the largest school project in the UK and is leading the way in Net Zero Carbon by establishing ambitious embodied and operational targets. In November 2022, Cabinet approved an uplift in budget which will allow the project progress on site in the New Year.
30. Another key project for the Council is Willows High School, which is progressing at pace and will see a design & build contractor appointed early in 2023 with the aim to complete in 2025. Other projects that are progressing through the design stages are St. Mary the Virgin CIW Primary School, The Court Special School, and Cathays High School.

31. Projects yet to be progressed in the Band B programme include Greenhill Special School, Cardiff High School, Fairwater Primary School and Ysgol Nant Caerau and Ysgol Pen Y Pil.
32. The programme is seeing clear progress across live projects, but in September 2021 Cabinet, in partnership with WG, also approved the acquisition of the old Tax Office site in Ty Glas for secondary education and ALN. This was a strategic purchase that allows flexibility for education in the north of the city.
33. The progress outlined above has been underpinned by lessons learnt from Band A. Band B is evolving to focus on education and outcomes by meeting the needs of the local school community, with an enhanced community focussed approach. In line with the New National Curriculum for Wales each school now develops a vision which is aligned with school improvement plans. This ensures that the principles of the programme are enshrined in each school.
34. Band B is also seeing a continued prioritisation of Social Value, which is aligned with the school vision. Social Value will develop as contractors are appointed. Resource contributions on Fitzalan High School and the Fairwater Campus equate to circa £4m.

#### Local Development Plan (LDP)

35. In addition to the Band B programme, the Council has secured developer contributions to deliver the first primary schools on the LDP strategic sites in north-east and north-west Cardiff.
36. The Council has worked closely with developers to ensure that the completion of new school provision is aligned with the phasing of new housing and surplus places in schools already serving each area. The first school to complete will be the new St. Mellons CiW Primary School on the St. Edeyrn's development, which is due to be completed in Spring 2023. The project includes £500k of community facilities that will make it a true community focussed school.
37. The next project is the new school serving the early phase of the Plasdwr development, Ysgol Gynradd Groeswen Primary School. The school is progressing well on site and is due to be completed by September 2023. The two form of entry school is innovative as it will enable new model of educational provision based on research from the Basque country. The headteacher designate is appointed and is making strides in engaging with the local community to ensure the school meets local needs.
38. The next school projects will be at Junction 33 and the Churchlands development and early planning is underway.

#### Asset Renewals

39. The five-year Asset Renewal plan is predicated on continuation of the enhanced budget and sets out the needs alongside the continuation of the funding required to achieve the scale of essential improvements alongside

moving toward proactive asset renewal and carbon reduction investment aligned with wider Cardiff strategies including One Planet Cardiff.

40. All condition and suitability issues identified are prioritised and assessed by qualified surveyors along with consultation with Council Health & Safety (H&S) officers, to ensure urgent priorities are being met, and that other priorities can be mitigated in the short term and then later addressed permanently. Priorities for the condition and suitability programmes are assessed in accordance with the following:
1. Statutory – H&S, safeguarding, DDA, sufficiency, statutory catering;
  2. Priority condition – weather tight, warm;
  3. Priority suitability – toilets, mobile classrooms, suitability affecting operations of the school;
  4. Non-Priority condition – general maintenance, lifecycle, proactive asbestos strip; and
  5. Non-Priority suitability – specialist teaching upgrades, non-urgent safeguarding, general teaching upgrades, NZC, retrofit.
41. Significant improvements have been made to the longer-term planning of asset renewals, which in turn have resulted in significant increases in spend. Historical spending against the programme budget has been in the region of £4m to £7m, however this has increased to £13.1m in 2020/21 and £18.6m in 2021/22. Last year's spend has seen the largest investment in education buildings in recent times. To note, the identified spend is currently against priorities 1, 2 and 3 in the past 12 months.
42. Progress has been made to address historical maintenance and condition issues of the estate and in 2021 four schools improved from condition "C" to condition "D". The programme in 2021/ 22 also saw 348 jobs completed, including the following key priority projects:
- 198 priority condition works;
  - 37 safeguarding improvements;
  - 18 ALN adaptations;
  - 63 priority mainstream suitability works; and
  - 9 ALN sufficiency projects.
43. Included in the above are some notable projects, including:
- Ty Gwyn Special School expansion;
  - Cathays High School expansion;
  - Whitchurch priority condition works;
  - Llanishen High School SRB;
  - The Court School roof replacement;
  - Glyncoed Primary School priority condition works;
  - H&S stonework improvements to St. Monica's CiW, Gladstone and Allensbank primary schools; and
  - Local Development Plan sufficiency projects.

## Developing provision to meet ALN

44. Cardiff has a range of provision delivering specialist places in special schools, a pupil referral unit and a range of specialist resource bases and wellbeing classes that operate as part of mainstream schools across the city.
45. Band B outlines key ALN projects, including the Fairwater Community Campus; The Court Special School; and Greenhill Special School. The Cabinet has since considered reports in response to the growing demand for specialist placements at its meetings on 15 July 2021 and 14 October 2021 and authorised officers to consult on proposals to expand primary and secondary provision for primary and secondary age learners with Complex Learning Needs, Autism Spectrum Condition and Emotional Health and Wellbeing Needs. These projects, combined with Band B projects, will enable a phased increase in Cardiff's specialist placements to:
  - 660 placements for primary-age learners with Complex Learning Needs and/ or Autism Spectrum Condition;
  - 781 placements for secondary-age and post-16 learners with Complex Learning Needs and/ or Autism Spectrum Condition;
  - 120 placements for primary-age learners with Emotional Health and Wellbeing Needs; and
  - 194 placements for secondary-age and post-16 learners with Emotional Health and Wellbeing Needs.
46. The additional places were brought forward against the strategic principles outlined below:
  - Schools and settings that deliver an innovative curriculum with effective whole school approaches to teaching and learning;
  - Excellent specialist services to enhance the capacity of schools and other settings to include children and young people with a range of ALN;
  - Effective early identification and research-based intervention to prevent the escalation of ALN wherever possible;
  - High levels of accessibility in every school building with sufficient flexible accommodation in every school appropriate to the age and stage of learning;
  - Strong partnerships to ensure a holistic, collaborative response to a child or young person's ALN (including health, children and adult services, early years and FE providers); and
  - Effective multi-agency transition planning at every stage, from early years through to primary, secondary, post 16 and adult destinations, to support admission without delay.
47. As the approved proposals are delivered this will mitigate costs of placements in Out of County or independent provision. Increased demand from the pandemic has necessitated use of a range of interim solutions including extending existing provisions through use of temporary

accommodation as well as purchasing a greater number of places Out of County and in independent schools. The latter is at capacity and the authority is now looking to stimulate the market to deliver new/expanded provision. Much of this is high cost and often longer distances from the pupils' homes with associated increased transport costs.

48. In the short term, the Council is currently working with private providers to stimulate the market to deliver a greater number of places, along with developing additional places through delivery of an enhanced Community Teaching provision.
49. In the longer term the Council will bring forward new proposals which seek to achieve the following when providing additional places:
  - An appropriate spread of specialist places across the city, including where relevant smaller local settings, allowing for a greater number of learners to access education in their local communities;
  - A Specialist Resource Base (SRB) in each cluster for Emotional Health and Wellbeing needs, and Complex Learning and Autism needs;
  - Create a training hub around each school with an SRB;
  - Reduce journey lengths and transport costs per pupil.

#### One Planet Cardiff

50. Historically, the Council has measured and reported high-level carbon output across the estate. However, the Built Environment stream of the strategy provides the framework to undertake this work in considerably more detail and to actively pursue reduction through a common approach across all parts of the estate.
51. The Corporate Property Strategy 2021-26 will establish key aims and objectives outlining how the Council will reduce carbon output and off-set with new renewable energy sources. The strategy is provisionally targeting a 60% carbon reduction in retained estate – equivalent to a permanent 6% reduction per annum until 2030.
52. The four key areas of focus to achieve carbon reduction are:
  - Relinquishment – where council property is surplus to operational requirements, property can be relinquished neutralising operational carbon;
  - Modernisation of retained estate – covering a broad area including specific schemes such as refit, retrofit or refurbishments to improve energy efficiency through component replacement, new standards and procurement relating to planned and reactive repair;
  - Behaviour – utilise the baseline performance data to understand how existing behaviours impact energy performance in buildings; Establish best practice training for building users and managers to maximise efficiency; and

- Offsetting – building specific projects relating to solar, wind etc renewable energy opportunities that can be installed on site to offset carbon output.
53. The school estate is essential to allow the Council to target investment in carbon reduction measures and to develop a meaningful behaviour programme. The programme has made strides in assessing the energy usage of the estate in partnership with K2N which can be found in Appendix 3 and an example school report at Appendix 4. The Council is beginning to explore the data with pilot schools and will be sharing with all schools in the New Year. The Council is also installing AICO (what is this acronym) multi-sensors that generate live data on CO<sub>2</sub>, humidity, and temperature. This data will not only help guide targeted carbon reduction but also help target asset renewals.
  54. Alongside the generation of baseline data, the Council is also developing a school One Planet Pledge through the curriculum team that will support full integration of One Planet principles in the New Curriculum for Wales and throughout schools. This will support the beginnings of culture change inside and outside of the Council.
  55. The Council has continued to develop and evolve the Net Zero Carbon standards for all new build schools. These standards are sector leading and include challenging operational and embodied carbon targets for contractors to deliver against. The first project for the Council that meets these requirements is the Fairwater Campus, which has brought Net Zero Carbon standards together with biodiversity and Well Building standards. The Council has also undertaken a thorough market testing exercise to establish which modular suppliers can achieve operational Net Zero Carbon targets.
  56. The Council has also made progress on the retrofit of schools through REFIT. REFIT is a programme of works that considers a blend of carbon reduction measures across whole schools or buildings. The REFIT 1 was a programme of five schools with works of a capital expenditure of £1.1m and operating expenditure of £36k and through these works, estimated annual savings of £149k were generated and 641 tonnes of CO<sub>2</sub> per annum. REFIT 2 included eleven schools and has recently been delivered and includes a capital expenditure of £1.4m, operating expenditure of £17k, with predicted annual savings of £181k and 486 tonnes of CO<sub>2</sub>. Based on existing REFIT projects carbon savings of circa 12% are generated.
  57. A business case is underdevelopment to bring together the Council's existing progress across the estate and to assess how long-term a programme of estate modernisation, primarily through retrofit, can be delivered to reduce operational carbon across schools.



## Changes to inform strategic planning of future investment

### City-wide context – mainstream places

58. Local authorities must ensure that there are sufficient schools providing primary and secondary education for their area. The Welsh Government School Organisation Code sets out that provision *'must be sufficient in number, character and equipment to provide for all pupils the opportunity of appropriate education'*.
59. The Code also provides guidance that, where there are more than 10% surplus places in an area overall, local authorities should review their provision and should consider whether to make proposals for their removal if this will improve the effectiveness and efficiency of provision.
60. There are a range of factors that influence the sufficiency of school places in Cardiff including resident birth rates; the Cardiff LDP programme; net migration patterns pre and post Brexit and the Covid pandemic as well as the differences in the different organisations projecting populations which inform planning public services including education.
61. Intakes to Reception classes city-wide peaked at c4,370 pupils in 2015/16 and 2016/17, corresponding with peak birth rates recorded in 2010/11 and 2011/12. Comparing intakes to the number of places available of c4,700, Cardiff retained approximately 8% surplus places.
62. Whilst birth rates in the period 2012/13 to 2016/17 were at a lower level than the peak, these remained at a high level overall, informing Cardiff's Band B sufficiency priorities.
63. As a consequence of a sustained fall in the birth rate from 2017/18 onwards, and changes to migration patterns, city-wide intakes to primary education in September 2021 to September 2025 are projected to reduce significantly. These are evidenced in data published by the Office of National Statistics and the most recent NHS GP registration data sets. However, changes to populations are not consistent in all parts of the city.
64. Intakes to mainstream Reception classes in 2021/22 fell to circa 3,820 pupils, a fall of c510 pupils since the peak, and are projected to fall further to circa 3,600 by 2025/ 2026, an overall fall of circa 18%. Comparing projected intakes to the number of places available of circa 4,700, Cardiff's surplus places would increase to circa 23% city-wide. This represents the equivalent of 18 surplus two-form entry primary schools. Parental preference patterns mean that the impact on some schools will be negligible, whilst for other schools the impact on pupil numbers will be far greater than the city-wide average of a 18% fall. As schools' budgets are predicated on pupil numbers, this may have a significantly impact on some schools.
65. As birth rates in Cardiff, and nationally, have followed a long-term cycle of approximately 25 years intakes to primary schools are not anticipated to

return to high levels until later than 2030. Nationally, the previous lowest birth rates were recorded in 1977, followed by a significant uplift and then fall to a low in 2001. This was then followed by a period of uplift to 2011/12 which then falls from this date. Whilst a small uplift has been recorded in ONS data for the 2021 calendar year, no uplift has been recorded in NHS GP registration data in the most recent dataset for the 2020/21 academic year period.

66. Intakes to secondary education city-wide are projected to peak at circa 4,240 pupils in 2023/24, again corresponding with the peak birth rates recorded in 2010/11 and 2011/12 and subsequent peak intakes to primary education. Intakes are projected to fall to circa 4,030 in 2024/25, remaining at a similar level for the period until 2027/28. Birth-rate data available since 2017/18 indicates that intakes to secondary education will fall further to circa 3,780 from 2028/29. The fall in intakes is expected to be offset by inward migration to the city in new housing developments.
67. The Council has utilised temporary measures at secondary schools city wide, to provide a low but sustainable level of circa 5% surplus places at entry during the peak intake periods. Parental preference patterns mean that many schools have few surplus places, whilst a small number have a surplus overall.
68. The city-wide surplus will inevitably increase above the 10% guidance level as a consequence of the recent and significant fall in the birth rate. The projected falling intakes to secondary education in 2028/29, would result in circa 11% surplus at entry, and surplus across secondary schools would exceed 10% by 2031/32.
69. In the context of great variance in birth rates and intakes to schools in Cardiff, the Council must utilise temporary measures at peak intakes to mitigate the impact that carrying surplus places causes for all schools, and particularly those that are lower ranked in parental preferences.

For further information regarding projections please see Appendix 1.

#### City-wide context – specialist places

70. The citywide position of ALN across the city shows that the number of pupils with severe and complex needs, requiring a place in a special school or specialist resource base has continued to grow due to a number of factors including pupil population growth, improved survival rates for children born with significant disabilities, resulting in a higher incidence of severe and complex disabilities, increased incidence and identification of specific needs and higher incidence of children and young people with emotional health and wellbeing needs.
71. Whilst the factors above would broadly apply to the national context, in it is believed that the proportion in Cardiff is higher than average owing to factors such as, but not solely due to, proximity to the University Hospital of Wales.

72. As in all Local Authorities, the medium to long-term impact on learners of the Covid-19 lockdown is uncertain. Cardiff's schools have reported concerns in respect of behavioural, emotional and social development of learners that are at present supported in mainstream provision and it is noted that there has been a further increase in the number of children presenting with complex emotional health and wellbeing needs which have required appropriate support/more specialist placements.

#### Primary phase - Emotional Health and Wellbeing

73. Proposals considered by Cabinet in July 2021 noted the projected increasing demand for primary age places for children resident in Cardiff with Emotional Health and Wellbeing Needs, to 119-131 places by 2025/26.
74. To address the need for additional places, the Council has approved proposals in 2022 to expand The Court Special School from 42 places to 72 places, with effect from September 2025. This will add capacity to the primary phase, addressing sufficiency needs, and will replace an existing deteriorating building with two new purpose-built schools of 36 places each in the east and the west of the city.
75. In recent years, the Council has established 48 temporary placements for primary-age learners with Emotional Health and Wellbeing Needs at five Wellbeing Classes within mainstream schools city-wide, taking the total places to 120, and is developing proposals to further expand these places in other communities from September 2023. This will further improve the city-wide distribution of specialist places, supporting a greater number of Cardiff's learners to access education in their local community.

#### Primary phase - Complex Learning Needs and/ or Autism Spectrum Condition

76. Proposals considered by Cabinet in July 2021 noted the projected increasing demand for primary age places for children resident in Cardiff with Complex Learning Needs and/ or Autism Spectrum Condition, to 547-602 places by 2025/26.
77. In order to address the need for additional places, the Council has approved proposals in 2022 to expand this provision by 182 places, with expansion being phased from September 2022 to September 2023. By September 2026, the implementation of these proposals combined with other approved changes will increase the number of for these learners to 660 places.
78. This addition of capacity to the primary phase will address sufficiency needs by expanding existing special schools and SRBs and establishing new provision in the south of the city to improve the city-wide distribution of specialist places, supporting a greater number of Cardiff's learners to access education in their local community.

## Secondary phase - Emotional Health and Wellbeing

79. Proposals considered by Cabinet in October 2021 noted the projected increasing demand for secondary and post-16 places for learners resident in Cardiff with Emotional Health and Wellbeing Needs, to 380-419 places by 2025/26.
80. At a time when the secondary-age population is increasing, the Council has ensured that places for secondary and post-16 learners with Emotional Health and Wellbeing Needs have been met, funding 86 places in the independent sector in 2022. However, the ability of the independent sector to respond to increased demand is limited. The Council is therefore prioritising the development of proposals to expand the Council's maintained provision which would support a greater number of Cardiff's learners to access education in the city and in their local community and would have a positive impact on the Council's distribution of financial resources to schools city-wide.
81. In order to address the need for additional places, the Council has approved proposals in 2022 to establish Specialist Resource bases of 20 places each at Cardiff West Community High School and Eastern High, with effect from September 2022 and September 2023 respectively, increasing capacity to 194 places.
82. The Council has also consulted on proposals within the Band B investment programme to expand Greenhill Special School in 2021/22 which indicated support of stakeholders to develop and expand provision for secondary and post-16 learners with Emotional Health and Wellbeing Needs. The Council is developing school organisation proposals to further expand this provision. In addition to this, the Council is further developing PRU provision to provide places for Key Stage 3 (age 11-14) learners alongside an enhanced tuition service to provide a broad offer for the needs presenting.

## Secondary phase - Complex Learning Needs and/ or Autism Spectrum Condition

83. Proposals considered by Cabinet in October 2021 noted the projected increasing demand for secondary age places for learners resident in Cardiff with Complex Learning Needs and/ or Autism Spectrum Condition, to 629-692 places by 2025/26.
84. As of February 2022, 560 secondary and post-16 learners resident in Cardiff with Complex Learning Needs and/ or Autism Spectrum Condition were placed in specialist provision, including 276 in special schools and 284 in Specialist Resource Bases in mainstream schools.
85. In order to address the need for additional places, the Council is progressing proposals to expand Woodlands High School from 140 places to 240 places at the Fairwater Learning Campus. This will add capacity to the secondary phase, addressing sufficiency needs, and will replace an existing deteriorating building.

86. The Council has also approved proposals in 2022 to expand provision for learners with Complex Learning Needs and/ or Autism Spectrum Condition by 179 places, with expansion being phased from September 2022 to September 2023. By September 2026, the implementation of these proposals combined with other approved changes will increase the number of for these learners to 781 places.

Placements in independent schools, neighbouring Local Authorities or PRU provision

87. The Council funds a number of places at special schools maintained by other Local Authorities, or in independent schools, to ensure that there are sufficient places to meet the needs of learners. As of August 2022, 151 FTE learners were placed in independent/ Out of County provision.
88. There is currently a higher number of places being purchased in Out of County provision and in the independent sector than in previous years. This is expected to continue to be required and potentially grow marginally until the Band B projects are delivered and further proposals are brought forward in early 2023.
89. As set out above, the Council is already progressing additional permanent provision at a number of its special schools and SRBs. Some of these independent/ Out of County placements are therefore necessary whilst sufficient additional permanent provision is developed, including at Ty Gwyn, Greenhill and the PRU. Other learners are placed in such provision to access multi agency highly specialist placements, or are Looked After Children placed Out of County, or are Looked After Children placed in residential accommodation.
90. As other Local Authorities are also seeing a level of rising need for specialist placements, and have fewer places available to offer neighbouring authorities, the options for purchasing places Out of County or with independent providers has become more challenging. To ensure a continued sufficiency of places is available to meet current demand and that statutory duties are met, the Council has proactively engaged with the independent sector to increase the number of places available through expansion of this provision. As the Council's approved proposals are delivered this will mitigate the growth in costs of placements in Out of County or independent provision, and additional proposals will seek to further offset and in future years reduce the costs for learners resident in Cardiff.
91. The Council's continuous monitoring of individual needs of learners, and how each learner's needs evolve, allows for data trends to be identified which inform the planning of places and learner support. Since proposals to expand provision were considered by Cabinet in 2021/22, trends have been updated in respect of the number of children requiring specialist placements either within Cardiff's maintained special school and Specialist Resource Base provision, or within alternative provision including

placements in independent schools, neighbouring Local Authorities or PRU provision.

92. Appendix 1 confirms that, when comparing the number of learners accessing specialist provision to the overall school population in the past five years, a year-on-year increase can be identified. Continuation of this trend projection would marginally exceed the range of figures (1,675 – 1,844 places in 2025/26) previously identified, by 43 pupils. The identified trend of growth from circa 2.9% in 2017/18 to circa 3.4% in 2022/23, if continued, would reach 3.9% (1,961 pupils) by 2027/28. However, whilst this consolidates the need for proposals to expand specialist provision to date, such growth trends cannot be modelled to continue indefinitely. It is not anticipated that such a high proportion of specialist provision would be required.
93. Further work on the refinement of data is ongoing to consolidate and build on existing knowledge and to better understand the long-term impacts of the pandemic to inform future proposals. The Council is prioritising the development of further proposals to ensure there is an appropriate balance in the number and type of specialist places for Cardiff learners in the medium and long term.

#### Impact of migration and new housing developments

94. The Council monitors city-wide net migration patterns, analysing data including school census data captured annually (PLASC). This data also allows for monitoring of the impact of new housing developments in each community.
95. In the past five school census data sets, the following patterns have been identified from the number of pupils promoting from one cohort in Cardiff's schools to the next cohort:
- A reducing net out-migration overall, from 470 pupils (2018-2019) to 83 pupils (2021-2022);
  - Continued net out-migration in the secondary age phase, fluctuating between 71 and 169 pupils;
  - Fewer year 6 children in Cardiff promoting to schools outside of Cardiff, independent schools or home education, reducing from 165 pupils (2018-2019) to 84 pupils (2021-2022); and
  - A reversal of migration in the primary age phase, from net out-migration of 136 pupils (2018-2019) to in-migration of 129 pupils (2021-2022).
96. As a proportion of the city-wide totals these figures are relatively small, however, the impact on schools in different areas of the city can be significantly different. The reasons for the changes to migration patterns include but are not limited to:
- Brexit, and changes to UK-EU migration;

- An increase in the number of dwellings in Cardiff, as new housing is developed on strategic housing sites in the North-East and North-West of the city;
  - A greater number of places available at entry to Cardiff's secondary schools, and fewer places for Cardiff pupils at schools in neighbouring Local Authorities; and
  - An increased number of families opting to educate children at home.
97. The most recent annual report on Cardiff's Adopted Local Development Plan (LDP) confirmed the completion of over circa 2,100 new dwellings on strategic sites over a seven-year period since 2015 including:
- 954 properties built at St. Edeyrn's, North-East Cardiff;
  - 216 properties at Lisvane/ Pontprennau, North-East Cardiff;
  - 739 properties at Plasdwr, North-West Cardiff; and
  - 213 properties on the site North of Junction 33, North-West Cardiff.
98. A number of new developments in existing communities have also progressed, including those through the Cardiff Living partnership, while further developments are at earlier planning stages.
99. Whilst many of the children and young people resident in these new housing developments are new to those communities, analysis of school data indicates that many are from neighbouring areas or elsewhere in the city, offsetting the number of new school places that may be required to serve developments.
100. Overall, the net yield of pupils city-wide is estimated at circa 1 form of entry per year, over a period extending approximately 15 years, necessitating the phased expansion of provision serving these areas over this period.
101. Since the school census data for 2022 was extracted, Cardiff has welcomed a number of children and young people to its schools from Afghanistan, initially placed in temporary accommodation awaiting long term dispersal, and from Ukraine both through the super-sponsor scheme and others placed in temporary accommodation.
102. It is anticipated that the school census data for 2022/23 will evidence a net in-migration overall; however, there is insufficient information available to the Council at this time to have medium term or long-term certainty around the continuation of use of temporary accommodation and dispersal of families to permanent homes within or outside of Cardiff. The Council retains sufficient surplus places to respond to migration changes and works closely with organisations contracted to accommodate families to support learners to access school provision without delay.

Welsh in Education Strategic Plan 2022-2031 and the Bilingual Cardiff Strategy 2022-2027

103. The Welsh Government's Welsh Language Strategy sets out the vision of a million Welsh speakers across Wales by 2050.

104. The Welsh Government published its Cymraeg 2050 strategy in 2017 which sets out a vision of reaching one million Welsh speakers by 2050. By 2050, the aim is for 40 per cent of children (in each year group) to be in Welsh-medium education. Of those in English-medium education, the assumption is that half of those leaving school will report that they are able to speak Welsh. The strategy assumes that, nationally, 70 per cent of 15-year-olds will be able to speak Welsh by 2050, made up of 40 per cent in Welsh-medium schools and 30 per cent in English-medium schools.
105. The Welsh in Education Strategic Plans (Wales) Regulations 2019 make provision for a local authority to prepare a ten-year Plan. Cardiff's Welsh in Education Strategic Plans (WESP) was published on the Council's website on 1 September 2022 following approval by the Welsh Minister in July 2022.
106. Since 2001, the number of Welsh speakers in Cardiff aged 3+ has increased by almost a third, with the most recent census indicating that over 17.5% of the city's population have one or more skills in the Welsh language. This means that Cardiff now has the third highest number of Welsh speakers of any Local Authority in Wales.
107. In February 2022, the number of pupils enrolled in Reception in Welsh-medium education was 643 pupils, which was 16.8% of the total intake. To reach Cardiff's adopted lower range WESP target of 25% of learners enrolled in WM Reception classes by 2032, there would need to be a percentage increase of approximately 8.2%. To reach the upper range target there would need to be a percentage increase of approximately 12.2%.
108. When compared to the most recent school census data for Reception classes in February 2022, the existing capacity in Welsh-medium primary schools and classes of 27.9FE leaves circa 23% surplus in Welsh-medium Reception classes. This demonstrates the Council's sustained investment in and growth of Welsh-medium provision in recent years to ensure that parents have confidence in securing placement in the language of their preference and to continue to drive and nurture growth of the Welsh language in each community.
109. The Cardiff WESP includes a range of actions to both stimulate uptake of existing provision and to increase the number of places and distribution of provision across the city including increasing the number of specialist Welsh-medium ALN places available. These are expected to be delivered utilising a combination of capital funding streams including Sustainable Communities for Learning Funding, LDP developer contributions and Welsh Government Welsh Capital Grant funding.

#### WG change in future investment

110. When considering future priorities, in the context of the recent programming changes to the Sustainable Communities for Learning Programme, the Council may take into account the growing sufficiency



needs in the city particularly in relation to ALN, the Local Development Plan commitments, condition and suitability of buildings. However, phasing of the remaining projects is expected to continue and will be progressed in line with the proposed rolling future Sustainable Communities for Learning Programme.

111. On the basis of the current data there will be sufficient permanent mainstream English-medium community places to serve Cardiff's existing communities, in the primary and secondary age phases, on completion of the schemes already underway. However, this will be kept under continual review to ensure a sufficiency places. Whilst the five-year programme is having a positive impact, Cardiff continues to have an unprecedented level of condition works required across increasing number of schools, particularly in relation to keeping buildings weather tight, warm and safe, relating to the age and historic underinvestment in many of its buildings.

### Condition & Suitability

112. Cardiff has a very large education estate, with over 127 school properties. Many sites comprise of multiple blocks, constructed during different decades and large areas of the estate in urgent need of upgrade.
113. Condition and suitability ratings for each Cardiff school are prepared independently, using Welsh Government approved methodology to classify all properties across the school estate from A to D, with D being the worst category for the following issues:
- Condition of the school buildings;
  - Suitability of the environment for teaching.
114. An enhanced Welsh Government approved survey methodology has applied from 2018 onwards to enable a more comprehensive record of condition of the education estate than available to inform the original Band B submission. The new system provides a set of data on each individual building element which is aligned to industry standard ratings for condition. This provides a more accurate representation of the works required enabling more effective planning and improved targeting of investment.
115. The Council has also implemented a 'One Front Door' reporting system which has improved the two-way communication between schools and the Council on issues relating to condition and suitability of buildings/facilities. This enables improved tracking and visibility of issues presenting alongside the works undertaken and any improvement recorded.
116. Together these systems have supported the identification of building maintenance issues and proactive programming of works to resolve key asset challenges. These combined with the significantly increased funding committed to increase the asset renewal budget have resulted in a clear improvement in the estate overall with many schools benefiting from effective targeted investment to address long standing issues.

117. The below table shows the Property Condition classification of all Cardiff schools.

Property Condition	2020	%	2021	%
A	8	6	8	6
B	34	27	38	30
C	82	65	78	61
D	3	2	3	2
Total	127	100	127	100

118. The above table reflects the most recent assessed position in 2021; however, Band B projects will remove all three category “D” schools, a number of category “C” schools, and will increase the number of “A” schools.
119. Each of the three schools classified as “D” for condition, namely Cantonian High School, Fitzalan High School and Willows High School where all or part of the buildings are identified as ‘end of life’, were prioritised for replacement as part of the Band B Programme and are being progressed.
120. The approved new-build projects in the Band B programme, and in construction on LDP strategic sites, will remove eight “C” or “D” condition buildings and deliver eleven new “A” condition buildings.
121. Going forward there are a range of issues remaining which are identified and planned for as part of the five-year rolling Asset Renewal programme. Any primary, secondary and special schools classified as “C” condition will receive appropriate monitoring and targeted asset investment to address major defects.

### Suitability

122. Cardiff’s suitability surveys in 2020 identified that 111 secondary and primary schools surveyed (87%) were classed in the highest categories of “A” or “B” which is significantly above the condition levels of schools.
123. In a small number of Cardiff schools, teaching is inhibited by the suitability of both internal and external accommodation. Factors such as the flexibility of the space, its size and shape, levels of light, accessibility, safeguarding, ventilation and acoustics are restricting the access of young people to a broad and balanced curriculum.
124. Each of the five schools classified as “D” for suitability, where buildings inhibit the schools’ ability to deliver the curriculum, are prioritised for replacement as part of the Sustainable Communities for Learning

Programme. Further improvements are being progressed through the Council's asset renewal funding. The approved new-build projects in the Band B programme, and in construction on LDP strategic sites, will provide eleven new "A" suitability buildings.

#### Asset renewal need for continued investment

125. It remains a challenge to maintain and improve the estate, with a sufficient level of ongoing investment essential, supplemented by strategic reorganisation proposals, prioritised to achieve greater impact where possible. Due to the extent of issues within the estate compared to available funding and resources, there has been a need to reprioritise and postpone some of the programmed proactive roof and boiler works to future years.
126. The 2022/23 and 2023/24 condition programme has been planned to cover urgent issues relating to condition and health and safety. During 2021/22 there have been several instances of degradation of stonework facades on Victorian schools which has caused serious health and safety concerns for the buildings and their users. These works have been prioritised over proactive maintenance /replacement programmes and require high levels of funding to resolve.
127. Based on the priorities outlined above and needs as assessed by surveyors, anticipated costs for current 2022/23 and 2023/24 schemes related to Stonework, Drainage, Roofs, Pipework and Boilers is £33.2m. The anticipated costs for 2022/23 and 2023/24 schemes related to sufficiency, health & safety, safeguarding, DDA, ALN and catering is a further £65.83m.
128. It is acknowledged that the levels of spend outlined in the programme require further re-prioritisation to allow for delivery against Council resource and market capacity. However, any re-prioritising of the programme will need to be considered against risks.

#### **Considerations for the next 12 months**

129. Going forward the priority for Cardiff is to deliver a stronger, fairer and greener education system that ensures every Cardiff learner is able to thrive and succeed through accessing inclusive inspiring education opportunities in every community. Addressing the needs in the education estate in Cardiff is central to delivering this.
130. To deliver improvements the Council will engage with stakeholders to develop a programme strategy. This will set out clear principles for how the education system across the city should be organised to take account of the Council's wider ambitions, for education to fulfil its role in supporting social mobilisation and, in turn the long-term prosperity of the city through ensuring our children and young people to reach their potential.

131. This strategy, together with the revised national investment aims and programming approach for the Sustainable Communities for Learning Programme, will underpin the key organisation and investment priorities for Cardiff over the next nine years.
132. The strategy will identify resources to meet the challenges of the ongoing demographic and financial pressures, whilst maintaining progress of Band B. It will also align WG initiatives that bring forward capital, such as Universal Free School Meals and Ed-Tech ICT investment, and maximise external funding possible.
133. In addition, there are ongoing inflationary pressures which are currently operating at circa 10% Building Cost Information Service (BCIS) per year (sums estimated in the programme) and a stringent need for prioritisation of schemes if capital financing costs are to be kept within the current revenue envelope. Risk management will need to be carefully considered with any further re-prioritisation. Consideration will need to be given to sequencing of investment proposals against current and future iterations of Sustainable Communities for Learning funding.
134. In the current financial climate ensuring funding for education is targeted toward learning experiences and opportunities alongside support for families is critical. Whilst investment in the infrastructure is a key part of this to reduce spend on fixed assets, ensuring an appropriate, flexible and sustainable organisation of places distributed across the city is essential. This works alongside an effective strategy to maximise the potential of our teaching and learning staff to ensure best use of their talent thereby securing the greatest impact on learner opportunities and outcomes for all.

### **Scrutiny Consideration**

135. The Children & Young People's Scrutiny Committee will consider this item on 16 January 2023. Any comments will be reported to the Cabinet meeting.

### **Reason for Recommendations**

136. To inform Cabinet of the progress of investment to date but also the considerations which encompass both challenges and opportunities facing Cardiff in the development of the education estate at the current time and to highlight aspects which require proposals to be brought forward to subsequent Cabinet meetings.

### **Financial Implications**

137. Whilst this report does not recommend any specific course of action or create any financial obligation, decision makers should be informed of the current progress in SOP Band A and Band B schemes, along with the current competing priorities against a restricted capital programme. In prioritising ongoing schemes consideration must be given to identified risks in relation to the current Local Development Plan S.106 shortfall, ALN

reform, the condition of the school's estate and WESP targets. As such flexibility and potential reprioritisation of capital funding may be required to manage within the budget available. Additional Cabinet reports will be necessary as a result and will require financial evaluation of the options taken forward.

138. Further consideration will be needed on a project specific basis in relation to impact on revenue budgets and the financial impact/pupil numbers on schools in affected areas, particularly in light of the significant drop-in birth rates since initial planning stages, which should inform future priorities.
139. Transport implications are outlined below. These will have a potential impact on revenue with any changes to routes, pupil numbers or school locations likely to increase costs further. In addition, capital expenditure for highways external to the school boundary are frequently excluded from WG funding and may need to be found from other budgets. Cost reduction and efficiencies should be sought within home to school transport to ensure minimal impact on available revenue budgets.
140. The risks highlighted in the report include inflation which is already having an impact on which schemes will be affordable within Band B and which schemes will need to be reconsidered in future iterations of funding. Band B funding in relation to capital receipts remains at risk with the £25 million target for Band B as yet unidentified.
141. It should be highlighted that as yet there is no specific funding within the Cardiff Council Capital Programme to match fund the rolling Sustainable Communities for Learning Programme at present.

### **HR Implications**

142. There are no direct HR implications arising from the recommendations set out in this report. Future reports to Cabinet arising from this report will be assessed for HR implications which will be clearly set out as required.

### **Legal Implications**

143. The individual proposals referred to as part of this paper will be subject to separate reports, requiring individual legal advice on the implications under the School Standard and Organisation (Wales) Act 2013 and the accompanying statutory School Organisation Code.
144. This report recommends amendment to Band B priorities by no longer proceeding with the expansion of English-medium education provision and the following matters are relevant to Cabinet's consideration of this.
145. Under the Education Act 1996, the Council has general statutory obligations to promote high standards of education and to consider parental preferences for school places. The Council also has to satisfy its public sector duties under the Equality Act 2010 (including specific Welsh public sector duties). This means the Council must give due regard to the

need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. The protected characteristics are age, gender reassignment, sex, race – including ethnic or national origin, colour or nationality, disability, pregnancy and maternity, marriage and civil partnership, sexual orientation, religion or belief – including lack of belief.

146. When taking strategic decisions, the Council also has a statutory duty to have due regard to the need to reduce inequalities of outcome resulting from socio-economic disadvantage (“the Socio-Economic Duty” imposed under section 1 of the Equality Act 2010). In considering this, the Council must take into account the statutory guidance issued by the Welsh Minister (WG420044 A More Equal Wales The Socio-economic Duty) and must be able to demonstrate how it has discharged its duty.

#### Well Being of Future Generations (Wales) Act 2015

147. The Wellbeing of Future Generations (Wales) Act 2015 (“the Act”) places a ‘well-being duty’ on public bodies aimed at achieving 7 national well-being goals for Wales – a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.

148. In discharging its duties under the Act, the Council has set and published well-being objectives designed to maximise its contribution to achieving the national well-being goals. The well-being objectives are set out in Cardiff’s Corporate Plan 2021-2024. When exercising its functions, the Council is required to take all reasonable steps to meet its well-being objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the well-being objectives and must be satisfied that all reasonable steps have been taken to meet those objectives.

149. The well-being duty also requires the Council to act in accordance with a ‘sustainable development principle’. This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:

- Look to the long term
- Focus on prevention by understanding the root causes of problems
- Deliver an integrated approach to achieving the 7 national well-being goals
- Work in collaboration with others to find shared sustainable solutions
- Involve people from all section of the community in the decisions which affect them

150. The decision maker must be satisfied that the proposed decision accords with the principles above; and due regard must be given to the Statutory Guidance issued by the Welsh Ministers, which is accessible using the link below:

[Well-being of Future Generations \(Wales\) Act 2015: guidance | GOV.WALES](#)

### General

151. The decision maker should be satisfied that the decision is in accordance and within the financial and budgetary policy.
152. The decision maker should also have regard to, when making its decision, to the Council's wider obligations under the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards.

### Transport Implications

153. There are financial pressures on school transport associated with supplier issues and increasing demand. The supplier costs have increased due to a combination of Brexit, COVID, Ukraine Crisis, driver shortages, vehicle shortages leading to increased contractor costs (increased costs of fuel, parts, vehicles and wages). The demand for school transport is increasing as the city is growing including the accommodation of refugees and pupil needs are becoming more complex and parental expectations have increased with a larger number of referrals and requests having to be managed. Key areas of improvement to help manage these supplier and demand issues are as follows:
- Increase Independent Travel Training to reduce the costs of the ALN provision.
  - Additional staff resource to more proactively recruit new transport providers and improve contractor compliance by supporting them improving their systems and processes and training the staff in particular to better manage the complex pupils reducing the volume of issues that current arise.
  - Increase the supplier base by holding regular supplier forums to advise suppliers how to become approved contractors which will increase our supplier base and stabilise contract rates with more competition.
  - More effectively review and challenge all ALN Individual transport and part time placement transport.
  - In the longer term, seek to review ALN Provision and placements with Education Services to get the provision located in the areas where the pupils are living which would reduce transport requirements.

### Property Implications

154. Strategic Estates continue to work with and support Education colleagues through the asset management process and any property matters relating and arising from proposals. Where there are any property transactions or

valuations required to deliver any proposals, they should be done so in accordance with the Council's Asset Management process and in consultation with Strategic Estates and relevant service areas.

### **Single Impact Assessment**

155. An initial Single Impact Assessment has been carried out. As this report does not recommend any specific course of action, assessments would be undertaken for any statutory proposals considered by Cabinet when developing the proposals, and reviewed at the relevant stages following consultation, determination and as any schemes are progressed. A Single Impact Assessment is attached as Appendix 2.

### **RECOMMENDATIONS:**

Cabinet is recommended to

1. note the matters outlined in this report and considerations for the next 12 months for the School Organisation Programme.
2. Agree that officers bring forward a School Organisation Strategy within the next financial year that leads to priority projects against the next tranche of funding of the Sustainable Communities for Learning.

<b>SENIOR RESPONSIBLE OFFICER</b>	Melanie Godfrey Director of Education & Lifelong Learning
	13 January 2023

*The following appendices are attached*

Appendix 1: Annual Report Summary Data

Appendix 2: Single Impact Assessment

Appendix 3: K29 Energy Usage of the Education Estate Report

Appendix 4: Energy Usage Individual School Example (CHS)

Published documents referred to in this report can be found through the links below:

- 12 October 2017 - DEVELOPING THE EDUCATION ESTATE IN CARDIFF [CARDIFF COUNCIL \(modern.gov.co.uk\)](http://modern.gov.co.uk)
- 14 December 2017 - 21ST CENTURY SCHOOLS CARDIFF COUNCIL'S BAND B PRIORITIES [CARDIFF COUNCIL \(modern.gov.co.uk\)](http://modern.gov.co.uk)
- Cardiff Welsh in Education Strategic Plan 2022-2031 [CARDIFF Welsh in Education Strategic Plan 2022-31.pdf](http://modern.gov.co.uk)
- 17 November 2022 – Fairwater Campus Band B Redevelopment [CARDIFF COUNCIL \(modern.gov.co.uk\)](http://modern.gov.co.uk)



## Appendix 1 Summary data sets Autumn 2022

### Birth rates and birth projection data

The below table sets out ONS birth-rate calendar year projections for Cardiff through successive evaluation updates from 2006 to 2018, published by Welsh Government, compared with recent ONS birth data, published by the ONS. This allows the Council to compare actual births to national published forecasts for Cardiff. The cyclic pattern observed in Cardiff's birth rate data has differed greatly to the population projections published by Welsh Government in 2011 and 2014, and also differs to the most recent 2018-based projections published in 2020.

Calendar Year	WG Forecast: 2006	WG Forecast: 2008	WG Forecast: 2011	WG Forecast: 2014	WG Forecast: 2018	Actual births
2018	5,023	5,638	5,100	4,720	4,050	4,027
2019	5,038	5,721	5,131	4,788	4,008	3,738
2020	5,039	5,784	5,164	4,864	4,082	3,705
2021	5,030	5,826	5,202	4,946	4,059	3,818
2022	5,016	5,853	5,239	5,036	4,034	
2023	4,996	5,869	5,273	5,111	4,024	
2024	4,974	5,872	5,304	5,169	4,029	
2025	4,953	5,869	5,328	5,218	4,033	
2026	4,931	5,861	5,342	5,253	4,035	
2027	4,910	5,850	5,345	5,281	4,036	
2028	4,891	5,840	5,352	5,307	4,038	
2029	4,877	5,832	5,366	5,334	4,044	
2030	4,869	5,827	5,379	5,360	4,056	
2031	4,867	5,831	5,390	5,389	4,072	
2032		5,845	5,401	5,418	4,093	
2033		5,870	5,416	5,449	4,117	

It is notable that the national birth rate projections do not follow a cyclic pattern, and the most recent projections set shows little change overall. This generally static projected birth rate cannot be observed in any past birth-rate data.

The Council collects GP registration data from the NHS each year which indicates that the birth rate in Cardiff in 2022, when published, will likely be lower than the birth rate projected by the Welsh Government. Any short-term or medium-term targets set in Cardiff must therefore take account of the most recent birth rate data available.

The table overleaf sets out the most recent data collection from the NHS in summer 2022, which includes all pre-school children registered with a GP born before 31/08/2021.

Academic Year of birth	Children registered with GP
2017 - 2018	4,106
2018 - 2019	3,850
2019 - 2020	3,781
2020 - 2021	3,735

## 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.

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.

## Projected whole-school number on roll data and intake year data

The below table sets out aggregated pupil numbers in Cardiff mainstream schools, and projected future numbers, focused on intake years and whole-school populations.

This takes account of the verified PLASC (Pupil Level Annual School Census) data as supplied by primary schools and secondary schools each year, with the most recent dataset supplied in February 2022. The PLASC datasets confirm the number of pupils who were enrolled in English-medium, Welsh-medium and faith-based primary and secondary schools in Cardiff. Projected pupil populations are based on NHS pre-school populations and standard net cohort-transfer modelling.

As GP registration data to inform the Reception pupil population beyond 2025/26 is not yet available, primary pupil population data is based on repeated intakes of 3,595 (a weighted average of the three latest projected intakes).

Academic Year	Reception Pupil population	Yr 7 Pupil Population	Primary Pupil Population (4-11)	Secondary Pupil Population (11-16)	Secondary/post 16 pupil Population (11-18)
2017-18	4098	3670	29391	17104	17104
2018-19	4125	3816	29364	17623	17623
2019-20	4119	4010	29366	18250	18250
2020-21	4136	4097	29273	19048	19048
2021-22	3824	4077	29040	19509	19509
2022-23	<b>3814</b>	4196	28601	20015	20015
2023-24	<b>3615</b>	4235	27923	20408	20408
2024-25	<b>3582</b>	4028	27422	20412	20412
2025-26	<b>3598</b>	4072	26892	20403	20403
2026-27	<b>3595*</b>	4039	26391*	20362	20362
2027-28	<b>3595*</b>	4106	25823*	20273	20273

Grey shaded area represents captured PLASC data.  
 Non shaded numbers represent projected pupil populations  
 \*Data not yet available, figures modelled on three year weighted average of Reception projections

## Comparison of projected whole-school number on roll data and capacity

The below table sets out aggregated pupil numbers in Cardiff mainstream schools, and projected future numbers, comparing whole-school populations against published school capacities.

School capacity data takes account of published school capacities (permanent arrangements only), including phased changes where applicable, for approved proposals. This does not include potential future changes that have not yet been determined or temporary measures.

Academic Year	Primary School capacities (4-11)	Primary Pupil Population (4-11)	Secondary School capacities (11-18)	Secondary/post 16 pupil Population (11-18)	% Surplus: Primary	% Surplus: Secondary/post 16
2017-18	31,410	29,391	23,282	20,116	6.4%	13.6%
2018-19	31,724	29,364	23,752	20,669	7.4%	13.0%
2019-20	32,091	29,366	24,127	21,356	8.5%	11.5%
2020-21	32,261	29,273	24,127	22,309	9.3%	7.5%
2021-22	32,591	29,040	24,277	22,767	10.9%	6.2%
2022-23	32,661	28,601	24,277	23,322	12.4%	3.9%
2023-24	32,908	27,923	24,642	23,909	15.1%	3.0%
2024-25	32,968	27,422	24,672	24,072	16.8%	2.4%
2025-26	33,028	26,892	24,978	24,171	18.6%	3.2%
2026-27	33,088	26,391*	24,978	24,154	20.2%*	3.3%
2027-28	33,148	25,823*	24,978	24,124	22.1%*	3.4%
2028-29	33,208	25,592*	24,978	23,741	22.9%*	5.0%
2029-30	33,208	25,372*	24,978	23,390	23.6%*	6.4%
2030-31	33,208	25,352*	24,978	22,825	23.7%*	8.6%
2031-32	33,208	25,366*	24,978	22,327	23.6%*	10.6%
2032-33	33,208	25,363*	24,978	21,805	23.6%*	12.7%

Grey shaded area represents captured PLASC data.  
 Non shaded numbers represent projected pupil populations  
 \*Data not yet available, figures modelled on three year weighted average of Reception projections

## Recent net pupil migration

The below table sets out aggregated net migration transfer patterns to successive year groups across statutory primary and secondary phase education in Cardiff schools.

Academic Year	Net Primary phase cohort migration pupil numbers	Net statutory Secondary phase cohort migration pupil numbers
2018-19	-136	-169
2019-20	35	-125
2020-21	20	-71
2021-22	129	-128

City-wide and localised projections for each year group include a the 'Cohort Survival Rate (CSR)' using a three year weighted average, rather than a standardised approach across the whole education phase.

## Comparison of projected number of pupils requiring specialist placement and capacity

The below table compares the published ('designated') capacities of special schools and Specialist Resource Bases in Cardiff, with recent take up in these facilities and in EOTAS placements (i.e. independent provision, placed out of county or in the PRU).

Academic Year	Designated Specialist Capacity	Recent / projected need	In-County Placements	EOTAS Placements
2017-18	936	1405	967	438
2018-19	1042	1458	1055	403
2019-20	1042	1507	1101	406
2020-21	1050	1519	1146	373
2021-22	1050	1660	1254	406
2022-23	1308	1747**	1303	444
2023-24	1459	1776**	1450	326
2024-25	1459	1830**	1459	371
2025-26	1489	1887**	1489	398
2026-27	1665	1941**	1631	310
2027-28	1665	1961**	1650	311

Grey shaded area represents historical data.  
 Non shaded numbers represent projected values  
 \*includes temporary measures  
 \*\*Projected need based on continuation of recent trends

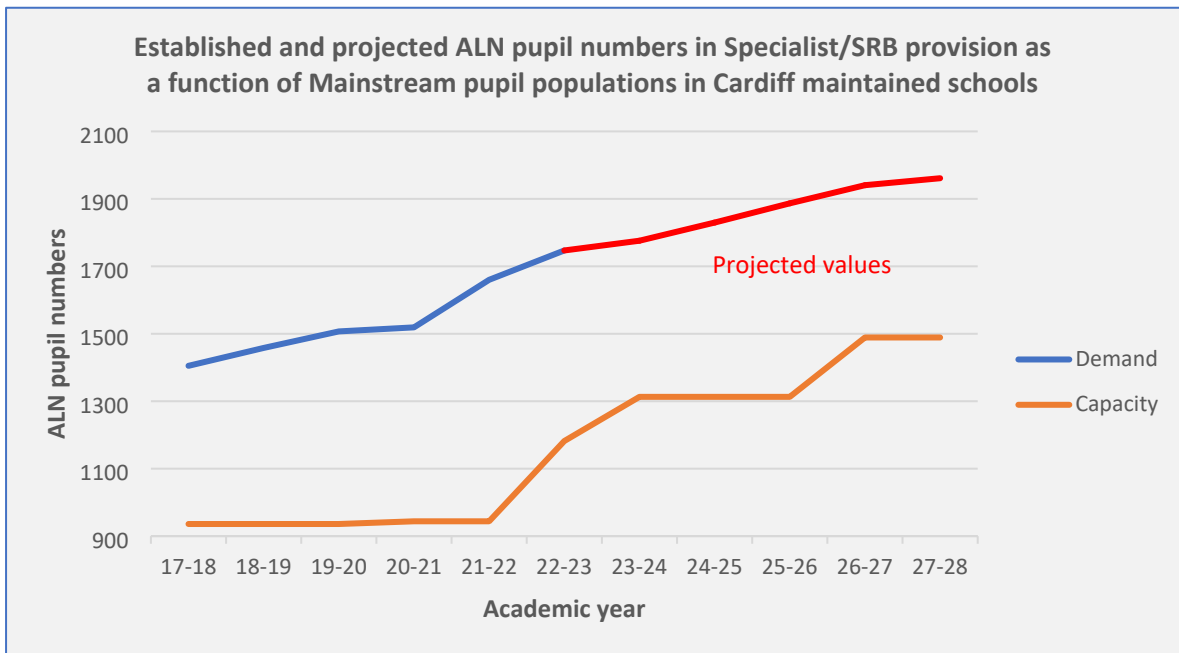
Increases to designated capacity, which aggregate all capacity across all special schools and SRBs, do not align with the projected take up of in county places as it may be necessary to phase implementation of capacity changes and admission of learners.

The above table, and the chart overleaf, illustrate a potential shortfall in Cardiff specialist provision based on a continuation of the existing trends of demand for these places; however, such growth trends cannot be modelled to continue indefinitely and it is not anticipated that such a high proportion of specialist provision would be required.

It should also be noted that the recent and current EOTAS data includes Cardiff children who are Looked After and residing elsewhere, as well as those where a specific need cannot be met in Cardiff provision. The Council must continue to offer EOTAS provision where this would be the most appropriate provision for the individual's needs and circumstances.

Where sufficient capacity is not available in Cardiff's specialist provision, and learners resident in Cardiff are placed in EOTAS provision because of a shortfall in the relevant type of provision, it may not be appropriate for a learner to transfer to Council-

maintained provision when capacity is added. The above reducing EOTAS trend takes account of the overall deficit but does not account for this.



# Single Impact Assessment

Cardiff Council



Appendix 2

## 1. Details of the Proposal

### What is the proposal?

Title: Annual Report on Investment in the Education Estate

### Is this a new proposal or are you amending an existing policy, strategy, project, procedure or service?

New

Existing

### Directorate/Service Area:

Education

### Who is developing the proposal?

Name: Richard Portas

Job Title: Programme Director – SOP

### Responsible Lead Officer (Director or Assistant Director):

Melanie Godfrey  
Director of Education and Lifelong Learning

### Cabinet Portfolio:

Education (Councillor Sarah Merry)

The Single Impact Assessment (SIA) can be strengthened as time progresses, helping shape the proposal. Version control will provide a useful audit trail of how the SIA has developed. Draft versions of the assessment should be retained for completeness, however only the final version will be publicly available. Draft versions may be provided to regulators if appropriate.

Version	Author	Job Title	Date
1	Rosalie Phillips	Senior School Organisation Governance and Compliance Officer	09/12/2022

## 2. Overview of the Proposal

### What action is the Council considering and why?

*Please provide an outline of the proposal.*

The report provides Cabinet with an update regarding the education estate across Cardiff, including outlining the challenges and opportunities facing the authority.

The report is the first of this type after which it is intended annual versions are to be presented to Cabinet and the C&YP Scrutiny Committee to support greater visibility of progress and enhanced opportunities for input from elected members to inform strategic planning going forward. The annual report intends to:

- Report annually against agreed School Organisation and capital investment priorities and spend;
- Update on progress made and lessons learnt during the last year;
- Reflect any potential notable changes based on opportunities/risks/issue presenting that could impact on programme in short, medium, long term;
- Confirm plans (incl proposals and projects) for forthcoming year.

This report will continue to be brought forward in the Autumn term annually.

### What are the costs and/or savings?

*What will the proposal cost and how will it be funded?*

*How might costs be reduced through involvement and collaboration, across Cardiff Council and/or with external stakeholders?*

*Are there savings and how will these be realised?*

N/A



### 3. Impact Assessments

**Which impact assessments do you need to complete to support your proposal?**

The [Impact Assessment Screening Tool](#) provides advice tailored to your proposed policy, strategy or project regarding which impact assessments may be required and who to contact to find out more.

The screening tool is an online form with mainly multiple-choice questions which should take less than 10 minutes to complete.

Once the answers have been submitted, an automated email will be sent to you with the recommended next steps and details of who to contact for expert advice.

**Put Yes or No next to each of the impact assessments listed below to indicate which ones are being carried out.**

<b>Impact Assessment</b>	<b>Page</b>	<b>To be completed: Y/N</b>
A. Equality Impact Assessment	4	Y
B. Child Rights Impact Assessment	10	Y
C. Welsh Language Impact Assessment	14	Y
D. Habitats Regulations Assessment	19	N
E. Strategic Environmental Assessment	20	N
F. Data Protection Impact Assessment	21	N
G. Health Impact Assessment	22	N

For further information on all the above impact assessments including who to contact for advice, please visit the [Policy Portal](#).

# A: Equality Impact Assessment

Guidance in completing this assessment can be accessed [here](#). Please consult the Equality Team for any further assistance with completing this assessment [EqualityTeam@cardiff.gov.uk](mailto:EqualityTeam@cardiff.gov.uk)

## Impact on the Protected Characteristics

### Age

Will this proposal have a **differential impact [positive/negative]** on younger/older people?

	Yes	No	N/A
Up to 18 years		x	
18 - 65 years		x	
Over 65 years		x	

### Please give details/consequences of the differential impact, and provide supporting evidence, if any.

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's policies on equal opportunities.

Any future proposals brought forward would need to consider a detailed range of information e.g. the existing/future demand of school places and appropriate actions to address any differential impacts.

### What action(s) can you take to address the differential impact?

--

### Disability

Will this proposal have a **differential impact [positive/negative]** on disabled people?

	Yes	No	N/A
Hearing Impairment		x	
Physical Impairment		x	
Visual Impairment		x	
Learning Disability		x	
Long-Standing Illness or Health Condition		x	

Mental Health		x	
Substance Misuse		x	
Other		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's policies on equal opportunities.

Any future proposals brought forward would need to consider a detailed range of information e.g., the design/accessibility of any school buildings/accommodation and appropriate actions to address any differential impacts.

**What action(s) can you take to address the differential impact?**

**Gender Reassignment**

Will this proposal have a **differential impact [positive/negative]** on transgender people?

	Yes	No	N/A
Transgender People (Transgender people are people whose gender identity or gender expression is different from the gender they were assigned at birth.)		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's policies on equal opportunities.

**What action(s) can you take to address the differential impact?**

--

**Marriage and Civil Partnership**

Will this proposal have a **differential impact [positive/negative]** on marriage and civil partnership?

	Yes	No	N/A
Marriage		x	
Civil Partnership		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council’s policies on equal opportunities.

The Council’s procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council’s policies on equal opportunities.

**What action(s) can you take to address the differential impact?**

--

**Pregnancy and Maternity**

Will this proposal have a **differential impact [positive/negative]** on pregnancy and maternity?

	Yes	No	N/A
Pregnancy		x	
Maternity		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council’s policies on equal opportunities.

The Council’s procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council’s policies on equal opportunities.

<b>What action(s) can you take to address the differential impact?</b>

**Race**

Will this proposal have a **differential impact [positive/negative]** on the following groups?

	Yes	No	N/A
White		x	
Mixed / Multiple Ethnic Groups		x	
Asian / Asian British		x	
Black / African / Caribbean / Black British		x	
Other Ethnic Groups		x	

<b>Please give details/consequences of the differential impact, and provide supporting evidence, if any.</b>
<p>There are no direct impacts arising from the recommendations of this report.</p> <p>The ethnic makeup of the school population across Cardiff varies.</p> <p><b>Table to go here</b></p> <p>Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council’s policies on equal opportunities.</p> <p>The Council’s procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council’s policies on equal opportunities.</p> <p>Any future proposals brought forward would need to consider a detailed range of information e.g., the makeup of school populations and the areas they serve and appropriate actions to address any differential impacts.</p>
<b>What action(s) can you take to address the differential impact?</b>

**Religion, Belief or Non-Belief**

Will this proposal have a **differential impact [positive/negative]** on people with different religions, beliefs or non-beliefs?

	Yes	No	N/A

Buddhist		X	
Christian		X	
Hindu		X	
Humanist		X	
Jewish		X	
Muslim		X	
Sikh		X	
Other		X	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's / Governing Bodies policies on equal opportunities.

Any future proposals brought forward would need to consider a detailed range of information e.g., demand for VA places and appropriate actions to address any differential impacts.

**What action(s) can you take to address the differential impact?**

**Sex**

Will this proposal have a **differential impact [positive/negative]** on men and/or women?

	Yes	No	N/A
Men		X	
Women		X	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's policies on equal opportunities.

**What action(s) can you take to address the differential impact?**

### Sexual Orientation

Will this proposal have a **differential impact [positive/negative]** on the following groups?

	Yes	No	N/A
Bisexual		x	
Gay Men		x	
Gay Women/Lesbians		x	
Heterosexual/Straight		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

The Council's procedure for managing staffing changes arising from any future proposals would be used in implementing any changes. This would ensure that good practice is followed, including the application of the Council's policies on equal opportunities.

**What action(s) can you take to address the differential impact?**

### Socio-economic Duty

Is the change anticipated to reduce or contribute to inequality of outcome as a result of socio-economic disadvantage? (e.g. will the change negatively impact on those on low-incomes or those living in deprived areas)

	Yes	No	N/A
Socio-economic impact		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report

The Council's 'Stronger, Fairer, Greener' policy sets out the key themes and commitments for the next five years with a strong focus on putting children and young people front and centre of their ambitions for the city. Central to this is the explicit belief that good education is the surest route out of poverty and, in turn that, the long-term prosperity of the city relies on firm support for our children and young people to reach their potential.

Education is consistently ranked as the top priority for children and young people in Cardiff, a key social and cultural right which plays an essential role in overcoming poverty and disadvantage.

Any future proposals brought forward would need to consider fully the commitments set out in 'Stronger, Fairer, Greener' and how any proposed changes would support these.

**What action(s) can you take to address the differential impact?**

**Welsh Language**

Will this proposal have a **differential impact [positive/negative]** on the Welsh language?

	Yes	No	N/A
Welsh language		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

The Council's Welsh in Education Strategic Plan sets out a series of ambitious commitments to build on the progress achieved to date. The WESP commits the Council to ensuring city wide capacity in the primary Welsh-medium sector at 10% over and above the projected intake at Reception to support growth and allow for in-year admissions and flexibility for transition. This includes the delivery of new Welsh-medium capacity at primary level by 2025 – 2026.

The Council works closely and constructively with partners on its Welsh Education Forum, which includes representatives of nursery, primary, secondary and further education, childcare, RhAG and the Welsh Government. The Forum actively informs the planning of Welsh-medium places, to continue to drive the Council's plan to sustainably increase the number of learners within Welsh-medium schools and those learning Welsh in English-medium schools.



The Council, and its partners on the Welsh Education Forum, are committed to driving the increase in number of pupils educated through the medium of Welsh, to meet the targets within Cardiff's WESP, and to meet the targets set out in the Welsh Government's Cymraeg 2050 strategy.

The Council monitors birth rates, the yield from proposed housing and the patterns of take-up in Welsh medium provision at primary and secondary age, with a view to bringing forward appropriate plans to meet any increased demand.

The Council must ensure that the expansion of school provision is brought forward in a strategic and timely manner, which does not compromise existing provision. Significantly or rapidly expanding Welsh-medium primary school provision would, inevitably, have an impact on the take-up of places in other schools, and in turn on the ability of schools to balance budgets and to attract or retain staff.

The Council's aspirations for increasing the number of Welsh speakers, and the Welsh Government's Cymraeg 2050, propose a significant change. Cymraeg 2050 sets national targets of educating 40% of learners in Welsh-medium schools, and a further 30% of learners being educated in English-medium schools being fluent in Welsh. At present, c17% of Cardiff children entering primary education are educated in Welsh-medium schools or classes.

There is a risk that provision of additional Welsh-medium primary school places may inhibit the growth at other local schools; however, Cardiff's WESP sets out a commitment to develop and implement targeted promotion in conjunction with Bilingual Cardiff to increase take up of Welsh-medium places in areas with low demand.

**What action(s) can you take to address the differential impact?**

**Consultation and Engagement**

What arrangements have been made to consult/engage with the various equalities groups?

There is no requirement for consultation/engagement arising directly out of the recommendations of this report.

Any future proposals brought forward would be subject to full consultation/engagement as part of the development/progression of any proposed changes.

--

**Summary of Actions (Listed in the sections above)**

	<b>Actions</b>
Age	
Disability	
Gender Reassignment	
Marriage & Civil Partnership	
Pregnancy & Maternity	
Race	
Religion/Belief	
Sex	
Sexual Orientation	
Socio-economic Impact	
Welsh Language	
Generic/ Over-Arching (applicable to all the above groups)	

**Next Steps**

Any recommendations for action that you plan to take as a result of this Equality Impact Assessment (listed in Summary of Actions) should be included as part of your Service Area's Business Plan to be monitored on a regular basis.

On completion of this Assessment, please ensure that the form is submitted to the Equality Team mailbox so that there is a record of all assessments undertaken in the Council  
[EqualityTeam@cardiff.gov.uk](mailto:EqualityTeam@cardiff.gov.uk)

## B: Child Rights Impact Assessment

Guidance for Local Government prepared from Unicef is available here:

[Child Rights Impact Assessment - Child Friendly Cities & Communities \(unicef.org.uk\)](https://www.unicef.org.uk/child-rights-impact-assessment)

For further information or assistance in completing the Child Rights Impact Assessment, please contact the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)

### STAGE 1: PURPOSE/ SCOPE

**What is the policy/ strategy/ project/ procedure/ service? Summarise/ describe its overall aims and any aims specific to children.**

The report provides Cabinet with an update regarding the education estate across Cardiff, including outlining the challenges and opportunities facing the authority.

The report is the first of this type after which it is intended annual versions are to be presented to Cabinet and the C&YP Scrutiny Committee to support greater visibility of progress and enhanced opportunities for input from elected members to inform strategic planning going forward. The annual report intends to:

- Report annually against agreed School Organisation and capital investment priorities and spend;
- Update on progress made and lessons learnt during the last year;
- Reflect any potential notable changes based on opportunities/risks/issue presenting that could impact on programme in short, medium, long term;
- Confirm plans (incl proposals and projects) for forthcoming year.

This report will continue to be brought forward in the Autumn term annually.

**Will the policy/ strategy/ project/ procedure/ service affect children and young people? Please think about which groups of children and young people it will affect.**

There are no direct impacts arising from the recommendations of this report

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities

Any future proposals brought forward would need to consider any potential impacts on children and young people aged 3 – 19 and appropriate actions to address any differential impacts.

**STAGE 2: BUILD AND ASSESS**

**Which UNCRC (United Nations Convention on the Rights of the Child) articles are relevant to the policy/ strategy/ project/ procedure/ service? Read the articles [here](#) and add any relevant ones to the table below.**

*The articles which form the four General Principles of the UNCRC are pre-populated in the table.*

*For further information or assistance on UNCRC Articles, please email the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)*

**Article 2 (non-discrimination):** The Convention applies to every child without discrimination, whatever their ethnicity, sex, religion, language, abilities or any other status, whatever they think or say, whatever their family background.

**Article 3 (best interests of the child):** The best interests of the child must be a top priority in all decisions and actions that affect children.

**Article 6 (life, survival and development):** Every child has the right to life. Governments must do all they can to ensure that children survive and develop to their full potential.

**Article 12 (respect for the views of the child):** Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously.

**Article 23 (children with a disability):** A child with a disability has the right to live a full and decent life with dignity and, as far as possible, independence and to play an active part in the community.

**Article 28 (right to education):** Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights.

**Article 29 (goals of education):** Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment

**What is the likely/ actual impact of the proposal on children's rights? Is it positive, negative or neutral?**

*(If a negative impact is assessed for any area of rights or any group of children and young people, you must list and recommend options to modify the proposal or mitigate the impact.)*

There are no direct impacts arising from the recommendations of this report.

Access to education in Cardiff is on an equal basis. All schools operate in accordance with the requirements of the Equalities Act and schools will continue to apply the Council's policies on equal opportunities.

Any future proposals brought forward would need to consider any potential impacts on children and young people aged 3 – 19 and appropriate actions to address any differential impacts.

### STAGE 3: VOICE AND EVIDENCE

**Have you sourced and included the views and experiences of children and young people? What do you know about children and young people's views and experiences that are relevant to the proposal?**

The views and experiences of children and young people have been sought on a range of school organisation proposals to date with full consideration given to these as part of the decision-making process.

Any future proposals brought forward would be subject to age-appropriate consultation/engagement with children and young people with the views expressed given full consideration as part of the decision-making process.

**How do you plan to review the policy/ strategy/ project/ procedure/ service to ensure that it respects, protects and fulfils children's rights?**

*Please provide an outline of the monitoring and review process for the implementation and/or delivery of the proposal and how children and young people will be included in this process.*

In order to deliver change the Council will engage with a range of stakeholders including children and young people and bring forward its SOP Strategy setting out clear principles for how the education system across the city should be organised to take account of the Council's wider ambitions and for education to fulfil its role in supporting social mobilisation and, in turn the long-term prosperity of the city through ensuring our children and young people to reach their potential.

### STAGE 4: BUDGET

**What is the budget for this proposal? Are any parts of it specifically allocated to children and young people?**

To be updated following confirmation of finance position

Any future proposals brought forward would include details of budget considerations.

## STAGE 5: IDENTIFIED ACTIONS

**What actions have been identified or changes made to the proposal as a result of this assessment?**

Age appropriate engagement/consultation with young people as part of the development of the SOP strategy and any future school organisation proposals.

### Next Steps

Where it is considered that a Child Rights Impact Assessment is required, you must append the completed form to the Cabinet or Officer Decision Report. A copy must also be emailed to the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)

## C: Welsh Language Impact Assessment

Please consult with Bilingual Cardiff for any assistance with completing this assessment  
[Bilingualcardiff@cardiff.gov.uk](mailto:Bilingualcardiff@cardiff.gov.uk)

### Welsh Language Standards 88-97

#### Standard 88

Will this proposal have a **differential impact [positive/negative]** on:

	Yes	No	N/A
The opportunities for persons to use the Welsh language?		x	
Treating the Welsh language no less favourably than the English language?		x	

**Please give details/ consequences of the differential impact, and provide supporting evidence, if any.**

There are no direct impacts arising from the recommendations of this report.

The Council's Welsh in Education Strategic Plan sets out a series of ambitious commitments to build on the progress achieved to date. The WESP commits the Council to ensuring city wide capacity in the primary Welsh-medium sector at 10% over and above the projected intake at Reception to support growth and allow for in-year admissions and flexibility for transition. This includes the delivery of new Welsh-medium capacity at primary level by 2025 – 2026.

The Council works closely and constructively with partners on its Welsh Education Forum, which includes representatives of nursery, primary, secondary and further education, childcare, RhAG and the Welsh Government. The Forum actively informs the planning of Welsh-medium places, to continue to drive the Council's plan to sustainably increase the number of learners within Welsh-medium schools and those learning Welsh in English-medium schools.

The Council, and its partners on the Welsh Education Forum, are committed to driving the increase in number of pupils educated through the medium of Welsh, to meet the targets within Cardiff's WESP, and to meet the targets set out in the Welsh Government's Cymraeg 2050 strategy.

The Council monitors birth rates, the yield from proposed housing and the patterns of take-up in Welsh medium provision at primary and secondary age, with a view to bringing forward appropriate plans to meet any increased demand.

The Council must ensure that the expansion of school provision is brought forward in a strategic and timely manner, which does not compromise existing provision. Significantly or rapidly expanding Welsh-medium primary school provision would, inevitably, have an

impact on the take-up of places in other schools, and in turn on the ability of schools to balance budgets and to attract or retain staff.

The Council's aspirations for increasing the number of Welsh speakers, and the Welsh Government's Cymraeg 2050, propose a significant change. Cymraeg 2050 sets national targets of educating 40% of learners in Welsh-medium schools, and a further 30% of learners being educated in English-medium schools being fluent in Welsh. At present, c17% of Cardiff children entering primary education are educated in Welsh-medium schools or classes.

There is a risk that provision of additional Welsh-medium primary school places may inhibit the growth at other local schools; however, Cardiff's WESP sets out a commitment to develop and implement targeted promotion in conjunction with Bilingual Cardiff to increase take up of Welsh-medium places in areas with low demand.

**Standard 89**

Could this proposal be formulated or re-formulated, so that it would have positive effects, or increased positive effects, on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

**Standard 90**

Could this proposal be formulated or re-formulated to ensure that it does not have adverse effects, or a decreased adverse effect, on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

**Standard 91**



When consulting on the proposal, were views considered, and sought, on the effects (both positive and negative) that it would have on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

### **Standard 92**

Did the consultation seek and give consideration to views on how the proposal could have positive, or increased positive effects, on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

### **Standard 93**

Did the consultation seek and give consideration to views on how the proposal could have no adverse effects, or decreased adverse effects, on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

### **Standard 94**

If the proposal includes the awarding of grants, has consideration been given to the guidance presented in Cardiff Council's Policy on Awarding Grants in Compliance with the Welsh Language Standards with regard to:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

**Standard 95**

If research was undertaken or commissioned to assist with the development of the proposal, did it give consideration to whether it would have a **differential impact [positive/negative]** on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

**Standard 96**

Did the research undertaken or commissioned to assist with the development of the proposal give consideration to how it could have a positive effect, or increased positive effects, on:

**The opportunities for persons to use the Welsh language?**

--

**Treating the Welsh language no less favourably than the English language?**

--

**Standard 97**

Did the research undertaken or commissioned to assist with the development of the proposal give consideration to how it could have no adverse effect, or decreased adverse effects, on:

**The opportunities for persons to use the Welsh language?**

--

--

<b>Treating the Welsh language no less favourably than the English language?</b>

### Material and Services

In addition to the impact assessment to ensure that the proposal meets the requirements of the Welsh Language Standards, consideration must also be given to the supporting materials and services that may be required.

These include (please click on the hyperlinks to view detailed information about the requirements under the Welsh Language Standards):

- [Correspondence](#) - receiving and replying (emails, letters, online communication).
- [Telephone](#) – receiving and answering calls.
- [Meetings & Public Events](#) – public meetings or events, group meetings, consultation, individual meetings.
- [Public Messages – electronic – video](#)
- [Signs, Notices & Display Material](#)
- [Publicity & Advertising](#)
- [Producing Public Documents](#) - policies, strategies, annual reports, corporate plans, guidelines, notices, codes of practice, consultation papers, licences, certificates, rules, brochures, leaflets, pamphlets or cards, ticket/vouchers.
- [Producing Forms](#)
- [Reception Services](#)
- [Websites, Apps and Online Services](#)
- [Social Media](#)
- [Self Service Machines](#)
- [Education Training Courses](#)
- [Public Address Announcements](#)

<b>Are all supporting materials and services compliant with the requirements of the Welsh language standards?</b>

### Cardiff Council’s Welsh Language Skills Strategy

This strategy may be viewed here and additional guidance documents have been produced to support its implementation:

- [Assessing Welsh Language Skills and Identifying Welsh Essential Roles](#)

- [Recruitment, Selection, and Interview Procedures and the Welsh Language](#)

**Do you have access to sufficient Welsh speaking staff to support the delivery of the proposal in compliance with the requirements of the Welsh language standards?**

--

### **Next Steps**

Where it is considered that a Welsh Language Impact Assessment is required, you must append the completed form to the Cabinet or Officer Decision Report. A copy must also be emailed to Bilingual Cardiff [Bilingualcardiff@cardiff.gov.uk](mailto:Bilingualcardiff@cardiff.gov.uk)

## D: Habitats Regulations Assessment

	Yes	No
Will the proposal affect a European site designated for its nature conservation interest*, or steer development towards an area that includes a European site, or indirectly affect a European site?	<input type="checkbox"/>	<input type="checkbox"/>

*\* Only two European sites designated for nature conservation interest lie within Cardiff's boundaries – the Severn Estuary and Cardiff Beech Woods, but be aware if your project affects an area close to a neighbouring authority.*

If the answer is 'Yes', then a screening exercise may need to be conducted to determine if a Habitats Regulations Assessment is required or not.

Contact the [Biodiversity Team](#) who will guide you through the process.

## E: Strategic Environmental Assessment

	Yes	No
Does the strategy, policy or activity set the framework for future development consent?	<input type="checkbox"/>	<input type="checkbox"/>

	Yes	No
Is the strategy, policy or activity likely to have significant environmental effects (positive or negative)?	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered 'Yes' to both of the above questions, then a full Strategic Environmental Assessment Screening is needed.

Contact the [Sustainable Development Unit](#) who will guide you through the process.

## F: Data Protection Impact Assessment

	Yes	No
Will the proposal involve processing information that could be used to identify individuals?	<input type="checkbox"/>	<input type="checkbox"/>

If the answer is 'Yes', then a Data Protection Impact Assessment may be required.

Click [here](#) to read the guidance and start the Data Protection Impact Assessment process if needed.

For further information, contact the [Data Protection Service](#).

## G: Health Impact Assessment

A Health Impact Assessment helps to develop policies and projects that consider the mental, physical and social health and well-being of a population during planning and development. Considering health inequalities and their impacts on local communities is an essential part of any Health Impact Assessment.

Health Impact Assessments will become a statutory requirement for public bodies in specific circumstances in the future. These circumstances have yet to be published by Welsh Government.

For further information and advice, please contact the Wales HIA Support Unit.

Website: [Home - Wales Health Impact Assessment Support Unit \(phwwhocc.co.uk\)](http://phwwhocc.co.uk)

Email: [WHIASU.PublicHealthWales@wales.nhs.uk](mailto:WHIASU.PublicHealthWales@wales.nhs.uk)



Cardiff Council - Schools Institute Buildings Utility CCC, Cost and CO2 Latest Month Report						
No date range specified						
Building Name	Floor Area m <sup>2</sup>	Designed Occupancy	Total kgCO <sub>2</sub> e/m <sup>2</sup>	Total kgCO <sub>2</sub> e/ Occupant	Total kWhe/m <sup>2</sup>	Total kWhe/ Occupant
Adamsdown Primary School v2	1,606	408	36.94	145.43	173.48	682.89
Albany Primary School	2,243	417	28.17	151.54	132.20	711.08
All Saints Primary School (Cw)	984	150	31.47	206.44	147.74	969.13
Allensbank Primary School	2,272	216	31.12	327.40	146.12	1,537.05
Baden Powell Primary School	2,131	323	8.07	53.26	38.20	252.00
Birchgrove Primary School	1,490	392	29.97	113.93	140.78	535.23
Bishop Childs Primary School (Cw)	885	218	32.09	130.24	150.77	611.92
Bryn Celyn Primary School	1,402	175	37.71	302.19	177.31	1,420.79
Bryn Deri Primary School	1,016	223	29.14	132.74	136.95	623.89
Bryn Hafod Primary School	2,462	425	27.96	161.96	131.23	760.20
Bryn-Y-Deryn Pupil Referral Unit	691		92.48		434.64	
Cantonian High School	8,704	893	24.13	235.17	113.55	1,106.71
Cardiff High School v3	13,080		24.34		114.36	
Cardiff West Community High School		1,023		13.27		62.85
Cathays High School	8,310	1,098	20.35	154.06	95.75	724.69
Christ The King Primary School (Rc)	1,036	215	29.71	143.08	139.44	671.65
Coed Glas Primary School	2,814	508	28.91	160.13	135.64	751.38
Corpus Christi High School (Rc)	7,546	1,076	24.08	168.87	113.04	792.73
Coryton Primary School	909	205	22.81	101.14	107.15	475.17
Creigiau Primary School	1,397	391	29.60	105.75	139.31	497.73
Danescourt Primary School	2,144	459	22.67	105.90	106.44	497.26
Eastern High School	11,102	1,176	22.96	216.79	90.12	850.76
Ely and Caerau Children's Centre	1,370	85	46.01	741.64	216.14	3,484.35
Fairwater Primary School v3	2,122	194	25.40	277.84	119.42	1,306.23
Fitzalan High School	14,345	1,861	37.65	290.23	177.00	1,364.39
Gabalfa Primary School	2,802	250	0.29	3.30	1.15	12.94

Building Name	Floor Area m <sup>2</sup>	Designed Occupancy	Total kgCO <sub>2</sub> e/m <sup>2</sup>	Total kgCO <sub>2</sub> e/ Occupant	Total kWhe/m <sup>2</sup>	Total kWhe/ Occupant
Gladstone Primary School	2,154	190	23.27	263.85	109.46	1,241.02
Glan-Yr-Afon Primary School	2,694	147	23.61	432.59	111.17	2,037.05
Glyncoed Primary School	2,132	341	19.61	122.65	92.15	576.17
Grangetown Nursery School	304	91	28.12	93.79	132.46	441.78
Grangetown Primary School	2,475	393	28.04	176.60	131.58	828.60
Greenhill Special School	1,122	66	40.42	687.25	189.98	3,230.50
Greenway Primary School	2,604	232	21.95	246.34	102.99	1,156.03
Hawthorn Primary School	1,364	229	26.92	160.37	126.40	752.97
Herbert Thompson Primary School v3	3,658	471	25.80	200.37	121.25	941.68
Holy Family Primary School (Rc)	1,452	150	28.05	271.54	131.64	1,274.43
Howardian Primary School	4,590	451	3.14	31.94	14.87	151.30
Hywel Dda Primary School	2,355	422	21.41	119.44	100.48	560.62
Kitchener Primary School	2,296	427	44.47	239.10	208.48	1,120.89
Lakeside Primary School	2,817	467	31.62	190.76	148.47	895.63
Lansdowne Primary School	2,316	356	35.34	229.91	165.75	1,078.33
Llandaff Primary School (Cw)	2,288	420	22.05	120.13	103.60	564.33
Llanedeyrn Primary School	8,512	358	14.70	349.43	68.89	1,637.94
Llanishen Fach Primary School	2,960	498	16.55	98.39	77.97	463.52
Llanishen High School	12,553	1,661	33.06	249.85	155.30	1,173.71
Llysfaen Primary School	1,948	442	18.99	83.70	89.25	393.40
Marlborough Primary School	2,543	505	20.26	102.00	95.26	479.63
Mary Immaculate High School (Rc)	6,045	788	22.08	169.41	103.71	795.59
Meadowbank Special School	1,148	48	31.46	752.55	147.73	3,534.19
Meadowlane Primary School	2,500	335	26.03	194.29	122.02	910.74
Millbank Primary School	653	240	70.31	191.21	330.30	898.28
Moorland Primary School	2,395	435	11.26	61.98	53.08	292.24
Mount Stuart Primary School	1,634	418	47.61	186.08	223.64	874.16
Ninian Park Primary School	2,505	636	23.17	91.25	109.03	429.37

Building Name	Floor Area m <sup>2</sup>	Designed Occupancy	Total kgCO <sub>2</sub> e/m <sup>2</sup>	Total kgCO <sub>2</sub> e/ Occupant	Total kWhe/m <sup>2</sup>	Total kWhe/ Occupant
Oakfield Primary School	2,246	453	34.63	171.70	162.51	805.65
Pen Y Bryn Primary School	2,053	236	27.96	243.26	131.17	1,141.33
Pencaerau Primary School	1,839	236	26.27	204.70	123.47	961.96
Pentrebane Primary School	1,679	203	41.40	342.44	194.58	1,609.42
Pentyrch Primary School	857	145	38.88	229.87	183.34	1,083.97
Peter Lea Primary School	2,694	326	21.64	178.84	101.54	839.04
Pontprennau Primary School	682	464	78.65	115.57	369.95	543.61
Radnor Primary School	2,125	265	20.85	167.12	97.96	785.37
Radyr Comp School	10,908	1,300	33.16	278.19	155.68	1,306.24
Radyr Primary School	1,473	462	29.39	93.73	138.24	440.85
Rhiwbina Primary School	2,844	694	12.35	50.60	58.09	238.04
Rhydypenau Primary School	2,542	466	26.05	142.13	122.24	666.91
Riverbank Special School	1,072	67	17.70	282.99	83.84	1,340.75
Roath Park Primary School	1,919	464	27.71	114.56	130.00	537.53
Rumney Primary School	2,808	444	33.27	210.36	156.09	986.97
Severn Primary School	2,759	458	77.38	466.12	362.81	2,185.44
Springwood Primary School	2,800	259	24.42	264.00	114.58	1,238.48
St Alban's Primary School (Rc)	1,198	116	23.70	244.88	111.51	1,152.00
St Bernadette's Primary School (Rc)	1,145	244	27.86	130.72	131.02	614.71
St Cadoc's Primary School (Rc)	2,254	328	26.33	180.91	123.65	849.58
St Cuthberts Primary School (Rc)	803	98	33.87	277.61	159.20	1,304.97
St Davids Primary School (Cw)	1,113	225	32.61	161.27	153.30	758.17
St Fagan's C.W. Primary School v3	1,006	214	33.88	159.21	159.04	747.32
St Francis Primary School (Rc)	2,024	344	46.18	271.66	216.61	1,274.27
St Illtyds High School (Rc)	7,057	933	17.41	131.72	81.79	618.66
St John Lloyd Primary School (Rc)	2,080	323	26.63	171.55	125.09	805.72
St Joseph's Primary School (Rc)	1,281	211	37.46	227.48	175.86	1,067.98
St Mary The Virgin C.W. Primary School v2	1,104	191	35.73	206.52	168.13	971.88

Building Name	Floor Area m <sup>2</sup>	Designed Occupancy	Total kgCO <sub>2</sub> e/m <sup>2</sup>	Total kgCO <sub>2</sub> e/ Occupant	Total kWhe/m <sup>2</sup>	Total kWhe/ Occupant
St Marys Primary School (Rc)	1,452	223	38.19	248.58	179.15	1,166.10
St Mellons Cw Primary School	708	98	20.34	146.87	95.60	690.33
St Monicas Primary School (Cw)	748	124				
St Patricks Primary School (Rc)	1,387	243	18.63	106.30	87.57	499.77
St Pauls Primary School (Cw)	928	225	20.02	82.59	94.84	391.29
St Peter's Primary School (Rc)	2,826	431	23.81	156.15	111.93	733.95
St Philip Evans Primary School (Rc)	1,510	379	31.84	126.81	149.57	595.78
St Teilo's Secondary School v3	12,531	1,390	24.07	216.97	113.46	1,022.89
Stacey Primary School	1,469	210	46.50	325.20	218.13	1,525.49
The Bishop Of Llandaff High School	10,902	1,249	12.60	109.99	59.43	518.76
The Court Special School	1,023	40	38.54	985.54	180.93	4,626.92
The Hollies Special School	3,704	115	24.25	780.87	113.75	3,663.16
Thornhill Primary School v3	2,077	451	19.97	91.98	93.68	431.41
Ton Yr Ywen Primary School	3,208	468	26.91	184.47	126.33	866.00
Tongwynlais Primary School	1,303	190	24.67	169.13	115.80	794.00
Tredgarville Primary School (Cw)	1,269	223	33.57	191.01	157.65	897.11
Treai Primary School	2,443	366	21.07	140.65	99.03	661.03
Tremorfa Nursery School	417	41	28.25	287.63	132.79	1,352.09
Trowbridge Primary School	1,321	175	30.65	231.39	144.06	1,087.64
Ty Gwyn Special School v3	5,728	205	62.61	1,749.46	293.72	8,206.85
Whitchurch High School (Lower)	9,277		33.90		159.26	
Whitchurch High School (Upper)	10,946		29.95		140.67	
Whitchurch Primary School	2,939	695	27.13	114.70	127.53	539.20
Willowbrook Primary School	2,097	453	27.22	126.00	127.77	591.57
Willows High School	8,466	709	31.65	377.94	148.68	1,775.39
Windsor Clive Primary School	4,214	423	21.25	211.74	99.76	993.87
Woodlands High Special School	1,770	141	26.38	331.20	124.09	1,558.04
Ysgol Bro Eirwg	2,064	405	26.55	135.28	124.31	633.38

Building Name	Floor Area m <sup>2</sup>	Designed Occupancy	Total kgCO <sub>2</sub> e/m <sup>2</sup>	Total kgCO <sub>2</sub> e/ Occupant	Total kWhe/m <sup>2</sup>	Total kWhe/ Occupant
Ysgol Glan Ceubal	397	185	52.82	113.21	250.25	536.34
Ysgol Glan Morfa	1,312	246	10.54	56.19	49.92	266.19
Ysgol Gyfun Gymraeg Bro Edern	7,890	934	25.42	214.76	119.33	1,008.03
Ysgol Gyfun Gymraeg Glantaf	12,196	1,416	19.23	165.61	90.45	779.05
Ysgol Gyfun Gymraeg Plasmawr v3	10,795	1,166	25.38	235.01	119.16	1,103.27
Ysgol Gymraeg Coed Y Gof	1,630	269				
Ysgol Gymraeg Melin Gruffydd	1,414	467	55.17	167.04	259.21	784.90
Ysgol Gymraeg Nant Caerau v3	1,340	226	58.83	348.90	276.77	1,641.36
Ysgol Gymraeg Pwll Coch	2,446	323	7.69	58.25	36.36	275.36
Ysgol Gymraeg Treganna v3	3,314	684	28.34	137.31	133.24	645.59
Ysgol Gynradd Gwaelod Y Garth	1,216	249	31.57	154.21	148.34	724.56
Ysgol Gynradd Gymraeg Hamadryad		258		58.21		276.11
Ysgol Mynydd Bychan	997	238	25.58	107.12	120.09	502.80
Ysgol Pen Y Groes	1,399	118				
Ysgol Pen Y Pîl v3	1,272	197	61.92	399.75	290.59	1,875.87
Ysgol Pencae	1,080	202	31.69	169.39	148.76	795.19
Ysgol Y Berllan Deg	2,042	414	23.07	113.77	108.39	534.48
Ysgol Y Wern Primary School	3,111	653	25.84	123.11	121.44	578.56
	<b>Building Floor Area m<sup>2</sup></b>	<b>Designed Occupancy</b>				
<b>Total</b>	<b>776,875</b>	<b>101,929</b>				

Cardiff Council - Schools Institute Buildings Utility CCC, Cost and CO2 Latest Month Report												
Electricity												
Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Adamsdown Primary School v2	1,606.10	Green		Nov 2022	73,479.97	£9,552.40	45.75	£5.95	14,209.56	8.85	1,299.86	0.81
Albany Primary School	2,242.90	Green		Nov 2022	61,567.75	£8,003.81	27.45	£3.57	11,905.97	5.31	1,089.13	0.49
All Saints Primary School (Cw)	983.97	Orange		Nov 2022	35,363.11	£4,597.20	35.94	£4.67	6,838.52	6.95	625.57	0.64
Allensbank Primary School	2,272.20	Orange		Nov 2022	81,942.20	£10,652.49	36.06	£4.69	15,845.98	6.97	1,449.56	0.64
Baden Powell Primary School	2,130.95	Green		Nov 2022	73,088.27	£9,501.48	34.30	£4.46	14,133.81	6.63	1,292.93	0.61
Birchgrove Primary School	1,490.40	Orange		Nov 2022	63,866.90	£8,302.70	42.85	£5.57	12,350.58	8.29	1,129.81	0.76
Bishop Childs Primary School (Cw)	884.80	Orange		Sep 2022	41,505.50	£5,395.72	46.91	£6.10	8,026.33	9.07	734.23	0.83
Bryn Celyn Primary School	1,402.30	Orange		Nov 2022	92,024.49	£11,963.18	65.62	£8.53	17,795.70	12.69	1,627.91	1.16
Bryn Deri Primary School	1,015.90	Orange		Nov 2022	47,825.08	£6,217.26	47.08	£6.12	9,248.41	9.10	846.03	0.83
Bryn Hafod Primary School	2,461.90	Green		Nov 2022	73,982.13	£9,617.68	30.05	£3.91	14,306.66	5.81	1,308.74	0.53
Bryn-Y-Deryn Pupil Referral Unit	2,349.20	Orange		Nov 2022	100,551.68	£13,071.72	42.80	£5.56	19,444.68	8.28	1,778.76	0.76
Cantonian High School	8,703.93	Orange		Nov 2022	441,001.86	£57,330.24	50.67	£6.59	85,280.94	9.80	7,801.32	0.90
Cardiff High School v3	13,040.12	Orange		Nov 2022	468,627.98	£60,921.64	35.94	£4.67	90,623.28	6.95	8,290.03	0.64
Cardiff West Community High School				Nov 2022	64,296.98	£8,358.61			12,433.75		1,137.41	
Cathays High School	8,310.33	Orange		Nov 2022	326,979.84	£42,507.38	39.35	£5.12	63,231.36	7.61	5,784.27	0.70
Christ The King Primary School (Rc)	1,035.60	Green		Nov 2022	33,990.04	£4,418.71	32.82	£4.27	6,572.99	6.35	601.28	0.58
Coed Glas Primary School	2,814.00	Green		Nov 2022	78,937.08	£10,261.82	28.05	£3.65	15,264.85	5.42	1,396.40	0.50
Corpus Christi High School (Rc)	7,545.60	Green		Nov 2022	205,107.18	£26,663.93	27.18	£3.53	39,663.63	5.26	3,628.35	0.48
Coryton Primary School	909.10	Orange		Nov 2022	29,796.51	£3,873.55	32.78	£4.26	5,762.05	6.34	527.10	0.58
Creigiau Primary School	1,397.00	Orange		Nov 2022	88,768.32	£11,539.88	63.54	£8.26	17,166.02	12.29	1,570.31	1.12
Danescourt Primary School	2,144.30	Green		Nov 2022	60,678.38	£7,888.19	28.30	£3.68	11,733.98	5.47	1,073.40	0.50
Eastern High School	11,101.99	Orange		Feb 2018	440,339.18	£57,244.09	39.66	£5.16	124,646.81	11.23	10,625.38	0.96

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumpti on kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Ely and Caerau Children's Centre	1,370.27			Nov 2022	91,232.60	£11,860.24	66.58	£8.66	17,642.56	12.88	1,613.90	1.18
Fairwater Primary School v3	2,122.00			Sep 2022	92,212.50	£11,987.63	43.46	£5.65	17,832.05	8.40	1,631.24	0.77
Fitzalan High School	14,345.33			Nov 2022	914,479.69	£118,882.36	63.75	£8.29	176,842.08	12.33	16,177.15	1.13
Gabalfa Primary School	2,802.11			Oct 2019	2,106.28	£273.82	0.75	£0.10	538.37	0.19	45.71	0.02
Gladstone Primary School	2,154.17			Nov 2022	94,740.34	£12,316.24	43.98	£5.72	18,320.89	8.50	1,675.96	0.78
Glan-Yr-Afon Primary School	2,693.50			Sep 2022	148,843.07	£19,349.60	55.26	£7.18	28,783.27	10.69	2,633.03	0.98
Glyncod Primary School	2,132.20			Nov 2022	59,222.60	£7,698.94	27.78	£3.61	11,452.47	5.37	1,047.65	0.49
Grangetown Nursery School	303.50			Nov 2022	21,100.21	£2,743.03	69.52	£9.04	4,080.36	13.44	373.26	1.23
Grangetown Primary School	2,474.80			Nov 2022	64,681.41	£8,408.58	26.14	£3.40	12,508.09	5.05	1,144.21	0.46
Greenhill Special School	1,122.30			Nov 2022	74,804.60	£9,724.60	66.65	£8.66	14,465.71	12.89	1,323.29	1.18
Greenway Primary School	2,604.10			Sep 2022	57,596.27	£7,487.51	22.12	£2.88	11,137.97	4.28	1,018.88	0.39
Hawthorn Primary School	1,364.20			Nov 2022	44,459.49	£5,779.73	32.59	£4.24	8,597.58	6.30	786.49	0.58
Herbert Thompson Primary School v3	3,468.47			Nov 2022	149,347.10	£19,415.12	43.06	£5.60	28,880.74	8.33	2,641.95	0.76
Holy Family Primary School (Rc)	1,452.20			Sep 2022	42,725.63	£5,554.33	29.42	£3.82	8,262.28	5.69	755.82	0.52
Howardian Primary School	4,589.80			Nov 2022	68,237.33	£8,870.85	14.87	£1.93	13,195.73	2.88	1,207.12	0.26
Hywel Dda Primary School	2,354.60			Nov 2022	54,500.13	£7,085.02	23.15	£3.01	10,539.24	4.48	964.11	0.41
Kitchener Primary School	2,295.70			Nov 2022	60,179.33	£7,823.31	26.21	£3.41	11,637.48	5.07	1,064.57	0.46
Lakeside Primary School	2,817.10			Nov 2022	106,091.38	£13,791.88	37.66	£4.90	20,515.95	7.28	1,876.76	0.67
Lansdowne Primary School	2,316.00			Nov 2022	63,900.38	£8,307.05	27.59	£3.59	12,357.06	5.34	1,130.40	0.49
Llandaff Primary School (Cw)	2,287.90			Nov 2022	70,611.66	£9,179.52	30.86	£4.01	13,654.88	5.97	1,249.12	0.55
Llanedeyrn Primary School	8,511.79			Nov 2022	70,215.98	£9,128.08	8.25	£1.07	13,578.37	1.60	1,242.12	0.15
Llanishen Fach Primary School	2,960.47			Nov 2022	123,203.67	£16,016.48	41.62	£5.41	23,825.13	8.05	2,179.47	0.74
Llanishen High School	12,552.99			Nov 2022	583,135.92	£75,807.67	46.45	£6.04	112,766.82	8.98	10,315.67	0.82
Llysfaen Primary School	1,948.30			Nov 2022	58,908.11	£7,658.05	30.24	£3.93	11,391.65	5.85	1,042.08	0.53
Marlborough Primary School	2,542.70			Nov 2022	92,363.71	£12,007.28	36.33	£4.72	17,861.29	7.02	1,633.91	0.64

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumpti on kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Mary Immaculate High School (Rc)	6,045.10	Green		Nov 2022	172,570.59	£22,434.18	28.55	£3.71	33,371.70	5.52	3,052.77	0.51
Meadowbank Special School	1,148.30	Yellow		Nov 2022	46,659.35	£6,065.72	40.63	£5.28	9,022.99	7.86	825.40	0.72
Meadowlane Primary School	2,500.40	Green		Nov 2022	36,309.43	£4,720.23	14.52	£1.89	7,021.52	2.81	642.31	0.26
Millbank Primary School	652.70	Red		Nov 2022	64,920.06	£8,439.61	99.46	£12.93	12,554.24	19.23	1,148.44	1.76
Moorland Primary School	2,394.93	Green		Nov 2022	77,228.26	£10,039.67	32.25	£4.19	14,934.40	6.24	1,366.17	0.57
Mount Stuart Primary School	1,633.90	Yellow		Nov 2022	109,307.21	£14,209.94	66.90	£8.70	21,137.83	12.94	1,933.64	1.18
Ninian Park Primary School	2,504.66	Yellow		Nov 2022	119,422.60	£15,524.94	47.68	£6.20	23,093.94	9.22	2,112.59	0.84
Oakfield Primary School	2,245.80	Yellow		Nov 2022	74,108.69	£9,634.13	33.00	£4.29	14,331.14	6.38	1,310.98	0.58
Pen Y Bryn Primary School	2,053.40	Green		Nov 2022	53,113.45	£6,904.75	25.87	£3.36	10,271.08	5.00	939.58	0.46
Pencaerau Primary School	1,838.70	Yellow		Sep 2022	74,504.93	£9,685.64	40.52	£5.27	14,407.76	7.84	1,317.99	0.72
Pentrebane Primary School	1,679.10	Yellow		Sep 2022	110,142.37	£14,318.51	65.60	£8.53	21,299.33	12.68	1,948.42	1.16
Pentyrch Primary School	857.30	Red		Sep 2022	96,469.83	£12,541.08	112.53	£14.63	18,655.34	21.76	1,706.55	1.99
Peter Lea Primary School	2,693.80	Green		Nov 2022	52,432.77	£6,816.26	19.46	£2.53	10,139.45	3.76	927.54	0.34
Pontprenau Primary School	681.80	Red		Nov 2022	102,549.59	£13,331.45	150.41	£19.55	19,831.04	29.09	1,814.10	2.66
Radnor Primary School	2,124.50	Yellow		Sep 2022	68,811.80	£8,945.53	32.39	£4.21	13,306.83	6.26	1,217.28	0.57
Radyr Comp School	10,907.53	Yellow		Nov 2022	443,279.79	£57,626.37	40.64	£5.28	85,721.45	7.86	7,841.62	0.72
Radyr Primary School	1,473.30	Yellow		Nov 2022	82,200.02	£10,686.00	55.79	£7.25	15,895.84	10.79	1,454.12	0.99
Rhiwbina Primary School	2,844.00	Green		Nov 2022	68,415.81	£8,894.06	24.06	£3.13	13,230.25	4.65	1,210.28	0.43
Rhydypenau Primary School	2,542.40	Yellow		Nov 2022	63,529.04	£8,258.78	24.99	£3.25	12,285.25	4.83	1,123.83	0.44
Riverbank Special School	1,071.50	Red		Nov 2022	89,830.47	£11,677.96	83.84	£10.90	17,371.42	16.21	1,589.10	1.48
Roath Park Primary School	1,918.60	Green		Nov 2022	50,486.35	£6,563.23	26.31	£3.42	9,763.05	5.09	893.10	0.47
Rumney Primary School	2,807.50	Green		Nov 2022	85,508.97	£11,116.17	30.46	£3.96	16,535.73	5.89	1,512.65	0.54
Severn Primary School	2,758.80	Yellow		Nov 2022	138,291.78	£17,977.93	50.13	£6.52	26,742.86	9.69	2,446.38	0.89
Springwood Primary School	2,799.60	Green		Nov 2022	59,008.78	£7,671.14	21.08	£2.74	11,411.12	4.08	1,043.87	0.37
St Alban's Primary School (Rc)	1,198.43	Yellow		Sep 2022	55,858.50	£7,261.61	46.61	£6.06	10,801.92	9.01	988.14	0.82

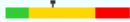





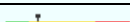
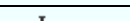
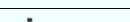
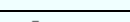


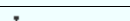
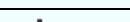
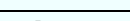
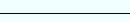





Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption on kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
St Bernadette's Primary School (Rc)	1,144.80			Nov 2022	57,532.51	£7,479.23	50.26	£6.53	11,125.64	9.72	1,017.75	0.89
St Cadoc's Primary School (Rc)	2,253.60			Sep 2022	75,516.74	£9,817.18	33.51	£4.36	14,603.43	6.48	1,335.89	0.59
St Cuthberts Primary School (Rc)	803.30			Sep 2022	45,364.03	£5,897.32	56.47	£7.34	8,772.50	10.92	802.49	1.00
St Davids Primary School (Cw)	1,112.80			Nov 2022	61,430.56	£7,985.97	55.20	£7.18	11,879.44	10.68	1,086.71	0.98
St Fagan's C.W. Primary School v3	1,005.57			Nov 2022	36,895.62	£4,796.43	36.69	£4.77	7,134.87	7.10	652.68	0.65
St Francis Primary School (Rc)	2,023.72			Sep 2022	76,727.57	£9,974.58	37.91	£4.93	14,837.58	7.33	1,357.31	0.67
St Illtyds High School (Rc)	7,056.80			Nov 2022	164,413.24	£21,373.72	23.30	£3.03	31,794.23	4.51	2,908.47	0.41
St John Lloyd Primary School (Rc)	2,080.46			Sep 2022	73,620.43	£9,570.66	35.39	£4.60	14,236.72	6.84	1,302.35	0.63
St Joseph's Primary School (Rc)	1,281.40			Sep 2022	56,279.00	£7,316.27	43.92	£5.71	10,883.23	8.49	995.58	0.78
St Mary The Virgin C.W. Primary School v2	1,095.59			Nov 2022	82,766.70	£10,759.67	75.55	£9.82	16,005.42	14.61	1,464.14	1.34
St Marys Primary School (Rc)	1,451.50			Sep 2022	47,581.07	£6,185.54	32.78	£4.26	9,201.23	6.34	841.71	0.58
St Mellons Cw Primary School	707.69			Nov 2022	23,376.60	£3,038.96	33.03	£4.29	4,520.57	6.39	413.53	0.58
St Monicas Primary School (Cw)												
St Patricks Primary School (Rc)	1,386.80			Sep 2022	44,770.96	£5,820.22	32.28	£4.20	8,657.81	6.24	792.00	0.57
St Pauls Primary School (Cw)	928.30			Nov 2022	88,040.69	£11,445.29	94.84	£12.33	17,025.31	18.34	1,557.44	1.68
St Peter's Primary School (Rc)	2,826.25			Sep 2022	109,994.80	£14,299.32	38.92	£5.06	21,270.79	7.53	1,945.81	0.69
St Philip Evans Primary School (Rc)	1,509.70			Nov 2022	69,427.31	£9,025.55	45.99	£5.98	13,425.85	8.89	1,228.17	0.81
St Teilo's Secondary School v3	12,531.06			Nov 2022	843,552.41	£109,661.81	67.32	£8.75	163,126.16	13.02	14,922.44	1.19
Stacey Primary School	1,468.64			Nov 2022	57,668.25	£7,496.87	39.27	£5.10	11,151.89	7.59	1,020.15	0.69
The Bishop Of Llandaff High School	10,901.92			Nov 2022	408,023.21	£53,043.02	37.43	£4.87	78,903.53	7.24	7,217.93	0.66
The Court Special School	1,022.94			Nov 2022	46,031.73	£5,984.13	45.00	£5.85	8,901.62	8.70	814.30	0.80
The Hollies Special School	3,703.50			Nov 2022	77,489.20	£10,073.60	20.92	£2.72	14,984.86	4.05	1,370.78	0.37
Thornhill Primary School v3	2,076.82			Nov 2022	33,174.95	£4,312.74	15.97	£2.08	6,415.37	3.09	586.86	0.28
Ton Yr Ywen Primary School	3,208.10			Sep 2022	98,712.27	£12,832.59	30.77	£4.00	19,088.98	5.95	1,746.22	0.54
Tongwynlais Primary School	1,302.80			Sep 2022	37,070.57	£4,819.17	28.45	£3.70	7,168.71	5.50	655.78	0.50

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumpti on kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Tredegarville Primary School (Cw)	1,269.00			Sep 2022	56,316.97	£7,321.21	44.38	£5.77	10,890.58	8.58	996.25	0.79
Trelai Primary School	2,443.00			Nov 2022	81,773.10	£10,630.50	33.47	£4.35	15,813.28	6.47	1,446.57	0.59
Tremorfa Nursery School	417.46			Sep 2022	19,616.47	£2,550.14	46.99	£6.11	3,793.43	9.09	347.02	0.83
Trowbridge Primary School	1,321.20			Sep 2022	66,233.28	£8,610.33	50.13	£6.52	12,808.19	9.69	1,171.67	0.89
Ty Gwyn Special School v3	5,520.20			Nov 2022	307,555.64	£39,982.23	55.71	£7.24	59,475.11	10.77	5,440.66	0.99
Whitchurch High School (Lower)	9,277.09			Nov 2022	443,721.25	£57,683.76	47.83	£6.22	85,806.82	9.25	7,849.43	0.85
Whitchurch High School (Upper)	10,945.69			Nov 2022	444,439.89	£57,777.19	40.60	£5.28	85,945.79	7.85	7,862.14	0.72
Whitchurch Primary School	2,938.50			Nov 2022	133,083.58	£17,300.87	45.29	£5.89	25,735.70	8.76	2,354.25	0.80
Willowbrook Primary School	2,097.30			Nov 2022	66,993.69	£8,709.18	31.94	£4.15	12,955.24	6.18	1,185.12	0.57
Willows High School	8,466.43			Nov 2022	373,388.41	£48,540.49	44.10	£5.73	72,205.85	8.53	6,605.24	0.78
Windsor Clive Primary School	4,214.30			Nov 2022	96,857.69	£12,591.50	22.98	£2.99	18,730.34	4.44	1,713.41	0.41
Woodlands High Special School	1,770.40			Nov 2022	91,089.80	£11,841.67	51.45	£6.69	17,614.95	9.95	1,611.38	0.91
Ysgol Bro Eirwg	2,063.60			Nov 2022	68,508.93	£8,906.16	33.20	£4.32	13,248.26	6.42	1,211.92	0.59
Ysgol Glan Ceubal	396.50			Nov 2022	99,223.02	£12,898.99	250.25	£32.53	19,187.75	48.39	1,755.26	4.43
Ysgol Glan Morfa	1,311.80			Nov 2022	64,983.78	£8,447.89	49.54	£6.44	12,566.56	9.58	1,149.56	0.88
Ysgol Gyfun Gymraeg Bro Ederm	7,890.16			Nov 2022	217,965.99	£28,335.58	27.63	£3.59	42,150.26	5.34	3,855.82	0.49
Ysgol Gyfun Gymraeg Glantaf	12,196.03			Nov 2022	456,528.46	£59,348.70	37.43	£4.87	88,283.47	7.24	8,075.99	0.66
Ysgol Gyfun Gymraeg Plasmawr v3	10,795.47			Nov 2022	316,050.30	£41,086.54	29.28	£3.81	61,117.81	5.66	5,590.93	0.52
Ysgol Gymraeg Coed Y Gof												
Ysgol Gymraeg Melin Gruffydd	1,414.10			Sep 2022	116,467.40	£15,140.76	82.36	£10.71	22,522.47	15.93	2,060.31	1.46
Ysgol Gymraeg Nant Caerau v3	1,340.30			Sep 2022	155,252.37	£20,182.81	115.83	£15.06	30,022.70	22.40	2,746.41	2.05
Ysgol Gymraeg Pwll Coch	2,446.41			Sep 2022	72,097.07	£9,372.62	29.47	£3.83	13,942.13	5.70	1,275.40	0.52
Ysgol Gymraeg Treganna v3	3,314.10			Nov 2022	163,167.79	£21,211.81	49.23	£6.40	31,553.39	9.52	2,886.44	0.87
Ysgol Gynradd Gwaelod Y Garth	1,216.20			Nov 2022	56,450.15	£7,338.52	46.42	£6.03	10,916.33	8.98	998.60	0.82
Ysgol Gynradd Gymraeg Hamadryad				Nov 2022	60,420.80	£7,854.70			11,684.17		1,068.84	

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption on kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 2 Emissions kgCO <sub>2</sub> e	Scope 2 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Ysgol Mynydd Bychan	996.50	Green		Nov 2022	27,550.60	£3,581.58	27.65	£3.59	5,327.74	5.35	487.37	0.49
Ysgol Pen Y Groes												
Ysgol Pen Y Pili v3	1,282.10	Orange		Nov 2022	77,877.47	£10,124.07	60.74	£7.90	15,059.95	11.75	1,377.65	1.07
Ysgol Pencae	1,079.81	Orange		Nov 2022	38,915.03	£5,058.95	36.04	£4.69	7,525.39	6.97	688.41	0.64
Ysgol Y Berllan Deg	2,041.50	Green		Nov 2022	66,877.99	£8,694.14	32.76	£4.26	12,932.87	6.33	1,183.07	0.58
Ysgol Y Wern Primary School	3,111.10	Orange		Nov 2022	126,363.33	£16,427.23	40.62	£5.28	24,436.14	7.85	2,235.37	0.72

Total for Electricity												
	Area Served m <sup>2</sup>				Annual Consumption kWh	Annual Cost			Scope 2 Emissions kgCO <sub>2</sub> e		Scope 3 Supply Emissions kgCO <sub>2</sub> e	
<b>Total</b>	<b>391,265.45</b>				<b>15,668,810.96</b>	<b>£2,036,945.43</b>			<b>3,069,659.74</b>		<b>280,025.50</b>	

Cardiff Council - Schools Institute Buildings Utility CCC, Cost and CO2 Latest Month Report												
No date range specified	Gas											
Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Adamsdown Primary School v2	1,606.10			Oct 2022	205,140.51	£10,257.03	127.73	£6.39	37,446.35	23.32	6,379.87	3.97
Albany Primary School	2,242.90			Oct 2022	234,953.82	£11,747.69	104.75	£5.24	42,888.47	19.12	7,307.06	3.26
All Saints Primary School (Cw)	983.97			Oct 2022	110,006.02	£5,500.30	111.80	£5.59	20,080.50	20.41	3,421.19	3.48
Allensbank Primary School	2,272.20			Oct 2022	250,061.48	£12,503.07	110.05	£5.50	45,646.22	20.09	7,776.91	3.42
Baden Powell Primary School	2,130.95			Oct 2022	8,307.15	£415.36	3.90	£0.19	1,516.39	0.71	258.35	0.12
Birchgrove Primary School	1,490.40			Oct 2022	145,944.76	£7,297.24	97.92	£4.90	26,640.76	17.87	4,538.88	3.05
Bishop Childs Primary School (Cw)	884.80			Oct 2022	91,892.31	£4,594.62	103.86	£5.19	16,774.02	18.96	2,857.85	3.23
Bryn Celyn Primary School	1,402.30			Oct 2022	156,613.53	£7,830.68	111.68	£5.58	28,588.23	20.39	4,870.68	3.47
Bryn Deri Primary School	1,015.90			Oct 2022	91,302.04	£4,565.10	89.87	£4.49	16,666.27	16.41	2,839.49	2.80
Bryn Hafod Primary School	2,461.90			Oct 2022	249,102.73	£12,455.14	101.18	£5.06	45,471.21	18.47	7,747.09	3.15
Bryn-Y-Deryn Pupil Referral Unit				Oct 2022	199,656.61	£9,982.83			36,445.32		6,209.32	
Cantonian High School	8,703.93			Oct 2022	547,293.67	£27,364.68	62.88	£3.14	99,902.99	11.48	17,020.83	1.96
Cardiff High School v3	13,040.12			Oct 2022	1,027,209.39	£51,360.47	78.77	£3.94	187,506.80	14.38	31,946.21	2.45
Cardiff West Community High School				Sep 2021	0.00	£0.00			0.00		0.00	
Cathays High School	8,310.33			Oct 2022	468,732.54	£23,436.63	56.40	£2.82	85,562.44	10.30	14,577.58	1.75
Christ The King Primary School (Rc)	1,035.60			Oct 2022	110,414.23	£5,520.71	106.62	£5.33	20,155.01	19.46	3,433.88	3.32
Coed Glas Primary School	2,814.00			Oct 2022	302,764.77	£15,138.24	107.59	£5.38	55,266.68	19.64	9,415.98	3.35
Corpus Christi High School (Rc)	7,545.60			Oct 2022	647,867.47	£32,393.37	85.86	£4.29	118,261.73	15.67	20,148.68	2.67
Coryton Primary School	909.10			Oct 2022	67,613.93	£3,380.70	74.37	£3.72	12,342.25	13.58	2,102.79	2.31
Creigiau Primary School	1,397.00			Oct 2022	105,843.12	£5,292.16	75.76	£3.79	19,320.60	13.83	3,291.72	2.36
Danescourt Primary School	2,144.30			Oct 2022	167,566.23	£8,378.31	78.14	£3.91	30,587.54	14.26	5,211.31	2.43

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Eastern High School	11,101.99			Oct 2022	560,151.31	£28,007.57	50.46	£2.52	102,250.02	9.21	17,420.71	1.57
Ely and Caerau Children's Centre				Oct 2022	204,937.54	£10,246.88			37,409.30		6,373.56	
Fairwater Primary School v3	2,122.00			Oct 2022	161,195.42	£8,059.77	75.96	£3.80	29,424.61	13.87	5,013.18	2.36
Fitzalan High School	14,345.33			Oct 2022	1,624,650.78	£81,232.54	113.25	£5.66	296,563.75	20.67	50,526.64	3.52
Gabalfa Primary School	2,802.12			May 2022	1,129.62	£56.48	0.40	£0.02	206.20	0.07	35.13	0.01
Gladstone Primary School	2,154.17			Oct 2022	141,053.55	£7,052.54	65.48	£3.27	25,747.92	11.95	4,386.77	2.04
Glan-Yr-Afon Primary School	2,693.50			Oct 2022	150,602.72	£7,529.99	55.91	£2.80	27,491.02	10.21	4,683.74	1.74
Glyncod Primary School	2,132.20			Oct 2022	137,250.02	£6,862.50	64.37	£3.22	25,053.62	11.75	4,268.48	2.00
Grangetown Nursery School	303.50			Oct 2022	19,101.36	£955.07	62.94	£3.15	3,486.76	11.49	594.05	1.96
Grangetown Primary School	2,474.80			Oct 2022	260,959.52	£13,047.98	105.45	£5.27	47,635.55	19.25	8,115.84	3.28
Greenhill Special School	1,122.30			Oct 2022	138,408.40	£6,920.42	123.33	£6.17	25,265.07	22.51	4,304.50	3.84
Greenway Primary School	2,604.10			Oct 2022	210,602.21	£10,530.11	80.87	£4.04	38,443.33	14.76	6,549.73	2.52
Hawthorn Primary School	1,364.20			Oct 2022	127,971.43	£6,398.57	93.81	£4.69	23,359.90	17.12	3,979.91	2.92
Herbert Thompson Primary School v3	3,206.74			Oct 2022	294,186.27	£14,709.31	91.74	£4.59	53,700.76	16.75	9,149.19	2.85
Holy Family Primary School (Rc)	1,452.20			Oct 2022	148,438.14	£7,421.91	102.22	£5.11	27,095.90	18.66	4,616.43	3.18
Howardian Primary School												
Hywel Dda Primary School	2,354.60			Oct 2022	182,080.36	£9,104.02	77.33	£3.87	33,236.95	14.12	5,662.70	2.40
Kitchener Primary School	2,295.70			Oct 2022	418,438.68	£20,921.93	182.27	£9.11	76,381.80	33.27	13,013.44	5.67
Lakeside Primary School	2,817.10			Oct 2022	312,168.47	£15,608.42	110.81	£5.54	56,983.23	20.23	9,708.44	3.45
Lansdowne Primary School	2,316.00			Oct 2022	319,986.76	£15,999.34	138.16	£6.91	58,410.38	25.22	9,951.59	4.30
Llandaff Primary School (Cw)	2,287.90			Oct 2022	166,406.43	£8,320.32	72.73	£3.64	30,375.83	13.28	5,175.24	2.26
Llanedeyrn Primary School	8,511.79			Oct 2022	516,167.32	£25,808.37	60.64	£3.03	94,221.18	11.07	16,052.80	1.89
Llanishen Fach Primary School	2,960.47			Oct 2022	107,628.45	£5,381.42	36.36	£1.82	19,646.50	6.64	3,347.24	1.13
Llanishen High School	12,552.99			Oct 2022	1,366,401.40	£68,320.07	108.85	£5.44	249,422.91	19.87	42,495.08	3.39

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Llysfaden Primary School	1,948.30	Green		Oct 2022	114,974.11	£5,748.71	59.01	£2.95	20,987.37	10.77	3,575.69	1.84
Marlborough Primary School	2,542.70	Green		Oct 2022	149,848.08	£7,492.40	58.93	£2.95	27,353.27	10.76	4,660.28	1.83
Mary Immaculate High School (Rc)	6,045.10	Green		Oct 2022	454,355.16	£22,717.76	75.16	£3.76	82,937.99	13.72	14,130.45	2.34
Meadowbank Special School	1,148.30	Orange		Oct 2022	122,981.69	£6,149.08	107.10	£5.35	22,449.08	19.55	3,824.73	3.33
Meadowlane Primary School	2,500.40	Orange		Sep 2022	268,789.01	£13,439.45	107.50	£5.37	49,064.75	19.62	8,359.34	3.34
Millbank Primary School	652.70	Orange		Oct 2022	150,667.50	£7,533.37	230.84	£11.54	27,502.85	42.14	4,685.76	7.18
Moorland Primary School	2,394.93	Green		Oct 2022	49,896.58	£2,494.83	20.83	£1.04	9,108.12	3.80	1,551.78	0.65
Mount Stuart Primary School	1,633.90	Orange		Oct 2022	256,092.65	£12,804.63	156.74	£7.84	46,747.15	28.61	7,964.48	4.87
Ninian Park Primary School	2,504.66	Green		Jun 2022	153,654.46	£7,682.72	61.35	£3.07	28,048.09	11.20	4,778.65	1.91
Oakfield Primary School	2,245.80	Orange		Oct 2022	290,852.61	£14,542.63	129.51	£6.48	53,092.24	23.64	9,045.52	4.03
Pen Y Bryn Primary School	2,053.40	Orange		Oct 2022	216,240.79	£10,812.04	105.31	£5.27	39,472.59	19.22	6,725.09	3.28
Pencaerau Primary School				Oct 2022	152,517.54	£7,625.88			27,840.55		4,743.30	
Pentrebane Primary School	1,679.10	Orange		Jun 2022	216,570.48	£10,828.52	128.98	£6.45	39,532.78	23.54	6,735.34	4.01
Pentyrch Primary School	857.30	Green		Oct 2022	60,706.53	£3,035.33	70.81	£3.54	11,081.37	12.93	1,887.97	2.20
Peter Lea Primary School	2,693.80	Green		Oct 2022	221,095.44	£11,054.77	82.08	£4.10	40,358.76	14.98	6,876.07	2.55
Pontprenau Primary School	681.80	Orange		Sep 2022	149,685.55	£7,484.28	219.54	£10.98	27,323.60	40.08	4,655.22	6.83
Radnor Primary School	2,124.50	Green		Oct 2022	139,311.83	£6,965.59	65.57	£3.28	25,429.98	11.97	4,332.60	2.04
Radyr Comp School	10,907.53	Orange		Oct 2022	1,254,836.37	£62,741.82	115.04	£5.75	229,057.83	21.00	39,025.41	3.58
Radyr Primary School	1,473.30	Orange		Oct 2022	121,471.30	£6,073.56	82.45	£4.12	22,173.37	15.05	3,777.76	2.56
Rhiwbina Primary School	2,844.00	Green		Oct 2022	96,787.23	£4,839.36	34.03	£1.70	17,667.54	6.21	3,010.08	1.06
Rhydypenau Primary School	2,542.40	Orange		Oct 2022	247,251.02	£12,362.55	97.25	£4.86	45,133.20	17.75	7,689.51	3.02
Riverbank Special School												
Roath Park Primary School	1,918.60	Orange		Oct 2022	198,928.40	£9,946.42	103.68	£5.18	36,312.39	18.93	6,186.67	3.22
Rumney Primary School	2,807.50	Orange		Oct 2022	352,704.65	£17,635.23	125.63	£6.28	64,382.71	22.93	10,969.11	3.91
Severn Primary School	2,758.80	Red		Oct 2022	862,639.31	£43,131.97	312.69	£15.63	157,466.18	57.08	26,828.08	9.72

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Springwood Primary School	2,799.60			Oct 2022	261,758.43	£13,087.92	93.50	£4.67	47,781.38	17.07	8,140.69	2.91
St Alban's Primary School (Rc)	1,198.43			Jun 2022	77,773.81	£3,888.69	64.90	£3.24	14,196.83	11.85	2,418.77	2.02
St Bernadette's Primary School (Rc)	1,144.80			Oct 2022	92,455.66	£4,622.78	80.76	£4.04	16,876.86	14.74	2,875.37	2.51
St Cadoc's Primary School (Rc)	2,253.60			Oct 2022	203,145.04	£10,157.25	90.14	£4.51	37,082.10	16.45	6,317.81	2.80
St Cuthberts Primary School (Rc)	803.30			Oct 2022	82,523.43	£4,126.17	102.73	£5.14	15,063.83	18.75	2,566.48	3.19
St Davids Primary School (Cw)	1,112.80			Oct 2022	109,158.32	£5,457.92	98.09	£4.90	19,925.76	17.91	3,394.82	3.05
St Fagan's C.W. Primary School v3	1,003.67			Oct 2022	123,031.35	£6,151.57	122.58	£6.13	22,458.14	22.38	3,826.28	3.81
St Francis Primary School (Rc)	2,023.72			Oct 2022	361,622.06	£18,081.10	178.69	£8.93	66,010.49	32.62	11,246.45	5.56
St Illtyds High School (Rc)	7,056.80			Oct 2022	412,796.78	£20,639.84	58.50	£2.92	75,351.92	10.68	12,837.98	1.82
St John Lloyd Primary School (Rc)	2,080.46			Oct 2022	186,627.23	£9,331.36	89.70	£4.49	34,066.93	16.37	5,804.11	2.79
St Joseph's Primary School (Rc)	1,281.40			Oct 2022	169,064.28	£8,453.21	131.94	£6.60	30,860.99	24.08	5,257.90	4.10
St Mary The Virgin C.W. Primary School v2	1,095.59			Oct 2022	102,862.01	£5,143.10	93.89	£4.69	18,776.43	17.14	3,199.01	2.92
St Marys Primary School (Rc)	1,451.50			Oct 2022	212,458.79	£10,622.94	146.37	£7.32	38,782.23	26.72	6,607.47	4.55
St Mellons Cw Primary School				Oct 2022	44,275.73	£2,213.79			8,082.09		1,376.98	
St Monicas Primary School (Cw)												
St Patricks Primary School (Rc)	1,386.80			Oct 2022	76,672.84	£3,833.64	55.29	£2.76	13,995.86	10.09	2,384.53	1.72
St Pauls Primary School (Cw)												
St Peter's Primary School (Rc)	2,826.25			Oct 2022	206,338.84	£10,316.94	73.01	£3.65	37,665.09	13.33	6,417.14	2.27
St Philip Evans Primary School (Rc)	1,509.70			Oct 2022	156,372.63	£7,818.63	103.58	£5.18	28,544.26	18.91	4,863.19	3.22
St Teilo's Secondary School v3	11,404.76			Oct 2022	578,265.43	£28,913.27	50.70	£2.54	105,556.57	9.26	17,984.05	1.58
Stacey Primary School	1,468.64			Oct 2022	262,684.85	£13,134.24	178.86	£8.94	47,950.49	32.65	8,169.50	5.56
The Bishop Of Llandaff High School	10,901.92			Oct 2022	239,906.92	£11,995.35	22.01	£1.10	43,792.61	4.02	7,461.11	0.68
The Court Special School	1,022.94			Oct 2022	139,044.97	£6,952.25	135.93	£6.80	25,381.27	24.81	4,324.30	4.23
The Hollies Special School	3,703.50			Oct 2022	343,774.57	£17,188.73	92.82	£4.64	62,752.61	16.94	10,691.39	2.89
Thornhill Primary School v3	2,076.82			Oct 2022	161,390.18	£8,069.51	77.71	£3.89	29,460.16	14.19	5,019.23	2.42

Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Ton Yr Ywen Primary School	3,208.10			Jun 2022	306,575.54	£15,328.78	95.56	£4.78	55,962.30	17.44	9,534.50	2.97
Tongwynlais Primary School	1,302.80			Oct 2022	113,789.24	£5,689.46	87.34	£4.37	20,771.09	15.94	3,538.85	2.72
Tredegaville Primary School (Cw)	1,269.00			Oct 2022	143,738.99	£7,186.95	113.27	£5.66	26,238.11	20.68	4,470.28	3.52
Trelai Primary School	2,443.00			Sep 2022	160,164.06	£8,008.20	65.56	£3.28	29,236.35	11.97	4,981.10	2.04
Tremorfa Nursery School	417.46			Oct 2022	35,819.09	£1,790.95	85.80	£4.29	6,538.42	15.66	1,113.97	2.67
Trowbridge Primary School	1,321.20			Oct 2022	124,103.53	£6,205.18	93.93	£4.70	22,653.86	17.15	3,859.62	2.92
Ty Gwyn Special School v3	5,509.80			Oct 2022	1,374,848.43	£68,742.42	249.53	£12.48	250,964.83	45.55	42,757.79	7.76
Whitchurch High School (Lower)	9,277.09			Oct 2022	1,033,763.65	£51,688.18	111.43	£5.57	188,703.22	20.34	32,150.05	3.47
Whitchurch High School (Upper)	10,945.69			Oct 2022	1,095,242.25	£54,762.11	100.06	£5.00	199,925.52	18.27	34,062.03	3.11
Whitchurch Primary School	2,938.50			Oct 2022	241,663.22	£12,083.16	82.24	£4.11	44,113.20	15.01	7,515.73	2.56
Willowbrook Primary School	2,097.30			Oct 2022	200,987.01	£10,049.35	95.83	£4.79	36,688.17	17.49	6,250.70	2.98
Willows High School	8,466.43			Oct 2022	885,361.62	£44,268.08	104.57	£5.23	161,613.91	19.09	27,534.75	3.25
Windsor Clive Primary School	4,214.30			Oct 2022	323,547.56	£16,177.38	76.77	£3.84	59,060.37	14.01	10,062.33	2.39
Woodlands High Special School	1,770.40			Oct 2022	128,594.46	£6,429.72	72.64	£3.63	23,473.63	13.26	3,999.29	2.26
Ysgol Bro Eirwg	2,063.60			Apr 2021	188,010.79	£9,400.54	91.11	£4.56	34,436.06	16.69	5,894.14	2.86
Ysgol Glan Ceubal												
Ysgol Glan Morfa	1,311.80			Apr 2022	498.44	£24.92	0.38	£0.02	90.99	0.07	15.50	0.01
Ysgol Gyfun Gymraeg Bro Edern	7,890.16			Oct 2022	723,538.68	£36,176.93	91.70	£4.59	132,074.75	16.74	22,502.05	2.85
Ysgol Gyfun Gymraeg Glantaf	12,196.03			Oct 2022	646,604.33	£32,330.22	53.02	£2.65	118,031.15	9.68	20,109.39	1.65
Ysgol Gyfun Gymraeg Plasmawr v3	10,594.50			Oct 2022	970,357.96	£48,517.90	91.59	£4.58	177,129.14	16.72	30,178.13	2.85
Ysgol Gymraeg Coed Y Gof												
Ysgol Gymraeg Melin Gruffydd	1,414.10			Oct 2022	250,080.41	£12,504.02	176.85	£8.84	45,649.68	32.28	7,777.50	5.50
Ysgol Gymraeg Nant Caerau v3	1,334.50			Oct 2022	215,696.10	£10,784.80	161.63	£8.08	39,373.17	29.50	6,708.15	5.03
Ysgol Gymraeg Pwll Coch	2,446.41			Sep 2022	16,842.82	£842.14	6.88	£0.34	3,074.49	1.26	523.81	0.21
Ysgol Gymraeg Treganna v3	3,277.60			Oct 2022	278,417.10	£13,920.85	84.95	£4.25	50,822.26	15.51	8,658.77	2.64



Building Name	Area Served m <sup>2</sup>	K2n RAG	K2n RAG Detail	Year to Month	Annual Consumption kWh	Annual Cost	Annual Consumption kWh/m <sup>2</sup>	Annual Cost m <sup>2</sup>	Scope 1 Emissions kgCO <sub>2</sub> e	Scope 1 Emissions kgCO <sub>2</sub> e/m <sup>2</sup>	Scope 3 Supply Emissions kgCO <sub>2</sub> e	Scope 3 Supply Emissions kgCO <sub>2</sub> e/m <sup>2</sup>
Ysgol Gynradd Gwaelod Y Garth	1,216.20	Orange		Oct 2022	123,965.96	£6,198.30	101.93	£5.10	22,628.75	18.61	3,855.34	3.17
Ysgol Gynradd Gymraeg Hamadryad				Mar 2018	10,815.48	£540.77			1,989.62		276.55	
Ysgol Mynydd Bychan	996.50	Orange		Oct 2022	92,115.71	£4,605.79	92.44	£4.62	16,814.80	16.87	2,864.80	2.87
Ysgol Pen Y Groes												
Ysgol Pen Y Pili v3	1,271.70	Red		Oct 2022	291,669.87	£14,583.49	229.35	£11.47	53,241.42	41.87	9,070.93	7.13
Ysgol Pencae	1,079.81	Orange		Oct 2022	121,712.70	£6,085.64	112.72	£5.64	22,217.44	20.58	3,785.27	3.51
Ysgol Y Berllan Deg	2,041.50	Green		Oct 2022	154,397.42	£7,719.87	75.63	£3.78	28,183.71	13.81	4,801.76	2.35
Ysgol Y Wern Primary School	3,111.10	Green		Oct 2022	251,434.61	£12,571.73	80.82	£4.04	45,896.87	14.75	7,819.62	2.51

	Total for Gas											
	Area Served m <sup>2</sup>				Annual Consumption kWh	Annual Cost			Scope 1 Emissions kgCO <sub>2</sub> e		Scope 3 Supply Emissions kgCO <sub>2</sub> e	
<b>Total</b>	<b>376,359.50</b>				<b>34,169,421.95</b>	<b>£1,708,470.81</b>			<b>6,237,418.21</b>		<b>1,062,656.22</b>	

<b>All</b>					
<b>No date range specified</b>	<b>Total for All Utilities</b>				
<b>Building Name</b>	<b>Annual Calculated Cost</b>	<b>Scope 1 Emissions kgCO2e</b>	<b>Scope 2 Emissions kgCO2e</b>	<b>Scope 3 Emissions kgCO2e</b>	<b>Total Emissions kgCO2e</b>
Adamsdown Primary School v2	£19,809.42	37,446.35	14,209.56	7,679.73	59,335.64
Albany Primary School	£19,751.50	42,888.47	11,905.97	8,396.20	63,190.64
All Saints Primary School (Cw)	£10,097.51	20,080.50	6,838.52	4,046.76	30,965.78
Allensbank Primary School	£23,155.56	45,646.22	15,845.98	9,226.47	70,718.67
Baden Powell Primary School	£9,916.83	1,516.39	14,133.81	1,551.28	17,201.48
Birchgrove Primary School	£15,599.94	26,640.76	12,350.58	5,668.69	44,660.03
Bishop Childs Primary School (Cw)	£9,990.33	16,774.02	8,026.33	3,592.08	28,392.44
Bryn Celyn Primary School	£19,793.86	28,588.23	17,795.70	6,498.59	52,882.52
Bryn Deri Primary School	£10,782.36	16,666.27	9,248.41	3,685.52	29,600.21
Bryn Hafod Primary School	£22,072.81	45,471.21	14,306.66	9,055.84	68,833.71
Bryn-Y-Deryn Pupil Referral Unit	£23,054.55	36,445.32	19,444.68	7,988.08	63,878.08
Cantonian High School	£84,694.93	99,902.99	85,280.94	24,822.16	210,006.08
Cardiff High School v3	£112,282.11	187,506.80	90,623.28	40,236.24	318,366.32
Cardiff West Community High School	£8,358.61		12,433.75	1,137.41	13,571.16
Cathays High School	£65,944.01	85,562.44	63,231.36	20,361.86	169,155.65
Christ The King Primary School (Rc)	£9,939.42	20,155.01	6,572.99	4,035.17	30,763.18
Coed Glas Primary School	£25,400.06	55,266.68	15,264.85	10,812.38	81,343.92
Corpus Christi High School (Rc)	£59,057.31	118,261.73	39,663.63	23,777.02	181,702.38
Coryton Primary School	£7,254.24	12,342.25	5,762.05	2,629.89	20,734.19
Creigiau Primary School	£16,832.04	19,320.60	17,166.02	4,862.03	41,348.65
Danescourt Primary School	£16,266.50	30,587.54	11,733.98	6,284.71	48,606.23
Eastern High School	£85,251.66	102,250.02	124,646.81	28,046.09	254,942.92
Ely and Caerau Children's Centre	£22,107.12	37,409.30	17,642.56	7,987.46	63,039.32
Fairwater Primary School v3	£20,047.40	29,424.61	17,832.05	6,644.42	53,901.08
Fitzalan High School	£200,114.90	296,563.75	176,842.08	66,703.78	540,109.62

Building Name	Annual Calculated Cost	Scope 1 Emissions kgCO2e	Scope 2 Emissions kgCO2e	Scope 3 Emissions kgCO2e	Total Emissions kgCO2e
Gabalfa Primary School	£330.30	206.20	538.37	80.84	825.40
Gladstone Primary School	£19,368.78	25,747.92	18,320.89	6,062.72	50,131.52
Glan-Yr-Afon Primary School	£26,879.58	27,491.02	28,783.27	7,316.78	63,591.07
Glyncoed Primary School	£14,561.44	25,053.62	11,452.47	5,316.12	41,822.21
Grangetown Nursery School	£3,698.10	3,486.76	4,080.36	967.32	8,534.44
Grangetown Primary School	£21,456.56	47,635.55	12,508.09	9,260.06	69,403.70
Greenhill Special School	£16,645.02	25,265.07	14,465.71	5,627.79	45,358.58
Greenway Primary School	£18,017.62	38,443.33	11,137.97	7,568.61	57,149.90
Hawthorn Primary School	£12,178.30	23,359.90	8,597.58	4,766.40	36,723.88
Herbert Thompson Primary School v3	£34,124.44	53,700.76	28,880.74	11,791.14	94,372.65
Holy Family Primary School (Rc)	£12,976.24	27,095.90	8,262.28	5,372.24	40,730.42
Howardian Primary School	£8,870.85		13,195.73	1,207.12	14,402.85
Hywel Dda Primary School	£16,189.04	33,236.95	10,539.24	6,626.81	50,402.99
Kitchener Primary School	£28,745.25	76,381.80	11,637.48	14,078.02	102,097.29
Lakeside Primary School	£29,400.30	56,983.23	20,515.95	11,585.20	89,084.38
Lansdowne Primary School	£24,306.39	58,410.38	12,357.06	11,081.99	81,849.42
Llandaff Primary School (Cw)	£17,499.84	30,375.83	13,654.88	6,424.36	50,455.07
Llanedeyrn Primary School	£34,936.44	94,221.18	13,578.37	17,294.92	125,094.47
Llanishen Fach Primary School	£21,397.90	19,646.50	23,825.13	5,526.72	48,998.34
Llanishen High School	£144,127.74	249,422.91	112,766.82	52,810.76	415,000.49
Llysfaen Primary School	£13,406.76	20,987.37	11,391.65	4,617.78	36,996.81
Marlborough Primary School	£19,499.69	27,353.27	17,861.29	6,294.19	51,508.75
Mary Immaculate High School (Rc)	£45,151.93	82,937.99	33,371.70	17,183.22	133,492.91
Meadowbank Special School	£12,214.80	22,449.08	9,022.99	4,650.13	36,122.20
Meadowlane Primary School	£18,159.68	49,064.75	7,021.52	9,001.65	65,087.92
Millbank Primary School	£15,972.98	27,502.85	12,554.24	5,834.19	45,891.28
Moorland Primary School	£12,534.50	9,108.12	14,934.40	2,917.95	26,960.48

Building Name	Annual Calculated Cost	Scope 1 Emissions kgCO2e	Scope 2 Emissions kgCO2e	Scope 3 Emissions kgCO2e	Total Emissions kgCO2e
Mount Stuart Primary School	£27,014.57	46,747.15	21,137.83	9,898.13	77,783.11
Ninian Park Primary School	£23,207.66	28,048.09	23,093.94	6,891.24	58,033.27
Oakfield Primary School	£24,176.76	53,092.24	14,331.14	10,356.50	77,779.87
Pen Y Bryn Primary School	£17,716.79	39,472.59	10,271.08	7,664.67	57,408.34
Pencaerau Primary School	£17,311.52	27,840.55	14,407.76	6,061.29	48,309.60
Pentrebane Primary School	£25,147.03	39,532.78	21,299.33	8,683.76	69,515.87
Pentyrch Primary School	£15,576.40	11,081.37	18,655.34	3,594.52	33,331.23
Peter Lea Primary School	£17,871.03	40,358.76	10,139.45	7,803.60	58,301.81
Pontprenau Primary School	£20,815.72	27,323.60	19,831.04	6,469.32	53,623.96
Radnor Primary School	£15,911.13	25,429.98	13,306.83	5,549.88	44,286.69
Radyr Comp School	£120,368.19	229,057.83	85,721.45	46,867.03	361,646.31
Radyr Primary School	£16,759.57	22,173.37	15,895.84	5,231.88	43,301.09
Rhiwbina Primary School	£13,733.42	17,667.54	13,230.25	4,220.36	35,118.15
Rhydypenau Primary School	£20,621.33	45,133.20	12,285.25	8,813.34	66,231.78
Riverbank Special School	£11,677.96		17,371.42	1,589.10	18,960.52
Roath Park Primary School	£16,509.65	36,312.39	9,763.05	7,079.78	53,155.22
Rumney Primary School	£28,751.40	64,382.71	16,535.73	12,481.77	93,400.20
Severn Primary School	£61,109.90	157,466.18	26,742.86	29,274.46	213,483.51
Springwood Primary School	£20,759.06	47,781.38	11,411.12	9,184.55	68,377.05
St Alban's Primary School (Rc)	£11,150.30	14,196.83	10,801.92	3,406.90	28,405.65
St Bernadette's Primary School (Rc)	£12,102.01	16,876.86	11,125.64	3,893.12	31,895.62
St Cadoc's Primary School (Rc)	£19,974.43	37,082.10	14,603.43	7,653.70	59,339.22
St Cuthberts Primary School (Rc)	£10,023.50	15,063.83	8,772.50	3,368.97	27,205.29
St Davids Primary School (Cw)	£13,443.89	19,925.76	11,879.44	4,481.53	36,286.73
St Fagan's C.W. Primary School v3	£10,948.00	22,458.14	7,134.87	4,478.96	34,071.98
St Francis Primary School (Rc)	£28,055.69	66,010.49	14,837.58	12,603.76	93,451.82
St Illtyds High School (Rc)	£42,013.56	75,351.92	31,794.23	15,746.45	122,892.61

Building Name	Annual Calculated Cost	Scope 1 Emissions kgCO2e	Scope 2 Emissions kgCO2e	Scope 3 Emissions kgCO2e	Total Emissions kgCO2e
St John Lloyd Primary School (Rc)	£18,902.02	34,066.93	14,236.72	7,106.45	55,410.11
St Joseph's Primary School (Rc)	£15,769.48	30,860.99	10,883.23	6,253.47	47,997.70
St Mary The Virgin C.W. Primary School v2	£15,902.77	18,776.43	16,005.42	4,663.15	39,445.01
St Marys Primary School (Rc)	£16,808.48	38,782.23	9,201.23	7,449.18	55,432.63
St Mellons Cw Primary School	£5,252.74	8,082.09	4,520.57	1,790.51	14,393.17
St Monicas Primary School (Cw)					
St Patricks Primary School (Rc)	£9,653.87	13,995.86	8,657.81	3,176.52	25,830.19
St Pauls Primary School (Cw)	£11,445.29		17,025.31	1,557.44	18,582.75
St Peter's Primary School (Rc)	£24,616.27	37,665.09	21,270.79	8,362.95	67,298.83
St Philip Evans Primary School (Rc)	£16,844.18	28,544.26	13,425.85	6,091.36	48,061.47
St Teilo's Secondary School v3	£138,575.08	105,556.57	163,126.16	32,906.50	301,589.23
Stacey Primary School	£20,631.12	47,950.49	11,151.89	9,189.65	68,292.03
The Bishop Of Llandaff High School	£65,038.36	43,792.61	78,903.53	14,679.04	137,375.17
The Court Special School	£12,936.37	25,381.27	8,901.62	5,138.60	39,421.49
The Hollies Special School	£27,262.33	62,752.61	14,984.86	12,062.17	89,799.65
Thornhill Primary School v3	£12,382.25	29,460.16	6,415.37	5,606.10	41,481.64
Ton Yr Ywen Primary School	£28,161.37	55,962.30	19,088.98	11,280.72	86,332.00
Tongwynlais Primary School	£10,508.64	20,771.09	7,168.71	4,194.62	32,134.42
Tredegarville Primary School (Cw)	£14,508.15	26,238.11	10,890.58	5,466.53	42,595.22
Trelai Primary School	£18,638.71	29,236.35	15,813.28	6,427.67	51,477.30
Tremorfa Nursery School	£4,341.10	6,538.42	3,793.43	1,460.99	11,792.84
Trowbridge Primary School	£14,815.50	22,653.86	12,808.19	5,031.29	40,493.34
Ty Gwyn Special School v3	£108,724.65	250,964.83	59,475.11	48,198.45	358,638.39
Whitchurch High School (Lower)	£109,371.95	188,703.22	85,806.82	39,999.48	314,509.51
Whitchurch High School (Upper)	£112,539.30	199,925.52	85,945.79	41,924.18	327,795.48
Whitchurch Primary School	£29,384.03	44,113.20	25,735.70	9,869.97	79,718.88
Willowbrook Primary School	£18,758.53	36,688.17	12,955.24	7,435.81	57,079.22

Building Name	Annual Calculated Cost	Scope 1 Emissions kgCO2e	Scope 2 Emissions kgCO2e	Scope 3 Emissions kgCO2e	Total Emissions kgCO2e
Willows High School	£92,808.57	161,613.91	72,205.85	34,139.99	267,959.75
Windsor Clive Primary School	£28,768.88	59,060.37	18,730.34	11,775.74	89,566.45
Woodlands High Special School	£18,271.40	23,473.63	17,614.95	5,610.67	46,699.24
Ysgol Bro Eirwg	£18,306.70	34,436.06	13,248.26	7,106.06	54,790.38
Ysgol Glan Ceubal	£12,898.99		19,187.75	1,755.26	20,943.00
Ysgol Glan Morfa	£8,472.81	90.99	12,566.56	1,165.06	13,822.61
Ysgol Gyfun Gymraeg Bro Edern	£64,512.51	132,074.75	42,150.26	26,357.87	200,582.88
Ysgol Gyfun Gymraeg Glantaf	£91,678.92	118,031.15	88,283.47	28,185.38	234,500.01
Ysgol Gyfun Gymraeg Plasmawr v3	£89,604.44	177,129.14	61,117.81	35,769.06	274,016.01
Ysgol Gymraeg Coed Y Gof					
Ysgol Gymraeg Melin Gruffydd	£27,644.78	45,649.68	22,522.47	9,837.81	78,009.95
Ysgol Gymraeg Nant Caerau v3	£30,967.61	39,373.17	30,022.70	9,454.56	78,850.43
Ysgol Gymraeg Pwll Coch	£10,214.76	3,074.49	13,942.13	1,799.21	18,815.83
Ysgol Gymraeg Treganna v3	£35,132.67	50,822.26	31,553.39	11,545.21	93,920.85
Ysgol Gynradd Gwaelod Y Garth	£13,536.82	22,628.75	10,916.33	4,853.94	38,399.02
Ysgol Gynradd Gymraeg Hamadryad	£8,395.48	1,989.62	11,684.17	1,345.40	15,019.19
Ysgol Mynydd Bychan	£8,187.36	16,814.80	5,327.74	3,352.17	25,494.71
Ysgol Pen Y Groes					
Ysgol Pen Y Pîl v3	£24,707.56	53,241.42	15,059.95	10,448.59	78,749.95
Ysgol Pencae	£11,144.59	22,217.44	7,525.39	4,473.67	34,216.50
Ysgol Y Berllan Deg	£16,414.01	28,183.71	12,932.87	5,984.83	47,101.40
Ysgol Y Wern Primary School	£28,998.96	45,896.87	24,436.14	10,054.98	80,388.00
	<b>Grand Total for All Utilities</b>				
	Annual Calculated Cost	Scope 1 Emissions kgCO2e	Scope 2 Emissions kgCO2e	Scope 3 Emissions kgCO2e	Total Emissions kgCO2e
<b>Total</b>	<b>£3,745,416.23</b>	<b>6,237,418.21</b>	<b>3,069,659.74</b>	<b>1,342,681.71</b>	<b>10,649,759.66</b>

## Cardiff High School Monthly Report

### Overview

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**Notes**

This section shows the measured and target energy consumption for each utility.

K2n targets for a building are based on its unique spaces, activities and building services.

The "change in consumption over year to specified data month" section in the report month shows the following:

- % consumption increase over the year to the month shown (negative = decrease).
- value of the increase/decrease.

# Cardiff High School v3 Annual Consumption

Year to end of Nov 22

Utility*1	Data Month*2	Annual Consumption*3	Derived from K2n "good" benchmarks		Change in consumption over year to specified data month	
			Target	Potential Savings*4	Percent Change*5	Consumption Change
Electricity	Nov 2022	468,628 kWh	463,628 kWh	5,000 kWh	8.52%	36,799 kWh
Gas	Oct 2022	1,027,209 kWh	1,052,546 kWh	-25,337 kWh	-13.39%	-158,760 kWh
Overall	N/A	1,495,837 kWh	1,516,175 kWh	-20,337 kWh	-7.54%	-121,961 kWh

\*1 Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

\*2 Latest available month's data, highlighted in orange if no data available for reporting month.

\*3 Annual consumption, highlighted in green if less than K2n benchmark target and in orange if greater than K2n benchmark target.

\*4 Potential savings relative to the K2n "good" target. A negative value indicates performance is better than the "good" K2n benchmark. Further savings may still be possible.

\*5 Percentage change since the previous year, highlighted in green if a decrease and orange if an increase.



## Cardiff High School v3 Annual Kg of CO<sub>2</sub>

Year to end of Nov 22

Utility* <sup>1</sup>	Data Month* <sup>2</sup>	Annual Emissions* <sup>3</sup>	Derived from K <sup>2</sup> n "good" benchmarks		Change in emissions over year to specified data month	
			Target	Potential Savings* <sup>4</sup>	Percent Change* <sup>5</sup>	Emissions Change
Electricity	Nov 2022	108,309 kgCO <sub>2</sub>	107,154 kgCO <sub>2</sub>	1,156 kgCO <sub>2</sub>	7.57%	7,626 kgCO <sub>2</sub>
Gas	Oct 2022	220,347 kgCO <sub>2</sub>	225,782 kgCO <sub>2</sub>	-5,435 kgCO <sub>2</sub>	-12.70%	-32,055 kgCO <sub>2</sub>
Overall	N/A	328,656 kgCO <sub>2</sub>	332,936 kgCO <sub>2</sub>	-4,280 kgCO <sub>2</sub>	-6.92%	-24,429 kgCO <sub>2</sub>

\*<sup>1</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

\*<sup>2</sup> Latest available month's data, highlighted in orange if no data available for reporting month.

\*<sup>3</sup> Annual emissions, highlighted in green if less than K<sup>2</sup>n benchmark target and in orange if greater than K<sup>2</sup>n benchmark target.

\*<sup>4</sup> Potential savings relative to the K<sup>2</sup>n "good" target. A negative value indicates performance is better than the "good" K<sup>2</sup>n benchmark. Further savings may still be possible.

\*<sup>5</sup> Percentage change since the previous year, highlighted in green if a decrease and orange if an increase.

## Cardiff High School v3 Annual Costs

Year to end of Nov 22

Utility* <sup>1</sup>	Data Month* <sup>2</sup>	Annual Cost* <sup>3</sup>	Derived from K <sup>2</sup> n "good" benchmarks		Change in costs over year to specified data month		Unit Costs* <sup>6</sup>	
			Target	Potential Savings* <sup>4</sup>	Percent Change* <sup>5</sup>	Cost Change	Current Year	Previous Year
Electricity	Nov 2022	£60,922	£60,272	£650	8.52%	£4,784	£0.13/kWh	£0.13/kWh
Gas	Oct 2022	£51,360	£52,627	-£1,267	-13.39%	-£7,938	£0.05/kWh	£0.05/kWh
Overall	N/A	£112,282	£112,899	-£617	-2.73%	-£3,154	N/A	N/A

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\*<sup>1</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

\*<sup>2</sup> Latest available month's data, highlighted in orange if no data available for reporting month.

\*<sup>3</sup> Annual costs, highlighted in green if less than K<sup>2</sup>n benchmark target and in orange if greater than K<sup>2</sup>n benchmark target.

\*<sup>4</sup> Potential savings relative to the K<sup>2</sup>n "good" target. A negative value indicates performance is better than the "good" K<sup>2</sup>n benchmark. Further savings may still be possible.

\*<sup>5</sup> Percentage change since the previous year, highlighted in green if a decrease and orange if an increase.

\*<sup>6</sup> Unit costs are calculated by pro-rating all unit costs for the year based on the number of months they are chargeable for.

# Cardiff High School v3 Energy Ranking : All Buildings

Year to end of Nov 22

## Notes

This table shows the current ranking of the school against other Cardiff County Council schools.

The ranking uses the following information to produce this table:

1. Performance of a school's measured utility use against its tailored K2n benchmark ranges for each utility.
2. K2n benchmark ranges for a school are based on its unique spaces, activities and building services.
3. Benchmark ranges unique to a school allows understanding of how it is actually performing relative to its potential.
4. The relative position of a school on these ranges is then used to compare performance between schools.

K2n benchmarks are continually being derived from detailed sub-metered utility measurements across many schools where space areas, activities and servicing arrangements are known in detail.

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	Electricity		Gas		Overall* <sup>3</sup>	
	Current	Change* <sup>1</sup>	Current	Change* <sup>1</sup>	Current	Change* <sup>1</sup>
Ranking	56 of 123	▲ +1	41 of 115	▲ +3	47 of 118	▲ +2
Data Month* <sup>2</sup>	Nov 2022		Oct 2022		N/A	

\*<sup>1</sup> Change in ranking compared to previous month.

\*<sup>2</sup> Latest available month's data, highlighted in orange if none available for reporting month.

\*<sup>3</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

# Cardiff High School v3 Energy Ranking in Cluster : Cluster 5

Year to end of Nov 22

## Notes

This table shows the current ranking of the school against other Cardiff County Council schools.

The ranking uses the following information to produce this table:

1. Performance of a school's measured utility use against its tailored K2n benchmark ranges for each utility.
2. K2n benchmark ranges for a school are based on its unique spaces, activities and building services.
3. Benchmark ranges unique to a school allows understanding of how it is actually performing relative to its potential.
4. The relative position of a school on these ranges is then used to compare performance between schools.

K2n benchmarks are continually being derived from detailed sub-metered utility measurements across many schools where space areas, activities and servicing arrangements are known in detail.

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	Electricity		Gas		Overall* <sup>3</sup>	
	Current	Change* <sup>1</sup>	Current	Change* <sup>1</sup>	Current	Change* <sup>1</sup>
Ranking	14 of 23	—	6 of 23	▲ +1	11 of 23	—
Data Month* <sup>2</sup>	Nov 2022		Oct 2022		N/A	

\*<sup>1</sup> Change in ranking compared to previous month.

\*<sup>2</sup> Latest available month's data, highlighted in orange if none available for reporting month.

\*<sup>3</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

# Cardiff High School v3 Performance Against K2n Benchmarks m2

## Year to Nov 2022

### Notes

This chart shows the measured:



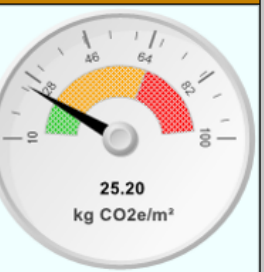
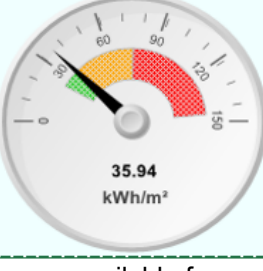
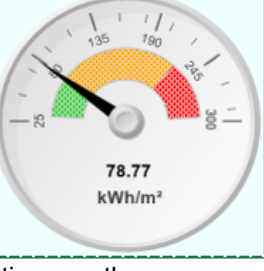
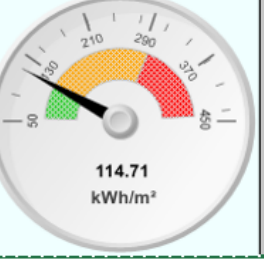
- annual carbon emissions and consumptions per m<sup>2</sup> on the top row.
- annual utility consumption per m<sup>2</sup> on the bottom row.

Floor area in m<sup>2</sup> is obtained from the building internal area floor plans.

Classifications are relative to ranges of measured 'in use' performance recorded by K2n in other buildings.

The K2n procedure produces a partial twin of a building's assets and activities. This means benchmarks are building specific.

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Annual Figures	Electricity	Gas	Overall <sup>*2</sup>
Data Month <sup>*1</sup>	Nov 2022	Oct 2022	N/A
<b>Emissions per m<sup>2</sup> in kg CO2e</b> Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities	 <p>8.31 kg CO2e/m<sup>2</sup></p>	 <p>16.90 kg CO2e/m<sup>2</sup></p>	 <p>25.20 kg CO2e/m<sup>2</sup></p>
<b>Consumption per m<sup>2</sup> in kWh</b> Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities	 <p>35.94 kWh/m<sup>2</sup></p>	 <p>78.77 kWh/m<sup>2</sup></p>	 <p>114.71 kWh/m<sup>2</sup></p>

<sup>\*1</sup> Latest available month's data, highlighted in orange if none available for reporting month.

<sup>\*2</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

# Cardiff High School v3 Performance Against K2n Benchmarks m2

## Year to Nov 2022







Annual Figures	Electricity	Gas	Overall <sup>*2</sup>
Data Month <sup>*1</sup>	Nov 2022	Oct 2022	N/A
<p><b>Emissions per m<sup>2</sup> in kg CO<sub>2</sub>e</b></p> <p>Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities</p>	<p>8.31 kg CO<sub>2</sub>e/m<sup>2</sup></p>	<p>16.90 kg CO<sub>2</sub>e/m<sup>2</sup></p>	<p>25.20 kg CO<sub>2</sub>e/m<sup>2</sup></p>
<p><b>Consumption per m<sup>2</sup> in kWh</b></p> <p>Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities</p>	<p>35.94 kWh/m<sup>2</sup></p>	<p>78.77 kWh/m<sup>2</sup></p>	<p>114.71 kWh/m<sup>2</sup></p>

<sup>\*1</sup> Latest available month's data, highlighted in orange if none available for reporting month.

<sup>\*2</sup> Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

# Cardiff High School v3 Performance Against K2n Benchmarks m2

## Year to Nov 2022

Annual Figures	Electricity	Gas	Overall <sup>*2</sup>
Data Month <sup>*1</sup>	Nov 2022	Oct 2022	N/A
<b>Emissions per m<sup>2</sup> in kg CO2e</b> <small>Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities</small>	 8.31 kg CO2e/m <sup>2</sup>	 16.90 kg CO2e/m <sup>2</sup>	 25.20 kg CO2e/m <sup>2</sup>
<b>Consumption per m<sup>2</sup> in kWh</b> <small>Relative performance against the bespoke K2n benchmark ranges created for the building based on services, space areas and activities</small>	 35.94 kWh/m <sup>2</sup>	 78.77 kWh/m <sup>2</sup>	 114.71 kWh/m <sup>2</sup>

\*1 Latest available month's data, highlighted in orange if none available for reporting month.

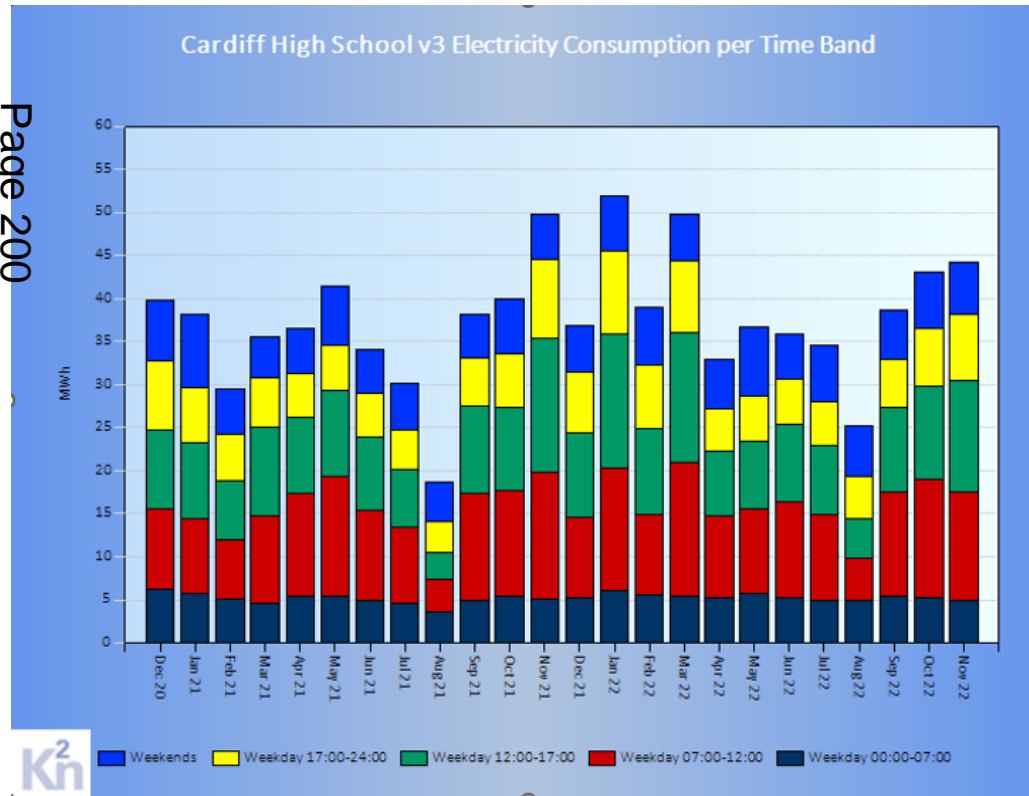
\*2 Overall figures include latest available data months for each utility type. N/A is shown if months are not the same for all utilities.

# Electricity Consumption

## Notes

This chart shows the relative proportions of utility use in 5 different time bands per month over the last 24 months. Its purpose is:

1. To allow a quick insight into when the utility is generally being used in the day for each month.
2. To see relative changes occurring over time.



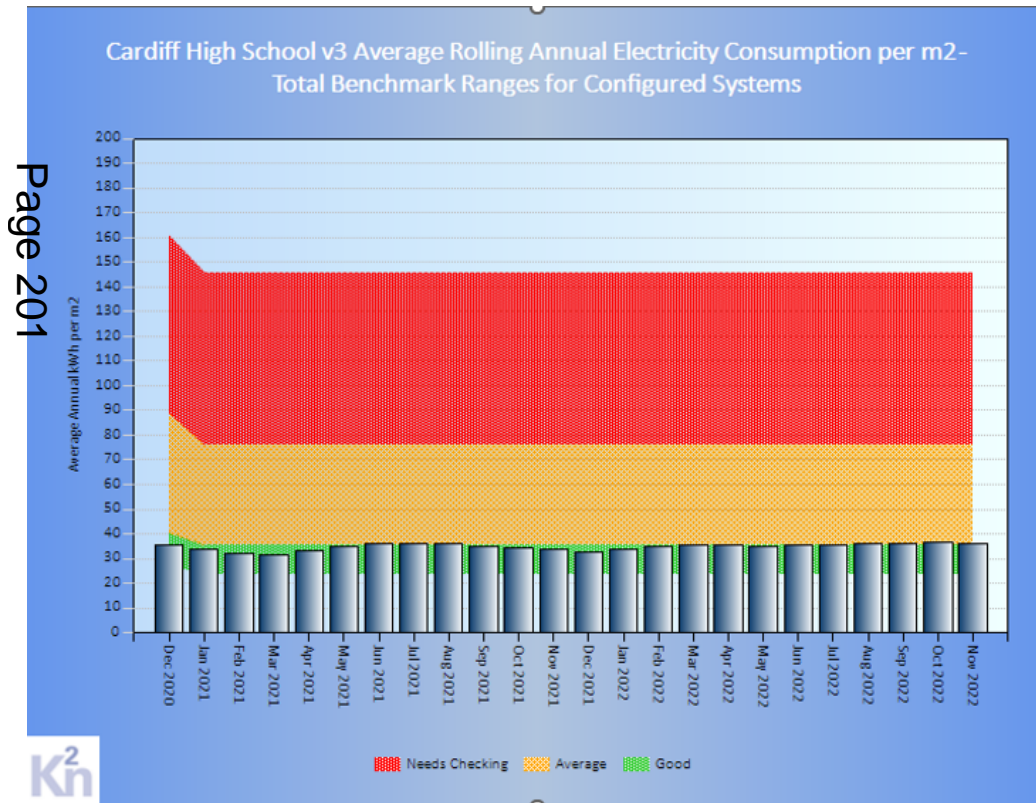


## Notes

This chart shows trends in measured annual utility use to the month shown against the potential range of use predicted for the building by K2n.

The potential range of annual use is divided into 3 bands:

- 1) A measured performance in the GREEN band is in the best 25% expected.
- 2) A measured performance in the GOLD band is in the middle 50% expected.
- 3) A measured performance in the RED band is in the worst 25% expected.



## Notes

This chart is called a 'carpet plot' as it uses 10 coloured bands to show measured utility use per interval in the month.

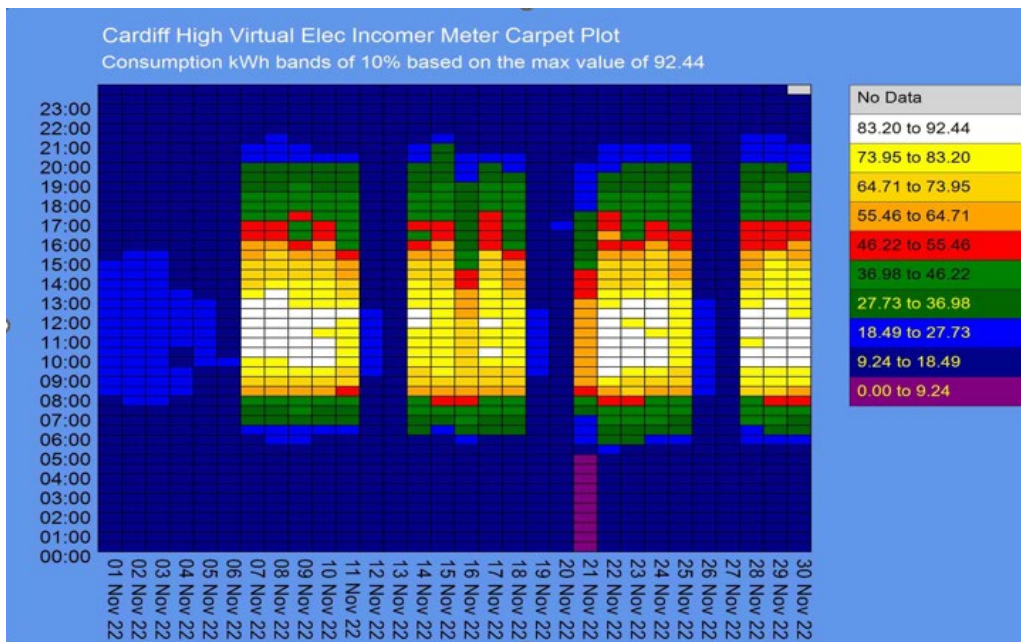
It presents the measured utility use of the meter shown in the title.

The peak use per interval in the month is shown in the sub-title.

Each column shows a day from start at the bottom to end at the top. The day is shown on the X-axis, and the time of day on the Y-axis.

Brighter colours show greater use in an interval.

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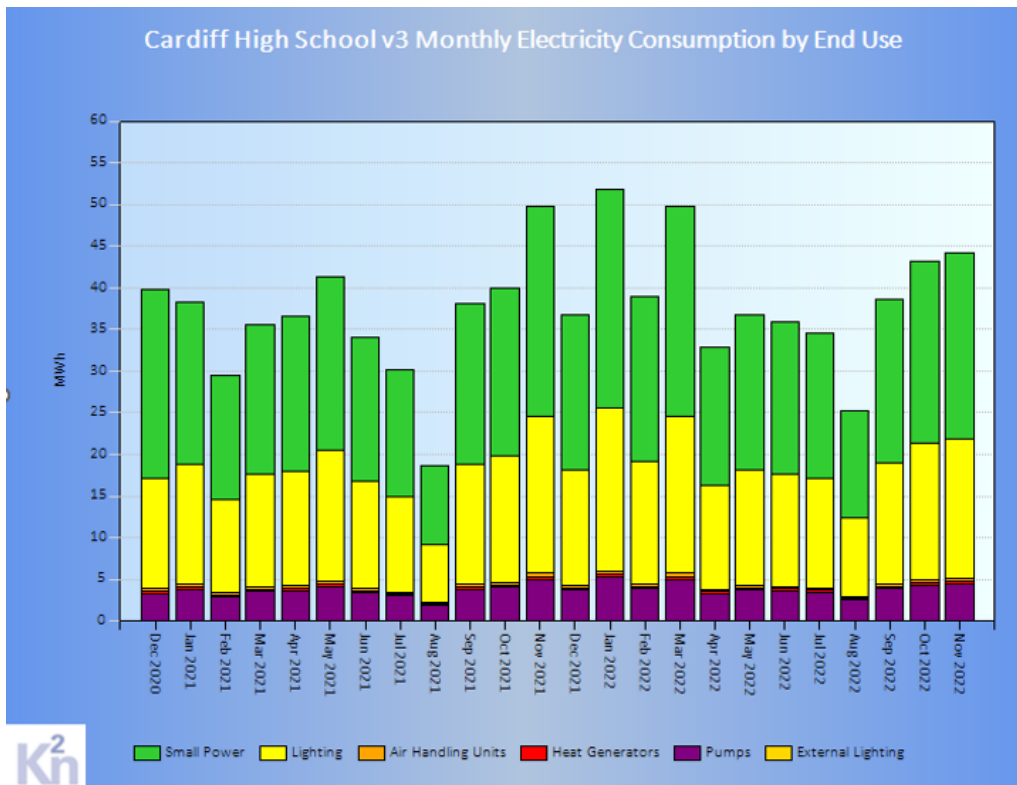
\* latest months data is shown if no data available for specified date range.

## Notes

This chart shows the measured OR estimated monthly end uses of the utility in the building over the last 24 months.

It uses measured data where available, otherwise these are estimates of how the overall consumption is split by end use.

All estimates are based on K2n's ongoing detailed measurements of end use demand vs systems and activities in other buildings.

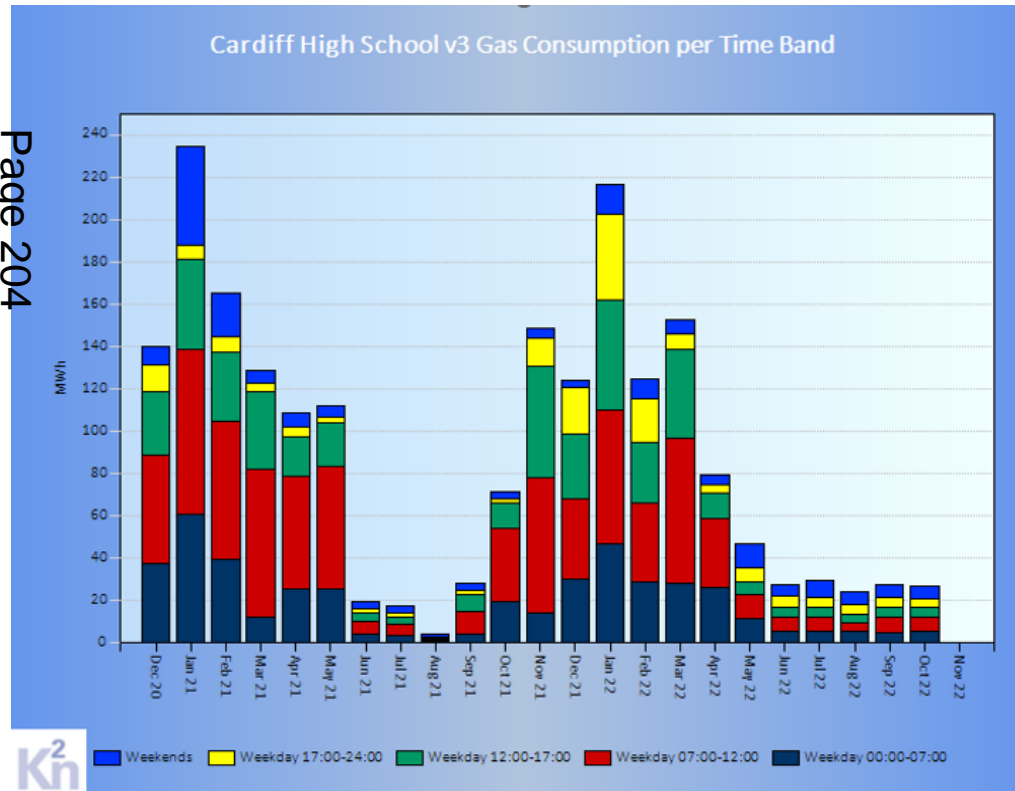


# Gas Consumption

## Notes

This chart shows the relative proportions of utility use in 5 different time bands per month over the last 24 months. Its purpose is:

1. To allow a quick insight into when the utility is generally being used in the day for each month.
2. To see relative changes occurring over time.

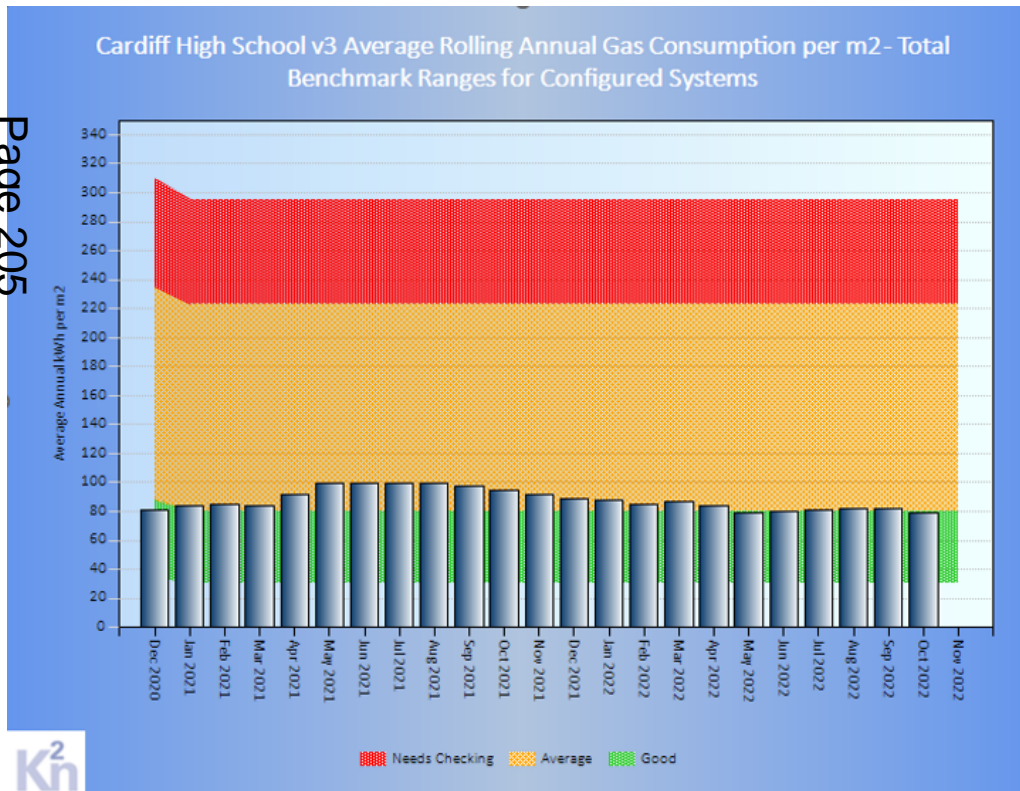


## Notes

This chart shows trends in measured annual utility use to the month shown against the potential range of use predicted for the building by K2n.

The potential range of annual use is divided into 3 bands:

- 1) A measured performance in the GREEN band is in the best 25% expected.
- 2) A measured performance in the GOLD band is in the middle 50% expected.
- 3) A measured performance in the RED band is in the worst 25% expected.



## Notes

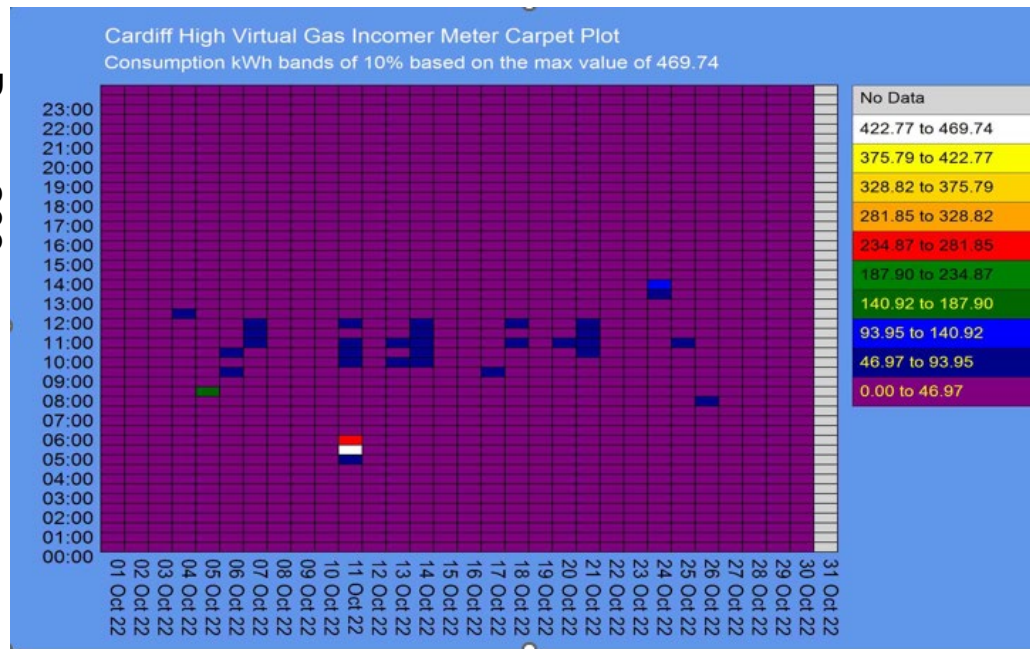
This chart is called a 'carpet plot' as it uses 10 coloured bands to show measured utility use per interval in the month.

It presents the measured utility use of the meter shown in the title.

The peak use per interval in the month is shown in the sub-title.

Each column shows a day from start at the bottom to end at the top. The day is shown on the X-axis, and the time of day on the Y-axis.

Brighter colours show greater use in an interval.



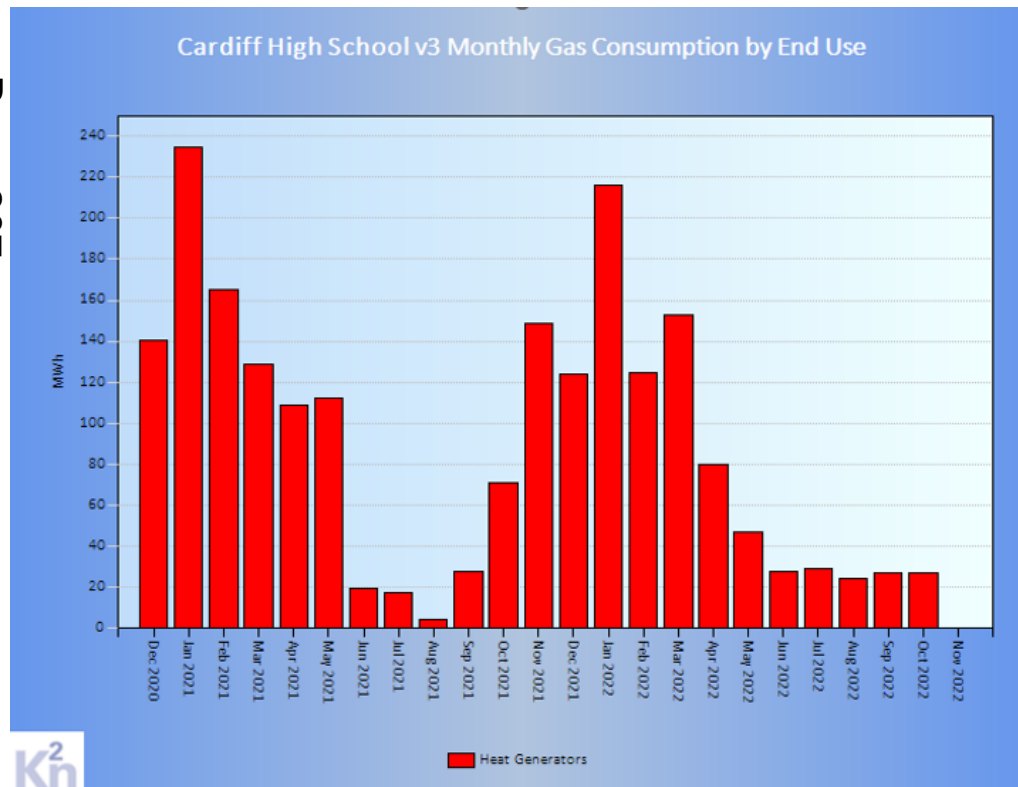
\* latest months data is shown if no data available for specified date range.

## Notes

This chart shows the measured OR estimated monthly end uses of the utility in the building over the last 24 months.

It uses measured data where available, otherwise these are estimates of how the overall consumption is split by end use.

All estimates are based on K2n's ongoing detailed measurements of end use demand vs systems and activities in other buildings.



# Energy Saving Actions

## Notes

This section suggests generic actions that can be undertaken in most buildings.

Key to achieving actual operational savings initially are usually down to better control of existing systems and appliances.

## Electricity

- \* Turn off unused equipment and lighting where able to or place in standby if it can't be turned off.
- \* Use provided power saving facilities on all equipment.
- \* Discuss significant energy consuming equipment with the energy team.
- \* Ensure energy efficiency is considered when purchasing new equipment.

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Gas

\* TRV'S on radiators can take up to 30 minutes to control the air temperature, so be patient.

\* A TRV setting of "2" for cooler spaces; a setting of "4" for warmer spaces.

Do not leave windows open overnight or use windows to control air temperature.

- \* Let facilities know locations of overheated or underheated rooms.
- \* Optimise heating controls - BMS systems - is heating coming on too early or going off too late?

## Water

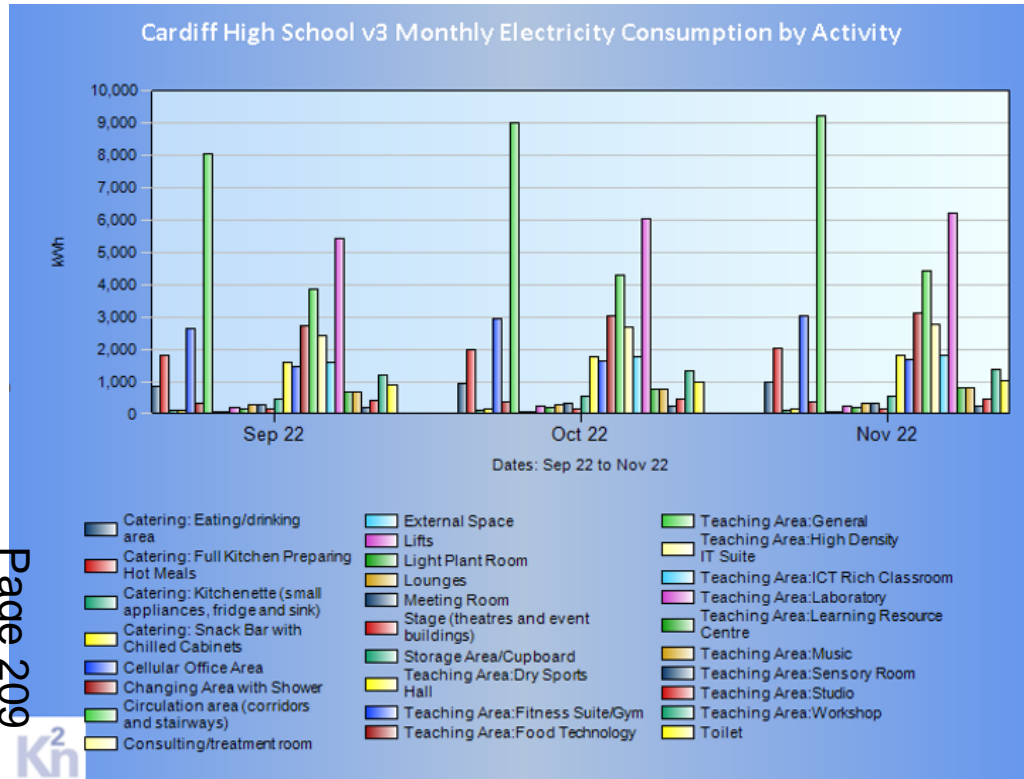
- \* Check whether process water use procedures could be improved.
- \* Report any leaks, dripping taps or continuously filling cisterns.
- \* Discuss with facilities whether process water systems could be replaced by more efficient ones.

## Control

\* Check the carpet plots and other charts above to see when utilities are being used the most and when they are being consumed at unexpected times. You should then see whether or not it is possible to reduce or eliminate these uses.



Monthly end use by activity notes



**Appendix 4: Individual school K2N Example: electricity**

Space	Activity	Electricity							
		Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1000 Lift	Lifts	4.39	£0.13	37.28	£4.85	395.04	£51.36	89.99	£11.70
1001 - Economics Seminar Room	Teaching Area:General	57.48	£0.13	91.53	£11.90	969.94	£126.09	16.87	£2.19
1001 - General Teaching	Teaching Area:General	57.48	£0.13	81.60	£10.61	834.56	£108.49	14.52	£1.89
1002 - Store	Storage Area/Cupboard	1.37	£0.13	1.18	£0.15	12.55	£1.63	9.16	£1.19
1003 - Corridor	Circulation area (corridors and stairways)	10.52	£0.13	47.98	£6.24	508.46	£66.10	48.33	£6.28
1004 - IT	Teaching Area:High Density IT Suite	68.63	£0.13	326.27	£42.42	3,457.41	£449.46	50.38	£6.55
1005 - Lobby	Circulation area (corridors and stairways)	16.13	£0.13	73.57	£9.56	779.60	£101.35	48.33	£6.28
1006 - Stairs	Circulation area (corridors and stairways)	14.58	£0.13	66.50	£8.65	704.69	£91.61	48.33	£6.28
1007 - Library	Teaching Area:Learning Resource Centre	194.54	£0.13	631.87	£82.14	6,695.68	£870.44	34.42	£4.47
1008 - Store	Storage Area/Cupboard	1.08	£0.13	0.93	£0.12	9.90	£1.29	9.16	£1.19
1009 - Staff and Admin. spaces	Cellular Office Area	7.2	£0.13	23.39	£3.04	247.81	£32.22	34.42	£4.47
1010 - Laboratory	Teaching Area:Laboratory	88.26	£0.13	439.98	£57.20	4,662.28	£606.10	52.82	£6.87
1011 - Lab Technician	Cellular Office Area	13.72	£0.13	44.56	£5.79	472.21	£61.39	34.42	£4.47
1012 - Store	Storage Area/Cupboard	3.44	£0.13	2.97	£0.39	31.52	£4.10	9.16	£1.19
1013 - Laboratory	Teaching Area:Laboratory	90.93	£0.13	453.29	£58.93	4,803.32	£624.43	52.82	£6.87
1014 - Corridor	Circulation area (corridors and stairways)	23.09	£0.13	105.32	£13.69	1,116.00	£145.08	48.33	£6.28
1015 - Office	Cellular Office Area	16.71	£0.13	54.27	£7.06	575.12	£74.77	34.42	£4.47
1016 - Office	Cellular Office Area	13.97	£0.13	45.37	£5.90	480.82	£62.51	34.42	£4.47
1017 - Office	Cellular Office Area	13.13	£0.13	42.65	£5.54	451.91	£58.75	34.42	£4.47
1018 - Classroom	Teaching Area:General	47.14	£0.13	75.07	£9.76	795.46	£103.41	16.87	£2.19
1018a - Store	Storage Area/Cupboard	8.02	£0.13	6.93	£0.90	73.48	£9.55	9.16	£1.19
1019 - Corridor	Circulation area (corridors and stairways)	33.46	£0.13	152.61	£19.84	1,617.20	£210.24	48.33	£6.28
1020 - Office	Cellular Office Area	17.75	£0.13	57.65	£7.49	610.92	£79.42	34.42	£4.47
1021 - Office	Cellular Office Area	8.03	£0.13	26.08	£3.39	276.38	£35.93	34.42	£4.47
1022 - Circulation	Circulation area (corridors and stairways)	12.55	£0.13	57.24	£7.44	606.57	£78.85	48.33	£6.28
1023 - Stairs	Circulation area (corridors and stairways)	11.63	£0.13	53.05	£6.90	562.11	£73.07	48.33	£6.28
1024 - Lobby	Circulation area (corridors and stairways)	0.81	£0.13	3.69	£0.48	39.15	£5.09	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1025 - WC	Toilet	8.26	£0.13	22.38	£2.91	237.12	£30.82	28.71	£3.73
1026 - General Teaching	Teaching Area:General	46.9	£0.13	66.58	£8.66	680.94	£88.52	14.52	£1.89
1026 - Office	Cellular Office Area	46.9	£0.13	152.33	£19.80	1,614.20	£209.85	34.42	£4.47
1027 - Store	Storage Area/Cupboard	0.84	£0.13	0.73	£0.09	7.70	£1.00	9.16	£1.19
1028 - Student Advice Office	Cellular Office Area	16.68	£0.13	54.18	£7.04	574.09	£74.63	34.42	£4.47
1029 - Classroom	Teaching Area:General	45.3	£0.13	72.14	£9.38	764.41	£99.37	16.87	£2.19
1029 - Staff and Admin. spaces	Cellular Office Area	88.85	£0.13	257.27	£33.45	2,631.21	£342.06	29.61	£3.85
1029a - Classroom	Teaching Area:General	42.7	£0.13	68.00	£8.84	720.53	£93.67	16.87	£2.19
1030 - Corridor	Circulation area (corridors and stairways)	15.84	£0.13	72.25	£9.39	765.59	£99.53	48.33	£6.28
1031 - Classroom	Teaching Area:General	48	£0.13	76.44	£9.94	809.97	£105.30	16.87	£2.19
1032 - Stairs	Circulation area (corridors and stairways)	13.36	£0.13	60.94	£7.92	645.72	£83.94	48.33	£6.28
1033 - Corridor	Circulation area (corridors and stairways)	30.37	£0.13	138.52	£18.01	1,467.86	£190.82	48.33	£6.28
1034 - Corridor	Circulation area (corridors and stairways)	5.32	£0.13	24.27	£3.15	257.13	£33.43	48.33	£6.28
1035 - Classroom	Teaching Area:General	52.65	£0.13	83.84	£10.90	888.43	£115.50	16.87	£2.19
1036 - Classroom	Teaching Area:General	52.72	£0.13	83.95	£10.91	889.62	£115.65	16.87	£2.19
1037 - Store	Storage Area/Cupboard	1.77	£0.13	1.53	£0.20	16.22	£2.11	9.16	£1.19
1038 - Classroom	Teaching Area:General	9.08	£0.13	14.46	£1.88	153.22	£19.92	16.87	£2.19
1039 - Classroom	Teaching Area:General	9.3	£0.13	14.81	£1.93	156.93	£20.40	16.87	£2.19
1040 - Corridor	Circulation area (corridors and stairways)	41.83	£0.13	190.79	£24.80	2,021.75	£262.83	48.33	£6.28
1041 - Store	Storage Area/Cupboard	19.49	£0.13	16.85	£2.19	178.57	£23.21	9.16	£1.19
1042 - Stairs	Circulation area (corridors and stairways)	11.78	£0.13	53.73	£6.98	569.36	£74.02	48.33	£6.28
1043 - Classroom	Teaching Area:General	43.1	£0.13	68.63	£8.92	727.28	£94.55	16.87	£2.19
1044 - Store	Storage Area/Cupboard	21.3	£0.13	18.42	£2.39	195.16	£25.37	9.16	£1.19
1045 - Office	Cellular Office Area	9.46	£0.13	30.73	£3.99	325.59	£42.33	34.42	£4.47
1046 - Office	Cellular Office Area	12.1	£0.13	39.30	£5.11	416.46	£54.14	34.42	£4.47
1047 - Office	Cellular Office Area	11.32	£0.13	36.77	£4.78	389.61	£50.65	34.42	£4.47
1048 - Office	Cellular Office Area	12.93	£0.13	42.00	£5.46	445.02	£57.85	34.42	£4.47
1049 - Classroom	Teaching Area:General	42.43	£0.13	67.57	£8.78	715.98	£93.08	16.87	£2.19
1050 - Classroom	Teaching Area:General	55.53	£0.13	88.43	£11.50	937.03	£121.81	16.87	£2.19

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1051 - Store	Storage Area/Cupboard	7.12	£0.13	6.16	£0.80	65.24	£8.48	9.16	£1.19
1052 - Store	Storage Area/Cupboard	6.76	£0.13	5.84	£0.76	61.94	£8.05	9.16	£1.19
1053 - Corridor	Circulation area (corridors and stairways)	42.87	£0.13	195.53	£25.42	2,072.01	£269.36	48.33	£6.28
1054 - Store	Storage Area/Cupboard	2.93	£0.13	2.53	£0.33	26.85	£3.49	9.16	£1.19
1055 - Store	Storage Area/Cupboard	1.77	£0.13	1.53	£0.20	16.22	£2.11	9.16	£1.19
1056 - Classroom	Teaching Area:General	53.33	£0.13	84.92	£11.04	899.91	£116.99	16.87	£2.19
1057 - Classroom	Teaching Area:General	53.51	£0.13	85.21	£11.08	902.95	£117.38	16.87	£2.19
1058 - Corridor	Circulation area (corridors and stairways)	22.17	£0.13	101.12	£13.15	1,071.53	£139.30	48.33	£6.28
1059 - Classroom	Teaching Area:General	64.03	£0.13	101.96	£13.26	1,080.46	£140.46	16.87	£2.19
1060 - Classroom	Teaching Area:General	20.75	£0.13	33.04	£4.30	350.14	£45.52	16.87	£2.19
1061 - Lobby	Circulation area (corridors and stairways)	5.94	£0.13	27.09	£3.52	287.09	£37.32	48.33	£6.28
1062 - Hall	Teaching Area:Dry Sports Hall	215.43	£0.13	314.03	£40.82	3,327.63	£432.59	15.45	£2.01
1063 - Corridor	Circulation area (corridors and stairways)	37.98	£0.13	173.23	£22.52	1,835.67	£238.64	48.33	£6.28
1064 - Store	Storage Area/Cupboard	2.92	£0.13	2.52	£0.33	26.75	£3.48	9.16	£1.19
1065 - Classroom	Teaching Area:General	43.38	£0.13	69.08	£8.98	732.01	£95.16	16.87	£2.19
1066 - IT	Teaching Area:High Density IT Suite	63.15	£0.13	300.22	£39.03	3,181.34	£413.57	50.38	£6.55
1067 - Store	Storage Area/Cupboard	11.39	£0.13	9.85	£1.28	104.36	£13.57	9.16	£1.19
1068 - IT	Teaching Area:High Density IT Suite	55.76	£0.13	265.09	£34.46	2,809.05	£365.18	50.38	£6.55
1069 - Office	Cellular Office Area	7.03	£0.13	22.83	£2.97	241.96	£31.45	34.42	£4.47
1070 - Needlecraft/Textiles	Teaching Area:Workshop	72.03	£0.13	246.51	£32.05	2,521.19	£327.75	35.00	£4.55
1070 - Staff Room	Cellular Office Area	72.03	£0.13	233.95	£30.41	2,479.13	£322.29	34.42	£4.47
1071 - Teaching Storage	Storage Area/Cupboard	7.66	£0.13	5.90	£0.77	60.39	£7.85	7.88	£1.02
1072 - Corridor	Circulation area (corridors and stairways)	32.03	£0.13	146.09	£18.99	1,548.09	£201.25	48.33	£6.28
1073 - Plant	Light Plant Room	6.76	£0.13	6.12	£0.80	64.85	£8.43	9.59	£1.25
1074 - Classroom	Teaching Area:General	62.39	£0.13	119.93	£15.59	1,270.86	£165.21	20.37	£2.65
1074 - Heavy Practical/Cookery	Teaching Area:Food Technology	62.39	£0.13	1,156.22	£150.31	11,825.09	£1,537.26	189.53	£24.64
1075 - Office	Cellular Office Area	3.54	£0.13	11.50	£1.49	121.84	£15.84	34.42	£4.47
1075 - Teaching Storage	Storage Area/Cupboard	10.74	£0.13	8.28	£1.08	84.67	£11.01	7.88	£1.02
1075a Store	Storage Area/Cupboard	1.98	£0.13	1.71	£0.22	18.14	£2.36	9.16	£1.19

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1076 - Office	Cellular Office Area	9.5	£0.13	30.86	£4.01	326.97	£42.51	34.42	£4.47
1077 - Heavy Practical/Cookery	Teaching Area:Food Technology	66.65	£0.13	1,235.17	£160.57	12,632.51	£1,642.23	189.53	£24.64
1077 - Kitchen	Teaching Area:Food Technology	66.65	£0.13	1,385.50	£180.12	14,681.74	£1,908.63	220.28	£28.64
1078 - Store	Storage Area/Cupboard	14.15	£0.13	12.23	£1.59	129.65	£16.85	9.16	£1.19
1079 - Store	Storage Area/Cupboard	3.82	£0.13	3.30	£0.43	35.00	£4.55	9.16	£1.19
1079a Store	Storage Area/Cupboard	1.84	£0.13	1.59	£0.21	16.86	£2.19	9.16	£1.19
1080 - Heavy Practical/Cookery	Teaching Area:Food Technology	83.21	£0.13	1,542.06	£200.47	15,771.20	£2,050.26	189.53	£24.64
1080 - Kitchen	Teaching Area:Food Technology	83.21	£0.13	1,729.75	£224.87	18,329.59	£2,382.85	220.28	£28.64
1081 - Store	Storage Area/Cupboard	9.43	£0.13	8.15	£1.06	86.40	£11.23	9.16	£1.19
1082 - Corridor	Circulation area (corridors and stairways)	24.13	£0.13	110.06	£14.31	1,166.26	£151.61	48.33	£6.28
1083 - Store	Storage Area/Cupboard	9.2	£0.13	7.95	£1.03	84.29	£10.96	9.16	£1.19
1084 - IT	Teaching Area:High Density IT Suite	62.36	£0.13	296.47	£38.54	3,141.55	£408.40	50.38	£6.55
1085 - Store	Storage Area/Cupboard	7.4	£0.13	6.40	£0.83	67.80	£8.81	9.16	£1.19
1086 - Tech	Teaching Area:Workshop	169.24	£0.13	649.70	£84.46	6,884.66	£895.01	40.68	£5.29
1087 - Store	Storage Area/Cupboard	6.82	£0.13	5.90	£0.77	62.49	£8.12	9.16	£1.19
1088 - Teaching Storage	Storage Area/Cupboard	5.05	£0.13	3.89	£0.51	39.81	£5.18	7.88	£1.02
1089 - Circulation	Circulation area (corridors and stairways)	6.79	£0.13	27.61	£3.59	282.37	£36.71	41.59	£5.41
1090 - Store	Storage Area/Cupboard	7.34	£0.13	6.35	£0.83	67.25	£8.74	9.16	£1.19
1091 - Store	Storage Area/Cupboard	2.33	£0.13	2.01	£0.26	21.35	£2.78	9.16	£1.19
1092 - IT	Teaching Area:High Density IT Suite	108.85	£0.13	517.48	£67.27	5,483.60	£712.87	50.38	£6.55
1093 - Corridor	Circulation area (corridors and stairways)	33.4	£0.13	152.34	£19.80	1,614.30	£209.86	48.33	£6.28
1094 - Stairs/Lobby	Circulation area (corridors and stairways)	20.03	£0.13	91.36	£11.88	968.10	£125.85	48.33	£6.28
1095 - Store	Storage Area/Cupboard	2.12	£0.13	1.83	£0.24	19.42	£2.53	9.16	£1.19
1096 - Teaching Storage	Storage Area/Cupboard	1.34	£0.13	1.03	£0.13	10.56	£1.37	7.88	£1.02
1097 - Tech Store	Storage Area/Cupboard	9.22	£0.13	7.97	£1.04	84.48	£10.98	9.16	£1.19
1098 - Office	Cellular Office Area	16.49	£0.13	53.56	£6.96	567.55	£73.78	34.42	£4.47
1099 - Technology	Teaching Area:High Density IT Suite	85.11	£0.13	404.62	£52.60	4,287.64	£557.39	50.38	£6.55
1100 - Store	Storage Area/Cupboard	9.01	£0.13	7.79	£1.01	82.55	£10.73	9.16	£1.19
1101 - Corridor	Circulation area (corridors and stairways)	7.52	£0.13	34.30	£4.46	363.46	£47.25	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1102 - Heavy Practical/Cookery	Teaching Area:Food Technology	73.35	£0.13	1,359.33	£176.71	13,902.39	£1,807.31	189.53	£24.64
1102 - Technology Lab	Teaching Area:Workshop	73.35	£0.13	305.78	£39.75	3,240.25	£421.23	44.18	£5.74
1103 - Dust Extract	Storage Area/Cupboard	10.32	£0.13	8.92	£1.16	94.55	£12.29	9.16	£1.19
1104 - Corridor	Circulation area (corridors and stairways)	25.8	£0.13	117.68	£15.30	1,246.98	£162.11	48.33	£6.28
1105 - Ancillary	Storage Area/Cupboard	1.13	£0.13	0.87	£0.11	8.91	£1.16	7.88	£1.02
1105 - Cupboard	Storage Area/Cupboard	2.01	£0.13	1.74	£0.23	18.42	£2.39	9.16	£1.19
1106 - Classroom	Teaching Area:General	107.35	£0.13	170.95	£22.22	1,811.46	£235.49	16.87	£2.19
1107 - Technology lab	Teaching Area:Workshop	89.37	£0.13	343.08	£44.60	3,635.56	£472.62	40.68	£5.29
1108 - Teaching Storage	Storage Area/Cupboard	6.09	£0.13	5.27	£0.68	55.80	£7.25	9.16	£1.19
1108a Store?	Storage Area/Cupboard	6.09	£0.13	5.27	£0.68	55.80	£7.25	9.16	£1.19
1109 - Ancillary	Storage Area/Cupboard	3.59	£0.13	2.77	£0.36	28.30	£3.68	7.88	£1.02
1110 - Corridor	Circulation area (corridors and stairways)	34.14	£0.13	155.72	£20.24	1,650.07	£214.51	48.33	£6.28
1111 - Classroom	Teaching Area:General	56.85	£0.13	90.53	£11.77	959.31	£124.71	16.87	£2.19
1112 - Classroom	Teaching Area:General	56.91	£0.13	90.62	£11.78	960.32	£124.84	16.87	£2.19
1113 - Classroom	Teaching Area:General	64.03	£0.13	101.96	£13.26	1,080.46	£140.46	16.87	£2.19
1114 - Circulation	Circulation area (corridors and stairways)	18.7	£0.13	85.29	£11.09	903.82	£117.50	48.33	£6.28
1115 - Office	Cellular Office Area	21.28	£0.13	69.12	£8.99	732.41	£95.21	34.42	£4.47
1116 - Classroom	Teaching Area:General	69.26	£0.13	110.29	£14.34	1,168.72	£151.93	16.87	£2.19
1117 - Office	Cellular Office Area	10.13	£0.13	32.90	£4.28	348.65	£45.33	34.42	£4.47
1117 - Teaching Storage	Storage Area/Cupboard	10.13	£0.13	7.81	£1.02	79.86	£10.38	7.88	£1.02
1118 - Photocopy	Cellular Office Area	5.5	£0.13	17.86	£2.32	189.30	£24.61	34.42	£4.47
1119 - Stairs	Circulation area (corridors and stairways)	18.56	£0.13	84.65	£11.01	897.05	£116.62	48.33	£6.28
1120 - Store	Storage Area/Cupboard	4.25	£0.13	3.67	£0.48	38.94	£5.06	9.16	£1.19
1121 - Art Room 1	Teaching Area:ICT Rich Classroom	91.73	£0.13	466.35	£60.63	4,941.76	£642.43	53.87	£7.00
1121 - WC	Toilet	7.61	£0.13	20.62	£2.68	218.46	£28.40	28.71	£3.73
1122 - Store	Storage Area/Cupboard	7.05	£0.13	6.10	£0.79	64.59	£8.40	9.16	£1.19
1122 - WC	Toilet	7.25	£0.13	19.64	£2.55	208.12	£27.06	28.71	£3.73
1123 - Corridor	Circulation area (corridors and stairways)	22.81	£0.13	104.04	£13.53	1,102.46	£143.32	48.33	£6.28
1124 - Kiln Room	Teaching Area:Workshop	13.71	£0.13	52.63	£6.84	557.72	£72.50	40.68	£5.29

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1125 - Art Room	Teaching Area:ICT Rich Classroom	13.79	£0.13	65.56	£8.52	694.71	£90.31	50.38	£6.55
1126 - Art Room	Teaching Area:ICT Rich Classroom	13.47	£0.13	64.04	£8.32	678.59	£88.22	50.38	£6.55
1127 - Accessible WC	Toilet	5.35	£0.13	10.59	£1.38	112.20	£14.59	20.97	£2.73
1128 - Toilets	Toilet	11.4	£0.13	22.56	£2.93	239.08	£31.08	20.97	£2.73
1129 - Art Room 2	Teaching Area:ICT Rich Classroom	91.25	£0.13	463.91	£60.31	4,915.91	£639.07	53.87	£7.00
1130 - Store	Storage Area/Cupboard	4.66	£0.13	4.03	£0.52	42.70	£5.55	9.16	£1.19
1131 - Corridor	Circulation area (corridors and stairways)	32.24	£0.13	147.05	£19.12	1,558.24	£202.57	48.33	£6.28
1132 - Art Room 3	Teaching Area:ICT Rich Classroom	90.25	£0.13	458.83	£59.65	4,862.03	£632.06	53.87	£7.00
1133 - Store	Storage Area/Cupboard	6.77	£0.13	5.85	£0.76	62.03	£8.06	9.16	£1.19
1137 - Stairs/Lobby	Circulation area (corridors and stairways)	41.87	£0.13	190.97	£24.83	2,023.68	£263.08	48.33	£6.28
1138 - Ancillary	Storage Area/Cupboard	3.51	£0.13	2.71	£0.35	27.67	£3.60	7.88	£1.02
1138 - Lift	Lifts	3.51	£0.13	29.81	£3.87	315.85	£41.06	89.99	£11.70
1186 - Staircase	Circulation area (corridors and stairways)	26.96	£0.13	122.97	£15.99	1,303.04	£169.40	48.33	£6.28
2000 Lift	Lifts	3.76	£0.13	31.93	£4.15	338.35	£43.99	89.99	£11.70
2001 - WC	Toilet	12.68	£0.13	34.35	£4.47	364.00	£47.32	28.71	£3.73
2002 - Classroom	Teaching Area:General	42.66	£0.13	67.93	£8.83	719.86	£93.58	16.87	£2.19
2002 - General Teaching	Teaching Area:General	45.69	£0.13	64.86	£8.43	663.38	£86.24	14.52	£1.89
2002a - Store	Storage Area/Cupboard	1.17	£0.13	1.01	£0.13	10.72	£1.39	9.16	£1.19
2002b - Store	Storage Area/Cupboard	1.13	£0.13	0.98	£0.13	10.35	£1.35	9.16	£1.19
2003 - Classroom	Teaching Area:General	45.84	£0.13	73.00	£9.49	773.52	£100.56	16.87	£2.19
2003 - General Teaching	Teaching Area:General	48.56	£0.13	68.94	£8.96	705.05	£91.66	14.52	£1.89
2003a - Store	Storage Area/Cupboard	2.35	£0.13	2.03	£0.26	21.53	£2.80	9.16	£1.19
2004 - Store	Storage Area/Cupboard	7.18	£0.13	6.21	£0.81	65.79	£8.55	9.16	£1.19
2004 - Teaching Storage	Storage Area/Cupboard	8.18	£0.13	6.31	£0.82	64.49	£8.38	7.88	£1.02
2005 - Classroom	Teaching Area:General	45.68	£0.13	72.74	£9.46	770.82	£100.21	16.87	£2.19
2005 - General Teaching	Teaching Area:General	48.16	£0.13	68.37	£8.89	699.24	£90.90	14.52	£1.89
2006 - Teaching Storage	Storage Area/Cupboard	1.8	£0.13	1.39	£0.18	14.19	£1.84	7.88	£1.02
2007 - Classroom	Teaching Area:General	43	£0.13	68.47	£8.90	725.60	£94.33	16.87	£2.19
2007 - General Teaching	Teaching Area:General	46.06	£0.13	65.39	£8.50	668.75	£86.94	14.52	£1.89

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2007a - Store	Storage Area/Cupboard	5.14	£0.13	4.44	£0.58	47.09	£6.12	9.16	£1.19
2008 - Corridor	Circulation area (corridors and stairways)	41.71	£0.13	190.24	£24.73	2,015.95	£262.07	48.33	£6.28
2009 - SEN	Teaching Area:Sensory Room	22.9	£0.13	41.46	£5.39	439.39	£57.12	19.19	£2.49
2010 - WC	Toilet	14.1	£0.13	38.20	£4.97	404.76	£52.62	28.71	£3.73
2011 - SEN	Teaching Area:Sensory Room	11.65	£0.13	21.09	£2.74	223.53	£29.06	19.19	£2.49
2012 - Learning Support	Cellular Office Area	5.8	£0.13	18.84	£2.45	199.62	£25.95	34.42	£4.47
2012 - Staff and Admin. spaces	Cellular Office Area	5.8	£0.13	16.79	£2.18	171.76	£22.33	29.61	£3.85
2013 - Store	Storage Area/Cupboard	1.32	£0.13	1.14	£0.15	12.09	£1.57	9.16	£1.19
2014 - WC	Toilet	15.32	£0.13	41.50	£5.40	439.78	£57.17	28.71	£3.73
2015 - SEN	Teaching Area:Sensory Room	15.21	£0.13	27.54	£3.58	291.84	£37.94	19.19	£2.49
2016 - SEN	Teaching Area:Sensory Room	46.03	£0.13	83.35	£10.83	883.19	£114.81	19.19	£2.49
2017 - SEN	Teaching Area:Sensory Room	26.32	£0.13	47.66	£6.20	505.01	£65.65	19.19	£2.49
2018 - Corridor	Circulation area (corridors and stairways)	28.94	£0.13	132.00	£17.16	1,398.74	£181.84	48.33	£6.28
2019 - Classroom	Teaching Area:General	52.45	£0.13	83.52	£10.86	885.06	£115.06	16.87	£2.19
2020 - IT	Teaching Area:High Density IT Suite	31.9	£0.13	151.66	£19.72	1,607.05	£208.92	50.38	£6.55
2021 - Store	Storage Area/Cupboard	2.95	£0.13	2.55	£0.33	27.03	£3.51	9.16	£1.19
2022 - Classroom	Teaching Area:General	40.5	£0.13	64.49	£8.38	683.41	£88.84	16.87	£2.19
2023 - Circulation	Circulation area (corridors and stairways)	17.71	£0.13	80.78	£10.50	855.97	£111.28	48.33	£6.28
2024 - Office	Cellular Office Area	12.96	£0.13	42.09	£5.47	446.06	£57.99	34.42	£4.47
2025 - Corridor	Circulation area (corridors and stairways)	50.18	£0.13	228.88	£29.75	2,425.32	£315.29	48.33	£6.28
2026 - Classroom	Teaching Area:General	64.48	£0.13	102.68	£13.35	1,088.06	£141.45	16.87	£2.19
2027 - House Keeping	Storage Area/Cupboard	14.05	£0.13	12.15	£1.58	128.73	£16.73	9.16	£1.19
2028 - Store	Storage Area/Cupboard	1.53	£0.13	1.32	£0.17	14.02	£1.82	9.16	£1.19
2029 - Store	Storage Area/Cupboard	19.84	£0.13	17.15	£2.23	181.78	£23.63	9.16	£1.19
2030 - Classroom	Teaching Area:General	58.02	£0.13	92.39	£12.01	979.05	£127.28	16.87	£2.19
2030 - IT	Teaching Area:High Density IT Suite	58.02	£0.13	245.90	£31.97	2,514.94	£326.94	43.35	£5.63
2031 - Office	Cellular Office Area	12.41	£0.13	40.31	£5.24	427.13	£55.53	34.42	£4.47
2032 - Circulation	Circulation area (corridors and stairways)	17.34	£0.13	79.09	£10.28	838.08	£108.95	48.33	£6.28
2033 - Classroom	Teaching Area:General	60.19	£0.13	95.85	£12.46	1,015.67	£132.04	16.87	£2.19



Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2034 - Office	Cellular Office Area	11.89	£0.13	38.62	£5.02	409.23	£53.20	34.42	£4.47
2035 - Laboratory	Teaching Area:Laboratory	86.29	£0.13	430.15	£55.92	4,558.21	£592.57	52.82	£6.87
2036 - Preparation Room	Teaching Area:Laboratory	23.79	£0.13	118.59	£15.42	1,256.69	£163.37	52.82	£6.87
2036 - Staff and Admin. spaces	Cellular Office Area	23.79	£0.13	68.89	£8.96	704.52	£91.59	29.61	£3.85
2037 - Corridor	Circulation area (corridors and stairways)	35.23	£0.13	160.69	£20.89	1,702.75	£221.36	48.33	£6.28
2038 - Laboratory	Teaching Area:Laboratory	80.19	£0.13	399.75	£51.97	4,235.98	£550.68	52.82	£6.87
2039 - Store	Storage Area/Cupboard	5.66	£0.13	4.89	£0.64	51.86	£6.74	9.16	£1.19
2040 - Laboratory	Teaching Area:Laboratory	89.03	£0.13	443.81	£57.70	4,702.95	£611.38	52.82	£6.87
2041 - Store	Storage Area/Cupboard	7.87	£0.13	6.80	£0.88	72.11	£9.37	9.16	£1.19
2041a Office	Cellular Office Area	5.4	£0.13	17.54	£2.28	185.86	£24.16	34.42	£4.47
2042 - Stairs	Circulation area (corridors and stairways)	17.75	£0.13	80.96	£10.52	857.90	£111.53	48.33	£6.28
2043 - Preparation Room	Teaching Area:Laboratory	34.2	£0.13	170.49	£22.16	1,806.59	£234.86	52.82	£6.87
2043 - Staff and Admin. spaces	Cellular Office Area	34.2	£0.13	99.03	£12.87	1,012.80	£131.66	29.61	£3.85
2044 - Teaching Storage	Storage Area/Cupboard	4.35	£0.13	3.35	£0.44	34.29	£4.46	7.88	£1.02
2045 - Science Office	Cellular Office Area	20.57	£0.13	66.81	£8.69	707.98	£92.04	34.42	£4.47
2046 - Laboratory	Teaching Area:Laboratory	86.65	£0.13	431.95	£56.15	4,577.23	£595.04	52.82	£6.87
2047 - Corridor	Circulation area (corridors and stairways)	50.62	£0.13	230.88	£30.01	2,446.59	£318.06	48.33	£6.28
2047a - Counselling Room	Consulting/treatment room	4.95	£0.13	11.01	£1.43	116.70	£15.17	23.57	£3.06
2048 - Store	Storage Area/Cupboard	3.76	£0.13	3.25	£0.42	34.45	£4.48	9.16	£1.19
2049 - Laboratory	Teaching Area:Laboratory	93.85	£0.13	467.84	£60.82	4,957.56	£644.48	52.82	£6.87
2050 - Laboratory	Teaching Area:Laboratory	88	£0.13	438.68	£57.03	4,648.54	£604.31	52.82	£6.87
2051 - Corridor	Circulation area (corridors and stairways)	37.19	£0.13	169.63	£22.05	1,797.48	£233.67	48.33	£6.28
2052 - Chemical Store	Storage Area/Cupboard	26.04	£0.13	22.52	£2.93	238.59	£31.02	9.16	£1.19
2053 - Office	Cellular Office Area	15.43	£0.13	50.12	£6.52	531.07	£69.04	34.42	£4.47
2054 - Laboratory	Teaching Area:Laboratory	37	£0.13	184.44	£23.98	1,954.50	£254.09	52.82	£6.87
2055 - Laboratory	Teaching Area:Laboratory	100.7	£0.13	501.99	£65.26	5,319.41	£691.52	52.82	£6.87
2056 - Laboratory	Teaching Area:Laboratory	88.24	£0.13	439.88	£57.18	4,661.22	£605.96	52.82	£6.87
2057 - Store	Storage Area/Cupboard	4.34	£0.13	3.75	£0.49	39.76	£5.17	9.16	£1.19
2058 - Corridor	Circulation area (corridors and stairways)	33.34	£0.13	152.07	£19.77	1,611.40	£209.48	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2059 - General Teaching	Teaching Area:General	40.93	£0.13	58.11	£7.55	594.27	£77.25	14.52	£1.89
2059 - IT	Teaching Area:High Density IT Suite	40.93	£0.13	194.59	£25.30	2,061.95	£268.05	50.38	£6.55
2060 - Classroom	Teaching Area:General	39.62	£0.13	63.09	£8.20	668.56	£86.91	16.87	£2.19
2061 - Plant	Light Plant Room	2.79	£0.13	2.53	£0.33	26.77	£3.48	9.59	£1.25
2062 - Common Room	Lounges	53.1	£0.13	94.98	£12.35	971.43	£126.29	18.29	£2.38
2062 - Meeting Room	Meeting Room	53.1	£0.13	106.54	£13.85	1,129.02	£146.77	21.26	£2.76
2063 - Study	Teaching Area:Learning Resource Centre	48.62	£0.13	157.92	£20.53	1,673.40	£217.54	34.42	£4.47
2064 - Corridor	Circulation area (corridors and stairways)	50.86	£0.13	231.98	£30.16	2,458.19	£319.56	48.33	£6.28
2065 - Store	Storage Area/Cupboard	2.97	£0.13	2.57	£0.33	27.21	£3.54	9.16	£1.19
2066 - Office	Cellular Office Area	9.57	£0.13	31.08	£4.04	329.38	£42.82	34.42	£4.47
2066 - Staff and Admin. spaces	Cellular Office Area	23.77	£0.13	68.83	£8.95	703.93	£91.51	29.61	£3.85
2066a - Office	Cellular Office Area	7.05	£0.13	22.90	£2.98	242.65	£31.54	34.42	£4.47
2067 - Office	Cellular Office Area	23.82	£0.13	77.37	£10.06	819.84	£106.58	34.42	£4.47
2068 - Common Room	Lounges	57.74	£0.13	103.28	£13.43	1,056.32	£137.32	18.29	£2.38
2068 - Meeting Room	Lounges	57.74	£0.13	115.85	£15.06	1,227.67	£159.60	21.26	£2.76
2069 - Store	Storage Area/Cupboard	1.61	£0.13	1.39	£0.18	14.75	£1.92	9.16	£1.19
2070 - WC	Toilet	23.62	£0.13	63.99	£8.32	678.05	£88.15	28.71	£3.73
2071 - WC	Toilet	16.87	£0.13	45.70	£5.94	484.28	£62.96	28.71	£3.73
2072 - Common Room	Lounges	60.08	£0.13	107.47	£13.97	1,099.13	£142.89	18.29	£2.38
2072 - Meeting Room	Meeting Room	60.08	£0.13	120.55	£15.67	1,277.43	£166.07	21.26	£2.76
2072 - Teaching Storage	Storage Area/Cupboard	4.95	£0.13	3.82	£0.50	39.02	£5.07	7.88	£1.02
2073 - Common Room	Lounges	20.4	£0.13	40.93	£5.32	433.75	£56.39	21.26	£2.76
2074 - SEN	Teaching Area:Sensory Room	6.25	£0.13	11.32	£1.47	119.92	£15.59	19.19	£2.49
2075 - SEN	Teaching Area:Sensory Room	2.75	£0.13	4.98	£0.65	52.76	£6.86	19.19	£2.49
2076 - SEN Classroom	Teaching Area:Sensory Room	2.75	£0.13	4.44	£0.58	45.40	£5.90	16.51	£2.15
2114 - Stairs	Circulation area (corridors and stairways)	15.07	£0.13	68.74	£8.94	728.37	£94.69	48.33	£6.28
2119 - Stairs	Circulation area (corridors and stairways)	20.26	£0.13	92.41	£12.01	979.22	£127.30	48.33	£6.28
2137 - Stairs/Lobby	Circulation area (corridors and stairways)	25.71	£0.13	117.27	£15.24	1,242.63	£161.54	48.33	£6.28
2138 - Ancillary	Storage Area/Cupboard	3.51	£0.13	2.71	£0.35	27.67	£3.60	7.88	£1.02

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2138 - Lift	Lifts	3.51	£0.13	29.81	£3.87	315.85	£41.06	89.99	£11.70
2194 - Stairs	Circulation area (corridors and stairways)	25.52	£0.13	116.40	£15.13	1,233.44	£160.35	48.33	£6.28
3000 Lift	Lifts	3.76	£0.13	31.93	£4.15	338.35	£43.99	89.99	£11.70
3001 - Circulation	Circulation area (corridors and stairways)	10.95	£0.13	44.52	£5.79	455.37	£59.20	41.59	£5.41
3001 - Office	Cellular Office Area	10.95	£0.13	35.57	£4.62	376.88	£48.99	34.42	£4.47
3002 - Classroom	Teaching Area:General	45.27	£0.13	72.09	£9.37	763.90	£99.31	16.87	£2.19
3002a - Store	Storage Area/Cupboard	1.15	£0.13	0.99	£0.13	10.54	£1.37	9.16	£1.19
3002b - Store	Storage Area/Cupboard	1.15	£0.13	0.99	£0.13	10.54	£1.37	9.16	£1.19
3003 - Teaching Storage	Storage Area/Cupboard	1.73	£0.13	1.33	£0.17	13.64	£1.77	7.88	£1.02
3004 - Classroom	Teaching Area:General	48.57	£0.13	77.34	£10.05	819.59	£106.55	16.87	£2.19
3004a - Store	Storage Area/Cupboard	1.15	£0.13	0.99	£0.13	10.54	£1.37	9.16	£1.19
3004b - Store	Storage Area/Cupboard	1.15	£0.13	0.99	£0.13	10.54	£1.37	9.16	£1.19
3005 - Boiler/Plant	Light Plant Room	8.15	£0.13	6.58	£0.86	67.27	£8.75	8.25	£1.07
3005 - Office	Cellular Office Area	8.15	£0.13	26.47	£3.44	280.51	£36.47	34.42	£4.47
3006 - Classroom	Teaching Area:General	48.03	£0.13	76.48	£9.94	810.47	£105.36	16.87	£2.19
3006a - Store	Storage Area/Cupboard	1.17	£0.13	1.01	£0.13	10.72	£1.39	9.16	£1.19
3006b - Store	Storage Area/Cupboard	1.13	£0.13	0.98	£0.13	10.35	£1.35	9.16	£1.19
3006c Lobby	Circulation area (corridors and stairways)	2.13	£0.13	9.72	£1.26	102.95	£13.38	48.33	£6.28
3007 - Teaching Storage	Storage Area/Cupboard	1.71	£0.13	1.48	£0.19	15.67	£2.04	9.16	£1.19
3008 - Classroom	Teaching Area:General	45.84	£0.13	73.00	£9.49	773.52	£100.56	16.87	£2.19
3008a - Store	Storage Area/Cupboard	2.35	£0.13	2.03	£0.26	21.53	£2.80	9.16	£1.19
3023 - Stairs	Circulation area (corridors and stairways)	16.77	£0.13	76.49	£9.94	810.54	£105.37	48.33	£6.28
3042 - Stairs	Circulation area (corridors and stairways)	17.75	£0.13	80.96	£10.52	857.90	£111.53	48.33	£6.28
B001 - Boiler Room	Light Plant Room	67	£0.13	60.66	£7.89	642.77	£83.56	9.59	£1.25
Cupboard - Storage Area/Cupboard	Storage Area/Cupboard	2.66	£0.13	2.30	£0.30	24.37	£3.17	9.16	£1.19
EXT - External Space	External Space	200	£0.13	42.11	£5.47	446.21	£58.01	2.23	£0.29
G000 Lift	Lifts	4.81	£0.13	40.85	£5.31	432.84	£56.27	89.99	£11.70
G001 - Art	Teaching Area:ICT Rich Classroom	86.93	£0.13	368.43	£47.90	3,768.07	£489.85	43.35	£5.63
G001 - Science Laboratory	Teaching Area:Laboratory	86.93	£0.13	433.35	£56.33	4,592.02	£596.96	52.82	£6.87

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G002 - Preparation Room	Cellular Office Area	11.67	£0.13	37.90	£4.93	401.66	£52.22	34.42	£4.47
G002 - Teaching Storage	Storage Area/Cupboard	11.67	£0.13	9.00	£1.17	92.00	£11.96	7.88	£1.02
G003 - Teaching Storage	Storage Area/Cupboard	8.33	£0.13	6.42	£0.83	65.67	£8.54	7.88	£1.02
G004 - Art	Teaching Area:ICT Rich Classroom	83.27	£0.13	352.92	£45.88	3,609.43	£469.23	43.35	£5.63
G004 - Science Laboratory	Teaching Area:Laboratory	83.27	£0.13	415.10	£53.96	4,398.68	£571.83	52.82	£6.87
G005 - Corridor	Circulation area (corridors and stairways)	56.73	£0.13	258.75	£33.64	2,741.90	£356.45	48.33	£6.28
G006 - Stairs/Lobby	Circulation area (corridors and stairways)	10.64	£0.13	48.53	£6.31	514.26	£66.85	48.33	£6.28
G007 - Store	Storage Area/Cupboard	2.55	£0.13	2.20	£0.29	23.36	£3.04	9.16	£1.19
G008 - WC	Toilet	25.69	£0.13	69.59	£9.05	737.47	£95.87	28.71	£3.73
G009 - Store	Storage Area/Cupboard	1.74	£0.13	1.50	£0.20	15.94	£2.07	9.16	£1.19
G010 - Art	Teaching Area:ICT Rich Classroom	54.18	£0.13	229.63	£29.85	2,348.49	£305.30	43.35	£5.63
G010 - Classroom	Teaching Area:General	54.18	£0.13	86.28	£11.22	914.25	£118.85	16.87	£2.19
G011 - Art	Teaching Area:ICT Rich Classroom	88.16	£0.13	373.64	£48.57	3,821.39	£496.78	43.35	£5.63
G011 - Laboratory	Teaching Area:Laboratory	88.16	£0.13	439.48	£57.13	4,656.99	£605.41	52.82	£6.87
G012 - Lobby	Circulation area (corridors and stairways)	3.16	£0.13	14.41	£1.87	152.73	£19.85	48.33	£6.28
G013 - Preparation Room	Cellular Office Area	8.53	£0.13	27.71	£3.60	293.59	£38.17	34.42	£4.47
G013 - Staff and Admin. spaces	Cellular Office Area	8.53	£0.13	24.70	£3.21	252.61	£32.84	29.61	£3.85
G014 - Classroom	Teaching Area:General	38	£0.13	60.51	£7.87	641.22	£83.36	16.87	£2.19
G015 - WC	Toilet	25.6	£0.13	69.35	£9.02	734.89	£95.54	28.71	£3.73
G016 - Lobby	Circulation area (corridors and stairways)	2.84	£0.13	12.95	£1.68	137.26	£17.84	48.33	£6.28
G017 - Head Teacher Office	Cellular Office Area	33.4	£0.13	108.48	£14.10	1,149.56	£149.44	34.42	£4.47
G018 - WC	Toilet	3.21	£0.13	8.70	£1.13	92.15	£11.98	28.71	£3.73
G019 - WC	Toilet	11.13	£0.13	30.15	£3.92	319.50	£41.54	28.71	£3.73
G020 - Corridor	Circulation area (corridors and stairways)	21.36	£0.13	97.42	£12.67	1,032.38	£134.21	48.33	£6.28
G021 - Store	Storage Area/Cupboard	0.91	£0.13	0.79	£0.10	8.34	£1.08	9.16	£1.19
G022 - WC	Toilet	10.25	£0.13	27.77	£3.61	294.24	£38.25	28.71	£3.73
G023 - Stairs	Circulation area (corridors and stairways)	5.67	£0.13	25.86	£3.36	274.04	£35.63	48.33	£6.28
G024 - Office	Cellular Office Area	19.81	£0.13	64.34	£8.36	681.82	£88.64	34.42	£4.47
G025 - Corridor	Circulation area (corridors and stairways)	15.49	£0.13	70.65	£9.18	748.67	£97.33	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G026 - Classroom	Teaching Area:General	53.95	£0.13	85.91	£11.17	910.37	£118.35	16.87	£2.19
G027 - Office	Cellular Office Area	14.9	£0.13	48.40	£6.29	512.83	£66.67	34.42	£4.47
G028 - Store	Storage Area/Cupboard	2.75	£0.13	2.38	£0.31	25.20	£3.28	9.16	£1.19
G029 - Store	Storage Area/Cupboard	2.9	£0.13	2.51	£0.33	26.57	£3.45	9.16	£1.19
G030 - Store	Storage Area/Cupboard	1.35	£0.13	1.17	£0.15	12.37	£1.61	9.16	£1.19
G030 - Teaching Storage	Storage Area/Cupboard	2.06	£0.13	1.59	£0.21	16.24	£2.11	7.88	£1.02
G031 - Circulation	Circulation area (corridors and stairways)	23.29	£0.13	94.70	£12.31	968.55	£125.91	41.59	£5.41
G032 - Office	Cellular Office Area	20.61	£0.13	66.94	£8.70	709.35	£92.22	34.42	£4.47
G033 - Store	Storage Area/Cupboard	2.06	£0.13	1.78	£0.23	18.87	£2.45	9.16	£1.19
G033 - Teaching Storage	Storage Area/Cupboard	1.35	£0.13	1.04	£0.14	10.64	£1.38	7.88	£1.02
G034 - Circulation	Circulation area (corridors and stairways)	12.88	£0.13	52.37	£6.81	535.63	£69.63	41.59	£5.41
G035 - Circulation	Circulation area (corridors and stairways)	68.48	£0.13	312.34	£40.60	3,309.81	£430.27	48.33	£6.28
G035 - Staff and Admin. spaces	Cellular Office Area	11.29	£0.13	32.69	£4.25	334.34	£43.46	29.61	£3.85
G036 - Office	Cellular Office Area	41.03	£0.13	133.27	£17.32	1,412.17	£183.58	34.42	£4.47
G037 - Office	Cellular Office Area	8.66	£0.13	28.13	£3.66	298.06	£38.75	34.42	£4.47
G038 - Office	Cellular Office Area	7.99	£0.13	25.95	£3.37	275.00	£35.75	34.42	£4.47
G039 - Office	Cellular Office Area	11.53	£0.13	37.45	£4.87	396.84	£51.59	34.42	£4.47
G040 - Store	Storage Area/Cupboard	1.21	£0.13	1.05	£0.14	11.09	£1.44	9.16	£1.19
G041 - Electric	Storage Area/Cupboard	5.17	£0.13	4.47	£0.58	47.37	£6.16	9.16	£1.19
G042 - Stairs/Lobby	Circulation area (corridors and stairways)	18.14	£0.13	82.74	£10.76	876.75	£113.98	48.33	£6.28
G043 - Office	Cellular Office Area	2.56	£0.13	8.31	£1.08	88.11	£11.45	34.42	£4.47
G043 - Teaching Storage	Storage Area/Cupboard	1.51	£0.13	1.16	£0.15	11.90	£1.55	7.88	£1.02
G044 - Medical	Consulting/treatment room	11.15	£0.13	24.81	£3.22	262.86	£34.17	23.57	£3.06
G044 - Staff and Admin. spaces	Cellular Office Area	11.15	£0.13	32.29	£4.20	330.20	£42.93	29.61	£3.85
G045 - Office	Cellular Office Area	15.92	£0.13	51.71	£6.72	547.93	£71.23	34.42	£4.47
G046 - Circulation	Circulation area (corridors and stairways)	43.19	£0.13	175.62	£22.83	1,796.11	£233.49	41.59	£5.41
G047 - Hall	Teaching Area:Dry Sports Hall	194.18	£0.13	252.34	£32.80	2,580.75	£335.50	13.29	£1.73
G048 - Drama	Teaching Area:Studio	56.21	£0.13	73.05	£9.50	747.06	£97.12	13.29	£1.73
G049 - Drama	Teaching Area:Studio	50.26	£0.13	73.26	£9.52	776.34	£100.92	15.45	£2.01

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G050 - Drama	Teaching Area:Studio	52.36	£0.13	76.32	£9.92	808.78	£105.14	15.45	£2.01
G051 - Lobby	Circulation area (corridors and stairways)	11.54	£0.13	52.64	£6.84	557.76	£72.51	48.33	£6.28
G052 - Store	Storage Area/Cupboard	3.46	£0.13	2.99	£0.39	31.70	£4.12	9.16	£1.19
G053 - WC	Toilet	4.04	£0.13	10.94	£1.42	115.97	£15.08	28.71	£3.73
G054 - Store	Storage Area/Cupboard	7.49	£0.13	6.48	£0.84	68.63	£8.92	9.16	£1.19
G055 - Duct	Storage Area/Cupboard	0.83	£0.13	0.72	£0.09	7.60	£0.99	9.16	£1.19
G056 - Store	Storage Area/Cupboard	2.07	£0.13	1.79	£0.23	18.97	£2.47	9.16	£1.19
G057 - Store	Storage Area/Cupboard	3.75	£0.13	3.24	£0.42	34.36	£4.47	9.16	£1.19
G058 - Store	Storage Area/Cupboard	3.49	£0.13	3.02	£0.39	31.98	£4.16	9.16	£1.19
G059 - Circulation	Circulation area (corridors and stairways)	32.74	£0.13	133.13	£17.31	1,361.54	£177.00	41.59	£5.41
G060 - Teaching Storage	Storage Area/Cupboard	0.45	£0.13	0.35	£0.05	3.55	£0.46	7.88	£1.02
G061 - Circulation	Circulation area (corridors and stairways)	10.02	£0.13	40.74	£5.30	416.70	£54.17	41.59	£5.41
G062 - Pupil Changing / Toilets	Toilet	2.44	£0.13	5.89	£0.77	60.27	£7.83	24.70	£3.21
G063 - Pupil Changing / Toilets	Toilet	7.36	£0.13	17.77	£2.31	181.79	£23.63	24.70	£3.21
G064 - Pupil Changing / Toilets	Toilet	3.7	£0.13	8.94	£1.16	91.39	£11.88	24.70	£3.21
G065 - Staff and Admin. spaces	Cellular Office Area	11.97	£0.13	34.66	£4.51	354.48	£46.08	29.61	£3.85
G066 - Circulation	Circulation area (corridors and stairways)	6.61	£0.13	26.88	£3.49	274.89	£35.74	41.59	£5.41
G067 - Music	Teaching Area:Music	19.51	£0.13	82.69	£10.75	845.68	£109.94	43.35	£5.63
G068 - Music	Teaching Area:Music	57.43	£0.13	243.40	£31.64	2,489.36	£323.62	43.35	£5.63
G069 - Music	Teaching Area:Music	58.44	£0.13	247.68	£32.20	2,533.14	£329.31	43.35	£5.63
G070 - Music	Teaching Area:Music	23.89	£0.13	101.25	£13.16	1,035.54	£134.62	43.35	£5.63
G071 - Lobby	Circulation area (corridors and stairways)	18.18	£0.13	82.92	£10.78	878.68	£114.23	48.33	£6.28
G072 - Store	Storage Area/Cupboard	3.07	£0.13	2.65	£0.35	28.13	£3.66	9.16	£1.19
G073 - Office	Cellular Office Area	6.88	£0.13	22.35	£2.91	236.80	£30.78	34.42	£4.47
G074 - Office	Cellular Office Area	6.15	£0.13	19.98	£2.60	211.67	£27.52	34.42	£4.47
G075 - Gymnasium	Teaching Area:Fitness Suite/Gym	255.22	£0.13	1,401.95	£182.25	14,856.01	£1,931.28	58.21	£7.57
G076 - Store	Storage Area/Cupboard	15.57	£0.13	13.46	£1.75	142.66	£18.55	9.16	£1.19
G076 - Teaching Storage	Storage Area/Cupboard	11.52	£0.13	8.88	£1.15	90.82	£11.81	7.88	£1.02
G077 - Corridor	Circulation area (corridors and stairways)	19.95	£0.13	90.99	£11.83	964.23	£125.35	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G078 - Pupil Changing / Toilets	Toilet	8.72	£0.13	21.06	£2.74	215.38	£28.00	24.70	£3.21
G078 - Store	Storage Area/Cupboard	8.72	£0.13	16.05	£2.09	170.04	£22.10	19.50	£2.53
G079 - Lobby	Circulation area (corridors and stairways)	4.41	£0.13	20.11	£2.61	213.15	£27.71	48.33	£6.28
G080 - Changing Rooms	Changing Area with Shower	34.88	£0.13	76.87	£9.99	814.51	£105.89	23.35	£3.04
G081 - Pupil Changing / Toilets	Changing Area with Shower	13.69	£0.13	26.90	£3.50	275.07	£35.76	20.09	£2.61
G081 - Showers	Changing Area with Shower	13.69	£0.13	30.17	£3.92	319.69	£41.56	23.35	£3.04
G082 - Store	Storage Area/Cupboard	3.07	£0.13	2.65	£0.35	28.13	£3.66	9.16	£1.19
G083 - WC	Toilet	9.62	£0.13	26.06	£3.39	276.16	£35.90	28.71	£3.73
G084 - Lobby	Circulation area (corridors and stairways)	4.94	£0.13	22.53	£2.93	238.76	£31.04	48.33	£6.28
G085 - WC	Toilet	10.06	£0.13	27.25	£3.54	288.79	£37.54	28.71	£3.73
G086 - Changing Rooms	Changing Area with Shower	33.19	£0.13	73.14	£9.51	775.05	£100.76	23.35	£3.04
G087 - Store	Storage Area/Cupboard	2.71	£0.13	2.34	£0.30	24.83	£3.23	9.16	£1.19
G088 - Pupil Changing / Toilets	Changing Area with Shower	13.26	£0.13	26.05	£3.39	266.43	£34.64	20.09	£2.61
G088 - Showers	Changing Area with Shower	13.26	£0.13	29.22	£3.80	309.65	£40.25	23.35	£3.04
G089 - Stairs/Landing	Circulation area (corridors and stairways)	12.23	£0.13	55.78	£7.25	591.11	£76.84	48.33	£6.28
G090 - Store	Storage Area/Cupboard	1.38	£0.13	1.19	£0.16	12.64	£1.64	9.16	£1.19
G091 - Lobby	Circulation area (corridors and stairways)	5.38	£0.13	24.54	£3.19	260.03	£33.80	48.33	£6.28
G092 - Teaching Storage	Storage Area/Cupboard	1.21	£0.13	0.93	£0.12	9.54	£1.24	7.88	£1.02
G093 - Classroom	Teaching Area:General	52.42	£0.13	83.47	£10.85	884.55	£114.99	16.87	£2.19
G094 - WC	Toilet	9.88	£0.13	26.76	£3.48	283.62	£36.87	28.71	£3.73
G095 - Office	Cellular Office Area	8.7	£0.13	28.26	£3.67	299.44	£38.93	34.42	£4.47
G096 - Classroom	Teaching Area:General	51.06	£0.13	81.31	£10.57	861.60	£112.01	16.87	£2.19
G097 - Store	Storage Area/Cupboard	2.01	£0.13	1.74	£0.23	18.42	£2.39	9.16	£1.19
G098 - Corridor	Circulation area (corridors and stairways)	22.74	£0.13	103.72	£13.48	1,099.08	£142.88	48.33	£6.28
G099 - Hall	Teaching Area:Dry Sports Hall	48.93	£0.13	63.58	£8.27	650.30	£84.54	13.29	£1.73
G099 - Meeting Room	Meeting Room	48.93	£0.13	98.18	£12.76	1,040.36	£135.25	21.26	£2.76
G099a Tea Point	Catering: Kitchenette (small appliances, fridge)	5.06	£0.13	105.19	£13.67	1,114.62	£144.90	220.28	£28.64
G100 - Classroom	Teaching Area:General	48.92	£0.13	77.90	£10.13	825.49	£107.31	16.87	£2.19
G101 - Corridor	Circulation area (corridors and stairways)	29.23	£0.13	133.32	£17.33	1,412.76	£183.66	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G102 - WC	Toilet	11.37	£0.13	30.80	£4.00	326.39	£42.43	28.71	£3.73
G103 - Ducts	Storage Area/Cupboard	5.44	£0.13	4.70	£0.61	49.84	£6.48	9.16	£1.19
G104 - Electric Store	Storage Area/Cupboard	1.8	£0.13	1.56	£0.20	16.49	£2.14	9.16	£1.19
G105 - Classroom	Teaching Area:General	51.75	£0.13	82.41	£10.71	873.25	£113.52	16.87	£2.19
G106 - Deputy Head	Cellular Office Area	19.78	£0.13	64.25	£8.35	680.79	£88.50	34.42	£4.47
G107 - Classroom	Teaching Area:General	57.8	£0.13	92.04	£11.97	975.34	£126.79	16.87	£2.19
G108 - Store	Storage Area/Cupboard	3.18	£0.13	2.75	£0.36	29.14	£3.79	9.16	£1.19
G109 - Office	Cellular Office Area	22.5	£0.13	73.08	£9.50	774.40	£100.67	34.42	£4.47
G110 - Lobby	Circulation area (corridors and stairways)	14.67	£0.13	66.91	£8.70	709.04	£92.17	48.33	£6.28
G111 - Store	Storage Area/Cupboard	1.35	£0.13	1.17	£0.15	12.37	£1.61	9.16	£1.19
G112 - Office	Cellular Office Area	22.57	£0.13	73.31	£9.53	776.81	£100.99	34.42	£4.47
G113 - WC	Toilet	15.94	£0.13	43.18	£5.61	457.58	£59.49	28.71	£3.73
G114 - Stairs/Landing	Circulation area (corridors and stairways)	26.42	£0.13	120.50	£15.67	1,276.94	£166.00	48.33	£6.28
G115 - Classroom	Teaching Area:General	60.69	£0.13	96.64	£12.56	1,024.10	£133.13	16.87	£2.19
G116 - Office	Cellular Office Area	22.73	£0.13	73.83	£9.60	782.32	£101.70	34.42	£4.47
G117 - IT	Teaching Area:High Density IT Suite	65.16	£0.13	309.78	£40.27	3,282.60	£426.74	50.38	£6.55
G117a - IT	Teaching Area:ICT Rich Classroom	63.97	£0.13	304.12	£39.54	3,222.65	£418.95	50.38	£6.55
G118 - Lobby	Circulation area (corridors and stairways)	18.15	£0.13	82.78	£10.76	877.23	£114.04	48.33	£6.28
G119 - Stairs	Circulation area (corridors and stairways)	18.2	£0.13	83.01	£10.79	879.65	£114.35	48.33	£6.28
G120 - Store	Storage Area/Cupboard	1.44	£0.13	1.25	£0.16	13.19	£1.72	9.16	£1.19
G121 - Art	Teaching Area:ICT Rich Classroom	41.63	£0.13	176.44	£22.94	1,804.50	£234.58	43.35	£5.63
G121 - Classroom	Teaching Area:General	41.63	£0.13	66.29	£8.62	702.48	£91.32	16.87	£2.19
G122 - Art	Teaching Area:ICT Rich Classroom	19.27	£0.13	81.67	£10.62	835.28	£108.59	43.35	£5.63
G123 - Canteen	Catering: Eating/drinking area	252.59	£0.13	714.23	£92.85	7,568.43	£983.90	29.96	£3.90
G124 - Store	Storage Area/Cupboard	3.36	£0.13	2.91	£0.38	30.79	£4.00	9.16	£1.19
G125 - Kitchen	Catering: Full Kitchen Preparing Hot Meals	94.77	£0.13	2,046.28	£266.02	21,683.74	£2,818.89	228.80	£29.74
G126 - Plant	Light Plant Room	30.52	£0.13	27.63	£3.59	292.80	£38.06	9.59	£1.25
G127 - Kitchen	Catering: Kitchenette (small appliances, fridge)	8.49	£0.13	157.34	£20.45	1,609.15	£209.19	189.53	£24.64
G127 - Store	Storage Area/Cupboard	8.49	£0.13	10.14	£1.32	107.46	£13.97	12.66	£1.65



Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G128 - Kitchen	Catering: Kitchenette (small appliances, fridge)	12.82	£0.13	237.58	£30.89	2,429.84	£315.88	189.53	£24.64
G128 - Store	Storage Area/Cupboard	12.82	£0.13	15.31	£1.99	162.27	£21.10	12.66	£1.65
G129 - Kitchen	Catering: Kitchenette (small appliances, fridge)	3.25	£0.13	60.23	£7.83	615.99	£80.08	189.53	£24.64
G129 - Lobby	Circulation area (corridors and stairways)	3.25	£0.13	15.90	£2.07	168.44	£21.90	51.83	£6.74
G130 - Kitchen	Catering: Kitchenette (small appliances, fridge)	1.19	£0.13	22.05	£2.87	225.55	£29.32	189.53	£24.64
G130 - Store	Storage Area/Cupboard	1.19	£0.13	1.42	£0.18	15.06	£1.96	12.66	£1.65
G131 - Kitchen	Catering: Kitchenette (small appliances, fridge)	4.42	£0.13	81.91	£10.65	837.74	£108.91	189.53	£24.64
G131 - WC	Toilet	4.42	£0.13	8.75	£1.14	92.70	£12.05	20.97	£2.73
G132 - Lobby	Circulation area (corridors and stairways)	17.28	£0.13	78.82	£10.25	835.18	£108.57	48.33	£6.28
G133 - WC	Toilet	16.68	£0.13	45.19	£5.87	478.82	£62.25	28.71	£3.73
G134 - WC	Toilet	15.72	£0.13	42.59	£5.54	451.27	£58.66	28.71	£3.73
G135 - Store	Storage Area/Cupboard	3.76	£0.13	3.25	£0.42	34.45	£4.48	9.16	£1.19
G136 - Pupil Changing / Toilets	Toilet	5.52	£0.13	13.33	£1.73	136.34	£17.72	24.70	£3.21
G136 - Store	Storage Area/Cupboard	5.52	£0.13	10.16	£1.32	107.64	£13.99	19.50	£2.53
G137 - Stairs/Lobby	Circulation area (corridors and stairways)	14.51	£0.13	66.18	£8.60	701.30	£91.17	48.33	£6.28
G138 - Ancillary	Storage Area/Cupboard	3.33	£0.13	2.57	£0.33	26.25	£3.41	7.88	£1.02
G138 - Lift	Lifts	3.33	£0.13	28.28	£3.68	299.66	£38.96	89.99	£11.70
G139 - Lift Motor	Storage Area/Cupboard	3.76	£0.13	3.25	£0.42	34.45	£4.48	9.16	£1.19
G140 - General Teaching	Teaching Area:General	61.52	£0.13	87.34	£11.35	893.21	£116.12	14.52	£1.89
G141 - Store	Storage Area/Cupboard	4.72	£0.13	4.08	£0.53	43.25	£5.62	9.16	£1.19
G142 - Entrance Lobby	Circulation area (corridors and stairways)	18.35	£0.13	83.70	£10.88	886.90	£115.30	48.33	£6.28
G143 - WC	Toilet	2.69	£0.13	7.29	£0.95	77.22	£10.04	28.71	£3.73
G144 - Changing	Changing Area with Shower	36.2	£0.13	79.77	£10.37	845.34	£109.89	23.35	£3.04
G144 - Pupil Changing / Toilets	Changing Area with Shower	38.4	£0.13	75.44	£9.81	771.55	£100.30	20.09	£2.61
G145 - WC	Toilet	3.25	£0.13	8.80	£1.14	93.30	£12.13	28.71	£3.73
G146 - Changing	Changing Area with Shower	38.13	£0.13	84.03	£10.92	890.41	£115.75	23.35	£3.04
G146 - Pupil Changing / Toilets	Changing Area with Shower	42.41	£0.13	83.32	£10.83	852.12	£110.78	20.09	£2.61
G147 - Pupil Changing / Toilets	Toilet	5.99	£0.13	14.47	£1.88	147.95	£19.23	24.70	£3.21
G147 - WC	Toilet	3.4	£0.13	9.21	£1.20	97.60	£12.69	28.71	£3.73

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G148 - Ancillary	Storage Area/Cupboard	2.51	£0.13	1.93	£0.25	19.79	£2.57	7.88	£1.02
G148 - Laundry	Storage Area/Cupboard	6.44	£0.13	5.57	£0.72	59.00	£7.67	9.16	£1.19
G149 - PE	Teaching Area:Fitness Suite/Gym	679.37	£0.13	3,326.92	£432.50	34,025.62	£4,423.33	50.08	£6.51
G149 - Sports Hall	Teaching Area:Dry Sports Hall	679.37	£0.13	990.30	£128.74	10,493.86	£1,364.20	15.45	£2.01
G150 - Teaching Storage	Storage Area/Cupboard	19.98	£0.13	15.40	£2.00	157.51	£20.48	7.88	£1.02
G151 - Fitness Suite	Teaching Area:Fitness Suite/Gym	52.13	£0.13	286.36	£37.23	3,034.42	£394.47	58.21	£7.57
G151 - PE	Teaching Area:Fitness Suite/Gym	31.65	£0.13	154.99	£20.15	1,585.16	£206.07	50.08	£6.51
G152 - Lobby	Circulation area (corridors and stairways)	23.37	£0.13	106.59	£13.86	1,129.53	£146.84	48.33	£6.28
G153 - WC	Toilet	2.94	£0.13	7.96	£1.04	84.40	£10.97	28.71	£3.73
G154 - Changing	Changing Area with Shower	6.98	£0.13	15.38	£2.00	163.00	£21.19	23.35	£3.04
G155 - Office	Cellular Office Area	8.62	£0.13	28.00	£3.64	296.68	£38.57	34.42	£4.47
G156 - Cupboard	Storage Area/Cupboard	1.41	£0.13	1.22	£0.16	12.92	£1.68	9.16	£1.19
G157 - Dance	Teaching Area:Studio	200.36	£0.13	292.06	£37.97	3,094.85	£402.33	15.45	£2.01
G157 - Drama	Teaching Area:Studio	223.63	£0.13	290.61	£37.78	2,972.15	£386.38	13.29	£1.73
G157a - Store	Storage Area/Cupboard	22.32	£0.13	19.30	£2.51	204.50	£26.59	9.16	£1.19
G158 - Lobby	Circulation area (corridors and stairways)	4.22	£0.13	19.25	£2.50	203.96	£26.52	48.33	£6.28
G159 - Changing	Toilet	27.42	£0.13	74.28	£9.66	787.13	£102.33	28.71	£3.73
G160 - WC	Toilet	6.65	£0.13	18.01	£2.34	190.90	£24.82	28.71	£3.73
G161 - Plant	Light Plant Room	29.92	£0.13	27.09	£3.52	287.04	£37.32	9.59	£1.25
G162 - Circulation	Circulation area (corridors and stairways)	45.58	£0.13	185.34	£24.09	1,895.51	£246.42	41.59	£5.41
G170 - 6th Form Canteen	Catering: Eating/drinking area	79.34	£0.13	250.51	£32.57	2,654.61	£345.10	33.46	£4.35
G171 - Pupil Entrance	Circulation area (corridors and stairways)	49.9	£0.13	227.60	£29.59	2,411.79	£313.53	48.33	£6.28
G172 - Reception	Cellular Office Area	11.4	£0.13	37.03	£4.81	392.37	£51.01	34.42	£4.47
G173 - General Admin Office	Cellular Office Area	27.7	£0.13	89.97	£11.70	953.38	£123.94	34.42	£4.47
G174 - Chair Store	Storage Area/Cupboard	8.7	£0.13	7.52	£0.98	79.71	£10.36	9.16	£1.19
G175 - Office	Cellular Office Area	8.7	£0.13	28.26	£3.67	299.44	£38.93	34.42	£4.47
G176 - Principal Office/Admin	Cellular Office Area	13.1	£0.13	42.55	£5.53	450.88	£58.61	34.42	£4.47
G177 - Visitors/Waiting	Circulation area (corridors and stairways)	23.9	£0.13	109.01	£14.17	1,155.15	£150.17	48.33	£6.28
G178 - Corridor	Circulation area (corridors and stairways)	12.4	£0.13	56.56	£7.35	599.32	£77.91	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G179 - Meeting/General Teaching	Teaching Area:General	67.4	£0.13	107.33	£13.95	1,137.33	£147.85	16.87	£2.19
G180 - Corridor	Circulation area (corridors and stairways)	25.39	£0.13	115.81	£15.05	1,227.16	£159.53	48.33	£6.28
G181 - Interview Room	Cellular Office Area	8.4	£0.13	27.28	£3.55	289.11	£37.58	34.42	£4.47
G182 - General Teaching	Teaching Area:General	68.9	£0.13	109.72	£14.26	1,162.64	£151.14	16.87	£2.19
G183 - Junior Hall	Teaching Area:Dry Sports Hall	252.8	£0.13	368.50	£47.90	3,904.86	£507.63	15.45	£2.01
G184 - Corridor	Circulation area (corridors and stairways)	48.1	£0.13	219.39	£28.52	2,324.79	£302.22	48.33	£6.28
G185 - General Teaching	Teaching Area:General	56.9	£0.13	90.61	£11.78	960.15	£124.82	16.87	£2.19
G186 - Stairs	Circulation area (corridors and stairways)	27.8	£0.13	126.80	£16.48	1,343.64	£174.67	48.33	£6.28
G187 - General Teaching	Teaching Area:General	57.6	£0.13	91.72	£11.92	971.96	£126.36	16.87	£2.19
G188 - General Teaching	Teaching Area:General	56	£0.13	89.18	£11.59	944.96	£122.85	16.87	£2.19
G189 - Stage Area	Stage (theatres and event buildings)	69.4	£0.13	165.60	£21.53	1,754.81	£228.13	25.29	£3.29
G190 - Store	Storage Area/Cupboard	12.1	£0.13	10.46	£1.36	110.86	£14.41	9.16	£1.19
G191 - Props	Storage Area/Cupboard	7.7	£0.13	6.66	£0.87	70.55	£9.17	9.16	£1.19
G192 - Cleaner	Storage Area/Cupboard	2	£0.13	2.39	£0.31	25.32	£3.29	12.66	£1.65
G193 - Corridor	Circulation area (corridors and stairways)	48.43	£0.13	220.89	£28.72	2,340.74	£304.30	48.33	£6.28
G194 - General Teaching/Music	Teaching Area:General	69.7	£0.13	110.99	£14.43	1,176.14	£152.90	16.87	£2.19
G195 - Music Classroom	Teaching Area:Music	65.7	£0.13	312.34	£40.60	3,309.81	£430.28	50.38	£6.55
G196 - Accessible W.C	Toilet	3.5	£0.13	6.93	£0.90	73.40	£9.54	20.97	£2.73
G197 - Music Store	Storage Area/Cupboard	8.4	£0.13	7.26	£0.94	76.96	£10.01	9.16	£1.19
G198 - Practice	Teaching Area:Music	8.5	£0.13	40.41	£5.25	428.21	£55.67	50.38	£6.55
G199 - Practice	Teaching Area:Music	8.9	£0.13	42.31	£5.50	448.36	£58.29	50.38	£6.55
G200 - Practice	Teaching Area:Music	18.6	£0.13	88.43	£11.50	937.02	£121.81	50.38	£6.55
G201 - Recording Studio	Teaching Area:Studio	13.7	£0.13	19.97	£2.60	211.62	£27.51	15.45	£2.01
G202 - Corridor	Circulation area (corridors and stairways)	34.63	£0.13	157.95	£20.53	1,673.75	£217.59	48.33	£6.28
G203 - Music Classroom	Teaching Area:Music	65.6	£0.13	311.87	£40.54	3,304.77	£429.62	50.38	£6.55
G204 - Music Office	Cellular Office Area	11.6	£0.13	37.68	£4.90	399.25	£51.90	34.42	£4.47
G205 - Store	Storage Area/Cupboard	7	£0.13	6.05	£0.79	64.14	£8.34	9.16	£1.19
G206 - Store	Storage Area/Cupboard	7	£0.13	6.05	£0.79	64.14	£8.34	9.16	£1.19
G207 - Corridor	Circulation area (corridors and stairways)	36.92	£0.13	168.40	£21.89	1,784.43	£231.98	48.33	£6.28

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G208 - Female Staff/Visitors WC	Toilet	10.1	£0.13	19.99	£2.60	211.82	£27.54	20.97	£2.73
G209 - Male Staff/Visitors WC	Toilet	8.97	£0.13	17.75	£2.31	188.12	£24.46	20.97	£2.73
G210 - Accessible WC	Toilet	3.58	£0.13	7.09	£0.92	75.08	£9.76	20.97	£2.73
G211 - Boiler House & Electrical	Light Plant Room	54.5	£0.13	49.34	£6.41	522.85	£67.97	9.59	£1.25
G212 - Gas Meter	Light Plant Room	8.09	£0.13	7.32	£0.95	77.61	£10.09	9.59	£1.25
G212a Sports Store	Storage Area/Cupboard	15.39	£0.13	13.31	£1.73	141.01	£18.33	9.16	£1.19
G213 - Reception Lobby	Circulation area (corridors and stairways)	34.98	£0.13	159.55	£20.74	1,690.67	£219.79	48.33	£6.28
G214 - Office	Cellular Office Area	10.59	£0.13	34.40	£4.47	364.49	£47.38	34.42	£4.47
G215 - Store	Storage Area/Cupboard	1.72	£0.13	1.49	£0.19	15.76	£2.05	9.16	£1.19
G216 - Male WC	Toilet	13.54	£0.13	26.80	£3.48	283.96	£36.92	20.97	£2.73
G217 - Female WC	Toilet	13.25	£0.13	26.22	£3.41	277.88	£36.12	20.97	£2.73
G218 - Lounge	Lounges	74.69	£0.13	149.86	£19.48	1,588.07	£206.45	21.26	£2.76
G219 - Store	Storage Area/Cupboard	11.9	£0.13	10.29	£1.34	109.03	£14.17	9.16	£1.19
G220 - Café	Catering: Snack Bar with Chilled Cabinets	7.48	£0.13	145.68	£18.94	1,543.68	£200.68	206.37	£26.83
G221 - Office	Cellular Office Area	12.39	£0.13	40.24	£5.23	426.44	£55.44	34.42	£4.47
G222 - Store	Storage Area/Cupboard	2.31	£0.13	2.00	£0.26	21.16	£2.75	9.16	£1.19
G223 - Hall	Teaching Area:Dry Sports Hall	92.54	£0.13	134.89	£17.54	1,429.41	£185.82	15.45	£2.01
G224 - Garage	External Space	40	£0.13	33.69	£4.38	356.97	£46.41	8.92	£1.16
G225 - Classroom	Teaching Area:General	27.26	£0.13	43.41	£5.64	459.99	£59.80	16.87	£2.19
G226 - Office	Cellular Office Area	12.87	£0.13	41.80	£5.43	442.96	£57.58	34.42	£4.47
G227 - Store	Storage Area/Cupboard	2.78	£0.13	2.40	£0.31	25.47	£3.31	9.16	£1.19
G228 - Admin	Cellular Office Area	5.58	£0.13	18.12	£2.36	192.05	£24.97	34.42	£4.47
G229 - Boiler Room	Light Plant Room	8.28	£0.13	7.50	£0.97	79.44	£10.33	9.59	£1.25
G230 - Meters	Light Plant Room	1.58	£0.13	1.43	£0.19	15.16	£1.97	9.59	£1.25
<b>Total</b>		<b>16,754.22</b>		<b>59,676.21</b>	<b>£7,757.91</b>	<b>626,662.58</b>	<b>£81,466.14</b>		

**Appendix 4: Individual school K2N Example: gas**

Space	Activity	Gas							
		Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1000 Lift	Lifts	4.39	£0.05	7.82	£0.39	299.82	£14.99	68.30	£3.41
1001 - Economics Seminar Room	Teaching Area:General	57.48	£0.05	102.38	£5.12	3,925.71	£196.29	68.30	£3.41
1001 - General Teaching	Teaching Area:General	57.48	£0.05	580.65	£29.03	3,847.19	£192.36	66.93	£3.35
1002 - Store	Storage Area/Cupboard	1.37	£0.05	2.44	£0.12	93.57	£4.68	68.30	£3.41
1003 - Corridor	Circulation area (corridors and stairways)	10.52	£0.05	18.74	£0.94	718.48	£35.92	68.30	£3.41
1004 - IT	Teaching Area:High Density IT Suite	68.63	£0.05	122.24	£6.11	4,687.22	£234.36	68.30	£3.41
1005 - Lobby	Circulation area (corridors and stairways)	16.13	£0.05	28.73	£1.44	1,101.63	£55.08	68.30	£3.41
1006 - Stairs	Circulation area (corridors and stairways)	14.58	£0.05	25.97	£1.30	995.77	£49.79	68.30	£3.41
1007 - Library	Teaching Area:Learning Resource Centre	194.54	£0.05	346.51	£17.33	13,286.48	£664.32	68.30	£3.41
1008 - Store	Storage Area/Cupboard	1.08	£0.05	1.92	£0.10	73.76	£3.69	68.30	£3.41
1009 - Staff and Admin. spaces	Cellular Office Area	7.2	£0.05	12.82	£0.64	491.74	£24.59	68.30	£3.41
1010 - Laboratory	Teaching Area:Laboratory	88.26	£0.05	157.21	£7.86	6,027.88	£301.39	68.30	£3.41
1011 - Lab Technician	Cellular Office Area	13.72	£0.05	24.44	£1.22	937.03	£46.85	68.30	£3.41
1012 - Store	Storage Area/Cupboard	3.44	£0.05	6.13	£0.31	234.94	£11.75	68.30	£3.41
1013 - Laboratory	Teaching Area:Laboratory	90.93	£0.05	161.96	£8.10	6,210.24	£310.51	68.30	£3.41
1014 - Corridor	Circulation area (corridors and stairways)	23.09	£0.05	41.13	£2.06	1,576.98	£78.85	68.30	£3.41
1015 - Office	Cellular Office Area	16.71	£0.05	29.76	£1.49	1,141.24	£57.06	68.30	£3.41
1016 - Office	Cellular Office Area	13.97	£0.05	24.88	£1.24	954.11	£47.71	68.30	£3.41
1017 - Office	Cellular Office Area	13.13	£0.05	23.39	£1.17	896.74	£44.84	68.30	£3.41
1018 - Classroom	Teaching Area:General	47.14	£0.05	83.97	£4.20	3,219.52	£160.98	68.30	£3.41
1018a - Store	Storage Area/Cupboard	8.02	£0.05	14.29	£0.71	547.74	£27.39	68.30	£3.41
1019 - Corridor	Circulation area (corridors and stairways)	33.46	£0.05	59.60	£2.98	2,285.21	£114.26	68.30	£3.41
1020 - Office	Cellular Office Area	17.75	£0.05	31.62	£1.58	1,212.27	£60.61	68.30	£3.41
1021 - Office	Cellular Office Area	8.03	£0.05	14.30	£0.72	548.42	£27.42	68.30	£3.41
1022 - Circulation	Circulation area (corridors and stairways)	12.55	£0.05	22.35	£1.12	857.13	£42.86	68.30	£3.41
1023 - Stairs	Circulation area (corridors and stairways)	11.63	£0.05	20.72	£1.04	794.29	£39.71	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1024 - Lobby	Circulation area (corridors and stairways)	0.81	£0.05	1.44	£0.07	55.32	£2.77	68.30	£3.41
1025 - WC	Toilet	8.26	£0.05	29.43	£1.47	1,128.26	£56.41	136.59	£6.83
1026 - General Teaching	Teaching Area:General	46.9	£0.05	473.78	£23.69	3,139.06	£156.95	66.93	£3.35
1026 - Office	Cellular Office Area	46.9	£0.05	83.54	£4.18	3,203.12	£160.16	68.30	£3.41
1027 - Store	Storage Area/Cupboard	0.84	£0.05	1.50	£0.07	57.37	£2.87	68.30	£3.41
1028 - Student Advice Office	Cellular Office Area	16.68	£0.05	29.71	£1.49	1,139.19	£56.96	68.30	£3.41
1029 - Classroom	Teaching Area:General	45.3	£0.05	80.69	£4.03	3,093.85	£154.69	68.30	£3.41
1029 - Staff and Admin. spaces	Cellular Office Area	88.85	£0.05	897.55	£44.88	5,946.81	£297.34	66.93	£3.35
1029a - Classroom	Teaching Area:General	42.7	£0.05	76.06	£3.80	2,916.28	£145.81	68.30	£3.41
1030 - Corridor	Circulation area (corridors and stairways)	15.84	£0.05	28.21	£1.41	1,081.82	£54.09	68.30	£3.41
1031 - Classroom	Teaching Area:General	48	£0.05	85.50	£4.27	3,278.25	£163.91	68.30	£3.41
1032 - Stairs	Circulation area (corridors and stairways)	13.36	£0.05	23.80	£1.19	912.45	£45.62	68.30	£3.41
1033 - Corridor	Circulation area (corridors and stairways)	30.37	£0.05	54.09	£2.70	2,074.18	£103.71	68.30	£3.41
1034 - Corridor	Circulation area (corridors and stairways)	5.32	£0.05	9.48	£0.47	363.34	£18.17	68.30	£3.41
1035 - Classroom	Teaching Area:General	52.65	£0.05	93.78	£4.69	3,595.83	£179.79	68.30	£3.41
1036 - Classroom	Teaching Area:General	52.72	£0.05	93.90	£4.70	3,600.61	£180.03	68.30	£3.41
1037 - Store	Storage Area/Cupboard	1.77	£0.05	3.15	£0.16	120.89	£6.04	68.30	£3.41
1038 - Classroom	Teaching Area:General	9.08	£0.05	16.17	£0.81	620.14	£31.01	68.30	£3.41
1039 - Classroom	Teaching Area:General	9.3	£0.05	16.57	£0.83	635.16	£31.76	68.30	£3.41
1040 - Corridor	Circulation area (corridors and stairways)	41.83	£0.05	74.51	£3.73	2,856.86	£142.84	68.30	£3.41
1041 - Store	Storage Area/Cupboard	19.49	£0.05	34.72	£1.74	1,331.11	£66.56	68.30	£3.41
1042 - Stairs	Circulation area (corridors and stairways)	11.78	£0.05	20.98	£1.05	804.54	£40.23	68.30	£3.41
1043 - Classroom	Teaching Area:General	43.1	£0.05	76.77	£3.84	2,943.60	£147.18	68.30	£3.41
1044 - Store	Storage Area/Cupboard	21.3	£0.05	37.94	£1.90	1,454.72	£72.74	68.30	£3.41
1045 - Office	Cellular Office Area	9.46	£0.05	16.85	£0.84	646.09	£32.30	68.30	£3.41
1046 - Office	Cellular Office Area	12.1	£0.05	21.55	£1.08	826.39	£41.32	68.30	£3.41
1047 - Office	Cellular Office Area	11.32	£0.05	20.16	£1.01	773.12	£38.66	68.30	£3.41
1048 - Office	Cellular Office Area	12.93	£0.05	23.03	£1.15	883.08	£44.15	68.30	£3.41
1049 - Classroom	Teaching Area:General	42.43	£0.05	75.58	£3.78	2,897.84	£144.89	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1050 - Classroom	Teaching Area:General	55.53	£0.05	98.91	£4.95	3,792.53	£189.63	68.30	£3.41
1051 - Store	Storage Area/Cupboard	7.12	£0.05	12.68	£0.63	486.27	£24.31	68.30	£3.41
1052 - Store	Storage Area/Cupboard	6.76	£0.05	12.04	£0.60	461.69	£23.08	68.30	£3.41
1053 - Corridor	Circulation area (corridors and stairways)	42.87	£0.05	76.36	£3.82	2,927.89	£146.39	68.30	£3.41
1054 - Store	Storage Area/Cupboard	2.93	£0.05	5.22	£0.26	200.11	£10.01	68.30	£3.41
1055 - Store	Storage Area/Cupboard	1.77	£0.05	3.15	£0.16	120.89	£6.04	68.30	£3.41
1056 - Classroom	Teaching Area:General	53.33	£0.05	94.99	£4.75	3,642.27	£182.11	68.30	£3.41
1057 - Classroom	Teaching Area:General	53.51	£0.05	95.31	£4.77	3,654.57	£182.73	68.30	£3.41
1058 - Corridor	Circulation area (corridors and stairways)	22.17	£0.05	39.49	£1.97	1,514.14	£75.71	68.30	£3.41
1059 - Classroom	Teaching Area:General	64.03	£0.05	114.05	£5.70	4,373.05	£218.65	68.30	£3.41
1060 - Classroom	Teaching Area:General	20.75	£0.05	36.96	£1.85	1,417.16	£70.86	68.30	£3.41
1061 - Lobby	Circulation area (corridors and stairways)	5.94	£0.05	10.58	£0.53	405.68	£20.28	68.30	£3.41
1062 - Hall	Teaching Area:Dry Sports Hall	215.43	£0.05	364.51	£18.23	13,976.42	£698.82	64.88	£3.24
1063 - Corridor	Circulation area (corridors and stairways)	37.98	£0.05	67.65	£3.38	2,593.92	£129.70	68.30	£3.41
1064 - Store	Storage Area/Cupboard	2.92	£0.05	5.20	£0.26	199.43	£9.97	68.30	£3.41
1065 - Classroom	Teaching Area:General	43.38	£0.05	77.27	£3.86	2,962.72	£148.14	68.30	£3.41
1066 - IT	Teaching Area:High Density IT Suite	63.15	£0.05	112.48	£5.62	4,312.95	£215.65	68.30	£3.41
1067 - Store	Storage Area/Cupboard	11.39	£0.05	20.29	£1.01	777.90	£38.90	68.30	£3.41
1068 - IT	Teaching Area:High Density IT Suite	55.76	£0.05	99.32	£4.97	3,808.24	£190.41	68.30	£3.41
1069 - Office	Cellular Office Area	7.03	£0.05	12.52	£0.63	480.13	£24.01	68.30	£3.41
1070 - Needlecraft/Textiles	Teaching Area:Workshop	72.03	£0.05	727.64	£36.38	4,821.03	£241.05	66.93	£3.35
1070 - Staff Room	Cellular Office Area	72.03	£0.05	128.30	£6.41	4,919.43	£245.97	68.30	£3.41
1071 - Teaching Storage	Storage Area/Cupboard	7.66	£0.05	77.38	£3.87	512.69	£25.63	66.93	£3.35
1072 - Corridor	Circulation area (corridors and stairways)	32.03	£0.05	57.05	£2.85	2,187.55	£109.38	68.30	£3.41
1073 - Plant	Light Plant Room	6.76	£0.05	12.04	£0.60	461.69	£23.08	68.30	£3.41
1074 - Classroom	Teaching Area:General	62.39	£0.05	222.26	£11.11	8,522.09	£426.10	136.59	£6.83
1074 - Heavy Practical/Cookery	Teaching Area:Food Technology	62.39	£0.05	1,260.51	£63.03	8,351.64	£417.58	133.86	£6.69
1075 - Office	Cellular Office Area	3.54	£0.05	6.31	£0.32	241.77	£12.09	68.30	£3.41
1075 - Teaching Storage	Storage Area/Cupboard	10.74	£0.05	108.49	£5.42	718.84	£35.94	66.93	£3.35

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1075a Store	Storage Area/Cupboard	1.98	£0.05	3.53	£0.18	135.23	£6.76	68.30	£3.41
1076 - Office	Cellular Office Area	9.5	£0.05	16.92	£0.85	648.82	£32.44	68.30	£3.41
1077 - Heavy Practical/Cookery	Teaching Area:Food Technology	66.65	£0.05	1,346.57	£67.33	8,921.89	£446.09	133.86	£6.69
1077 - Kitchen	Teaching Area:Food Technology	66.65	£0.05	237.43	£11.87	9,103.98	£455.20	136.59	£6.83
1078 - Store	Storage Area/Cupboard	14.15	£0.05	25.20	£1.26	966.40	£48.32	68.30	£3.41
1079 - Store	Storage Area/Cupboard	3.82	£0.05	6.80	£0.34	260.89	£13.04	68.30	£3.41
1079a Store	Storage Area/Cupboard	1.84	£0.05	3.28	£0.16	125.67	£6.28	68.30	£3.41
1080 - Heavy Practical/Cookery	Teaching Area:Food Technology	83.21	£0.05	1,681.15	£84.06	11,138.64	£556.93	133.86	£6.69
1080 - Kitchen	Teaching Area:Food Technology	83.21	£0.05	296.43	£14.82	11,365.97	£568.30	136.59	£6.83
1081 - Store	Storage Area/Cupboard	9.43	£0.05	16.80	£0.84	644.04	£32.20	68.30	£3.41
1082 - Corridor	Circulation area (corridors and stairways)	24.13	£0.05	42.98	£2.15	1,648.00	£82.40	68.30	£3.41
1083 - Store	Storage Area/Cupboard	9.2	£0.05	16.39	£0.82	628.33	£31.42	68.30	£3.41
1084 - IT	Teaching Area:High Density IT Suite	62.36	£0.05	111.07	£5.55	4,258.99	£212.95	68.30	£3.41
1085 - Store	Storage Area/Cupboard	7.4	£0.05	13.18	£0.66	505.40	£25.27	68.30	£3.41
1086 - Tech	Teaching Area:Workshop	169.24	£0.05	301.45	£15.07	11,558.57	£577.93	68.30	£3.41
1087 - Store	Storage Area/Cupboard	6.82	£0.05	12.15	£0.61	465.78	£23.29	68.30	£3.41
1088 - Teaching Storage	Storage Area/Cupboard	5.05	£0.05	51.01	£2.55	338.00	£16.90	66.93	£3.35
1089 - Circulation	Circulation area (corridors and stairways)	6.79	£0.05	68.59	£3.43	454.46	£22.72	66.93	£3.35
1090 - Store	Storage Area/Cupboard	7.34	£0.05	13.07	£0.65	501.30	£25.06	68.30	£3.41
1091 - Store	Storage Area/Cupboard	2.33	£0.05	4.15	£0.21	159.13	£7.96	68.30	£3.41
1092 - IT	Teaching Area:High Density IT Suite	108.85	£0.05	193.88	£9.69	7,434.12	£371.71	68.30	£3.41
1093 - Corridor	Circulation area (corridors and stairways)	33.4	£0.05	59.49	£2.97	2,281.12	£114.06	68.30	£3.41
1094 - Stairs/Lobby	Circulation area (corridors and stairways)	20.03	£0.05	35.68	£1.78	1,367.99	£68.40	68.30	£3.41
1095 - Store	Storage Area/Cupboard	2.12	£0.05	3.78	£0.19	144.79	£7.24	68.30	£3.41
1096 - Teaching Storage	Storage Area/Cupboard	1.34	£0.05	13.54	£0.68	89.69	£4.48	66.93	£3.35
1097 - Tech Store	Storage Area/Cupboard	9.22	£0.05	16.42	£0.82	629.70	£31.48	68.30	£3.41
1098 - Office	Cellular Office Area	16.49	£0.05	29.37	£1.47	1,126.22	£56.31	68.30	£3.41



Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1099 - Technology	Teaching Area:High Density IT Suite	85.11	£0.05	151.60	£7.58	5,812.75	£290.64	68.30	£3.41
1100 - Store	Storage Area/Cupboard	9.01	£0.05	16.05	£0.80	615.36	£30.77	68.30	£3.41
1101 - Corridor	Circulation area (corridors and stairways)	7.52	£0.05	13.39	£0.67	513.59	£25.68	68.30	£3.41
1102 - Heavy Practical/Cookery	Teaching Area:Food Technology	73.35	£0.05	1,481.94	£74.10	9,818.76	£490.94	133.86	£6.69
1102 - Technology Lab	Teaching Area:Workshop	73.35	£0.05	261.30	£13.07	10,019.16	£500.96	136.59	£6.83
1103 - Dust Extract	Storage Area/Cupboard	10.32	£0.05	18.38	£0.92	704.82	£35.24	68.30	£3.41
1104 - Corridor	Circulation area (corridors and stairways)	25.8	£0.05	45.95	£2.30	1,762.06	£88.10	68.30	£3.41
1105 - Ancillary	Storage Area/Cupboard	1.13	£0.05	11.42	£0.57	75.63	£3.78	66.93	£3.35
1105 - Cupboard	Storage Area/Cupboard	2.01	£0.05	3.58	£0.18	137.28	£6.86	68.30	£3.41
1106 - Classroom	Teaching Area:General	107.35	£0.05	191.21	£9.56	7,331.67	£366.58	68.30	£3.41
1107 - Technology lab	Teaching Area:Workshop	89.37	£0.05	159.18	£7.96	6,103.69	£305.18	68.30	£3.41
1108 - Teaching Storage	Storage Area/Cupboard	6.09	£0.05	10.85	£0.54	415.93	£20.80	68.30	£3.41
1108a Store?	Storage Area/Cupboard	6.09	£0.05	10.85	£0.54	415.93	£20.80	68.30	£3.41
1109 - Ancillary	Storage Area/Cupboard	3.59	£0.05	36.27	£1.81	240.28	£12.01	66.93	£3.35
1110 - Corridor	Circulation area (corridors and stairways)	34.14	£0.05	60.81	£3.04	2,331.66	£116.58	68.30	£3.41
1111 - Classroom	Teaching Area:General	56.85	£0.05	101.26	£5.06	3,882.68	£194.13	68.30	£3.41
1112 - Classroom	Teaching Area:General	56.91	£0.05	101.37	£5.07	3,886.78	£194.34	68.30	£3.41
1113 - Classroom	Teaching Area:General	64.03	£0.05	114.05	£5.70	4,373.05	£218.65	68.30	£3.41
1114 - Circulation	Circulation area (corridors and stairways)	18.7	£0.05	33.31	£1.67	1,277.15	£63.86	68.30	£3.41
1115 - Office	Cellular Office Area	21.28	£0.05	37.90	£1.90	1,453.36	£72.67	68.30	£3.41
1116 - Classroom	Teaching Area:General	69.26	£0.05	123.37	£6.17	4,730.24	£236.51	68.30	£3.41
1117 - Office	Cellular Office Area	10.13	£0.05	18.04	£0.90	691.85	£34.59	68.30	£3.41
1117 - Teaching Storage	Storage Area/Cupboard	10.13	£0.05	102.33	£5.12	678.01	£33.90	66.93	£3.35
1118 - Photocopy	Cellular Office Area	5.5	£0.05	9.80	£0.49	375.63	£18.78	68.30	£3.41
1119 - Stairs	Circulation area (corridors and stairways)	18.56	£0.05	33.06	£1.65	1,267.59	£63.38	68.30	£3.41
1120 - Store	Storage Area/Cupboard	4.25	£0.05	7.57	£0.38	290.26	£14.51	68.30	£3.41
1121 - Art Room 1	Teaching Area:ICT Rich Classroom	91.73	£0.05	326.78	£16.34	12,529.75	£626.49	136.59	£6.83
1121 - WC	Toilet	7.61	£0.05	27.11	£1.36	1,039.48	£51.97	136.59	£6.83
1122 - Store	Storage Area/Cupboard	7.05	£0.05	12.56	£0.63	481.49	£24.07	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
1122 - WC	Toilet	7.25	£0.05	25.83	£1.29	990.31	£49.52	136.59	£6.83
1123 - Corridor	Circulation area (corridors and stairways)	22.81	£0.05	40.63	£2.03	1,557.85	£77.89	68.30	£3.41
1124 - Kiln Room	Teaching Area:Workshop	13.71	£0.05	24.42	£1.22	936.35	£46.82	68.30	£3.41
1125 - Art Room	Teaching Area:ICT Rich Classroom	13.79	£0.05	24.56	£1.23	941.81	£47.09	68.30	£3.41
1126 - Art Room	Teaching Area:ICT Rich Classroom	13.47	£0.05	23.99	£1.20	919.96	£46.00	68.30	£3.41
1127 - Accessible WC	Toilet	5.35	£0.05	19.06	£0.95	730.78	£36.54	136.59	£6.83
1128 - Toilets	Toilet	11.4	£0.05	40.61	£2.03	1,557.17	£77.86	136.59	£6.83
1129 - Art Room 2	Teaching Area:ICT Rich Classroom	91.25	£0.05	325.07	£16.25	12,464.18	£623.21	136.59	£6.83
1130 - Store	Storage Area/Cupboard	4.66	£0.05	8.30	£0.42	318.26	£15.91	68.30	£3.41
1131 - Corridor	Circulation area (corridors and stairways)	32.24	£0.05	57.43	£2.87	2,201.89	£110.09	68.30	£3.41
1132 - Art Room 3	Teaching Area:ICT Rich Classroom	90.25	£0.05	321.50	£16.08	12,327.59	£616.38	136.59	£6.83
1133 - Store	Storage Area/Cupboard	6.77	£0.05	12.06	£0.60	462.37	£23.12	68.30	£3.41
1137 - Stairs/Lobby	Circulation area (corridors and stairways)	41.87	£0.05	74.58	£3.73	2,859.59	£142.98	68.30	£3.41
1138 - Ancillary	Storage Area/Cupboard	3.51	£0.05	35.46	£1.77	234.93	£11.75	66.93	£3.35
1138 - Lift	Lifts	3.51	£0.05	6.25	£0.31	239.72	£11.99	68.30	£3.41
1186 - Staircase	Circulation area (corridors and stairways)	26.96	£0.05	48.02	£2.40	1,841.28	£92.06	68.30	£3.41
2000 Lift	Lifts	3.76	£0.05	6.70	£0.33	256.80	£12.84	68.30	£3.41
2001 - WC	Toilet	12.68	£0.05	45.17	£2.26	1,732.01	£86.60	136.59	£6.83
2002 - Classroom	Teaching Area:General	42.66	£0.05	75.99	£3.80	2,913.55	£145.68	68.30	£3.41
2002 - General Teaching	Teaching Area:General	45.69	£0.05	461.55	£23.08	3,058.07	£152.90	66.93	£3.35
2002a - Store	Storage Area/Cupboard	1.17	£0.05	2.08	£0.10	79.91	£4.00	68.30	£3.41
2002b - Store	Storage Area/Cupboard	1.13	£0.05	2.01	£0.10	77.18	£3.86	68.30	£3.41
2003 - Classroom	Teaching Area:General	45.84	£0.05	81.65	£4.08	3,130.73	£156.54	68.30	£3.41
2003 - General Teaching	Teaching Area:General	48.56	£0.05	490.55	£24.53	3,250.16	£162.51	66.93	£3.35
2003a - Store	Storage Area/Cupboard	2.35	£0.05	4.19	£0.21	160.50	£8.02	68.30	£3.41
2004 - Store	Storage Area/Cupboard	7.18	£0.05	12.79	£0.64	490.37	£24.52	68.30	£3.41
2004 - Teaching Storage	Storage Area/Cupboard	8.18	£0.05	82.63	£4.13	547.49	£27.37	66.93	£3.35
2005 - Classroom	Teaching Area:General	45.68	£0.05	81.36	£4.07	3,119.80	£155.99	68.30	£3.41
2005 - General Teaching	Teaching Area:General	48.16	£0.05	486.50	£24.33	3,223.39	£161.17	66.93	£3.35

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2006 - Teaching Storage	Storage Area/Cupboard	1.8	£0.05	18.18	£0.91	120.48	£6.02	66.93	£3.35
2007 - Classroom	Teaching Area:General	43	£0.05	76.59	£3.83	2,936.77	£146.84	68.30	£3.41
2007 - General Teaching	Teaching Area:General	46.06	£0.05	465.29	£23.26	3,082.84	£154.14	66.93	£3.35
2007a - Store	Storage Area/Cupboard	5.14	£0.05	9.16	£0.46	351.05	£17.55	68.30	£3.41
2008 - Corridor	Circulation area (corridors and stairways)	41.71	£0.05	74.29	£3.71	2,848.66	£142.43	68.30	£3.41
2009 - SEN	Teaching Area:Sensory Room	22.9	£0.05	40.79	£2.04	1,564.00	£78.20	68.30	£3.41
2010 - WC	Toilet	14.1	£0.05	50.23	£2.51	1,925.97	£96.30	136.59	£6.83
2011 - SEN	Teaching Area:Sensory Room	11.65	£0.05	20.75	£1.04	795.66	£39.78	68.30	£3.41
2012 - Learning Support	Cellular Office Area	5.8	£0.05	10.33	£0.52	396.12	£19.81	68.30	£3.41
2012 - Staff and Admin. spaces	Cellular Office Area	5.8	£0.05	58.59	£2.93	388.20	£19.41	66.93	£3.35
2013 - Store	Storage Area/Cupboard	1.32	£0.05	2.35	£0.12	90.15	£4.51	68.30	£3.41
2014 - WC	Toilet	15.32	£0.05	54.58	£2.73	2,092.62	£104.63	136.59	£6.83
2015 - SEN	Teaching Area:Sensory Room	15.21	£0.05	27.09	£1.35	1,038.80	£51.94	68.30	£3.41
2016 - SEN	Teaching Area:Sensory Room	46.03	£0.05	81.99	£4.10	3,143.71	£157.19	68.30	£3.41
2017 - SEN	Teaching Area:Sensory Room	26.32	£0.05	46.88	£2.34	1,797.57	£89.88	68.30	£3.41
2018 - Corridor	Circulation area (corridors and stairways)	28.94	£0.05	51.55	£2.58	1,976.51	£98.83	68.30	£3.41
2019 - Classroom	Teaching Area:General	52.45	£0.05	93.42	£4.67	3,582.17	£179.11	68.30	£3.41
2020 - IT	Teaching Area:High Density IT Suite	31.9	£0.05	56.82	£2.84	2,178.67	£108.93	68.30	£3.41
2021 - Store	Storage Area/Cupboard	2.95	£0.05	5.25	£0.26	201.48	£10.07	68.30	£3.41
2022 - Classroom	Teaching Area:General	40.5	£0.05	72.14	£3.61	2,766.02	£138.30	68.30	£3.41
2023 - Circulation	Circulation area (corridors and stairways)	17.71	£0.05	31.54	£1.58	1,209.54	£60.48	68.30	£3.41
2024 - Office	Cellular Office Area	12.96	£0.05	23.08	£1.15	885.13	£44.26	68.30	£3.41
2025 - Corridor	Circulation area (corridors and stairways)	50.18	£0.05	89.38	£4.47	3,427.14	£171.36	68.30	£3.41
2026 - Classroom	Teaching Area:General	64.48	£0.05	114.85	£5.74	4,403.78	£220.19	68.30	£3.41
2027 - House Keeping	Storage Area/Cupboard	14.05	£0.05	25.03	£1.25	959.57	£47.98	68.30	£3.41
2028 - Store	Storage Area/Cupboard	1.53	£0.05	2.73	£0.14	104.49	£5.22	68.30	£3.41
2029 - Store	Storage Area/Cupboard	19.84	£0.05	35.34	£1.77	1,355.01	£67.75	68.30	£3.41
2030 - Classroom	Teaching Area:General	58.02	£0.05	103.34	£5.17	3,962.59	£198.13	68.30	£3.41
2030 - IT	Teaching Area:High Density IT Suite	58.02	£0.05	586.11	£29.31	3,883.33	£194.17	66.93	£3.35

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2031 - Office	Cellular Office Area	12.41	£0.05	22.10	£1.11	847.56	£42.38	68.30	£3.41
2032 - Circulation	Circulation area (corridors and stairways)	17.34	£0.05	30.89	£1.54	1,184.27	£59.21	68.30	£3.41
2033 - Classroom	Teaching Area:General	60.19	£0.05	107.21	£5.36	4,110.79	£205.54	68.30	£3.41
2034 - Office	Cellular Office Area	11.89	£0.05	21.18	£1.06	812.05	£40.60	68.30	£3.41
2035 - Laboratory	Teaching Area:Laboratory	86.29	£0.05	153.70	£7.68	5,893.34	£294.67	68.30	£3.41
2036 - Preparation Room	Teaching Area:Laboratory	23.79	£0.05	42.37	£2.12	1,624.78	£81.24	68.30	£3.41
2036 - Staff and Admin. spaces	Cellular Office Area	23.79	£0.05	240.32	£12.02	1,592.29	£79.61	66.93	£3.35
2037 - Corridor	Circulation area (corridors and stairways)	35.23	£0.05	62.75	£3.14	2,406.10	£120.30	68.30	£3.41
2038 - Laboratory	Teaching Area:Laboratory	80.19	£0.05	142.83	£7.14	5,476.73	£273.84	68.30	£3.41
2039 - Store	Storage Area/Cupboard	5.66	£0.05	10.08	£0.50	386.56	£19.33	68.30	£3.41
2040 - Laboratory	Teaching Area:Laboratory	89.03	£0.05	158.58	£7.93	6,080.47	£304.02	68.30	£3.41
2041 - Store	Storage Area/Cupboard	7.87	£0.05	14.02	£0.70	537.50	£26.87	68.30	£3.41
2041a Office	Cellular Office Area	5.4	£0.05	9.62	£0.48	368.80	£18.44	68.30	£3.41
2042 - Stairs	Circulation area (corridors and stairways)	17.75	£0.05	31.62	£1.58	1,212.27	£60.61	68.30	£3.41
2043 - Preparation Room	Teaching Area:Laboratory	34.2	£0.05	60.92	£3.05	2,335.75	£116.79	68.30	£3.41
2043 - Staff and Admin. spaces	Cellular Office Area	34.2	£0.05	345.48	£17.27	2,289.04	£114.45	66.93	£3.35
2044 - Teaching Storage	Storage Area/Cupboard	4.35	£0.05	43.94	£2.20	291.15	£14.56	66.93	£3.35
2045 - Science Office	Cellular Office Area	20.57	£0.05	36.64	£1.83	1,404.87	£70.24	68.30	£3.41
2046 - Laboratory	Teaching Area:Laboratory	86.65	£0.05	154.34	£7.72	5,917.93	£295.90	68.30	£3.41
2047 - Corridor	Circulation area (corridors and stairways)	50.62	£0.05	90.16	£4.51	3,457.19	£172.86	68.30	£3.41
2047a - Counselling Room	Consulting/treatment room	4.95	£0.05	8.82	£0.44	338.07	£16.90	68.30	£3.41
2048 - Store	Storage Area/Cupboard	3.76	£0.05	6.70	£0.33	256.80	£12.84	68.30	£3.41
2049 - Laboratory	Teaching Area:Laboratory	93.85	£0.05	167.16	£8.36	6,409.66	£320.48	68.30	£3.41
2050 - Laboratory	Teaching Area:Laboratory	88	£0.05	156.74	£7.84	6,010.13	£300.51	68.30	£3.41
2051 - Corridor	Circulation area (corridors and stairways)	37.19	£0.05	66.24	£3.31	2,539.96	£127.00	68.30	£3.41
2052 - Chemical Store	Storage Area/Cupboard	26.04	£0.05	46.38	£2.32	1,778.45	£88.92	68.30	£3.41
2053 - Office	Cellular Office Area	15.43	£0.05	27.48	£1.37	1,053.82	£52.69	68.30	£3.41
2054 - Laboratory	Teaching Area:Laboratory	37	£0.05	65.90	£3.30	2,526.99	£126.35	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2055 - Laboratory	Teaching Area:Laboratory	100.7	£0.05	179.37	£8.97	6,877.50	£343.87	68.30	£3.41
2056 - Laboratory	Teaching Area:Laboratory	88.24	£0.05	157.17	£7.86	6,026.52	£301.33	68.30	£3.41
2057 - Store	Storage Area/Cupboard	4.34	£0.05	7.73	£0.39	296.41	£14.82	68.30	£3.41
2058 - Corridor	Circulation area (corridors and stairways)	33.34	£0.05	59.38	£2.97	2,277.02	£113.85	68.30	£3.41
2059 - General Teaching	Teaching Area:General	40.93	£0.05	413.47	£20.67	2,739.48	£136.97	66.93	£3.35
2059 - IT	Teaching Area:High Density IT Suite	40.93	£0.05	72.90	£3.65	2,795.39	£139.77	68.30	£3.41
2060 - Classroom	Teaching Area:General	39.62	£0.05	70.57	£3.53	2,705.92	£135.30	68.30	£3.41
2061 - Plant	Light Plant Room	2.79	£0.05	4.97	£0.25	190.55	£9.53	68.30	£3.41
2062 - Common Room	Lounges	53.1	£0.05	536.41	£26.82	3,554.03	£177.70	66.93	£3.35
2062 - Meeting Room	Meeting Room	53.1	£0.05	94.58	£4.73	3,626.57	£181.33	68.30	£3.41
2063 - Study	Teaching Area:Learning Resource Centre	48.62	£0.05	86.60	£4.33	3,320.60	£166.03	68.30	£3.41
2064 - Corridor	Circulation area (corridors and stairways)	50.86	£0.05	90.59	£4.53	3,473.58	£173.68	68.30	£3.41
2065 - Store	Storage Area/Cupboard	2.97	£0.05	5.29	£0.26	202.84	£10.14	68.30	£3.41
2066 - Office	Cellular Office Area	9.57	£0.05	17.05	£0.85	653.60	£32.68	68.30	£3.41
2066 - Staff and Admin. spaces	Cellular Office Area	23.77	£0.05	240.12	£12.01	1,590.95	£79.55	66.93	£3.35
2066a - Office	Cellular Office Area	7.05	£0.05	12.56	£0.63	481.49	£24.07	68.30	£3.41
2067 - Office	Cellular Office Area	23.82	£0.05	42.43	£2.12	1,626.83	£81.34	68.30	£3.41
2068 - Common Room	Lounges	57.74	£0.05	583.28	£29.16	3,864.59	£193.23	66.93	£3.35
2068 - Meeting Room	Lounges	57.74	£0.05	102.85	£5.14	3,943.46	£197.17	68.30	£3.41
2069 - Store	Storage Area/Cupboard	1.61	£0.05	2.87	£0.14	109.96	£5.50	68.30	£3.41
2070 - WC	Toilet	23.62	£0.05	84.14	£4.21	3,226.35	£161.32	136.59	£6.83
2071 - WC	Toilet	16.87	£0.05	60.10	£3.00	2,304.34	£115.22	136.59	£6.83
2072 - Common Room	Lounges	60.08	£0.05	606.92	£30.35	4,021.21	£201.06	66.93	£3.35
2072 - Meeting Room	Meeting Room	60.08	£0.05	107.01	£5.35	4,103.28	£205.16	68.30	£3.41
2072 - Teaching Storage	Storage Area/Cupboard	4.95	£0.05	50.00	£2.50	331.31	£16.57	66.93	£3.35
2073 - Common Room	Lounges	20.4	£0.05	36.34	£1.82	1,393.26	£69.66	68.30	£3.41
2074 - SEN	Teaching Area:Sensory Room	6.25	£0.05	11.13	£0.56	426.86	£21.34	68.30	£3.41
2075 - SEN	Teaching Area:Sensory Room	2.75	£0.05	4.90	£0.24	187.82	£9.39	68.30	£3.41
2076 - SEN Classroom	Teaching Area:Sensory Room	2.75	£0.05	27.78	£1.39	184.06	£9.20	66.93	£3.35

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
2114 - Stairs	Circulation area (corridors and stairways)	15.07	£0.05	26.84	£1.34	1,029.23	£51.46	68.30	£3.41
2119 - Stairs	Circulation area (corridors and stairways)	20.26	£0.05	36.09	£1.80	1,383.70	£69.18	68.30	£3.41
2137 - Stairs/Lobby	Circulation area (corridors and stairways)	25.71	£0.05	45.79	£2.29	1,755.91	£87.80	68.30	£3.41
2138 - Ancillary	Storage Area/Cupboard	3.51	£0.05	35.46	£1.77	234.93	£11.75	66.93	£3.35
2138 - Lift	Lifts	3.51	£0.05	6.25	£0.31	239.72	£11.99	68.30	£3.41
2194 - Stairs	Circulation area (corridors and stairways)	25.52	£0.05	45.46	£2.27	1,742.94	£87.15	68.30	£3.41
3000 Lift	Lifts	3.76	£0.05	6.70	£0.33	256.80	£12.84	68.30	£3.41
3001 - Circulation	Circulation area (corridors and stairways)	10.95	£0.05	110.62	£5.53	732.89	£36.64	66.93	£3.35
3001 - Office	Cellular Office Area	10.95	£0.05	19.50	£0.98	747.85	£37.39	68.30	£3.41
3002 - Classroom	Teaching Area:General	45.27	£0.05	80.63	£4.03	3,091.80	£154.59	68.30	£3.41
3002a - Store	Storage Area/Cupboard	1.15	£0.05	2.05	£0.10	78.54	£3.93	68.30	£3.41
3002b - Store	Storage Area/Cupboard	1.15	£0.05	2.05	£0.10	78.54	£3.93	68.30	£3.41
3003 - Teaching Storage	Storage Area/Cupboard	1.73	£0.05	17.48	£0.87	115.79	£5.79	66.93	£3.35
3004 - Classroom	Teaching Area:General	48.57	£0.05	86.51	£4.33	3,317.18	£165.86	68.30	£3.41
3004a - Store	Storage Area/Cupboard	1.15	£0.05	2.05	£0.10	78.54	£3.93	68.30	£3.41
3004b - Store	Storage Area/Cupboard	1.15	£0.05	2.05	£0.10	78.54	£3.93	68.30	£3.41
3005 - Boiler/Plant	Light Plant Room	8.15	£0.05	82.33	£4.12	545.49	£27.27	66.93	£3.35
3005 - Office	Cellular Office Area	8.15	£0.05	14.52	£0.73	556.62	£27.83	68.30	£3.41
3006 - Classroom	Teaching Area:General	48.03	£0.05	85.55	£4.28	3,280.30	£164.02	68.30	£3.41
3006a - Store	Storage Area/Cupboard	1.17	£0.05	2.08	£0.10	79.91	£4.00	68.30	£3.41
3006b - Store	Storage Area/Cupboard	1.13	£0.05	2.01	£0.10	77.18	£3.86	68.30	£3.41
3006c Lobby	Circulation area (corridors and stairways)	2.13	£0.05	3.79	£0.19	145.47	£7.27	68.30	£3.41
3007 - Teaching Storage	Storage Area/Cupboard	1.71	£0.05	3.05	£0.15	116.79	£5.84	68.30	£3.41
3008 - Classroom	Teaching Area:General	45.84	£0.05	81.65	£4.08	3,130.73	£156.54	68.30	£3.41
3008a - Store	Storage Area/Cupboard	2.35	£0.05	4.19	£0.21	160.50	£8.02	68.30	£3.41
3023 - Stairs	Circulation area (corridors and stairways)	16.77	£0.05	29.87	£1.49	1,145.34	£57.27	68.30	£3.41
3042 - Stairs	Circulation area (corridors and stairways)	17.75	£0.05	31.62	£1.58	1,212.27	£60.61	68.30	£3.41
B001 - Boiler Room	Light Plant Room	67	£0.05	119.34	£5.97	4,575.89	£228.79	68.30	£3.41
Cupboard - Storage Area/Cupboard	Storage Area/Cupboard	2.66	£0.05	4.74	£0.24	181.67	£9.08	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
EXT - External Space	External Space								
G000 Lift	Lifts	4.81	£0.05	8.57	£0.43	328.51	£16.43	68.30	£3.41
G001 - Art	Teaching Area:ICT Rich Classroom	86.93	£0.05	878.15	£43.91	5,818.30	£290.92	66.93	£3.35
G001 - Science Laboratory	Teaching Area:Laboratory	86.93	£0.05	154.84	£7.74	5,937.05	£296.85	68.30	£3.41
G002 - Preparation Room	Cellular Office Area	11.67	£0.05	20.79	£1.04	797.02	£39.85	68.30	£3.41
G002 - Teaching Storage	Storage Area/Cupboard	11.67	£0.05	117.89	£5.89	781.08	£39.05	66.93	£3.35
G003 - Teaching Storage	Storage Area/Cupboard	8.33	£0.05	84.15	£4.21	557.53	£27.88	66.93	£3.35
G004 - Art	Teaching Area:ICT Rich Classroom	83.27	£0.05	841.18	£42.06	5,573.34	£278.67	66.93	£3.35
G004 - Science Laboratory	Teaching Area:Laboratory	83.27	£0.05	148.32	£7.42	5,687.08	£284.35	68.30	£3.41
G005 - Corridor	Circulation area (corridors and stairways)	56.73	£0.05	101.05	£5.05	3,874.48	£193.72	68.30	£3.41
G006 - Stairs/Lobby	Circulation area (corridors and stairways)	10.64	£0.05	18.95	£0.95	726.68	£36.33	68.30	£3.41
G007 - Store	Storage Area/Cupboard	2.55	£0.05	4.54	£0.23	174.16	£8.71	68.30	£3.41
G008 - WC	Toilet	25.69	£0.05	91.52	£4.58	3,509.09	£175.45	136.59	£6.83
G009 - Store	Storage Area/Cupboard	1.74	£0.05	3.10	£0.15	118.84	£5.94	68.30	£3.41
G010 - Art	Teaching Area:ICT Rich Classroom	54.18	£0.05	547.32	£27.37	3,626.32	£181.32	66.93	£3.35
G010 - Classroom	Teaching Area:General	54.18	£0.05	96.50	£4.83	3,700.33	£185.02	68.30	£3.41
G011 - Art	Teaching Area:ICT Rich Classroom	88.16	£0.05	890.58	£44.53	5,900.63	£295.03	66.93	£3.35
G011 - Laboratory	Teaching Area:Laboratory	88.16	£0.05	157.03	£7.85	6,021.05	£301.05	68.30	£3.41
G012 - Lobby	Circulation area (corridors and stairways)	3.16	£0.05	5.63	£0.28	215.82	£10.79	68.30	£3.41
G013 - Preparation Room	Cellular Office Area	8.53	£0.05	15.19	£0.76	582.57	£29.13	68.30	£3.41
G013 - Staff and Admin. spaces	Cellular Office Area	8.53	£0.05	86.17	£4.31	570.92	£28.55	66.93	£3.35
G014 - Classroom	Teaching Area:General	38	£0.05	67.69	£3.38	2,595.28	£129.76	68.30	£3.41
G015 - WC	Toilet	25.6	£0.05	91.20	£4.56	3,496.80	£174.84	136.59	£6.83
G016 - Lobby	Circulation area (corridors and stairways)	2.84	£0.05	5.06	£0.25	193.96	£9.70	68.30	£3.41
G017 - Head Teacher Office	Cellular Office Area	33.4	£0.05	59.49	£2.97	2,281.12	£114.06	68.30	£3.41
G018 - WC	Toilet	3.21	£0.05	11.44	£0.57	438.47	£21.92	136.59	£6.83
G019 - WC	Toilet	11.13	£0.05	39.65	£1.98	1,520.29	£76.01	136.59	£6.83
G020 - Corridor	Circulation area (corridors and stairways)	21.36	£0.05	38.05	£1.90	1,458.82	£72.94	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G021 - Store	Storage Area/Cupboard	0.91	£0.05	1.62	£0.08	62.15	£3.11	68.30	£3.41
G022 - WC	Toilet	10.25	£0.05	36.51	£1.83	1,400.09	£70.00	136.59	£6.83
G023 - Stairs	Circulation area (corridors and stairways)	5.67	£0.05	10.10	£0.50	387.24	£19.36	68.30	£3.41
G024 - Office	Cellular Office Area	19.81	£0.05	35.29	£1.76	1,352.96	£67.65	68.30	£3.41
G025 - Corridor	Circulation area (corridors and stairways)	15.49	£0.05	27.59	£1.38	1,057.92	£52.90	68.30	£3.41
G026 - Classroom	Teaching Area:General	53.95	£0.05	96.10	£4.80	3,684.62	£184.23	68.30	£3.41
G027 - Office	Cellular Office Area	14.9	£0.05	26.54	£1.33	1,017.62	£50.88	68.30	£3.41
G028 - Store	Storage Area/Cupboard	2.75	£0.05	4.90	£0.24	187.82	£9.39	68.30	£3.41
G029 - Store	Storage Area/Cupboard	2.9	£0.05	5.17	£0.26	198.06	£9.90	68.30	£3.41
G030 - Store	Storage Area/Cupboard	1.35	£0.05	2.40	£0.12	92.20	£4.61	68.30	£3.41
G030 - Teaching Storage	Storage Area/Cupboard	2.06	£0.05	20.81	£1.04	137.88	£6.89	66.93	£3.35
G031 - Circulation	Circulation area (corridors and stairways)	23.29	£0.05	235.27	£11.76	1,558.82	£77.94	66.93	£3.35
G032 - Office	Cellular Office Area	20.61	£0.05	36.71	£1.84	1,407.60	£70.38	68.30	£3.41
G033 - Store	Storage Area/Cupboard	2.06	£0.05	3.67	£0.18	140.69	£7.03	68.30	£3.41
G033 - Teaching Storage	Storage Area/Cupboard	1.35	£0.05	13.64	£0.68	90.36	£4.52	66.93	£3.35
G034 - Circulation	Circulation area (corridors and stairways)	12.88	£0.05	130.11	£6.51	862.07	£43.10	66.93	£3.35
G035 - Circulation	Circulation area (corridors and stairways)	68.48	£0.05	121.98	£6.10	4,676.97	£233.85	68.30	£3.41
G035 - Staff and Admin. spaces	Cellular Office Area	11.29	£0.05	114.05	£5.70	755.65	£37.78	66.93	£3.35
G036 - Office	Cellular Office Area	41.03	£0.05	73.08	£3.65	2,802.22	£140.11	68.30	£3.41
G037 - Office	Cellular Office Area	8.66	£0.05	15.43	£0.77	591.45	£29.57	68.30	£3.41
G038 - Office	Cellular Office Area	7.99	£0.05	14.23	£0.71	545.69	£27.28	68.30	£3.41
G039 - Office	Cellular Office Area	11.53	£0.05	20.54	£1.03	787.46	£39.37	68.30	£3.41
G040 - Store	Storage Area/Cupboard	1.21	£0.05	2.16	£0.11	82.64	£4.13	68.30	£3.41
G041 - Electric	Storage Area/Cupboard	5.17	£0.05	9.21	£0.46	353.09	£17.65	68.30	£3.41
G042 - Stairs/Lobby	Circulation area (corridors and stairways)	18.14	£0.05	32.31	£1.62	1,238.91	£61.95	68.30	£3.41
G043 - Office	Cellular Office Area	2.56	£0.05	4.56	£0.23	174.84	£8.74	68.30	£3.41
G043 - Teaching Storage	Storage Area/Cupboard	1.51	£0.05	15.25	£0.76	101.07	£5.05	66.93	£3.35
G044 - Medical	Consulting/treatment room	11.15	£0.05	19.86	£0.99	761.51	£38.08	68.30	£3.41



Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G044 - Staff and Admin. spaces	Cellular Office Area	11.15	£0.05	112.64	£5.63	746.28	£37.31	66.93	£3.35
G045 - Office	Cellular Office Area	15.92	£0.05	28.36	£1.42	1,087.29	£54.36	68.30	£3.41
G046 - Circulation	Circulation area (corridors and stairways)	43.19	£0.05	436.30	£21.81	2,890.75	£144.54	66.93	£3.35
G047 - Hall	Teaching Area:Dry Sports Hall	194.18	£0.05	1,863.35	£93.17	12,345.82	£617.29	63.58	£3.18
G048 - Drama	Teaching Area:Studio	56.21	£0.05	1,160.70	£58.04	7,690.37	£384.52	136.81	£6.84
G049 - Drama	Teaching Area:Studio	50.26	£0.05	182.99	£9.15	7,016.66	£350.83	139.61	£6.98
G050 - Drama	Teaching Area:Studio	52.36	£0.05	190.64	£9.53	7,309.83	£365.49	139.61	£6.98
G051 - Lobby	Circulation area (corridors and stairways)	11.54	£0.05	20.55	£1.03	788.15	£39.41	68.30	£3.41
G052 - Store	Storage Area/Cupboard	3.46	£0.05	6.16	£0.31	236.31	£11.82	68.30	£3.41
G053 - WC	Toilet	4.04	£0.05	14.39	£0.72	551.84	£27.59	136.59	£6.83
G054 - Store	Storage Area/Cupboard	7.49	£0.05	13.34	£0.67	511.54	£25.58	68.30	£3.41
G055 - Duct	Storage Area/Cupboard	0.83	£0.05	1.48	£0.07	56.69	£2.83	68.30	£3.41
G056 - Store	Storage Area/Cupboard	2.07	£0.05	3.69	£0.18	141.37	£7.07	68.30	£3.41
G057 - Store	Storage Area/Cupboard	3.75	£0.05	6.68	£0.33	256.11	£12.81	68.30	£3.41
G058 - Store	Storage Area/Cupboard	3.49	£0.05	6.22	£0.31	238.36	£11.92	68.30	£3.41
G059 - Circulation	Circulation area (corridors and stairways)	32.74	£0.05	330.73	£16.54	2,191.32	£109.57	66.93	£3.35
G060 - Teaching Storage	Storage Area/Cupboard	0.45	£0.05	4.55	£0.23	30.12	£1.51	66.93	£3.35
G061 - Circulation	Circulation area (corridors and stairways)	10.02	£0.05	101.22	£5.06	670.65	£33.53	66.93	£3.35
G062 - Pupil Changing / Toilets	Toilet	2.44	£0.05	49.30	£2.46	326.62	£16.33	133.86	£6.69
G063 - Pupil Changing / Toilets	Toilet	7.36	£0.05	148.70	£7.43	985.22	£49.26	133.86	£6.69
G064 - Pupil Changing / Toilets	Toilet	3.7	£0.05	74.75	£3.74	495.29	£24.76	133.86	£6.69
G065 - Staff and Admin. spaces	Cellular Office Area	11.97	£0.05	120.92	£6.05	801.16	£40.06	66.93	£3.35
G066 - Circulation	Circulation area (corridors and stairways)	6.61	£0.05	66.77	£3.34	442.41	£22.12	66.93	£3.35
G067 - Music	Teaching Area:Music	19.51	£0.05	197.09	£9.85	1,305.82	£65.29	66.93	£3.35
G068 - Music	Teaching Area:Music	57.43	£0.05	580.15	£29.01	3,843.84	£192.19	66.93	£3.35
G069 - Music	Teaching Area:Music	58.44	£0.05	590.35	£29.52	3,911.44	£195.57	66.93	£3.35
G070 - Music	Teaching Area:Music	23.89	£0.05	241.33	£12.07	1,598.98	£79.95	66.93	£3.35
G071 - Lobby	Circulation area (corridors and stairways)	18.18	£0.05	32.38	£1.62	1,241.64	£62.08	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G072 - Store	Storage Area/Cupboard	3.07	£0.05	5.47	£0.27	209.67	£10.48	68.30	£3.41
G073 - Office	Cellular Office Area	6.88	£0.05	12.25	£0.61	469.88	£23.49	68.30	£3.41
G074 - Office	Cellular Office Area	6.15	£0.05	10.95	£0.55	420.03	£21.00	68.30	£3.41
G075 - Gymnasium	Teaching Area:Fitness Suite/Gym	255.22	£0.05	929.25	£46.46	35,630.55	£1,781.53	139.61	£6.98
G076 - Store	Storage Area/Cupboard	15.57	£0.05	27.73	£1.39	1,063.38	£53.17	68.30	£3.41
G076 - Teaching Storage	Storage Area/Cupboard	11.52	£0.05	116.37	£5.82	771.04	£38.55	66.93	£3.35
G077 - Corridor	Circulation area (corridors and stairways)	19.95	£0.05	35.53	£1.78	1,362.52	£68.13	68.30	£3.41
G078 - Pupil Changing / Toilets	Toilet	8.72	£0.05	176.18	£8.81	1,167.27	£58.36	133.86	£6.69
G078 - Store	Storage Area/Cupboard	8.72	£0.05	31.06	£1.55	1,191.10	£59.55	136.59	£6.83
G079 - Lobby	Circulation area (corridors and stairways)	4.41	£0.05	7.86	£0.39	301.19	£15.06	68.30	£3.41
G080 - Changing Rooms	Changing Area with Shower	34.88	£0.05	124.26	£6.21	4,764.39	£238.22	136.59	£6.83
G081 - Pupil Changing / Toilets	Changing Area with Shower	13.69	£0.05	276.59	£13.83	1,832.57	£91.63	133.86	£6.69
G081 - Showers	Changing Area with Shower	13.69	£0.05	48.77	£2.44	1,869.97	£93.50	136.59	£6.83
G082 - Store	Storage Area/Cupboard	3.07	£0.05	5.47	£0.27	209.67	£10.48	68.30	£3.41
G083 - WC	Toilet	9.62	£0.05	34.27	£1.71	1,314.03	£65.70	136.59	£6.83
G084 - Lobby	Circulation area (corridors and stairways)	4.94	£0.05	8.80	£0.44	337.39	£16.87	68.30	£3.41
G085 - WC	Toilet	10.06	£0.05	35.84	£1.79	1,374.13	£68.71	136.59	£6.83
G086 - Changing Rooms	Changing Area with Shower	33.19	£0.05	118.24	£5.91	4,533.55	£226.68	136.59	£6.83
G087 - Store	Storage Area/Cupboard	2.71	£0.05	4.83	£0.24	185.08	£9.25	68.30	£3.41
G088 - Pupil Changing / Toilets	Changing Area with Shower	13.26	£0.05	267.90	£13.40	1,775.01	£88.75	133.86	£6.69
G088 - Showers	Changing Area with Shower	13.26	£0.05	47.24	£2.36	1,811.23	£90.56	136.59	£6.83
G089 - Stairs/Landing	Circulation area (corridors and stairways)	12.23	£0.05	21.78	£1.09	835.27	£41.76	68.30	£3.41
G090 - Store	Storage Area/Cupboard	1.38	£0.05	2.46	£0.12	94.25	£4.71	68.30	£3.41
G091 - Lobby	Circulation area (corridors and stairways)	5.38	£0.05	9.58	£0.48	367.44	£18.37	68.30	£3.41
G092 - Teaching Storage	Storage Area/Cupboard	1.21	£0.05	12.22	£0.61	80.99	£4.05	66.93	£3.35
G093 - Classroom	Teaching Area:General	52.42	£0.05	93.37	£4.67	3,580.12	£179.01	68.30	£3.41
G094 - WC	Toilet	9.88	£0.05	35.20	£1.76	1,349.55	£67.48	136.59	£6.83
G095 - Office	Cellular Office Area	8.7	£0.05	15.50	£0.77	594.18	£29.71	68.30	£3.41
G096 - Classroom	Teaching Area:General	51.06	£0.05	90.95	£4.55	3,487.24	£174.36	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G097 - Store	Storage Area/Cupboard	2.01	£0.05	3.58	£0.18	137.28	£6.86	68.30	£3.41
G098 - Corridor	Circulation area (corridors and stairways)	22.74	£0.05	40.50	£2.03	1,553.07	£77.65	68.30	£3.41
G099 - Hall	Teaching Area:Dry Sports Hall	48.93	£0.05	469.53	£23.48	3,110.93	£155.55	63.58	£3.18
G099 - Meeting Room	Meeting Room	48.93	£0.05	87.15	£4.36	3,341.77	£167.09	68.30	£3.41
G099a Tea Point	Catering: Kitchenette (small appliances, fridge)	5.06	£0.05	18.03	£0.90	691.16	£34.56	136.59	£6.83
G100 - Classroom	Teaching Area:General	48.92	£0.05	87.14	£4.36	3,341.08	£167.05	68.30	£3.41
G101 - Corridor	Circulation area (corridors and stairways)	29.23	£0.05	52.06	£2.60	1,996.32	£99.82	68.30	£3.41
G102 - WC	Toilet	11.37	£0.05	40.50	£2.03	1,553.07	£77.65	136.59	£6.83
G103 - Ducts	Storage Area/Cupboard	5.44	£0.05	9.69	£0.48	371.54	£18.58	68.30	£3.41
G104 - Electric Store	Storage Area/Cupboard	1.8	£0.05	3.21	£0.16	122.93	£6.15	68.30	£3.41
G105 - Classroom	Teaching Area:General	51.75	£0.05	92.18	£4.61	3,534.36	£176.72	68.30	£3.41
G106 - Deputy Head	Cellular Office Area	19.78	£0.05	35.23	£1.76	1,350.91	£67.55	68.30	£3.41
G107 - Classroom	Teaching Area:General	57.8	£0.05	102.95	£5.15	3,947.56	£197.38	68.30	£3.41
G108 - Store	Storage Area/Cupboard	3.18	£0.05	5.66	£0.28	217.18	£10.86	68.30	£3.41
G109 - Office	Cellular Office Area	22.5	£0.05	40.08	£2.00	1,536.68	£76.83	68.30	£3.41
G110 - Lobby	Circulation area (corridors and stairways)	14.67	£0.05	26.13	£1.31	1,001.92	£50.10	68.30	£3.41
G111 - Store	Storage Area/Cupboard	1.35	£0.05	2.40	£0.12	92.20	£4.61	68.30	£3.41
G112 - Office	Cellular Office Area	22.57	£0.05	40.20	£2.01	1,541.46	£77.07	68.30	£3.41
G113 - WC	Toilet	15.94	£0.05	56.78	£2.84	2,177.31	£108.87	136.59	£6.83
G114 - Stairs/Landing	Circulation area (corridors and stairways)	26.42	£0.05	47.06	£2.35	1,804.40	£90.22	68.30	£3.41
G115 - Classroom	Teaching Area:General	60.69	£0.05	108.10	£5.41	4,144.94	£207.25	68.30	£3.41
G116 - Office	Cellular Office Area	22.73	£0.05	40.49	£2.02	1,552.39	£77.62	68.30	£3.41
G117 - IT	Teaching Area:High Density IT Suite	65.16	£0.05	116.06	£5.80	4,450.23	£222.51	68.30	£3.41
G117a - IT	Teaching Area:ICT Rich Classroom	63.97	£0.05	113.94	£5.70	4,368.95	£218.45	68.30	£3.41
G118 - Lobby	Circulation area (corridors and stairways)	18.15	£0.05	32.33	£1.62	1,239.59	£61.98	68.30	£3.41
G119 - Stairs	Circulation area (corridors and stairways)	18.2	£0.05	32.42	£1.62	1,243.00	£62.15	68.30	£3.41
G120 - Store	Storage Area/Cupboard	1.44	£0.05	2.56	£0.13	98.35	£4.92	68.30	£3.41
G121 - Art	Teaching Area:ICT Rich Classroom	41.63	£0.05	420.54	£21.03	2,786.33	£139.32	66.93	£3.35
G121 - Classroom	Teaching Area:General	41.63	£0.05	74.15	£3.71	2,843.20	£142.16	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G122 - Art	Teaching Area:ICT Rich Classroom	19.27	£0.05	194.66	£9.73	1,289.76	£64.49	66.93	£3.35
G123 - Canteen	Catering: Eating/drinking area	252.59	£0.05	449.91	£22.50	17,251.11	£862.56	68.30	£3.41
G124 - Store	Storage Area/Cupboard	3.36	£0.05	5.98	£0.30	229.48	£11.47	68.30	£3.41
G125 - Kitchen	Catering: Full Kitchen Preparing Hot Meals	94.77	£0.05	429.53	£21.48	16,469.79	£823.49	173.79	£8.69
G126 - Plant	Light Plant Room	30.52	£0.05	54.36	£2.72	2,084.42	£104.22	68.30	£3.41
G127 - Kitchen	Catering: Kitchenette (small appliances, fridge	8.49	£0.05	171.53	£8.58	1,136.49	£56.82	133.86	£6.69
G127 - Store	Storage Area/Cupboard	8.49	£0.05	30.24	£1.51	1,159.68	£57.98	136.59	£6.83
G128 - Kitchen	Catering: Kitchenette (small appliances, fridge	12.82	£0.05	259.01	£12.95	1,716.11	£85.81	133.86	£6.69
G128 - Store	Storage Area/Cupboard	12.82	£0.05	45.67	£2.28	1,751.13	£87.56	136.59	£6.83
G129 - Kitchen	Catering: Kitchenette (small appliances, fridge	3.25	£0.05	65.66	£3.28	435.05	£21.75	133.86	£6.69
G129 - Lobby	Circulation area (corridors and stairways)	3.25	£0.05	11.58	£0.58	443.93	£22.20	136.59	£6.83
G130 - Kitchen	Catering: Kitchenette (small appliances, fridge	1.19	£0.05	24.04	£1.20	159.30	£7.96	133.86	£6.69
G130 - Store	Storage Area/Cupboard	1.19	£0.05	4.24	£0.21	162.55	£8.13	136.59	£6.83
G131 - Kitchen	Catering: Kitchenette (small appliances, fridge	4.42	£0.05	89.30	£4.47	591.67	£29.58	133.86	£6.69
G131 - WC	Toilet	4.42	£0.05	15.75	£0.79	603.74	£30.19	136.59	£6.83
G132 - Lobby	Circulation area (corridors and stairways)	17.28	£0.05	30.78	£1.54	1,180.17	£59.01	68.30	£3.41
G133 - WC	Toilet	16.68	£0.05	59.42	£2.97	2,278.38	£113.92	136.59	£6.83
G134 - WC	Toilet	15.72	£0.05	56.00	£2.80	2,147.25	£107.36	136.59	£6.83
G135 - Store	Storage Area/Cupboard	3.76	£0.05	6.70	£0.33	256.80	£12.84	68.30	£3.41
G136 - Pupil Changing / Toilets	Toilet	5.52	£0.05	111.52	£5.58	738.92	£36.95	133.86	£6.69
G136 - Store	Storage Area/Cupboard	5.52	£0.05	19.66	£0.98	754.00	£37.70	136.59	£6.83
G137 - Stairs/Lobby	Circulation area (corridors and stairways)	14.51	£0.05	25.85	£1.29	990.99	£49.55	68.30	£3.41
G138 - Ancillary	Storage Area/Cupboard	3.33	£0.05	33.64	£1.68	222.88	£11.14	66.93	£3.35
G138 - Lift	Lifts	3.33	£0.05	5.93	£0.30	227.43	£11.37	68.30	£3.41
G139 - Lift Motor	Storage Area/Cupboard	3.76	£0.05	6.70	£0.33	256.80	£12.84	68.30	£3.41
G140 - General Teaching	Teaching Area:General	61.52	£0.05	621.46	£31.07	4,117.59	£205.88	66.93	£3.35
G141 - Store	Storage Area/Cupboard	4.72	£0.05	8.41	£0.42	322.36	£16.12	68.30	£3.41
G142 - Entrance Lobby	Circulation area (corridors and stairways)	18.35	£0.05	32.68	£1.63	1,253.25	£62.66	68.30	£3.41
G143 - WC	Toilet	2.69	£0.05	9.58	£0.48	367.44	£18.37	136.59	£6.83

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G144 - Changing	Changing Area with Shower	36.2	£0.05	128.96	£6.45	4,944.70	£247.23	136.59	£6.83
G144 - Pupil Changing / Toilets	Changing Area with Shower	38.4	£0.05	775.82	£38.79	5,140.29	£257.01	133.86	£6.69
G145 - WC	Toilet	3.25	£0.05	11.58	£0.58	443.93	£22.20	136.59	£6.83
G146 - Changing	Changing Area with Shower	38.13	£0.05	135.83	£6.79	5,208.32	£260.42	136.59	£6.83
G146 - Pupil Changing / Toilets	Changing Area with Shower	42.41	£0.05	856.84	£42.84	5,677.08	£283.85	133.86	£6.69
G147 - Pupil Changing / Toilets	Toilet	5.99	£0.05	121.02	£6.05	801.83	£40.09	133.86	£6.69
G147 - WC	Toilet	3.4	£0.05	12.11	£0.61	464.42	£23.22	136.59	£6.83
G148 - Ancillary	Storage Area/Cupboard	2.51	£0.05	25.36	£1.27	168.00	£8.40	66.93	£3.35
G148 - Laundry	Storage Area/Cupboard	6.44	£0.05	11.47	£0.57	439.83	£21.99	68.30	£3.41
G149 - PE	Teaching Area:Fitness Suite/Gym	679.37	£0.05	14,028.57	£701.43	92,947.96	£4,647.40	136.81	£6.84
G149 - Sports Hall	Teaching Area:Dry Sports Hall	679.37	£0.05	1,149.49	£57.47	44,075.38	£2,203.77	64.88	£3.24
G150 - Teaching Storage	Storage Area/Cupboard	19.98	£0.05	201.83	£10.09	1,337.28	£66.86	66.93	£3.35
G151 - Fitness Suite	Teaching Area:Fitness Suite/Gym	52.13	£0.05	189.80	£9.49	7,277.72	£363.89	139.61	£6.98
G151 - PE	Teaching Area:Fitness Suite/Gym	31.65	£0.05	653.55	£32.68	4,330.19	£216.51	136.81	£6.84
G152 - Lobby	Circulation area (corridors and stairways)	23.37	£0.05	41.63	£2.08	1,596.10	£79.80	68.30	£3.41
G153 - WC	Toilet	2.94	£0.05	10.47	£0.52	401.59	£20.08	136.59	£6.83
G154 - Changing	Changing Area with Shower	6.98	£0.05	24.87	£1.24	953.42	£47.67	136.59	£6.83
G155 - Office	Cellular Office Area	8.62	£0.05	15.35	£0.77	588.72	£29.44	68.30	£3.41
G156 - Cupboard	Storage Area/Cupboard	1.41	£0.05	2.51	£0.13	96.30	£4.81	68.30	£3.41
G157 - Dance	Teaching Area:Studio	200.36	£0.05	729.50	£36.48	27,971.70	£1,398.58	139.61	£6.98
G157 - Drama	Teaching Area:Studio	223.63	£0.05	4,617.82	£230.89	30,595.92	£1,529.80	136.81	£6.84
G157a - Store	Storage Area/Cupboard	22.32	£0.05	39.76	£1.99	1,524.39	£76.22	68.30	£3.41
G158 - Lobby	Circulation area (corridors and stairways)	4.22	£0.05	7.52	£0.38	288.21	£14.41	68.30	£3.41
G159 - Changing	Toilet	27.42	£0.05	97.68	£4.88	3,745.40	£187.27	136.59	£6.83
G160 - WC	Toilet	6.65	£0.05	23.69	£1.18	908.35	£45.42	136.59	£6.83
G161 - Plant	Light Plant Room	29.92	£0.05	53.29	£2.66	2,043.44	£102.17	68.30	£3.41
G162 - Circulation	Circulation area (corridors and stairways)	45.58	£0.05	460.44	£23.02	3,050.71	£152.54	66.93	£3.35
G170 - 6th Form Canteen	Catering: Eating/drinking area	79.34	£0.05	282.64	£14.13	10,837.35	£541.87	136.59	£6.83
G171 - Pupil Entrance	Circulation area (corridors and stairways)	49.9	£0.05	88.88	£4.44	3,408.02	£170.40	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G172 - Reception	Cellular Office Area	11.4	£0.05	20.31	£1.02	778.58	£38.93	68.30	£3.41
G173 - General Admin Office	Cellular Office Area	27.7	£0.05	49.34	£2.47	1,891.82	£94.59	68.30	£3.41
G174 - Chair Store	Storage Area/Cupboard	8.7	£0.05	15.50	£0.77	594.18	£29.71	68.30	£3.41
G175 - Office	Cellular Office Area	8.7	£0.05	15.50	£0.77	594.18	£29.71	68.30	£3.41
G176 - Principal Office/Admin	Cellular Office Area	13.1	£0.05	23.33	£1.17	894.69	£44.73	68.30	£3.41
G177 - Visitors/Waiting	Circulation area (corridors and stairways)	23.9	£0.05	42.57	£2.13	1,632.30	£81.61	68.30	£3.41
G178 - Corridor	Circulation area (corridors and stairways)	12.4	£0.05	22.09	£1.10	846.88	£42.34	68.30	£3.41
G179 - Meeting/General Teaching	Teaching Area:General	67.4	£0.05	120.05	£6.00	4,603.21	£230.16	68.30	£3.41
G180 - Corridor	Circulation area (corridors and stairways)	25.39	£0.05	45.22	£2.26	1,734.06	£86.70	68.30	£3.41
G181 - Interview Room	Cellular Office Area	8.4	£0.05	14.96	£0.75	573.69	£28.68	68.30	£3.41
G182 - General Teaching	Teaching Area:General	68.9	£0.05	122.72	£6.14	4,705.66	£235.28	68.30	£3.41
G183 - Junior Hall	Teaching Area:Dry Sports Hall	252.8	£0.05	427.74	£21.39	16,400.87	£820.04	64.88	£3.24
G184 - Corridor	Circulation area (corridors and stairways)	48.1	£0.05	85.68	£4.28	3,285.08	£164.25	68.30	£3.41
G185 - General Teaching	Teaching Area:General	56.9	£0.05	101.35	£5.07	3,886.09	£194.30	68.30	£3.41
G186 - Stairs	Circulation area (corridors and stairways)	27.8	£0.05	49.52	£2.48	1,898.65	£94.93	68.30	£3.41
G187 - General Teaching	Teaching Area:General	57.6	£0.05	102.60	£5.13	3,933.90	£196.70	68.30	£3.41
G188 - General Teaching	Teaching Area:General	56	£0.05	99.75	£4.99	3,824.63	£191.23	68.30	£3.41
G189 - Stage Area	Stage (theatres and event buildings)	69.4	£0.05	123.61	£6.18	4,739.80	£236.99	68.30	£3.41
G190 - Store	Storage Area/Cupboard	12.1	£0.05	21.55	£1.08	826.39	£41.32	68.30	£3.41
G191 - Props	Storage Area/Cupboard	7.7	£0.05	13.72	£0.69	525.89	£26.29	68.30	£3.41
G192 - Cleaner	Storage Area/Cupboard	2	£0.05	7.12	£0.36	273.19	£13.66	136.59	£6.83
G193 - Corridor	Circulation area (corridors and stairways)	48.43	£0.05	86.26	£4.31	3,307.62	£165.38	68.30	£3.41
G194 - General Teaching/Music	Teaching Area:General	69.7	£0.05	124.15	£6.21	4,760.29	£238.01	68.30	£3.41
G195 - Music Classroom	Teaching Area:Music	65.7	£0.05	117.02	£5.85	4,487.11	£224.36	68.30	£3.41
G196 - Accessible W.C	Toilet	3.5	£0.05	12.47	£0.62	478.08	£23.90	136.59	£6.83
G197 - Music Store	Storage Area/Cupboard	8.4	£0.05	14.96	£0.75	573.69	£28.68	68.30	£3.41
G198 - Practice	Teaching Area:Music	8.5	£0.05	15.14	£0.76	580.52	£29.03	68.30	£3.41
G199 - Practice	Teaching Area:Music	8.9	£0.05	15.85	£0.79	607.84	£30.39	68.30	£3.41
G200 - Practice	Teaching Area:Music	18.6	£0.05	33.13	£1.66	1,270.32	£63.52	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G201 - Recording Studio	Teaching Area:Studio	13.7	£0.05	49.88	£2.49	1,912.62	£95.63	139.61	£6.98
G202 - Corridor	Circulation area (corridors and stairways)	34.63	£0.05	61.68	£3.08	2,365.12	£118.26	68.30	£3.41
G203 - Music Classroom	Teaching Area:Music	65.6	£0.05	116.85	£5.84	4,480.28	£224.01	68.30	£3.41
G204 - Music Office	Cellular Office Area	11.6	£0.05	20.66	£1.03	792.24	£39.61	68.30	£3.41
G205 - Store	Storage Area/Cupboard	7	£0.05	12.47	£0.62	478.08	£23.90	68.30	£3.41
G206 - Store	Storage Area/Cupboard	7	£0.05	12.47	£0.62	478.08	£23.90	68.30	£3.41
G207 - Corridor	Circulation area (corridors and stairways)	36.92	£0.05	65.76	£3.29	2,521.52	£126.08	68.30	£3.41
G208 - Female Staff/Visitors WC	Toilet	10.1	£0.05	35.98	£1.80	1,379.60	£68.98	136.59	£6.83
G209 - Male Staff/Visitors WC	Toilet	8.97	£0.05	31.95	£1.60	1,225.25	£61.26	136.59	£6.83
G210 - Accessible WC	Toilet	3.58	£0.05	12.75	£0.64	489.01	£24.45	136.59	£6.83
G211 - Boiler House & Electrical Switchgear	Light Plant Room	54.5	£0.05	97.07	£4.85	3,722.18	£186.11	68.30	£3.41
G212 - Gas Meter	Light Plant Room	8.09	£0.05	14.41	£0.72	552.52	£27.63	68.30	£3.41
G212a Sports Store	Storage Area/Cupboard	15.39	£0.05	27.41	£1.37	1,051.09	£52.55	68.30	£3.41
G213 - Reception Lobby	Circulation area (corridors and stairways)	34.98	£0.05	62.31	£3.12	2,389.03	£119.45	68.30	£3.41
G214 - Office	Cellular Office Area	10.59	£0.05	18.86	£0.94	723.26	£36.16	68.30	£3.41
G215 - Store	Storage Area/Cupboard	1.72	£0.05	3.06	£0.15	117.47	£5.87	68.30	£3.41
G216 - Male WC	Toilet	13.54	£0.05	48.23	£2.41	1,849.48	£92.47	136.59	£6.83
G217 - Female WC	Toilet	13.25	£0.05	47.20	£2.36	1,809.87	£90.49	136.59	£6.83
G218 - Lounge	Lounges	74.69	£0.05	133.04	£6.65	5,101.10	£255.05	68.30	£3.41
G219 - Store	Storage Area/Cupboard	11.9	£0.05	21.20	£1.06	812.73	£40.64	68.30	£3.41
G220 - Café	Catering: Snack Bar with Chilled Cabinets	7.48	£0.05	26.65	£1.33	1,021.72	£51.09	136.59	£6.83
G221 - Office	Cellular Office Area	12.39	£0.05	22.07	£1.10	846.20	£42.31	68.30	£3.41
G222 - Store	Storage Area/Cupboard	2.31	£0.05	4.11	£0.21	157.77	£7.89	68.30	£3.41
G223 - Hall	Teaching Area:Dry Sports Hall	92.54	£0.05	156.58	£7.83	6,003.70	£300.19	64.88	£3.24
G224 - Garage	External Space								
G225 - Classroom	Teaching Area:General	27.26	£0.05	48.56	£2.43	1,861.77	£93.09	68.30	£3.41
G226 - Office	Cellular Office Area	12.87	£0.05	22.92	£1.15	878.98	£43.95	68.30	£3.41
G227 - Store	Storage Area/Cupboard	2.78	£0.05	4.95	£0.25	189.87	£9.49	68.30	£3.41
G228 - Admin	Cellular Office Area	5.58	£0.05	9.94	£0.50	381.10	£19.05	68.30	£3.41

Space	Activity	Floor Area Served m2	Unit Cost kWh	Consumption for Month kWh	Cost for Month	Consumption Year to Month kWh	Cost Year to Month	Consumption Year to Month per m2 kWh	Cost Year to Month per m2
G229 - Boiler Room	Light Plant Room	8.28	£0.05	14.75	£0.74	565.50	£28.27	68.30	£3.41
G230 - Meters	Light Plant Room	1.58	£0.05	2.81	£0.14	107.91	£5.40	68.30	£3.41
<b>Total</b>		<b>16,514.22</b>		<b>76,831.80</b>	<b>£3,841.59</b>	<b>1,358,769.31</b>	<b>£67,938.47</b>		



**Appendix 4: Individual school K2N Example: all utilities**

Space	Activity	Total for All Utilities		
		Cost for Month	Cost Year to Month	Cost Year to Month per m2
1000 Lift	Lifts	£5.24	£66.35	£15.11
1001 - Economics Seminar Room	Teaching Area:General	£17.02	£322.38	£5.61
1001 - General Teaching	Teaching Area:General	£39.64	£300.85	£5.23
1002 - Store	Storage Area/Cupboard	£0.28	£6.31	£4.61
1003 - Corridor	Circulation area (corridors and stairways)	£7.17	£102.02	£9.70
1004 - IT	Teaching Area:High Density IT Suite	£48.53	£683.82	£9.96
1005 - Lobby	Circulation area (corridors and stairways)	£11.00	£156.43	£9.70
1006 - Stairs	Circulation area (corridors and stairways)	£9.94	£141.40	£9.70
1007 - Library	Teaching Area:Learning Resource Centre	£99.47	£1,534.76	£7.89
1008 - Store	Storage Area/Cupboard	£0.22	£4.97	£4.61
1009 - Staff and Admin. spaces	Cellular Office Area	£3.68	£56.80	£7.89
1010 - Laboratory	Teaching Area:Laboratory	£65.06	£907.49	£10.28
1011 - Lab Technician	Cellular Office Area	£7.02	£108.24	£7.89
1012 - Store	Storage Area/Cupboard	£0.69	£15.84	£4.61
1013 - Laboratory	Teaching Area:Laboratory	£67.03	£934.94	£10.28
1014 - Corridor	Circulation area (corridors and stairways)	£15.75	£223.93	£9.70
1015 - Office	Cellular Office Area	£8.54	£131.83	£7.89
1016 - Office	Cellular Office Area	£7.14	£110.21	£7.89
1017 - Office	Cellular Office Area	£6.71	£103.58	£7.89
1018 - Classroom	Teaching Area:General	£13.96	£264.39	£5.61
1018a - Store	Storage Area/Cupboard	£1.62	£36.94	£4.61
1019 - Corridor	Circulation area (corridors and stairways)	£22.82	£324.50	£9.70
1020 - Office	Cellular Office Area	£9.08	£140.03	£7.89
1021 - Office	Cellular Office Area	£4.11	£63.35	£7.89
1022 - Circulation	Circulation area (corridors and stairways)	£8.56	£121.71	£9.70
1023 - Stairs	Circulation area (corridors and stairways)	£7.93	£112.79	£9.70
1024 - Lobby	Circulation area (corridors and stairways)	£0.55	£7.86	£9.70
1025 - WC	Toilet	£4.38	£87.24	£10.56
1026 - General Teaching	Teaching Area:General	£32.34	£245.48	£5.23
1026 - Office	Cellular Office Area	£23.98	£370.00	£7.89
1027 - Store	Storage Area/Cupboard	£0.17	£3.87	£4.61
1028 - Student Advice Office	Cellular Office Area	£8.53	£131.59	£7.89
1029 - Classroom	Teaching Area:General	£13.41	£254.07	£5.61
1029 - Staff and Admin. spaces	Cellular Office Area	£78.32	£639.40	£7.20
1029a - Classroom	Teaching Area:General	£12.64	£239.48	£5.61
1030 - Corridor	Circulation area (corridors and stairways)	£10.80	£153.62	£9.70
1031 - Classroom	Teaching Area:General	£14.21	£269.21	£5.61
1032 - Stairs	Circulation area (corridors and stairways)	£9.11	£129.57	£9.70
1033 - Corridor	Circulation area (corridors and stairways)	£20.71	£294.53	£9.70
1034 - Corridor	Circulation area (corridors and stairways)	£3.63	£51.59	£9.70
1035 - Classroom	Teaching Area:General	£15.59	£295.29	£5.61
1036 - Classroom	Teaching Area:General	£15.61	£295.68	£5.61
1037 - Store	Storage Area/Cupboard	£0.36	£8.15	£4.61
1038 - Classroom	Teaching Area:General	£2.69	£50.93	£5.61
1039 - Classroom	Teaching Area:General	£2.75	£52.16	£5.61
1040 - Corridor	Circulation area (corridors and stairways)	£28.53	£405.67	£9.70

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
1041 - Store	Storage Area/Cupboard	£3.93	£89.77	£4.61
1042 - Stairs	Circulation area (corridors and stairways)	£8.03	£114.24	£9.70
1043 - Classroom	Teaching Area:General	£12.76	£241.73	£5.61
1044 - Store	Storage Area/Cupboard	£4.29	£98.11	£4.61
1045 - Office	Cellular Office Area	£4.84	£74.63	£7.89
1046 - Office	Cellular Office Area	£6.19	£95.46	£7.89
1047 - Office	Cellular Office Area	£5.79	£89.31	£7.89
1048 - Office	Cellular Office Area	£6.61	£102.01	£7.89
1049 - Classroom	Teaching Area:General	£12.56	£237.97	£5.61
1050 - Classroom	Teaching Area:General	£16.44	£311.44	£5.61
1051 - Store	Storage Area/Cupboard	£1.43	£32.79	£4.61
1052 - Store	Storage Area/Cupboard	£1.36	£31.14	£4.61
1053 - Corridor	Circulation area (corridors and stairways)	£29.24	£415.76	£9.70
1054 - Store	Storage Area/Cupboard	£0.59	£13.50	£4.61
1055 - Store	Storage Area/Cupboard	£0.36	£8.15	£4.61
1056 - Classroom	Teaching Area:General	£15.79	£299.10	£5.61
1057 - Classroom	Teaching Area:General	£15.84	£300.11	£5.61
1058 - Corridor	Circulation area (corridors and stairways)	£15.12	£215.01	£9.70
1059 - Classroom	Teaching Area:General	£18.96	£359.11	£5.61
1060 - Classroom	Teaching Area:General	£6.14	£116.38	£5.61
1061 - Lobby	Circulation area (corridors and stairways)	£4.05	£57.61	£9.70
1062 - Hall	Teaching Area:Dry Sports Hall	£59.05	£1,131.41	£5.25
1063 - Corridor	Circulation area (corridors and stairways)	£25.90	£368.33	£9.70
1064 - Store	Storage Area/Cupboard	£0.59	£13.45	£4.61
1065 - Classroom	Teaching Area:General	£12.84	£243.30	£5.61
1066 - IT	Teaching Area:High Density IT Suite	£44.65	£629.22	£9.96
1067 - Store	Storage Area/Cupboard	£2.29	£52.46	£4.61
1068 - IT	Teaching Area:High Density IT Suite	£39.43	£555.59	£9.96
1069 - Office	Cellular Office Area	£3.59	£55.46	£7.89
1070 - Needlecraft/Textiles	Teaching Area:Workshop	£68.43	£568.81	£7.90
1070 - Staff Room	Cellular Office Area	£36.83	£568.26	£7.89
1071 - Teaching Storage	Storage Area/Cupboard	£4.64	£33.48	£4.37
1072 - Corridor	Circulation area (corridors and stairways)	£21.84	£310.63	£9.70
1073 - Plant	Light Plant Room	£1.40	£31.52	£4.66
1074 - Classroom	Teaching Area:General	£26.70	£591.32	£9.48
1074 - Heavy Practical/Cookery	Teaching Area:Food Technology	£213.33	£1,954.84	£31.33
1075 - Office	Cellular Office Area	£1.81	£27.93	£7.89
1075 - Teaching Storage	Storage Area/Cupboard	£6.50	£46.95	£4.37
1075a Store	Storage Area/Cupboard	£0.40	£9.12	£4.61
1076 - Office	Cellular Office Area	£4.86	£74.95	£7.89
1077 - Heavy Practical/Cookery	Teaching Area:Food Technology	£227.90	£2,088.32	£31.33
1077 - Kitchen	Teaching Area:Food Technology	£191.99	£2,363.82	£35.47
1078 - Store	Storage Area/Cupboard	£2.85	£65.17	£4.61
1079 - Store	Storage Area/Cupboard	£0.77	£17.59	£4.61
1079a Store	Storage Area/Cupboard	£0.37	£8.47	£4.61
1080 - Heavy Practical/Cookery	Teaching Area:Food Technology	£284.53	£2,607.19	£31.33
1080 - Kitchen	Teaching Area:Food Technology	£239.69	£2,951.15	£35.47
1081 - Store	Storage Area/Cupboard	£1.90	£43.43	£4.61

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
1082 - Corridor	Circulation area (corridors and stairways)	£16.46	£234.01	£9.70
1083 - Store	Storage Area/Cupboard	£1.85	£42.37	£4.61
1084 - IT	Teaching Area:High Density IT Suite	£44.09	£621.35	£9.96
1085 - Store	Storage Area/Cupboard	£1.49	£34.08	£4.61
1086 - Tech	Teaching Area:Workshop	£99.53	£1,472.93	£8.70
1087 - Store	Storage Area/Cupboard	£1.37	£31.41	£4.61
1088 - Teaching Storage	Storage Area/Cupboard	£3.06	£22.08	£4.37
1089 - Circulation	Circulation area (corridors and stairways)	£7.02	£59.43	£8.75
1090 - Store	Storage Area/Cupboard	£1.48	£33.81	£4.61
1091 - Store	Storage Area/Cupboard	£0.47	£10.73	£4.61
1092 - IT	Teaching Area:High Density IT Suite	£76.97	£1,084.57	£9.96
1093 - Corridor	Circulation area (corridors and stairways)	£22.78	£323.92	£9.70
1094 - Stairs/Lobby	Circulation area (corridors and stairways)	£13.66	£194.25	£9.70
1095 - Store	Storage Area/Cupboard	£0.43	£9.76	£4.61
1096 - Teaching Storage	Storage Area/Cupboard	£0.81	£5.86	£4.37
1097 - Tech Store	Storage Area/Cupboard	£1.86	£42.47	£4.61
1098 - Office	Cellular Office Area	£8.43	£130.09	£7.89
1099 - Technology	Teaching Area:High Density IT Suite	£60.18	£848.03	£9.96
1100 - Store	Storage Area/Cupboard	£1.82	£41.50	£4.61
1101 - Corridor	Circulation area (corridors and stairways)	£5.13	£72.93	£9.70
1102 - Heavy Practical/Cookery	Teaching Area:Food Technology	£250.81	£2,298.25	£31.33
1102 - Technology Lab	Teaching Area:Workshop	£52.82	£922.19	£12.57
1103 - Dust Extract	Storage Area/Cupboard	£2.08	£47.53	£4.61
1104 - Corridor	Circulation area (corridors and stairways)	£17.60	£250.21	£9.70
1105 - Ancillary	Storage Area/Cupboard	£0.68	£4.94	£4.37
1105 - Cupboard	Storage Area/Cupboard	£0.40	£9.26	£4.61
1106 - Classroom	Teaching Area:General	£31.78	£602.07	£5.61
1107 - Technology lab	Teaching Area:Workshop	£52.56	£777.81	£8.70
1108 - Teaching Storage	Storage Area/Cupboard	£1.23	£28.05	£4.61
1108a Store?	Storage Area/Cupboard	£1.23	£28.05	£4.61
1109 - Ancillary	Storage Area/Cupboard	£2.17	£15.69	£4.37
1110 - Corridor	Circulation area (corridors and stairways)	£23.28	£331.09	£9.70
1111 - Classroom	Teaching Area:General	£16.83	£318.84	£5.61
1112 - Classroom	Teaching Area:General	£16.85	£319.18	£5.61
1113 - Classroom	Teaching Area:General	£18.96	£359.11	£5.61
1114 - Circulation	Circulation area (corridors and stairways)	£12.75	£181.35	£9.70
1115 - Office	Cellular Office Area	£10.88	£167.88	£7.89
1116 - Classroom	Teaching Area:General	£20.51	£388.45	£5.61
1117 - Office	Cellular Office Area	£5.18	£79.92	£7.89
1117 - Teaching Storage	Storage Area/Cupboard	£6.13	£44.28	£4.37
1118 - Photocopy	Cellular Office Area	£2.81	£43.39	£7.89
1119 - Stairs	Circulation area (corridors and stairways)	£12.66	£180.00	£9.70
1120 - Store	Storage Area/Cupboard	£0.86	£19.58	£4.61
1121 - Art Room 1	Teaching Area:ICT Rich Classroom	£76.96	£1,268.92	£13.83
1121 - WC	Toilet	£4.04	£80.37	£10.56
1122 - Store	Storage Area/Cupboard	£1.42	£32.47	£4.61
1122 - WC	Toilet	£3.84	£76.57	£10.56
1123 - Corridor	Circulation area (corridors and stairways)	£15.56	£221.21	£9.70

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
1124 - Kiln Room	Teaching Area:Workshop	£8.06	£119.32	£8.70
1125 - Art Room	Teaching Area:ICT Rich Classroom	£9.75	£137.40	£9.96
1126 - Art Room	Teaching Area:ICT Rich Classroom	£9.52	£134.21	£9.96
1127 - Accessible WC	Toilet	£2.33	£51.12	£9.56
1128 - Toilets	Toilet	£4.96	£108.94	£9.56
1129 - Art Room 2	Teaching Area:ICT Rich Classroom	£76.56	£1,262.28	£13.83
1130 - Store	Storage Area/Cupboard	£0.94	£21.46	£4.61
1131 - Corridor	Circulation area (corridors and stairways)	£21.99	£312.67	£9.70
1132 - Art Room 3	Teaching Area:ICT Rich Classroom	£75.72	£1,248.44	£13.83
1133 - Store	Storage Area/Cupboard	£1.36	£31.18	£4.61
1137 - Stairs/Lobby	Circulation area (corridors and stairways)	£28.56	£406.06	£9.70
1138 - Ancillary	Storage Area/Cupboard	£2.12	£15.34	£4.37
1138 - Lift	Lifts	£4.19	£53.05	£15.11
1186 - Staircase	Circulation area (corridors and stairways)	£18.39	£261.46	£9.70
2000 Lift	Lifts	£4.49	£56.83	£15.11
2001 - WC	Toilet	£6.72	£133.92	£10.56
2002 - Classroom	Teaching Area:General	£12.63	£239.26	£5.61
2002 - General Teaching	Teaching Area:General	£31.51	£239.14	£5.23
2002a - Store	Storage Area/Cupboard	£0.24	£5.39	£4.61
2002b - Store	Storage Area/Cupboard	£0.23	£5.20	£4.61
2003 - Classroom	Teaching Area:General	£13.57	£257.09	£5.61
2003 - General Teaching	Teaching Area:General	£33.49	£254.16	£5.23
2003a - Store	Storage Area/Cupboard	£0.47	£10.82	£4.61
2004 - Store	Storage Area/Cupboard	£1.45	£33.07	£4.61
2004 - Teaching Storage	Storage Area/Cupboard	£4.95	£35.76	£4.37
2005 - Classroom	Teaching Area:General	£13.52	£256.20	£5.61
2005 - General Teaching	Teaching Area:General	£33.21	£252.07	£5.23
2006 - Teaching Storage	Storage Area/Cupboard	£1.09	£7.87	£4.37
2007 - Classroom	Teaching Area:General	£12.73	£241.17	£5.61
2007 - General Teaching	Teaching Area:General	£31.76	£241.08	£5.23
2007a - Store	Storage Area/Cupboard	£1.04	£23.67	£4.61
2008 - Corridor	Circulation area (corridors and stairways)	£28.45	£404.51	£9.70
2009 - SEN	Teaching Area:Sensory Room	£7.43	£135.32	£5.91
2010 - WC	Toilet	£7.48	£148.92	£10.56
2011 - SEN	Teaching Area:Sensory Room	£3.78	£68.84	£5.91
2012 - Learning Support	Cellular Office Area	£2.97	£45.76	£7.89
2012 - Staff and Admin. spaces	Cellular Office Area	£5.11	£41.74	£7.20
2013 - Store	Storage Area/Cupboard	£0.27	£6.08	£4.61
2014 - WC	Toilet	£8.12	£161.80	£10.56
2015 - SEN	Teaching Area:Sensory Room	£4.93	£89.88	£5.91
2016 - SEN	Teaching Area:Sensory Room	£14.93	£272.00	£5.91
2017 - SEN	Teaching Area:Sensory Room	£8.54	£155.53	£5.91
2018 - Corridor	Circulation area (corridors and stairways)	£19.74	£280.66	£9.70
2019 - Classroom	Teaching Area:General	£15.53	£294.17	£5.61
2020 - IT	Teaching Area:High Density IT Suite	£22.56	£317.85	£9.96
2021 - Store	Storage Area/Cupboard	£0.59	£13.59	£4.61
2022 - Classroom	Teaching Area:General	£11.99	£227.14	£5.61
2023 - Circulation	Circulation area (corridors and stairways)	£12.08	£171.75	£9.70

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
2024 - Office	Cellular Office Area	£6.63	£102.24	£7.89
2025 - Corridor	Circulation area (corridors and stairways)	£34.22	£486.65	£9.70
2026 - Classroom	Teaching Area:General	£19.09	£361.64	£5.61
2027 - House Keeping	Storage Area/Cupboard	£2.83	£64.71	£4.61
2028 - Store	Storage Area/Cupboard	£0.31	£7.05	£4.61
2029 - Store	Storage Area/Cupboard	£4.00	£91.38	£4.61
2030 - Classroom	Teaching Area:General	£17.18	£325.41	£5.61
2030 - IT	Teaching Area:High Density IT Suite	£61.27	£521.11	£8.98
2031 - Office	Cellular Office Area	£6.35	£97.90	£7.89
2032 - Circulation	Circulation area (corridors and stairways)	£11.83	£168.16	£9.70
2033 - Classroom	Teaching Area:General	£17.82	£337.58	£5.61
2034 - Office	Cellular Office Area	£6.08	£93.80	£7.89
2035 - Laboratory	Teaching Area:Laboratory	£63.61	£887.23	£10.28
2036 - Preparation Room	Teaching Area:Laboratory	£17.54	£244.61	£10.28
2036 - Staff and Admin. spaces	Cellular Office Area	£20.97	£171.20	£7.20
2037 - Corridor	Circulation area (corridors and stairways)	£24.03	£341.66	£9.70
2038 - Laboratory	Teaching Area:Laboratory	£59.11	£824.51	£10.28
2039 - Store	Storage Area/Cupboard	£1.14	£26.07	£4.61
2040 - Laboratory	Teaching Area:Laboratory	£65.62	£915.41	£10.28
2041 - Store	Storage Area/Cupboard	£1.59	£36.25	£4.61
2041a Office	Cellular Office Area	£2.76	£42.60	£7.89
2042 - Stairs	Circulation area (corridors and stairways)	£12.11	£172.14	£9.70
2043 - Preparation Room	Teaching Area:Laboratory	£25.21	£351.64	£10.28
2043 - Staff and Admin. spaces	Cellular Office Area	£30.15	£246.12	£7.20
2044 - Teaching Storage	Storage Area/Cupboard	£2.63	£19.02	£4.37
2045 - Science Office	Cellular Office Area	£10.52	£162.28	£7.89
2046 - Laboratory	Teaching Area:Laboratory	£63.87	£890.94	£10.28
2047 - Corridor	Circulation area (corridors and stairways)	£34.52	£490.92	£9.70
2047a - Counselling Room	Consulting/treatment room	£1.87	£32.07	£6.48
2048 - Store	Storage Area/Cupboard	£0.76	£17.32	£4.61
2049 - Laboratory	Teaching Area:Laboratory	£69.18	£964.97	£10.28
2050 - Laboratory	Teaching Area:Laboratory	£64.87	£904.82	£10.28
2051 - Corridor	Circulation area (corridors and stairways)	£25.36	£360.67	£9.70
2052 - Chemical Store	Storage Area/Cupboard	£5.25	£119.94	£4.61
2053 - Office	Cellular Office Area	£7.89	£121.73	£7.89
2054 - Laboratory	Teaching Area:Laboratory	£27.27	£380.43	£10.28
2055 - Laboratory	Teaching Area:Laboratory	£74.23	£1,035.40	£10.28
2056 - Laboratory	Teaching Area:Laboratory	£65.04	£907.28	£10.28
2057 - Store	Storage Area/Cupboard	£0.87	£19.99	£4.61
2058 - Corridor	Circulation area (corridors and stairways)	£22.74	£323.33	£9.70
2059 - General Teaching	Teaching Area:General	£28.23	£214.23	£5.23
2059 - IT	Teaching Area:High Density IT Suite	£28.94	£407.82	£9.96
2060 - Classroom	Teaching Area:General	£11.73	£222.21	£5.61
2061 - Plant	Light Plant Room	£0.58	£13.01	£4.66
2062 - Common Room	Lounges	£39.17	£303.99	£5.72
2062 - Meeting Room	Meeting Room	£18.58	£328.10	£6.18
2063 - Study	Teaching Area:Learning Resource Centre	£24.86	£383.57	£7.89
2064 - Corridor	Circulation area (corridors and stairways)	£34.69	£493.24	£9.70

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
2065 - Store	Storage Area/Cupboard	£0.60	£13.68	£4.61
2066 - Office	Cellular Office Area	£4.89	£75.50	£7.89
2066 - Staff and Admin. spaces	Cellular Office Area	£20.95	£171.06	£7.20
2066a - Office	Cellular Office Area	£3.60	£55.62	£7.89
2067 - Office	Cellular Office Area	£12.18	£187.92	£7.89
2068 - Common Room	Lounges	£42.59	£330.55	£5.72
2068 - Meeting Room	Lounges	£20.20	£356.77	£6.18
2069 - Store	Storage Area/Cupboard	£0.32	£7.42	£4.61
2070 - WC	Toilet	£12.53	£249.46	£10.56
2071 - WC	Toilet	£8.95	£178.17	£10.56
2072 - Common Room	Lounges	£44.32	£343.95	£5.72
2072 - Meeting Room	Meeting Room	£21.02	£371.23	£6.18
2072 - Teaching Storage	Storage Area/Cupboard	£3.00	£21.64	£4.37
2073 - Common Room	Lounges	£7.14	£126.05	£6.18
2074 - SEN	Teaching Area:Sensory Room	£2.03	£36.93	£5.91
2075 - SEN	Teaching Area:Sensory Room	£0.89	£16.25	£5.91
2076 - SEN Classroom	Teaching Area:Sensory Room	£1.97	£15.11	£5.49
2114 - Stairs	Circulation area (corridors and stairways)	£10.28	£146.15	£9.70
2119 - Stairs	Circulation area (corridors and stairways)	£13.82	£196.48	£9.70
2137 - Stairs/Lobby	Circulation area (corridors and stairways)	£17.53	£249.34	£9.70
2138 - Ancillary	Storage Area/Cupboard	£2.12	£15.34	£4.37
2138 - Lift	Lifts	£4.19	£53.05	£15.11
2194 - Stairs	Circulation area (corridors and stairways)	£17.40	£247.49	£9.70
3000 Lift	Lifts	£4.49	£56.83	£15.11
3001 - Circulation	Circulation area (corridors and stairways)	£11.32	£95.84	£8.75
3001 - Office	Cellular Office Area	£5.60	£86.39	£7.89
3002 - Classroom	Teaching Area:General	£13.40	£253.90	£5.61
3002a - Store	Storage Area/Cupboard	£0.23	£5.30	£4.61
3002b - Store	Storage Area/Cupboard	£0.23	£5.30	£4.61
3003 - Teaching Storage	Storage Area/Cupboard	£1.05	£7.56	£4.37
3004 - Classroom	Teaching Area:General	£14.38	£272.41	£5.61
3004a - Store	Storage Area/Cupboard	£0.23	£5.30	£4.61
3004b - Store	Storage Area/Cupboard	£0.23	£5.30	£4.61
3005 - Boiler/Plant	Light Plant Room	£4.97	£36.02	£4.42
3005 - Office	Cellular Office Area	£4.17	£64.30	£7.89
3006 - Classroom	Teaching Area:General	£14.22	£269.38	£5.61
3006a - Store	Storage Area/Cupboard	£0.24	£5.39	£4.61
3006b - Store	Storage Area/Cupboard	£0.23	£5.20	£4.61
3006c Lobby	Circulation area (corridors and stairways)	£1.45	£20.66	£9.70
3007 - Teaching Storage	Storage Area/Cupboard	£0.34	£7.88	£4.61
3008 - Classroom	Teaching Area:General	£13.57	£257.09	£5.61
3008a - Store	Storage Area/Cupboard	£0.47	£10.82	£4.61
3023 - Stairs	Circulation area (corridors and stairways)	£11.44	£162.64	£9.70
3042 - Stairs	Circulation area (corridors and stairways)	£12.11	£172.14	£9.70
B001 - Boiler Room	Light Plant Room	£13.85	£312.35	£4.66
Cupboard - Storage Area/Cupboard	Storage Area/Cupboard	£0.54	£12.25	£4.61
EXT - External Space	External Space	£5.47	£58.01	£0.29

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G000 Lift	Lifts	£5.74	£72.69	£15.11
G001 - Art	Teaching Area:ICT Rich Classroom	£91.80	£780.76	£8.98
G001 - Science Laboratory	Teaching Area:Laboratory	£64.08	£893.81	£10.28
G002 - Preparation Room	Cellular Office Area	£5.97	£92.07	£7.89
G002 - Teaching Storage	Storage Area/Cupboard	£7.06	£51.01	£4.37
G003 - Teaching Storage	Storage Area/Cupboard	£5.04	£36.41	£4.37
G004 - Art	Teaching Area:ICT Rich Classroom	£87.94	£747.89	£8.98
G004 - Science Laboratory	Teaching Area:Laboratory	£61.38	£856.18	£10.28
G005 - Corridor	Circulation area (corridors and stairways)	£38.69	£550.17	£9.70
G006 - Stairs/Lobby	Circulation area (corridors and stairways)	£7.26	£103.19	£9.70
G007 - Store	Storage Area/Cupboard	£0.51	£11.75	£4.61
G008 - WC	Toilet	£13.62	£271.33	£10.56
G009 - Store	Storage Area/Cupboard	£0.35	£8.01	£4.61
G010 - Art	Teaching Area:ICT Rich Classroom	£57.22	£486.62	£8.98
G010 - Classroom	Teaching Area:General	£16.04	£303.87	£5.61
G011 - Art	Teaching Area:ICT Rich Classroom	£93.10	£791.81	£8.98
G011 - Laboratory	Teaching Area:Laboratory	£64.98	£906.46	£10.28
G012 - Lobby	Circulation area (corridors and stairways)	£2.16	£30.65	£9.70
G013 - Preparation Room	Cellular Office Area	£4.36	£67.29	£7.89
G013 - Staff and Admin. spaces	Cellular Office Area	£7.52	£61.39	£7.20
G014 - Classroom	Teaching Area:General	£11.25	£213.12	£5.61
G015 - WC	Toilet	£13.58	£270.38	£10.56
G016 - Lobby	Circulation area (corridors and stairways)	£1.94	£27.54	£9.70
G017 - Head Teacher Office	Cellular Office Area	£17.08	£263.50	£7.89
G018 - WC	Toilet	£1.70	£33.90	£10.56
G019 - WC	Toilet	£5.90	£117.55	£10.56
G020 - Corridor	Circulation area (corridors and stairways)	£14.57	£207.15	£9.70
G021 - Store	Storage Area/Cupboard	£0.18	£4.19	£4.61
G022 - WC	Toilet	£5.44	£108.26	£10.56
G023 - Stairs	Circulation area (corridors and stairways)	£3.87	£54.99	£9.70
G024 - Office	Cellular Office Area	£10.13	£156.28	£7.89
G025 - Corridor	Circulation area (corridors and stairways)	£10.56	£150.22	£9.70
G026 - Classroom	Teaching Area:General	£15.97	£302.58	£5.61
G027 - Office	Cellular Office Area	£7.62	£117.55	£7.89
G028 - Store	Storage Area/Cupboard	£0.55	£12.67	£4.61
G029 - Store	Storage Area/Cupboard	£0.58	£13.36	£4.61
G030 - Store	Storage Area/Cupboard	£0.27	£6.22	£4.61
G030 - Teaching Storage	Storage Area/Cupboard	£1.25	£9.01	£4.37
G031 - Circulation	Circulation area (corridors and stairways)	£24.07	£203.85	£8.75
G032 - Office	Cellular Office Area	£10.54	£162.60	£7.89
G033 - Store	Storage Area/Cupboard	£0.42	£9.49	£4.61
G033 - Teaching Storage	Storage Area/Cupboard	£0.82	£5.90	£4.37
G034 - Circulation	Circulation area (corridors and stairways)	£13.31	£112.74	£8.75
G035 - Circulation	Circulation area (corridors and stairways)	£46.70	£664.12	£9.70
G035 - Staff and Admin. spaces	Cellular Office Area	£9.95	£81.25	£7.20
G036 - Office	Cellular Office Area	£20.98	£323.69	£7.89
G037 - Office	Cellular Office Area	£4.43	£68.32	£7.89
G038 - Office	Cellular Office Area	£4.09	£63.03	£7.89

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G039 - Office	Cellular Office Area	£5.90	£90.96	£7.89
G040 - Store	Storage Area/Cupboard	£0.24	£5.57	£4.61
G041 - Electric	Storage Area/Cupboard	£1.04	£23.81	£4.61
G042 - Stairs/Lobby	Circulation area (corridors and stairways)	£12.37	£175.92	£9.70
G043 - Office	Cellular Office Area	£1.31	£20.20	£7.89
G043 - Teaching Storage	Storage Area/Cupboard	£0.91	£6.60	£4.37
G044 - Medical	Consulting/treatment room	£4.22	£72.25	£6.48
G044 - Staff and Admin. spaces	Cellular Office Area	£9.83	£80.24	£7.20
G045 - Office	Cellular Office Area	£8.14	£125.60	£7.89
G046 - Circulation	Circulation area (corridors and stairways)	£44.65	£378.03	£8.75
G047 - Hall	Teaching Area:Dry Sports Hall	£125.97	£952.79	£4.91
G048 - Drama	Teaching Area:Studio	£67.53	£481.64	£8.57
G049 - Drama	Teaching Area:Studio	£18.67	£451.76	£8.99
G050 - Drama	Teaching Area:Studio	£19.45	£470.63	£8.99
G051 - Lobby	Circulation area (corridors and stairways)	£7.87	£111.92	£9.70
G052 - Store	Storage Area/Cupboard	£0.70	£15.94	£4.61
G053 - WC	Toilet	£2.14	£42.67	£10.56
G054 - Store	Storage Area/Cupboard	£1.51	£34.50	£4.61
G055 - Duct	Storage Area/Cupboard	£0.17	£3.82	£4.61
G056 - Store	Storage Area/Cupboard	£0.42	£9.53	£4.61
G057 - Store	Storage Area/Cupboard	£0.76	£17.27	£4.61
G058 - Store	Storage Area/Cupboard	£0.70	£16.07	£4.61
G059 - Circulation	Circulation area (corridors and stairways)	£33.84	£286.57	£8.75
G060 - Teaching Storage	Storage Area/Cupboard	£0.27	£1.97	£4.37
G061 - Circulation	Circulation area (corridors and stairways)	£10.36	£87.70	£8.75
G062 - Pupil Changing / Toilets	Toilet	£3.23	£24.17	£9.90
G063 - Pupil Changing / Toilets	Toilet	£9.75	£72.89	£9.90
G064 - Pupil Changing / Toilets	Toilet	£4.90	£36.64	£9.90
G065 - Staff and Admin. spaces	Cellular Office Area	£10.55	£86.14	£7.20
G066 - Circulation	Circulation area (corridors and stairways)	£6.83	£57.86	£8.75
G067 - Music	Teaching Area:Music	£20.60	£175.23	£8.98
G068 - Music	Teaching Area:Music	£60.65	£515.81	£8.98
G069 - Music	Teaching Area:Music	£61.72	£524.88	£8.98
G070 - Music	Teaching Area:Music	£25.23	£214.57	£8.98
G071 - Lobby	Circulation area (corridors and stairways)	£12.40	£176.31	£9.70
G072 - Store	Storage Area/Cupboard	£0.62	£14.14	£4.61
G073 - Office	Cellular Office Area	£3.52	£54.28	£7.89
G074 - Office	Cellular Office Area	£3.14	£48.52	£7.89
G075 - Gymnasium	Teaching Area:Fitness Suite/Gym	£228.72	£3,712.81	£14.55
G076 - Store	Storage Area/Cupboard	£3.14	£71.71	£4.61
G076 - Teaching Storage	Storage Area/Cupboard	£6.97	£50.36	£4.37
G077 - Corridor	Circulation area (corridors and stairways)	£13.61	£193.48	£9.70
G078 - Pupil Changing / Toilets	Toilet	£11.55	£86.36	£9.90
G078 - Store	Storage Area/Cupboard	£3.64	£81.66	£9.36
G079 - Lobby	Circulation area (corridors and stairways)	£3.01	£42.77	£9.70
G080 - Changing Rooms	Changing Area with Shower	£16.21	£344.11	£9.87
G081 - Pupil Changing / Toilets	Changing Area with Shower	£17.33	£127.39	£9.31
G081 - Showers	Changing Area with Shower	£6.36	£135.06	£9.87



Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G082 - Store	Storage Area/Cupboard	£0.62	£14.14	£4.61
G083 - WC	Toilet	£5.10	£101.60	£10.56
G084 - Lobby	Circulation area (corridors and stairways)	£3.37	£47.91	£9.70
G085 - WC	Toilet	£5.33	£106.25	£10.56
G086 - Changing Rooms	Changing Area with Shower	£15.42	£327.43	£9.87
G087 - Store	Storage Area/Cupboard	£0.55	£12.48	£4.61
G088 - Pupil Changing / Toilets	Changing Area with Shower	£16.78	£123.39	£9.31
G088 - Showers	Changing Area with Shower	£6.16	£130.82	£9.87
G089 - Stairs/Landing	Circulation area (corridors and stairways)	£8.34	£118.61	£9.70
G090 - Store	Storage Area/Cupboard	£0.28	£6.36	£4.61
G091 - Lobby	Circulation area (corridors and stairways)	£3.67	£52.18	£9.70
G092 - Teaching Storage	Storage Area/Cupboard	£0.73	£5.29	£4.37
G093 - Classroom	Teaching Area:General	£15.52	£294.00	£5.61
G094 - WC	Toilet	£5.24	£104.35	£10.56
G095 - Office	Cellular Office Area	£4.45	£68.64	£7.89
G096 - Classroom	Teaching Area:General	£15.12	£286.37	£5.61
G097 - Store	Storage Area/Cupboard	£0.40	£9.26	£4.61
G098 - Corridor	Circulation area (corridors and stairways)	£15.51	£220.53	£9.70
G099 - Hall	Teaching Area:Dry Sports Hall	£31.74	£240.09	£4.91
G099 - Meeting Room	Meeting Room	£17.12	£302.33	£6.18
G099a Tea Point	Catering: Kitchenette (small appliances, fridge	£14.58	£179.46	£35.47
G100 - Classroom	Teaching Area:General	£14.48	£274.37	£5.61
G101 - Corridor	Circulation area (corridors and stairways)	£19.93	£283.47	£9.70
G102 - WC	Toilet	£6.03	£120.08	£10.56
G103 - Ducts	Storage Area/Cupboard	£1.10	£25.06	£4.61
G104 - Electric Store	Storage Area/Cupboard	£0.36	£8.29	£4.61
G105 - Classroom	Teaching Area:General	£15.32	£290.24	£5.61
G106 - Deputy Head	Cellular Office Area	£10.11	£156.05	£7.89
G107 - Classroom	Teaching Area:General	£17.11	£324.17	£5.61
G108 - Store	Storage Area/Cupboard	£0.64	£14.65	£4.61
G109 - Office	Cellular Office Area	£11.50	£177.51	£7.89
G110 - Lobby	Circulation area (corridors and stairways)	£10.00	£142.27	£9.70
G111 - Store	Storage Area/Cupboard	£0.27	£6.22	£4.61
G112 - Office	Cellular Office Area	£11.54	£178.06	£7.89
G113 - WC	Toilet	£8.45	£168.35	£10.56
G114 - Stairs/Landing	Circulation area (corridors and stairways)	£18.02	£256.22	£9.70
G115 - Classroom	Teaching Area:General	£17.97	£340.38	£5.61
G116 - Office	Cellular Office Area	£11.62	£179.32	£7.89
G117 - IT	Teaching Area:High Density IT Suite	£46.07	£649.25	£9.96
G117a - IT	Teaching Area:ICT Rich Classroom	£45.23	£637.39	£9.96
G118 - Lobby	Circulation area (corridors and stairways)	£12.38	£176.02	£9.70
G119 - Stairs	Circulation area (corridors and stairways)	£12.41	£176.50	£9.70
G120 - Store	Storage Area/Cupboard	£0.29	£6.63	£4.61
G121 - Art	Teaching Area:ICT Rich Classroom	£43.96	£373.90	£8.98
G121 - Classroom	Teaching Area:General	£12.33	£233.48	£5.61
G122 - Art	Teaching Area:ICT Rich Classroom	£20.35	£173.07	£8.98
G123 - Canteen	Catering: Eating/drinking area	£115.34	£1,846.45	£7.31
G124 - Store	Storage Area/Cupboard	£0.68	£15.48	£4.61

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G125 - Kitchen	Catering: Full Kitchen Preparing Hot Meals	£287.49	£3,642.38	£38.43
G126 - Plant	Light Plant Room	£6.31	£142.28	£4.66
G127 - Kitchen	Catering: Kitchenette (small appliances, fridge	£29.03	£266.01	£31.33
G127 - Store	Storage Area/Cupboard	£2.83	£71.95	£8.48
G128 - Kitchen	Catering: Kitchenette (small appliances, fridge	£43.84	£401.68	£31.33
G128 - Store	Storage Area/Cupboard	£4.27	£108.65	£8.48
G129 - Kitchen	Catering: Kitchenette (small appliances, fridge	£11.11	£101.83	£31.33
G129 - Lobby	Circulation area (corridors and stairways)	£2.65	£44.09	£13.57
G130 - Kitchen	Catering: Kitchenette (small appliances, fridge	£4.07	£37.29	£31.33
G130 - Store	Storage Area/Cupboard	£0.40	£10.09	£8.48
G131 - Kitchen	Catering: Kitchenette (small appliances, fridge	£15.11	£138.49	£31.33
G131 - WC	Toilet	£1.92	£42.24	£9.56
G132 - Lobby	Circulation area (corridors and stairways)	£11.78	£167.58	£9.70
G133 - WC	Toilet	£8.85	£176.17	£10.56
G134 - WC	Toilet	£8.34	£166.03	£10.56
G135 - Store	Storage Area/Cupboard	£0.76	£17.32	£4.61
G136 - Pupil Changing / Toilets	Toilet	£7.31	£54.67	£9.90
G136 - Store	Storage Area/Cupboard	£2.30	£51.69	£9.36
G137 - Stairs/Lobby	Circulation area (corridors and stairways)	£9.90	£140.72	£9.70
G138 - Ancillary	Storage Area/Cupboard	£2.02	£14.56	£4.37
G138 - Lift	Lifts	£3.97	£50.33	£15.11
G139 - Lift Motor	Storage Area/Cupboard	£0.76	£17.32	£4.61
G140 - General Teaching	Teaching Area:General	£42.43	£322.00	£5.23
G141 - Store	Storage Area/Cupboard	£0.95	£21.74	£4.61
G142 - Entrance Lobby	Circulation area (corridors and stairways)	£12.51	£177.96	£9.70
G143 - WC	Toilet	£1.43	£28.41	£10.56
G144 - Changing	Changing Area with Shower	£16.82	£357.13	£9.87
G144 - Pupil Changing / Toilets	Changing Area with Shower	£48.60	£357.32	£9.31
G145 - WC	Toilet	£1.72	£34.32	£10.56
G146 - Changing	Changing Area with Shower	£17.72	£376.17	£9.87
G146 - Pupil Changing / Toilets	Changing Area with Shower	£53.67	£394.63	£9.31
G147 - Pupil Changing / Toilets	Toilet	£7.93	£59.33	£9.90
G147 - WC	Toilet	£1.80	£35.91	£10.56
G148 - Ancillary	Storage Area/Cupboard	£1.52	£10.97	£4.37
G148 - Laundry	Storage Area/Cupboard	£1.30	£29.66	£4.61
G149 - PE	Teaching Area:Fitness Suite/Gym	£1,133.93	£9,070.73	£13.35
G149 - Sports Hall	Teaching Area:Dry Sports Hall	£186.21	£3,567.97	£5.25
G150 - Teaching Storage	Storage Area/Cupboard	£12.09	£87.34	£4.37
G151 - Fitness Suite	Teaching Area:Fitness Suite/Gym	£46.72	£758.36	£14.55
G151 - PE	Teaching Area:Fitness Suite/Gym	£52.83	£422.58	£13.35
G152 - Lobby	Circulation area (corridors and stairways)	£15.94	£226.64	£9.70
G153 - WC	Toilet	£1.56	£31.05	£10.56
G154 - Changing	Changing Area with Shower	£3.24	£68.86	£9.87
G155 - Office	Cellular Office Area	£4.41	£68.00	£7.89
G156 - Cupboard	Storage Area/Cupboard	£0.28	£6.49	£4.61
G157 - Dance	Teaching Area:Studio	£74.44	£1,800.92	£8.99
G157 - Drama	Teaching Area:Studio	£268.67	£1,916.18	£8.57
G157a - Store	Storage Area/Cupboard	£4.50	£102.80	£4.61

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G158 - Lobby	Circulation area (corridors and stairways)	£2.88	£40.93	£9.70
G159 - Changing	Toilet	£14.54	£289.60	£10.56
G160 - WC	Toilet	£3.53	£70.23	£10.56
G161 - Plant	Light Plant Room	£6.19	£139.49	£4.66
G162 - Circulation	Circulation area (corridors and stairways)	£47.12	£398.95	£8.75
G170 - 6th Form Canteen	Catering: Eating/drinking area	£46.70	£886.97	£11.18
G171 - Pupil Entrance	Circulation area (corridors and stairways)	£34.03	£483.93	£9.70
G172 - Reception	Cellular Office Area	£5.83	£89.94	£7.89
G173 - General Admin Office	Cellular Office Area	£14.16	£218.53	£7.89
G174 - Chair Store	Storage Area/Cupboard	£1.75	£40.07	£4.61
G175 - Office	Cellular Office Area	£4.45	£68.64	£7.89
G176 - Principal Office/Admin	Cellular Office Area	£6.70	£103.35	£7.89
G177 - Visitors/Waiting	Circulation area (corridors and stairways)	£16.30	£231.78	£9.70
G178 - Corridor	Circulation area (corridors and stairways)	£8.46	£120.26	£9.70
G179 - Meeting/General Teaching	Teaching Area:General	£19.96	£378.01	£5.61
G180 - Corridor	Circulation area (corridors and stairways)	£17.32	£246.23	£9.70
G181 - Interview Room	Cellular Office Area	£4.29	£66.27	£7.89
G182 - General Teaching	Teaching Area:General	£20.40	£386.43	£5.61
G183 - Junior Hall	Teaching Area:Dry Sports Hall	£69.29	£1,327.68	£5.25
G184 - Corridor	Circulation area (corridors and stairways)	£32.80	£466.48	£9.70
G185 - General Teaching	Teaching Area:General	£16.85	£319.12	£5.61
G186 - Stairs	Circulation area (corridors and stairways)	£18.96	£269.61	£9.70
G187 - General Teaching	Teaching Area:General	£17.05	£323.05	£5.61
G188 - General Teaching	Teaching Area:General	£16.58	£314.08	£5.61
G189 - Stage Area	Stage (theatres and event buildings)	£27.71	£465.12	£6.70
G190 - Store	Storage Area/Cupboard	£2.44	£55.73	£4.61
G191 - Props	Storage Area/Cupboard	£1.55	£35.47	£4.61
G192 - Cleaner	Storage Area/Cupboard	£0.67	£16.95	£8.48
G193 - Corridor	Circulation area (corridors and stairways)	£33.03	£469.68	£9.70
G194 - General Teaching/Music	Teaching Area:General	£20.64	£390.91	£5.61
G195 - Music Classroom	Teaching Area:Music	£46.46	£654.63	£9.96
G196 - Accessible W.C	Toilet	£1.52	£33.45	£9.56
G197 - Music Store	Storage Area/Cupboard	£1.69	£38.69	£4.61
G198 - Practice	Teaching Area:Music	£6.01	£84.69	£9.96
G199 - Practice	Teaching Area:Music	£6.29	£88.68	£9.96
G200 - Practice	Teaching Area:Music	£13.15	£185.33	£9.96
G201 - Recording Studio	Teaching Area:Studio	£5.09	£123.14	£8.99
G202 - Corridor	Circulation area (corridors and stairways)	£23.62	£335.84	£9.70
G203 - Music Classroom	Teaching Area:Music	£46.39	£653.63	£9.96
G204 - Music Office	Cellular Office Area	£5.93	£91.51	£7.89
G205 - Store	Storage Area/Cupboard	£1.41	£32.24	£4.61
G206 - Store	Storage Area/Cupboard	£1.41	£32.24	£4.61
G207 - Corridor	Circulation area (corridors and stairways)	£25.18	£358.05	£9.70
G208 - Female Staff/Visitors WC	Toilet	£4.40	£96.52	£9.56
G209 - Male Staff/Visitors WC	Toilet	£3.91	£85.72	£9.56
G210 - Accessible WC	Toilet	£1.56	£34.21	£9.56
G211 - Boiler House & Electrical	Light Plant Room	£11.27	£254.08	£4.66
G212 - Gas Meter	Light Plant Room	£1.67	£37.72	£4.66

Space	Activity	Cost for Month	Cost Year to Month	Cost Year to Month per m2
G212a Sports Store	Storage Area/Cupboard	£3.10	£70.89	£4.61
G213 - Reception Lobby	Circulation area (corridors and stairways)	£23.86	£339.24	£9.70
G214 - Office	Cellular Office Area	£5.41	£83.55	£7.89
G215 - Store	Storage Area/Cupboard	£0.35	£7.92	£4.61
G216 - Male WC	Toilet	£5.90	£129.39	£9.56
G217 - Female WC	Toilet	£5.77	£126.62	£9.56
G218 - Lounge	Lounges	£26.13	£461.50	£6.18
G219 - Store	Storage Area/Cupboard	£2.40	£54.81	£4.61
G220 - Café	Catering: Snack Bar with Chilled Cabinets	£20.27	£251.76	£33.66
G221 - Office	Cellular Office Area	£6.33	£97.75	£7.89
G222 - Store	Storage Area/Cupboard	£0.47	£10.64	£4.61
G223 - Hall	Teaching Area:Dry Sports Hall	£25.36	£486.01	£5.25
G224 - Garage	External Space	£4.38	£46.41	£1.16
G225 - Classroom	Teaching Area:General	£8.07	£152.89	£5.61
G226 - Office	Cellular Office Area	£6.58	£101.53	£7.89
G227 - Store	Storage Area/Cupboard	£0.56	£12.80	£4.61
G228 - Admin	Cellular Office Area	£2.85	£44.02	£7.89
G229 - Boiler Room	Light Plant Room	£1.71	£38.60	£4.66
G230 - Meters	Light Plant Room	£0.33	£7.37	£4.66
<b>Total</b>		<b>£11,599.50</b>	<b>£149,404.60</b>	

**RESPONSE TO THE POLICY REVIEW AND PERFORMANCE  
SCRUTINY COMMITTEE TASK AND FINISH GROUP INQUIRY  
REPORT ON HOME AND AGILE WORKING****FINANCE, MODERNISATION & PERFORMANCE  
(COUNCILLOR CHRISTOPHER WEAVER)****AGENDA ITEM: 4**

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**Reason for this Report**

1. To approve the Cabinet response to the report from the Chair of Policy Review and Performance Scrutiny Committee dated March 2022 relating to the Scrutiny Task and Finish Group – Home and Agile Working.

**Background**

2. The Policy Review and Performance Scrutiny agreed following its re-start in September 2020 that its work programme would include a task and finish inquiry into the Council's approach to capturing the benefits of homeworking developed as an emergency response to the pandemic.
3. The terms of reference for the inquiry were agreed as follows:
  - To examine how the experience of managing remotely during the pandemic can inform future policy on autonomy at work, operating within a culture of care and trust; with a specific focus on management/leadership challenges of supporting home and agile working.
4. Members of the task and finish group first commissioned a review of published research evidence on the impact of pre-pandemic homeworking, to identify the issues that should form the basis of their evidence gathering from internal and external witnesses. To supplement this, the task and finish group interviewed a cross section of senior managers from a variety of Council service areas on their experiences and management of homeworking staff. Two public sector organisations were also chosen as reference points, due to their move to homeworking prior to the pandemic. These were Monmouthshire County Council and Natural Resources Wales.

5. The findings and recommendations are set out in a report dated March 2022 which was presented to Cabinet for consideration in July 2022 and is attached at Appendix 2.

### **Findings and Response to the Recommendations**

6. The report from the Task and Finish group sets out a series of findings which have then translated into nine formal recommendations to Cabinet. A formal response to each of the nine recommendations is set out in Appendix 1 to this report.

### **Reason for Recommendations**

7. To respond to the Policy Review and Performance Scrutiny Task and Finish Group on Home and Agile Working.

### **Legal Implications**

8. This report seeks approval of the Cabinet response to the report from the Chair of Policy Review and Performance Scrutiny Committee dated March 2022 and the associated recommendations arising from this.
9. In the implementation of these proposals, employment law and consultation requirements may arise in relation to the implementation of hybrid working policies and processes and legal advice will be provided as these proposals are progressed.
10. In considering this matter, Members must have regard to the Council's public sector equality duties under the Equality Act 2010. Pursuant to these legal duties Councils must, in making decisions, have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. Protected characteristics are: (a) Age, (b) Gender reassignment, (c) Sex, (d) Race – including ethnic or national origin, colour or nationality, (e) Disability, (f) Pregnancy and maternity, (g) Marriage and civil partnership, (h) Sexual orientation, (i) Religion or belief – including lack of belief.
11. When taking strategic decisions, the Council also has a statutory duty to have due regard to the need to reduce inequalities of outcome resulting from socio-economic disadvantage ('the Socio-Economic Duty' imposed under section 1 of the Equality Act 2010). In considering this, the Council Page 18 of 20 must take into account the statutory guidance issued by the Welsh Ministers (WG42004 A More Equal Wales The Socio-economic Duty Equality Act 2010 (gov.wales) and must be able to demonstrate how it has discharged its duty.
12. The Well-being of Future Generations (Wales) Act 2015 requires the Council to consider how its decisions will contribute towards meeting its well-being objectives (set out in the Corporate Plan). Members must also be satisfied that the Council's decisions comply with the sustainable development principle, which requires that the needs of the present are

met without compromising the ability of future generations to meet their own needs.

13. The Council must also be mindful of the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards and consider the impact of its proposals upon the Welsh language.

### **Financial Implications**

14. There are minimal financial implications arising from this report. Apart from a potential investment in training, accepted recommendations would be delivered within existing resources. In developing the format of the training, there will be a need to balance potential costs, with available funding sources.

### **Human Resources Implications**

15. The recommendations cover a number of employment matters which will be worked through. Any required trade Union and/or staff consultation will take place and any changes will follow corporately agreed policies and processes.

### **Property Implications**

16. There are no immediate property implications within this report.
17. As set out in the Corporate Property Strategy 2021-26, adoption of a hybrid working strategy will have an impact on the Council's core office space requirement. It will be important to quantify this impact to inform short, medium and long term property and budget decision making.

## **RECOMMENDATION**

Cabinet is recommended to approve the response to the recommendations of the Policy Review and Performance Scrutiny Committee Task and Finish Group on Home and Agile Working, as set out in appendix 1.

<b>SENIOR RESPONSIBLE OFFICER</b>	<b>Chris Lee</b> Corporate Director Resources and Section 151 Officer
	13 January 2023

*The following Appendices are attached:*

**Appendix 1** Draft Response to Recommendations of Policy Review and Performance Scrutiny Committee Task and Finish Group on Home and Agile Working.

**Appendix 2** Policy Review and Performance Scrutiny Committee Task and Finish Group Report dated March 2022 – Home and Agile Working.

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**Appendix 1** Draft Response to Recommendations of Policy Review and Performance Scrutiny Committee Task and Finish Group on Home and Agile Working.

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
1. Cabinet develops, publishes and communicates to all staff a refreshed set of Council values setting out its vision of how hybrid working will be introduced and embedded. Such values will need to be widely communicated and receive constant reinforcement by leaders at all levels.	Accepted	It is agreed that the Council's move to home and agile working being part of its business-as-usual working arrangements will need to be founded on a set of agreed and robust values. This will form part of the development of policies for hybrid working.	Chris Lee	Development by end of 2022/23 with publication and communication commencing early 2023/24
2. Cabinet refreshes and updates the Council's HR policy framework to reflect new working styles, particularly policies affecting terms and conditions, organisation structure job roles and responsibilities, PPDRs as well as sickness absence and well being policies.	Accepted	It is agreed that some HR policies will need to be refreshed and updated to reflect new working styles and this will be carried out for some policies as and when they are due for review and for others on a proactive basis depending on the changes required	Tracey Thomas	On-going
3. Cabinet undertakes a full review of the leadership expectations and capabilities of managers at all levels. This review should provide managers with:	Partially accepted	Whilst it is agreed that managers need to: <ul style="list-style-type: none"> <li>• Understand their responsibilities in role modelling and disseminating the Council's vision and culture;</li> </ul>	Tracey Thomas	By end of 2023/24

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
<ul style="list-style-type: none"> <li>• An updated role definition;</li> <li>• A full understanding of their responsibility for disseminating the Council's vision and upholding its culture;</li> <li>• The people management skills and personal guidance they require to successfully deliver a hybrid model; and</li> <li>• A clear definition and understanding of what the Council means by 'management by results'. This should include defining expected people and performance management capabilities, leading to a review of the knowledge and skills required to develop all managers to meet this key requirement.</li> </ul>		<ul style="list-style-type: none"> <li>• Have the people management skills and personal guidance to successfully deliver the hybrid model, and</li> <li>• Have a clear definition and understanding of what the council means by 'management by results'</li> </ul> <p>It is not agreed that this necessarily requires an updated role definition for every manager and that this could be achieved through clear communication of the Council's expectations of managers.</p>		
<p>4. Cabinet clearly sets out its expectations on the levels of communication and consultation between managers and their hybrid/office-based and homeworking</p>	Accepted	<p>This recommendation is agreed. At the beginning of the pandemic a Homeworking etiquette guide was issued to managers and staff as well a</p>	Tracey Thomas	Throughout 2023/24 and onwards

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
<p>staff. Central to the system should be regular whole team meetings which encourage staff feedback to managers on how the effectiveness of working styles could be improved. An important element of the framework must be staff well-being needs.</p>		<p>training put in place for managers regarding managing remote working employees. This documentation and training included these messages. This will be reinforced as hybrid working becomes business as usual.</p>		
<p>5. Cabinet looks in the emerging Council culture by introducing a framework for the continual sharing of service area hybrid working processes, experiences and best practice, to benchmark and ensure consistency of culture, management and staff experience across the Council. Capturing some excellent existing cultural norms which are being employed by one, or a few Council Directorates offers the opportunity for useful organisation learning and potential change.</p>	Accepted	<p>This recommendation is agreed. The development of the Hybrid Model at Cardiff has been a collaborative approach with services and key stakeholders. A key part of this has been ongoing staff engagement which will continue to be scheduled in for regular check points of progress and sharing of good practice.</p>	Chris Lee	On-going
<p>6. Cabinet recognises the value in exploring the experiences of</p>	Accepted	<p>It is agreed that it is beneficial to explore the experiences of others including</p>	Chris Lee	On-going

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
<p>other Councils, for example Monmouthshire, which successfully introduced new ways of working well before the pandemic. Monmouthshire's experience of homeworking is summarised in this report and offers a number of learning opportunities for Cardiff Council, particularly their two-phase approach to hybrid working that further reduces staff: desk ratios and office space requirements. We recommend contact at Chief Executive level to establish potential learning followed by exchanges at director and senior manager level.</p>		<p>Monmouthshire Council as well as other core city authorities and others in Wales that have developed hybrid working. This will be developed further as more formal arrangements are put in place across organisations to support post pandemic service delivery.</p>		
<p>7. Cabinet invests in training to support the successful introduction of a new style of working in the delivery of Council services. Three key areas of focus and development for Cardiff Academy stood out in our research:</p>	<p>Accepted</p>	<p>It is agreed that along with development of vision and policies there will also be a need to invest in training whether this be through the Academy, directly in service areas or through subject matter experts. This will be put in place.</p>	<p>Tracey Thomas</p>	<p>By end of 2023/24</p>

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
<ul style="list-style-type: none"> <li>• Management skills – in coaching and mentoring; managing home/hybrid worker performance and identifying and dealing with staff wellbeing needs.</li> <li>• Induction – enhanced induction for home/hybrid working new starters</li> <li>• IT self-sufficiency – all staff would benefit from IT skills training that ensures confident self sufficiency whilst homeworking and successful communication with their line manager.</li> </ul>				
<p>8. Cabinet requires each Directorate to develop and implement an action plan setting out what it expects in terms of people management and preferred leadership styles. These plans should be consistent across the Council reflecting the refreshed vision and values</p>	Partially accepted	<p>New ways of working, including Hybrid Working are being built into refreshed Service Delivery Plans and Service Workforce Plans rather than as standalone plans for Hybrid Working. It is recognised that ‘one size doesn’t fit all’ but the policies, values and management guides referenced in earlier recommendations will support a consistent framework being developed.</p>	Chris Lee	As part of 2023/24 Service Delivery and Workforce Plans

Recommendation	Accepted, Partially Accepted or Not Accepted	Cabinet Response	Responsible Officer	Implementation Date
<p>9. Cabinet requires Senior Management Team to undertake regular reviews, at least annually, of the equality and consistency of hybrid working, its effectiveness in the delivery of council services and the embedding of the agreed and implemented recommendations in the report.</p>	<p>Partially accepted</p>	<p>As already referenced, regular staff engagement activity will continue to be undertaken as Hybrid working is developed at the Council and this is being reported to the Senior Management Team. This will include gaining assurance on the equality and consistency of how Hybrid Working is being deployed. In addition, as this becomes business as usual, assurance will also be gained through existing corporate mechanisms such as Senior Management Assurance Statements.</p>	<p>Chris Lee</p>	<p>Ongoing staff engagement and for embedding in corporate assurance processes by the end of 23/24.</p>



An inquiry report of the:  
**Policy Review & Performance Scrutiny Committee**

# Home & Agile Working

March 2022



Cardiff Council

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## FOREWORD

It is undoubtedly the case that the pandemic has changed the way we live and work. One of its few positive impacts has been that organisations have been forced to try new ways of working when normal office life was virtually stopped for a lengthy period of time.

When we were all asked to work from home some organisations feared a drop in performance and staff wellbeing. The evidence is now suggesting that many staff benefitted from this arrangement but also that their work performance was usually positive too. A national, even international consensus is now building that working life may never return to pre-pandemic patterns. That will not only change the nature of employment but also how countries operate. Large scale commuting and ever enlarging office blocks may now become a thing of the past, something most of us would welcome.

Here in Cardiff Council, the impact has been substantial but, as the infection risks reduce and the threat recedes, we are recognising that the authority's future is likely to be very different from that anticipated and planned for in 2019.

The Council's Senior Management Team has responded promptly to the opportunities described and has started shaping the authority's post pandemic future. It is a huge undertaking and one which the Policy Review and Performance Scrutiny Committee felt it could contribute to. Not to scope out an alternative strategy but to seek to add value and undertake research which could offer perspectives the present and future administrations would find helpful.

My sincere thanks to my task group colleagues Councillors Henshaw and Mackie for contributing to this Inquiry. Finally, I would like to express my appreciation of the excellent work of Principal Scrutiny Officer Nicola Newton, who played a major role in shaping the report and getting it published against a very tight deadline.

We therefore offer this report in the expectation that its findings and recommendations will enhance the work already in train. We commend it to the Cabinet and to the newly elected Council in May 2022.



A handwritten signature in black ink that reads "David Walker". The signature is written in a cursive, flowing style.

**Councillor David Walker, Chair,  
Policy Review & Performance  
Scrutiny Committee**

## TERMS OF REFERENCE

1. The Policy Review & Performance Scrutiny Committee agreed following its re-start in September 2020 that its work programme would include a task and finish inquiry into the Council's approach to capturing the benefits of homeworking developed as an emergency response to the pandemic. The Terms of Reference for the inquiry were agreed as follows:

***To examine how the experience of managing remotely during the pandemic can inform future policy on autonomy at work, operating within a culture of care and trust; with a specific focus on the management/leadership challenges of supporting home & agile working.***

2. The expected output/outcome from this investigation was:

To produce a report that uses the evidence gathered to make recommendations to the Cabinet to inform future policy on autonomy at work within a culture of care and trust.

3. The Committee agreed that the Membership of the task & finish group would comprise:

Councillor Jane Henshaw  
Councillor Norma Mackie  
Councillor David Walker (Chair)

## **KEY FINDINGS**

### **Organisational Strategy and Culture**

KF1 Where an organisation has large numbers of home/hybrid working staff there must be a trust-based model of service delivery that starts with clear corporate values from the leadership. The model should be understood and upheld by all employees, creating the culture for success. It will need to include checks and balances to ensure staff compliance when placed in a position of trust.

KF2 Organisations with a successful home/hybrid working culture have revisited and updated organisational values and developed a consistent leadership approach. The same management behaviours will be evident across all services and bases/locations, delivering a consistent culture, based on these values.

KF3 A move to home/hybrid working requires cultural change led from the top of the organisation and, in the Council, this has started to happen. Council senior managers interviewed considered that the organisational culture had started to change during the pandemic, but that further work was required to ensure that such change is consistently understood and applied by leaders in all directorates. The Chief Executive and Senior Management Team have started setting the tone and expectations for a new model of working and are now at the stage of ensuring that the tone and expectations cascade down consistently.

KF4 The Council's HR policy framework needs updating to reflect home & agile working, particularly policies affecting such areas as terms and conditions, personal performance and development review, organisation structure, job roles and responsibilities, as well as sickness absence and well-being policies.

KF5 As things change and home/hybrid working becomes established, equality between home and office-based workers is becoming the accepted norm. Senior managers consider this was not previously the case when office-based staff enjoyed some advantages.

KF6 Effective home/hybrid working requires effective corporate communication, to ensure staff feel involved and not isolated. The importance of engaging all staff in the development of new home/hybrid working proposals cannot be overstated.

KF7 It is important that home/hybrid workers establish clear boundaries between life and work and ensure a clear separation of the two.

KF8 Evidence from a spread of Cardiff senior managers revealed that every service area has its own culture. There does not appear to be a methodology for identifying what 'works well' and can be replicated. Sharing experiences and best practice in managing home/hybrid workers would secure greater uniformity of approach, which in turn would ensure the experience of home working for the Council is consistent across the organisation.

KF9 Compiling and making use of some excellent existing cultural norms which are being employed by one, or a few, Council directorates offers the opportunity for useful organisation learning and potential change.

## **Leadership and Management Behaviour**

### **Performance management – role of managers**

KF10 Managers have a major responsibility and will need to exercise a key role in making the home/hybrid working option a success and in helping their teams to support the creation of a successful homeworking environment.

KF11 A move to greater levels of home/hybrid working has a strategic impact on the role of the middle manager in an organisation. Senior

managers will become more dependent on middle managers fulfilling their potential as team leaders.

KF12 Homeworking throughout the pandemic has highlighted management style strengths, weaknesses and variation in the abilities of managers to adapt to new role expectations. Some middle managers are finding it difficult to embrace the increased responsibility.

KF13 The support needs of employees are picked up earlier in an office environment than a homeworking/virtual environment. The literature review confirms that managing homeworkers can be more challenging than managing office-based staff. Managers must adopt new ways of leading, motivating and monitoring their staff. They will also need skills in identifying and addressing wellbeing issues and concerns.

KF14 Managers who are unwilling or lack the capacity to change their management and control styles are likely to experience a deterioration in the depth and vitality of their connection with their homeworking direct reports, whose work performance may also suffer.

KF15 Managers must stay in close contact with home/hybrid workers, emphasising information-sharing and deliverables rather than close monitoring of work processes. In having this approach managers should be able to support staff in achieving work-life balance, better job performance and positive levels of collaboration with their co-workers.

KF16 Organisations that were early adopters of homeworking consider managing people online can be more challenging, particularly when more difficult conversations are required. Seeing people regularly at work enables managers to spot signs of stress. For home/hybrid workers the emphasis needs to be on regular and focussed on-line conversations and occasional face to face meetings with their manager.

KF17 Managers need to have a better understanding of what each direct report is working on and be prepared to challenge when a member of the team is underperforming. Monitoring work performance can only be successful when managers are prepared to speak openly with their staff about issues of concern including workloads.

KF18 A key success factor is that performance management is outcome based and measures an employee's effectiveness in undertaking their role as opposed to the hours worked. Trust will be central to a new outcome-based approach. Managers will need to adjust their strategies for monitoring employees, moving from behaviour-based to output-based controls in effectively managing home/hybrid working staff.

KF19 The Council's Personal Performance and Development Review framework of 6 monthly objectives setting and review is the formal mechanism for performance management. The framework would benefit from the inclusion of strategic informal checks between the 6-month reviews to manage staff performance. Manager and home/hybrid worker will also need to agree a *check-in check-out* system to maintain effective contact.

### **Performance managing the team- the role of managers**

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KF20 Senior managers in Cardiff are clear that the first question for all managers is '*can we deliver the service in the new working environment?*'.

KF21 Managing the hours worked by a team is monitored via the staff flexitime system DigiGov. Managers are encouraged to review staff flexitime records to identify any pattern of an employee continually working additional hours. Managers should encourage staff to take their leave entitlement.

KF22 Monmouthshire Council uses a trust-based time-keeping approach. Staff are employed on a fully flexible basis, there is no clocking in or out. Core hours have been removed altogether.

KF23 It is important that a hybrid policy clarifies that any service manager has the power to insist on physical attendance at a workplace where levels of service delivery, or output, would be compromised by homeworking, or where homeworking for the individual is not producing the outcomes agreed.

KF24 Hybrid working requires agreement between staff and management to ensure business/office hours are covered. Homeworking can elongate working hours from 7.30am-9pm, leading to responses to e-mails being delayed. This is particularly an issue for frontline services where staff need to deal with calls or emails during specific periods of the working day.

KF25 Whole team contact levels vary widely across the Council. Some service areas have weekly business improvement meetings that might be worthy of experimentation by other directorates or rolled out more widely and become a feature throughout the Council. Whatever model a service area adopts should allow regular work team contact

KF26 There is a perception that team working has recently suffered in some areas. This is more likely to be the case where managers/supervisors leading frontline workers are themselves based at home. It will be important, in such cases, for on-site or in-hub team meetings to be held from time to time so that personal contact is maintained, not only with the manager but between colleagues.

KF27 It is important that managers listen to individual employees and take their needs on board as well as the needs of the whole team in delivering the service. A key success factor in introducing a home/hybrid working model will be the need to review arrangements regularly and maintain open two-way communication with staff.

KF28 The relationship between manager and direct report should be a balanced one, using a management style that builds trust and empowers the employee. If an individual employee is struggling, they should be more closely monitored and supported.

KF29 Arrangements for new starters needs consolidation across the Council. One service reported that, where a team has a new starter, they are encouraged to work in County Hall for the first few weeks alongside a rotating number of staff, to kick start their induction. It is important that managers ensure new starters integrate well into their new team, creating opportunities for teams to meet up, including on screen socialising, and more connection and communication between staff generally. The Council offers a half day online induction course that may require review. Other successful homeworking organisations typically spend two days on induction training.

KF30 Management tools such as *mentoring* and *coaching* are used in organisations that report successful homeworking arrangements at all levels. Some Cardiff services report a mentoring approach, including one of 'buddying up' low and higher-grade staff within the service. All managers would benefit from training in the skills of coaching and mentoring.

KF31 We heard from Cardiff senior managers that '*Management roles have changed and a whole new layer of complexity exists*'; '*Line managers have adapted fast.... and we must take this golden opportunity*'; and '*Middle managers now take clearer responsibility for their teams and for the welfare of their direct reports*'. Present management structures may be inappropriate to address the challenges of hybrid working. Similarly, the management competencies required will be different and there will be a wide range of new skills required. A major



review and diagnosis of both structure and skills in each directorate would seem to be an essential starting point

## **Productivity**

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KF32 The positive impact of homeworking on productivity is well documented by academic and practitioner research<sup>1</sup>. Most employees engaging in homeworking prior to the pandemic were doing so by choice and self-reported an increase in their productivity, possibly motivated to suggest that homeworking is not detrimental to productivity. There are also manager reports of increased or 'no change' productivity with most of their homeworking staff.

KF33 The suggested reasons for improved homeworker productivity are attributed to an increase in work hours. This is usually made possible by reduced commuting times, removal of office-related distractions, work intensification, more discretionary effort, taking fewer breaks and, in some cases, working longer hours. Homeworkers are often motivated to prove that this alternative working arrangement, which suits their work/life balance needs, is successful.

KF34 The literature review found that an employee survey undertaken by the Chartered Institute of Personnel Development in 2020, and calculations made by Felstead in 2020 using Understanding Covid Society data revealed similar results. More than a third stated that homeworking had no effect on productivity. A lower proportion indicated that homeworking had either increased or decreased productivity. The main reasons cited for a decrease in productivity included having less work to do, having to provide care or home schooling, a lack of motivation/focus/concentration, limited access to workplace resources, less frequent interaction with colleagues, and changes to how work was carried out.

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<sup>1</sup> Appendix 1 A review of Research Evidence on the Impact of Homeworking, January 2022

KF35 The review found evidence that team productivity can be adversely affected by homeworking in cases where work involves a high degree of task interdependence. However, when homeworkers make themselves proactively available on-line to their colleagues in such circumstances, team performance can be enhanced.

KF36 Cardiff senior managers' perception is that staff are predominantly more productive homeworking and use their calendars more. Microsoft Teams has improved meeting capability, frequency and therefore productivity, whilst having the benefit of ensuring that everyone's input is sought.

KF37 A key factor found to affect team productivity is organisational attitude to homeworking. Research found that team performance tends not to suffer in organisations where homeworking is regarded as normal practice.

KF38 Whilst most Council services produced no metrics on productivity pre-pandemic, for those departments that are profession/policy based the perception is that productivity is higher operating in the virtual world than in the office.

## **Implications for staff**

### **Work-life balance & Well-being**

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KF39 Work-life balance & well-being are inextricably linked. In Cardiff senior managers report that working flexibly has benefitted employees' work-life balance and therefore, generally, staff are happy with the prospect of hybrid working. There will, however, be members of staff whose wellbeing is best served by being based at an office, or other

Council facility. There will also be a proportion of employees whose roles or home circumstances will not allow homeworking.

KF40 Flexibility of working style can have a positive impact on work-life balance, particularly due to the elimination of commuting time, however research confirms there are gender related implications, particularly the potential for increased stress and home demands on time where there are caring responsibilities. These need to be picked up during manager one to ones and addressed.

KF41 Homeworking can lead to lower levels of work-related stress than those experienced by office-based staff due to the perception of having greater control over one's work environment and schedule. Research suggests that work-family role conflict is sometimes a source of pressure for the homeworker and has been correlated with negative experiences of emotional and physical ill health. This again will be a challenge for managers to help resolve.

KF42 In Cardiff there has been some staff resistance to homeworking, particularly where home issues and distractions can cause difficulties. Some staff have asked to return to the office, having missed the benefit of social interaction with work colleagues. Going forward the Council may need to review the impact of reduced social interaction on staff well-being.

KF43 The review of homeworking literature revealed social isolation as one of the challenges of working from home. Partial homeworkers are less likely to experience social isolation or miss the emotional support from co-workers and informal interaction with others compared with full time homeworkers. An organisation introducing homeworking should consider an individual's suitability for dealing with the social isolation associated with full time homeworking.

KF44 Research found that homeworking is unlikely to exert a negative effect on relationships with colleagues for individuals who partially work at home. (ACAS 2013). For those who are exclusively homeworking there may be links to decreased quality of co-worker relationships. The study found that it is the quality rather than the quantity of communication with others that is important to homeworkers

KF45 The homeworking employee needs an environment adequately set up for work, confidentiality, personal rules and self-discipline, which will differ from those employed at an office base.

### **Personal job satisfaction**

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KF46 A key success factor in homeworking is developing effective self-management skills. Ensuring that staff practice good diary management, that calendars are automatically updated, voicemails and out of office messages are routinely used to enable business continuity.

KF47 The individual homeworking employee has a heightened responsibility to feedback ideas and issues of concern to their manager effectively. Homeworking employees will need to develop the skills to achieve this, but it is most likely to work when the manager is able to encourage two way open and effective dialogue.

KF48 There is variable evidence of the impact of homeworking on job satisfaction. Research suggests that job satisfaction tails off as homeworking approaches 3 days per week. Where there is higher autonomy, leading to higher job satisfaction, this can often be attributed to higher personal commitment and loyalty to the employer.

KF49 Homeworkers can have concerns about the impact of professional isolation on their career prospects, however there is insufficient research evidence to establish whether homeworking contributes to lower levels of career ambition or whether employees with pre-existing low levels of

career ambition have deliberately chosen homeworking arrangements. Visibility in the workplace, if only for part of the week, may reassure staff that their capabilities are noticed by managers.

KF50 In Cardiff Council, where there has been recent structural movement in directorates, there is some evidence of career progression whilst homeworking was in place.

## Practical Issues

### Space/accommodation

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KF51 A benefit of staff being home based for part or all of the working week is the cost reduction in overheads associated with maintaining large buildings. To utilise its asset base efficiently Monmouthshire's new HQ depersonalised office space with bookable meeting rooms for face-to-face meetings. Services are allocated office zones, but not personal desks. Monmouthshire's move to flexible working has evolved in two phases. Following the first phase move to *flexible* working the Council adopted a 50% desk: employee ratio. However, the second phase move to *hybrid* working is likely to see a 20% desk: employee ratio. The Chief Executive is located alongside his senior team and Cabinet Members share one large office.

KF52 NRW has recently reviewed its estate across Wales and established 3 hybrid working sites. A central motivating factor is Carbon reduction. Early calculations suggest that 50% less office space will be needed than previous working arrangements. The status associated with personal offices has been removed. All space has been stripped of personal belongings and set up for hot desking, providing a range of working options, with sound pods, breakout areas, sofas and team meeting areas. Visiting the office is to meet, not to work alone. NRW recognise the importance of exciting staff about their environment and have sought staff views on place-based decision making. As with Monmouthshire there will

be less use of desk-based telephones and a room and desk booking system is in place.

KF53 It will be important that Cardiff Council maintains a longer-term vision for office needs and builds flexibility into its plans for office accommodation where staff will be hybrid working and ensures a generous supply of bookable meeting rooms.

KF54 Staff in Cardiff are currently expected to be in the office on a *need only* basis, wellbeing need, physical need or where the home working environment is unsuitable. Looking ahead managers expect most staff to be home based 3.5 to 4 days and office based 1 to 1.5 days. This will considerably reduce the office footprint

KF55 Not all staff will have the option of home/hybrid working. Technical staff will have to be at base, and some services, such as Waste Management, need middle managers and supervisors to communicate on-site with frontline staff. To avoid those staff who are wholly frontline being excluded from all home/hybrid working opportunities the Council may wish to examine the opportunities for job redesign or job share.

## **Technology**

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KF56 Technology plays a key part in successful homeworking. Homeworkers require enhanced access to technology and support compared to office-based workers as they are more affected when technological issues arise in their own environment without the immediate support of colleagues or alternative technology to rely on. This can potentially result in further social and professional isolation and stress from not being connected with colleagues.

KF57 The key to successful home/hybrid working is becoming paperless and fully electronic. Training staff and members in the technology to work virtually and providing high quality equipment will underpin this.

KF58 A hybrid working policy will require further developing and embracing of technology. To date the Council has a good record in the provision of technical support and managers are confident that the IT service, with correct funding, will be able to support homeworking effectively.

KF59 Frontline services such as Waste Management require investment in new fully integrated mobile software that allows frontline staff to work directly from home without first reporting to a core office. It requires a business case for investment in software systems,

## **Recruitment**

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KF60 Home/hybrid working is a new way of working that has become a recruitment benefit for most Council services. Staff retention is normally better with homeworking and a package offering work-life balance can be attractive. However, going forward, the Council will need to review the trends/profile of future recruits and whether this has been impacted by the offer of hybrid working.

## **Training and Development**

KF61 Managers will require new management skills to support homeworking and would benefit from formal training in skills such as coaching/mentoring as part of a formal hybrid working roll out. Personal Performance and Development Reviews will need to address professional and career development.

KF62 Whilst the majority of staff training takes place online, some mandatory classroom-based training for the manual workforce has fallen behind during the pandemic and needs to be reinstated.

KF63 Management training and support on health and safety guidance is effective. However, a number of areas require training and development courses to maximise the effectiveness of homeworking, many of which could be offered by Cardiff Academy: They include IT skills to ensure staff are effective at online working from home; Management skills in performance management, staff development, coaching and mentoring, and improving one to one communication and listening skills. Also, how best to induct new starters whilst hybrid-working.



## RECOMMENDATIONS

The Task group recommends that, in order to lock in the changing culture emerging from working arrangements during the pandemic, and to ensure a successful home & agile hybrid working model, in the medium-longer term, Cabinet:

R1 Develops, publishes and communicates to all staff a refreshed set of Council values setting out its vision of how hybrid working will be introduced and embedded. Such values will need to be widely communicated and receive constant reinforcement by leaders at all levels.  
*Supported by KF1,3*

R2 Refreshes and updates the Council's HR policy framework to reflect new working styles, particularly policies affecting such areas as terms and conditions, organisation structure, job roles and responsibilities, PPDRs as well as sickness absence and well-being policies.  
*Supported by KF4,7,39,41,55*

R3 Undertakes a full review of the leadership expectations and capabilities of managers at all levels. This review should provide managers with:

- An updated role definition;
- A full understanding of their responsibility for disseminating the Council's vision and upholding its culture;
- The people management skills and personal guidance they require to successfully deliver a hybrid model; and
- A clear definition and understanding of what the Council means by 'management by results.' This should include defining expected people and performance management capabilities, leading to a review of the knowledge and skills required to develop all managers to meet this key requirement.

*Supported by KF2,10,11,12,13,14,17,18,31*

R4 Clearly sets out its expectations on the levels of communication and consultation between managers and their hybrid/office-based and homeworking staff. Central to the system should be regular whole team meetings which encourage staff feedback to managers on how the effectiveness of working styles could be improved. An important element of the framework must be staff well-being needs.

*Supported by KF6,15,16,19,25,26,43,44*

R5 Locks in the emerging Council culture by introducing a framework for the continual sharing of service area hybrid working processes, experiences, and best practice, to benchmark and ensure consistency of culture, management, and staff experience across the Council. Capturing some excellent existing cultural norms which are being employed by one, or a few, Council Directorates offers the opportunity for useful organisation learning and potential change.

*Supported by KF8,9*

R6 Recognises the value in exploring the experiences of other Councils, for example Monmouthshire, which successfully introduced new ways of working well before the pandemic. Monmouthshire's experience of homeworking is summarised in this report and offers a number of learning opportunities for Cardiff Council, particularly their two-phase approach to hybrid working that further reduces staff: desk ratios and office space requirements.

We recommend contact at Chief Executive level to establish potential learning followed by exchanges at director and senior manager level.

*Supported by KF22,51,53,54*

R7 Invests in training to support the successful introduction of a new style of working in the delivery of Council services. Three key areas of focus and development for Cardiff Academy stood out in our research:

- *Management skills* – in coaching and mentoring; managing home/hybrid worker performance and identifying and dealing with staff wellbeing needs.

- *Induction* – enhanced induction for home/hybrid working new starters.
- *IT self-sufficiency* – all staff would benefit from *IT skills* training that ensures confident self-sufficiency whilst homeworking and successful communication with their line manager.

*Supported by KF29,30,46,47,56,57,58,61,63*

R8 Requires each Directorate to develop and implement an action plan setting out what it expects in terms of people management and preferred leadership styles. These plans should be consistent across the Council reflecting the refreshed vision and values.

*Supported by KF20,21,28*

R9 Requires the Senior Management Team to undertake regular reviews, at least annually, of the quality and consistency of hybrid working, its effectiveness in the delivery of council services and the embedding of the agreed and implemented recommendations in this report.

*Supported by KF27,42,60*

## CONTEXT

### Cardiff Council - Overview of current homeworking position

4. Prior to the pandemic very few Cardiff Council employees worked from home and some senior managers reported a level of scepticism as to whether this was the best arrangement to deliver council business. However, the pandemic emergency of 2020 demonstrated that homeworking works well for most people and the present perceived management view is that homeworking offers benefits to both employer and employee. For the past 2 years staff have taken the opportunity of more flexible working styles, adapted quickly and many are reluctant to give up homeworking. There is an added stated environmental benefit that less commuting may reduce carbon emissions, although heating and lighting the home workplace may counterbalance that potential advantage. There have also been challenges in Cardiff, and, whilst there is a general resistance to change in some Council service areas, the prevailing management view is that the pandemic has led to more flexibility and innovation. Managers' report that solutions that facilitate homeworking are emerging all the time<sup>2</sup>. So how did the Council arrive at this point?
5. The Council transitioned to a 'work from home' model for staff not working in critical front-line services in response to Covid-19 in March 2020. It has not reverted to pre-pandemic working practices, instead it is proposing a Hybrid Working Model (HWM) that seeks to maintain the benefits seen over the past two years, whilst mitigating the risks identified. (*Recovery and Renewal Cabinet Report, May 2021*).
6. For the immediate future, the expectation is that many staff will continue to work from home where possible. The Council's Recovery Programme is being delivered in 2 phases – 'during' (phase 1) and 'post' pandemic (phase 2). The HWM is currently under development, with staff and stakeholder engagement well underway. Work is in progress addressing complexities such as culture change, meeting protocols, and locality

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<sup>2</sup> Senior Management Fieldwork by Homeworking Task Group, November 2021

working. The Programme will have key linkages with other Council strategies such as One Planet and Economic Recovery. A future Organisational Recovery report will set out a recommended service model. A business case analysis will be needed alongside development of the model that establishes the transformational impact, illustrating the importance of productivity gains. The current phase 1 is key as the organisation becomes clearer on how it will operate services post pandemic.

7. To support its work on a HWM the Council carried out an *Employee Survey* between July and September 2021. The headlines from the survey indicated that staff working from home during the pandemic valued no commuting (87%); flexibility (74%); and improved work/life balance (68%); however, missed colleagues / social interactions (54%); found it harder to differentiate home and work (32%); and had IT problems (31%). Looking back 70% considered themselves to be more productive (a little or a lot); 63% have an increased workload (slightly or much increased); 66% have an improved sense of wellbeing (slightly or much improved); 57% feel slightly or a lot less stressed. Looking forward, 26% of staff felt working from home would best suit their role; 15.9% would prefer to be home-based/mobile; 50.7% felt hybrid working would best suit their role; and just 7.4% felt working full time on-site/office based would best suit the role. The top benefits of hybrid working were seen as less commuting (89%) flexibility (83%) and reducing my carbon footprint (73%); whilst top disadvantages were considered hot-desking (42%) and IT problems (34%).
8. The employee survey also sought managers views on the experience of managing staff working from home. Over 80% of managers felt they had had sufficient contact with staff during the pandemic, whilst 88% considered they had been able to support their staff. Managers felt it had been easier to set up meetings (68%), use technology (64%) and productivity had increased (44%). The key disadvantages highlighted were concerns over staff well-being (49%), IT problems (46%) and increased workloads (29%). 35% of managers consider hybrid working is already

successfully in place; 20% consider further IT support is required and 19% would be seeking different equipment.

9. The Council plans to base its HWM on 3 key principles:

- Work is what we do not where we do it;
- Hybrid Working will be embedded in the way we work, and this will be the norm, not the exception;
- Management by results

10. As the Council develops its HWM managers will be encouraged to:

- Empower employees to have the autonomy to choose where, when and how work is carried out whilst meeting the needs of the business.
- Adapt their styles to ensure effective outputs and continuous improvement.
- Be proactive in maintaining effective communication and working relationships.
- Be fair and consistent in considering individual circumstances & workstyles.

11. Within a Hybrid working environment employees will be encouraged to:

- Take greater responsibility when choosing where, when and how work is completed in order to achieve the required outputs.
- Make the best use of technologies and their working environment to improve productivity and customer focus.
- Utilise the 3 Hybrid Working principles to meet the needs of the business whilst promoting their own wellbeing & work/life balance.
- Take responsibility for their own working practices and ensure effective communication & working relationships are maintained.

12. The Council believes working spaces are shaped by activities, not allocated to individuals. A *Digital First* approach will deliver modernisation of desktop telephony & audio/visual solutions, giving employees the software to carry out their work at any location. A desk booking system will give the employee the option of selecting location and preferred desk for a half or full day.

13. *Activity Based Working* will need to accommodate the following 4 tasks:

- Focus - an environment that allows concentration and minimal interruption.
- Collaboration - an environment that enables creativity and innovation working with others, either in person or via technology.
- Socialise/Network - sharing information and ideas across teams, services, and the organisation to promote a move away from silo working.
- Learn - formal and informal training courses, peer to peer contact, supervision and mentoring.

## KEY EVIDENCE

14. Members of the task group first commissioned a review of published research evidence on the impact of pre-pandemic homeworking, to identify the issues that should form the basis of their evidence gathering from internal and external witnesses. The review is attached to this report at **Appendix 1** and the key messages from its executive summary have been incorporated within the key evidence presented in this report. The review provided a platform for the task group's work and those who require more detail as to the sources of evidence are encouraged to follow the link on page 57
15. To supplement the review and the evidence gathering the task group interviewed a cross section of senior managers from a variety of Cardiff's services on their experiences of managing homeworking staff. Their views and experiences have been consolidated, analysed, and headline findings captured in the key evidence section.
16. Two comparable public sector organisations were chosen as reference points, due to their move into homeworking well before the pandemic, Monmouthshire County Council and Natural Resources Wales (NRW). We were interested to learn how they have made it work and what they will be refining as they look ahead and consolidate the position post pandemic. The background to each journey, in their own words, is captured in the boxes below, and their evidence and pointers to key success factors are incorporated in the key evidence section of this report.
17. The evidence gathered has been collated and analysed thematically. The themes emerging that merit consideration for the medium-long term development of future working styles are Organisational Strategy & Culture; Leadership & Management behaviours; Implications for Staff; Practical Issues and Training & Development.



## **Monmouthshire County Council**

Monmouthshire Council has been working flexibly for many years. The arrival of a new Chief Executive in 2009, who saw little evidence of agile working, sought to change office culture, beginning by creating an open plan office for himself and the team directly supporting him.

New headquarters, located 12 miles from the former site, were at the planning stage and would seek to address future needs, technological requirements, travel patterns, sustainable heating, and parking provision. The needs of the workforce at the time, including those commuting, were central to the plans. However, cost was a key driver, and the new HQ was constructed on the basis that 50% of the workforce would be homeworking at any one time and therefore the building could be much smaller in scale than its predecessors. That decision was made before the arrival of the pandemic.

Staff were asked to empty desks, clear bookcases, and scan documents needing to be retained, enabling the council to become paperless. For some this was difficult, however many embraced it. At the same time, the council abandoned its 'core' working hours (10am-12pm and 2pm- 4pm) and introduced completely flexible working hours. Online 'Agile Working Flexi Sheets' were introduced, placing the responsibility on the employee to be honest about the hours they were working. This required managers to trust their employees and manage performance in terms of their effectiveness in performing their role as opposed to the hours sat at a desk. All employees were required to maintain an up-to-date online calendar including meetings, working location and private appointments, so that managers were clear where staff were at all times. The Council's corporate values of Fairness, Flexibility, Openness and Teamwork were understood, and the culture became a 'trust based' model, which would assist the council throughout the turmoil of not having a HQ for an extended time.

The two years needed to build a new HQ provided a testbed for Agile Working and enabled officers and members to find alternative spaces for working and holding meetings. Monmouthshire had small satellite offices and officers took advantage of working at those and places such as community hubs and leisure centres but mostly, both staff and members attempted agile working. Formal meetings such as committees were held in the Shire Hall, a council owned historic building. Very informal meetings such as Scrutiny Chairs Group were held in a local café/pub at zero cost.

Throughout the construction period a business case for Agile Working ensured that the technology to enable staff and members to continue working effectively was put in place. All staff and members were given a laptop with video capability. Note the key difference between home-working and 'agile working' is that employees are not expected to work from a single location or from their homes, the location could be a leisure centre, a community hub, a coffee shop, or campervan!

Future arrangements, both organisational needs and accommodation capacity are under review. Pre-pandemic some staff were home-working 1 day per week whereas this is likely to become the more permanent pattern for many, with staff attending HQ 1-2 days each week.

## **Natural Resources Wales**

Natural Resources Wales (NRW) is a Welsh Government sponsored body that became operational from 1 April 2013, formed by the merger of the Countryside Council for Wales, the Environment Agency Wales, and the Forestry Commission Wales. It is responsible for environmental protection and regulation and the maintenance of natural resources throughout Wales.

Pre-Covid NRW were already working flexibly, with few roles tied to specific locations. Working from home was by informal arrangement at the discretion of the line manager. Almost all staff already had laptops, so when Covid hit the ICT was already in place. NRW's geographical spread means its experience is a little different to Cardiff Council, though the principles of successfully delivering homeworking are the same.

NRW underwent organisational re-design a few years ago, creating more consistent teams, fewer managers and more supervisors who are closer to their actual teams. The organisational structure created uses a matrix style of management, six Executive Team Directors manage all staff across Wales.

NRW are currently reviewing their Homeworking Strategy and Space Strategy. A staff survey in July 2021 revealed that staff appreciate the flexibility of homeworking and 78% wanted to either work from home or work flexibly.

18. Monmouthshire Council's values are Open, Fair and Flexible. Clear corporate values from the leadership that are understood and upheld by all, seek to create the culture for success. The trust-based model is endorsed by the Chief Executive hosting a whole organisation Teams meeting every Friday, referencing organisational expectations. The CEO is quoted as saying "*We employ adults, not children and you are trusted until you prove otherwise*".

A key success factor for Monmouthshire in embracing homeworking has been effective corporate communication, to ensure staff don't feel isolated. Monmouthshire's Corporate Communications team has therefore stepped up.

Monmouthshire stresses the importance of staff engagement, of involving staff in new proposals, understanding their needs, not underestimating the sensitivity of working arrangements and recognising that many will be against it.

Monmouthshire admit there were difficult moments in the course of getting to their current position. Overcoming teething problems requires selling the flexibility of new arrangements. It is important that no member of staff is told they must work from home, it is very much up to the individual. Some Monmouthshire officers are still in the office more than they are at home.

A further success factor Monmouthshire Council has identified is that all managers and staff must consider the boundaries between life and work and ensure a clear separation. The Council intend to trial hybrid working and aims to introduce a hybrid policy by Christmas 2021.

19. Natural Resources Wales report it has taken awhile for the cultures of three previously separate organisations to merge into one, suggesting there had been a few issues along the way. A lot of work has been done on values and what leadership looks like. NRW's aim now is that when you walk into an NRW office across Wales the same behaviours will be evident; a consistent culture based on the organisation's values.

20. Cardiff Council's approach to post pandemic organisational recovery is set out in 4 strands of a Recovery Programme:

*People* – what people need to operate efficiently and effectively, including: policies & working arrangements e.g., core hours; management / staff guides/staff training e.g. on managing outcomes; performance management; health and wellbeing support.

*Accommodation* - workspace needs, including spatial assessments, safe layouts, storage and document retention; Hybrid meeting arrangements; touch down requirements – core buildings and community based; workflow arrangements; smart building technology

*Technology* needs, including desktop solutions / standardisation; hybrid technology / meetings (staff and Members to consider); connectivity solutions

*Customer's* needs, including: A need to refresh any customer / resident engagement – post pandemic have expectations changed? Automation and increased digitalisation; use of data; customer contact points .... including those not able to use digital channels.

21. Senior manager fieldwork revealed there is clear direction from the Chief Executive and Senior Management Team that the manager's role is to focus on staff welfare and celebrate success, setting the tone and expectations. That tone all senior managers must aim to cascade down. Senior managers consider that organisational culture has changed, there is now more equality between home and office-based workers.

Managers recognise the organisation can benefit from homeworking and the vast majority of staff, even those that were sceptical, think there is a place for it. The Council has good Terms and Conditions and whilst happier staff makes for a better workplace, senior managers feel the Council shouldn't be taken advantage of.

Senior managers recognise that a move to homeworking requires cultural change, which remains the Council's greatest challenge. A hybrid working policy will require further developing and embracing of technology. It will also need to include checks and balances to ensure staff compliance when

placed in a position of trust. The Council's HR policy framework needs updating to reflect online working, particularly policies such as sickness absence and well-being policies. There is clearly the environmental impact assessment of homeworking to factor into new ways of working, but this inquiry has not looked closely at these.

## **Leadership and Management Behaviour**

### **Performance management – role of managers**

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22. The literature review found that managers play a key role in making homeworking a success and in creating a successful homeworking environment. Research shows that a substantial proportion of managers (40%) confirmed that managing homeworkers is more difficult than managing office-based staff. Managers might have to change their strategies for monitoring employees from behaviour-based to output-based controls to effectively manage homeworking.

Managers who are unwilling or who lack the training to change their management and control styles, are likely to experience a deterioration in the depth and vitality of their connection with their homeworking direct reports. Research suggests Managers should be willing to relinquish the traditional notions of how best to manage performance – usually based on direct supervision – and adopt new ways of motivating and monitoring their staff. For managers who prefer to have their employees in sight, supervision of their staff, managing homeworkers, poses a challenge. They may be concerned about a loss of direct control over homeworkers, unable to detect whether an employee is experiencing difficulties, is working too much, or is not working enough. Managers must find new ways of motivating. Trust will be central to a new output-based approach. The adoption of output-based controls will involve assessing performance based on output, products, or other deliverables of the work rather than on the process or behaviours used to generate the output. The more

common practice of behaviour-based controls refers to assessment of employee performance based on employees' observable actions. Managers must stay in close contact with homeworkers, emphasising information-sharing rather than close monitoring of work processes. In having this approach managers are able to support staff in achieving lower work-to-life conflict, better performance, and higher rates of helping their co-workers.

23. Performance management is outcome based at Monmouthshire Council.

The performance framework has changed, becoming less formal.

Quarterly goal setting has become 6 monthly. A *check- in check -out* system is in place to have conversations around what matters.

One-to-one meetings are held regularly to ensure that employees know what is expected of them and to ensure they deliver accordingly.

Performance management is 'outcome based' as opposed to 'time quantifiable'. Managing by output and delivery requires a lot more trust in employees. Managers need to have a better understanding of what each member of the team is working on and must be prepared to challenge when a member of the team is underperforming.

Monmouthshire consider managing online is harder, more difficult conversations are required. Members highlighted that seeing people regularly at work enabled managers to spot signs of stress and poor mental health. Monmouthshire counteract this with regular online 1-to-1's between employee and manager and consider that catch up conversations are more frequent and focussed.

A key success factor at Monmouthshire is that performance management is 'outcome based' as opposed to 'time quantified' i.e., measuring an employee's effectiveness in undertaking of their role as opposed to the hours worked.

24. NRW's considered view is that Covid-19 facilitated a huge shift in mindset.

NRW consider they are getting more from their staff. Employee performance objectives are based on the high-level objectives set out in

the Corporate Plan. Performance Reviews take place twice yearly and there is an expectation that between reviews managers will carry out regular strategic rather than daily checks to manage staff performance.

25. Senior managers highlighted that the Council has a formal Personal Performance & Development Review policy and framework which continues to be applied and works well virtually. The framework ensures 6 monthly 1-to-1's with all direct reports. However, 1-to-1's are generally a more regular feature for new starters, staff who are struggling, or those undertaking new roles/ extra activities.

The support for employee needs is picked up earlier in an office environment than a homeworking/virtual environment. The individual homeworking employee has a heightened responsibility to report back to their manager effectively, recognising that they are a part of an effective solution and will need to develop the skills to achieve this.

Senior managers report that the move to homeworking has forced a change of mindset with respect to managing staff and use of their time. Generally, managers have responded well, line managers have adapted fast and managing online is functioning well. All managers are more aware of HR policies. However, homeworking has highlighted management style strengths and weaknesses, the ability to adapt and management competencies.

With homeworking management roles have changed, middle managers have become a vital organisational communication tool. Some managers are finding it difficult to embrace the increased responsibility. Virtual management removes senior manager real-time assessment of body language and behaviour in the office, making them more dependent on middle managers, but this is where the supervisory responsibility should lie. Where there are trust issues, some managers are perceived to struggle and would benefit from formal coaching/mentoring/support and training as part of a formal hybrid working roll out.

## Performance managing the team- role of managers

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26. Senior managers are clear that the first question for all managers is 'can we deliver the service?' Managing the *hours worked* by a team is monitored via the staff flexitime system, DigiGov. Managers are encouraged to review staff flexitime records. Monitoring *workloads* starts with sound and regular communication between manager and direct report.

Whole team contact levels vary widely across the Council. In some services operational managers are encouraged to have contact with their whole team a minimum of once every three weeks, with most teams meeting on a fortnightly basis. In others whole team meetings are held once a month, team leaders meet weekly, and every individual has a 1-to-1 once per month. In others direct reports have weekly meetings with managers, there will be e-mail chats and more informal check-ups. Some report that team members speak over Microsoft Teams 2-3 times a day,

One service reported that where a team has a new starter, they are encouraged to work in County Hall for the first few weeks alongside a rotating number of staff to kick start their networking. Another service reported a mentoring approach of buddying up low and high-grade staff.

Senior managers report that whilst culture is changing and workloads are increasing, the management of performance has not changed significantly, it remains mostly output and trust based. Microsoft Teams has improved meeting capability and productivity is considered to have improved.

Managers agreed the pandemic has led to innovation in some areas.

*'At the start of the pandemic, I held a daily 30-minute Teams meeting with my direct reports...we developed an action plan for each functional area. I also had a 1-2-1 weekly meeting with each direct report – now fortnightly.'*

There is a perception that team working has suffered in some areas.

Cardiff senior managers considered that the manager's role is to lead by example by effectively separating work from home life, simply saying 'I'm logging off now' when not working. Managers can review flexitime records



to identify a pattern of continually working additional hours and some need to encourage staff to take their leave. Where homeworking managers/supervisors are leading frontline workers, it is important to maintain a strong physical interface to avoid distancing between manager and employee. Where the organisation issues a directive that all staff who are able should work from home, it is important that a hybrid policy clarifies that any manager has the power to insist on physical attendance where levels of service would be compromised by homeworking.

27. Monmouthshire recognises that homeworking teams are more effective because of better communication and mutual co-operation. It has chosen to focus on delivering outcomes that matter to citizens, rather than counting time. To maintain momentum teams often create alternative methods of contact, e.g., outdoor meetings.

Monmouthshire cites that a key benefit of homeworking is more effective leadership and improved workforce flexibility. Managers listen to employees and take their needs on board as well as the needs of the service, understanding that the team is not made up of 'robots'. A key success factor for that authority is that managers will need to review homeworking arrangements regularly and maintain open two-way communication with their staff.

28. At NRW 19% of the current workforce started working for the organisation during Covid. To ensure new starters and teams work well together opportunities for teams to meet up include on screen socialising, a commitment to social meetings, and more connection and communication with staff generally. New starters are expected to spend two days induction training. Senior staff are also making more effort to meet online than historically.

NRW encourages a strong leadership approach, recognising that if Managers take a caring and supportive approach NRW reaps the benefit. Microsoft Teams phone/video calls make it easier to get to know and to praise an employee. Notably staff retention is good. A distinction is made between mentoring someone and coaching them, and a range of management

training courses are ongoing. The most senior managers are encouraged to establish relationships with professional mentors.

At NRW the relationship between managers and staff is characterised by using a balanced management style to build trust. Staff are empowered, trust is considered to be an organisational norm. If an individual employee is struggling, they are more closely supported and monitored.

## **Productivity**

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29. The literature review revealed the positive impact of homeworking on productivity is well documented by academic and practitioner research from the late 1990s and early 2000. Most employees engaging in homeworking prior to the pandemic were doing so by choice and self-reported an increase in their productivity, possibly motivated to prove that homeworking is not detrimental to productivity. More recent and rigorous evidence (after 2010) using self-reported data plus supervisor rated assessment supported that view. A quantitative assessment found that productivity sometimes increased significantly.

Various reasons were cited in different literature on the reasons for increased productivity. Generally, this is attributed to an increase in work hours made possible by reduced commuting times. The productivity gains can also arise from the lack of office-related distractions present in the home setting e.g. frequent phone calls or impromptu conversations with colleagues can be avoided. Another reason cited is work intensification. Individuals increase effort while working, putting in more discretionary effort taking fewer breaks and, in some cases, working longer hours when homeworking. One suggestion is that staff are often grateful for the opportunity to work from home, and so exert greater effort, or are motivated to prove that this alternative working arrangement is successful.

There is limited information on the effect that the widespread growth of enforced homeworking has had on productivity levels during the lockdown

and recent research findings have differing results. Research conducted in the Netherlands reported that productivity has slightly decreased, however Canadian research reported the opposite.

The employee survey undertaken by CIPD in 2020 and calculations made by Felstead 2020 using Understanding Covid Society data found similar results. More than a third stated that homeworking had no effect on productivity. A smaller proportion stated that this had either increased or decreased productivity. The main reasons cited for the decrease in productivity include the following: having less work to do, having to provide care or home schooling, a lack of motivation/focus/concentration, limited access to workplace resources, less frequent interaction with colleagues, and changes to how work was carried out.

There is some evidence that team productivity can be affected to some degree by homeworking in cases where work involves a high degree of task interdependence. This can be true in cases where there are limited avenues for communication and coordination between team members. However, evidence suggests that when homeworkers themselves are proactively available to their colleagues, team performance can be enhanced.

Perceptions that homeworking can threaten knowledge transfer between homeworkers and office-based staff and potentially affect the quality of relationships among workers is quite well documented in research. However, research evidence demonstrates that homeworking does not significantly affect the quality of information exchange between homeworkers and other organisational members. Instead, it was found that a key factor that affects team productivity is organisational attitude to homeworking. Team performance does not suffer in organisations where homeworking is regarded as a normative practice. The development of new processes, communication routines, schedules to accommodate homeworkers help maximise the benefits that can be derived from homeworking and the work of the team.

30. Senior Cardiff Council managers' report that where a service is profession/policy based the perception is that productivity is higher in the virtual world than in the office. The opportunity for 100% focus at home can be more productive. Removing commuting times, which benefits those that travel furthest, has the potential to gain a minimum of 1-hour extra productivity each day without additional stress. Whilst most services report no metrics on productivity, senior management perception is that people are more productive and are using their calendars more. Microsoft Teams has improved meeting capability and productivity and has the benefit of ensuring that everyone's input is sought.

## **Implications for Staff**

### **Work-life balance**

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31. The literature review established that homeworking has a positive impact on work-life balance, particularly the elimination of commuting time, however there are gender related implications, particularly the potential for increased stress where there are caring responsibilities. Boundaries can become blurred, and one needs to adopt boundary management tactics, personal rules and self-discipline. It is critical that the home environment is adequately set up for work and the individual is sheltered from non-work interruptions.
32. Senior Council managers' report that, in general staff are happy with the prospect of hybrid working, homeworking and working flexibly with many reporting having benefitted in terms of their work-life balance. However, working arrangements need to reach a consolidated position. Work-life balance can be achieved when homeworking, usually leading to happier, more productive staff, and this therefore benefits the employer. Some managers hold weekly meetings to check on staff well-being and ensure no-one feels disconnected from the team. Staff find it less stressful not having to commute.

33. The Council has many employees with caring responsibilities for whom greater flexibility of work style has added benefits. An employee can provide a level of support for elderly relatives whilst homeworking, particularly where the work base is a long way from home and a stressful commute has been removed. Such employees found that short caring breaks did not reduce their work capacity or hours which could stretch to compensate.

34. Monmouthshire Council supports the ethos that Work-Life Balance is an opportunity for all employees, not just those with family/caring responsibilities. The Council recognises that personal fulfilment is important and may not always be connected to the workplace.

### **Job satisfaction**

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35. The literature review revealed variable evidence of the impact of homeworking on job satisfaction. Those homeworking three days or more per week reported higher levels of job satisfaction than office-based staff. For those homeworking for up to 12 hours per week a positive relationship emerges between homeworking and job satisfaction. Interestingly satisfaction tails off as homeworking approaches 20 hours (3 days) per week. Higher job autonomy equates to higher job satisfaction from homeworking. Autonomy and freedom to manage their own time and schedule the hours worked to meet both work and family commitments reduces work-family conflict. Where there is higher autonomy and job satisfaction there is higher organisational commitment and greater loyalty to the employer. This results in attracting and keeping the best talent. Note that one study revealed for those employees who worked exclusively at home, their levels of commitment were no different to those of office-based staff.

36. Monmouthshire considers a key success factor in homeworking is flexibility. They do not designate employees as a 'homeworker' but travelling to work in the office is encouraged on a 'needs basis' only,

acknowledging that some services, such as Children's Services, the team needs to work closely together. They also recognise that for some staff, such as carers and those in frontline operational public services, homeworking is impossible.

A further key success factor in Monmouthshire's view is effective self-management skills. Ensuring staff practice good diary management, calendars are automatically updated, voicemails and out of offices are switched on, will enable business continuity.

Monmouthshire firmly believes that people feel greater loyalty and motivation because they have more control over their working life.

Managers understand that if you give employees flexibility, they will be more likely to work harder when it is really needed.

## Well-being

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37. The literature review established that homeworking is associated with significantly lower levels of work-related stress than those experienced by office-based staff. A reduction in stress is associated with the perception of having control over one's work environment and schedule. Partial/hybrid homeworkers (three days a week) report less stress generated by frequent meetings and interruptions by colleagues and perceive less exposure to office-based politics. A general perception is that homeworkers are less available and provide less support in challenging situations. Colleagues are often an outlet for discussing work and non-work matters. There is also evidence of people feeling a sense of reciprocity – the need to increase effort in exchange for homeworking privilege. Presenteeism - homeworkers may feel compelled to work even when sick to avoid employer's doubts regarding their productivity or to maintain the 'privilege' of homeworking. Impact on Absenteeism – it is notable that amongst homeworkers there is a drop in absenteeism, including frequent or habitual absence, from work. The homeworker may, for example, take a morning off when ill rather than a full day, return to work when not fully recovered— or take no time off at all

The review found limited information and evidence on the impact of homeworking on the mental health of employees. An early detailed research exercise in this area by Mann et al. (2000) found that homeworking has a significant emotional impact on employees. This study reported a range of negative emotions such as loneliness, irritation, worry and guilt were more apparent compared to office-based workers.

A statistical analysis of a quantitative study by Mann and Holdsworth found that female home workers are likely to experience higher levels of mental and physical ill health than male homeworkers. The balancing of work-family role conflict has been noted as a source of stress for the homeworker and has been correlated with negative experiences of emotional and physical ill health. Female homeworkers usually retain responsibility for the majority of the domestic chores, which can lead to feelings of frustration, inadequacy and stress in balancing the demands of family life and work (Mann and Lynn Holdsworth 2000). Studies suggest that mental and physical ill health in male office-workers could also be related to a loss of status. Overall, mental health deteriorated across the population during lockdown. However, the fall in mental health at the beginning of the lockdown was more pronounced amongst those who always, often or sometimes worked at home compared to those who never worked at home.

38. Monmouthshire Council reported a strong commitment to protecting the health and well-being of its workforce

39. NRW stated that the health & well-being of all employees is important. They pointed to the risk of overwhelming IT traffic and caution of the need to be mindful of the risk of over-inviting to Teams meetings because of its ease.

40. Senior Council managers' report some staff resistance to homeworking, particularly where home issues and distractions can cause difficulties. Some staff have asked to return to the office often to improve mental health, some miss the benefit of social interaction with work colleagues. They found that formal meetings are more intense virtually, get straight to the point with a lack of social 'chit chat.' Going forward the Council may need to review the impact of reducing social interaction on staff well-being. Senior managers also pointed to the importance of staff understanding that homeworking is subject to the exigencies of the service and arrangements will always need to be business driven. Staff well-being will become the domain of soft contact by middle managers on whom senior managers will depend.

### **Career progression**

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41. Research suggests that homeworkers are more likely to feel out of the loop, significantly impacting on longer term career prospects in the organisation. There is a risk of homeworkers becoming 'politically disadvantaged' and a suggestion that visibility, at a central location is critical for soundly based performance evaluations. Some homeworkers have concerns about the impact of professional isolation on their career prospects, fearing that they are not only 'out of sight', but also 'out of mind. Homeworkers have fewer behavioural opportunities to demonstrate high performance in a face-to-face, highly salient context. Fear that others view them as less committed and less loyal to the organisation and prioritising personal life over professional. Homeworkers are less likely to report having the ambition to advance in their careers, less likely to agree that having a career is important to their sense of identity. Insufficient evidence to establish whether over time homeworking contributes to lower levels of career ambition or whether employees with pre-existing low levels of career ambition have deliberately chosen homeworking arrangements. However, there is insufficient evidence to establish whether participation in full time homeworking contributes over time to lower levels of career



ambition or whether employees with pre-existing low levels of career ambition choose to work at home when that is on offer.

Research on the views of homeworkers on how professional isolation affects their career prospects shows they do not believe they miss out on activities and opportunities that could enhance their career and opportunities to be mentored. Most partial (60%) and full time (67%) homeworkers believe that working from home has no impact on their opportunity to advance in their careers. A much smaller proportion felt that their working arrangement had a negative impact on their career advancement opportunities. It was noted from qualitative evidence that homeworking employees proactively avoid any potential damaging effects of professional isolation. Additionally, managers can also set up various arrangements that can help mitigate professional isolation among homeworking staff.

42. NRW considers career progression is not a negative issue for hybrid/homeworking staff and, in fact, flexible working is more likely to be beneficial as performance assessment is based on outcomes.

43. Some Council senior managers report evidence of career progression whilst homeworking, in other work areas, such as technical/cleaning, there has been very little opportunity for structural movement.

### **Co-worker relationships**

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44. The literature review found research highlighting concerns that homeworking can have a detrimental on the quality of relationships amongst work colleagues. The spatial distance between homeworkers could translate into psychological distance. However more recent research evidence indicates that homeworking is unlikely to exert any negative effect on relationships with colleagues for individuals who partially

work at home ACAS (2013). For those who are exclusively homeworking there may be links to decreased quality of co-worker relationships.

Employees who work mostly from home have less frequent communications with their co-workers. The research found there was no negative impact on frequency of communication between partial homeworkers, these are best connected to their colleagues even with office-based staff. Research evidence however suggests that there are no links between type and amount of communication with isolation or job satisfaction experienced by homeworkers. As the number of communications increases, perceptions of job control, positive well-being and work-life facilitation decline, and work-to-life interference increases. The study found that the quality rather than the quantity of communication with others what is important to homeworkers.

The view that organisational culture will be weakened as homeworking becomes more prevalent has been refuted by research. This is largely dependent on the culture of the organisation. The evidence suggests that organisational cultures can easily be kept alive and well, even when there is reduced communication among employees. This is particularly true in jobs that have some degree of autonomy, where interdependence is very low and frequent communications with work colleagues may not be essential.

## **Social isolation**

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45. Social isolation was identified by full time homeworkers and partial homeworkers as one of the challenges of working from home. This is defined as the sense that one is out of touch with others in the workplace, both physically and in terms of communication. Research evidence confirms that social isolation is experienced by employees who spend a minimum of 20% of their working time at home. However only a very small percentage of homeworkers reported that they frequently or very

frequently feel socially isolated. Furthermore, partial homeworkers appear to be the group less likely to experience social isolation compared to fulltime homeworkers.

The degree of social isolation experienced by homeworkers also varies. Partial homeworkers are less likely to miss the emotional support from co-workers and informal interaction with others compared with full time homeworkers. In terms informal interaction with others regarding work, fulltime (72%) homeworkers are more likely to report occasionally missing this type of informal interaction with others. In comparison a significantly lower proportion (40%) of partial homeworkers feel the same way. The evidence suggests that partial homeworkers appear be the homeworking category that experience lower levels of social isolation. Their working arrangement split their working time between home and office and allows them to communicate face-to-face more frequently with office-based colleagues and home-based colleagues.

To avoid feeling socially isolated, some full-time homeworkers and partial homeworkers take proactive measures to stay in contact with their work colleagues. Managers can also support and put arrangements in place to reduce social isolation amongst home workers and encourage social interaction amongst colleagues. The organisation should also consider the suitability of a given individual and their capacity for dealing with the social isolation associated with full time homeworking.

## **Practical Issues**

### **Space/accommodation**

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46. Monmouthshire's Cabinet consider utilisation of the Council's asset base is important. The Chief Executive is located alongside all other senior team members. There is one Cabinet office that all Cabinet Members share.

This has been in place for the past 20 months and was a very smooth shift that has had no reported pitfalls.

The transition whilst there was no Monmouthshire HQ was particularly difficult for elected members, as they found they weren't seeing each other regularly, unless for formal meetings. The view was that networking opportunities were lost, and they missed informal conversations with colleagues in the member's lounge or with officers in person, as would have taken place in the previous office environment.

The new HQ provides depersonalised office space and has bookable meeting rooms for face-to-face meetings. Service areas are allocated office zones, but not personal desks. At first the clear desk policy was challenging for officers, who have now adapted to the change.

In 2013 the new office was gradually opened. Desks were allocated numbers and anyone planning to work at HQ was required to book a desk.

Monmouthshire's move to flexible working has therefore evolved in two phases, Medium and Longer Term. Following the initial move to *flexible* working the Council adopted a 50% desk: employee ratio. However, the current move to *hybrid* working is more likely to see a 20% desk: employee ratio. Monmouthshire has 2,300 employees (excluding schools) and is moving to 350-400 desks to accommodate approximately 20% of staff.

As Monmouthshire moves towards hybrid working the previous zones for service areas are being removed and the booking system for desks in work areas zoned by 'type' of work will be retained. Further work is underway to create more flexible workspaces, such as more space for informal conversations and meetings.

Monmouthshire's experience has led them to provide a generous supply of meeting rooms. It is also important to build flexibility into the office accommodation plans. Monmouthshire has considered the possibility that some Council accommodation may need to be lettable in the longer term.

In short, Monmouthshire report a key benefit of homeworking is the cost reduction in overheads associated with maintaining large and expensive buildings.

47. The NRW Space/accommodation Strategy entails a review of all NRW property/estate across Wales. A central motivating factor is carbon reduction. When the review is completed, decisions will be made about lease renewals, improvements, and refurbishment. Early calculations suggest that 50% less office space will be needed than previous working arrangements.

NRW has recently established 3 hybrid working sites across Wales. The offices have been stripped of personal belongings and set up for hot desking. Offices provide a range of working options, with sound pods, breakout areas, sofas, and team meeting areas. Visiting the office is to meet not to work alone. The status associated with office ownership has been removed. The only personal office is that of the Chief Executive. There is, however, a perception that Legal and HR services may find this approach to office space more challenging and may request rooms for confidential meetings. The nature of NRW services means operational teams often use outdoor hubs rather than offices.

New baselines have been established for office accommodation. Staff views have been sought on place-based decision making and NRW recognises the importance of staff acceptance and comfort within their environment. The ultimate question is does the homeworking arrangement work for NRW? Do systems hold up, for example arrangements for the security of technology and data.

NRW are encouraging less use of desk-based telephones, employees are trialling 'bring your own device'. The view is that desk phones are on the way out, all work calls are now made on the Microsoft Teams App and the 3 new trial NRW buildings across Wales will have no provision for desk phones. Desk phones are also seen as a Covid risk. A room and desk booking system is in place.

48. Senior Council managers' report that staff will be expected to be in the office on a *need only* basis, work need, mental need, physical need or if

the home working environment is unsuitable. Managers expect most staff to be home based 3.5/4 days and office based 1.5/1 day. This will reduce the office footprint, but its extent is yet to be measured.

Not all staff will have the option of homeworking. Some technical staff will have to be at base, and some services, such as Waste Management, need middle managers and supervisors to communicate with frontline staff who have no access to IT technology. This will require that they still come into the office and work on site.

Where employees have a challenging home environment it will be important that they have the option of office accommodation. If they opt to work from home, then the capability of holding virtual meetings is critical.

## **Trust**

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49. The literature review found various early research highlighting the potential for homeworking to damage the quality of the manager and subordinate relationship. Some managers fear reduced control over their subordinates, while employees fear isolation and information impoverishment. Research recommends that managers might have to change their strategies for monitoring employees from behaviour-based to output-based controls to effectively manage homeworking.

50. Monmouthshire's trust-based time-keeping approach has removed core hours altogether, staff are employed on a fully flexible basis, there is no clocking in or out.

51. Senior Council managers recognise that homeworking is trust -based. However, the Council still operates a system called DigiGov to monitor the hours worked by homeworking staff.

Managers' report that with home working the hours of work can elongate from 8.30am-9pm, and responses to e-mails can be delayed. This is particularly an issue for frontline services. As previously stated, hybrid working will need agreement between staff and management, to ensure business/office hours are covered.

## Technology

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52. The literature review confirmed the central role technology plays in ensuring successful homeworking. Technological issues experienced whilst homeworking have been associated with significantly higher levels of feeling isolated and reduced feelings of well-being. Homeworkers are significantly more affected when technological issues arise in their own environment without the immediate support of colleagues or alternative technology to rely on. The speed and reliability of internet and network connection, as well as readily accessible information and support on common technological issues are some of the most common problems encountered. Homeworking literature highlights the need for enhanced access to technology and support for homeworkers compared to office-based workers. Overall, research evidence has shown that homeworkers who receive adequate technological support are more satisfied with their working arrangements than those receiving insufficient levels of support.

53. Pre-pandemic all Monmouthshire Councillors had already embraced paperless meetings, which reduced printing and postage costs significantly. Some Councillors elected in 2017 were already proficient with technology. For staff the ability to work flexibly has improved as technology has improved. The council was therefore fully electronic pre-pandemic, staff and members having been given the best technological equipment to enable video meetings.

Monmouthshire stressed that the key to successful homeworking is becoming paperless, fully electronic, training everyone on the technology to work in a virtual workplace and providing high quality equipment to underpin this.

54. Senior Council managers' report that Cardiff Council has mainly done well in the provision of technical support, with most staff very quickly supported with IT hardware and breakdown assistance. Several managers reported

there had been no problems, they were impressed with the service and all the signs were good that the Council could support homeworking effectively.

There was however a request for investment in new fully integrated mobile software that allows frontline staff to work directly from home without first reporting to a core office. It requires a business case for investment in software systems, which has proved to be difficult to demonstrate. For some services improvements to IT software would increase the percentage of staff given the option of homeworking.

## **Environmental Benefits**

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55. We heard from Monmouthshire there is a compelling environmental argument for the hybrid/homeworking approach. Staff feel they are reducing their carbon footprint through reduced travel. There is also a no printing /paperless approach which homeworking supports.

## **Recruitment**

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56. Monmouthshire reported fewer recruiting difficulties to homeworking posts, lower staff turnover and lower sickness levels. *“Flexible working is a real enabler, it offers a way of life, connecting autonomy with purpose”*.

Experienced people are retained ~ work-life balance practices are evidenced to improve employee engagement; positively impacting upon sickness absence levels and borderline sickness and improving recruitment and retention. Time and money spend on recruitment and training is reduced.

57. Senior Council managers’ report that homeworking is a new way of working that has become a recruitment benefit for most services. For some whereas pre-Covid there were no difficulties with recruitment, post-Covid, demand for cleaning and other on-site staff has increased, particularly in



schools. In services such as these managers consider vacancies, particularly temporary vacancies, are hard to recruit and the potential for flexible working has not helped with recruitment.

Other desk-based professional services have recruited 10-15 new people during the pandemic. Managers' report that staff retention is notably better with homeworking and a package offering work-life balance is attractive. Previously many Council staff were lost to organisations with a more flexible approach. Whilst the Council's financial benefits are not the highest, it is now considered a flexible employer. This view is consolidated by attendance at virtual recruitment fayres suggesting there is an appetite for hybrid working amongst job seekers.

Going forward, the Council will need to review the trends/profile of future recruits and whether its attractiveness as an employer has been impacted by hybrid working.

## **Training and Development**

58. In Monmouthshire managers were trained in new management skills. In 2010/11 a development programme was rolled out, providing coaching training. Managers who still struggle continue to receive 1-to-1 support.

59. Currently the majority of Cardiff's staff training takes place online. Senior managers view is that HR circulates a lot of staff information and training opportunities online. Notably management training and support on health and safety guidance is exceptional. Some mandatory classroom-based training for the manual workforce has fallen behind. Managers highlighted that when a new member of the team is recruited the exchange of information is tough and needs to be planned for.

Senior managers highlighted several areas that require training and development courses, many of which could be offered by Cardiff Academy: IT skills to ensure staff are effective at online working from home; Management skills in performance management, staff development, coaching and mentoring training, improving the softer skills; How best to

induct new starters whilst hybrid-working. Such training is not presently mandatory but could become so if a culture change is seen as a priority that requires consistent application.

## INQUIRY METHODOLOGY

60. The Policy Review and Performance Scrutiny Committee Home & Agile Working task group was charged by the full committee with researching the key issues for consideration and delivering a report for its consideration. This report uses the evidence gathered by the task group to make key findings and recommendations to the Cabinet of the Council in respect of Home & Agile Working. Evidence presented to the full committee in an October 2021 update on the Council's Recovery and Renewal Programme has also informed the task groups work. The Committee's Principal Scrutiny Officer has worked closely with the Scrutiny Research function, identified appropriate witnesses, and taken a steer from members of the task group. The task group therefore received evidence from the following witnesses:

### **Internal Witnesses**

Councillor Chris Weaver, Cabinet Member, Finance Modernisation & Performance

Chris Lee, Director of Resources

Gareth Newell, Head of Performance & Partnerships

Donna Jones, Assistant Director, Estates

Senior Management fieldwork contributors

### **External Witnesses**

Councillor Paul Pavia, Cabinet Member Education, Monmouthshire Council

Matthew Gatehouse, Head of Policy, Engagement & Improvement,  
Monmouthshire Council

Hazel Illet, Senior Scrutiny Officer Monmouthshire Council

Victoria Rose-Piper, Head of Renewal, Natural Resources Wales

61. To commence its inquiry the task group commissioned desk-based research from the Principal Scrutiny Researcher, Gladys Hingco, and a fully referenced research report is attached at **Appendix 1** to this report to

inform policy development further. The Executive Summary findings of the report have been integrated into the evidence section of the final report.

62. Key messages from the research have been drawn to Member's attention, and informed questioning during evidence gathering of both internal and external witnesses. The key findings and recommendations are the unanimous view of the task group.

63. Details of all evidence considered by the task group and used in the preparation of this report are contained within a record of evidence that is available for inspection upon request.

## **LEGAL IMPLICATIONS**

64. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. Any report with recommendations for decision that goes to Executive/Council will set out any legal implications arising from those recommendations. All decisions taken by or on behalf the Council must (a) be within the legal powers of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers of behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. Scrutiny Procedure Rules; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances.

## **FINANCIAL IMPLICATIONS**

65. There are no direct financial implications arising from this report. However, financial implications may arise if and when the matters under review are implemented with or without any modifications.

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**POLICY REVIEW & PERFORMANCE SCRUTINY COMMITTEE**



Councillor David Walker OBE  
**Chair**



Councillor Rodney Berman OBE



Councillor Bernie Bowen-Thomson



Councillor Ashley Lister



Councillor Jane Henshaw



Councillor Ali Ahmed



Councillor Norma Mackie



Councillor Jayne Cowan



Councillor Joel Williams

## **COMMITTEE TERMS OF REFERENCE**

To scrutinise, monitor and review the overall operation of the Cardiff Programme for Improvement and the effectiveness of the general implementation of the Council's policies, aims and objectives, including:

To scrutinise, monitor and review the effectiveness of the Council's systems of financial control and administration and use of human resources.

To assess the impact of partnerships with and resources and services provided by external organisations including the Welsh Government, joint local government services, Welsh Government Sponsored Public Bodies and quasi-departmental non-governmental bodies on the effectiveness of Council service delivery.

To report to an appropriate Cabinet or Council meeting on its findings and to make recommendations on measures which may enhance Council performance and service delivery in this area.

## **APPENDIX 1:**

### **A Review of Research Evidence on the Impact of Homeworking**

To access the report please click on the following link:

<https://cardiff.moderngov.co.uk/documents/s56297/Appendix%201.pdf?LLL=0>

Scrutiny Services, Cardiff County Council  
County Hall, Atlantic Wharf, Cardiff CF10 4UW  
Email: [scrutinyviewpoints@cardiff.gov.uk](mailto:scrutinyviewpoints@cardiff.gov.uk)



**MID-YEAR ASSESSMENT OF PERFORMANCE 2022/23**

**FINANCE, MODERNISATION & PERFORMANCE  
(COUNCILLOR CHRIS WEAVER)**

**AGENDA ITEM: 5**

**Reason for this Report**

1. The report enables the Cabinet to consider the Council's mid-year assessment of performance in 2022/23.

**Background**

2. The Well-being of Future Generations (Wales) Act 2015 requires the Council to set and publish Well-being Objectives and take all reasonable steps to meet those objectives. These duties are fulfilled through the Council's annual Corporate Planning process, with the Corporate Plan being approved by Council in late February or early March. The Well-being of Future Generations Act also requires the Council to publish an annual report of progress made in meeting its Well-being Objectives in each financial year.
3. The Local Government and Elections (Wales) Act 2021 established a new legislative framework for local government performance management, with an emphasis on self-improvement through a system based on self-assessment and a panel performance assessment. The purpose of the Act, in relation to performance, is *"to provide a framework which supports councils, through an ongoing process of review, to think about their performance and effectiveness now and for the future; to encourage more inquisitive organisations willing to challenge themselves to do more, to be more innovative and more ambitious in what they do"*.
4. As part of the Council's strengthened performance management arrangements, a mid-year self-assessment of performance is published annually. This ensures that performance is kept under regular review; there is collective understanding of progress, as well as areas of challenge, and corrective action can be identified and agreed if necessary.

## Issues

### Overview of Corporate Performance: Mid-Year Assessment

5. The mid-year assessment of performance in 2022/23 is attached as **Appendix A** to this report. The assessment provides a performance update for each of the Council's seven Well-Being Objectives, as set out in the Corporate Plan 2022-25. The assessment draws on a number of sources of performance information to assess progress against the Well-being Objectives, including:
  - Progress against the Steps and Key Performance Indicators under each Well-being Objective (**Appendix A**) (accessible via the [Corporate Plan Dashboard](#))
  - Regulatory assessment;
  - Surveys and citizen feedback;
  - Complaints – these are also considered separately as part of an annual report to Cabinet;
  - Financial monitoring – the Council's Month 6 monitoring report 2022/23 serves to inform the Council's financial position;
  - Feedback from Scrutiny Committees and the Governance & Audit Committee – the Council responds to the issues raised and recommendations made by Scrutiny Committees, which help to inform performance improvement;
  - Risk – the Council's corporate and directorate risks are considered fully;
  - The Annual Governance Statement, supported by the Senior Management Assurance Statement.
6. Reviewing this range of performance information assists the Council in developing a balanced picture of the Council's improvement journey over the year and enables the Council to identify areas of improvement and performance challenge, which may require further attention.
7. The Council also has in place a performance and accountability regime, which involves the wider political governance of the Council. In developing the self-assessment of performance, the following steps have been undertaken to provide opportunities for challenge and to ensure a full and balanced assessment:
  - Directorate self-evaluation of service performance, governance & financial challenges and priorities;
  - Performance and budget challenge sessions with each Director that are convened by the Chief Executive and Section 151 Officer to consider the findings of the directorate self-assessment;
  - A progress and performance session with Cabinet and the Council's Senior Management Team; and
  - Consideration by the Policy Review and Performance (PRAP) Scrutiny Committee.

8. The PRAP Scrutiny Committee is due to consider the mid-year assessment of performance 2022/23 at its meeting on 17 January 2023. The Governance & Audit Committee will also consider the mid-year assessment at its meeting on 24 January 2023.

### **Areas of Progress and Improvement**

9. The Council continues to evidence improvement across a range of council services, with clear progress being made in the delivery of Corporate Plan 2022-25 commitments to date in 2022/23.
  - The Council's submission to UNICEF to gain Child Friendly City status was completed in September 2022, with Cardiff on track to become the first city in the UK to achieve accredited status.
  - The Council is delivering the Passport to the City programme in partnership with Cardiff University, which provides an expansion of extra-curricular activities for all children and young people in the city.
  - The Interventions Hub has been launched in Children's Services, which is working well to coordinate integrated support for children and families.
  - The "Cardiff Working towards an Age-friendly City" campaign was launched on 7 June 2022.
  - The Dementia Friendly Volunteer Programme was launched on World Alzheimer's Day on 21 September 2022.
  - Work on the Addison House development to deliver 44 care-ready apartments in Rumney is progressing well in 2022/23, with handover scheduled for July 2023.
  - Establishment of a Cost-of-Living Task Force to share best practice and raise awareness of the support available, including council services and partner organisations such as Citizens Advice, C3SC (Cardiff Third Sector Council), Department for Work and Pensions (DWP), Welsh Government, Cardiff Foodbank and Registered Social Landlords.
  - Cardiff's status as an accredited Living Wage City has been renewed for the next three years and the Cardiff Living Wage City Partnership won in the Public/Private Partnership category at the 2022 Local Government Chronicle (LGC) Awards in July 2022.
  - The Council is making good progress to deliver 1,000 new Council homes, despite difficult market conditions and significant inflationary pressures.
  - The Council is working in partnership with Cardiff & Vale University Health Board to deliver new, integrated facilities that will enhance community health and wellbeing provision at key locations around the city, including the Maelfa Health & Wellbeing Hub which opened in July 2022.
  - The delivery of wraparound support for Afghan nationals at two bridging accommodation settings has continued, including commissioning additional support services and delivering Cardiff's resettlement quota. A strong partnership approach is in place with Ministry of Defence, Home Office, Council departments, Health Board and voluntary sector, and the work of the service was

recognised with the award of the UK Housing Hero Awards 2022 'Team of the Year' Award.

- Footfall in Cardiff city centre has recovered to just under pre-pandemic levels and is outperforming a number of comparator cities. Recovery is also continuing across the commercial sector, with data for the first half of 2022 showing that office take-up in Cardiff reached 215,000 sq.ft, which is the highest half year take-up since 2016, according to a recent report by property consultancy, Savills.
- In October 2022, the Council published a new Socially Responsible Procurement Strategy (2022-2027), which has a number of key objectives, including contributing to the aim to be a carbon-neutral city by 2030 and increasing the community benefits delivered through council contracts.

### **'Stronger, Fairer, Greener' Policy Statement**

10. Following the local council elections in May 2022, the Leader of the Council launched the new administration's policy agenda for the next five years, entitled 'Stronger, Fairer, Greener', on 19 July 2022, which was also considered by both the Cabinet on 14 July 2022 and by Council on 21 July 2022. The new Corporate Plan 2023-26, which is due to be considered by Cabinet and Council in late February/early March 2023, will translate these policy priorities into clear organisational objectives with associated delivery milestones, key performance indicators and the necessary resources to ensure progress.

### **Areas of Strategic Challenge and Corporate Improvement Priorities**

11. The mid-year assessment highlights a number of performance challenges that will be the subject of corporate focus in Quarters 3 and 4 of 2022/23:
  - **Financial Pressures:** The Council faces significant in-year and medium-term budgetary challenges due to a combination of the legacy of the pandemic, energy pricing, pay pressures and the impact of the cost-of-living crisis. Though the indicative budget gap of £53m identified in October 2022 has been reduced to £23m following the Welsh Government's Provisional Financial Settlement 2023/24 on 14 December 2022, the financial pressures facing the Council remain significant. Ongoing corporate oversight will be required with financial discipline at every level of the organisation and continued effective planning to manage areas of high or escalating cost. A sharp focus will also need to be placed on the capital position. Construction cost inflation, resulting from increased tender activity, material availability and labour shortages represents a delivery and affordability risk to projects to remain within estimated budgets. Directorates must continue to allocate sufficient capacity and resources to ensuring that projects progress in line with the timescales intended, and robust business cases continue to be essential.

- **Demand Pressures in Children’s Services:** Children’s Services continue to face high and rising demand and increases in case complexity. This demand pressure is reflected throughout the child’s journey, including increasing demand on services to address children’s mental health and emotional well-being. At the same time, the service is facing challenges in the supply of residential placements for children and young people, with the market for children’s placements not able to meet current demand levels. The service is also facing challenges with the recruitment of social workers and an insufficiency of placements to meet the assessed need. A programme of service, cross-Council and partnership interventions have been put in place leading to some demonstrable improvements in demand management and in the recruitment and retention of social workers. A new Children’s Services Strategy 2023-26 has also been developed, which sets out the vision for directorate and highlights the key priorities over the next three years to ensure that the demand on services to meet the increasingly complex needs of children and families in Cardiff can be met. This is due to be considered by Cabinet on 19 January 2023.
- **Delivering a Partnership Response to Demand Pressures in the City’s Health and Social Care System:** In Cardiff, as is the case across the UK, the social care sector is facing acute pressures through rising demand and increasingly complex service requirements. While the supply of care has improved significantly over the year, the care market remains fragile due to an ongoing shortage of care workers. Recruitment and retention of social workers and occupational therapists is a significant issue, and this is placing severe pressure on an already stretched social care system. The Council continues to work in close partnership with Cardiff & Vale University Health Board and the care sector to support older people live independently at home for as long as possible and to ensure that people are discharged from hospital as soon as it is safe to do so. Given the pressures on the health and social care system, this will continue to be a strategic priority for the Council and its partners over the winter and into 2023/24.
- **Responding to the Cost-of-Living Crisis:** The cost-of-living crisis is having an impact on many households with inflationary pressures making essential day-to-day items more expensive. Coming so soon after the Covid-19 pandemic, this crisis has compounded the pressures that many people face and deepened inequalities. In response, the Council has established an enhanced programme of advice and support for citizens, supported by a communications and engagement campaign. Despite seeing a significant increase in demand, the Council’s Advice Services are continuing to be delivered effectively. Similarly, the Council’s Into Work Services are responding effectively to rapid increases in demand. Concerns remain however regarding the volume of demand and the scale of challenges individuals and households face given the nature of the cost-of-living crisis.

- **Workforce Pressures:** The Council continues to face a number of workforce challenges in ensuring sufficient capacity, appropriate skills and in recruiting and retaining staff, particularly given the level of competition for some professions. For example, Children's Services is dealing with ongoing difficulties in recruiting and retaining social workers, particularly experienced social workers, with a current heavy reliance on agency staff. Similarly, recruitment and retention of social care workers remains a challenge which is contributing to the severe pressures across the health and social care system. Discrete initiatives are in place to respond to pressures in social services, which are leading to a demonstrable improvement in recruitment and retention. While particularly acute in social services, workforce pressures are being felt across all council services. In response, an enhanced approach to workforce planning at a corporate level has been put in place.
- **Housing:** The pressure on the housing market, especially the cost and lack of availability of homes in the private rented sector, is causing significant demand and cost pressures in housing and homelessness services and across numerous council services, including social services, advice services and refugee and asylum seeker support. Waiting lists to enter temporary accommodation have doubled over the last six months and hotels are now being used as temporary accommodation for some families. A programme of immediate actions has been put in place, including additional support packages to support those at risk of becoming homeless and for those struggling to pay their rent or mortgage. Over the longer term, the ongoing delivery of the Council's ambitious house building programme, working with Welsh Government and other partners, and which has included a number of innovative developments, is serving to accelerate the availability of housing in the city. Given the scale of the challenge and the cross-service and cross-city impacts of the issue, this is likely to remain a strategic priority for the Council for the remainder of the year and beyond.

### **Reason for Recommendations**

12. To provide Cabinet with a mid-year assessment of the Council's performance in 2022/23.

### **Financial Implications**

13. This report sets out the Council's mid-year assessment of performance. The covering report sets out the challenging environment within which the Council currently operates, which is likely to continue for the medium term. The Month 6 Financial Monitoring performance report was considered by Cabinet on 17 November 2022 with a further monitoring report for Month 9 to be considered in late February/early March 2023.

## **Legal Implications**

14. The Local Government and Elections (Wales) Act 2021 ('the 2021 Act'), Part 6, Chapter 1 sets the new performance and governance framework for local authorities, which came into force in May 2021. Under these provisions, the Council is required to keep under review the extent to which it is fulfilling the 'performance requirements', that is, the extent to which: (i) it is exercising its functions effectively; (ii) it is using its resources economically, efficiently and effectively; and (iii) its governance is effective for securing the above. The information set out in this report enables the Council to discharge this duty.
15. The Council is required to consult at least once in each financial year about the extent to which it is meeting the performance requirements. The statutory consultees are: a) local people; b) other persons carrying on a business in the council's area; c) the staff of the council; and d) every recognised trade union.
16. A self-assessment report must be prepared in respect of each financial year, setting out conclusions on the extent to which the Council has met the performance requirements during that financial year, and any actions it intends to take, or has already taken, to increase the extent to which it is meeting the performance requirements.
17. The performance and governance provisions of the 2021 Act are framed within the context of the well-being duty set by the Well-being of Future Generations (Wales) Act 2015. The Well-being of Future Generations (Wales) Act 2015 requires the Council to consider how its decisions and actions will contribute towards meeting the well-being objectives set out in the Corporate Plan and to keep the well-being objectives under review. The Council must publish a report of the progress made in meeting its well-being objectives in each financial year, which may be included in the self-assessment report prepared under the 2021 Act (referred to in paragraph 15 above). Members must also be satisfied that the Council is complying with the sustainable development principle, which requires that the needs of the present are met without compromising the ability of future generations to meet their own needs.
18. When considering its performance and governance duties under the 2021 Act, the Council must have regard to the statutory guidance issued by the Welsh Ministers:  
<https://gov.wales/sites/default/files/publications/2021-03/performance-governance-of-principal-councils.pdf>

## **HR Implications**

19. This report sets out an assessment of performance against a number of performance criteria and the recommendations do not have any direct HR implications.

## **Property Implications**

20. The report does not contain any property specific recommendations.
21. The strategic management of the Council's land and property estate is integral to the delivery of the Council's performance objectives. The Corporate Property Strategy 2021-26 sets out a five year plan aligned to the Council's budget requirements and Corporate Plan. Property performance is reported Annually via the Annual Property Plan. The Council's Property Asset Management governance ensures alignment of the estate with corporate performance and service requirements.

## **RECOMMENDATION**

Cabinet is recommended to note the mid-year assessment of the Council's performance as set out in this report and Appendix A, including the delivery of key commitments and priorities at the end of Quarter 2 of 2022/23, and the actions being taken to ensure the effective delivery of the Corporate Plan 2022-25.

<b>SENIOR RESPONSIBLE OFFICER</b>	<b>Paul Orders</b> Chief Executive
	13 January 2023

*The following appendix is attached:*

Appendix A: Mid-Year Assessment of Performance 2022/23



# Mid-Year Assessment of Performance 2022/23

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## About This Report

### What is the Mid-Year Self-Assessment?

As part of its performance management arrangement, Cardiff Council produces a Mid-Year and End-of-Year Self-Assessment of performance in delivering its Well-being Objectives for 2022/23.

These Well-being Objectives, including the steps the Council will take to achieve them and how performance will be measured, are set out in the Council's Corporate Plan 2022-25:

- Cardiff is a great place to grow up
- Cardiff is a great place to grow older
- Supporting people out of poverty
- Safe, confident and empowered communities
- A capital city that works for Wales
- Cardiff grows in a resilient way
- Modernising and integrating our public services

The Annual Well-being Report is the product of a comprehensive self-assessment process and draws on service performance, governance and risk, resources and other sources of performance information provided for each Well-being Objective:

- A strategic assessment of performance
- Key successes
- Areas of risk and challenge
- Areas of focus for the year ahead

In doing so, the report fulfils the Council's statutory duties in relation to both the Well-being of Future Generations (Wales) Act 2015 and the Local Government and Elections (Wales) Act 2021.

As part of the Council's planning and performance arrangements, a mid-year self-assessment of performance is also produced to ensure that Cabinet receives an update on the delivery of their policy agenda and performance of statutory services.

### How is the Mid-Year Self-Assessment Report developed?

The assessment of performance contained within the Mid-Year Self-Assessment is developed through a thorough process of self-assessment involving the political and managerial leadership of the Council, drawing from a wide range of sources of performance information.

#### Sources of Performance Information

Sources of performance information which contribute towards the performance assessment contained within the Annual Well-being Report include:

- **Performance against the Council's Key Performance Indicators** – The Council's [Corporate Plan](#) contains a suite of performance indicators which measure progress made in delivering the Well-being Objectives. Where applicable, targets are set against these performance indicators to demonstrate the desired level of achievement. Performance indicators are assigned a RAG status: **Green** where the indicator is on or above target, **Amber** where the result is within 10% of the target and **Red** where the result is greater than 10% from the target.
- **Progress against the steps in each Well-being Objective** – Each Well-being Objective within the Corporate Plan also contains a set of 'steps' or actions. Monitoring the progress of these steps provides an understanding of what has been achieved and where further work is required.
- **Consultation and Engagement** – The Council has a number of established consultation and engagement mechanisms such as the Annual Ask Cardiff Citizen Survey, the Budget Consultation, the Child Friendly City Survey as well as other surveys and consultation exercises which take place over the course of a year that provide residents, businesses and other city stakeholders an opportunity to share their views on a wide range of the Council's services.

In addition, the Council's [Annual Compliments and Complaints Report](#) provides valuable insight into where Cardiff's citizens feel the Council needs to improve. The Corporate Plan contains a number of 'qualitative' Key Performance Indicators that relate to citizen satisfaction with services, and the findings of the consultation and engagement work forms an important part of the Council's self-assessment process, policy development and budget setting process.

- **Finance Monitoring** – The Council's [Outturn Report 2021/22](#) serves to inform of the Council's financial position in respect of the year ending 31 March 2022 and its findings contribute to the assessment contained within the Annual Well-being Report.
- **Good Governance** – The Council's Governance Framework comprises the systems, processes, culture and values by which the Council is directed, controlled, and the means through which it accounts to, engages with, and leads the community. The Council's [Annual Governance Statement](#) sets out an assessment of the Council's framework of governance, risk management and internal control.
- **Risk** – Delivering objectives requires frequent management of a wide range of risks at both operational and strategic levels, particularly in the dynamic external environment in which the Council is currently operating. The Council's Year End [Risk Report](#), and its Corporate and Directorate Risk Registers, provides an overview of the current risks and the actions in place to mitigate them.
- **Scrutiny Committees and Governance & Audit Committee** – The Council responds to the issues raised and recommendations made by the Committees, which help inform policy development and performance improvement.

- **Inspection Reports** – The Council is subject to a number of inspections from regulatory bodies including Audit Wales, Estyn (Education) and the Care Inspectorate Wales (CIW). Their findings help the Council to assess areas of strong performance, as well as identifying areas that require improvement.

## **Well-being Objective 1: Cardiff is a great place to grow up – Summary**

Ensuring that Cardiff is a city where children and young people are guaranteed access to a good education and given every opportunity to achieve their potential is a core priority for the Council.

The Council has demonstrated a sustained improvement in the quality and effectiveness of its education services, with good progress continuing to be made against the delivery of the Cardiff 2030 vision for educational learning. This assessment was reflected in the Estyn report of February 2022, which also noted how school inspection outcomes have been strong between 2017 and 2020. At the same time, schools continue to recover from the pandemic, demonstrating resilience and commitment to learner progress through effective engagement, assessment practices and teaching and learning strategies. Areas of good progress include the support and engagement work undertaken with pupils and headteachers ahead of the new academic year, improvements to digital technology in schools – with a ratio of 3:4 devices per pupil at Quarter 2, the implementation of the new curriculum and through the progress of the Child Friendly City programme.

Secondary schools successfully re-introduced external examinations for Key Stage 4 and Key Stage 5 pupils during the summer of 2022; the first time since 2019 after two years of grade determination by schools. The 2022 GCSE and A-level results achieved by pupils in Cardiff were higher than the average results achieved in Wales, presenting an encouraging picture of pupil performance.

While services are recovering from the immediate impact of the Covid-19 crisis, the medium-term impact on children and young people, particularly those who are most vulnerable, is becoming more evident in some areas of the city. Lower attendance rates in schools, persistent absence, higher exclusion rates, increasing use of Pastoral Support Plans and greater demands for emotional, mental health and well-being support continue to require a sharp focus.

Schools are also facing challenges in recruiting and retaining staff, including school-based counsellors, Welsh language teachers, specialist teachers and teaching assistants, with recruitment of the latter being supported where possible by the Council's Into Work Services.

The Education service has strengthened joint work with the Youth Justice Service (YJS), adding capacity to identify and help remove barriers to progression for young people supported by the YJS.

Children's Services continue to face high and rising demand and increases in case complexity. Both contacts to the Multi-Agency Safeguarding Hub (MASH) and the total volume of Children's Services open cases reached all-time highs in the period immediately following the Covid-19 pandemic, and these high levels have been sustained well into 2022/23, with around 2,000 contacts received per month by the MASH, and around 3,700

open Children's Services cases. This demand pressure is reflected throughout the child's journey, including increasing demand on services to address children's mental health and emotional well-being. At the same time, the service is facing challenges in the supply of residential placements for children and young people, with the market for children's placements not able to meet current demand levels. The service is also facing challenges with the recruitment of social workers, with 23% of social work posts filled by agency workers at Quarter 2, and an insufficiency of placements to meet the assessed need.

A programme of service, cross-Council and partnership interventions have been put in place leading to some demonstrable improvements in demand management and in the recruitment and retention of social workers. This area will, however, remain one of significant challenge for the Council over the remainder of the year and beyond.

## **A Child Friendly City**

Cardiff's ambition to be recognised as a city where all children and young people have an equal chance to thrive and reach their potential is one step closer to realisation as the submission to gain UNICEF Child Friendly City status was completed in September 2022. If successful, Cardiff will be the first city in the UK to gain UNICEF accredited status. The UNICEF assessment is scheduled for early 2023.

Work is ongoing to promote children's rights through workforce development and member training, delivering the Rights Respecting Schools Programme and the introduction of a Child Rights Impact Assessment which has been incorporated into the Council's policy and decision-making assessment framework. As part of the Rights Respecting Schools Approach, a further 10 schools have been accredited, bringing the total to 83 out of 127 schools (65.3%). While this is a positive improvement, this is slightly short of the target for Quarter 2 of 69% (or 88 schools). Of those accredited, 46 schools have achieved Bronze status, 25 have achieved Silver, and 12 have achieved Gold.

## **Deliver the Cardiff 2030 Vision for Education and Learning**

As reflected by Estyn, in its latest inspection report<sup>1</sup>, the Council has demonstrated a sustained improvement in the quality and effectiveness of its education services in recent years, with a drive towards the 'Cardiff 2030' strategic vision and priorities. In general, school inspection outcomes have been strong, especially in the primary sector, whilst outcomes for pupils across Key Stage 4 have been above or well above expectations. Additionally, the Council has established strong working relationships with principal improvement partners from the regional consortium and there are robust processes for the support and challenge to schools causing concern. Ensuring consistency in the quality of evaluation of education services will represent an area of focus moving forward to ensure that areas for improvement can be identified.

The Council continues to work towards the goals set out in the Cardiff 2030 vision, to build upon the quality and effectiveness of its education services. In the year to date, successes include the further investment in digital technology in schools, with the ratio of devices to pupils reaching 3:4; and the expansion of extra-curricular activities for all children and young people through the Passport to the City, delivered in partnership with Cardiff University, with 10 schools and 799 pupils enrolled with access to 258 different activities.

Schools continue to make progress implementing curriculum reform and in supporting those with additional learning needs (ALN), including the introduction of statutory support plans (known as Individual Development Plans).

In June 2022 Welsh Government published the new School Improvement Guidance: Framework for Evaluation, Improvement and Accountability. The Council is working closely with Welsh Government, Estyn and the Central South Consortium to implement the new requirements.

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<sup>1</sup> Published in February 2022.



Following delays caused by Covid-19, the Band B 21<sup>st</sup> Century School Programme is committed to complete the new Fitzalan High School build, and to begin work at the Fairwater Campus site in early 2023. £20 million worth of improvements to existing schools is also on track to be delivered by the end of March 2023. Over the next year, the wider work programme includes the completion of a new primary school in St Mellons, the completion of works at the site of Ysgol Gynradd Groes-Wen Primary School, and the finalisation of the specification for Junction 33. Looking to the longer term, the School Organisational Plan will need to consider the latest population projections, the ongoing impact of Covid, the sufficiency of ALN provision and the impact of inflationary pressures on the delivery programme.

Good progress has been made to advance Co-ordinated Admissions arrangements, with more schools – both primary and secondary – joining the scheme. Work is ongoing to support and encourage the remaining schools to participate in the coming years.

A further area of focus is the enhancement of Youth Services. The final report from the Youth Service Review is due to be presented to Cabinet in early 2023 as the first step towards delivering a more integrated service offer by September 2023.

### **Schools: Pandemic Recovery Challenges**

In preparation for the 2022-23 academic year, a number of initiatives were taken forward by the Education directorate to re-engage pupils following the pandemic. These included appointing additional Education Welfare Officers to overcome certain language barriers, offering additional summer support for Year 11s and Post-16s, running a marketing campaign on school attendance, and developing a persistent absence review tool. Fixed Penalty Notices for poor attendance will also be reinstated this year after being paused during the pandemic.

Regarding attendance, secondary school attendance has fallen the most (a 9% drop from 94% in 2018/19 to 85% in 2021/22). Following the pandemic, the Education Welfare Service highlighted a significant number of pupils where anxiety was a barrier to attendance. Anxiety, along with other mental health problems, have been heightened by the pandemic, affecting both pupils and staff. Concerning trends in persistent absence have also been noted; this is now being closely monitored and reported on, with pupils and families affected being provided with more support where possible. Regarding exclusions, the number of children being excluded from school, either on a permanent or fixed-term basis, has shown an increase in the 2021/22 academic year and continues to cause concern. This is more pronounced in secondary schools than primary schools, where aggressive behaviour was the leading cause of permanent exclusion.

Re-engagement activities, both within and beyond the school, delivered in partnership with Youth Services and wider partners, are also playing a critical role in supporting schools to recover from the pandemic. Collaboration between Council Services to support schools, which evolved rapidly during the pandemic, is also being developed further into a

sustainable Team Around the School model, commencing in the schools serving the most challenged communities.

Another challenge being faced by schools relates to workforce and the availability of both core and agency staff, with a particular challenge being the recruitment of school-based counsellors. The Education Management Team have been working closely with schools to support them in filling both teaching and non-teaching posts, with a particular focus on those with specific requirements, such as Welsh speakers and specialist teachers.

The service faces acute financial pressures relating to specific areas of service delivery. A key pressure contributing to this overspend is in relation to School Transport due to rising costs in fuel and driver supply, combined with the increased number of pupils with ALN requiring transport. There are also significant pressures in respect of out of area placements and school catering services, the latter being impacted by price increases in relation to food and transport costs combined with reduced income from paid school meals. These rising costs, alongside the pay award, largely account for the forecasted overspend within the Service Area. The directorate are actively pursuing a number of steps to respond to budget pressures arising in key areas, with key strands of work relating to the management of out of county placements, managing rising costs of schools catering and addressing the cost of school transport.

### **Protecting the Well-Being of Vulnerable Children, Young People, and Families**

Following the Covid-19 pandemic, Children's Services face rising demand, stemming from an increase in the number and complexity of cases. Contacts to the Multi-Agency Safeguarding Hub (MASH), along with overall caseload volumes, reached an all-time high immediately following the pandemic, and these high volumes have been sustained. At the same time, the service is facing challenges in the supply of residential placements for children and young people, with the market for children's placements not able to meet current demand levels. The recruitment and retention of children's social workers, despite significant improvements over the past 18 months, remains a challenge. As a result, as of September 2022, Children's Services is forecast an overspend of £8.3 million (£7.6 million exclusive of the pay award).

In direct response to the demand pressures and forecast overspend, a multi-disciplinary cross-Council response has been put in place, including a series of projects and workstreams aimed at reducing the volume and cost of expensive placements, while still ensuring that the needs of the young person are met. Ongoing reviews are being undertaken by Children's Services to identify cases which can be stepped down, particularly for those aged over 16 who are ready to move on to become more independent. Work is also being undertaken with partners and providers, including the Young Person's Gateway, to increase capacity for accommodation and move-on options both internally and within the external support market. A review has been undertaken on the Foster Carer Assessment Process, and data dashboards have been set up by Children's Services to provide managers with real-time data to support case-level decision-making and caseload management.

Parallel to this, work is underway to implement the Interventions Hub and to establish 'The Right Place' model. The Interventions Hub has been launched and is working well to co-ordinate integrated support for children and families and ensure demand is met for most types of provision. There is currently a long waiting list for Family Support. In response, families on the waiting list have been risk assessed and consultation with social workers has taken place and a business case has been prepared to extend provision to meet this demand.

The Council is working to implement 'The Right Place' model, a new approach to working with children and young people experiencing complex journeys, based on a successful model used in North Yorkshire. Through an independent review, this model was shown to result in improved outcomes for children and young people, including a reduction in the number of children looked after along with significant financial savings. Further work is planned to establish governance for this new model, and to raise awareness and understanding of the model with key stakeholders.

The improvement and intervention work undertaken by the service has helped to flatten the trend on the overall number of children looked after, with volumes of children looked after increasing at a much slower rate than the overall demand on the service. The challenges facing the service, however, remain significant.

### **Children's Services Workforce**

Children's Services is dealing with ongoing difficulties in recruiting and retaining social workers, particularly experienced social workers, leading to a reliance on agency staff. This is a long-standing issue affecting the social care workforce, which the Council has been proactively working to address with work progressing throughout the year to improve the Cardiff offer for social workers. Successes to date include the development of the training offer for social workers, the creation of new support roles enabling social workers to focus more on core social work and less administrative work, and a review of pay and conditions, including the market supplement.

The social worker vacancy rate at Quarter 2 is 22.7%, showing a small improvement from 24% in Quarter 1. Whilst this is below the current target of 18%, this more ambitious target was set for this financial year in view of the improved arrangements which had been established. Over the long-term, significant improvement can be seen in this indicator, which was as high as 39% at the start of 2020-21.

### **All Our Futures Youth Justice Strategy**

His Majesty's Inspectorate of Probation (HMIP) has undertaken an inspection of the Youth Justice Service which recognised the positive distance travelled since the last inspection in 2020. As a result, the service has de-escalated from its prior priority status. This de-escalation is recognition of the progress which has been made over the last two years and demonstrates the confidence that HMIP have in operational management and senior leadership in Cardiff to continue to deliver improvement and positive outcomes for children and young people. The Youth Justice Service is seeing fewer first-time entrants, with only 9

individuals in Quarter 2, against a target of 70, as well as lower re-offending rates than those measured prior to the pandemic. Re-offending rates are measured over a period of 6 months for each cohort, so the Quarter 2 data is not yet available. However, the rate in Quarter 1 was 31%, which is below the current target of 40%.

The Youth Justice Service has updated the 'All Our Futures' Youth Justice Strategy and work is ongoing to implement this. In Quarter 2 the Youth Justice Service completed its management restructure and agreed the action plan to deliver the All Our Futures Strategy with HMIP.

## **Well-being Objective 2: Cardiff is a great place to grow older – Summary**

The population of older people in Cardiff is increasing, as is the number of older people with life-limiting conditions, with the estimated number of people aged 65 and over having grown by 16%<sup>2</sup> over the last 10 years. The Council continues to deliver effective support for older people across a range of services areas, however significant pressures remain, particularly in areas of delivery heavily impacted by the pandemic over the last two years.

In Cardiff, as is the case across the UK, the social care sector is facing acute pressures through rising demand and increasingly complex service requirements. While the supply of care has improved significantly over the year, the care market remains fragile due to an ongoing shortage of care workers. Recruitment and retention of social workers and occupational therapists is a significant issue, and this is placing severe pressure on an already stretched social care system.

The Council continues to work in close partnership with Cardiff & Vale University Health Board and the care sector to support older people live independently at home for as long as possible. Strengthened arrangements have been established to support discharge from hospital as soon as it is safe to do so by ensuring effective community support arrangements are in place. This will continue to be a strategic priority for the Council and its partners over the winter and into 2023/24.

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<sup>2</sup> Based on the population estimates for Cardiff, 2011-2021, Nomis

## **Supporting older people to stay active and connected in an age-friendly city**

Loneliness and social isolation have a significant impact on the health and well-being of older people. Preventing social isolation by enabling older people to connect digitally and stay active in the community remains a key priority for the Council.

The “Cardiff Working towards an Age-friendly City” campaign was officially launched at Cardiff Castle in June 2022. Age-friendly City information has been distributed to a wide variety of organisations engaged in delivering services and support to older people within Cardiff. In the first half of the year, the Community Digital Team issued over 50 devices to older people as part of the Tablet Gifting Scheme. The scheme supports individuals deemed digitally deprived who have never owned or used a device. In addition, the team have developed a digital training offer targeted at older people, with a focus on delivering courses in Cardiff North.

The city’s Day Centre activity programme has been expanded in consultation with the Carers Impact group, service users, family members and staff. This has included introducing therapeutic arts and crafts sessions, family dementia sessions, and visits to Hubs, parks and garden centres. Day Centre facilities have been further enhanced by the Tovertafel interactive technology and driving reminiscence pods, bringing service users together and creating enjoyable, mentally stimulating environments. In addition, Fairwater Day Centre is now operating on a Saturday on a pilot basis, providing further opportunities for service users and their carers.

Consultation with the Carers Impact group has also provided invaluable insight into age-specific activity provision within the Hubs. As a result, the team are now widening the offer to include activities more appropriate and attractive to older people, including individual and one-on-one activities.

The Dementia Friendly Volunteer Programme was launched on World Alzheimer’s Day, 21<sup>st</sup> September 2022. The scheme will recruit and train Dementia Friendly Ambassador Volunteers to support local shops, businesses, and organisations to work towards becoming Dementia Friendly, recognising the impact of dementia, understanding how it changes customer needs and considering how to support those affected. So far, business sign up to the Dementia Friendly Pledge has been below target (4 businesses in Quarter 1 and Quarter 2 against a target of 20), however the number of digital Dementia Friendly City events held has exceeded targets (637 events in Quarter 1 and Quarter 2 against a target of 300), raising awareness and promoting the support available. Within the Council, the percentage of staff completing the Dementia Friendly training module remains significantly below target (50% of staff in Quarter 2 against a target of 85%).

## **Supporting older people to live independently at home through strengths-based preventative services**

Enabling older people to live independently at home improves their sense of well-being as well as reducing pressures on the public purse. The Council’s preventative services are vital to ensuring that people can remain living at home for longer.

The development and upskilling of the First Point of Contact (FPOC) team is continuing; however progress has been impacted by high demand. Some new capabilities and relevant training have been delivered, for example, FPOC staff can now prescribe low-level safety at home adaptations. The percentage of new cases dealt with directly at FPOC with no onward referral to Adult Services is lower than in previous years and is currently below target (Quarter 2 result is 66% against a target of 75%). However, the way in which the FPOC Community Contact team and the FPOC Social Work team manage the assessment process has changed, and as a result direct comparisons with previous years' figures is not possible.

The Community Occupational Therapy (OT) team offers practical support to enable people to live independently in their own homes for as long as possible. Through use of equipment aids and adaptations, they help people remain at home and ensure an appropriate level of care through "right sized" support packages. The service is now working on the development of a trusted assessor model, a collaboration between OT and Social Work to enable the completion of care plans by Occupational Therapists. During the first half of the year, there has been an ongoing programme of recruitment for Occupational Therapists, however the process has taken longer than previously experienced, leading to a delay in recruitment. A shift to recruiting non-qualified staff has however proved successful and the service is developing proposals for growing its own qualified OT staff, providing a career path for carers and OT assistants.

The Community Resource Team (CRT) is a partnership between Health and Council services, it supports people to stay at home or return home from hospital through health and care services and through reablement support. A review of the Council's CRT homecare is now complete and work towards a customer-focussed care model is in progress. Meetings have been held with Health colleagues, looking at a clear division of responsibilities with a view to providing more fluid therapy support in CRT. The Council's Community Occupational Therapists are helping to triage cases for CRT, resulting in a more streamlined and efficient service with fewer hand offs. A CRT homecare Quality Assurance framework is also in development and the service was inspected by the Care Inspectorate Wales during Quarter 1, and this provided assurances that there was good management oversight of the service, and that compliance with regulatory requirements was good.

Despite this progress, there has been a significant and consistent drop in the number of people accessing CRT (775 in Quarter 1 and Quarter 2 against a target of 1,000) and likewise in the total hours of support provided (20,401 hours in Quarter 1 and Quarter 2 against a target of 25,000). This is due to low workforce capacity caused by leave, sickness and inability to fill vacant posts, combined with the increased complexity of some of the cases referred into the team, some of which require double-handed care. Vacancies are continually advertised and the team co-ordinate with Cardiff Cares Academy, attend job fairs and are in touch with universities to see whether those working towards OT/Social Worker qualifications are interested in providing care as part of their learning. The service is also examining whether it can simplify the recruitment process, which would align it with private providers. It is anticipated that a recent increase in the grade for the CRT homecare posts will improve recruitment in the future.

## **Working in partnership to deliver high-quality sustainable care and support**

Work is ongoing to develop integrated local Multi-Disciplinary Teams (MDTs) that prevent hospital admission and facilitate hospital discharge. The new integrated discharge hub with hospital-based MDT is now up and running in the University Hospital of Wales (UHW). Dedicated social worker and OT resource has been identified, and two Care Co-ordinators have been recruited and expected to start in post in early Quarter 3. This will ensure the right mixture of support to focus on the safe and timely discharge of citizens back to settings in the community.

The “Trusted Partner” model gives our commissioned providers the ability to adapt care to meet individual needs, for example by stepping down care for older people from double-handed to single-handed as their needs dictate. This ensures the right level of care and secures value for money for the Council as costs are streamlined. During the first half of the year a pilot of the “Trusted Partner” model was rolled out and is now operational across the care sector.

In addition to domiciliary care staff registering with Social Care Wales, there will also be a requirement for care home staff to register from October 2022. There is a risk that these new requirements may impact recruitment and retention in a sector already facing acute workforce challenges. To mitigate this risk, the Council has actively promoted social care as a positive career choice. The Cardiff Cares Academy pilot has also been evaluated with a number of the recommended changes enacted and resulting in a greater number of candidates going in to care roles. Furthermore, additional measures have been established to support recruitment including the appointment of an Employer Liaison Officer, dedicated mentors, full training package and assistance with vetting and recruitment.

The number of people in residential care aged 65 or over per 10,000 population has increased from 66 in Quarter 1 to 69 in Quarter 2. In tackling the increase in demand, the Council aims to use Extra Care and Community Living housing as an alternative to residential care for both respite and permanent care. The Extra Care waiting list is now managed alongside the housing waiting list for sheltered and community living. There is regular communication between Linc Housing Association, Adult Services and Rehousing Solutions regarding clients’ suitability for independent living via the Housing Waiting List or through Extra Care accommodation. Extra Care applications are also now being received from the UHW Housing resettlement officer. Intelligence data is being captured to inform a cross directorate group which will evaluate the effectiveness of the service and discuss next steps.

Work is ongoing to develop a Quality Assurance framework for care homes alongside the IPC (Institute of Public Care) and it is expected that Cabinet will consider the review of care home provision later in 2023. A new Escalating Concerns policy has also been finalised and signed off by the Regional Commissioning Board and Adult Services Management Team.



## Older persons housing

The Council is committed to delivering modern, older persons housing that supports independent living, however the construction market continues to face the impact of supply shortages, financial difficulties and rising material prices, resulting in increases in costs for developments and challenges finding suitable suppliers.

The Addison House development to deliver 44 care-ready apartments in Rumney is progressing well, with handover scheduled for July 2023. An invitation to tender has been issued for a development of 44 apartments for older people in Bute Street, with returns expected in Quarter 3.

A planning application has been submitted for the development of older persons' accommodation at Moorland Road, with work on-site expected by January 2023. Progress on the development of 101 care-ready apartments at the Maelfa and St. Mellons has stalled as a result of the appointed contractor falling into administration. Alternative options to ensure the sites are re-started and completed at pace are being considered in parallel with legal requirements.

A contractor has recently been chosen for the development 35 older person apartments on the site of Canton Community Hall, it is anticipated that work will commence in early 2023.

Early-stage master-planning is underway on the proposed well-being village on the former Michaelston College site which will deliver in the region of 250 new homes. Alongside this will be a wide range of public buildings providing a range of facilities for the local community with a focus on older people and health and well-being. It is anticipated that the planning application for the development will be submitted by February 2023.

The means test for eligible Disabled Facilities Grants (DFGs) has been removed. An initial evaluation of removing the means testing on adaptations has resulted in amendments being made to the process. These changes have been implemented and a follow up evaluation will take place in December 2022 to determine their effectiveness. During Quarter 2, the average number of calendar days taken to deliver a DFG was 103, against a target of 185, an improvement from 154 calendar days in Quarter 1.

### Well-being Objective 3: Supporting people out of poverty – Summary

The cost-of-living crisis is having an impact on many households with inflationary pressures making essential day-to-day items more expensive. Coming so soon after the Covid-19 pandemic, this crisis has compounded the pressures that many people face and deepened inequalities.

In response, the Council has established an enhanced programme of advice and support for citizens, supported by a communications and engagement campaign. Despite seeing a significant increase in demand – with calls to the Adviceline increasing by over 20% – the Council’s Advice Services are continuing to be delivered effectively. Similarly, the Council’s Into Work Services are responding effectively to rapid increases in demand and are performing in line with the targets set in the Corporate Plan, at the half year point. Concerns remain, however, regarding the volume of demand and the scale of challenges individuals and households face given the nature of the cost-of-living crisis and the draw on household income.

Rough sleeping remains at historically low levels within Cardiff with 11 individuals sleeping on the city’s streets at the end of September 2022. However, the number of people and families presenting as homeless has increased significantly with severe pressure now seen across the housing system. Increasing demand and a lack of available, affordable housing, particularly in the private rented sector, are the forces driving the pressures facing the service. Waiting lists to enter temporary accommodation have doubled over the last six months and hotels are now being used as temporary accommodation for some families. A programme of immediate and long-term actions is in place and making an impact. Given the scale and the cross-service impact of the issue, this will, however, remain a strategic priority for the Council.

## Cost-of Living Crisis

The Council is doing everything in its power to ease the burden on those households in the city who are affected by the cost-of-living crisis.

More residents are seeking assistance from the benefits, homelessness prevention and advice teams. For example, calls to the Adviceline have increased by 21.7% since April 2022 and in September 2022, 41% of all calls received by the team were related to the cost-of-living crisis. In addition to this, the number of clients seeking face-to-face advice has more than doubled since April 2022

The Council has established a Cost-of-Living Task Force with internal departments and external organisations, including Citizens Advice, C3SC (Cardiff Third Sector Council), the Department for Work and Pensions (DWP), Welsh Government, Cardiff Foodbank and Registered Social Landlords. All parties are working together to share best practice and raise awareness of all of the support on offer.

The Council's Money Advice Team provides local, practical support to residents who are struggling to manage. A wide-reaching publicity campaign, including social media and radio adverts as well as publicity in Hubs and outside advertising, was run to increase awareness of the support available. Letters were also sent to all households in the city illustrating the help on offer. Food and Fuel Champions provide additional support to advice officers in Hubs across the city, offering information, guidance and advice on maximising income, benefit and grant checks, and tips on how to shop on a budget. New designated cost-of-living 'information stations' have been placed in every Hub across the city, which provide information and practical tips on how to reduce costs and save money. The Money Advice Team with the Food and Fuel Champions can also support residents by providing emergency foodbank vouchers and fuel vouchers. A specific cost-of-living support leaflet has been produced that is placed in all Foodbank bags. The Council provided direct support to Cardiff Foodbank by grant funding £46,000 via the Household Support Fund to purchase food stocks.

In June, Cabinet approved the Council's Cost-of-Living Discretionary Support Scheme. Welsh Government provided a grant to pay £150 to nearly 90,000 eligible households in the city, but they also allocated the Council £2.193 million for a Discretionary Scheme. This allows the Council to support households it considers need extra help with their living costs. The Council's Discretionary Scheme has both means-tested and non-means-tested elements. This combination provides a more inclusive offer as it can help those on benefits and those experiencing in-work poverty. This scheme further enhances other national support on offer and encourages residents to engage with the services available to ensure that they were claiming all the payments they are entitled to. The Cost-of-Living Discretionary Support Scheme will end on 31<sup>st</sup> March 2023.

The Money Advice Team are providing bespoke advice to care leavers who choose to participate in Welsh Government's three-year Basic Income pilot. Monthly money advice drop-in sessions have been set up for both the young people and their Personal Advisors.

With all of this support, it is hoped that the financial stability of the basic income will give young people the opportunity to make positive life choices as they leave care

The use of volunteers is being increased to help support paid staff and deal with the increased demand on advice services. Whilst advice officers are still able to support residents to claim benefits, grants, and discounts, it is proving more difficult for them to reduce clients' outgoings when completing budgeting statements. Switching tariffs to find cheaper alternatives for energy costs is no longer a viable solution and with costs continuing to escalate, it is becoming more difficult for advice officers to use budgeting as a complete solution to money issues.

Welsh Government has announced that means-tested free school meals will continue to be provided to children during the school holidays, up until the end of next year's February half-term. It is anticipated that around 40,000 applications will be made to the Winter Fuel scheme in the autumn.

Over the winter months Hubs and Libraries will offer warm welcome spaces to any residents concerned about rising costs of heating their own homes. Funding will also be made available via the Council to third sector organisations to provide warm welcome spaces from other community buildings, providing a space for residents to access across the city.

As demand continues to increase, Advice Services will be constantly reviewed to ensure that there are adequate resources to support all the residents who need help and bids for external funding will continue to be made as and when it becomes available.

### **Supporting those most impacted by the economic crisis into work, education or training**

Advice and support to help people into work, education or training is more vital than ever. Throughout Quarter 2, Into Work Services delivered a number of engagement events, primarily focused on the southern arc of the city. This led to an increase in referrals and over 300 individuals attended events in August. A jobs and wellbeing event was also hosted by the team in September in the Capitol Shopping Centre. The team worked in partnership with employers including St David's Hotel, Cardiff Bus and Aldi; 485 job seekers attended the event.

The Job Club has expanded their provision by providing additional sessions in RISE (the Council's specialist support service for victims of violence against women, domestic abuse and sexual violence), Job Centres, Grange Pavilion and, most recently, in the Ukrainian Welcome Centre. Tailored into work programmes have been also delivered for specific groups such as young people not in education, employment or training, and care-experienced young people.

At the end of Quarter 2, 561 clients have secured work as a result of support received through the Employment Gateway against an annual target of 1,100. 188 employers have also received assistance from the Employer Liaison Team.

Within the Council, 30 apprenticeships were approved in August as part of the Corporate Apprentice & Trainee Scheme. Roles offered through this scheme are designed to encourage increased diversity of applicants and removes many traditional barriers to employment.

The new model of delivery for Adult Learning has also been rolled out. This provides quick one and two full-day accredited courses which support those with work skills rather than term-based courses for two hours a day over several weeks. This will make clients job ready more promptly and therefore able to access employment more quickly. More courses are also provided from more community locations. Further work will be done in the coming months to offer more courses from schools as the Community Schools programme is rolled out further.

Into Work Services were also successful in a bid to the DWP to deliver a three-year local supported employment programme supporting individuals with learning difficulties and autism.

### **Continuing our Living Wage City ambition**

Continued progress has been made in Cardiff's Living Wage work, with the city's status as a Living Wage City renewed for the next three years, following confirmation from the Living Wage Foundation and the city's 100<sup>th</sup> private sector organisation accredited as a Living Wage employer. At the end of Quarter 2, there were 184 accredited Real Living Wage employers in Cardiff against a target of 210 by the end of March 2023. Around 67,500 people are employed by accredited Living Wage employers in the city and almost 11,000 of them received a pay rise as a result of the accreditation. Recognising this progress, the Council's Real Living Wage initiative won the 2022 Local Government Chronicle award for Best Public/Private Partnership.

Over the next three years, Cardiff has set new targets for 300 accredited Living Wage employers in Cardiff, employing 95,000 staff of whom 13,900 have seen their pay uplifted to the Real Living Wage.

### **Embedding our new approach to tackling homelessness and ending rough sleeping**

Rough sleeping remains at historically low levels within Cardiff (11 at the end of Quarter 2). However, the number of people and families presenting as homeless has increased significantly during 2022/23. At the end of Quarter 2, 177 people were waiting to enter the Single Persons' Gateway – a single point of access pathway into a range of supported accommodation for single people and couples – and 90 families were waiting to enter the Family Gateway. A further 803 single people and 515 families were in temporary accommodation. Waiting lists to enter temporary accommodation have increased dramatically; a 426% rise since July 2021. This demand is felt equally for family accommodation, the waiting list for which has increased by 378% over the same time period.

A lack of available housing, particularly in the private rented sector, is the primary factor behind the demand pressures facing the service. Rents in the private rented sector have also become unaffordable with only a small proportion within the Local Housing Allowance (LHA) rate, the maximum amount that can be claimed in benefit. Tenants need to make up any shortfall from their other income and this is putting the option of renting privately out of reach for many. In a sample of the market taken during Quarter 2, 98% of properties were being let at least £100 per month above the LHA. The average shortfall across all property types is £318 per month.

To assist service users, a number of steps have been taken to offer additional support for those who are either already homeless or at risk of becoming homeless. Mediation is also offered between private landlords and tenants, providing advice and support in order to help tenants keep their homes. Where an individual's current accommodation cannot be sustained, practical assistance is provided to individuals to help them find alternative accommodation such as Home Finder Workshops.

The Council's mortgage debt advisors have also recently been fully aligned with the Money Advice Team, providing specialist advice for homeowners who are struggling to maintain their mortgage payments.

The Welfare Liaison Team supports Council tenants who are struggling to pay their rent; appointments with this team have more than doubled compared to last year. The Advice Teams work closely with Registered Social Landlords to ensure that their tenants have access to funds that can support them too. The rent arrears pathway is open to all tenants regardless of their tenure or income type. Financial support can also be offered in the form of a bond, rent in advance payments and support with rent arrears alongside guidance from the Money Advice Team. Last year 1,375 tenants who were at risk of becoming homeless were given financial assistance as well as practical support to prevent them from facing eviction.

At a strategic level, the prevention element of the Housing Support Programme Strategy is being reviewed to ensure that every avenue has been explored to prevent homelessness, so that people are supported at an early stage before they reach crisis point. The Prevention Team has recently been fully aligned within the Advice Services alongside the Housing Solutions Team. This will provide a robust service which can be accessed through the Housing Helpline and Community Hubs, and which will provide home visits. Except for very straightforward cases, residents seeking assistance will be allocated a specialist prevention officer and caseloads will be monitored closely providing bespoke help to each family or individual threatened with homelessness.

To address homelessness, a range of other solutions are being put into place which includes increasing temporary accommodation provision (potentially through acquiring new properties as appropriate), allocating more social housing to homeless clients and supporting access to the private rented sector through financial incentives. Increasing the availability and supply of settled accommodation is vital, which is why the Council launched the new Landlord Enquiry and Tenancy Service (LETS). LETS is working actively with landlords across the city and providing incentives to encourage them to support those with

the greatest housing need. The Council is also participating in the Welsh Government's Leasing Scheme, which aims to provide secure, long-term lets to households at affordable prices. The Council manages the properties in this scheme, where landlords can claim up to £5,000 for repair works to the property. The Council has secured 22 properties as part of this scheme so far and it is hoped that at least a further 10 properties will be secured before the end of the financial year. LETS also manages the Council's own tenant matching scheme which offer a range of support services and benefits to both the applicant and the landlord with the aim of making tenancies successful for both parties.

## **Well-being Objective 4: Safe, confident and empowered communities – Summary**

The Council has maintained momentum with its house-building, neighbourhood regeneration and Community Hubs programmes, with targets for new homes hit at Quarter 2 and several major community schemes completed. However, conditions in the construction market, including increasing costs, the supply of materials and labour, and a slow-down with regards to contractors bidding for projects, have impacted the pace of delivery. This has resulted in the Council falling just short of its target of completing 1,000 new homes by December 2022, though those homes are currently in development. With 822 new homes completed within a challenging delivery environment, 385 more in construction and a further 86 new homes with appointed contractors due to start in 2023, good progress continues to be made.

The pressure on the housing market, especially the cost and lack of availability of homes in the private rented sector, is causing significant demand and cost pressures across numerous Council services. As in other areas of the Council, increasing rates of inflation are impacting upon the Council's neighbourhood regeneration programme and the emerging energy crisis can be expected to impact the sustainability of community services, including the leisure services contract with GLL.

The Council has continued to deliver a targeted multi-agency problem-solving group approach to localised complex anti-social behaviour hotspots. The problem-solving approach has been expanded and now includes a programme of activity in the city centre and Cathays, supported by additional funding secured from UK Government.

Over the course of the spring and summer, the Council led a city-wide response to the Ukraine refugee crisis, ensuring that refugees were welcomed, given a place to stay and that the city's wider public services were available and ready to support them. The number of arrivals, and the often-complex nature of their needs, means that demand pressures will continue to be felt across the public service system and so maintaining a cross-public service Ukraine response will continue to be a priority for the remainder of the financial year.



## Building new Council homes and investing in community facilities

The Council continues to do everything in its power to maximise the amount of affordable, energy-efficient and low-carbon housing in the city as well as investing in communities.

Cardiff Living, the Council's house-building programme, continues to deliver new homes at scale with 822 new homes completed to date and a further 385 currently being built on site.

As part of the investment in the South Riverside Business Corridor, Tudor Street has been regenerated to appeal as a shopping destination for both local residents and the wider community. The £5 million scheme has delivered improvements to the public realm, business environment, transport infrastructure and the shopfronts of 30 business premises. Two estate regeneration schemes have recently commenced at Pennsylvania and Lincoln Court in Llanedeyrn. The schemes will deliver safer and more attractive environments and improve the quality of residents' lives. Funding has been agreed for a further three schemes. Community engagement and consultation on the multi-generational Michaelston Wellbeing Village is continuing.

The Council is working in partnership with Cardiff & Vale University Health Board to deliver new, integrated facilities which will enhance community health and wellbeing provision at key locations around the city. Maelfa Health & Wellbeing Hub opened in July, delivering Cardiff's first integrated community health and wellbeing centre, supporting joined-up service provision and partnership working. The number of visitors to Hubs and Libraries has increased by 15% between Quarter 1 and Quarter 2 this year. Views to the Hubs website are 334% higher in Quarter 2 this year than at the same time last year. These increases are, at least, in part fuelled by the increased demand for money and advice services. In spite of the increased demand, 98% of customers were satisfied with the service they received.

Despite one of the largest house-building programmes in the UK, at the end of Quarter 2, 8,204 households were on the common waiting list for a Council or Housing Association property in the city. In the first six months of 2022/23, 831 properties were let. On average over 400 new applications are received each month. Current market conditions are affecting the pace at which house-building schemes can be completed. The sector as a whole is being affected by the knock-on effects of the pandemic and the increasing costs of energy and materials with a number of well-established contractors recently ceasing trading.

In response, the Council is looking to increase the number of properties it purchases as well as expanding the modular builds on the Gasworks site. Work is also continuing to further decarbonise the house-building programme; in partnership with Welsh Government, the Council is undertaking its first net zero pilot housing project at the St Teilo's site in Llanedeyrn – the scheme will deliver 50 new zero carbon Council homes. A new Regeneration Strategy is being developed to support district and local centres across the city. Following the opening of the first health and wellbeing centre in the east of the city, work is continuing on the second, the Ely & Caerau Parkview Wellbeing Hub. Further joint Hubs will be developed on strategic planning sites.

## Ensuring children and adults are protected from risk of harm and abuse

Safeguarding and child protection remain key priorities for the Council. Almost 80% of Council staff have now completed safeguarding awareness training and the Level 1 online module of the National Training Framework on violence against women, domestic abuse and sexual violence. Despite the improvement in the number of staff completing the safeguarding awareness training, some service areas have low overall compliance figures. Targeted training work in those service areas is scheduled to begin in Quarter 3. The Council's Corporate Safeguarding Policy will also be reviewed following the publication of best practice by Welsh Government due in Quarter 3.

Although the volume of referrals to adult protection has remained stable, the increased complexity of queries means that each case requires more resources.

The Council has also continued to ensure those receiving care are empowered to retain a voice in the provision of the service they receive. In August, Care Inspectorate Wales (CIW) carried out an inspection of the Council's domiciliary care services. The report highlighted that people appear happy with the support they receive, and their physical, mental, and social needs are recognised and supported. The inspection found that services showed commitment to achieving positive outcomes for their service users. The Inspector also described interactions between people and staff as warm and positive, and recognised that staff are familiar with the needs and likes of the individuals they support.

Difficulties in recruiting to posts has had an impact on services – the roll-out of collaborative communication training to social services staff has been delayed and while RISE (the Council's specialist support service for victims of violence against women, domestic abuse and sexual violence) has recently been successful in filling some roles, there is a delay while new staff are trained. To address ongoing issues with the recruitment and retention of staff within Adult Services, branding and marketing activity has been refreshed with web and social media presence enhanced to raise the profile of Adult Services vacancies. Work also continues with Cardiff Cares Academy. Since it was set up in 2021, 256 people have been supported by the Academy and 86 have found jobs within the sector.

Working in partnership with the Integrated Health and Social Care Team, the Council continues to develop the @home programme. This will provide the foundation for delivering services within the community, with staff working in a geographical setting aligned to GP clusters. The trial of the first integrated working hub on the site of the former St Isan care home in Llanishen is also being finalised, with health colleagues and local providers working together to meet the holistic needs of individuals within the locality setting.

## Creating safe and inclusive communities

The Council has continued to deliver a targeted multi-agency problem-solving group approach to localised complex anti-social behaviour hotspots. Successful project work with partners has taken place in locations such as St Mellons Skate Park and Lydstep flats and park in Gabalfa which have both led to a reduction in anti-social behaviour, and Clifton

Street in Adamsdown which focused on complex issues. Additional project work is currently underway in Cowbridge Road East, Canton to tackle street drinking and anti-social behaviour. Following the successful Safer Streets Fund bid for £750,000 in July 2022, planned initiatives with partners to tackle crime, anti-social behaviour, and women's safety have been taking place in the city centre and some residential areas of Cathays. With additional funding received from UK Government's Shared Prosperity Fund, the Community Safety Team is expanding, which will provide more support to delivering the priority areas of the Community Safety Partnership – Street Based Lifestyle, Problem Solving and Violence Prevention.

Over the course of the spring and summer the Council led an effective city-wide response to the Ukraine refugee crisis, ensuring that refugees were welcomed, given a place to stay and that the city's wider public services were available and ready to support them. The number of arrivals, and the often-complex nature of their needs, means that demand pressures are being felt across the public service system. A dedicated in-house team was quickly established to support the Ukraine response, including a move-on team to deliver transition to long-term housing arrangements.

The delivery of wraparound support for Afghan nationals at two bridging accommodation settings has continued, including commissioning additional support services and delivering Cardiff's resettlement quota. A strong partnership approach is in place with the Ministry of Defence, Home Office, Council departments, Cardiff & Vale University Health Board and voluntary sector. The work of the service was recognised through being awarded the UK Housing Hero Awards 2022 'Team of the Year award'.

Parenting support and a dedicated team for refugee families with under 5s, in partnership with health visitors and maternity services, has also been put in place, and a dedicated refugee employability service is based in Central Library Hub. A move-on service for new refugees coming through the asylum route has also been established, with effective partnership between Housing Options and the Welsh Refugee Council which prevents homelessness during the 28-day move-on period.

Work is ongoing to transition the commissioned support service in-house to become a generic refugee support team which works flexibly across the broader range of schemes.

### **Promoting the Welsh language**

The number of Welsh speakers in Cardiff has increased over the last ten years, despite a decline in other areas of Wales. The 2021 census showed that the number of people who could speak, read and write Welsh has increased by almost a quarter – 23.0% or over 6,500 people – which is the largest numerical and percentage increase across all Welsh Local Authorities. The proportion of people with no skills in Welsh in Cardiff also fell from 83.8% in 2011 to 82.5% in 2021.

Work has also started on Ysgol Gynradd Groes-wen Primary School, the first dual-stream school in Cardiff – a school with one form of entry for Welsh-medium education and one form of entry for dual-language education in English and Welsh. The new school is expected

to admit its first pupils in September 2023 and represents real innovation in the way language will be taught.

### **Working together to support a healthier and more active population**

A programme of work to tackle health inequalities has been commenced in partnership with the Cardiff & Vale University Health Board. The work will focus on tackling inequalities in childhood vaccination uptake, bowel screening rates and levels of childhood obesity, informed by the joint approach to data analysis developed in partnership during the pandemic.

Work is continuing to promote health screenings and increase activity levels within the Hubs. Hub staff have received Public Health Wales (PHW) Screening Champion training to provide them with the tools to talk to customers about appropriate screening programmes. Gentle exercise classes, such as Elderfit, Low Impact Functional Training (LIFT) classes, walking football/netball etc., have been offered at Hubs throughout the city as part of the preventative health agenda.

Work is also taking place in collaboration with Sports Cardiff to work towards progressing Eat Well Move More including the provision of free sports equipment to children and young people via their library cards as well as staff training in the 'Dragon Play to Learn' initiative which aligns storytelling with physical activity.

### **Leisure Services**

The significant budget pressures faced by local authorities over recent years has led numerous Councils to reduce the level of their leisure service provision and some have chosen to close leisure centres. Despite the pressures, Cardiff Council has remained committed to keeping all its leisure centres open and to retaining and enhancing the level of service. Following the sustained impact of the Covid-19 pandemic, Cabinet was updated on the implications for GLL who had suffered a significant loss of income across their business. Whilst short-term funding was made available through government hardship support to keep the leisure industry afloat, the main implication for the contract in Cardiff was that GLL were no longer able to fund a deficit in Cardiff from surpluses elsewhere. In response, Cabinet authorised a detailed review of the GLL Leisure Services contract to identify potential variations that would improve the long-term sustainability of the contract and protect service delivery. The recent energy crisis has accentuated the problem and, prior to the UK Government intervention, was forecast to more than double the anticipated operating deficit of the leisure contract operator. Following the review of the Leisure Services Contract, a number of variations to improve the financial performance of the contract were agreed by Cabinet in October 2022. This included an agreement in principle to upgrade the energy infrastructure at each leisure centre to provide lower cost renewable energy.

The Leisure Services Follow-up Review published by Audit Wales in October 2022 noted that there was a "a clear leisure vision for the city supported by a five-year strategy" and that the Council has strengthened its governance and oversight arrangements of the GLL contract.

Whilst the Council has made swift and good progress addressing Audit Wales's proposals for improvement, the focus moving forward will be to ensure the sustainable development principle fully drives future leisure provision.

## **Well-being Objective 5: A capital city that works for Wales – Summary**

Building on the close partnership with the private sector, which provided significant and proactive support to businesses during the pandemic, the Council continues to make good progress supporting the city's economy through delivery of its recovery strategy, major projects programme and portfolio of regeneration activity.

To drive up productivity, a focus on delivering more – and better – jobs continues to be maintained, with the Council playing an active role in creating and safeguarding 483 new jobs at Quarter 2. Major projects, including Central Square, Central Quay and Canal Quarter, are also continuing on-site and the Indoor Arena project is progressing well. Phase 1 of the Canal Quarter scheme will be completed in summer 2023. The Council's capital programme is, however, exposed to risk associated with cost inflation, particularly construction materials and labour, which will need to be actively managed to ensure that projects progress in line with the timescales intended.

More broadly, the city centre continues to perform well; footfall has recovered to just under pre-pandemic levels, with figures at Quarter 2 showing figures as just over 11.2 million, and live and cultural events, as well as the music scene, are returning. A focus is being placed on rebuilding the city's event and cultural offer, ensuring that the impact of its creative and cultural assets is maximised. Income recovery at Council venues will remain an area of challenge as, across the UK, the cost-of-living crisis is likely to impact recovery.

Looking ahead, the cost-of-living crisis and a likely recession will impact local businesses, with energy costs representing a major challenge. As ever, the Council will continue to work alongside the city's private sector to develop a co-ordinated response.

## Leading the economic recovery in Wales

Cardiff's city centre footfall has recovered well with figures for the first two quarters of this year just under pre-pandemic levels and recovery continues across the commercial sector, with data for the first half of 2022 showing that office take-up in Cardiff reached 215,000 square feet. This is the highest half-year take-up since 2016, according to a recent report by property consultancy Savills. There also remains significant investment interest in the city, evidenced by the number of new premises being opened and the latest ONS data highlights that Cardiff has the highest positive margin between new start-up firms and failures in the UK.

The hospitality trade is reporting a positive outlook, though concerns remain that the impact of the cost-of-living crisis will become more apparent if the national economic outlook deteriorates. Confidence in key sectors, such as fintech and the creative industries, also remains high. FinTech Wales' latest report indicated that the sector has created over 1,000 jobs during the past year, with a significant number concentrated in Cardiff. The launch of Media.Cymru, a Council-supported £50 million collaboration, will further support research and development in Cardiff's creative and media cluster.

A decision is still awaited regarding the Council's bids to UK Government's Levelling Up Fund; a £50 million bid for the Metro link between the city centre and the Bay, as well as a £20 million bid for the Atlantic Wharf public realm development, were submitted over the summer. Work is also ongoing to maximise the benefits of the Shared Prosperity Fund, which is to be allocated to places across the UK on a needs basis. A Cardiff Capital Region Regional Investment Plan has been submitted to UK Government, and a response is awaited. A Shared Prosperity Fund Delivery Team has been established to work with service areas in the Council to deliver the Shared Prosperity Fund Programme once approved.

## Major Projects

To support recovery from the pandemic, work continues in taking forward the Council's portfolio of major projects, including the Arena, Atlantic Wharf and the International Sports Village. The volatility of the construction market in terms of the price and availability of labour and materials does, however, pose a risk to major projects, with substantial cost increases due to inflation. The Council is working to ensure that sufficient capacity and resource is allocated to projects to ensure that they progress in line with the timescales intended. The Arena's Development Funding Agreement will be completed by March 2023, enabling a review of cost following significant price inflation, whilst a full business case for the Velodrome and Closed Loop Circuit will also go to Cabinet in Quarter 4.

## Leading a recovery programme for the City Centre and Bay

As part of the City Centre Recovery Action Plan, the Council continues to engage with businesses on issues such as return to work strategies and the cost-of-living crisis. Moving forward, the Council will share best practices amongst businesses in the city centre, as well as explore the establishment of new retail models – involving charities and community businesses – in order to raise footfall levels. Furthermore, progress is being made in terms

of ensuring that the city centre is cleaner, safer and better maintained, with the city centre management team effectively co-ordinating activity with public and private sector partners.

Additionally, work is ongoing to protect and revitalise historic buildings in Cardiff Bay. A planning application for the regeneration of Merchant Place and Cory Buildings – into a sixth form college – has been submitted for approval. The Council is also in discussion with the current lease holders of the Coal Exchange regarding development fundraising opportunities for the building.

### **Supporting innovation and business development**

The Council continues to support the development of small business infrastructure, recently helping Tramshed Tech to expand its co-working space in the city centre through the Transforming Towns scheme. This will provide additional space for knowledge-based businesses in Cardiff, helping to provide a platform for some of the most innovative and exciting new enterprises in the city to flourish.

The Economic Development Team has also put in place a Business Park Roadshow programme aimed at meeting local companies across the city and holding face-to-face sessions with local companies. The first location of the Business Roadshow programme was Cardiff Business Park in Llanishen, with a face-to-face session taking place on a new electric bus in November 2022.

Moving forward, to further support innovation and following a period of consultation, a final Smart City roadmap is to be completed and presented to Cabinet in Quarter 4. The roadmap will act as a catalyst for collaboration, innovative thinking, better designed services and will allow the city to exploit advances in technology.

### **Supporting the recovery of the cultural sector and major events programme**

The cultural sector was particularly impacted by the pandemic with venues having to close their doors and Cardiff's major events programme suspended. The city is now working to rebuild its event and cultural offer, maximising the impact of its creative and cultural assets.

Following publication of the Welsh Government's National Events Strategy over the summer the Council is developing its own Event Strategy which will be informed by the Welsh Government's approach. Alongside this, a funding application – to Welsh Government – is currently being developed by the Council for Cardiff to host an international music festival. The Council is also in the process of developing a bid to be a host city for the 2028 UEFA European Football Championship, which will be submitted to UEFA in the new financial year.

There is a need to be mindful moving forward of the continued impact of Covid-19 on the hospitality sector which, alongside skills shortages, is impacting the availability of staff to support the delivery of shows and projects. Additionally, the cost-of-living crisis has reduced the amount of disposable income many have to spend on events and culture.



## Well-being Objective 6: Cardiff grows in a resilient way – Summary

The Council has recognised the challenge presented by the Climate Emergency and developed a pathway to become a net zero carbon city by 2030. This includes key actions across areas such as transport, energy, housing, and food, which will not only improve the local environment, but improve the well-being of residents and visitors. For instance, the Council has invested to accelerate the shift in sustainable and active travel, with pop-up cycle lanes introduced in the pandemic now made permanent. Additionally, monitoring data shows that air quality has improved since pre-pandemic levels and work is ongoing to ensure that compliance continues into the long-term.

The impact of cost inflation, particularly on the One Planet capital programme, does represent a strategic risk for the Council, however, with transport schemes, renewable energy generation projects and the Council's housing retrofit programme subject to delays and price increases. Schemes related to enhancing the city's flood defences have been particularly impacted - costs have increased by over 75% against original estimates – and will need to be closely monitored moving forward.

Cardiff remains one of the best performing core cities for recycling; the cumulative half-year position for current recycling rates is just above the 64% target set by Welsh Government, at 64.02%. A new Recycling Strategy has been approved which outlines steps that the Council will take to meet statutory recycling targets going forward.

## Delivering One Planet Cardiff

In response to the climate emergency, in October 2021 the Council published its One Planet Cardiff Strategy and Action Plan, which sets out priorities for delivering a net zero Council and city by 2030. To ensure that the city is on track to become carbon neutral, a 'pathway' analysis tool has since been developed, to determine the potential carbon impact of One Planet schemes and interventions. This provides a mechanism to justify interim carbon targets and will aid prioritisation and decision-making throughout the One Planet Cardiff programme.

A key decarbonisation project of the programme is the Cardiff Heat Network, which will bring low-carbon heat to both Council and non-Council owned buildings in Cardiff Bay. Whilst construction began on site in January 2022 – and was set to complete in three years' time – general delays, largely due to supply chain issues, has resulted in an additional six months being added to the completion date. On-site timing issues may also affect the eventual 'Heat-On' date. Nonetheless, these issues are manageable, with no immediate cost implications. Uncertainties are arising, however, regarding the detailed design of the Network, particularly interfaces with linked Council projects, such as the Indoor Arena and County Hall. Implications for the project's Business Plan are not yet known but scenario planning is being undertaken to assess potential impacts.

In order to develop options for other potential large-scale renewable energy projects on Council land, a delivery options analysis has been completed, along with a request to draw down funding for the next stage of design. Next steps, if the request is approved, include developing a full business case for consideration.

Furthermore, bid negotiation with Welsh Government is in progress to fund a 252 mixed-tenure external wall insulation scheme on unimproved British Iron and Steel Federation (BISF) properties in Llandaff North and Rumney. An Agreement in Principle has been received from Welsh Government but a Ministerial decision on funding is awaited to progress the scheme.

## Improving Air Quality

To assess air quality levels across Cardiff, Nitrogen Dioxide (NO<sub>2</sub>) concentrations are monitored at locations across the city, as well as within Air Quality Management Areas (AQMAs). This includes Castle Street, which was previously assessed as the most polluted street in Cardiff. Additional real time monitoring is also undertaken at specific locations across the city, where pollutants such as particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are also monitored.

The Council's Air Quality Annual Progress Report 2022, which presents monitoring data captured in 2021, shows that air quality has improved since pre-pandemic levels, with all locations monitored compliant with 'limit values' for pollutants as set out in legislation. This improvement in air quality is likely linked to less vehicle usage as a result of the pandemic and from measures implemented as part of the Council's Clean Air Plan. Further work is being undertaken by the Council to ensure that long term NO<sub>2</sub> compliance on Castle Street is

achieved and, in line with a Welsh Government Direction, work has commenced on the assessment and modelling of options for a permanent transport scheme. Due to the complexities of the data and additional schemes being assessed, the timetable to complete the modelling assessment works is challenging. However, ongoing dialogue is being undertaken with Welsh Government to ensure that the feasibility works remain on schedule, to enable a decision to be made by the Council's Cabinet early in 2023.

To further improve real-time air quality data and assess and identify trends in pollution, work has been ongoing to finalise additional monitoring locations, with installation due to commence early in 2023.

### **Delivering Sustainable New Communities**

Consultation has been undertaken on the Vision, Issues and Objectives for the Replacement Local Development Plan (LDP) and Strategic Growth and Spatial Options. The comments received during these consultations, together with a detailed review of evidence base studies and assessments, are being considered to inform the preparation of the Preferred Strategy, which is the first formal stage of consultation on the Replacement LDP. Whilst it was anticipated that this stage would commence in early 2023, there is a need to ensure that the Replacement LDP meets current and emerging priorities around housing and employment need, addresses the declared nature and climate emergencies, whilst supporting high-quality development through the promotion and delivery of sustainable communities. It is anticipated that the Preferred Strategy will be presented to Council in advance of formal public consultation commencing over summer 2023.

Despite the economic downturn, housing completions and associated infrastructure on many of the LDP strategic sites are being delivered in accordance with the master-planning principle. Further brownfield and greenfield developments are progressing to provide a range and choice of new developments across the city, including affordable housing.

### **Cardiff's Public Transport and Active Travel Systems**

Road traffic is one of the city's biggest contributing factors to climate change, as well as air pollution. The Council has therefore invested to accelerate the shift in sustainable and active travel, with pop-up cycle lanes introduced in the pandemic now made permanent. The new Active Travel Network Map for the city was submitted to Welsh Government for approval in June 2022. Once approved, the map will be published on the Council's website. The delivery of a city-wide cycle network is progressing with Route 1 from the city centre to the University Hospital of Wales nearing completion. Consultations on next stage routes are also in progress.

Key Transport White Paper projects also continue to be progressed; for instance, stage one of the Northern Bus and East-West Corridor WelTAG studies (Welsh Transport Appraisal Guidance: a process of optioneering and proving the case for transport projects in Wales) was completed earlier this year. Furthermore, major progress is being made on the design of the enhancement to Cardiff Central as well as the roll-out of Metro schemes. In

particular, the delivery of Phase 1 Cardiff Crossrail City Centre to Cardiff Bay Metro is in detailed planning stages.

Due to ongoing capacity constraints within the Council's Transport function and persistent recruitment difficulties, all 'Healthy Streets' projects have been suspended. A review is being undertaken to determine future deliverability, with a focus now placed on delivering other grant-funded projects and the city's Intelligent Transport System (ITS). The ITS involves combining information, communication and control technologies in a way that enables users to make better, safer and more co-ordinated use of transport networks. As part of this work, a draft ITS strategy was published for consultation over the summer. The feedback will be utilised to inform preparation of the final ITS Strategy, which will be reported to Cabinet in March 2023.

### **Flooding and Coastal Erosion**

Parts of the city's existing fluvial and coastal flood defences require improvement to meet the challenges of the climate emergency. Efforts to progress schemes have been subject to a range of pressures, including delays associated with Covid-19 and the scale of funding required. The costs have increased by over 75% against original estimates and capacity challenges within the Flood Risk Management Team have limited the pace of progress. As a result of these pressures, a decision has been taken to reduce the coastal defence improvement schemes in Cardiff East, with agreement from Welsh Government. An extensive amount of work has been undertaken on the full business case, tender and award process to reduce, as much as is reasonably practicable, the risks to Cardiff Council. Welsh Government's award process must be completed before the end of the financial year, as this is the cut-off point for funding.

Pressures have also resulted in delays in developing the Sustainable Water, Flood and Drainage Strategy for Cardiff, as required by the Flood and Water Management Act (2010) and the Flood Risk Regulations (2009) respectively. Limited staff resource in the Council's Flood Risk Management Team – compounded by recruitment issues due to a shortage of expertise in the current labour market – means that meeting the required timescale of 2023 for completing the Strategy is challenging. Discussions are ongoing with Welsh Government, the Welsh Local Government Association and neighbouring Local Authorities regarding an extension of the adoption and publication deadline.

Moving forward, an enhanced engagement programme will be developed with partners to support the public to enhance their own resilience to flooding. This includes improving communication regarding what to do in a flood, as well as raising awareness of the risk.

### **Waste and Recycling**

Cardiff's current recycling rate – as reported as the cumulative mid-year position – is just above the 64% target set by Welsh Government, at 64.02%. Whilst this is an improved position, the risk of failing to meet Welsh Government's statutory targets exposes the Council to a potential fine if it fails to meet the target and places additional financial costs on waste services. In October 2022, Audit Wales published a report which assesses waste

management in Cardiff, where it was noted that the Council will need to “*change its approach to recycling if it hopes to meet the statutory recycling target of 70% by 2025.*”.

Measures are continuing to be progressed to improve performance. After extensive engagement with Welsh Government and WRAP Cymru, and following consultation with the public, a new Recycling Strategy has been approved. The Strategy sets out the steps that the Council will take to meet statutory recycling targets, with attention now turned towards producing a phased implementation programme. Domestic collection trials, including segregated recycling and reduced residual waste, across the city will continue to inform implementation as the roll-out of the Strategy progresses.

The Council’s Month 6 budget monitoring report points towards overspends in collections – of just over £1.6 million. This reflects several factors, including higher staff costs – caused by greater levels of sickness and overtime – as well as increased vehicle costs, in particular the inflationary impact of fuel.

### Street Cleanliness

Cardiff is performing well overall in street cleanliness, with Quarter 2 results showing 92.02% of highways land inspected by the Local Authority being of a high or acceptable standard of cleanliness. The Council also measures cleanliness on a ward basis, with a Key Performance Indicator on the number of wards where at least 90% of highways inspected meet the high or acceptable standards of cleanliness. At Quarter 2, 22 out of 29 wards (measured using the ward boundaries as they were at the beginning of the 2022/23 financial year) pass the 90% threshold, although the target is for all wards to be above 90%. While performance against this indicator has not met this target since the indicator was first introduced, performance has improved in 2022/23 (up from only 16 out of 29 wards meeting standards in Quarter 4 of 2021/22). The methodology for this Key Performance Indicator will be reviewed moving forward as overall, street cleanliness has consistently met targets, with over 90% of streets meeting cleanliness standards.

Nonetheless, to address the gap a programme of service reform continues to be progressed. Love Where You Live ‘Blitz’ teams have been deployed in Cathays and Plasnewydd, and a robust student plan is now in place for both areas. Additionally, litter bin sensors in free standing bins are now in place across the city to help the service manage demand more efficiently. Success has also been experienced with businesses signing up to the Council’s Commercial Trade collection, following targeted enforcement action in Grangetown. Moving forward, a focus will be placed on utilizing and interrogating data, to help further target resources where they are needed across the city.

## Well-being Objective 7: Modernising and Integrating Our Public Services – Summary

The pandemic was a time of significant challenge, but also one of change, dynamism, and innovation in Council services. The Council is committed to continuing the approach to service innovation, digitalisation, flexibility, and continued partnership working that characterised the pandemic response into business-as-usual post-Covid.

The Council faces significant in-year and medium-term budgetary challenge due to a combination of the legacy of the pandemic, energy pricing, pay pressures and the impact of the cost-of-living crisis. The overall revenue monitoring position, as at Month 6 of the 2022/23 financial year, reflects a total projected net annual Council overspend of £7.394 million. Whilst there is continued pressure across several service areas, there are various factors impacting on the bottom-line position, many of which were not evident when budgets were set in March 2022. This will require ongoing corporate oversight, financial discipline at every level of the organisation and effective planning to manage areas of high or escalating cost.

Good progress continues to be made embedding hybrid working across the Council, supported by the effective deployment of technology and the creation of new office spaces in County Hall. In parallel, the Council is responding in year to the increases in energy costs in its operational estate and new short- and medium-term options for core and operational estate which allow the Council to continue to respond effectively to the new hybrid working model and the impact of rising energy costs are being developed and will be presented to Cabinet in early 2023. Progress has also been made in reducing the scale of the Council's asset footprint whilst improving the quality and environmental impact of buildings.

The Council faces a number of workforce challenges. Difficulty recruiting and retaining staff – ensuring sufficient capacity and appropriate skills – is particularly acute in Children's Services and in Adult Social Care, but it is also having an impact across all directorates and is impacting the delivery of all Well-being Objectives. Discrete initiatives are in place to respond to acute service pressures and an enhanced approach to workforce planning at a corporate level has been put in place. Sickness absence has also increased with the Quarter 2 results showing that 12.3 working days shifts, per full-time equivalent Local Authority employee, have been lost. Rates are greatly reduced when Covid-19 related sickness are considered.

## Financial Resilience

The Council faces a significant in-year and medium-term budgetary challenge due to a combination of the legacy of the pandemic, energy pricing, pay pressures and the cost-of-living crisis. The overall revenue monitoring position, as at Month 6 of the 2022/23 financial year, reflects a total projected net annual Council overspend of £7.394 million. Whilst there is continued pressure across several service areas, there are various factors impacting on the bottom-line position, many of which were not evident when budgets were set in March 2022. In financial terms, the pressures within Children's Services are the most significant and in the main, relate to the high numbers and costs of residential placements. Across broader services, post-pandemic recovery has been overshadowed by the energy and cost-of-living crisis, which has resulted in significant expenditure pressures in areas such as food costs, fuel and utilities.

Within Children's Services an urgent programme of work has been established to seek to reduce spend and deliver improvements across a range of services linked specifically to the issue of external placements. Across the Council as a whole, given the continued pressure on the budget position, all services have reviewed opportunities to deliver further in-year efficiencies. Between Month 6 and the financial year end, every effort will continue to be made to reduce the overspend to a balanced position or to identify other sources of available funding, in order that financial resilience is maintained. It is therefore important that Council directorates retain a focus on their financial positions and ensure that tight financial controls are in place over the remainder of this financial year.

A sharp focus will also need to be placed on the capital position – the Council's capital investment programme plays an essential role in both stimulating the local economy and delivering local services during the post Covid-19 recovery period. Construction cost inflation is significant, however, resulting from increased tender activity, material availability and labour shortages. This represents a delivery and affordability risk to projects to remain within estimated budgets following the outcome of tenders and may require re-prioritisation of schemes to be undertaken, including changes in specification, where this allows the same outcomes to be met. It remains important that directorates continue to allocate sufficient capacity and resource to ensuring projects progress in line with the timescales intended, and robust business cases continue to be essential.

Council will consider the 2023/24 Revenue Budget Strategy and a refreshed five-year Capital Programme in Quarter 4 of 2022/23.

## Building upon our digital agenda

The Council recognises the opportunities offered by technology to deliver services more efficiently. As a result, the Council's digital offer has been improved and expanded, including the breadth of services available to citizens on online platforms. For example, citizens are now able to report graffiti and can check digital parking permits via the Council's website, Chatbot and App. Quarter 2 results show that the Council is slightly behind target in terms of the number of customer contacts using digital channels, as well as the total number of webcast hits.

Digital is at the heart of the transformation agenda for Council Services. This includes developments planned in 2023 to utilise new technology to automate tasks and speed up back-office processes.

The Council is also continuing to improve the collection, presentation and analysis of data across the public service system, to join up data sets and better inform decision-making. A Corporate Performance Dashboard, which presents updates on the steps and KPIs within the Council's Corporate Plan, was published earlier this year, whilst a Management Dashboard, which improves the accessibility and usage of key data sets – such as training compliance and sickness absence – for managers within the Council has completed its first testing phase. Additionally, a City Performance Dashboard, which brings together a number of data sets to present a picture of life in Cardiff, has been created and published on the Council's website.

### **Delivering leaner and greener Council buildings**

The Council's land and property estate is considerable, with property running costs representing the second largest call on the Council's budget after staff costs. Changes to the way in which the Council delivers its services is linked to the management of its operational property estate and therefore strategic estate management offers an ongoing opportunity to unlock efficiency and improve service delivery. This is particularly relevant in the post-Covid recovery period, as services adapt to working in new and different ways, such as hybrid working.

For hybrid working, new touchdown spaces have been created, including flexible workspaces, meeting rooms with hybrid facilities and online desk booking systems in County Hall and this work will continue to be developed in line with the Council's Medium Term Core Office Strategy.

The delivery of capital receipts remains a critical objective of the Council's Property Strategy and the 2022/23 Annual Property Plan, approved in September 2022, sets a target of £5.5 million. At the end of Quarter 2, £2.5 million had been achieved. Another critical objective of the Property Strategy involves the modernisation of the Council's estate, with a target to complete 100% of programmed Priority 1 asset works each year. The 2022/23 programme is currently progressing subject to affordability and contractor availability. A key piece of ongoing work relates to carbon reduction retrofit proposals, to ensure maximum value for money and impact within the retained estate. Reducing the carbon footprint of the built environment is also an important component of the One Planet Cardiff Strategy and a Built Environment Carbon Reduction Board has been established to strengthen oversight of progress.

### **The Council's Workforce: Sickness Absence**

Following a substantial reduction in sickness absence during the pandemic, sickness rates have increased. The Quarter 2 results shows that 12.3 working days/ shifts – per full-time equivalent (FTE) Local Authority employee – have been lost due to sickness absence. This is



against a target of 9.5. Much of this increase relates to a large number of staff absent due to Covid-19, with the result dropping to 10.12 FTE days if Covid sicknesses are removed. Sickness absence is also not uniform across the Council, with sickness particularly high in Street Scene and Adult Services. A targeted approach will continue to be applied to improve performance.

Work is also continuing to support staff wellbeing generally, with additional support provided to staff suffering with poor mental health. As part of this work, a series of support sessions are currently being rolled out to Line Managers and Trade Unions, to ensure that they are aware of what support services are available across the Council, for promotion to staff.

### **The Council's Workforce: Recruitment and Representation**

The Council faces a number of workforce challenges in ensuring sufficient capacity, appropriate skills and in recruiting and retaining staff, particularly given the level of competition for some professions. This challenge is particularly acute in Children's Services and in adult social care, but it is also having an impact across all directorates and Well-being Objectives. To respond to these challenges, a new five-year workforce strategy is in the process of being developed and a consultation commenced in Quarter 2. The Strategy will be finalised and presented to Cabinet in March 2023.

Another key element of this work is ensuring that the Council's workforce is representative of the communities it serves. The Council is currently working to respond to the recommendations of the Race Equality Task Force and the Cabinet will formally respond to the recommendations of the Task Force in December. Further to this, the Council's wider Equality, Diversity and Inclusion training is being reviewed to ensure that it is fit for purpose and to consider which components should be mandatory for all staff. Cardiff Works has also created a comprehensive engagement plan, which covers raising awareness of vacancies within the community and providing support to those wishing to register with the service.

### **Socially Responsible Procurement**

The Council spends over £550 million a year procuring a diverse range of goods, services and works from over 8,000 suppliers and contractors. Whilst the Council's primary responsibility is to manage public money with probity and to ensure that value for money is achieved, procurement enables the Council to progress a number of its priorities such as decarbonisation, fair work and community benefits. Recognising this, in October 2022, the Council published a new Socially Responsible Procurement Strategy (2022-2027), which has a number of key objectives, including contributing to the aim to be a carbon-neutral city by 2030 and increasing the community benefits delivered through Council contracts. The delivery of the Strategy will be managed through an annually updated Delivery Plan, with progress reported and published on an annual basis.

One of the key objectives of the strategy is to make procurement spend more accessible to local small business and the third sector. Quarter 2 results show that the Council is slightly behind target in terms of the percentage of overall spend within Cardiff-based organisations

(50.43% against a target of 52%), as well as the percentage of overall spend with Cardiff Capital Region-based organisations (63.66% against a target of 66%). A detailed spend analysis has been undertaken to identify opportunities to increase local spend, with a detailed project plan – to drive this forward – finalised.

### **Public Engagement**

In line with the Local Government Elections (Wales) Act 2021, the Council is currently in the process of developing a new Citizen Engagement Strategy, with a focus on engaging and involving hard-to-reach groups in decision-making. Stakeholder engagement has been completed, whilst direct engagement is currently being undertaken with individuals and organisations who can offer insight and guidance into how the Council can strengthen engagement and consultation practices with underrepresented groups.

In addition, the Council's customer service agenda continues to be delivered. Online Customer Service Training was launched in October 2022, which is mandatory for all staff to complete. Additionally, Customer Service Strategy Standards have been circulated to all staff and will be made available on the Council's website in due course.

### **Pandemic Management**

Due to the success of the vaccination programme, the course of the pandemic has changed, and the link between the virus, serious illness, hospitalisation, and death has been weakened significantly. The national policy position has graduated beyond crisis response towards the ongoing management of Covid-19 as a vaccine-preventable disease. Following the removal of the majority of Covid-19 restrictions in March 2022, the Test, Trace, Protect Services has been scaled down and the required reduction in staff numbers has taken place, with most staff repurposed. All staff have been supported throughout this transition, with a register of leavers maintained should scale-up be required.

The situation, particularly in high-risk settings, will continue to be monitored moving forward. A live reporting tool has been created which highlights clusters of cases within Health and Social Care settings. Multi-agency meetings, related to Adult Services, will continue to take place monthly, with Public Health Wales colleagues attending Care Provider Forums to provide updates. The Council, alongside partners, remains ready to respond to any changes in national policy – should it be needed – to keep citizens and staff safe.

## **CABINET MEETING: 19 JANUARY 2023**

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### **INTERNATIONAL SPORTS VILLAGE**

### **INVESTMENT & DEVELOPMENT (CLLR RUSSELL GOODWAY)**

### **AGENDA ITEM:6**

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*Appendices 2-3 & 5-13 of this report are not for publication as they contain exempt information of the description contained in paragraphs 14, 16 and 21 of Schedule 12A of the Local Government Act 1972.*

#### **Reason for this Report**

1. To provide an update on the International Sports Village development.
2. To approve in principle the proposed disposal strategy for the residential and commercial development opportunities at the International Sports Village.
3. To approve the Outline Business Case for completion of the sport and leisure attraction and associated infrastructure at the International Sports Village.

#### **Background**

4. In March 2021, the Council published a new vision for the completion of the International Sports Village (ISV) setting out a renewed commitment to deliver a vibrant waterfront residential district and a consolidated sports and leisure destination of outstanding quality to support the Council's ambition to establish Cardiff Bay as a leading UK urban visitor destination (see Appendix 1).
5. The new masterplan has reframed the proposed land use allocation across the site placing high value residential and commercial uses along the Bay and river frontages with the proposed new leisure uses clustered around the existing leisure facilities away from the water's edge. As part of this new vision, authority was granted for the Council to acquire the Greenbank Partnership Ltd land holdings to establish full control of the whole International Sports Village development site.
6. Implementation of the new strategy for the ISV has required several sequential steps to be taken, authorised by successive Cabinet decisions, as follows:
  - March 2021 - Cabinet approved in principle plans to deliver a new purpose-built Velodrome at the ISV. Authority was granted to complete a business case for the Velodrome including the appointment of professional advisors, procurement of a contractor and the development of a planning

application. Authority was granted to undertake a soft market testing exercise for the delivery of a car parking solution for the site and to secure tenants for a refurbished Toys 'R' Us building. Cabinet also considered the future operation of the site and gave authority for an Outline Business Case to be developed.

- July 2021 - Cabinet approved the Outline Business Case for the new Velodrome and allocated the budget required to complete its delivery, subject to final approval of a Full Business Case. A contractor was subsequently appointed to assist with the development of detailed designs and cost as part of the work to prepare a Full Business Case.
- September 2021 - Cabinet authorised the acquisition of assets owned by Greenbank Partnership Ltd including the Ice Arena to enable the development agreement with Greenbank Partnership Ltd to be terminated. The assets were to be acquired in 2 phases with full completion by 31<sup>st</sup> December 2022.
- March 2022 - Cabinet approved a further iteration to the development masterplan to include the land being acquired from Greenbank Partnership Ltd. Authority was also granted to undertake a soft marketing exercise to develop a disposal strategy for the residential and commercial land. Cabinet also provided authority to extend the scope of the Full Business Case for the proposed new velodrome to include the proposed Closed Loop circuit, public realm and associated infrastructure works'

7. The Planning Application for the proposed new Velodrome was approved in March 2022.

## **Issues**

8. The International Sports Village development has been plagued by delays and this has created significant uncertainty for potential investors and for local residents. The Council has now provided a clear plan for the completion of the development and has secured control of all of the required land. It is now essential that the development progresses in a timely manner to provide confidence to potential investors and certainty to local residents. This report seeks a number of approvals from Cabinet to enable the recent momentum to be maintained.
9. The Council has recently completed the acquisition of the Greenbank Partnership Ltd assets including the Ice Arena. The acquisition of these assets has required the Council to enter a short-term borrowing arrangement on the basis that the capital outlay would be recovered quickly through the subsequent disposal of plots for development. The Council's strategy was to acquire these assets in two phases. This would provide an opportunity for receipts to be earmarked before the second installment was paid. To avoid a fire-sale of land and to ensure that the ISV development is brought forward in a coherent way that can deliver a high-quality neighbourhood, the Council is now proposing a more coordinated disposals strategy as set out in this report. It will mean the recovery of capital receipts will be delayed, and the project will therefore continue to incur costs associated with short-term borrowing until such a time as the disposals are completed and the capital receipts recovered.

The onus is therefore on the Council to progress the development quickly to reduce cost and maximise the amount of capital available to be invested back into the site.

10. The Velodrome proposal forms a key part of the plan to complete the leisure destination. The Council has secured planning permission for the development and is part way through the completion of a Full Business Case. The development however relies on a capital contribution from the Council's Education Department linked to the delivery of an expanded Cathays High School. The new Velodrome project will progress once the land arrangements relating to the delivery of the high school are concluded.

### **Disposal Strategy**

11. The Council has appointed property agents to undertake a soft marketing exercise to establish investor interest in the site. The exercise sought interest in the acquisition of individual plots as well as interest to bring forward development through a more holistic approach. The disposal of individual plots would enable a quick recovery of capital, whereas the development of the site through a master developer approach would oversee the disposal of plots in a coordinated way to ensure the wider site infrastructure such as public realm, energy solutions, highways requirements and public open space is delivered in a coherent and deliverable manner alongside a requirement for capital receipts.
12. The formal marketing of the development opportunities on the ISV site commenced in September 2022 and concluded with bids received in early December 2022. The Council received several expressions of interest and offers both for individual plots and for the role of master developer as set out in Confidential Appendix 2.
13. Confidential Appendix 2 sets out 3 key strategies for disposal based on the response to the market exercise as follows:
  - (1) Appointment of individual bidders for plots 1-4 based on 6 bids received.
  - (2) Appointment of a master developer based on 2 full bids received.
  - (3) A hybrid of the above - appointment of a master developer whilst also seeking to capture the best offers for individual plots.
14. The Council's appointed agents recommend the hybrid approach (set out as (3) above) and have recommended The Watermark Consortium as the preferred bidder based on their substantial vision for the site, their knowledge and history of the site, their commitment to achieving the Council's capital receipt requirements including their willingness to work to secure the best bids for individual plots and their strong commitment to achieving the Council's One Planet, carbon zero goals. The Watermark Consortium is formed of a number of entities which includes Orion Land. Orion Land were appointed as the original developer of the ISV site and were responsible for delivering the original remediation and infrastructure strategy including the revetment walls and a number of the existing developments on site including the International Pool and the Morrisons development. Their involvement in the consortium

provides significant in-depth knowledge of the site and its associated constraints. An overview of the offer from The Watermark Consortium is attached at Confidential Appendix 3.

15. The hybrid approach provides the best opportunity to ensure a coherent and co-ordinated delivery strategy, whilst also securing an early start on site and early capital receipts for the Council. The offers requiring further consideration relate to the following plots illustrated in the marketing brochure attached at Appendix 4 and detailed in the agent's report at Confidential Appendix 2.
  - a. Plot 1 - retirement living.
  - b. Plots 2-4 - low-rise residential.
  - c. Plot 9 – Park & Ride facility

If this disposal strategy is accepted by Cabinet, the target will be to negotiate terms of an agreement and to return to Cabinet for final approval in March 2023.

### **Velodrome Update**

16. Following the award of planning permission in March 2022 work has continued to develop the Full Business Case. The scope of the business case now incorporates the proposals for a Closed Loop Circuit and the wider infrastructure required to deliver a destination as approved by Cabinet in March 2022. The Full Business Case will be presented to Cabinet once the land arrangements relating to the Cathays High School site are progressed.
17. In the meantime, the Council continues to work to develop the detailed design of the proposed new facility to inform the Full Business Case. A track design specialist has been appointed and engagement continues through the technical working group represented by track cycling specialists and users. Work has been undertaken to consider the design features at a range of outdoor velodromes across the UK and abroad to inform the final designs.
18. A full review of the development strategy for the proposed new Velodrome was completed in June 2022. This presented an opportunity to enhance the ancillary provision that was originally planned to be specific to the Velodrome and instead will now align to the wider range of sporting facilities available and proposed for the ISV. The result is a proposal to deliver a Central Performance Hub that will support the development of athletes across several sports. The Hub is proposed to be allocated approximately 9,000 sq ft within the Toys R Us building (which totals 40,000 sq ft).
19. The proposal to locate the Central Performance Hub within the Toys R Us building rather than building a new bespoke building required a minor planning amendment via Section 73. An application was submitted in August 2022 and was approved in December 2022.

### **Operator Strategy**

20. In March 2021, Cabinet recognized the importance of securing appropriate organisations to operate the various proposed new sport and leisure facilities for the ISV and provided authority to develop an operator strategy. Securing

operators is an important step in the development of a Full Business Case as it provides certainty of costs and income for the Council, committed through lease agreements.

21. To develop an Operator Strategy a PIN Notice was issued in September 2021 with the aim of identifying any parties interested in engaging with the Council. Extensive due diligence regarding proposed operating models was undertaken and subsequently reported to Cabinet in March 2022.
22. In September 2022, the Council undertook a market exercise to seek offers from organisations interested in operating the facilities proposed for the ISV to provide assurance of the future operation model, in particular the Ice Arena and the proposed new Velodrome. Four bids were received in writing.
23. These bids have been the subject of a robust evaluation and clarification process administered by appointed independent agents. The Council has received a recommendation to progress dialogue with a preferred operator for the Ice Arena (Wales) and a preferred operator for the proposed new Velodrome, as set out in Confidential Appendix 5. Further negotiations are required with these parties to refine and agree the detailed terms of lease agreements. As part of this, the Council will need to confirm arrangements relating to the proposed new universal booking system (set out below) and the introduction of a new service charge arrangement covering all facilities at the ISV (also set out below).
24. The Ice Arena is now in the full ownership of the Council. It is therefore proposed to move quickly towards the completion of a lease agreement with the preferred bidder to establish a sustainable future for the facility. The preferred bid for the Ice Arena seeks to support the long-term operation of the Ice Rink by making better commercial use of the area that was previously set aside for a second ice pad. This area has not been used consistently as a second pad for some years due to the significant energy costs associated with keeping an ice pad properly chilled. The recent energy crisis has exacerbated this issue making the prospect of re-establishing a second ice pad commercially unrealistic. The proposal is for the area to be converted into an alternative family leisure attraction including a bespoke '*clip & climb*' facility aimed at attracting children and young people to the ISV. The intention is for the area to be sub-let to a specialist operator to establish certainty of income. The proposal for the 2<sup>nd</sup> pad will have the dual effect of reducing operating cost and increasing income and thereby meeting the Council's clear criteria of the Ice Arena having to operate without any requirement for subsidy from the Council. Details of the proposed new family attraction are attached at Confidential Appendix 6.

#### Management Organisation

25. The work to develop an Operator Strategy as set out in Confidential Appendix 5 recommends that the Council establishes a Management Organisation (MO) to ensure that the sport and leisure facilities and the general environment of the ISV are well maintained and fit for purpose.
26. The exact nature and constitution of this organization is yet to be determined and will require further due diligence through the development of an Outline

Business Case. It could simply be managed from within the Council, or via an arm's length vehicle owned by the Council. The pros and cons including VAT implications and the rates implications of the various approaches will need to be considered. The principle however is that the Management Organisation will secure income from each sport and leisure facility based on visitor numbers. This income will be used to fund a range of landlord responsibilities taking these responsibilities away from the operators of individual facilities. The system will be implemented through a new universal booking system across all facilities and a service charge applied based on visits to a facility (as set out below).

27. This proposed approach will require a different lease approach to the norm. It will require a move away from Full Repairing and Insuring Leases (FRI) to Internal Repairing Leases where the operator only has responsibility for the internal up-keep of the property and facilities. The Management Organisation would assume landlord responsibility for all external maintenance and repairs. The Management Organisation would also take on responsibility for site cleaning and maintenance, site security, site management and marketing and promotion of the whole venue etc.

#### Maintenance and Service Charge

28. To ensure the financial sustainability of the various facilities operating at the ISV a maintenance programme reflecting the unique nature of each facility and the differing maintenance and lifecycle costs will be put in place. The responsibilities for each operator will be set out in the Internal Repairing Lease arrangements and the Management Organisation will prioritise works to the external parts of the buildings and for the public open space (see Confidential Appendix 5).
29. A service charge will be implemented at each facility to cover the external maintenance costs and will be secured through a centralised booking system. The advantage of this approach is that the fee drawn down by the MO will reflect variations in operational peak times, range of events, periods of popularity and growth. Equally, each facility will have different running costs and lifecycle demand and this approach will create a service charge that works for each facility and that is fair across the entire site.
30. The key function of the Service Charge and Management Organisation is to cover all costs associated with the maintenance and management of the sporting and leisure infrastructure within the ISV including the public realm and to maintain a high standard. This is to ensure that the facilities are well maintained and operate together as a destination, optimising use for events, to ensure the ISV becomes a significant leisure destination in its own right.

#### Booking System

31. As part of the due diligence undertaken relating to the implementation of a Management Organisation the requirement for an overarching booking system was identified to enable a coordinated, cohesive approach to delivering a top quality destination. The booking system is the financial and management tool required to enable the effective implementation of the service charge approach on the individual facilities of the ISV including the Cardiff International Pool,



CIWW, Ice Arena, Velodrome, Closed Loop the revamped Toy R Us Leisure Box and any subsequent sporting, leisure and retail developments.

32. Research has been undertaken into a broad range of systems and a suitable platform has been identified. Details of the research and the associated options appraisal is attached at Confidential Appendix 7. The recommended platform has the capability to support an omni-channel system so that all the specialist venues across the ISV can retain their individuality whilst benefiting from a cohesive, supportive system that assists with the monitoring and maintenance of the facilities as well as the wide range of booking functions that are required across the site (see Confidential Appendix 8).

### **Outline Business Case - Leisure Destination**

33. Further to the Cabinet decision in March 2022, a review of the Closed Loop Circuit proposal has been prepared by independent advisors, attached at Confidential Appendix 9. The review outlines the revenue opportunities relating to the proposal and its associated infrastructure.
34. Confidential Appendix 10 presents an Outline Business Case for the completion of the leisure destination, including related infrastructure, but not including the new Velodrome proposal as this has already been considered up to the OBC stage. This OBC contains a breakdown of the costs and capital and revenue opportunities for the following:
  - a. Infrastructure requirements to enable the completion of the leisure destination and to optimize the disposal strategy to maximise land receipts.
  - b. The Closed Loop Circuit and the public realm enclosed within for sporting and leisure users.
  - c. Container based retail opportunities associated with the Closed Loop Circuit.
35. The OBC demonstrates the viability of the proposals and their importance to delivering the Council's broader vision for the site. The Council's intention is to bring forward a single Full Business Case covering all of the investment required to complete the leisure destination, including the new Velodrome proposal, and to enable the disposal strategy.
36. Bringing forward the development of the leisure destination as a whole will deliver economies of scale for the Council and should have the effect of accelerating the regeneration of the wider area including the residential and commercial development by providing strong confidence to the market that the development will be fully completed in a reasonable timescale.

### **Energy Strategy**

37. The Council is committed to delivering a high quality development that helps to promote and deliver the Council's One Planet Cardiff strategy commitments. The approved masterplan for the ISV presents a unique opportunity for a holistic approach to energy provision across the site based on new green

renewable energy sources. The current service infrastructure on site is in need of comprehensive upgrading to support the significant increase in development capacity proposed on the site. The large format leisure assets such as the International Pool, the Ice Arena and CIWW are also feeling the current energy crisis more acutely than other businesses given their scale and the nature of their operation and all have faced significant increases in energy costs over recent months. An illustration of the projected increase in energy costs associated with the International Pool is provided at Confidential Appendix 11. Similar projections can be applied to each of the major leisure assets. A new 'green' sustainable approach to energy provision across the ISV will not only provide an environmentally responsible development but could also be of huge financial benefit to both the proposed residential and commercial development and the leisure facilities.

38. The Council has worked with specialist consultants to consider an exciting Energy Strategy to ensure the ISV development meets the Council's ambitions and also provides an affordable and sustainable long-term energy solution for both residents, businesses and the major leisure attraction located on site. The strategy considers a range of solution including solar, wind and heat recovery from air, ground or water and is set out in Confidential Appendix 12.
39. It is anticipated, for the Energy Strategy to be deliverable and sustainable over the long term the Council will need to require each of the various developments brought forward through the disposal strategy to be linked-in to a single joined up plan.
40. The report attached at Confidential Appendix 8 represents a Strategic Outline Case for an energy solution for the site. The Council now needs to develop an Outline Business Case to consider the investment options for delivering the strategy. This will consider options for Council investment against options for private investment and/or a combination of both. As part of this the Council will continue recent discussions with Welsh Government to determine eligibility for capital funding to support implementation of the plan.

## **Park & Ride**

41. The delivery of a new Park & Ride facility providing quick access to the city centre and Cardiff Bay is an important feature of the new ISV masterplan. The proposal is to deliver a multi-storey car park (MSCP) to consolidate the extensive surface car parking currently available on-site, to free up land for development, and at the same time providing regular and quick bus services to the city centre and the Inner Harbour. The ISV site lends itself to a Park & Ride facility given its proximity to the city centre and the Inner Harbour as it can provide sustainable travel options such as cycling and walking in addition to improved public transport connections. In more practical terms, the Park & Ride facility will also help to address some of the long-standing concerns of existing local residents and businesses seeking a managed parking provision that deals with the typical peaks seen at the ISV for events, and also removing the ability for the current free surface car parks to be used as public open space, which results in additional issues such as littering and anti-social behavior.

42. There is currently provision for circa 600 surface spaces between the Ice Arena (license) and the International Pool car park (lease) with an additional circa 400 spaces provided at the Toys R Us site. At present there are no charges for parking at the ISV except for occasions when events are held on-site, such as Cardiff Devil Ice Hockey matches. The Council has undertaken a soft market testing exercise to consider the market appetite and commercial feasibility of delivering a new MSCP on Plot 9. The proposed new provision would consolidate the current circa 1000 spaces into a multi storey car park providing for the whole ISV site including the proposed new leisure facilities, the proposed food and beverage facilities, and the Park & Ride facility. However, there will be a need to introduce parking charges to fund delivery of a new MSCP.
43. The next step will be to prepare an Outline Business Case. This will consider the delivery method, i.e. whether it should be Council funded or privately funded, the cost of construction, and the income required to fund the development. Consideration of the options for a charging regime will therefore be a key part of this work. Initial engagement has also confirmed that further consideration must be given to the specific requirements of leisure users particularly where users make multiple visits per week to a facility or are required to park for extended periods of time. For clarity, there are no plans to introduce charges to the current surface car parking arrangements.

### **Consultation**

44. A formal consultation on the ISV Masterplan was undertaken in December 2021/January 2022 and the results were presented to Cabinet in March 2022.
45. There has been ongoing engagement with local residents of Cardiff Pointe and as the disposal strategy progresses, they will be invited to engage further. Local residents have also engaged through the planning process and have shown particular interest in the public open space proposals and the principle of developing the area as a neighbourhood.
46. With regards to the proposals for new sport and leisure facilities, a range of sports have been represented on the Council's technical working group for both the new Velodrome and the development of the wider site, including the Closed Loop. In addition to this, several stakeholder meetings and site visits have taken place to update and inform stakeholders of progress and feedback and to inform the design process of the wider site.
47. As the development strategy has expanded, the project has sought to broaden the representation on the technical working group to ensure the best possible engagement in the development of the sports facilities. This has been done in collaboration with the Governing Bodies, who have been able to assist in reaching out to all the associated sports clubs across Wales.

### **Scrutiny Consideration**

48. This report will be considered by the Economy & Culture Scrutiny Committee on 18 January 2023. Any comments received will be circulated at the Cabinet meeting.

## **Reasons for Recommendation**

49. To enable the International Sports Village development to move to the next phase.

## **Financial Implications**

50. Cabinet previously approved an updated masterplan for the International Sports Village in March 2022, including providing Cabinet authority for the development of a Full Business Case and submission of a planning application for the combined cycling facilities including Velodrome and Closed Road Circuit. Estimated costs of proposed works required to progress to next stage of developments covered within this report, including any further business case and/or due diligence works required before Cabinet can take final decisions on each scheme, are set out in Confidential Appendix 13, as well as the various funding sources for these. Cabinet should satisfy themselves the current business cases are likely to be deliverable before agreeing to incur further costs to progress to the next stages.
51. This report seeks approval of the proposed ISV disposals strategy in line with the independent advice attached as Confidential Appendix 2, as well as delegated authority to develop detailed Heads of Terms with the master developer to be approved at a future Cabinet meeting. As set out in paragraph 9 of this report, the timing of land disposals will be an important factor for the Council to consider, with the capital receipts associated with these land disposals required to fund the delivery of other facilities within the approved International Sports Village masterplan.
52. The onus therefore remains with the Council to progress the land disposals strategy quickly, balancing the issue of continued holding costs of the site against the optimisation of capital receipts and certainty of delivery to achieve Council objectives. The recommended hybrid approach set out within this report and Confidential Appendix 2 is intended to support realisation of some initial capital receipts during 2023/24 financial year, which if achieved would help manage cashflows and unlock funding for the wider site development proposals, including some of the schemes set out within this report.
53. This report is seeking approval in principle for a new operating strategy that would require a fundamental change to the way in which Council leases its assets at ISV. As set out in paragraph 27, this would involve a move away from the fully insured and repairing leases currently in place with existing tenant leases, which essentially pass all the repair and maintenance liabilities for a building to the tenants, towards an internal repairing lease arrangement whereby the tenant only has responsibility for the internal upkeep of the property and facilities, and would essentially be transferring the risk and liability for external fabric of building and public realm to a new Management Organisation.
54. In exchange for the reduced level of repair and maintenance responsibilities, tenants will instead agree to pay a service charge to a new Management Organisation who would then assume control and responsibility for external building repairs and maintenance, as well as maintaining the public realm areas around ISV, all expected to be funded via new service charges. It will be

important for the Council to ensure a fair and suitable balance is struck when negotiating future service charges with tenants to cover the legitimate risks and cost liabilities being incorporated into the new Management Organisation, which is likely to be run by the Council initially, to ensure the Council can fully cover its costs. This will be considered through an Outline Business Case to be presented back to a future meeting of Cabinet.

55. Agreement in principle to introduce a charging strategy for the potential Multi-Storey Car Park is set out within the recommendations to this report, with the commercial feasibility of this approach to be further tested as part of the development of an Outline Business Case, approval for which is also being sought as part of this report. More detailed financial implications will be provided on this, as well as any evaluation of potential delivery options for the proposed car park, once more detailed proposals are brought forward for consideration.
56. The Council has recently completed the acquisition of the Greenbank Partnership Ltd assets including the Ice Arena, with the existing lease arrangement remaining in place with the existing tenant to continue operating the Ice Arena in the short-term. A new long-term lease is currently being negotiated, with this report recommending the appointment of a preferred long-term operator for the Ice Arena as set out in Confidential Appendix 5, although this appointment remains subject to completion of suitable legal agreements, as well as suitable commercial terms, including a requirement that the Ice Arena will operate with no form of financial subsidy by the Council. This objective will be assisted by the proposals to make better commercial use of the second ice pad, details of which are set out within this report and in Confidential Appendix 6.
57. Approval of the preferred operator for the Velodrome must remain subject to detailed and complete financial, legal and procurement due diligence taking place. This will include a review of a business plan from the preferred operator, as well as the commercial and legal terms of the proposed lease. Final terms will be included within a Full Business Case to be presented back to a future Cabinet meeting and will include details of both the preferred operator's for the Velodrome and proposed Closed Loop Circuit, as well as the necessary sporting infrastructure required to develop these facilities. More detailed financial implications will be provided once these more comprehensive proposals are brought forward for consideration within a solidified business case at a future Cabinet meeting.
58. Careful consideration will need to be given to the VAT implications of these proposals due to the tax status of the International Sports Village sites. The Council opted to tax this land as part of the original International Sports Village development, with specific VAT advice provided at the time setting out a range of potential uses and categories of suitable partner organisations for these sites, as well as some restrictions in order to protect the Council's VAT partial exemption position. Further detailed VAT advice will be required on specific proposals for the future operation of these facilities as they are brought forward to Cabinet which must be taken into account in a timely manner during the decision-making process.

59. A business case led approach will be utilised with more detailed individual scheme proposals expected to be brought forward to Cabinet for review and approval in due course. More detailed financial implications will be provided as and when these detailed proposals are brought forward, with clear funding strategies needing to be identified to implement these proposals.

### **Legal Implications**

60. In connection with property matters Section 123 of the Local Government Act 1972 enables the Council to dispose of land "in any manner they wish", provided that best consideration is obtained. The Council's Acquisition and Disposal of Property Procedure Rules require the Council to have regard to the Council's valuer.
61. The Cabinet must also make its decision having due regard to the Council's public sector equality duties pursuant to the Equality Act 2010 (including specific Welsh public sector duties). This requires the Council, in the exercise of its functions, to have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. The protected characteristics are: age, gender reassignment, sex, race - including ethnic or national origin, colour or nationality, disability, pregnancy and maternity, marriage and civil partnership, sexual orientation, religion or belief – including lack of belief. If the recommendations in this report are accepted and when any alternative options are considered, the Council will have to consider further the equalities implication and an Equality Impact Assessment may need to be completed.
62. An Equalities Impact Assessment has been undertaken and is appended to this report and will be updated as the proposals described within this report, are developed.
63. The Well-Being of Future Generations (Wales) Act 2015 ("the Act") places a 'well-being duty' on public bodies aimed at achieving 7 national well-being goals for Wales – a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.
64. In discharging its duties under the Act, the Council has set and published well-being objectives designed to maximise its contribution to achieving the national well-being goals. The well-being objectives are set out in Cardiff's Corporate Plan 2022-25.
65. The well-being duty also requires the Council to act in accordance with the 'sustainable development principle'. This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without comprising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:
- Look to the long term;
  - Focus on prevention by understanding the root causes of problems;

- Deliver an integrates approach to achieving the 7 national well-being goals;
- Work in collaboration with others to find shared sustainable solutions; and
- Involve people from all sections of the community in the decisions which affect them.

66. The Cabinet must be satisfied that the proposed decision accords with the principles above; and due regard must be given to the Statutory Guidance issued by the Welsh Ministers, which is accessible here:

<http://gov.wales/topics/people-and-communities/people/future-generations-act/statutory-guidance/?lang=en>

67. The Council has to be mindful of the Welsh Language (Wales) Measure 2011 and the Welsh Language Standards when making any policy decisions and consider the impact upon the Welsh language.

### **HR Implications**

68. There are no direct HR implications for the Council arising from the recommendations in this report.

### **Property Implications**

69. All property implications are described within the report. Where there are property transactions or valuations required to deliver any proposals, they will be done so in accordance with the Council's Asset Management process and in consultation with Strategic Estates and relevant service areas, as well as supported by appropriate professional advice.

## **RECOMMENDATION**

Cabinet is recommended to:

- 1) Approve the disposal strategy as set out in this report in line with the independent advice attached at Confidential Appendix 2 and delegate authority to the Director of Economic Development in consultation with the Cabinet Member for Investment and Development, the Section 151 Officer and the Legal Officer to develop detailed heads of terms to be approved at a future meeting of Cabinet.
- 2) Approve the preferred operator for the proposed new Velodrome facility at the International Sports Village as set out in Confidential Appendix 5 subject to the detailed due diligence set out in this report and authorise the development of a Full Business Case for the whole leisure destination including associated infrastructure in line with the costs set out in Confidential Appendix 10 and as part of this provide authority to identify an appropriate operator for the Closed Loop Circuit.
- 3) Approve the preferred operator for the Ice Arena as set out in Confidential Appendix 5 including the proposal for the family attraction as set out in this

report and illustrated in Confidential Appendix 6, and delegate authority to the Director of Economic Development in consultation with the Cabinet Member for Investment and Development, the Section 151 Officer and the Legal Officer to conclude suitable legal and commercial terms in line with the criteria set out in this report.

- 4) Note the Strategic Outline Case for the Energy Strategy for the International Sports Village attached as Confidential Appendix 12 and approve the development of an Outline Business Case to be presented back to a future meeting of Cabinet.
- 5) Approve in principle the proposal to establish a single management organisation for the leisure destination at the International Sports Village and authorise the preparation of an Outline Business Case in line with the strategy set out in this report and Confidential Appendices 5, 7 and 8.
- 6) Approve the development of an Outline Business Case to consider the options for delivery of the proposed Multi Storey Car Park including an agreement in principle to the introduction of an appropriate charging regime to be approved as part of a Full Business Case to be presented to a future meeting of Cabinet.
- 7) Approve the budgetary spend set out at Confidential Appendix 13 to enable the development of the various Business Cases proposed in this report and to enable the submission of planning applications as required.

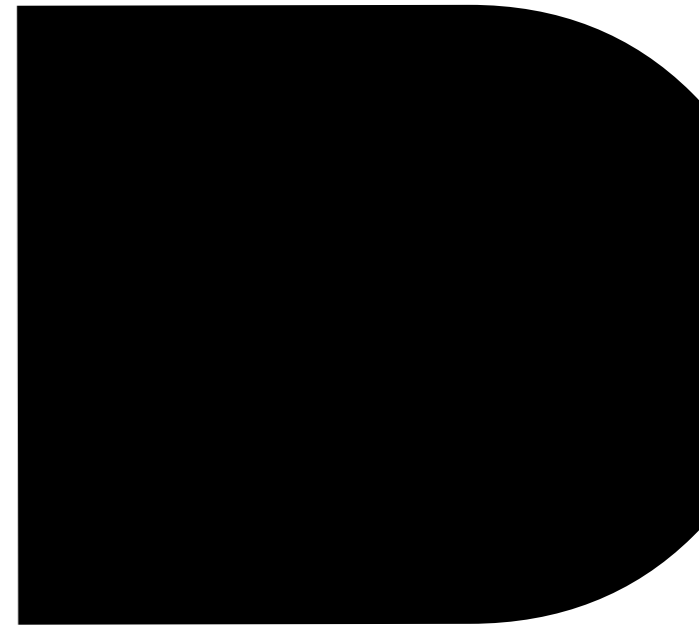
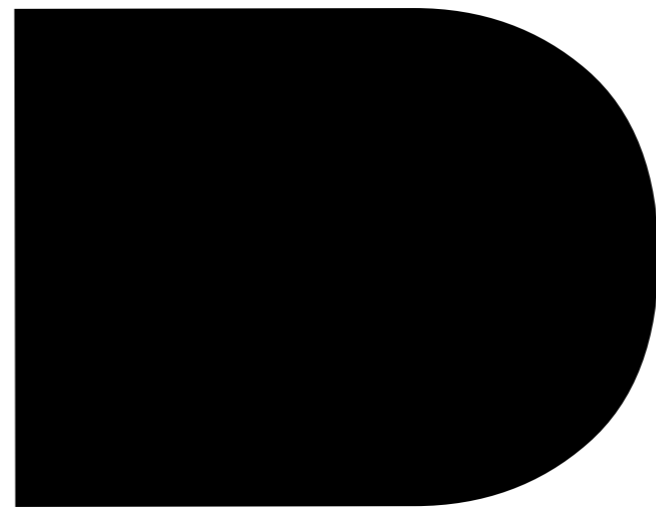
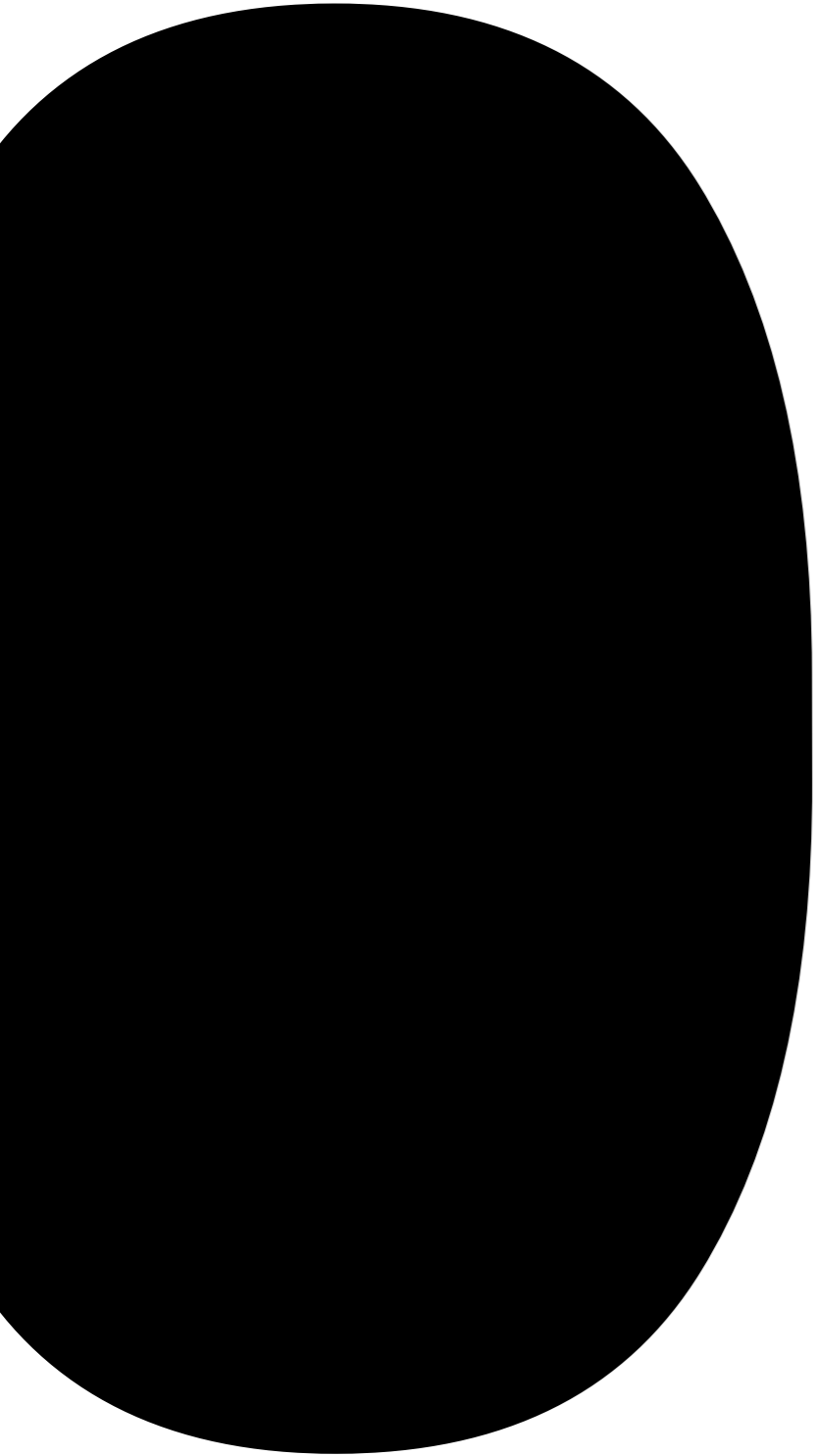
<b>SENIOR RESPONSIBLE OFFICER</b>	<b>Neil Hanratty</b> <b>Director of Economic Development</b>
	<b>13 January 2023</b>

*The following appendices are attached:*

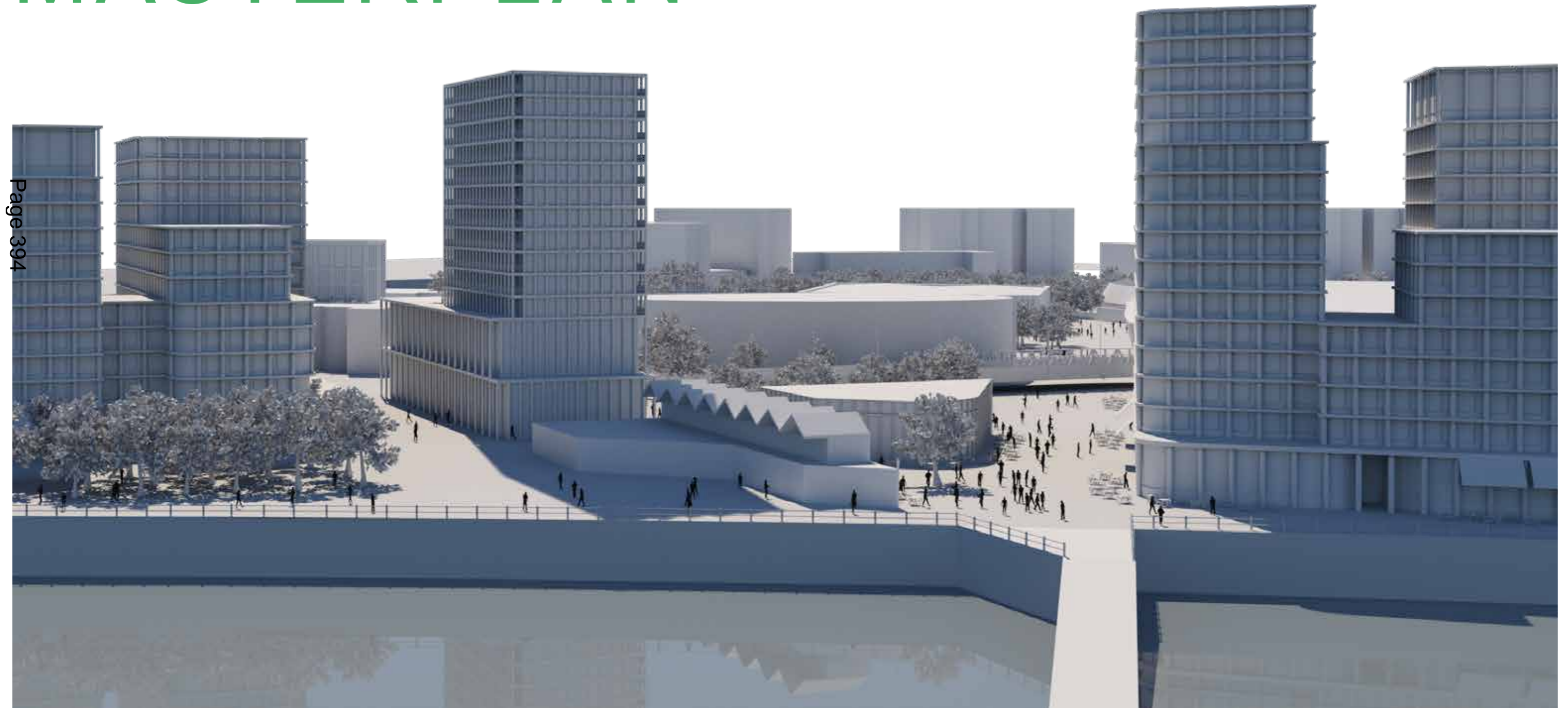
### **Appendices**

- Appendix 1 – ISV Masterplan
- Confidential Appendix 2 - Disposal Strategy (Interim Report)
- Confidential Appendix 3 - Watermark Consortium – Vision Statement
- Appendix 4 - Marketing Brochure (Disposal Strategy)
- Confidential Appendix 5 - Operator Report
- Confidential Appendix 6 - Ice Arena Proposal
- Confidential Appendix 7 - Booking System - Options Appraisal
- Confidential Appendix 8 - Booking System Proposal
- Confidential Appendix 9 - Review of the Closed Loop Circuit Proposal
- Confidential Appendix 10 - Outline Business Case – Leisure Destination
- Confidential Appendix 11 - Parkwood Energy Projections
- Confidential Appendix 12 - ISV Energy Strategy (Strategic Outline Case)
- Confidential Appendix 13 - Funding Proposal for Business Case Development
- Appendix 14 - Equality Impact Assessment

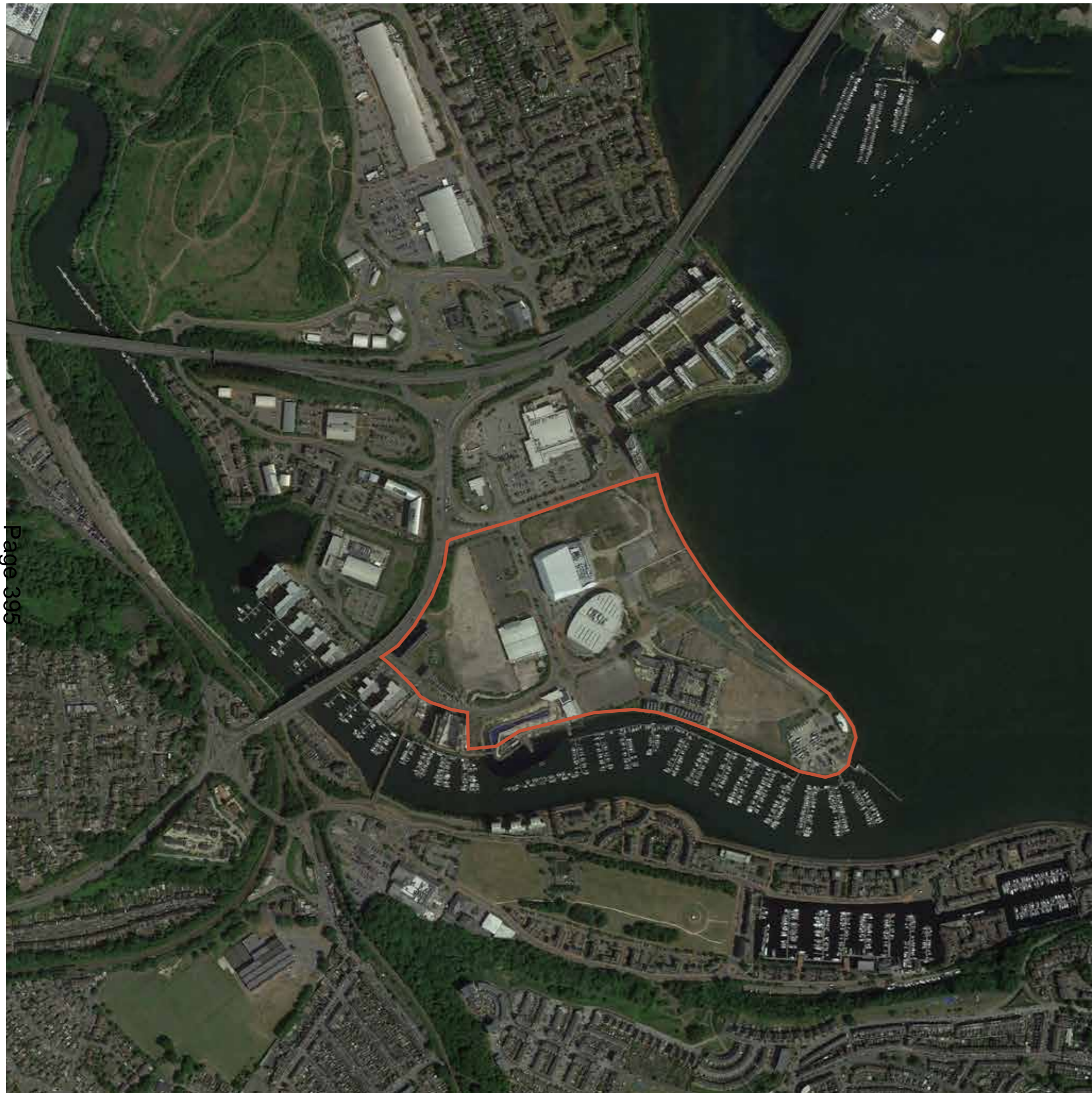




# CARDIFF BAY MASTERPLAN



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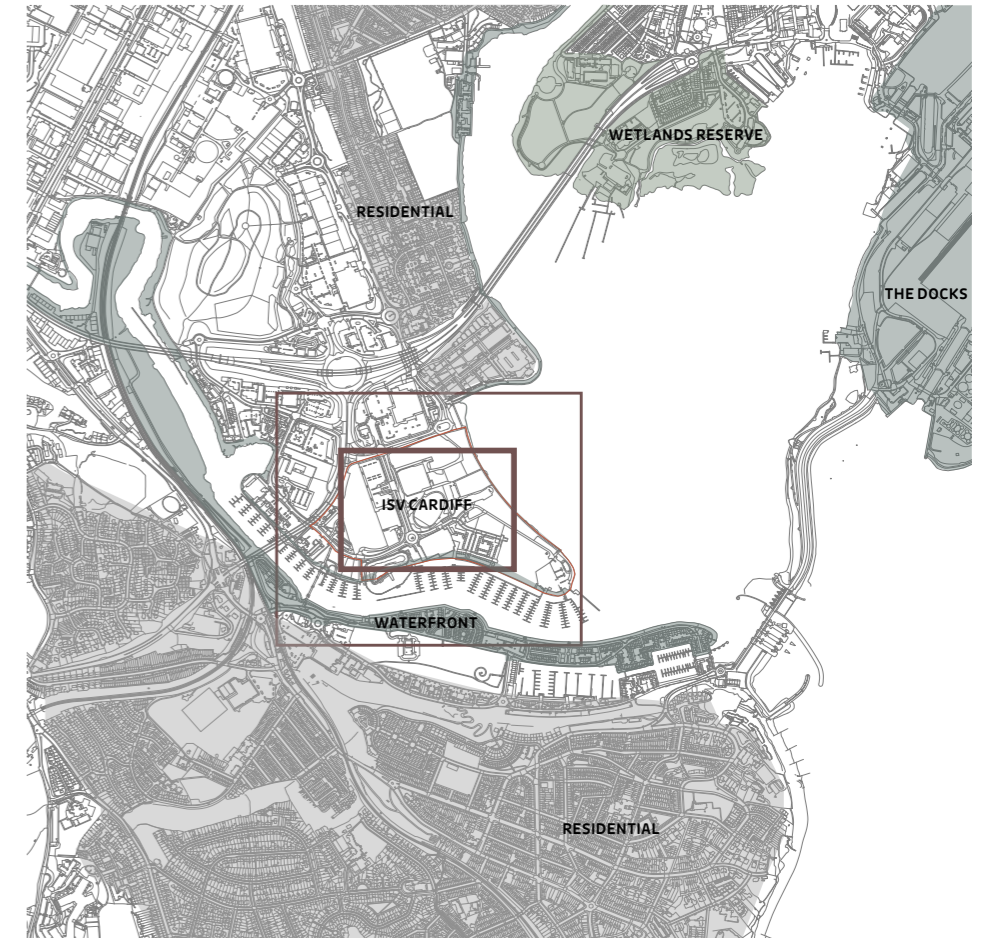
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Cardiff Bay aerial view

# CARDIFF BAY FROM INDUSTRY TO SPORTS HUB

## OVERVIEW

Creating spaces that are rich in character and distinct in identity, the project has evolved in the context of the redevelopment of the Cardiff Bay site and promotes a more holistic view of socially driven and environmentally responsive post-industrial regeneration at Cardiff Bay's waterfront.



Cardiff Bay zonal diagram + study areas



Strava - Activity Overlay



Strava - Cycling



Strava - Running



Strava - Watersports

## AMENITY + RECREATION

### LEISURE AND WELLBEING

The Strava activity map overlay opposite illustrates activity cycles and flow maps across the city based upon cycling and running routes. This indicates the road directly through the site is an intensely active route and the Cardiff Bay Link Road that accesses Pont y Werin Bridge. Conversely, the edge of the bay and waterfront has a low intensity use due to its lack of connection to the wider routes.



Key movement corridor



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Cardiff - Landscape / amenity setting

## AMENITY + RECREATION

### BAY LOOP

The map opposite illustrates the vast extent of parkscape, riverside and seaside within Cardiff, alongside the context of the Cardiff ISV site. However, the connectivity of amenity spaces across the city requires optimisation.

There is potential to unlock a new route around a new vibrant and engaging waterside neighbourhood.



Cardiff Bay Marina



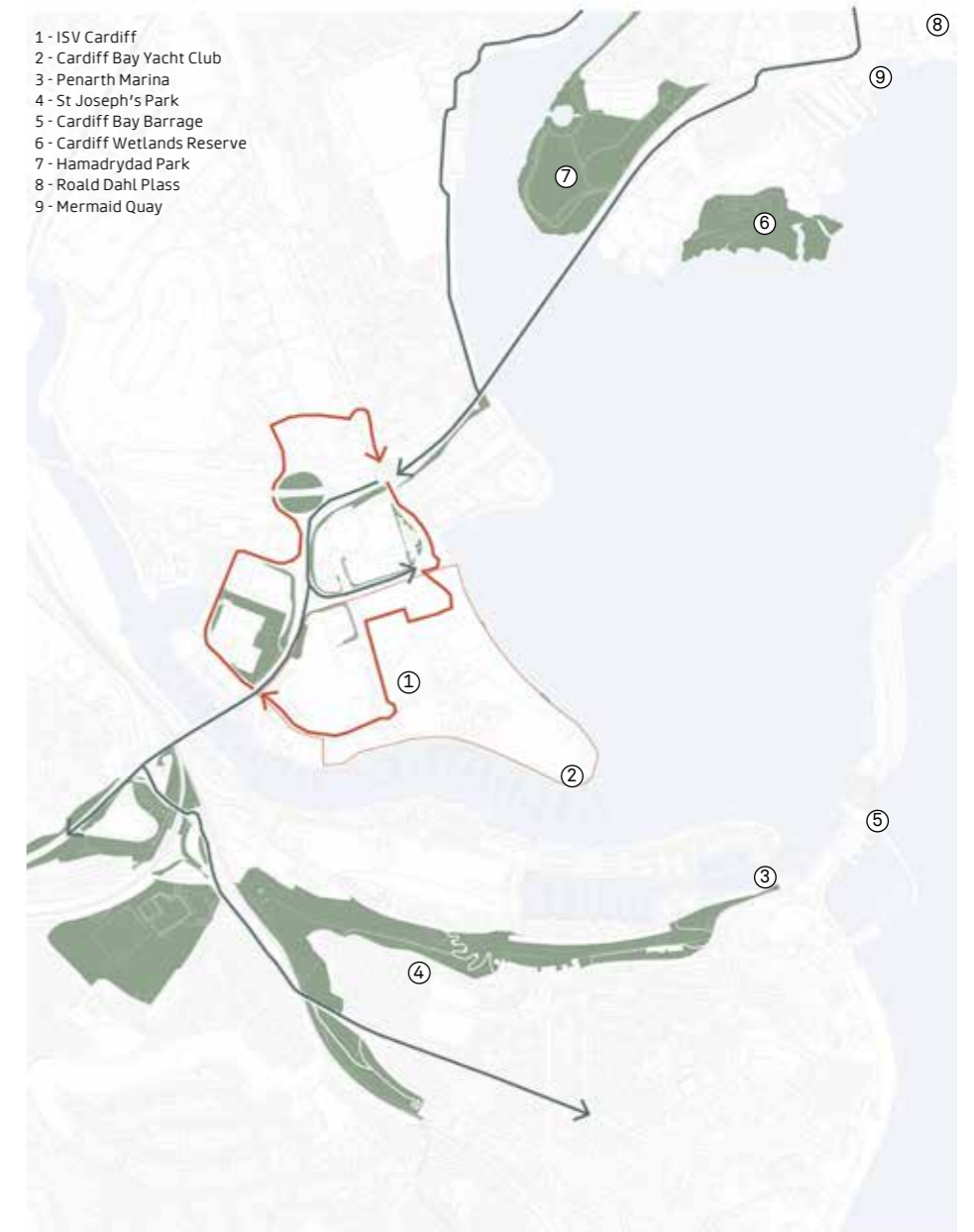
Cardiff - Landscape / amenity setting

## AMENITY + RECREATION

### OPPORTUNITY

We have developed a future Strava map which illustrates an indicative heat map based upon the introduction of a new bay loop route around the ISV.

This illustrates a natural increase in intensity of activity around the ISV and facilities - a result of a new vehicle route and the provision of a new pedestrian landscaping across the site. Linking the waterfront will create a sustainable and active amenity destination for all.



Opportunity - Connecting the green ribbon via the riverside



Cardiff - Landscape / amenity setting

# AMENITY + RECREATION

## BAY LOOP

The map opposite illustrates the vast extent of parkscape, riverside and seaside within Cardiff, alongside the context of the Cardiff ISV site. However, the connectivity of amenity spaces across the city requires optimisation.

There is potential to unlock a new route around a new vibrant and engaging waterside neighbourhood.



Cardiff - Amenity routes and connections



# MASTERPLAN CONCEPT

## TRIPARTITE ZONING

The peninsula has the complex nature of a triple aspect. Each aspect slightly different to the other, each with its own developed language and each with its own strengths.

The concept embraces this and applies a zoning strategy based around the context of the site.



# MASTERPLAN CONCEPT

## ZONE ONE - SPORTS VILLAGE

Zone one responds to the larger format "box" typology of sports infrastructure.





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# MASTERPLAN CONCEPT

## ZONE TWO - SMALL SCALE RESIDENTIAL

Zone two responds to Penarth and the River Ely, smaller in scale, this zone responds to a more human scale, a series of front doors and a language of historic terraces.



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# MASTERPLAN CONCEPT

## ZONE THREE - LARGE SCALE NEW RESIDENTIAL

Zone three responds to the wider bay, and existing developments on adjacent land that informs a larger more significant architecture.





# MASTERPLAN CONCEPT

## TRIPARTITE ZONING - OPPORTUNITY

Each zone offers a new opportunity to deliver a uniquely individual central space, that will reinforce the destination of the peninsula.



# MASTERPLAN CONCEPT

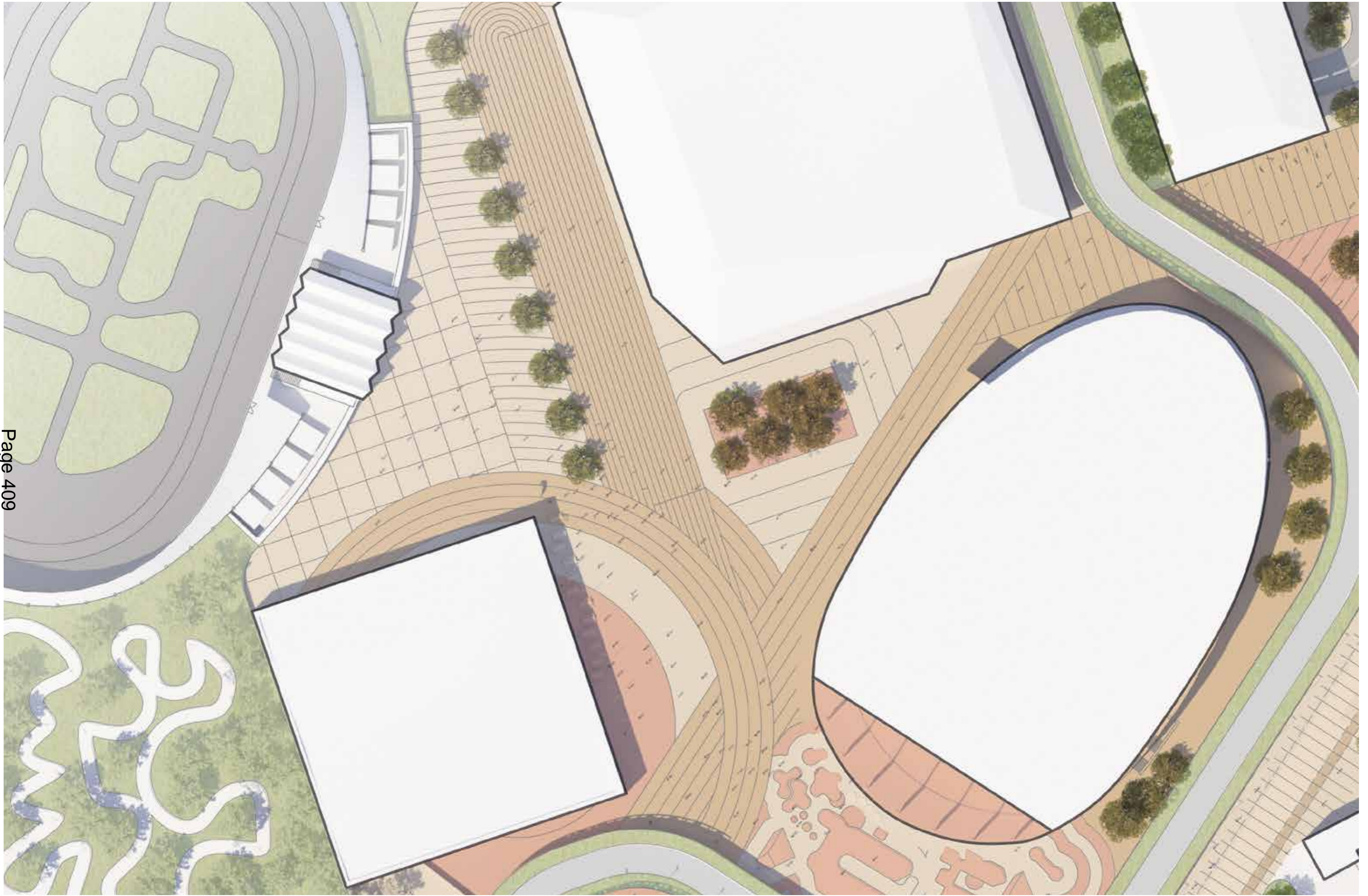
## SPACE ONE

The first spaces offers room and space for exercise, activity and wellness. Driven by the surrounding architecture the space reinforces an active lifestyle driven by active landscape. The space offers a one off sports destination for the city.

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# MASTERPLAN CONCEPT

## SPACE TWO

The second space offers a flexible independent destination, driven by pop up food markets, start up companies, independent breweries, street performers and artists. The flexibility of the space drives a seasonal and evolving destination that can flex and bend to accommodate a constant liveliness and vibrancy.







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# MASTERPLAN CONCEPT

## SPACE THREE

The third spaces offers a retail and leisure led destination, driven by independent coffee shops, cafes, restaurants, local start up companies and residential lobbies which drive an active waterside destination into the heart of the new masterplan.







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# MASTERPLAN CONCEPT

## HEART SPACES

We have developed an attitude towards the masterplan driven by spaces and places that people from different user groups can identify with.

The aspiration is that these differing spaces will drive activity and programme at different times of day and ultimately contribute to the liveliness and activation of the new masterplan helping to create a successful new destination in the bay.



# MASTERPLAN CONCEPT

## MOVEMENT OPPORTUNITY

Between these identified zones and spaces we have the opportunity to stitch the three aspects together using a series of improved movement corridors.

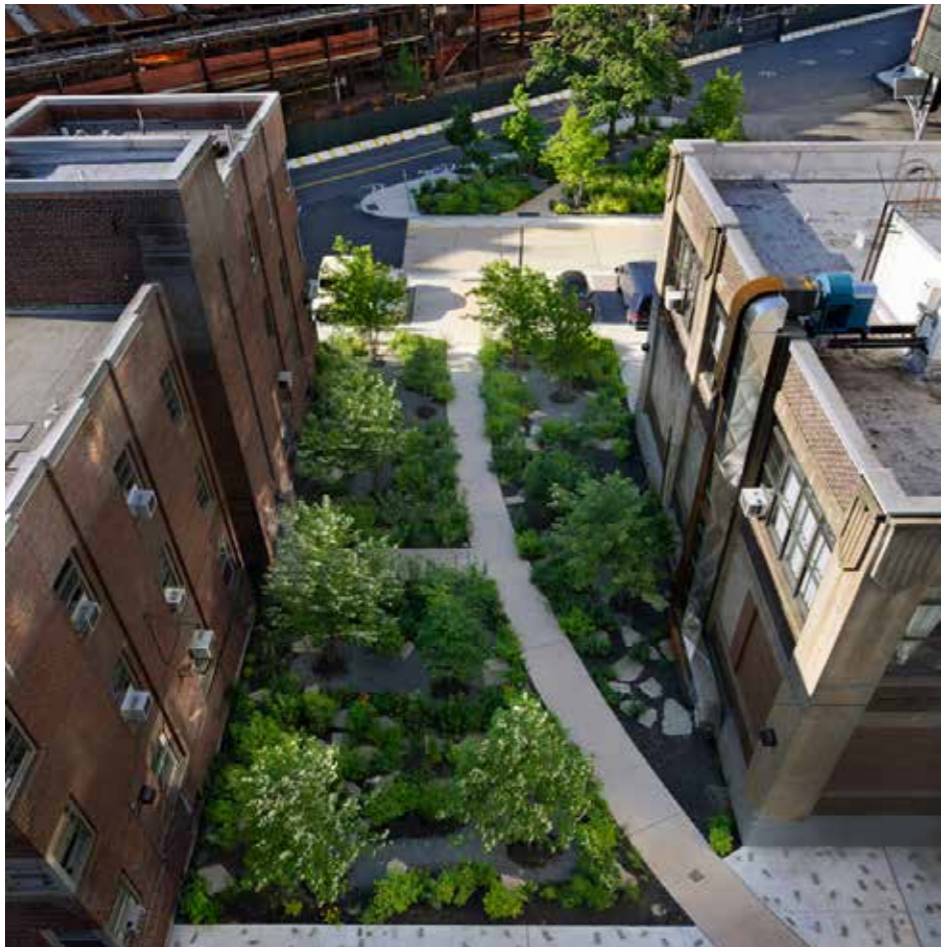
These movement corridors will increase the accessibility of the site, encouraging movement and increasing wellness.

The emphasis will be on shared space, active movement and a slower more relaxed way of life.









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# CONCEPT MASTERPLAN

## ROUTES

The concept masterplan has evolved around parameters derived from both historical analysis and the investigation of existing amenity / recreation use patterns.

Conceptually the idea is to create an arc of public realm that completes the bay loop but also brings together the aspiration to have residential and sports and leisure uses across the ISV. This arc will be activated through the use of active public realm, leisure destinations such as cafes, bars and restaurants and open and inviting spaces both internal and external.



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Concept Masterplan routes



ISV Cardiff concept sketch



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## CONCEPT MASTERPLAN

### ROUTES - ROUTE A

The concept masterplan has evolved around parameters derived from both historical analysis and the investigation of existing amenity / recreation use patterns.

Conceptually the idea is to create an arc of public realm that completes the bay loop but also brings together the aspiration to have residential and sports and leisure uses across the ISV. This arc will be activated through the use of active public realm, leisure destinations such as cafes, bars and restaurants and open and inviting spaces both internal and external.



Concept Masterplan routes









## CONCEPT MASTERPLAN

### ROUTES - ROUTE B

The concept masterplan has evolved around parameters derived from both historical analysis and the investigation of existing amenity / recreation use patterns.

Conceptually the idea is to create an arc of public realm that completes the bay loop but also brings together the aspiration to have residential and sports and leisure uses across the ISV. This arc will be activated through the use of active public realm, leisure destinations such as cafes, bars and restaurants and open and inviting spaces both internal and external.



Concept Masterplan routes



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# CONCEPT MASTERPLAN

## ROUTES - ROUTE C

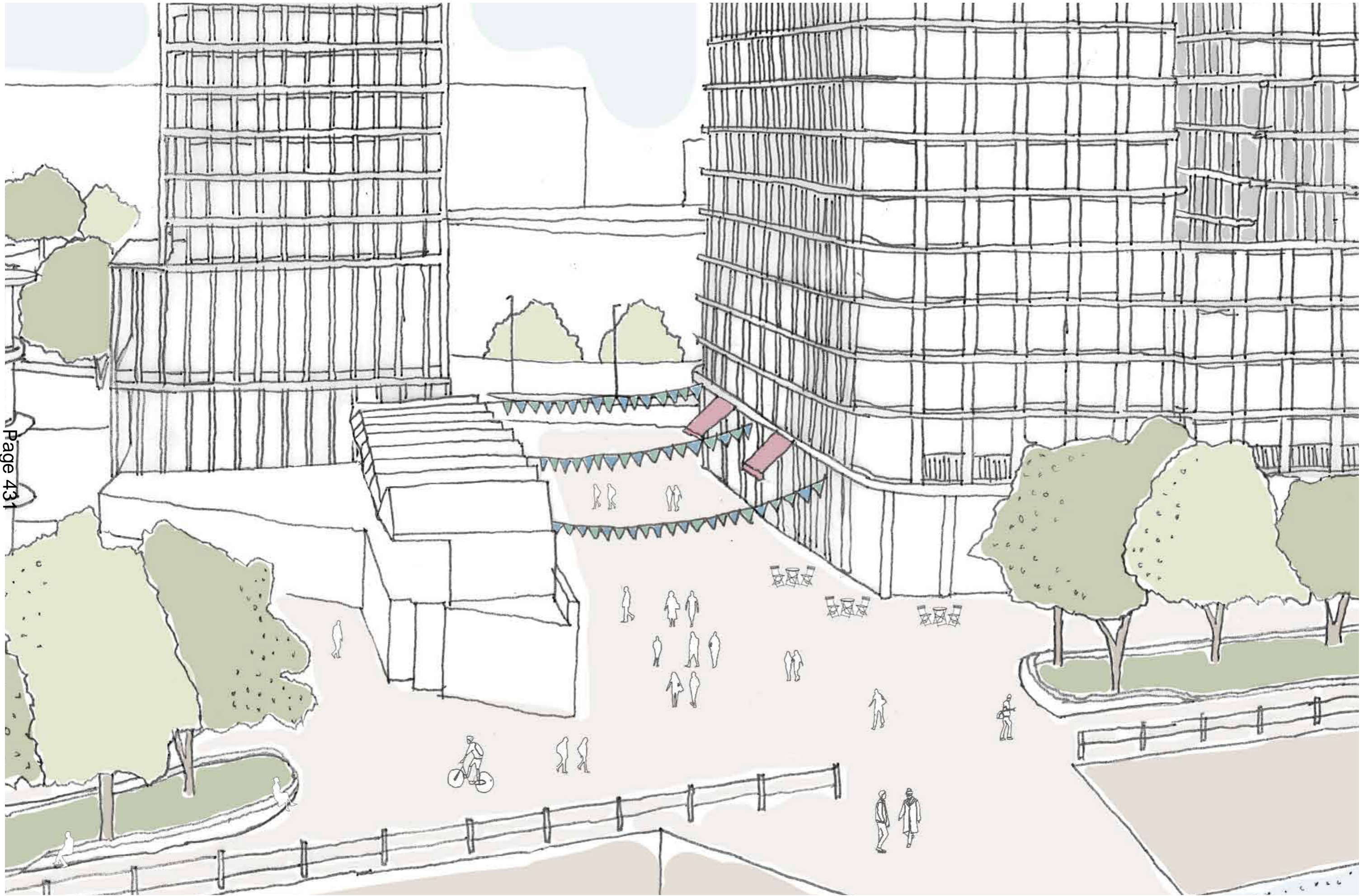
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Concept Masterplan routes

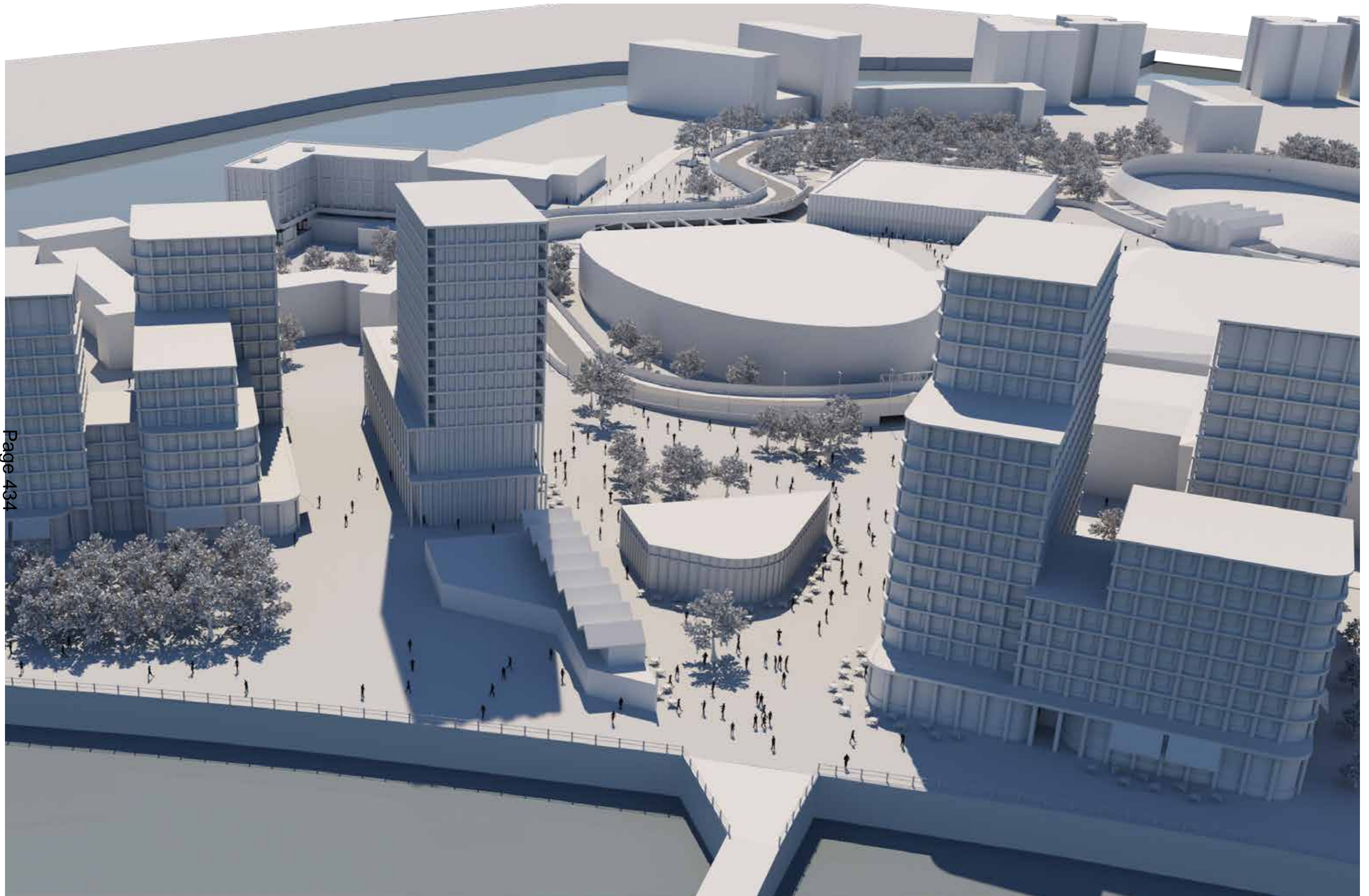








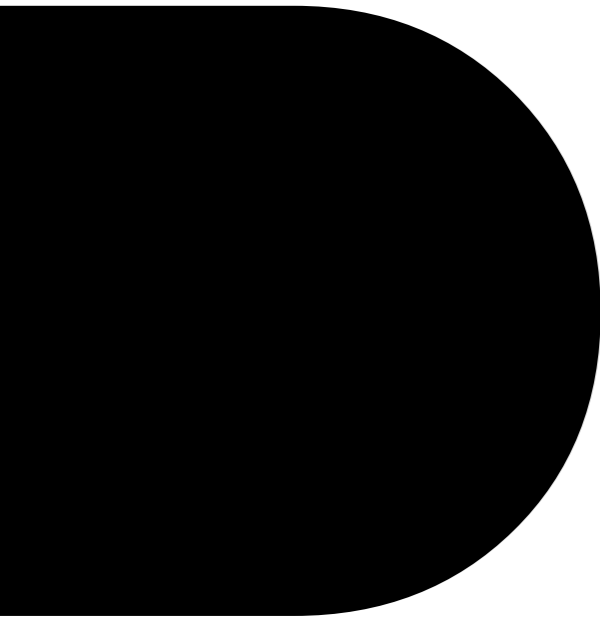
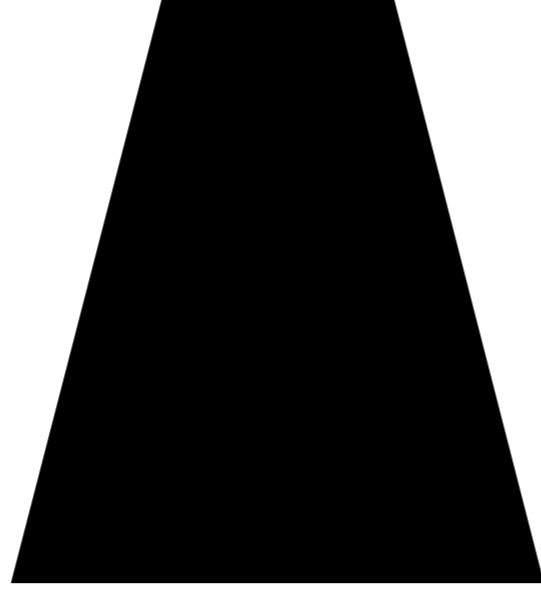








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ARCHITECTS**

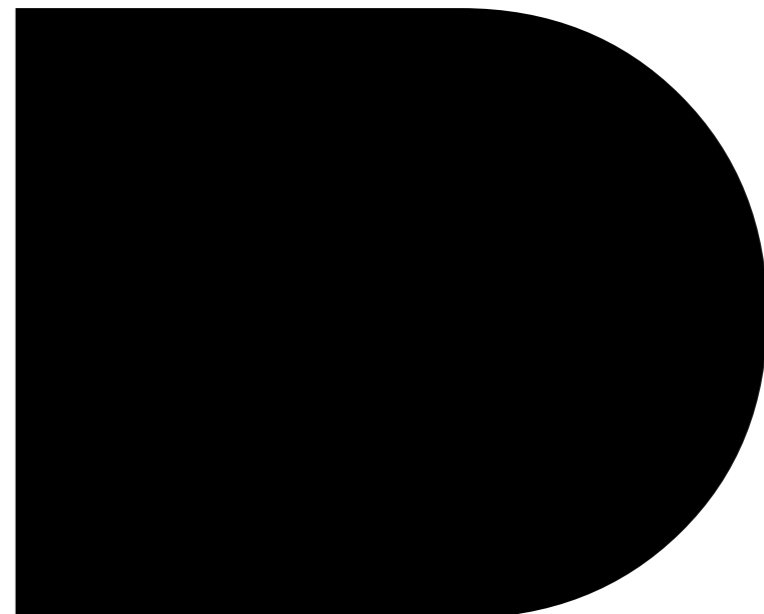


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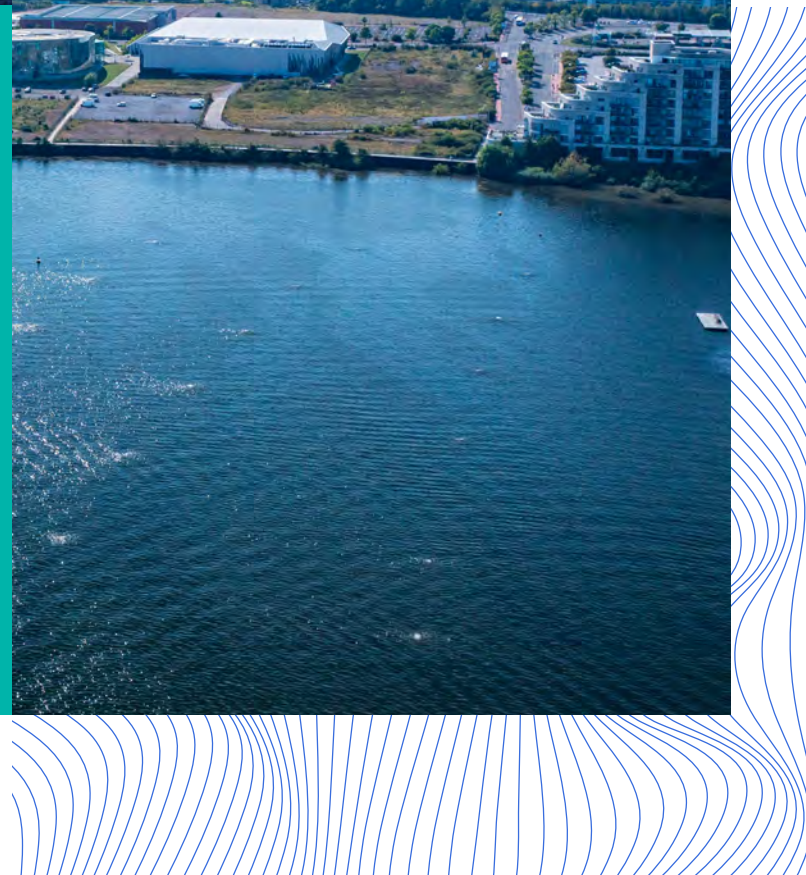
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Mixed Use  
Development  
Opportunity

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# CARDIFF BAY PENINSULA





## The Opportunity

Cardiff Council is seeking a delivery partner/s to bring forward the next phase of development at the International Sports Village.

Situated in Cardiff Bay, the International Sports Village is home to Cardiff International White Water, Ice Arena Wales, Cardiff International Pool and is the location of the proposed Velodrome. The area offers an array of fantastic activities both on and off the water.

This exciting opportunity will deliver a new waterfront community on this expansive peninsula creating a new neighbourhood within the Bay, energised by local culture and waterside activity.

# 18

acres

Total Development Area

# 1,000+

Indicative Number of Units

# 8-10

plots

Residential | Mixed Use  
Development Plots

# 199

year

Long Leasehold Interest

Interest is sought from experienced developers with a proven track record of delivering high quality residential and mixed use developments.





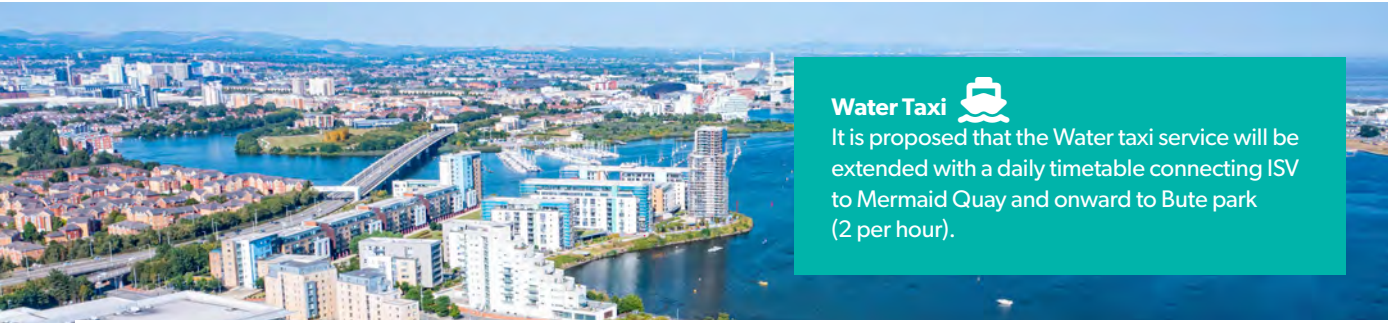
## Location


Cardiff is the capital city of Wales and provides the principal retailing and commercial centre for the South Wales region.

The city is located approximately 150 miles west of London, 44 miles west of Bristol and 42 miles east of Swansea. The city is situated 28 miles from the Prince of Wales Bridge, linking the city to Bristol and the South West of England.

The International Sports Village is situated approximately four miles south of the city centre via the A4232 dual carriageway, approximately 0.9 miles south west of Mermaid Quay, which is a prime leisure destination within the heart of Cardiff Bay and approximately 1.3 miles northwest of Penarth.





**Water Taxi** 

It is proposed that the Water taxi service will be extended with a daily timetable connecting ISV to Mermaid Quay and onward to Bute park (2 per hour).

## Excellent Connectivity

The city is well served by an extensive road network, lying adjacent to the M4 motorway, with access to the north east of the city via the A48(M), which leads directly to Junction 29, and via the A48 to the west of the city providing access to Junction 32. The M4 motorway intersects with the M5 motorway north of Bristol, providing fast access to the Midlands and the South West of England.

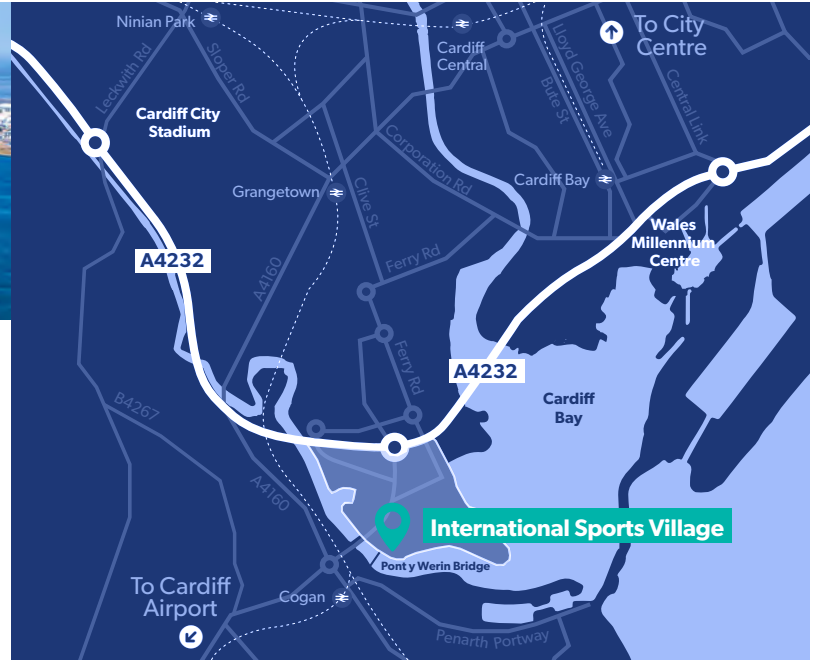
The two busiest railway stations in Wales are Cardiff Central and Queen Street which serve almost 14 million passengers a year. There are regular direct trains to London Paddington (1 hour 48 minutes) and Birmingham New Street (2 hours).

Electrification of the line between London and Cardiff was completed in 2019, speeding up travel times and improving Cardiff's connectivity further.

Cardiff benefits from excellent connectivity, both domestically and internationally.

Cardiff Queen Street underwent substantial redevelopment in 2013 and provides local/commuter services to the Vale of Glamorgan, Bridgend and the South Wales Valleys. Cogan Railway station is located 0.6 miles (13 minute walk) to the south and is accessible via Pont y Werin Bridge, a pedestrian and cycle bridge over the River Ely that links Cardiff Bay with Penarth. There are regular trains from Cogan to Cardiff Central and Queen Street, with journey times of 12 minutes and 21 minutes, respectively.

Cardiff Airport is located 11 miles south west of the city centre and provides scheduled flights to an ever-expanding array of global destinations. Prior to COVID-19 passenger growth had reached over 50% since the Airport came under public ownership in 2013.



**Journey**

Cogan Railway Station

**Duration**

13 mins

**Distance**

0.6 miles



**Journey**

Cogan to Central  
Cogan to Queen Street

**Duration**

12 mins  
21 mins

**Frequency**

66 Trains per day  
55 Trains per day



**Journey – To City Centre**

Service 5 Canal Street  
Service 7 Canal Street  
Service 9 Westgate Street  
Service 304 Custom House Street  
Service 89B

**Duration**

17 mins  
27 mins  
22 mins  
13 mins  
18 mins

**Frequency**

1 per hour  
1 per hour  
2 per hour  
1 per hour  
5 per day

## Economy & Demographics

The Cardiff Capital Region has a population of 1.5m across 10 local authorities and has seen significant regeneration and investment. The region is the economic powerhouse of Wales, accounting for approximately 50% of the total economic output of the Welsh economy. In addition to its anchor manufacturing businesses in aerospace, defence and automotive industries it has a growing diversity in its business base with emerging business clusters in areas such as cyber, compound semi-conductors, life sciences and the creative industries.

Cardiff had a retail expenditure of £4,421 billion in 2020, again ranking it 10th out of all PROMIS centres. It is an affluent area with 55% of the population in the most affluent ABC1 social groups, higher than the 51% PMA centre average.

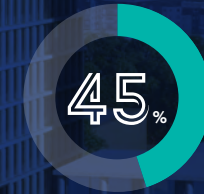
The city has a high proportion of young adults aged 15-24, partly down to its three major Universities: Cardiff University, Cardiff Metropolitan University and the University of Wales. As such the city is home to over 75,000 students. The city is also regularly ranked number one for quality of life and is the closest European capital city to London.

**NO. 1**

UK City for quality of life

Safest city to live in the UK

Highest earnings growth of the UK core cities over the past year



Of students plan to stay in Cardiff after their studies

**5G**

One of few cities selected to trial 5G networks

A £5billion 'Metro' rail infrastructure project planned



Projected growth over the next 20 years, making Cardiff the UK's fastest growing city



**1.5M**

Catchment of 1.5m people

75,000 Students in full or part time education

**200,000**

people work in financial and professional services

**> 6,000**

people are employed in the Creative Hub sector

# Cardiff Regeneration & Investment

Cardiff has been the subject of major regeneration and investment over the past decade, with many further large-scale projects planned.

The Cardiff Capital Region City Deal is an agreement between the UK government and Welsh Government. £1.1 billion has been committed to the deal, supported by an additional £120 million from the 10 local authority partners over the next 20 years. The deal will help boost economic growth by improving transport links, creating 25,000 new jobs and leveraging £4 billion in private sector investment.

## Inward Investment within Cardiff Bay

Cardiff Council have completed a number of acquisitions within the Sports Village. In 2019, the Council acquired the building previously known as Toys'R'Us which consists of a circa 37,000sqft retail box located within circa 3.2 acres of land. In 2022 the Council completed the acquisition of the residential quarter at ISV and have agreed terms to acquire the Ice Arena and the current pool car park by the end of 2022.

Over the last 2 years the Council has brought forward a coherent master-plan to simplify delivery of the wider International Sports Village and ensure the peninsula becomes an attractive destination to live, work, play or visit. In March 2022, the Council approved vision for the site and now aims to deliver the sports, leisure and energy infrastructure and to look for a partner or partners to deliver the residential and mixed use development.

Notable regeneration projects include:

- |   |                |   |                 |
|---|----------------|---|-----------------|
| 1 | Central Square | 4 | Central Quay    |
| 2 | Canal Quarter  | 5 | Merchants Place |
| 3 | Atlantic Wharf | 6 | Embankment      |





# Masterplan Vision

Plot	Indicative Density (No Units*)	Indicative Heights (Floors)	Use	Plot Size Acres (approx.)
1	80	4	Residential / Mixed Use	2.07
2	120	7	Residential / Mixed Use	3.00
3	130	11	Residential/Mixed Use	1.26
4	280	8	Residential/Parking	2.48
5	370	13	Mixed	2.17
6	340	30	Retail	2.98
7	280	17	Residential/Retail	1.33
8	235	11	Residential/Retail	1.68
9	-	-	1,000 space MSCP	1.03

\*Based on an indicative average unit size of 80m2



# Planning & Design Requirements

## Planning Status

The site has an extant planning permission for comprehensive redevelopment under planning permission 12/00937/DCI providing for the erection of 561 no. dwellings and 982 sq m A1 Retail/D1 non residential institution floorspace.

## Planning Obligations

There is no specific package of planning obligations sought for the delivery of the development. Developers should allow for policy compliant on and offsite contributions.

## Design

The placemaking and landscape of development proposals brought forward should deliver on the commitment to better places and spaces. Developers will be expected to drive quality of design to the heart of any proposed scheme.

Conceptually the idea is to create an arc of public realm that completes the bay loop but also brings together the aspiration to have green residential spaces and public gardens across the masterplan. The new masterplan has a significant green places and spaces strategy, the greening of the masterplan will be key to the wellness and enjoyment of the new neighbourhoods we create.

From private roof gardens to semi-private garden parks through to full accessible public spaces the new masterplan offers opportunity for the landscape to be utilised as an extension of the residential and retail offer that is being proposed across the site.

Cardiff ISV acknowledges the importance of green and external space and strives to deliver a more holistic destination focused on wellness and resident retention.

## Carbon Neutral

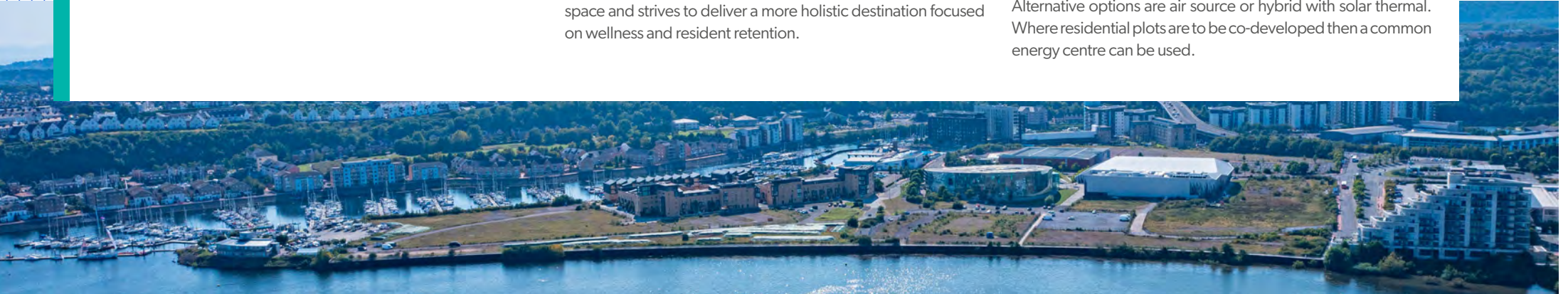
Developers would be obligated to support Cardiff Council's strategic response to the climate emergency as set out "One Planet Cardiff."

Developers will set out a pathway to net zero for ISV, as an exemplar of the One Planet Cardiff vision, providing a strategic framework for development that provides for low carbon energy infrastructure across the development and takes advantage of the opportunity for local renewable generation and the complementary energy demands across the development.

## District Heating Network

For new residential development a 5th generation heat network with distributed heat pumps at plot level (utilising available environmental heat) should be adopted unless alternative proposals can be shown to offer a faster trajectory to net zero.

Alternative options are air source or hybrid with solar thermal. Where residential plots are to be co-developed then a common energy centre can be used.



## Delivery Requirements

### Delivery

The council is committed to accelerating delivery of development at Cardiff Bay Peninsula, as such parties will be expected to align their programme to accommodate this requirement;

- The successful bidder/s will be obligated to submit a planning application within 6-9 months of exchange of contracts on a minimum of 5 acres of development land.
- Construction of the proposed development will commence within 12-15 months of exchange of contracts.
- Practical completion of the proposed development will be delivered within 60 months of commencement on site.



## Request for Proposals

Proposals are sought on a conditional (subject to planning) basis for the Long Leasehold interest in the individual plot/s.

Interested parties are invited to submit an expression of interest, following which a formal proposal will be invited requesting the information contained in points 1-10.



1. Proposed Purchase Price – including details of ‘gross’ and ‘net’ assumptions (if appropriate).
  2. A non refundable deposit of no less than 5%.
  3. Purchasing Entity – including contracting party and individual responsible for leading the purchase
  4. Conditionality of Proposal – set out all pre-exchange and pre-completion conditions.
  5. Clarify any internal and / or external approvals - required to commit to the purchase (including timescales)
  6. Funding: source of equity and debt – including proof of funding.
  7. Timescales & Programme - for undertaking technical, planning and legal due diligence prior to exchange through to legal completion.
  8. Track Record – Successful delivery of at least 2 similar schemes within the last 5 years, with examples of sales, marketing and disposal of completed developments.
  9. Supporting information - provide relevant scheme information / plans / proposals / professional team / legal advisors / key assumptions etc.
  10. A copy of your development appraisal, for your proposed development, setting out key assumptions and indicative cashflow.
- The intention is that a shortlist of bidders will be invited to interview with a view to exploring how each bidder (and their professional team) would work with Cardiff Council to identify a preferred design solution, secure a quality planning permission and successfully implement and deliver the scheme.



## Additional Information

### TENURE

The development plots will be sold on a long leasehold basis for a term of 199 years. The leaseholder will be responsible for contributing to a wider estates charge for the maintenance and upkeep of the public realm associated with the development.

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### DATA ROOM

The following documents are available within the data room [www.cardiffbaypeninsula.com](http://www.cardiffbaypeninsula.com)

- Legal
- Technical
- Architectural
- Scoring Criteria

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## CARDIFF COUNCIL

Equality Impact Assessment  
Corporate Assessment Template



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<b>Project: International Sports Village</b>
<b>New/Existing/Updating/Amending: Updating</b>

<b>Who is responsible for developing and implementing the Project?</b>	
Name: Jo Phillips	Job Title: Project Manager
Service Team: Strategic Projects	Service Area: Economic Development
Assessment Date: Updated November 2022	

### 1. What are the objectives of the Project?

The Capital Ambition sets out a commitment to “Write a new chapter in the regeneration of Cardiff Bay”, which this project aims to contribute towards. This project involves the return of the International Sports Village site to Council control and in doing so facilitate the regeneration of the Sports Village and contribute to the general regeneration programme for the Waterfront. This project aims to facilitate the development of a mixed-use sport and leisure site and aims to provide economic, social, and wellbeing benefits, as well as commercial, leisure, and retail opportunities.

Since the original impact assessment that was carried out in April 2020, the scope of the project has expanded and now includes the following work streams:

- The new Velodrome
- Urban Bike Park
- Closed Road Circuit (Loop)
- All associated public space
- Highways infrastructure
- Car Park

There is also a link to the wider site development, which includes:

- The disposal and development of the land on the Waterfront and Ely Riverfront sites
- The revised boundary to the Cardiff Bay Yacht Club and the new proposed adjoining Boat Yard.

To truly assess and manage the impact of all of these workstreams, they need to be considered as a whole. This is because all the accessibility and inclusivity requirements are linked and there is potential, if considered in isolation, that a conflict in design may have additional, unnecessary impacts. (for example, considering access to the new velodrome building without considering the public space will result in 2 very different outcomes). So it is agreed that there will be one EIA record for all workstreams within the ISV project.

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2. Please provide background information on the Project and any research done [e.g. service users data against demographic statistics, similar EIAs done etc.]

**Update to original assessment conducted 3<sup>rd</sup> April 2020:**

The acquisition by the Council of the land and assets at ISV are scheduled to conclude in December 2022 and progress is underway for all identified workstreams within the ISV project.

In March 22, planning was determined for the new velodrome and Cabinet also approved the progression of an Outline Business Case and planning application for the wider sport and leisure infrastructure, which includes:

- Closed Road Circuit (Loop)
- Urban Bike Park
- Public Space
- Highways infrastructure

This would result in all the sport/leisure infrastructure to be brought in line with the same level of approval and allow the Full Business Case to combine all components to be presented back to Cabinet at the same time.

The original impact assessment was initiated under the scope of the reversion of the land and the new velodrome development, but this update brings all of the ISV components together and reassesses the differential impacts based on the broader scope.

In December 21, Cabinet approved the disposal strategy for the land on the Waterfront and River Ely sites in order to progress the development of the wider site and complete the ISV as a destination. Work has progressed with the disposal strategy so that the outcome of the marketing can align to the completion of the acquisition and the relevant Cabinet decision making timelines.

Research has also been conducted into the 2011 census of the ward in which the International Sports Village sits to provide information regarding the demographics of the area. Consideration has been taken into the age of the census and the potential changes likely to have occurred within the area in the following years, including the impacts considered as a result of the Corona Virus Pandemic.

A further review considered changes recorded in the 2021 Census and the 2019 Welsh Index of Multiple Deprivation.

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**3 Assess Impact on the Protected Characteristics**

**3.1 Age**

Will this Project have a **differential impact [positive/negative/]** on younger/older people?

	Yes	No	N/A
Up to 18 years	X		
18 - 65 years	X		
Over 65 years	X		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and on residents of and visitors to the area, regardless of age.

The regeneration aims to provide a place where people can visit to engage in a range of sport and leisure activities or to engage in informal and social activity irrespective of their age. The facilities at ISV are required to provide inclusive and engaging programmes that are accessible to all ages, and the environment will be designed to encourage all ages to want to and be able to spend time there.

Due to the new development in the sports village and in the development of the neighbouring community, there will be increased employment opportunities, greater access to activities provided by the International Sports Village, as well as greater leisure and retail opportunities.

The regeneration has the potential for a positive impact on people of working age (18-65) due to business development and associated employment and work experience opportunities, as well as providing an improved environment for social interaction and active leisure.

The Sports facilities are required to promote programmes of activity for all ages and engage with education in support of the active development of young people.

The facilities also engage with sports clubs and groups, enabling them to deliver access to their sports to their young members and encourage more young people to get involved so that the sports can grow. This has an additional positive impact on social interaction, inclusivity, and mental health.

The same can also be said for people over the age of 65, the Sports Village provides a social inclusivity that ensures people can stay active and engaged with the community after retirement. The wider environment is planned to be conducive to social and active leisure for all ages.

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**Transport Accessibility**

In terms of accessibility for all ages, the site already has reasonably good transport links, which means that people are able to travel to the ISV via car for those who are of driving age and who will transport younger people via car, bus or train. There are already 6 bus routes that reach the site and Cogan Spur train station is only 400m from the site for those who choose to travel via public transport. The project scope will ensure that these public transport links are at least retained, but also enhanced to ensure those who do not drive have accessible options to travel to the site.

In addition, the project aims to introduce an additional water taxi stop at the site, which will be suitable for all ages.

**What action(s) can you take to address the differential impact?**

The Council, working with all respective partners and stakeholders will ensure that when considering the development of the ISV, the requirements of people of all ages are taken into consideration ensure that accessibility and inclusivity is a focus of all stages of the project- this includes the accessibility of the transport links that are already servicing the area.

**3.2 Disability**

Will this Project have a **differential impact [positive/negative]** on disabled people?

	Yes	No	N/A
Hearing Impairment	X		
Physical Impairment	X		
Visual Impairment	X		
Learning Disability	X		
Long-Standing Illness or Health Condition	X		
Mental Health	X		
Substance Misuse	X		
Other	X		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village site will have a positive impact on all Cardiff residents and visitors to the area, regardless of ability or disability. The project has the potential to provide state of the art facilities and provide activities and a physical, social environment which are accessible and inclusive to people of all abilities and disabilities. The project will need to consider accessibility and way-finding as a key part of the design process to ensure those with physical, visual, hearing and learning impairments are able to navigate around the facility.

Regarding mental health, it is acknowledged that for some, having a place to go and be with people and take part in activity can help with mental health.

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The project aims to provide an environment at the ISV that offers everyone a comfortable and pleasant place to be, with opportunities to take part in sport and active leisure as well as social activities.

Following the pandemic, many people are using outdoor space differently and so the project aims to help facilitate this.

#### **Transport accessibility**

For those with disabilities, it is important that they are also able to travel to the ISV. Where this project is not responsible for the accessibility of public transport, it is committed to ensure that where transport modes link to the site, that there is a straightforward and safe link from the car park and bus stops that those with disabilities can easily navigate into the Sports Village and all its facilities.

#### **What action(s) can you take to address the differential impact?**

As each workstream of the project progresses, any design work or programming should consider accessibility and way finding for all people, including those with disabilities or impairment or who may face other challenges in accessing similar opportunities.

### **3.3 Gender Reassignment**

Will this Project have a **differential impact [positive/negative]** on transgender people?

	Yes	No	N/A
<b>Transgender People</b> (People who are proposing to undergo, are undergoing, or have undergone a process [or part of a process] to reassign their sex by changing physiological or other attributes of sex)		X	

#### **Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area. It is not expected that this project will have a differential impact on transgender people or those undergoing transition.

#### **What action(s) can you take to address the differential impact?**

In line with the Council's Stonewall submission, any plans to develop new buildings or facilities will incorporate the need for gender neutral welfare, providing a choice for those undergoing or having undergoing transition.

### **3.4. Marriage and Civil Partnership**

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Will this Project have a **differential impact [positive/negative]** on marriage and civil partnership?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Marriage		x	
Civil Partnership		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area, regardless of marital or partnership status. It is not expected that this project will have a differential impact on people whether they are or are not in a marriage or civil partnership.

**What action(s) can you take to address the differential impact?**

N/A

**3.5 Pregnancy and Maternity**

Will this Project have a **differential impact [positive/negative]** on pregnancy and maternity?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Pregnancy		x	
Maternity		x	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area. It is not expected that this project will have a differential impact on pregnancy or maternity.

Consideration will always be given in the designing and planning of all facilities to ensure suitable welfare facilities are included that may be beneficial to everyone, including the potential addition needs of those who are pregnant or nursing/caring for young babies and children.

**What action(s) can you take to address the differential impact?**

N/A

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**3.6 Race**

Will this Project have a **differential impact [positive/negative]** on the following groups?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
White	<b>X</b>		
Mixed / Multiple Ethnic Groups	<b>X</b>		
Asian / Asian British	<b>X</b>		
Black / African / Caribbean / Black British	<b>X</b>		
Other Ethnic Groups	<b>X</b>		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area, regardless of race as it is designed to be a destination for all. It will also present improved opportunities for social inclusion, sport and active leisure and employment for all communities in the area as well as visitors to the area.

However, according to the 2011 census, the area in which the International Sports Village sits has a higher than average number of BAME\* residents (38.1%), compared to the overall Cardiff population (15.3%) and so this project has the potential to impact these groups a bit more.

The process of regeneration may be disruptive due to, for example, building works, however, the Sports Village area itself is not currently highly residential and so the impact is likely to be low. The overall objectives of this project will have a positive impact on all Cardiff residents through improving the economy, providing greater employment opportunities, and making the area a more appealing place to live.

\*BAME Breakdown

	<b>Local Area %</b>	<b>Cardiff Overall %</b>
Mixed/Multiple Ethnic Groups	4.5	2.9
Black/African/Caribbean/Black British	8.5	2.4
Asian/Asian British	20.9	8.0
Other	4.2	2.0

The 2021 census shows that the local area is represented by a majority Asian and White British population, with the remainder of those residing represent Black and Mixed Ethnicity.

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**What action(s) can you take to address the differential impact?**

The Council and relevant partners will ensure communication with local communities is maintained throughout the process, engaging with existing residents to gain an insight into local needs and ensure they are considered in the planning and design and in the programme of delivery.

**3.7 Religion, Belief or Non-Belief**

Will this Project have a **differential impact [positive/negative]** on people with different religions, beliefs or non-beliefs?

	Yes	No	N/A
Buddhist		<b>x</b>	
Christian		<b>x</b>	
Hindu	<b>x</b>		
Humanist		<b>x</b>	
Jewish		<b>x</b>	
Muslim	<b>x</b>		
Sikh		<b>x</b>	
Other		<b>x</b>	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area.  
According to the 2011 census, the area in which the International Sports Village sits has a higher than average number of Hindu (4.1%) and Muslim (23%) residents, compared to the overall Cardiff average (1.4% and 6.8% respectively) and so this project will likely have a differential impact on these groups.  
The 2021 census also shows that the majority of the local population represents either Hindu, Christian, Muslim or no religion.

The regeneration project may be disruptive for a period of time due to, for example, building works, however, the overall objectives of this project will have a positive impact on all Cardiff residents through improving the economy, providing greater employment opportunities, and making the area a more appealing place to live.

**What action(s) can you take to address the differential impact?**

The Council and relevant partners will ensure communication with local communities is maintained throughout the process, engaging with existing residents to gain an insight into local needs and ensure they are considered in the planning and design and in the programme of delivery.



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**3.8 Sex**

Will this Project have a **differential impact [positive/negative]** on men and/or women?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Men	<b>x</b>		
Women	<b>x</b>		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area. It is not expected that this project will have a differential impact on people of a specific gender.

However, feedback from some stakeholders has identified that the Sports Village may provide additional reassurances to females accessing sport, for example, the ability to run on a traffic free, floodlit circuit will help them feel safer than running elsewhere in the evening. This could also be translated into the overall Sports Village as a destination providing a lit, traffic free space for people to go to.

**What action(s) can you take to address the differential impact?**

Consideration throughout all design processes to be given to the feedback from stakeholders on the overall environment across the Village and the travel connections to and from there.

**3.9 Sexual Orientation**

Will this Project have a **differential impact [positive/negative]** on the following groups?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Bisexual		<b>X</b>	
Gay Men		<b>X</b>	
Gay Women/Lesbians		<b>X</b>	
Heterosexual/Straight		<b>X</b>	

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village will have a positive impact on all Cardiff residents and visitors to the area, regardless of sexual orientation. This project is not expected to have a differential impact on any person due to their sexuality.

The overall aim is to provide an environment conducive for all, so it could be translated that members of the LBGQTQ community should have a positive experience in and around the Sports Village.

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### **What action(s) can you take to address the differential impact?**

Ensure that designs and programmes promote inclusivity and do not tolerate exclusion or discrimination and do not discourage any specific community groups from the ISV.

### **3.10 Socio-economic Duty**

Will this Project have a **differential impact [positive/negative]** on the Socio-economic Duty?

	Yes	No	N/A
Socio Economic Groups	X		

### **Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

Socio economic duty requires public bodies to adopt transparent and effective measures to address the inequalities that result from differences in occupation, education, place of residence or social class.

The aim of the ISV project is to deliver an accessible and inclusive destination that provides an enriched environment for everyone to be able to access, irrespective of their social class, education, occupation or where they live.

As with any destination across the City, there are costs associated with travel to and from the site, and these costs may vary depending on the starting point of the journey, how far and the mode of transport being used. Those local to any facility will always benefit from lower transport costs. The project cannot control the cost of using buses and trains, nor can it manage the cost of fuel and using the road. However, the project is committed to ensuring that the car park operating model and the overall operating model of the ISV considers the accessibility of sport and leisure activities and balancing that with an operating model that supports the delivery of sport and leisure at a reasonable cost, whilst assisting operators in the management of maintenance and mitigation of risk. Operators will be required to provide an inclusive programme of activity that is accessible by all socio-economic groups.

Equally, the project is not responsible for the suitability of the cycle pathways across the City, but it is committed to ensuring safe and secure facilities at the ISV for those who choose to travel by bicycle and wish to park at ISV.

The overall masterplan of the ISV includes a range of social, sport and leisure activities, some of which will require an access charge, but there will also be a range of activities that are open and free to use by members of the public. The development of the sports village will provide employment and volunteer opportunities as well as broaden opportunities for sports to grow participation. The 2019 Welsh index of Multiple Deprivation shows some of the localities to the ISV accommodate some of the most deprived communities in Cardiff.

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The Sports Village development will provide opportunities that could have an additional, differential positive impact on these local communities.

**What action(s) can you take to address the differential impact?**

The project will need to ensure that throughout the operational strategy delivers inclusive and accessible programmes of activities for all socio-economic groups. Also, ensure that there is a reasonable balance of chargeable and free to access activity and the public space is conducive for social and leisure interaction for all.

**3.11 Welsh Language**

Will this Project have a **differential impact (positive/negative)** on the Welsh Language?

	<b>Yes</b>	<b>No</b>	<b>N/A</b>
Welsh Language		<b>X</b>	

**Please give details/ consequences of the differential impact, and provide supporting evidence, if any.**

The regeneration of the International Sports Village a positive impact on all Cardiff residents and visitors to the area. It is not expected that this project will have a differential impact on the Welsh language or Welsh language speakers of any level.

**What action(s) can you take to address the differential impact?**

Ensure that all facilities comply with the Welsh Language Act and that all visitors to the Sports Village have the choice of accessing services in both Welsh and English.

During the project development, ensure all obligations regarding Welsh Language are met.

**4. Consultation and Engagement**

What arrangements have been made to consult/engage with the various Equalities Groups?

Initial consultation and engagement commenced with known stakeholder groups, these groups included representatives of people of different ages and also representative of different social and sporting communities, including from around the ISV area and users of the existing Velodrome at Maindy. It also included representation of people with different sporting abilities and professional NGB organisations across the UK who have an interest in accessible and inclusive sport.

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Corporate Assessment Template**

As the project is progressing, the stakeholder representation is reviewed, and additional groups of people are engaged.  
There has been some initial communication with the Council's Equality Team that has increased as the project has progressed. Feedback has been invited and received and actions to date and further engagement will continue as the project workstreams progress.

**5. Summary of Actions [Listed in the Sections above]**

<b>Groups</b>	<b>Actions</b>
Age	The Council, working with all respective partners and stakeholders will ensure that when considering the development of the ISV, the requirements of people of all ages are taken into consideration ensure that accessibility and inclusivity is a focus of all stages of the project
Disability	As each workstream of the project progresses, any design work or programming should consider accessibility for people with impairments or who may face challenges in accessing similar opportunities.
Gender Reassignment	In line with the Council's Stonewall submission, any plans to develop new buildings or facilities will incorporate the need for gender neutral welfare, providing a choice for those undergoing or having undergoing transition
Marriage & Civil Partnership	<b>N/A</b>
Pregnancy & Maternity	<b>N/A</b>
Race	The Council and relevant partners will ensure communication with local communities is maintained throughout the process, engaging with existing residents to gain an insight into local needs and ensure they are considered in the planning and design and in the programme of delivery.
Religion/Belief	The Council and relevant partners will ensure communication with local communities is maintained throughout the process, engaging with existing residents to gain an insight into local needs and ensure they are considered in the planning and design and in the programme of delivery.
Sex	Consideration throughout all design processes to be given to the feedback from stakeholders on the overall environment across the Village and the travel connections to and from there. This is in relation to

**CARDIFF COUNCIL**

**Equality Impact Assessment  
Corporate Assessment Template**

	positive feedback in relation to female safety.
Sexual Orientation	Ensure that designs and programmes promote inclusivity and do not tolerate exclusion or discrimination and do not discourage any specific community groups from the ISV.
Socio-economic Duty	The project will need to ensure that throughout the operational strategy delivers inclusive and accessible programmes of activities for all socio-economic groups. Also, ensure that there is a reasonable balance of chargeable and free to access activity and the public space is conducive for social and leisure interaction for all.
Welsh Language	Ensure that all facilities comply with the Welsh Language Act and that all visitors to the sports Village have the choice of accessing services in both Welsh and English. During the project development, ensure all obligations regarding Welsh Language are met
Generic Over-Arching [applicable to all the above groups]	The Council and its relevant partners must ensure that all workstreams of the project continue to consider any potential impact on any group or groups and take reasonable steps to mitigate and address any such risk to provide an inclusive and accessible destination

**6. Further Action**

Any recommendations for action that you plan to take as a result of this Equality Impact Assessment (listed in Summary of Actions) should be included as part of your Service Area's Business Plan to be monitored on a regular basis.

**7. Authorisation**

The Template should be completed by the Lead Officer of the identified Policy/Strategy/Project/Function and approved by the appropriate Manager in each Service Area.

Completed By: J Phillips	Date:09:11:22
Designation: Project Manager	
Approved By:	
Designation:	
Service Area:	

7.1 On completion of this Assessment, please ensure that the form is submitted to the Equality Team mailbox so that there is a record of all assessments undertaken in the Council- [equalityteam@cardiff.gov.uk](mailto:equalityteam@cardiff.gov.uk).

For further information or assistance, please contact the Equality Team- [equalityteam@cardiff.gov.uk](mailto:equalityteam@cardiff.gov.uk)

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**CARDIFF COUNCIL  
CYNGOR CAERDYDD**



**CABINET MEETING: 19 JANUARY 2022**

**CHILDREN'S SERVICES STRATEGY**

**SOCIAL SERVICES (COUNCILLOR ASH LISTER/COUNCILLOR  
NORMA MACKIE)**

**AGENDA ITEM: 7**

**Reason for this Report**

1. To enable Cabinet to consider the Children's Services Strategy for 2023-26.

**Background**

2. The previous Children's Services Strategy has come to an end and a new strategy has been developed to set out the vision and direction for service provision over the next 3 years. The detail of how the strategy will be implemented will be included in the annual Directorate Delivery Plan.
3. We have achieved a great deal over the duration of the previous Children's Services Strategy, much of which fell during the COVID-19 pandemic. For example we have:
  - a. Maintained service provision to our most vulnerable children and young people throughout the course of the pandemic.
  - b. Implemented the Safeguarding Adolescents From Exploitation (SAFE) model to improve our partnership response to criminal and sexual exploitation.
  - c. Increased the number of children who are looked after with their families in kinship arrangements.
  - d. Developed a holistic Quality Assurance Framework and started a practice development journey.
  - e. Implemented the Mind of My Own app to support children to have a voice.
  - f. Started the pilot of Family Drug and Alcohol Courts in Wales.
  - g. Implemented a Reviewing Hub to improve arrangements for reviews of children with a Care and Support Plan.
  - h. Implemented an Interventions Hub to bring together all of our in house support services.
  - i. Made considerable improvements to our Youth Justice Service, as recognised by the most recent inspection by HM Inspectorate of Probation.

4. We are still facing a number of key challenges, many of which reflect national issues. The revised Children's Services Strategy sets out our approach to tackling these challenges, that include increasing demand and complexity, sufficiency of placements for children and recruitment and retention of experienced social workers. Further information is provided in the paragraphs below.

#### Issues

5. Children's Services are experiencing consistent high levels of demand and complexity, in part resulting from the impact of the COVID-19 pandemic. From 2019/20 to 2021/22 the number of referrals increased by 115% from 2,373 to 5,108. Whilst we have seen an increase in the number of children on the Child Protection Register and looked after during this time, the good work of the service has ensured that the increase has not filtered through the child's journey at this level. The number of children on the Child Protection Register increased by 74% from 253 to 439, but the increase in the number of children looked after was just 9% - from 955 to 1,040. A strategy is required to ensure that the Directorate is able to manage and respond to the demand for services, meet the needs of children who require care and support, and ensure that the children and young people in Cardiff are safeguarded. An overview of the increase in demand experienced is available at Appendix 6.
6. Key areas of concern are in relation to children and young people are as follows:
  - Increase in the number of children and young people experiencing serious emotional wellbeing and mental health issues and an increase in use of Deprivation of Liberty Safeguards.
  - Although fewer children are committing offences there is a significant increase in violent behaviour and the severity of offences being committed by young people, particularly in relation to serious youth violence.
7. This is all being experienced in the context of significant budget pressures, market sufficiency issues, and difficulty recruiting and retaining experienced social workers – which is further impacted by the recent negative representation of the social work profession in the media following recent child deaths.
8. The Children's Services Strategy sets out how we will seek to work with our partners to address these issues, using the least interventionist approach. We call this "shifting the balance" and we are focusing on three key areas:
  - Place – ensuring that children remain at home with their family where it is safe and appropriate to do so.
  - People – recruiting a permanent workforce and reducing our reliance on agency social workers.



- Practice - developing our practice to ensure it is strength based, trauma informed, restorative, research led and family focused.

## Consultation

9. Children and young people were consulted with via the Advocacy Service, NYAS Cymru, and asked a series of questions about their experience of Children's Services so we can better understand what has, and has not, worked well for them. In addition to this a series of workshops were held with staff to obtain their views on what is / isn't working well and what we need to do next. This feedback was taken into account during the development of the strategy. We have also considered themes from complaints from children and young people, parents and carers to ensure that lessons are learned and feedback is considered when planning future developments. A record of the consultation undertaken with staff is available at Appendix 5.

## Achieving Our Vision

10. The Children's Services Strategy is supported by our Workforce Strategy, Accommodation Strategy and Commissioning Strategy. Together, these set out how we will deliver our vision. Other strategies supporting our service delivery include the Corporate Parenting Strategy, Trauma Informed Strategy, Strategy for Children with Disabilities and Additional Learning Needs and Youth Justice Strategy.

## Workforce Strategy

11. Our Workforce Strategy sets out our plans to address recruitment and retention issues and to ensure the ongoing development of our workforce. This includes our emphasis on prudent social work, whereby social workers only do what only social workers can do – with appropriate support from non qualified staff.
12. The Workforce Strategy sets out our principles and gives an overview of the work that we are prioritising to implement them:
  - a. **Children's Rights:** We will ensure that staff are aware of their obligation to respect, protect and fulfil children's rights and understand that they are accountable to children for meeting this obligation.
  - b. **Home First:** We will identify preventative measures and/or develop solutions that enable people in need of care and support and their families to be as independent as possible and safe. This will include steps to support people to live within their local community, as close as possible to home, family, and friends wherever appropriate.
  - c. **What Matters:** - We will listen to and work with young people and their families in need of care and support, to find solutions that meet their needs, keep them safe and enable them to reach their full potential.
  - d. **Sustainable Resources:** - We will make the best use of our resources to ensure quality outcomes and value for money. We will work with people and partners to develop a sustainable approach to support within

the community so that people can access good quality and cost-effective solutions to meet their needs.

13. A Workforce Action Plan to support implementation of the Strategy is under development and will be updated as part of our Directorate Planning process for 2023/24. The Workforce Strategy is attached at Appendix 2.
14. Key workforce developments, such as the potential implementation of the Trusted Adult model to address the impact of the current social work recruitment and retention issues will be set out in the Action Plan. The premise of this redesign is built upon the key principle that families wherever possible should have one consistent worker throughout their involvement with Children's Services. Social care practitioner posts would be created to undertake the trusted adult role (much like a key worker). Each family would be allocated a worker at the conclusion of the initial assessment where it was determined that there was a need for social work intervention. The key worker / Trusted Adult would hold the case for the duration of the time the family required input from Children's Services, and this would be determined via the statutory reviews undertaken by the Reviewing Hub and formal supervision. The requirement for input from a social worker would also be determined via formal supervision, statutory reviews, and any other key escalation points including child protection, issuing to Court for a Care Order or pre court proceedings work. The social worker would be seen as the expert practitioner who would hold complex cases, including all child protection cases. They would joint work alongside the key worker as and when required to provide expertise and to meet statutory guidance / requirements and would undertake specific short-term tasks as and when required.

### **Accommodation Strategy**

15. Our Accommodation Strategy sets out the accommodation provision that we need to achieve the aims of our strategy. This strategy is closely linked with our work to implement The Right Place model in Cardiff (based on the North Yorkshire Model) and includes our ambitious plans to increase residential care provision for children and young people in Cardiff.
16. The strategy sets out how we will meet our commitments against the national context and the pressure areas that we need to address to meet local need. These are:
  - a. National context:
    - i. Provide additional specialist support for children with complex needs who may be on the edge of care.
    - ii. Explore radical reform of current services for children looked after and care leavers.
    - iii. Eliminate private profit from the care of children looked after.
    - iv. Fund regional residential services for children with complex needs ensuring their needs are met as close to home as

possible and in Wales wherever practicable.

- b. Local pressures:
  - i. Mainstream children looked after.
  - ii. Specialist mental health services and step-down from hospital.
  - iii. Short break requirements for children with disabilities and complex need.

17. The Accommodation Strategy is attached at Appendix 3.

### **Commissioning Strategy**

18. Our Commissioning Strategy sets out how we will work with our partners to build, reshape, and expand our current provision, services and homes for children to improve the outcomes of our most vulnerable children, young people and families. It takes account of the Welsh Government's "Programme for Government" for 2022-2027 which aims to transform Children's Services and remove profit from the care of children looked after.

19. The Commissioning Strategy is attached at Appendix 4.

### **Scrutiny Consideration**

20. The Children's Services Strategy will be shared with the Children and Young People's Scrutiny Committees at their meeting on 16<sup>th</sup> January. Any comments received will be circulated at the Cabinet meeting.

21. The Committee were given the opportunity to comment on the future direction of the service as part of the consultation that was undertaken during the production of the Local Authority Social Services Annual Report 2021/22. The comments made by Committee were taken account of during the development of the Children's Services Strategy.

### **Reasons for Recommendations**

22. To receive the Striving for Excellence in Children's Services Strategy and related Strategy documents.

### **Legal Implications**

23. Equality Requirements: In considering this matter the decision maker must have regard to the Council's duties under the Equality Act 2010. Pursuant to these legal duties Councils must, in making decisions, have due regard to the need to (1) eliminate unlawful discrimination, (2) advance equality of opportunity and (3) foster good relations on the basis of protected characteristics. Protected characteristics are: (a) Age, (b) Gender reassignment, (c) Sex, (d) Race – including ethnic or national origin, colour or nationality, (e) Disability, (f) Pregnancy and maternity, (g) Marriage and civil partnership, (h) Sexual orientation (i) Religion or belief – including lack of belief.

24. When taking strategic decisions, the Council also has a statutory duty to have due regard to the need to reduce inequalities of outcome resulting from socio-economic disadvantage ('the Socio-Economic Duty' imposed under section 1 of the Equality Act 2010). In considering this, the Council must take into account the statutory guidance issued by the Welsh Ministers (WG42004 A More Equal Wales The Socio-economic Duty Equality Act 2010 (gov.wales) and must be able to demonstrate how it has discharged its duty.
25. Well-Being of Future Generations (Wales) Act 2015: The Well-Being of Future Generations (Wales) Act 2015 ('the Act') places a 'well-being duty' on public bodies aimed at achieving seven national well-being goals for Wales – a Wales that is prosperous, resilient, healthier, more equal, has cohesive communities, a vibrant culture and thriving Welsh language, and is globally responsible.
26. In discharging its duties under the Act, the Council has set and published well-being objectives designed to maximise its contribution to achieving the national well-being goals. The well-being objectives relevant to this report are set out in Cardiff's Corporate Plan 2020-23. When exercising its functions, the Council is required to take all reasonable steps to meet its well-being objectives. This means that the decision makers should consider how the proposed decision will contribute towards meeting the well-being objectives and must be satisfied that all reasonable steps have been taken to meet those objectives.
27. The well-being duty also requires the Council to act in accordance with a 'sustainable development principle'. This principle requires the Council to act in a way which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. Put simply, this means that Council decision makers must take account of the impact of their decisions on people living their lives in Wales in the future. In doing so, the Council must:
  - Look to the long term;
  - Focus on prevention by understanding the root causes of problems;
  - Deliver an integrated approach to achieving the seven national well-being goals;
  - Work in collaboration with others to find shared sustainable solutions;
  - Involve people from all sections of the community in the decisions which affect them.

### **Financial Implications**

28. This report outlines the Children's Services Strategy which defines a set of targeted outcomes. The delivery of the strategy will be found from existing budgetary allocation to the service and any other grant funding streams identified for this purpose. Children's Services currently has a net budget of £79.816m with a further £2.175m held in contingency.
29. The report defines strategic goals and aspirations, but any additional schemes to implement the strategy are currently not costed and will be subject of separate approval. As schemes deriving from the implementation of the

strategy will have revenue and capital financing implications, business cases appraising different delivery options with detailed financial implications verified by finance will need to be authorised following sufficient oversight from appropriate levels of management across the authority.

30. The strategy timespan is for three years and the accommodation strategy details additional properties to increase residential placement provision within the authorities boundaries. The acquisition of these properties will have a longer lifespan than the strategy, and when capital expenditure is being incurred, there will need to be a longer planning horizon, with a risk assessment and consideration of mitigations that might be required, to ensure that assets being bought, created or reconfigured will continue to provide benefits to the council over the lifespan of the asset. The accommodation strategy notes previous Capital allocations that have not been utilised to date and the possibility of external grants to fund the acquisition and adaptation of properties. Further work will be required to ensure the accommodation strategy is affordable within the current funding envelope and utilisation of grants are in accordance with timescales and the terms and conditions of the individual grants.
31. Currently there are significant cost pressures within Children Services, as high-cost placements and bespoke care arrangements have arisen due to external changes since the pandemic and insufficient market capacity leading to increased prices. This has resulted in a projected overspend position in the Month 6 Outturn monitoring report. This strategy aims to manage and reduce the risk of significant overspends in future years through the implementation of several individual strands of work. Not included in the strategy is an implementation timetable or a risk assessment on the delivery of the strategy, which will need to be developed and delivered promptly to ensure corrective management actions can be taken to address the current financial challenges facing the service area and the authority. An appropriate financial monitoring mechanism will be required, aligned with performance indicators and delivery plans, to measure and communicate financial performance and cost effectiveness of schemes deriving from the strategy and ensure ongoing management control of schemes.

### **HR Implications**

32. Appendix 4 Workforce Strategy sets out the HR aspects of the overall Strategy. Should any changes need to be made in order to implement said strategy full consultation will take place with Trade Unions and affected staff. Any changes will be made in line with corporately agreed policies and procedures.

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### **Property Implications**

33. There are no further specific property implications in respect of the Children's Services Strategy Report. The Strategic Estates Department will assist where required in delivering Cardiff's Right Place Accommodation Strategy & Capital Plan. Where there are property transactions or valuations required to deliver any proposals, they should be done so in accordance with the Council's

relevant Asset Management process and in consultation with appropriate service areas.

## **RECOMMENDATION**

Cabinet is recommended to approve the Children's Services Strategy and associated appendices.

<b>SENIOR RESPONSIBLE OFFICER</b>	Deborah Driffield Director of Children's Services
	13 January 2023

*The following Appendices are attached:*

Appendix 1: Children's Services Strategy

Appendix 2: Workforce Strategy

Appendix 3: Accommodation Strategy

Appendix 4: Commissioning Strategy

Appendix 5: Record of Staff Consultation

Appendix 6: Demand Analysis

Appendix 7: EIA and Child rights impact assessment

*The following Background Papers have been taken into account:*

Local Authority Social Services Annual Report 2021-22

# Children's Services Strategy 2023-26



## MESSAGE FROM THE DIRECTOR OF CHILDREN'S SERVICES AND CABINET MEMBER FOR CHILDREN'S SERVICES

We all have a part to play in doing our best to make sure our children and young people are safe and can achieve their very best here in Cardiff – a Child Friendly City.

Recent years have added pressures to an already busy and stretched service with the impact of the pandemic still being seen and more and more children and young people having complex needs and living in challenging circumstances.

This refreshed strategy reflects on all aspects of the services we offer, in an honest way, highlighting our progress but also where we have further to go. We know that we have three key areas of work we have to undertake to improve our services as much as possible – Place, People and Practice – and our Strategy for 2023-26 outlines just how we will work across the Council and with partners to achieve our aims.

We would like to thank all staff across our services for their dedication, passion and commitment to doing all they can so that children and young people can lead happy, healthy, safe lives.





## INTRODUCTION

At Cardiff Children's Services our vision is clear – we want to provide families with the right support, from the right person at the right time, in the right place and at the lowest safe level of intervention, enabling them to remain with family where it is safe for them to do so. We call this shifting the balance of care for the children and young people in our city. We will take a trauma informed approach to our practice. This is a strengths-based approach which seeks to understand and respond to the impact of trauma on people's lives. It emphasises physical, psychological, and emotional safety for everyone and aims to empower individuals to re-establish control of their lives.

This strategy sets out our plan to deliver this progressive change for children in Cardiff with a focus on shifting the balance in 3 key areas:

- Ensuring a range of support in the community and a variety of homes for children are available in Cardiff - **place**.
- Supporting a permanent workforce – **people**.
- Developing our **practice** and procedures.

We will ensure that children's rights are respected, protected and fulfilled, and that children and families are at the centre of the work that we undertake with them throughout their journey through our service. We will ensure that children are aware that they have rights, and what their rights are. We will also ensure that staff are aware of their obligation to respect, protect and fulfil children's rights and understand that they are accountable to children for meeting this obligation. To this end we have undertaken a Child's Rights Impact Assessment to inform the development of the strategy. We have also considered themes from complaints from children and young people, parents and carers to ensure that lessons are learned and feedback is considered when planning future developments.

The strategy takes account of the feedback we received from children and young people in relation to our annual report for 2021/22. We built upon this with further consultation and engagement with children and young people throughout the development of the strategy, informing our vision and direction of travel for 2022/25. We have also consulted with our workforce and partners to ensure that our vision is shared and understood.



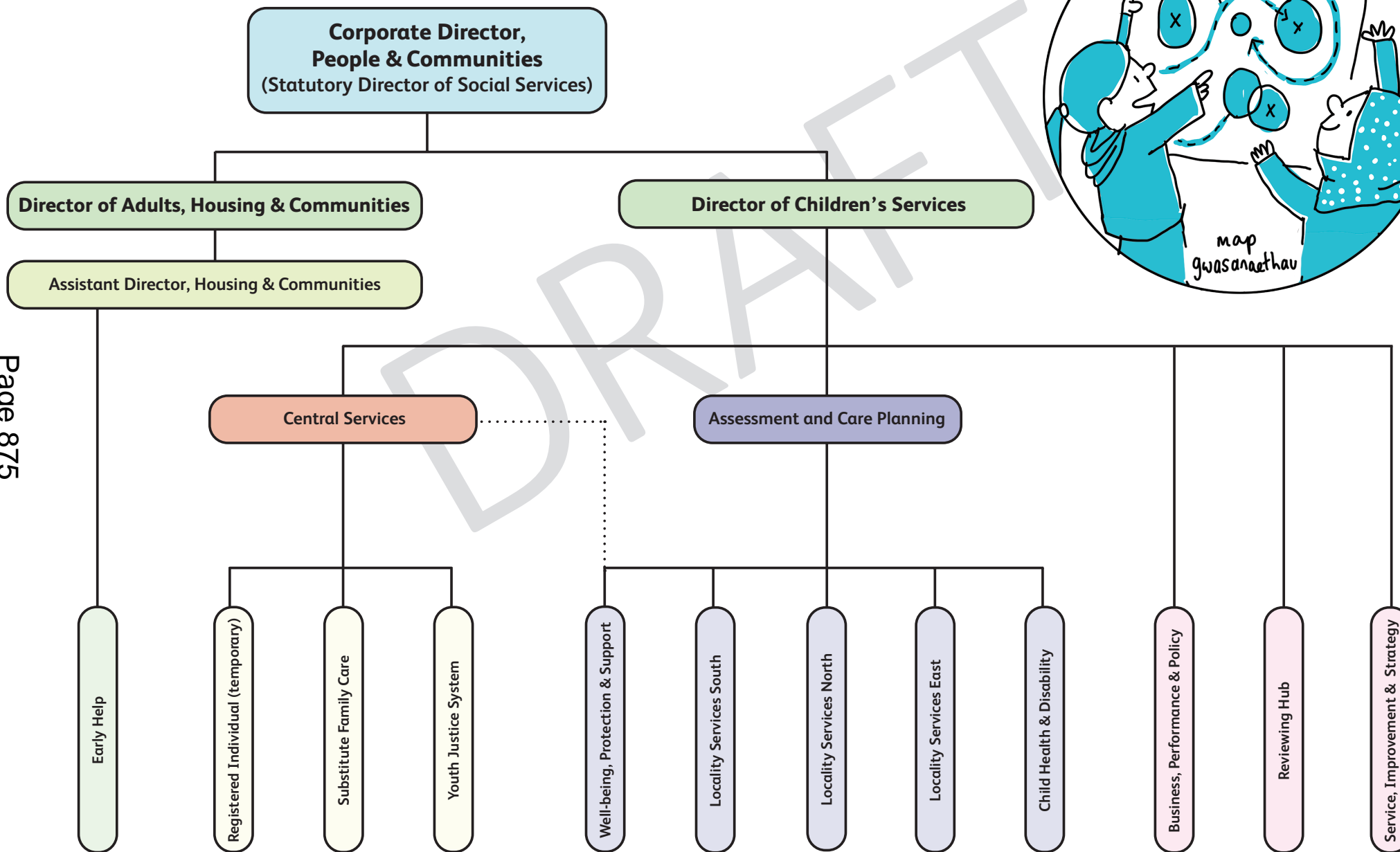
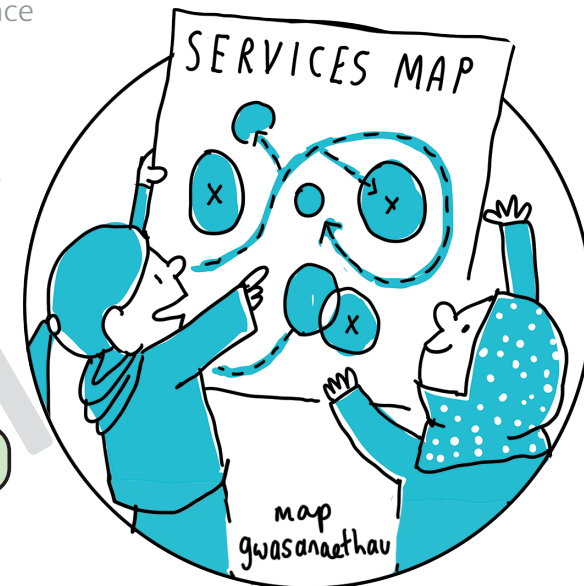
## OUR VISION

CHILDREN IN CARDIFF ARE PROVIDED WITH THE RIGHT SUPPORT, FROM THE RIGHT PERSON AT THE RIGHT TIME, IN THE RIGHT PLACE AND AT THE LOWEST SAFE LEVEL OF INTERVENTION, ENABLING THEM TO REMAIN WITH THEIR FAMILY WHERE IT IS SAFE FOR THEM TO DO SO AND ACHIEVE THEIR FULL POTENTIAL.

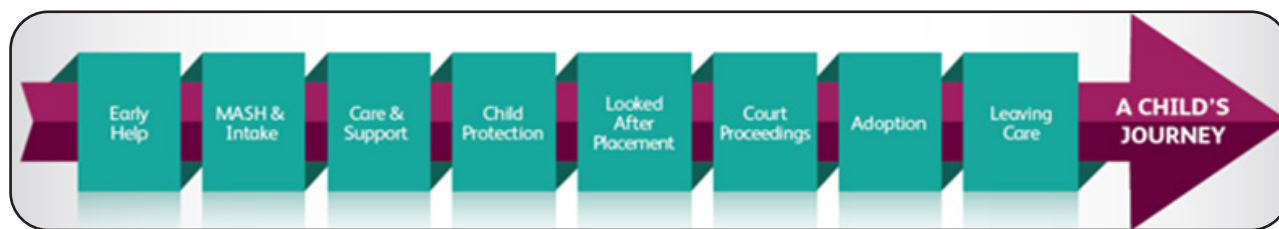
*#KeepingFamiliesTogether*



An overview of our structure and a brief summary of the child's journey is set out below, followed by an overview of the work that we are doing to achieve our vision.



## THE CHILD'S JOURNEY



### Early Help

- Cardiff Family Advice and Support offer a range of information, advice and assistance for children and their families. The team provide information and advice – for example on family life, child behaviour, childcare, parental support, employment, money and housing.

### Multi Agency Safeguarding Hub (MASH) and Intake & Assessment (I&A)

- MASH are the first point of contact for safeguarding referrals from professionals. Where it is considered that further action is required, the referral is passed on to I&A for a wellbeing assessment and / or child protection investigation.

### Care and Support

- Where an assessment concludes that a child or young person needs care and support, a care plan is co-produced with the family and reviewed to monitor achievement of outcomes.

### Child Protection

- Where a child protection investigation concludes that a child is suffering, or at risk from suffering, abuse or neglect, a multi agency child protection conference is convened to decide whether the child should be placed on the Child Protection Register.
- Where a child's name is placed on the Child Protection Register, a multi agency plan is co-produced with the family and reviewed to monitor achievement of outcomes.

### Children Looked After

- Where a child is not able to remain safely at home with their parents or extended family, they will need to be "looked after" by the local authority. This may be because the parents are too unwell to look after the child, the child is disabled and has needs that the parents / family are not able to meet, or Children's Services may have intervened because an assessment concluded that the child was at significant risk of harm.

### Court Proceedings

- When a child become looked after because of concerns for their safety, the child is usually the subject of a court-made legal order. This gives the local authority shared Parental Responsibility for the child.

### Adoption

- Adoption is a way of providing a child or children who cannot be raised by their own parents with a new family. Adoption is a legal procedure which transfers the parental responsibility for the child to the adoptive parents.

### Leaving Care

- Young people who are care leavers are entitled to receive services and support up to age 25.

## SHIFTING THE BALANCE OF CARE - PLACE

### The issue that we are facing:

The lack of sufficiency of placements and accommodation for children looked after and care leavers has resulted in an increase in the number of children being placed in high cost placements and homes operating without registration. The duration of these placements has also increased. This is not in the best interest of the child and impacts on our ability to manage the market. It also has a subsequent impact on our ability to manage our budget.

### Our response to the issue:

We are looking for innovative solutions and developing a range of support services to ensure children can remain at home with their families when it is in their best interests to do so, including:

- Implementing a Reviewing Hub
- Developing our short break provision
- Embedding a Reunification Framework
- Discharging Care Orders for children placed with their parents
- Converting kinship care arrangements to Special Guardianship Orders
- Developing the North Yorkshire Model for Cardiff – The Right Place

### The actions we will take:

The key actions that we will take to shift the balance to support children to remain at home, return home from being looked after or achieve permanence for children who need to be looked after are set out below. The detail of how we will implement these actions will be set out in our Directorate Delivery Plans - taking account of feedback from consultation with staff and young people.



## SHIFTING THE BALANCE OF CARE – PEOPLE / WORKFORCE

### The issue that we are facing:

We are experiencing an issue with the recruitment and retention of social workers, and particularly experienced social workers. This leads to over reliance on agency social workers which impacts on consistency of workers for children and families and our ability to manage the market - with a subsequent impact on budgets.

### Our response to the issue:

We have developed and are implementing a Workforce Strategy with a focus on recruiting and retaining social workers. The purpose of the Strategy is to attract both newly qualified and experienced social workers to Cardiff, and retain them when they are in post. A Workforce Action Plan to support implementation of the Strategy is under development and will be updated as part of our Directorate Planning process for 2023/24.

Recruitment pressures mean that we simply cannot appoint more social workers to meet the rising demands. Instead, we are implementing innovative solutions quickly to meet the demands and address the wider COVID-19 harms. This includes a focus on prudent social work – ensuring that social workers only do what only social workers can do. One option that we are exploring is how to implement the NEST (Nurturing, Empowering, Safe and Trusted) trusted adult concept using key workers who don't necessarily need to be social workers. This approach recognises the importance of having a trusted adult so children and young people have an adult in their life who understands them and who they can turn to when they are feeling sad, worried or angry.

### The actions we will take:

The key actions that we will take to shift the balance to a primarily permanent workforce with agency workers being used in exceptional and short term circumstances only are set out below. The detail of how we will implement these actions will be set out in our Directorate Delivery Plans - taking account of feedback from consultation with staff and young people.



## SHIFTING THE BALANCE OF CARE - PRACTICE

### The issue that we are facing:

There has been a continued and significant rise in demand for services and complexity of issues presented by children and their families throughout the child’s journey. This is impacting on our ability to allocate and manage cases, leading to inconsistency of social workers for children and a risk of cases drifting and care plans not being progressed. It also has a subsequent impact on our ability to manage budgets.

### Our response to the issue:

We have undertaken a systems review to help us to ensure that our processes are streamlined, and our services are future proofed so we can respond to the increase in demand and complexity. We will be focusing on our front door to address failure demand and shift our approach to supporting families, so we take a more integrated wellbeing approach, working to families’ strengths to provide them with the support that they need. This focus on integrated prevention services will ensure that risk is managed appropriately throughout the service to safeguard children effectively and reduce the potential for a risk averse and oppressive practice.

We are developing our practice to ensure it is strength based, trauma informed, restorative, research led and family focused. This will involve a change in culture across the whole of the directorate that will be supported by our new Training and Development Framework. This change will start with staff induction, continue with support for social workers in their first year in practice and provide ongoing support for career progression. We will ensure ongoing learning and development using our Quality Assurance Framework. Implementing restorative practices will provide staff with a range of language, behaviours and tools that will strengthen their relationships with children, young people and families, empowering them to share responsibility by using a solution-focused approach, which supports positive change. We have also introduced Practice Leads who are working well with the teams - delivering support to upskill newly qualified workers and help us to improve practice and consistency of practice across the Directorate.

Our Participation Framework will set out how we ensure that our strategies and plans are shaped by the lived experience of children and young people, reflect the principles of a child’s rights approach and ensure that the child is at the centre of all we do.

### The actions we will take:

The key actions that we will take to shift the balance of our practice are set out below. The detail of how we will implement these actions will be set out in our Directorate Delivery Plans - taking account of feedback from consultation with staff and young people.



## WELSH GOVERNMENT CONTEXT

The Welsh Government’s Programme for Government sets out the ten well-being objectives which they believe will make the greatest contribution towards achieving the long term well-being goals for Wales. These are:

### THE TEN WELL-BEING OBJECTIVES ARE:

Provide effective, high quality and sustainable healthcare	Continue our long-term programme of education reform, and ensure educational inequalities narrow and standards rise
Protect, re-build and develop our services for vulnerable people	Celebrate diversity and move to eliminate inequality in all of its forms
Build an economy based on the principles of fair work, sustainability and the industries and services of the future	Push towards a million Welsh speakers, and enable our tourism, sports and arts industries to thrive
Build a stronger, greener economy as we make maximum progress towards decarbonisation	Make our cities, towns and villages even better places in which to live and work
Embed our response to the climate and nature emergency in everything we do	Lead Wales in a national civic conversation about our constitutional future, and give our country the strongest possible presence on the world stage

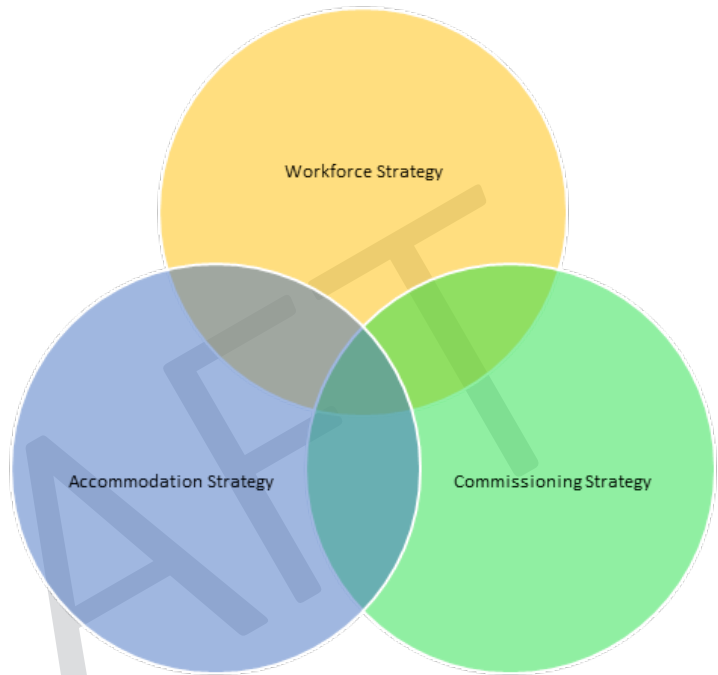
The commitment to eliminate private profit from social care sits underneath the well-being objective to protect, re-build and develop services for vulnerable people. This is part of the wider strategy to keep families together wherever possible and to reduce the number of children and young people looked after away from home. We are driving this forward via our aim to shift the balance of care (place) set out on page 7 above – including our work to implement The Right Place model and our new Accommodation Strategy.





## STRATEGIES AND PLANS

The Children's Services Strategy sets out our overall vision and direction and is supported by our Workforce Strategy, Accommodation Strategy and Commissioning Strategy. Together, these set out how we will deliver our vision. Other strategies supporting our service delivery include the Corporate Parenting Strategy, Trauma Informed Strategy, Strategy for Children with Disabilities and Additional Learning Needs and Youth Justice Strategy.





## KEY THEMES FROM ENGAGEMENT EXERCISES

As part of the production of the revised Children’s Services Strategy, engagement sessions have been undertaken with children and young people and staff. Key themes emerging from these sessions are set out below. We have also taken into account feedback received as part of the challenge process during the production of the Local Authority Social Services Annual Report. This feedback will be used to shape the steps that we take to implement the Children’s Services Strategy – these will be clearly set out in the Children’s Services Directorate Delivery Plan. A detailed overview of the consultation sessions is available at Appendix 4.

Shifting the Balance of Care – Place - Staff		
What’s working well	What we are worried about	What we need to do next
<ul style="list-style-type: none"> <li>• Interventions Hub</li> <li>• Family Group Conferencing (FGC)</li> <li>• Kinship / Special Guardianship Orders</li> <li>• Family Drug and Alcohol Court pilot</li> <li>• In house fostering and residential</li> </ul>	<ul style="list-style-type: none"> <li>• Arrangements for Rapid Response</li> <li>• Consistency of use of FGC</li> <li>• Consistency of approach</li> <li>• Arrangements for when pilot ends</li> <li>• Placement sufficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Review Rapid Response</li> <li>• Embed use of FGC</li> <li>• Improve consistency</li> <li>• Plan for end of pilot</li> <li>• Develop in house services</li> </ul>

Shifting the Balance of Care – People / Workforce - Staff		
What’s working well	What we are worried about	What we need to do next
<ul style="list-style-type: none"> <li>• Reduced vacancy rate</li> <li>• Hybrid working</li> <li>• Return to face to face visits</li> <li>• Resource Assistants</li> <li>• Induction</li> <li>• Supervision</li> <li>• Practice leads</li> <li>• Locality approach</li> </ul>	<ul style="list-style-type: none"> <li>• Recruitment / retention</li> <li>• Caseloads / demand</li> <li>• Complexity and vicarious trauma</li> <li>• Media portrayal of profession</li> <li>• Consistency across service - e.g. practice leads, supervision, induction</li> <li>• Time to undertake training</li> <li>• Awareness of services</li> </ul>	<ul style="list-style-type: none"> <li>• Review offer to staff</li> <li>• Prudent social work</li> <li>• Develop resilience of workforce</li> <li>• Improve comms</li> <li>• Improve consistency</li> <li>• Upskill workforce</li> <li>• Service directory</li> </ul>



Shifting the Balance of Care – Practice - Staff		
What's working well	What we are worried about	What we need to do next
<ul style="list-style-type: none"> <li>• Youth Justice Service</li> <li>• Reviewing Hub</li> <li>• Care planning</li> <li>• Engagement / participation</li> <li>• Advocacy</li> <li>• Transition</li> <li>• Trauma Informed Practice</li> <li>• Child Health &amp; Disability Needs Panel</li> </ul>	<ul style="list-style-type: none"> <li>• Rise in knife crime</li> <li>• Placement breakdowns</li> <li>• Consistency across service - e.g. planning / engagement / advocacy / transition / trauma informed</li> <li>• Too many panels</li> <li>• Waiting lists - CAMHS / Enfys</li> </ul>	<ul style="list-style-type: none"> <li>• Develop partnership work</li> <li>• Improve chronologies</li> <li>• Improve consistency across service</li> <li>• Streamline panels</li> <li>• Improve referral process</li> </ul>



## THE EXPERIENCE OF CHILDREN AND YOUNG PEOPLE

Children and young people were asked about their experience of receiving care and support and leaving care. Their responses tell us that we need to improve the consistency of services – there was variation with one young person reporting that their experience was “pretty positive” whilst for another it was “mostly negative”.

Young people enjoyed the opportunities that they were given – such as trips and activities. They particularly liked sharing these events with other young people who have had the same experiences as them and who have a better understanding of their situation. They found that taking part in these activities helped them to gain confidence as they discovered skills they did not know that they had. For young people leaving care who felt isolated, the activities helped them to feel less lonely.

Some young people noted that it was not always easy to get hold of people when they needed them, and that they did not feel listened to by the person that they lived with / who cared for them. They felt that decisions were made for them and not with them.

We also learned the importance of how we engage with young people - young people like it when the professionals that they work with are “on their level” - they feel more valued when professionals point out their strengths and help them to see what they are good at. This also needs to translate into how we write about young people when completing assessments and case recordings.

Some young people talked about how well supported they felt by their social worker, the Personal Advisor Service and the Into Work Service and shared how this helped them to develop their confidence. They also talked about the importance of support to maintain contact with their family and particularly their siblings.

### What young people would like to see for future services

- Foster carers should have more training for women and men (gender differences) and not just regarding ethnic minority issues.
- Professionals should get to know a young person for who they are and should invest time in them without assumption about their life or their abilities.
- Every effort should be made for children and young people to be an active part of their own plan and the decisions that impact their futures.
- Workers to take more care when recording so that it reflects factual information and is not subjective or does not place stigma upon young people.
- More consistent workers.
- Fun should not be underestimated and more opportunities for young people to get together should be facilitated as they have described lots of positives from doing this as care leavers.
- More support for mental health.
- Make sure family are in contact.

As with the feedback received from staff, these messages have been heard and will inform our future planning.

## LIST OF APPENDICES

- Appendix 1 – Workforce Strategy
- Appendix 2 – Accommodation Strategy
- Appendix 3 – Commissioning Strategy
- Appendix 4 – Record of Staff Consultation
- Appendix 5 – Demand Analysis

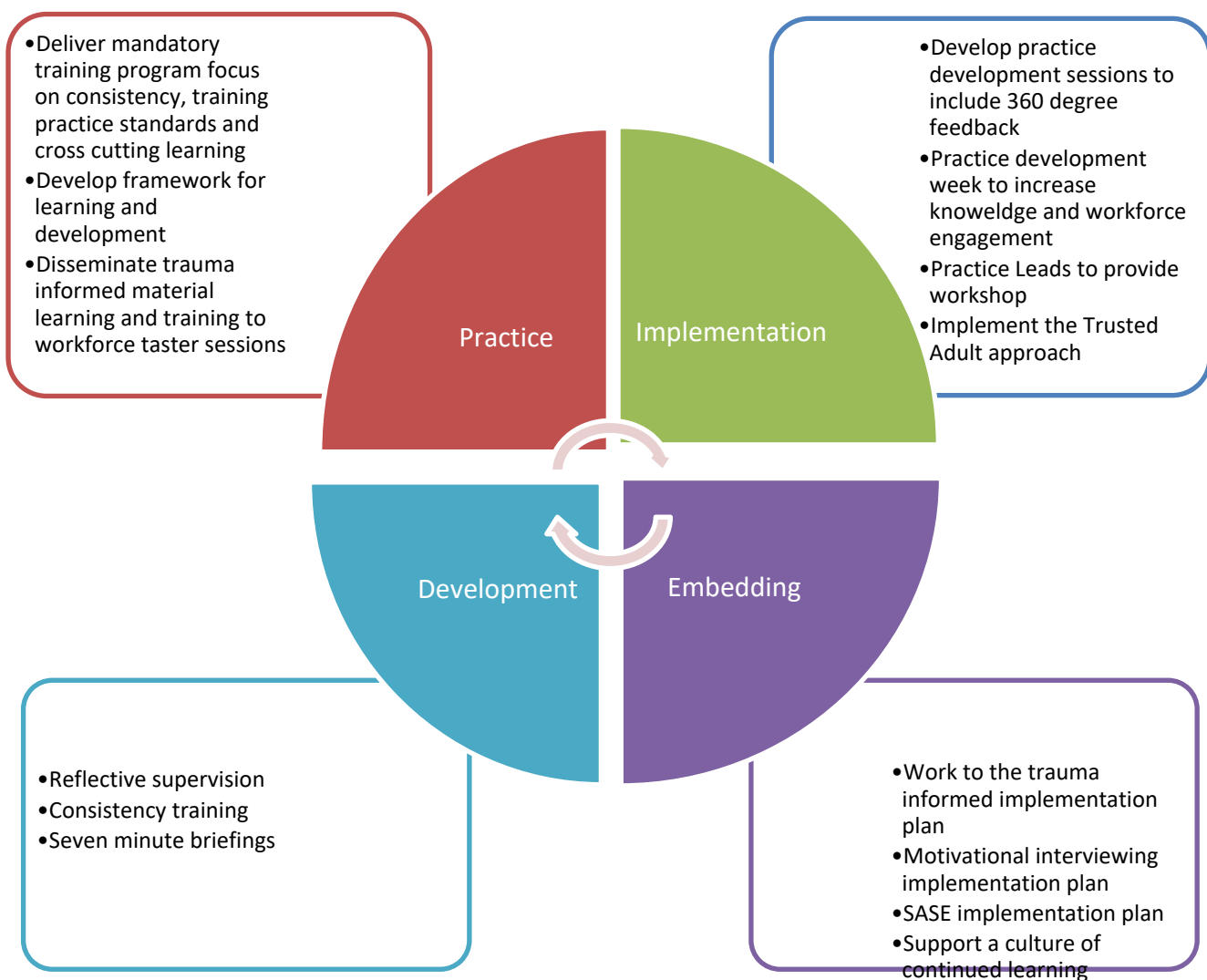


## Cardiff Council Children’s Services Workforce Strategy 2023-26

### Introduction

Working with children, young people and their families is one of the most important and rewarding jobs, the right person can make the biggest difference to children, young people and family’s lives. That is why Cardiff Council has set itself a standard to attract and retain high calibre social care professionals to our front-line social work teams, supporting our city’s most vulnerable children and young people. The purpose of this document is to set out Children’s Services approach to recruitment and retention by putting children and families first. It is about really listening to our children and young people, understanding what they need and responding appropriately to provide the best possible service.

At a time when there is a national shortfall in qualified and experienced social workers, this strategy sets out how we intend to make Cardiff Children’s Services the employer of choice in this region and beyond. The strategy serves to create the conditions required to achieve a fully resourced, permanent, qualified and competent Children’s Social Care workforce.



## Our vision for our workforce:

We will develop a sufficient and stable workforce of appropriately skilled and experienced staff that will:

- Ensure caseload levels are within agreed margins and levels that promote good practice and keep staff safe.
- Enable workers to have sufficient time to spend with children and young people and therefore improve the quality of practice.
- Promote greater job satisfaction.

A strategic direction that encourages and supports pre and post qualifying learning and encourages personal development and support will promote employee retention.

Embedding a child-first culture into practice through the implementation of a new model and approach to delivering social work services (e.g. strength based and evidence-based approaches such as Motivational Interviewing and Restorative Approaches). This will be supported by a range of frameworks, pathways, techniques and behaviours that will make provision for social workers to spend more time with children and families and the development of embedded business processes that effectively support the service to deliver good outcomes for children.

Providing a robust quality assurance framework that supports quality social work practice, which captures the views and feedback of children and families and of staff will inform continuous improvement, and will be supported by effective learning and development, supervision, and management.

## Our principles:

**Children's Rights** - We will ensure that staff are aware of their obligation to respect, protect and fulfil children's rights and understand that they are accountable to children for meeting this obligation.

**Home First** - We will identify preventative measures and/or develop solutions that enable people in need of care and support and their families to be as independent as possible and safe. This will include steps to support people to live within their local community, as close as possible to home, family, and friends wherever appropriate.

**What Matters** - We will listen to and work with young people and their families in need of care and support, to find solutions that meet their needs, keep them safe and enable them to reach their full potential.

**Sustainable Resources** - We will make the best use of our resources to ensure quality outcomes and value for money. We will work with people and partners to develop a sustainable approach to support within the community so that people can access good quality and cost-effective solutions to meet their needs.



## Employee Profile

### Staff Profile Summary

- There are 275 qualified social worker and social work manager posts in Cardiff Children's Services social work teams. (Including Fostering, Family Intervention & Support Services (FISS) and Reviewing Hub).
- Of these posts 196 are filled with permanent / temporary Council employed staff.
- Of these 196 posts:
  - 33 male
  - 163 female
- 20 posts are currently vacant and not covered by agency staff.
- 59 posts are occupied by agency staff.
- Approximately 14.3% of permanent / temporary Council employed staff across the whole of Children's Services are from a Black and Minority Ethnic (BME) background, compared with 16.6% of the Cardiff population.

The detail of how this strategy will be implemented is set out in our Workforce Action Plan that forms part of our Directorate Delivery Plan.

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# Cardiff's Right Place Accommodation Strategy & Capital Plan



## Vision

**At Cardiff Children's Services our vision is clear – we want to provide families with the right support, from the right person at the right time, in the right place and at the lowest safe level of intervention, enabling them to remain with family where it is safe for them to do so.**

However, for some children and young people their needs are best met in an accommodation setting and we want to ensure that there is enough sufficiency in Cardiff. All children and young people deserve to have a place they call home where they are safe, nurtured and protected.

The vision will be realised through the strategic use of existing housing resources and proactive housing development, aligned to social care priorities for children and young people. This will be supported by a corporate commitment by the council and combined with joined up working across council directorates and partner organisations.

The overall vision as per the Cardiff's Children Services Strategy is to:

- Safely reduce children looked after numbers
- Keep young people safely within their families and communities
- Reduce expensive out of area placements
- Develop a model of integrated partnership working that places the young person at the centre of planning
- Become an accredited model of best practice in planning and delivering support to children and their families



## Cardiff's Right Place Strategy

Cardiff's Right Place Strategy is the implementation of the North Yorkshire No Wrong Door model that provides an integrated service for young people, aged 12 to 18, who either are in care, edging to or on the edge of care, or have recently moved to supported or independent accommodation whilst being supported under No Wrong Door.

The flexible and resilient integrated team supports the young person throughout their journey to ensure that they are not passed from service to service but instead are supported by a dedicated team of edge of care and residential workers, a clinical psychologist, speech and language therapist and a Police worker. Some young people are placed in the hubs, and others are supported by outreach while either in foster care or living with their families. Central to the No Wrong Door innovation is that all staff are trained in a trauma informed, restorative, and solution-focused approaches.

The model is a non-traditional approach to working with adolescents experiencing complex journeys - with an innovative residential 'Hub' at the heart of the service. It provides:

- Short term placements and edge of care support (in and out of care).
- A range of services, support, and accommodation options.
- Embedded specialist roles working together (shared practice framework).
- An integrated service with a defined culture and practice model.
- An integrated team that 'sticks with' young people on their journey.

Through a whole systemic change this approach has been proved to improve in outcomes for those young people being supported. These improved outcomes include a reduction in total time spent in residential settings and a total reduction in the number of children looked after, as well as a reduction in missing, arrests, and hospital admissions.

The Right Place strategy is a whole system approach to practice with stated characteristics:

- Thinks differently – about risk management and safeguarding adolescents.
- Psychologically informed systemic practice across Children's Services.
- Reduces handoffs and episodic planning.
- Right services, right time, right place to meet need.
- Always striving for permanence in family/community setting (connectivity).
- Strengths based and restorative approaches and practice.
- Is aspirational – building self-esteem, foundations for the future and improving the lived experience for young people. This leads to a systemic service wide integrity and delivering against the ambition of 'sticking with' young people.

Key to the integrity of the model these are the 'Non-negotiables' and 'Distinguishers' of the North Yorkshire Model.

## The 8 'Non-Negotiables' of No Wrong Door

Essential values, principles and ways of working together  
(without which a model ceases to be faithful to the NWD approach)



**High Standards and ambitions for all young people**



**A belief in young people and their right to a family, whatever shape or form it takes**



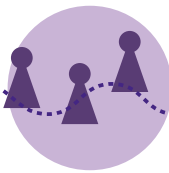
**Residential care as a short-term intervention, not a long term solution**



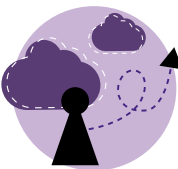
**A commitment and investment in staff support, and being rigorous about holding them to account**



**A commitment to do whatever it takes to support young people within their community**



**Employing an unconventional and flexible workforce, including the use of creative sessional contracts to respond quickly**



**Forward looking and aspirational**



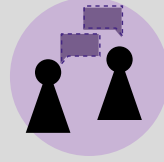
**Bring young people into No Wrong Door quickly but move them on slowly**

# The 10 'Distinguishers' of No Wrong Door

The distinguishing features and practical elements of the operating model (setting it apart from traditional services & ensures NWD stays true to its vision & aims).



Always 'progressing to permanence' within a family or the community



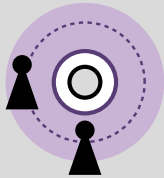
'No appointment assessments'



High 'stickability' of the key worker



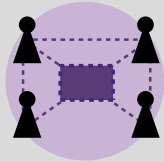
Close partnership working



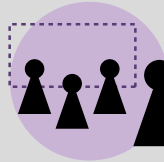
A 'core offer' to all young people



A 'No heads on beds' culture



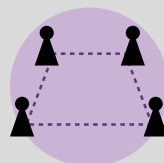
Multi-agency intelligence led approach to reduce risk



A robust training strategy in therapeutic support



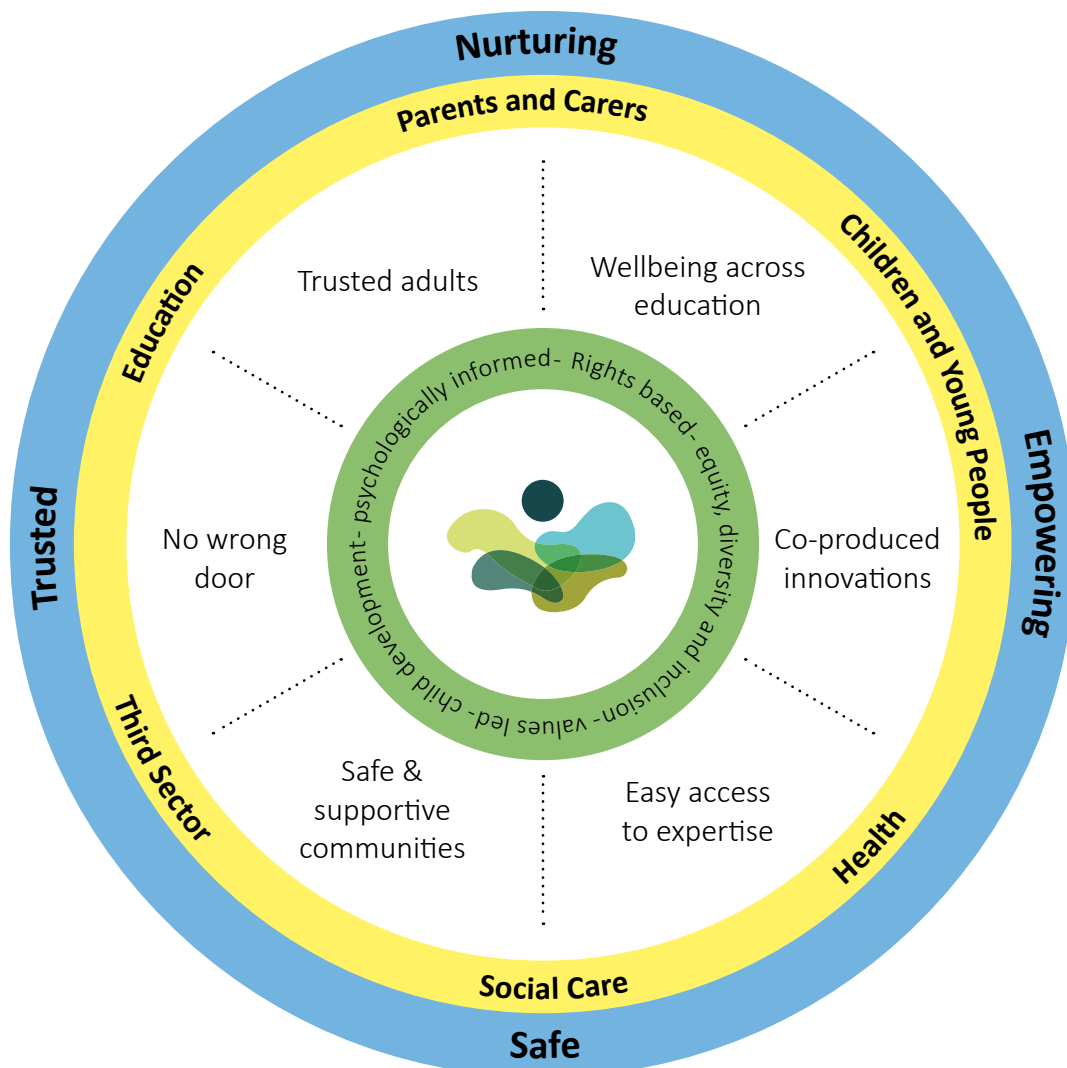
Practice driven by young people's aspirations



Fewer referrals, less stigma

## NEST

- The NEST Framework is a planning tool for Regional Partnership Boards that aims to ensure a 'whole system' approach for developing mental health, well-being and support services for babies, children, young people, parents, carers and their wider families across Wales.
- The Framework leads us towards developing services and systems that are Nurturing, Empowering, Safe and Trusted (NEST) and includes a partnership approach from stakeholders listed in the pale green ring on the diagram opposite.
- There are five guiding principles (shown in the central green ring on the diagram opposite).
- There are six core elements to consider in delivery of the whole system approach defined by the NEST Framework (in the white ring in the diagram below).





## Young Person's Accommodation and Support Gateway

The Council launched a Young Person's Accommodation and Support Gateway in October 2015 to manage supported accommodation for young people. The Gateway is a collaboration between the Council's Children's Services and Housing Services and acts as the single point of entry into accommodation and support services for young people, regardless of the legal duty which is owed to them.

Once the young person has been assessed in accordance with the appropriate legislation, placements are made by the Council's Temporary Accommodation Team based on the needs of the young person. There are 173 units of supported accommodation, providing a range of options for young people such as small, shared houses with 24-hour support, larger hostels, and independent flats in the community with lower-level support. Plans have commenced to increase the Gateway by a further twenty-four units, coming online in phases from January to December 2023.

The Gateway provides a consistent pathway into settled accommodation. By allowing visibility of all supported accommodation, it broadens choice and increases the chance that young people will be placed in the accommodation most appropriate to their needs.

Young people stay in supported accommodation until they are ready for independent living. They receive a range of support services whilst resident in a placement, and most move on successfully to their own permanent tenancy through the Training Tenancy scheme. Support packages remain in place once a young person has secured a tenancy to help them settle in for up to 12 months. The Tenancy Training scheme is highly successful, with over 300 young people brought housed since its inception in 2016, with 99% maintaining their tenancy.

## Housing First Model

The Pilot Housing Led for Young People Service has been set up in line with the current pressures on Children's Services. The pilot targets care leavers and young people with complex needs aged between 16-25 years old.

The Housing Led Service is based on tried and tested Housing First principles. It provides stable and appropriate housing to high-risk people with complex needs with dedicated ongoing support for as long as it is needed. Housing is based on needs with emphasis being placed on the needs and desire of young people. The project works with Private and Social Landlords to secure 1 bed self-contained flats

The service works in collaboration with the Young Persons Multi-disciplinary team to provide a meaningful pathway to Housing ensuring that appropriate and specialist support is in place to reduce the numbers of young people entering homelessness. Referrals are made

direct from Children's Services and be made via Cardiff Council YP MDT Service in a way that compliments the project and ensures that the process is co-ordinated and structured and that the right interventions are made for the young person from the outset. Where a young person is referred to the YP MDT Team an assessment will be made and a decision about their suitability for Housing Led Services will be made. This assessment will also enable decisions around what type of wrap around support is required to ensure the person is safe and supported appropriately.

Overall, the project seeks to provide therapeutic intervention, support and treatment to young people who have complex support needs. In depth assessments take place leading to a person-centred coordinated support and treatment plan. It allows young people to discuss their specific needs and access a range of support from professionals and helps inform us of any gaps or barriers within mainstream services.

The project is funded to support 5 young people into accommodation. We are currently supporting 1 young person in their tenancy and have 2 young people receiving pre-tenancy support while waiting for a property.

### Why do we need an accommodation strategy?

As outlined in our Children Services Strategy 2023/26 our overarching aim is to keep children with their families and where that is not possible that suitable foster placements are sought. There are circumstances however, where this is not always possible, or not safe to do so, and therefore where children and young people have to be accommodated in a residential setting it is important that there is sufficient residential placements in Cardiff for them.

### National context

As the capital city, Cardiff can play a key role in the delivery of Welsh Government's Programme for Government agenda. Cardiff's Right Place Strategy directly supports one of the well-being objectives – to Protect, re-build and develop our services for vulnerable people – this includes the following specific commitments.

- Provide additional specialist support for children with complex needs who may be on the edge of care.
- Explore radical reform of current services for looked after children and care leavers.
- Eliminate private profit from the care of children looked after.
- Fund regional residential services for children with complex needs ensuring their needs are met as close to home as possible and in Wales wherever practicable

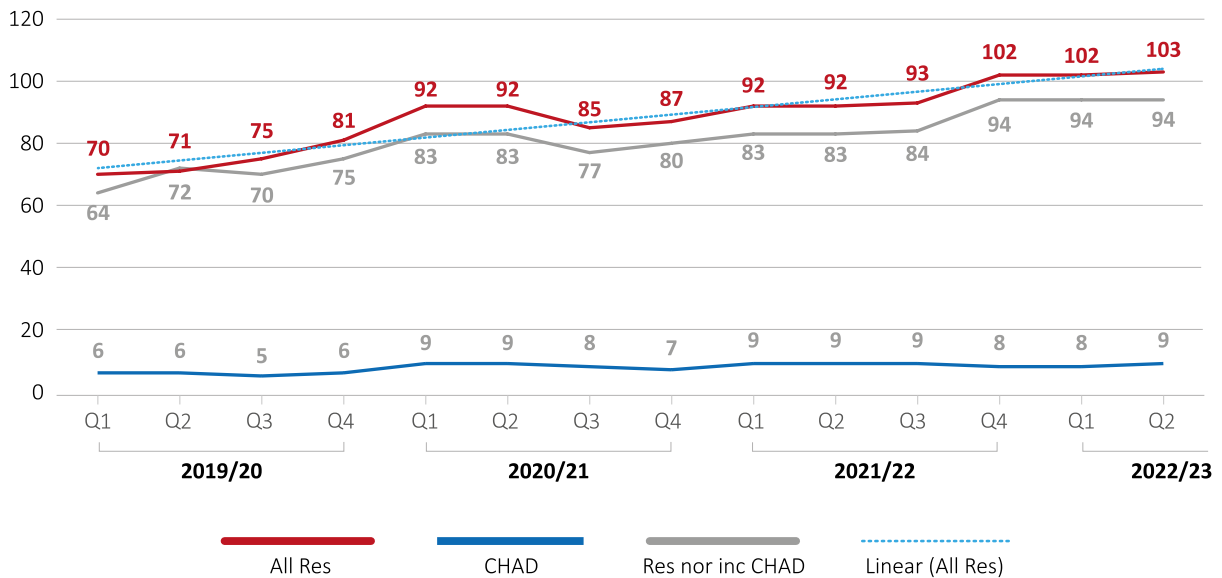
## Local Context / Needs Analysis

Our understanding of the increasing demand has identified the four main areas that we need to address:

- - Children's Residential Provision
- - Specialist mental health services and step-down from hospital
- - Short break requirements for children with disabilities and complex needs
- - Unaccompanied Asylum Seeking Children (UASC)

## Children's Residential Provision

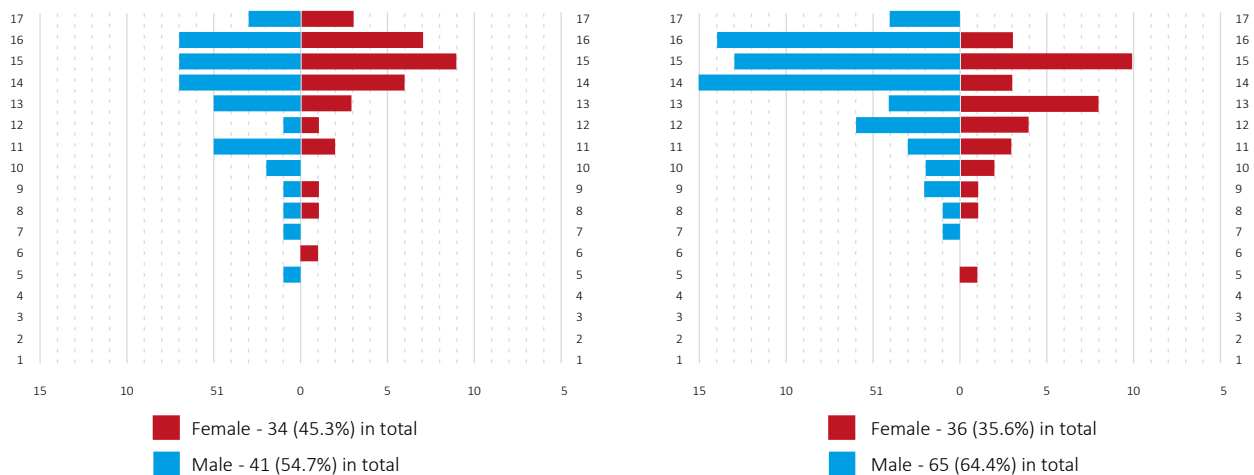
Graph showing the increase in residential placements over time



The number of children in residential placements by age and gender

As at 31st March 2020

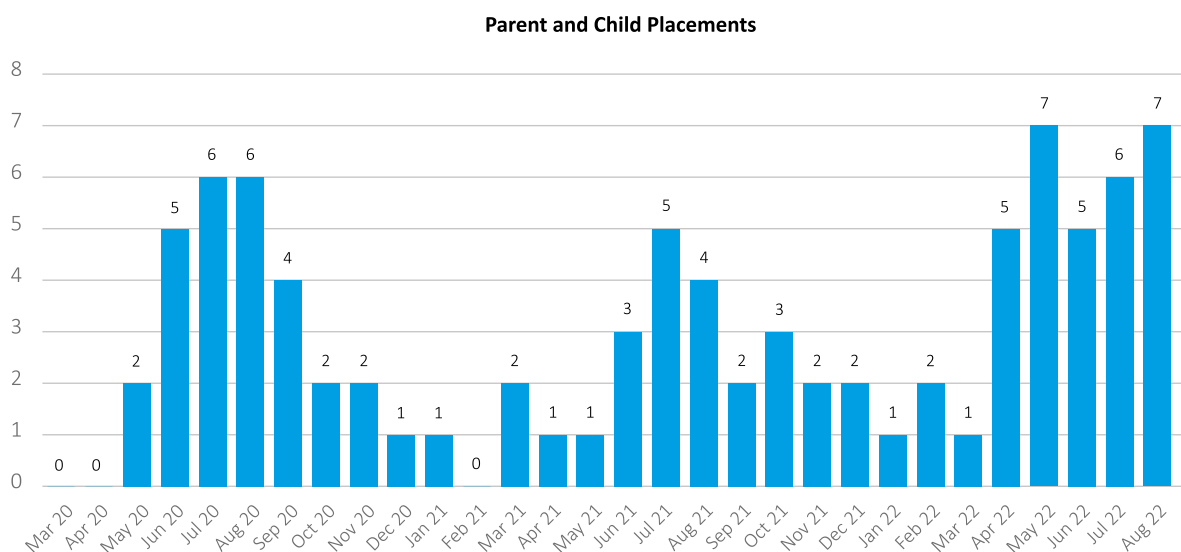
As at 31st August 2022



The number of boys in residential placements has increased by 59% from 41 to 65 over the period above, whereas girls in residential placements has increased by just 6% from 34 to 36. The following table shows the volume of young people placed in out of county placements and exemplifies the need for this strategy to be delivered at pace with 78 out of a total of 100 placements being Out of Cardiff.

Ages	In Cardiff	Out of Cardiff	Total	Percentage in Cardiff
Under 13	3	20	23	13%
13-15	8	37	45	18%
16/17	11	21	32	34%
Total	22	78	100	22%

The above figures do not include residential parent and baby assessment centres, these are used for between 11 and 14 weeks at a time and current usage over the past 2 years is below.



All of these parent and baby placements are outside of Cardiff and frequently outside of Wales because there is no local provision.

### Specialist Mental Health Services and Step-Down from Hospital

During the COVID-19 pandemic Cardiff experienced an increase in the number of children and young people (CYP) presenting to emergency units following self-harm or suicide attempts. Whilst the majority of young people were able to be discharged back to their homes or previous placements once they were medically fit, there were a small but growing number of young people who did not meet the criteria for Child and Adolescent Mental

Health Services (CAMHS) or tier 4 in-patient support because their needs were not best described as related to a 'mental illness' but did require ongoing support to enable them to safely return to living within the community. These young people were best described as experiencing past and current extreme emotional distress and were often not able to return home or to previous placements because this was either not an appropriate environment to meet their needs and allow a period of emotional stabilisation, or there were multi agency concerns in relation to the ability for risk to be mitigated within these environments.

A regional, integrated group of operational leads was convened to develop a model that can respond to the needs of this group of young people. They have agreed on an integrated delivery model that combines an outreach approach to work with young people and families across all settings with an accommodation solution for young people who cannot return home or to a community placement.

The outreach staff team and the accommodation solution provide support and safe space for a young person to stabilise following their emotional distress and become ready to start the intensive therapeutic work that addresses the cause(s) of their distress.

### Overnight Short Break Requirements for Children with Disabilities

The Social Services and Well-being (Wales) Act 2014 states a disabled child is a child that has a physical or mental impairment, which has a substantial and long-term adverse effect on that child's ability to carry out normal day to day activities.

Cardiff is committed to deliver the very highest quality services to children, young people with additional needs and their families. We want to ensure all children are safe, happy, enjoy their learning and thrive to be as independent as they can possibly be.

The provision of services to children and young people under the age of 18 with additional needs is delivered by the Child Health and Disability (CHaD) Team within Cardiff's Childrens Services.

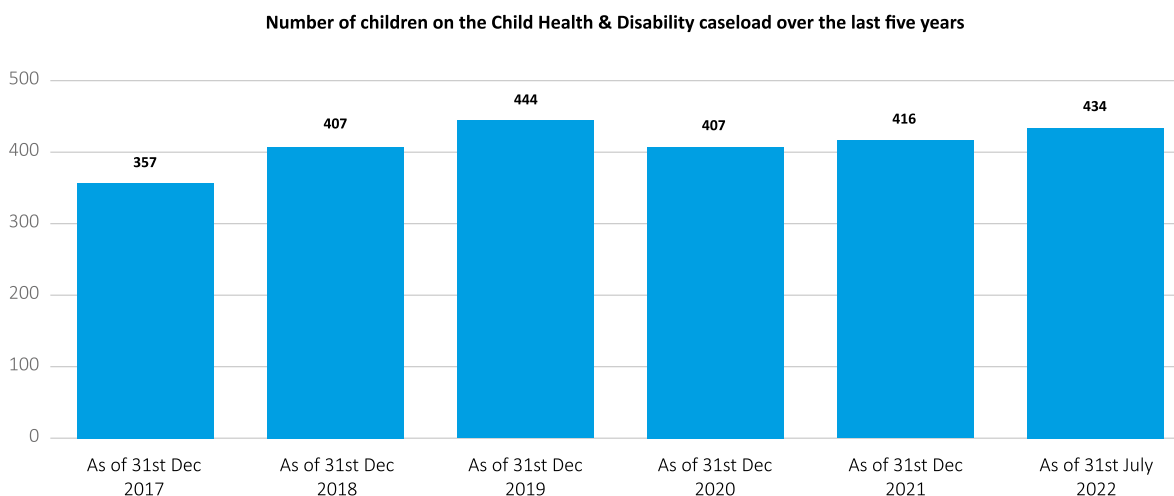
Short breaks (previously called respite provision) look after a young person temporarily so that their carer can have a break and provides a positive experience for the person cared for, to enhance the quality of their lives and support their relationship.

Tŷ Storrie, run by Cardiff Council is located in the west of Cardiff. It is a purpose built registered Childrens Home for children and young people aged between 6 and 17 with disabilities and complex needs.

There are currently 25 children accessing Ty Storrie as well as 23 children and young people on the waiting list. These children needs are met through additional packages including community care respite.

This is partly the reason for a 63% increase in domiciliary care payments.

The caseload of CHaD has remained relatively consistent over the past 5 years:



## UASC

The majority of UASC arrive in the UK and Wales ‘spontaneously’ however some children may arrive in the UK under the mechanism of s.67 Immigration Act 2016. A small number of children have already been resettled in Wales and more may come. The National Transfer Scheme is currently available in Wales and facilitates the transfer of children out of local authorities in England where there are large numbers being cared for, such as Kent and Croydon. The National Transfer Team work with us as well as the Wales Strategic Migration Partnership, to identify any possible placements for these children. In Cardiff, there are currently 53 children and young people open to the UASC team. Colum Road is a 6-bed property which was opened in March 2022 and is available for UASC aged 16 and above, arriving via the National Transfer Scheme (NTS) or spontaneously. The Assessment Centre offers an initial period of accommodation in order to receive wrap around support, robust assessment of needs and age assessment if required. Once ready the children will be moved on to appropriate longer term placements in line with their identified support needs. These placement options include Fostering, supported lodgings, and supported accommodation.

Once a young person reaches the age of 18 and they have received settled status, they can access a range of accommodation in Cardiff as per any other young adult. Due to delays in assessing claims, Cardiff Council are continuing to support and accommodate previous UASC who are now over 18 and who have no recourse to public funds until their status is finalised.

## Current Provision in Cardiff

The below table is the complete list of regulated placements in Cardiff. There are a variety of reasons why homes may not operate at full occupancy including matching with other young people, specific high need cases, staffing levels or restrictions placed by the Inspector.

Provision for CHaD	Home	Provider	Beds
No	Oakway	Cardiff Council	2
No	Falconwood	Cardiff Council	3
No	Crosslands	Cardiff Council	6
No	Heath House	BASE Support Ltd	4
No	Trevene House	Maponos Ltd	4
Both	Ninian House	Genus Care Ltd	3
No	Connaught Rd	BASE Support Ltd	4
No	Graig Llywn House	Keys	4
No	New House Lodge	Athena Care Group	5
No	Isgoed	Keys	4
Yes - CHaD	Ty Jibreel	Gofal Cymru Care	3
Yes - CHaD	Ty Mikail	Gofal Cymru Care	3
Yes - CHaD	Ty Coryton	Orbis	26
Yes - CHaD	Ty Cwtch	Salutem LD	16
Yes - CHaD	Ty Croeso	Gofal Cymru Care	3

## Capital Budget

The council has already identified previous years capital funding which can be used as well utilising grant funding a range of sources.

Capital Allocations as at 22/23		Total
Right Homes, Right Support Strategy - Residential Provision for Children Looked After	Subject to a business case, to make improvements to the residential offer for Children Looked After by the Council which are currently placed outside of the Council boundaries and with Independent Fostering Agencies. This includes an emergency pop-up unit, an assessment unit, and additional residential places in the city.	£1,900,000

Capital Allocations as at 22/23		Total
Children's Respite Provision	Following an assessment of respite services for children at Ty Storrie, to align service provision with the needs of young people.	£2,898,000
Safe Accomodation ICF Regional	Provide safe accommodation in a psychologically-informed environment for children / young people who are experiencing a crisis in their emotional wellbeing and mental health and require a safe place or 'sanctuary', away from their normal home, in which to recover and recuperate	£695,000
Children's Services Accommodation Strategy	Balance of proceeds from disposal of 150 Thornhill Road ring-fenced for schemes which provide direct benefit to children	£229,000

## Recommended Requirements

### Children's Residential Provision

Utilisation of current assets to maximise their usage to meet needs, the recommendations are as follows;

- Retain **Crosslands** as a 6-bed residential unit with minor upgrades to the home
- Retain **Falconwood** as a 3 bed residential unit
- Retain **Oakway** for use as an emergency provision for a 1 bed residential home
- Develop **Baden Powell** and upgrade the property and register the property as a 2-bed residential home
- **Bronwydd Road** – upgrade the property to be a therapeutic placement and register property as a 1-bed residential home

Purchase and develop additional properties to meet the demand;

- **3 x 3 bed children's home for younger children** – linked to our inhouse foster carers to support quick step down
- **4 x 3 bed and 3 x 4 bed children's homes predominantly focused on older children**

These properties should complement our existing portfolio and be strategically located across Cardiff to support young people who have to move into a residential home to keep their positive links to their area such as education, family and friends.



These proposals will deliver a total of 46 beds across the city within the control of Cardiff Council. This is in addition to the 28 beds currently being provided by other providers bringing in a total children's home provision in Cardiff to 74. Acknowledging this is 20 less than the 94 children currently in residential provision at the end of this 3-year strategy the need in Cardiff will be reviewed as the following factors need to be considered;

- Supporting children who need to be placed out of area
- The planned increase to the Young Persons Gateway
- The introduction of the Housing First model
- The increase in in-house fostering (including specialist foster carers)
- The overall shifting the balance of care to prevent the demands

The need for the **Parent and baby assessment centre** for up to 4 placements in Cardiff is highlighted in the demand analysis. Due to the specialist nature of this provision, linked to the Commissioning Strategy we will look to find a partner to deliver this provision.

### Specialist Mental Health & Step-down from hospital

#### **1 large property to accommodate up to 2 CYP at any one time, 1 staff sleep in and office space**

The service will offer an accommodation solution for CYP who cannot return to their place of residence. This accommodation solution will support up to up to two CYP at any time, aged 10-18, subject to matching of the CYP in residence which will be understood through the psychological formulation. The home will be in line with Regulation and Inspection of Social Care (Wales) Act 2016 (RISCA) regulations and registered with Care Inspectorate Wales and the building will be designed in line with recommendations from the implementation of the NEST/NYTH model – building psychologically informed environments.

- 2 bedrooms for CYP
- 1 bedroom for sleep in staff ideally with ensuite
- 1 office / staff space for multi-agency support services
- Lounge / play multifunctional space downstairs
- Rooms for the team to use with CYP (therapy / sensory)
- Garden space – areas for play outdoor and undercover canopy plus potential separate garden room to allow for separate spaces so that young people with different needs can be kept at a distance from one another when needed
- Car parking for staff
- Positive warm, welcoming homely design with robust furniture and materials and emphasis on sound proofing

- Safety principles to be incorporated into design to protect CYP who may be at risk of suicide and self harming
- Consideration given to location in regards of proximity to Accident & Emergency and away from anything which could facilitate risk taking behaviour

## Requirements for Children with Disabilities

The need is solely on the short break and shared care arrangements

- **Redesign of Ty Storrie** into 4 self-contained units with communal space for specialist shared care arrangements to bridge the gap between overnight short breaks and 52-week accommodation
- **Additional lower level short break provision** – this property would suit being delivered from a larger bungalow property for up to 4 children at a time

## Summary of properties

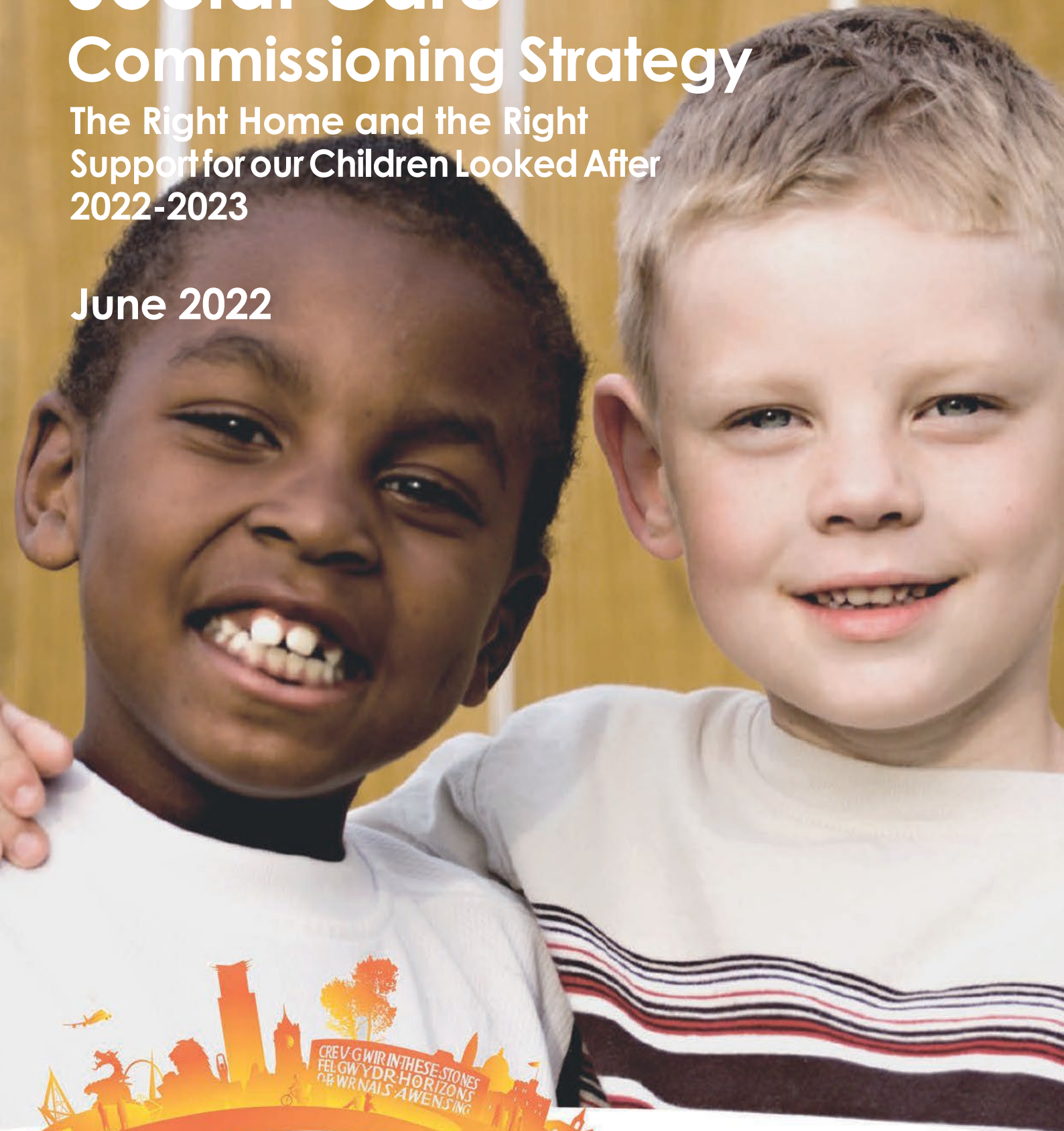
Name of Property	Current	Proposal
Crosslands	6 bed	6 bed
Falconwood	3 bed	3 bed
Oakway	1 bed	1 bed
Baden Powell	unregistered	2 bed
Bronwydd Road	unregistered	1 bed
3 x 3 beds additional for younger children	-	9 bed
4 x 3 beds additional for older children	-	12 bed
3 x 4 beds additional for older children	-	12 bed
Ty Storrie	2 bed	4 bed
CHaD Short Breaks	-	4 bed
Specialist Mental Health	-	2 bed
Parent and Baby	-	4 bed
Colum Road	6 bed	6 bed

These additional properties will be sought through open market purchase and refurbishment/remodelling, new build opportunities through housing development schemes plus the opportunity of repurposing existing assets to meet these needs.

# Social Care Commissioning Strategy

The Right Home and the Right  
Support for our Children Looked After  
2022-2023

June 2022





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# Foreword

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**I am delighted to introduce the June 2022 six monthly update of the 2022-2023 Cardiff's Children's Services Commissioning Strategy for support and accommodation for children and young people and families. The scope of this strategy remains the range of services we need to develop to meet the needs of children, young people and families where:**

- **children are at risk of becoming looked after**
- **children are looked after and**
- **children are leaving care**

In 2022 as the city emerges from the pandemic, it is essential that we consider the steps we need to take to accelerate recovery, whilst at the same time recognising we need to use the crisis as a catalyst to building back Stronger, Greener and Fairer. This objective is the aim of our City Recovery and Renewal Strategy and provides the Council's initial response to the pandemic and the actions we will take to get the city back up on its feet alongside longer-term priorities for renewal.

One of our Key Missions is to create a City for Everyone. This is because we know the impact of the pandemic has not been felt evenly. Those from deprived communities, the young, women and those from a BAME background will feel the effects more than others. This will further widen inequalities that existed before.

As a result, there is a risk that more children experience Adverse Childhood Experiences and more children become looked after. There is also a risk that that the Pandemic means those who are looked after remain so for longer and face further challenges in achieving the positive life outcomes they deserve. Over the months ahead there is an immediate need to ensure we respond to mitigate the risk.

This refreshed version of the Social Care Commissioning Strategy 'The Right Home and the Right Support for our Children Looked After' is now better than ever able to focus on delivering that important objective. In 2022 there is a clear Welsh Government vision for services for looked after children and care leavers which we must deliver. That vision has been clearly set out in The Programme for Government (2021) and the Welsh Government's Children and Young People's Plan (2022). Welsh Ministers are clear in their views that one of our priorities must be to invest public money in accommodation for care experienced children which does not lead to profit.

This strategy identifies the clear local priorities and outcomes we will deliver alongside practice improvements and workforce developments set out in the Cardiff Children's Services Strategy 'Striving for Excellence to achieve that vision.

Striving for Excellence explains that like every Local Authority across the UK, Cardiff's Children's Services continue to face high and increasing demand, increases in case complexity, compounded by challenges in recruitment. Demand pressure is reflected throughout the child's journey, including on services to address children's mental health and emotional well-being. To respond to this, work will continue to shift the balance of care, which will help to ensure that children are supported with the lowest safe level of intervention whilst receiving the right help in the right place, at the right time. A sharp focus will continue to be placed on working with partners to identify and address any safeguarding concerns, particularly protecting vulnerable young people from criminal exploitation and addressing the recent rise in serious youth violence. In terms of recruitment, the Council will place a focus on workforce development by maintaining momentum with improvements to practice and working to attract more and experienced staff to Cardiff.

Both strategies emphasises Cardiff Council's commitment to children's rights to ensures we are in a position to effectively fulfil our role as corporate parents as set out in Cardiff's 'Multi Agency Corporate Parenting Strategy' (2021-2024). The new Corporate Parenting Strategy tells us our children and young people who are looked after want the same life chances as everyone else. They want:

- o Improved emotional wellbeing and physical health.
- o Better connections, improved relationships.
- o A comfortable, safe and stable home whilst in care and after.
- o Educational Achievement, Employment and Training.
- o To be celebrated.

As a result, we are wholeheartedly committed to delivering the following policy commitments. We will:

- Provide children and families with the best start in life through our Early Help and Support Programme.
- Work to keep children safely with their families, supporting their growth and development needs and helping to prevent the need for care.
- Increase the number of children looked after who are placed with their wider families or community, and reduce the number of children placed in, often out of county, residential care placements.
- Increase the number of Local Authority Foster Carers and reduce our reliance on independent fostering agency placements.
- Continue to develop and embed a locality approach to service provision.
- Celebrate the work of our staff.
- Continue to develop and support the workforce.
- Work with schools and the health service to deliver an enhanced and joined-up approach – from school counselling to crisis support – for children and young people who are suffering with poor mental health.
- Deliver the new strategy for continuing to improve the Youth Justice Service.
- Protect vulnerable young people from exploitation and address the recent rise in serious youth violence through developing a robust, integrated, data-led approach across Council and partner services that work with young people.
- Deliver the Corporate Parenting Strategy 2021-24 to ensure children in our care are safe, receive the support they need, have high aspirations, can express their views and are ready for independent living.
- Enable all young people who are known to Children's Services to be empowered to play an active and central role in planning for their transition to adulthood.
- Use the information, intelligence and data we have across the Council and public services to develop a 'Single View' of the contacts each child or young person has with our services.

We will ensure that we work alongside children, young people and families in designing and developing what we do. We will develop local services, which are within the boundaries of Cardiff and work with housing, health, education and other partners to develop the right quality and range of support.

The services we wish to develop are based on a clear assessment of current and future needs. This strategy provides an analysis of the numbers and needs of children at risk of becoming looked after and children who are looked after by the Council.

The strategy will inform the way we work with a range of providers and the social care market as a whole, providing clear direction and a framework for engaging with service providers so that they can respond effectively to the strategic priorities identified. The strategy will also inform implementation plans that will deliver the actions required to achieve the priorities in a timely way. It

will provide the Council's Corporate Parenting Advisory Committee with a clear way forward to improve outcomes for children, young people and families in respect of support and accommodation.

Most importantly, the strategy provides the basis for our children, young people and families to achieve better outcomes, and live better lives as a result.



**Councillor Ash Lister**  
**Cabinet Member for Social Services (Children)**

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# Introduction

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**Cardiff Council are pleased to present our commissioning strategy for children and young people who are in the care of the Council and require additional support and accommodation.**

We have worked together with children, young people, parents and carers, to understand their experience and what matters to them. We have met with key Providers from the independent and third sector to ensure we understand their offer and to develop an ongoing dialogue take place to shape what is available.

This commissioning strategy sets out our clear direction for the future. It outlines our vision, describes the policy and legal context, analyses our current data and outlines our future priorities. Our priorities are the key issues that need to be addressed in the forthcoming years in order to respond to the needs of our most vulnerable children, young people and their families. This includes ensuring there is sufficient capacity and an appropriate range of provision to meet their needs.

## **Purpose – Why have a Strategy?**

The purpose of the strategy is to describe Cardiff Council and key priorities. Its aim is to ensure sufficient options for supporting vulnerable children, young people and their families. As such it outlines the work we want to undertake to develop local and regional services to support our children, young people and their families.

## **Our Vision**

Cardiff Children's Services Strategy (2019-2022) outlines a dynamic and progressive vision for children's social services. The strategy is currently being reviewed to reflect the distance already travelled and to include the new initiatives being implemented to provide families with the right support, from the right person at the right time, in the right place and at the lowest safe level of intervention.

The focus continues to be on 3 key areas:

- **Practice:** Developing our practice and procedures.
- **People:** Supporting a permanent workforce.
- **Place:** Ensuring a range of support in the community and a variety of homes for children are available in Cardiff.

It states:

"In all cases, we will adopt in the city a 'Think Family' approach which looks at the family as a whole and co-ordinates support across the public services, tailored to each family's needs and strengths. Supporting Vulnerable Children and Families Parents have the most significant influence on children and on their future lives. Outcomes for children are best when they are supported to grow and achieve within their own families, own communities and in Cardiff."

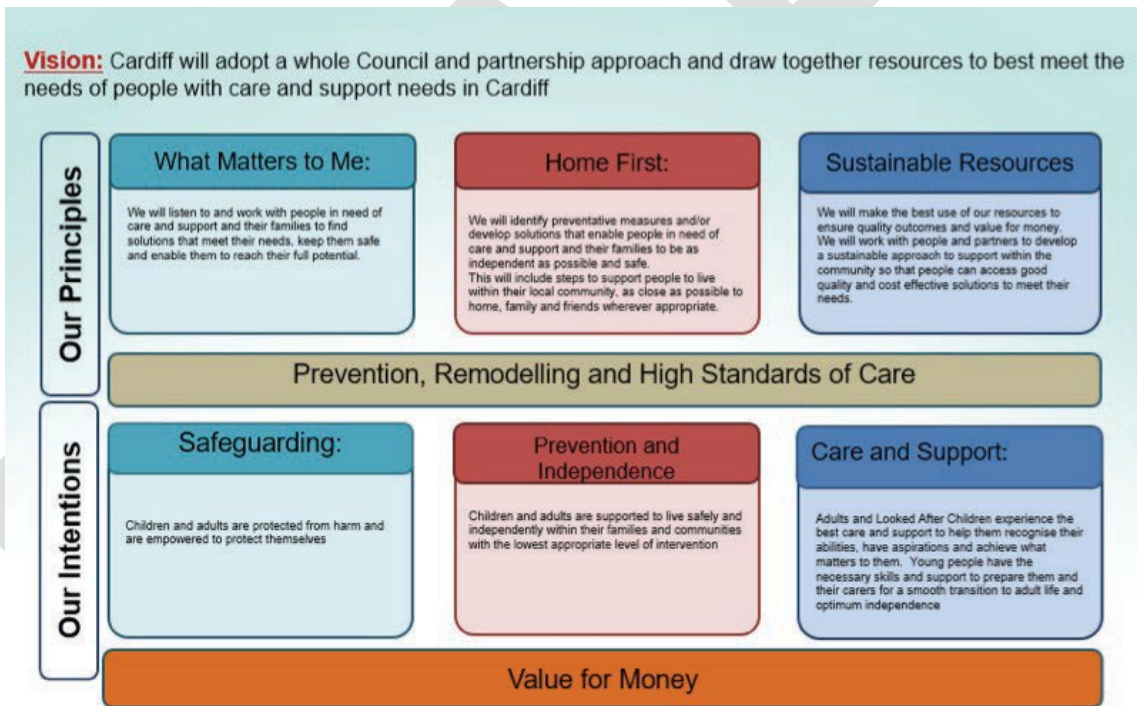
This will be supported by a range of services which places an emphasis on prevention and early intervention to give children the best possible outcomes and better manage the pressure on public services.

# “Being in care made my life better by having a safe house and a bedroom”

This commissioning strategy contributes to this vision by looking to facilitate with partners a range of services and options which improve outcomes and support more children and families to stay together whilst providing the highest quality services when that is not possible. Wherever appropriate the term 'home' is used as our children and young people prefer this term to 'placement or unit'.

## Aim – What do we want our strategy to do?

Our aim is to build, reshape, and expand our current provision, services and homes for children to improve the outcomes of our most vulnerable children, young people and families. Implementation of this strategy will be in line with the key principles in the Cardiff Social Services Strategic Commissioning Framework in the following diagram.



“I want to be listened to”



# The Cardiff Children's Services Strategy

Children's Services has reviewed its 3 year strategy for 2019-22 and developed a new "Striving for Excellence" Strategy for 2023-26. This 3 year strategy outlines key priorities and changes that will take place over the next three years. This commissioning strategy delivers a key priority within the overall strategy for Children's Services. The sum of this effort will deliver the Council's Capital Ambition commitments that Cardiff 'is a great place to grow up for the most vulnerable children'.

## Supporting Children, Young People and Their Families – Our Model

Parents have the most significant influence on children and their future lives. We are adopting a 'Think Family' model, which looks at the family as a whole, and co-ordinates support across the public services, tailored to each family's needs and strengths. This approach is informed by our awareness of the impact of adverse childhood experiences (ACE) on both the children and parents we work with and our interventions are evidence-based and informed by the impact of trauma.

## Supporting Children, Young People Closer to Home

We will, whenever it is safe to do so, support children and young people to remain with their birth family or extended family and avoid the need for children and young people to become looked after. We are committed to developing services that wrap around families, extended families and carers to respond to needs earlier and prevent their escalation.

It is our priority to ensure we will find safe ways to work alongside families to enable them to parent their children and protect them from harm. We also recognise we need to support good substitute family care (foster care) when it is not possible for a child or young person to remain with their own families. In most circumstances, it is important that children and young people maintain positive contact with their own families, friends, school and communities. This is why we are committed to developing services closer to Cardiff. On the occasions when it is not possible for children to be safe and protected in or close to Cardiff we will commission the highest quality service. The safety and well-being of our children and young people will always have the highest priority.

**"Staff are very supportive and I can always talk to someone"**

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## Supporting Children, Young people and Families – Intervening Early

We want to shift the balance of care so that by intervening earlier we prevent the escalation of need. Our aim is to support more children, young people and families through early help services and to reduce the number of children who become looked after. We will be commissioning the right services to the right capacity and at the right stage of the child's journey so we are able to meet needs through the least intensive intervention and as early as possible. This ambition is reflected in our Early Help Strategy.



### Better Outcomes – what success looks like?

'Striving for Excellence' aims to shift the balance of care and achieve the following outcomes for the children, young people and families of Cardiff. We will:

- Safely reduce the number of children and young people looked after,
- Increase the number of children and young people supported to live safely with their families,
- Reduce our reliance on out of area placements,
- Increase the number of kinship carers,
- Increase the number of local authority Foster Carers,
- Work differently with Independent Fostering Agencies,
- Develop the range of residential placements to meet more complex needs,
- Develop our commissioning and procurement capability and capacity,
- Develop further our understanding of our vulnerable children, young people and families.

Achievement of these outcomes is how we will evaluate the impact of this strategy



# Commissioning Strategy

## - The Welsh Context - The Law

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The main pieces of legislation related to this strategy are the Social Services and Well-being Act (Wales) Act 2014, the Well-being of Future Generations (Wales) Act 2015 and the Regulation and Inspection of Social Care (Wales) Act 2016.

The Social Services and Well-being (Wales) Act (SSWBA) 2014 requires on local authorities and health boards requiring them to promote the well-being of those who need care and support or carers who need support. It outlines key duties to ensure:

- People have control over what support they need, making decisions about their care and support as an equal partner,
- New proportionate assessment focused on the individual,
- Carers have an equal right to assessment for support to those who they care for,
- Easy access to information and advice is available to all,
- Powers to safeguard people are stronger,
- A preventative approach to meeting care and support needs is practised,
- Local authorities and health boards come together in new statutory partnerships to drive integration and service change.

There are some elements of the SSWBA that directly relate to children, young people and their families including the following duties on local authorities to ensure:

- That there is sufficient accommodation for all types of children who are looked after.
- That placements are made within their own areas, unless it is not reasonably practical to do so or there are overriding reasons for placing the child out of authority, the primary reason being safeguarding.
- Support is within the service, and the location that best enables them to achieve positive well-being outcomes. For most children this means in or close to Cardiff as this means they can maintain their relationships with their family, friends, school, community and health services.
- All decisions on the right accommodation / placement and support service will be made with the child or young person's best interest.
- Care and Support planning including achieving permanence is a key consideration from the very start.

The overarching principles for the SSWBA are:

- To support people who have care and support needs to achieve well-being.
- People are at the heart of the new system by giving them an equal say in the support they receive,
- Partnership and co-operation drive service delivery.
- Services will promote the prevention of escalating need and the right help is available at the right time.



The Well-being of Future Generations (Wales) Act 2015 places a duty on Public-bodies, including health and social services, to make sure that when making their decisions they take into account the impact they could have on people living in Wales in the future. This Act requires them to:

- Work together better.
- Involve people reflecting the diversity of our communities.
- Look to the long term as well as focusing on the now.
- Take action to try and stop problems getting worse, or even stop them happening in the first place.

Regulation and Inspection of Social Care (Wales) Act 2016 set the new statutory framework for the regulation and inspection of social care services, in other words how social care services are going to be assessed for their quality and impact they make.

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# Removing Profit from the Care of Looked After Children

## A Vision to Transform Children's Services

The Programme for Government 2022-2027 contains a number of commitments that taken together describe a new vision to transform children's services. The delivery of these commitments will effect change across the whole care system in Wales.

A key component is the commitment to remove private profit from the care of looked after children. The Welsh Government's Children and Young People's plan published on St David's Day 2022 sets out two key objectives:

- To build residential homes for children with complex needs in Wales. So that children and young people can be close to their home area.
- To continue to work and engage with private providers of children's residential and foster care, about the move to a not-for-profit system of care in Wales.

The First Minister and the Deputy Minister for Social Services are clear that the commitment to eliminate profit is a top priority for delivery during this Senedd term.

The commitment itself builds on the long-held view of Ministers and aligns with calls made by the Children's Commissioner for Wales and Voices from Care. It is a response to listening to children and young people who tell professionals that they feel upset at being looked after by profit making organisations, where they feel 'bought and sold'.

**"Not comfortable as we have to share a bedroom. 4-7yrs"**



## The Multi-Agency Programme Board

Chaired by the Chief Social Care Officer for Wales, Albert Heaney, a multi-agency Programme Board has been established to implement this commitment, so that the duties on local authorities in relation to looked after children are not contracted out to for-profit companies but remain with public sector and not-for-profit providers.

Representatives from the private sector children's care homes and fostering organisations alongside representation from the Public and Third sector providers, have been brought together to work with the government, local authorities, Care Inspectorate Wales, the Children's Commissioner for Wales and Voices from Care.

The board recognises this is a challenging commitment to deliver. There are a range of areas requiring examination in relation to defining not for profit, legislative change, competition and business considerations, developing models of service delivery such as Foster Wales and building future models including social enterprise and other models. All of this needs to be worked through while ensuring stability of the market and avoiding disruption to existing placements for children.

There are currently two work streams in progress; one which deals with technical matters relating to definitions, legislation and competition, and the second, about ways in which the public and not-for-profit market can be grown in the context of managing the transition and improving placement sufficiency.



# Together We are Stronger

## Working in Partnership

**The legal, policy and local strategic context all stress the importance of partnerships and working differently across public sector partners, the third and independent sector.**

Our work with partners is a central tenet in our delivery of more care support and accommodation options in order to see an improvement in outcomes for children and young people.

The Social Services and Well-Being Act describes the outcomes, which all partners need to work together to achieve for Children and Young people;

- Being Safe,
- Having somewhere suitable to live,
- Being involved in decisions that impact your life,
- Having friends,
- Being part of good, strong communities,
- Having every chance to do well in education, training, worked-based earning and employment,
- Feeling good about your life,
- Being able to grow up happily and successfully,
- Being well looked after,
- Having access to appropriate health care.

The No Wrong Door approach brings together services and asks services to wrap around children, young people and their families, rather than asking those in need of care and support to understand a complex system. Building upon this, the NEST (Nurturing, Empowering, Safe, Trusted) Framework promotes a person-centred, values-led, integrated whole system approach; supporting early help, the right help, and at the right time with the aim of improved mental health and emotional wellbeing.

Collaboration across services including public and third sector will facilitate a whole system approach and provide inclusive services for all those children, young people and families who may need them, rather than specialist interventions for specific groups.



Figure 1 NEST diagram showing key areas, stakeholders and themes around early support and prevention.

Cardiff Children's Services place a strong emphasis on the importance of working together in partnership. We recognise that Public and third sector partners including teachers, health practitioners, doctors, nurse, allied health professionals, mental health practitioners, social workers, youth workers, third sector practitioners, early years practitioners and play workers will work together to deliver a joined-up approach to enable the right conversations to take place at the right time, between the right people and for solutions to be found at the earliest possible stage, particularly for the most vulnerable children and families.

This commissioning strategy, and the work that follows will be an expression, in practice, of this vision for partnership working. Joint planning and delivery with our partners is essential to delivering the best outcomes for children.

## **Cardiff – A Child Friendly City**

Cardiff is one of five Cities in the UK developing, in partnership with UNICEF UK, as a 'Child Friendly City'. This means we place the rights of children and young people at the heart of all our policies and strategies; we involve children and young people in decision-making and commit to addressing barriers, which limit their lives. This development will involve all partner organisations placing Children's Rights at the centre of the commissioning approach.

## **Working with Providers**

This strategy also signals the ongoing desire of Cardiff Council to work collaboratively with providers to ensure an open and mature relationship. This proactive dialogue will engage providers in the development of key aspects of commissioning and enacting the Welsh Governments not-for profit vision, including the development of future provision and the analysis of current needs. They continue to have an important perspective to bring to the shaping of future provision.

## **Children's Commissioning Consortium Cymru (4Cs)**

Cardiff is a member of this important national consortium which is a strategic commissioning alliance between Welsh Local Authorities to support commissioning needs in respect of fostering and residential homes for children. Where it makes sense, Cardiff will be a key partner in developing regional and national solutions for children's provision.

## **Foster Wales**

Foster Wales was launched in July 2021. It is the nationwide collective of the 22 Local Authority fostering teams. Its objectives include:

- Co-ordinating national and local foster care marketing and recruitment.
- Managing and using the fostering National Performance Management framework.
- Coordinating national retention initiatives such as the National Commitment.
- National workforce improvement initiatives such as foster care Learning and Development.
- Continuing work in respect of harmonisation of foster carer payments.
- Promoting best practice standards and quality improvement across the sector.
- Foster Wales has a close working relationship with the National Adoption Service (NAS).

## **The Vale, Valleys and Cardiff Adoption Collaborative**

This is a collaboration between Cardiff, the Vale of Glamorgan, Rhondda Cynon Taf (RCT) and Merthyr Tydfil Local Authorities. It delivers all the functions related to securing and supporting permanence adoptive families for children when an adoption order is the care plan endorsed by the Family Court.







# What key Stakeholders told us?

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**This section sets out the messages received from key stakeholder regarding our Children Looked After.**

## **What's important to Children and Young people?**

From the information gathered from the consultations, surveys and engagement exercises with children and young people in care, key messages have been identified as follows:

- Children and young people told us that they want us to act on what they have already told us.
- They do not like the term 'placement' or 'unit'. They want a place they can call 'home'.
- They want somewhere they can make their own decisions about how it looks. A place that is their sanctuary and comfortable.
- Children want to feel included and understand why they are in care.
- Young people want regular review of contact arrangements.
- They want to understand why decisions have been made.
- Children and Young people want to be trusted and feel involved in activity planning.
- When care planning they want staff to be aware of gender differences.
- They want more opportunities to benefit from being in the outdoors.
- They want better access to mental health services.
- They want to build relationships and a sense of family.
- They want at least one strong enduring and dependable relationship, so that they can unload, unpack and process the things that cause them stress.
- Most children and young people have good relationships with their carers.
- The vast majority feel safe in their setting.
- Most feel positive about their futures.
- They want to have a secure future when they leave care. To earn a decent income, have independence and the things they never had, but are worried about the cost of living. They want to be able to care for themselves.
- They would like access to the internet.
- They want their belongings to be kept safe when they move between homes and never placed in bin bags.
- Most children and young people want to stay in their local area.
- They want to remain close to their families, friends and local communities.
- They want to remain in contact with carers after they have left for ongoing support.
- They want to feel like their peers and not stand out or be stigmatized by their experiences.
- They see school and college as a positive. It is a place where they can just be a teenager like everyone else, talking about and doing teenage stuff, getting up to everyday mischief. Whether a good or bad teenage experience, it is the same as those around them.
- The new Corporate Parenting Strategy was launched during the 2021 setting out five key priorities based on the views and experiences of children looked after. They are:
  - Improving emotional wellbeing and physical health.
  - Better connections, improved relationships.
  - A comfortable, safe and stable home whilst in care and after.
  - Educational Achievement, Employment and Training.
  - Celebrating our children and young people

There are some important themes within these messages which need to inform our commissioning strategy going forward. These themes could be summarised as 'meaningful involvement', 'having positive experience', 'their emotional well-being' and their desire to 'stay close to home'.

We have used the following engagement mechanisms to understand the views of children and young people:

- Bright Spots Survey of 255 children looked after (September 2018)
- Cardiff Council Social Services Annual Report consultation (April 2019)
- Consultation with children and young people living in Cardiff Council Residential Provision (May 2019)
- Child Friendly City Consultation (July 2019).
- Corporate Parenting Strategy Consultation (September 2020)
- Corporate Parenting Advisory Committee engagement with Bright Sparks (2021)
- Bright Sparks Participation update to the Corporate Parenting Committee (September 2021)

## What our providers tell us?

The Council has been engaging individually and in workshops with Fostering and Residential Providers.

The overriding message was a willingness to work even more closely in partnership, with the Council. A number of important messages emerged through the discussions:

- Providers have a range of experience, skills and knowledge that can help in the development of services.
- There is a willingness to engage in shared learning and development.
- There are opportunities for us to link up engagement with children and young people.
- There is a shared challenge on recruiting Foster Carers.
- Providers would like a more planned approach for young people leaving care.
- A need for an ongoing dialogue.
- Providers want to understand how needs and demand is changing.
- Some children and young people have more complex needs and they need to understand this further.
- There could be further improvements in the placement process.
- The importance of the partnership between the Council and Providers.
- Providers are willing to consider alternative commissioning arrangements including providing services into Council owned buildings.
- Significantly, they told us they are finding it difficult to secure properties within Cardiff. Properties must be:
  - Capable of meeting needs,
  - Meets the requirements of the provider's asset management strategy,
  - Conforms to the Welsh Government's Standard Viability Model and Acceptable Cost guidance,
  - Be capable of being developed to comply with statutory Housing and CIW requirements.
- This is even more difficult in Cardiff than surrounding areas as the housing market is so competitive.
- During the year there have been a number of external provider performance issues and providers entering escalating concerns. Some of those issues were as a result of COVID-19 and its impact on staffing.
- Some placement searches are returning zero providers in response to tenders for individual children.

This feedback clearly shows the market of providers wanting to engage in an ongoing dialogue with the Council, looking at shared challenges and looking for solutions that best meet the changing needs of children and young people in Cardiff.

Our vision is to have a vibrant provision in Cardiff able to meet the changing needs of our children and young people in a flexible and responsive way.

## What our Staff tell us?

Engagement with staff has further helped in terms of understanding the changing needs of our children and young people. Key messages included:

- Demand is increasing.
- It is more difficult to find suitable homes for our children and young people.
- There are more sibling groups needing support.
- Some children and young people have more complex needs.
- We want to be able to offer more support to families.
- We want to help bring families together again.
- We need to improve our processes.
- Priority areas for engagement with providers include: teenagers, sibling groups, step down from residential, disabled children and Unaccompanied Asylum-Seeking Children.





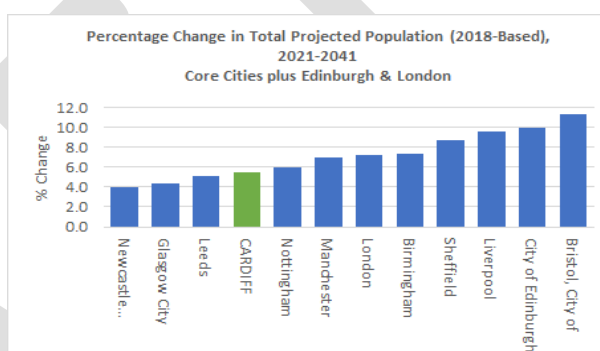
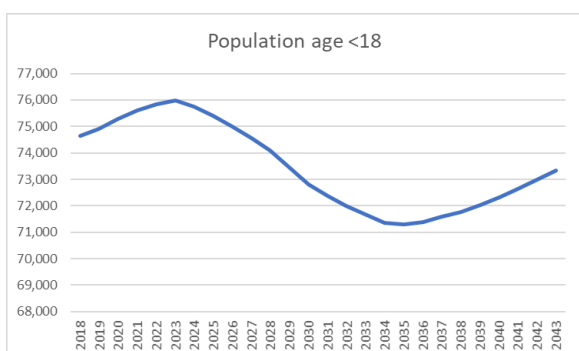
# What the data tells us?

In this section we will review some of the key data related to Children Looked After in Cardiff.

## Cardiff's population is changing

At the time of writing the last version of this strategy, Cardiff's population was expected to increase faster than other City in the UK, including a sharp 18% increase in the population of children and young people over the next 20 years.

This is no longer the case. Projections now indicate that the recent downward trend in births (2010 – 2020) will continue for approximately the next 10 years, and then follow a slight upward trend.

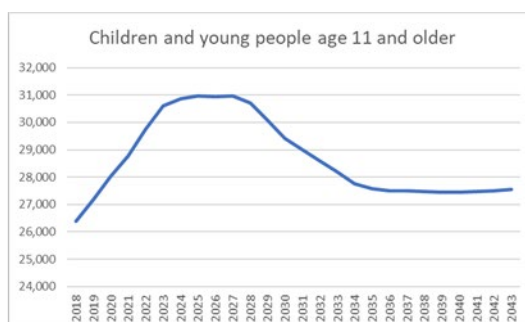
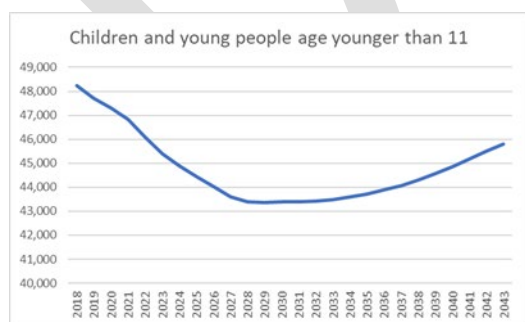


Source: 2018-based projections for local authorities Welsh Government

The number of children aged 0-18 is projected to peak in 2023 at 75,980, before decreasing to 71,295 in 2035. Increasing to 73,345 by 2043 (2018-based population projections). Remaining lower than the current population.

The projections are likely to reflect decreasing fertility, along with increased life expectancy, meaning that older people remain living in Cardiff properties for longer.

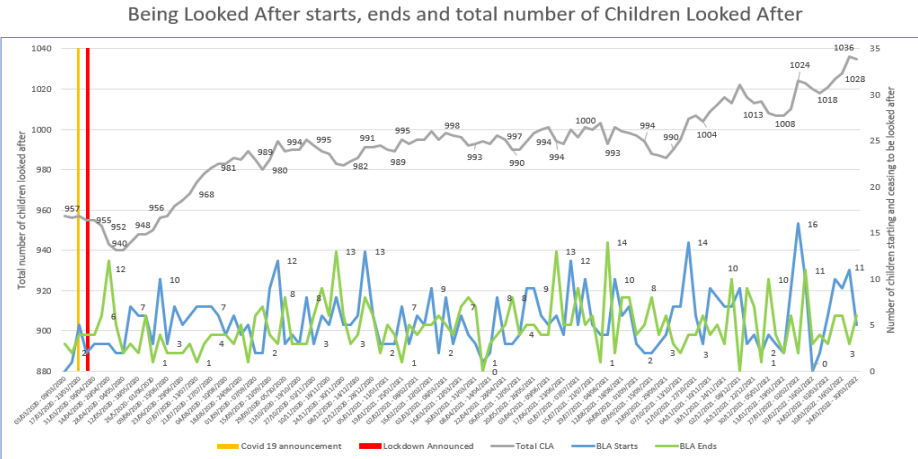
However, it should be noted that there is variation within the age-bands which make up the population of children and young people. Charts below show that whilst population size-based demand from primary school aged children is likely to decrease in the coming decade, a peak in population of secondary school aged children and young people aged 11 to 18 is likely to extend until 2028. These are children born before the fertility rate decreased.

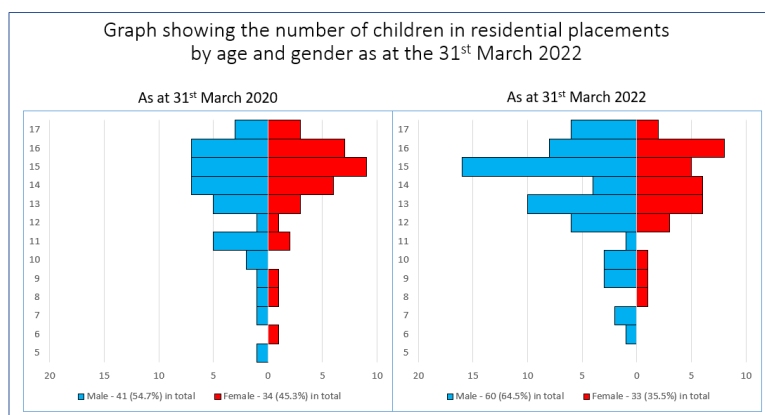


The projections do not take into account the as yet unknown impact of Brexit and the Pandemic. The figures may therefore be subject to further revision as those events are incorporated into population trends over time.

## Rates of children looked after

In interpreting population figures, it is important to be aware, that the rate of children who become looked after is dependent on the level of societal need, the ability of referring and safeguarding agencies to detect that need, as well as the age structure of the cohort.





Boys make up the majority of the increase in numbers of children looked after, with an increase of 82 or 16.6%.

The number of boys in residential placements has increased from 41 (54.7%) to 60 (64.5%) over the 2 year period

Looking at the age structure of looked after children, together with the population projections for 11-18 year olds, the data suggests that the peak in demand for looked after placements, based on population size alone, might not be reached until 2023 and extend until 2028.

Further impact of the pandemic, as well as increasing societal influences on mental health, and the cost-of-living crisis have the potential to result in even higher rates of Adverse Childhood Experiences (ACEs). Should public services not be able to mitigate these factors, they are likely to result in further increases in the rate of children being looked after, beyond those indicated by the population projections.

Whilst some of that impact is likely to be felt in the near future, there is potential that some of the demand might not become evident until some years in the future, thereby extending the peak beyond 2028. This is because adverse experiences accumulate over time.

## The Long-term Impact of the Pandemic

The most robust evidence we have in relation to the impact of the Pandemic is from the Welsh Government's Technical Advisory Group. Its paper 'Five Harms Arising from Covid-19: Consideration of Potential Baseline Measures'; 9 July 2021 states:

"Studies suggest that some of the impacts of the Pandemic on children and young people in particular will not become evident for some time. While the evidence is of varying quality, consistent themes include impacts on socialisation, communication, emotional and mental health, low levels of physical activity, increased sedentary behaviour, healthy eating and obesity. A review of 63 studies from previous pandemics, such as SARS in 2003, has demonstrated the potential for long-lasting effects. The length of time that children felt lonely predicted mental health problems up to nine years later, particularly depression. Children who had experienced more extreme isolation, such as quarantine, were five times more likely to require support from mental health services and experienced higher levels of post-traumatic stress. Poor emotional health in childhood is linked to long-term mental and physical health difficulties, and poor academic and occupational functioning. It is the number one predictor of adult life satisfaction".

The paper further indicated that the harm related to COVID-19 can be broadly grouped into 5 key areas:



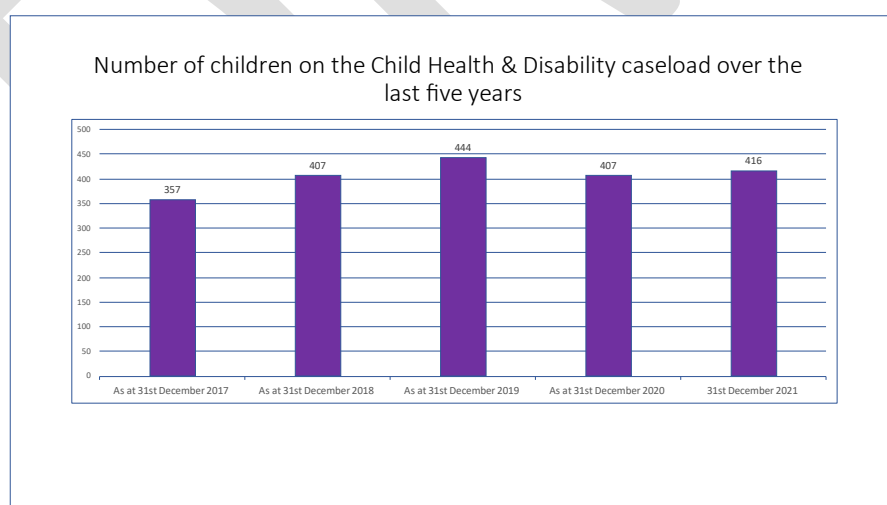
1. Harm directly arising from SARS-CoV2 infections;
2. Indirect COVID-19 harms due to surge pressures on the health and social care system and changes to healthcare activity, such as cancellation or postponement of elective surgeries and other non-urgent treatments (e.g. harm from cessation of screening services) and delayed management of long-term conditions.
3. Harms arising from population based health protection measures (e.g. lockdown) such as, educational harm, psychological harm and isolation from shielding and other measures.
4. Economic harms such as unemployment and reduced business income arising both from COVID-19 directly and population control measures, like lockdown.
5. Harms arising from the way COVID-19 has exacerbated existing, or introduced new, inequalities in our society.

All of these areas have potential to impact on children, young people or their families, to build a toxic mixture of Adverse Childhood Experiences (ACEs).

In the context of children who have suffered additional non-pandemic related ACEs, pandemic associated events which lead to separation from a carer or relative might be particularly significant as a tipping point. Mitchell, Rosch-Marsh and Robb (2014), identified studies have shown the characteristics and backgrounds of young people in secure accommodation (our most vulnerable young people) have a number of common features including experiencing multiple losses and separation from a parent or significant care giver.

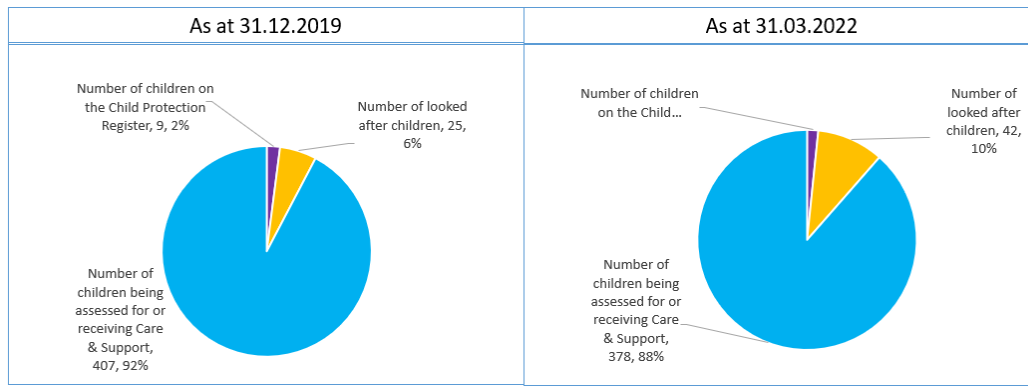
## Disabled Children

The effect of the pandemic is particularly notable on the population of disabled children and their families. The charts below, show that the cohort of disabled children known to Children's Services has remained relatively stable over the period, but the numbers of children who have become looked after has increased by 68% from 25 to 42. It is well noted that the effect of the pandemic has been particularly severe on disabled people.



The number of children on the Child Health & Disability Team's caseload has increased to 427 as at the 31st March 2022

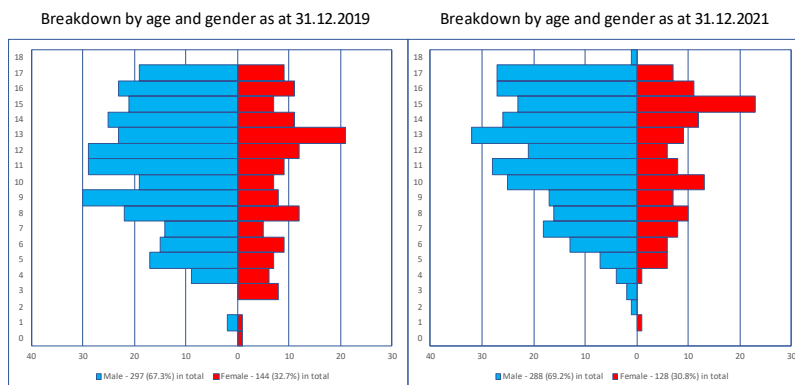
Breakdown of Child Health & Disability caseload by whether on the Child Protection Register, looked after or being assessed/receiving Care & Support



The number of looked after children on the Child Health and Disability Team caseload has increased from 25 to 42, 6% to 10% of the caseload, over the last two years. This equates to a 68% increase in looked after children.

Age profiles show similar patterns as for the general population, of increasing rates of being looked after as children get older.

Over time comparisons showing breakdowns of children on the Child Health & Disability Caseload by age and gender



## Unaccompanied Asylum-Seeking Children

Unlike the general trend in rates of looked after children known to Children’s Services, rates of Unaccompanied Asylum-Seeking Children are not affected by numbers of local births or rates of local Adverse Child Experiences, but are affected by global factors which lead people from other countries to seek a safe home in the UK.

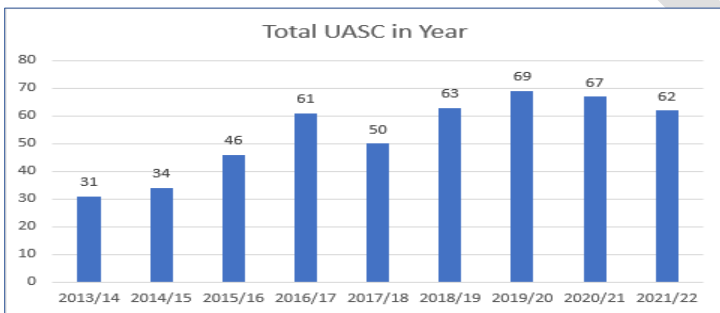
Unaccompanied asylum-seeking children can arrive in Cardiff via a number of routes. One of the most common routes is spontaneous arrival. These young people usually present at the Home Office or in the police station looking for support because they are unaccompanied children.

Some others, but not many, are dispersed to Cardiff by the Home Office as adults but claim that they are under the age of 18. Occasionally, the local authority will agree in these instances to undertake an age assessment.

Another route of arrival is through the National Transfer Scheme. This has operated on the basis of a rota system since July 2021 under the then voluntary scheme and from December 2021 under a mandatory scheme. Regions and nations take it in turns to assume responsibility for unaccompanied children. A weighting system determines the number of children each local authority can expect to receive. Allocations may be made up to a threshold of 0.07% of the local authority's general child population. But this is not a 'cut off' point. While transfers generally operate within the framework of the rota, local authorities retain the flexibility to agree transfers outside their turn, where a particular placement is in the best interest of the child, for example where a child may have a family connection. Where such a transfer takes place, this is considered as part of the receiving authority's allocation of placements under the next cycle.

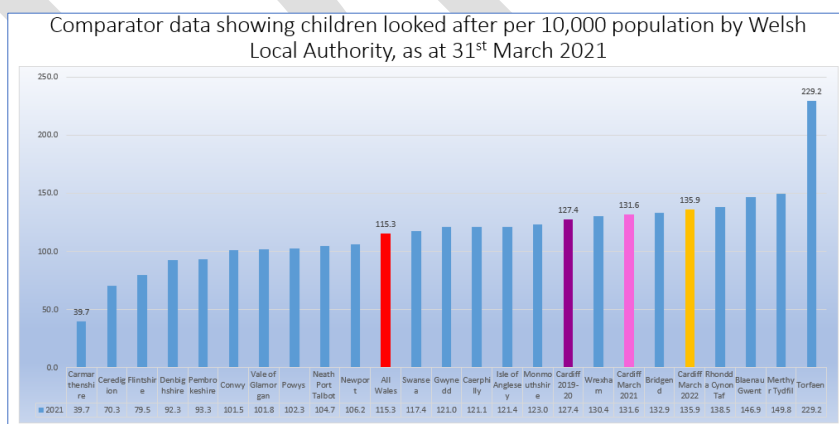
12 Unaccompanied Asylum Seeking Children were placed by Cardiff under the mandated National Transfer Scheme during 2021/22 with many being placed prior to this. There were a total of 38 being looked after at the 31st March 2022. The youngest four were aged 15 years of age. The other thirty-four were aged 16 and 17 years old.

The following chart shows the number of unaccompanied asylum-seeking children who were placed in Cardiff over the last nine years. The number doubled between 2013/14 and 2016/17 and have remained approximately steady since. For the reasons explained above, it would not be appropriate to project demand for placements forward based on previous trends.



### Comparison to other Welsh Local Authorities

This graph shows the number of looked after children per 10,000 population compared to other Welsh Local Authorities as at 31st March 2021.



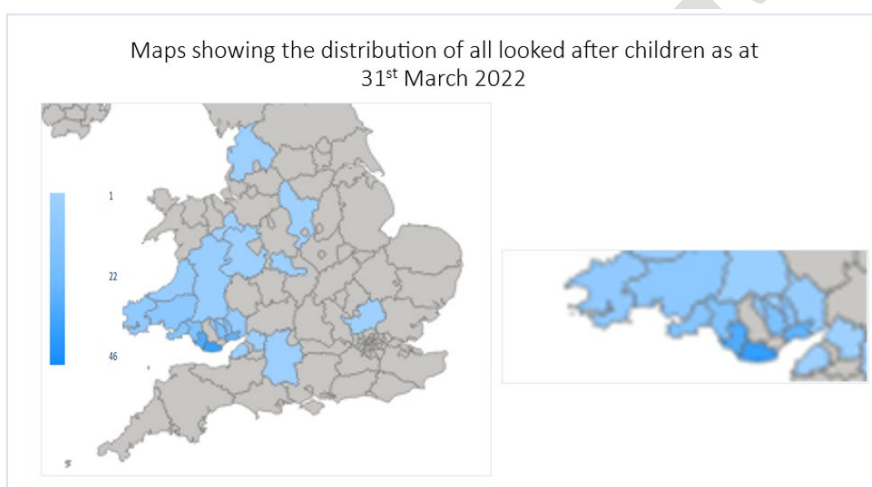
Cardiff figures for March 2020 and March 2022 are included as a comparison, our numbers per 10,000 are increasing, however Cardiff is not an outlier with 135.9 per 10,000 currently. Rates are in excess of the Wales average, but this is not unexpected given the area's city demographic.



# Current Provision

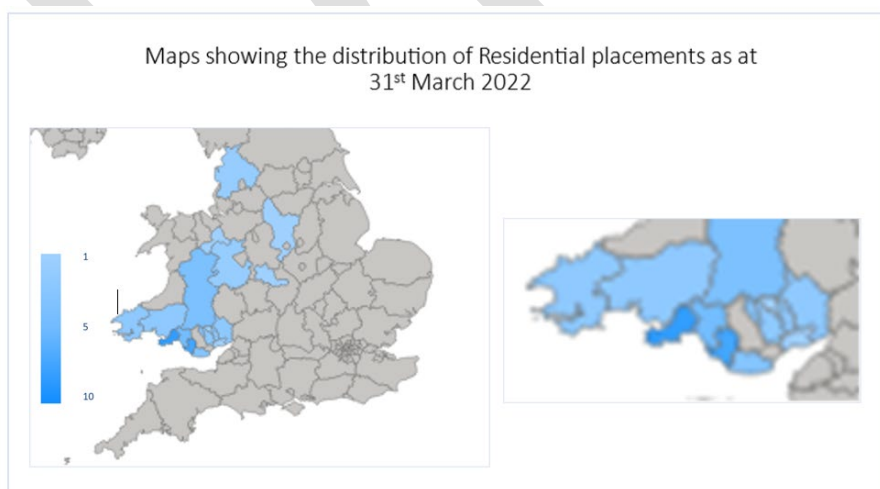
## Where do Cardiff Children and Young People live?

At the end of March 2022, 64.6% of children looked after lived in Cardiff whilst 35.4% were living out of County. The map below shows the vast majority were placed within South Wales local authorities, but some were placed further away in England.



Living closer to home has many benefits including maintenance of family and friendship relationships, remaining close to their communities, being able to attend local schools and access health services. There are circumstances where it is appropriate for a child or young person to live away from Cardiff, where they are placed in kinship placements with members of their family, or where it is not safe for a child to be placed close to home. Some of our placements have however been a result of a lack of placement availability or due to the location of a specialist placement setting.

At the end of March 2022, 25% of children living in residential placements were living in Cardiff, whilst 75% were living out of County.



Our aim is to year on year see more of our children and young people living closer to home.

## What kinds of Homes?

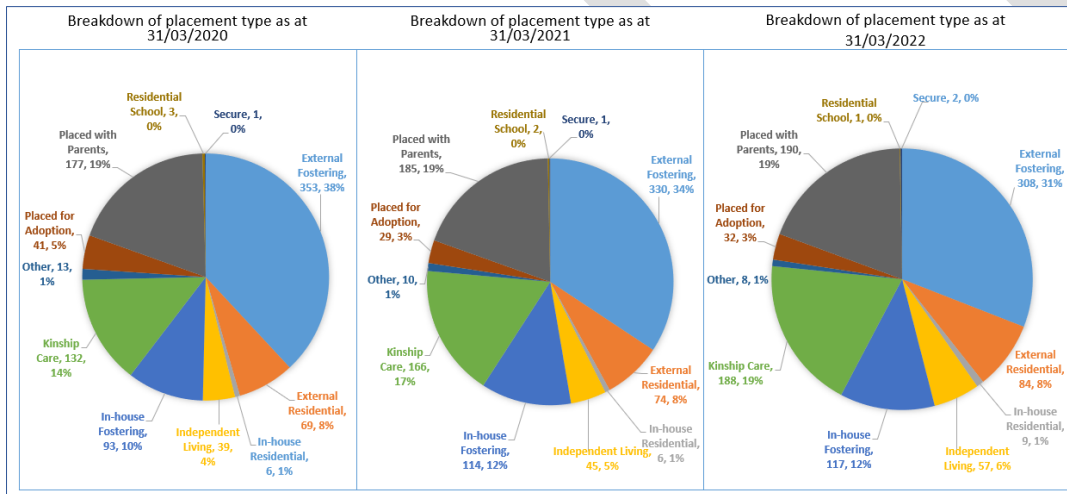
The pie-charts below shows the type of homes our Children Looked After are living in.

They show there is an increasing number of children and young people living with their own families or with people connected to their own families, 'placed with parents' or in 'kinship' arrangements.

They show rates of in-house fostering are increasing (from 93 in 2020 to 117 in 2021) and use of external fostering is decreasing in both relative and absolute numbers (decreasing from 353 (38%) in 2020 to 308 (31%) in 2022). It is important to note that this is in the context of an increasing number of children looked after.

The rate of external residential has remained a constant proportion but increased in numbers from 69 to 84 over the three year period. Numbers of children in in-house residential have increased by a third from 6 to 9. This reflects the addition of two new properties to the Council's children's home portfolio.

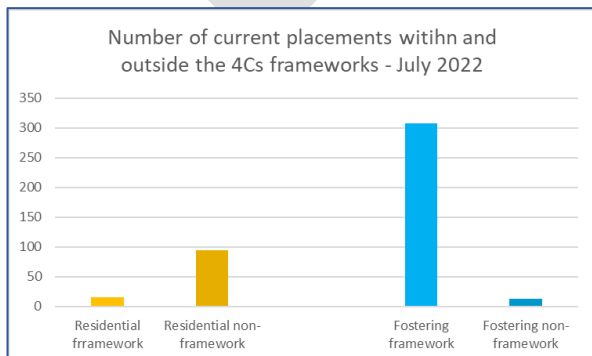
Rates of Independent living have increased from 39 to 57 young people.



## How these placements are commissioned

The Children's Commissioning Consortium Wales (otherwise known as 4C's) manages the All Wales Fostering Framework (2016); the All Wales Residential Framework (2016) and the All Wales Residential Flexible Framework (2019) on behalf of Welsh Local Authorities which are part of the syndicate. Cardiff has been a member since its inception in 2012.

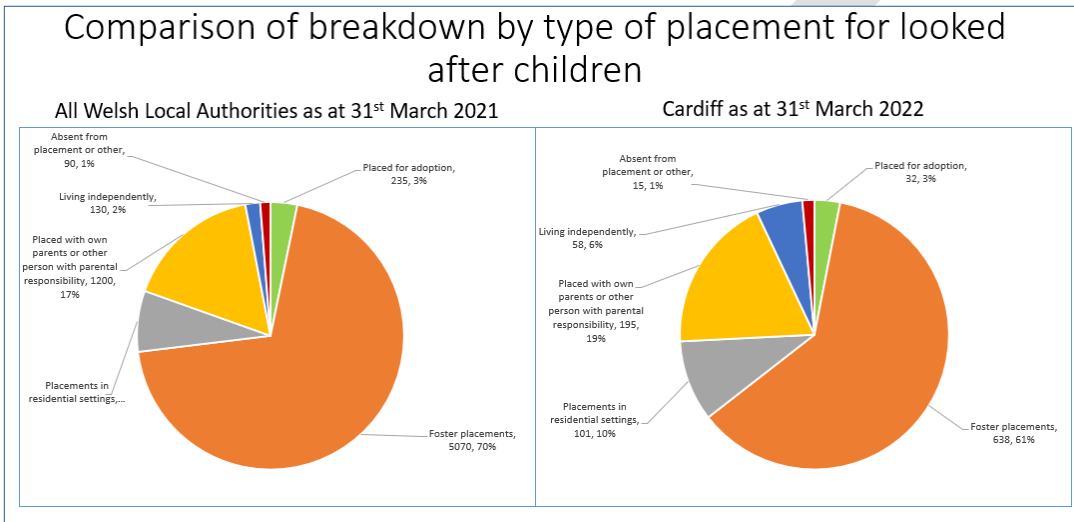
The Frameworks have been negotiated by 4Cs with providers on behalf of the consortium, to maximise the benefit of standardised contracts, terms and conditions, and purchaser economies of scale. There is however a cost to providers to become registered on the frameworks.



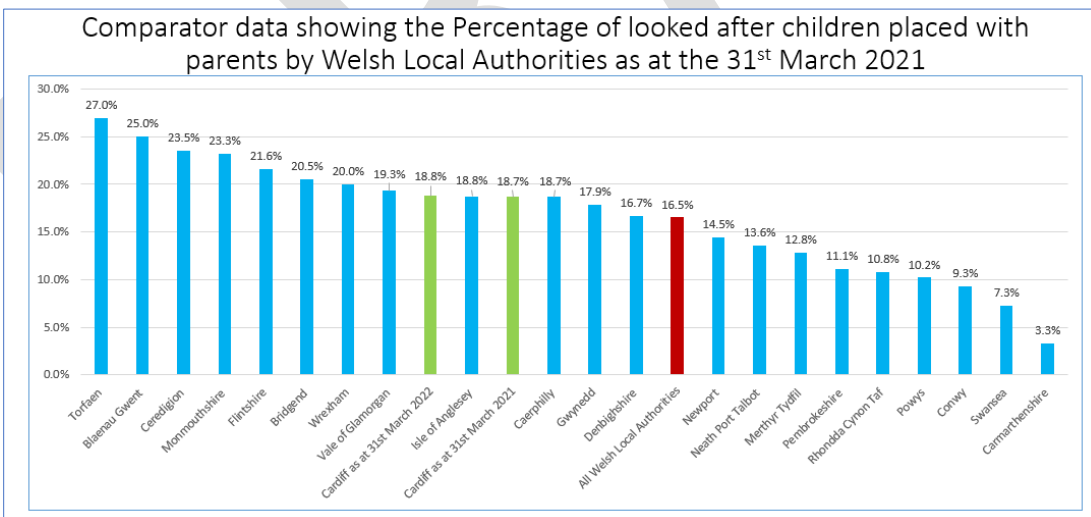
The chart above shows that whilst 96% of children are placed with fostering providers signed up to the framework, only 16% of children are placed with residential providers signed up to the framework. This reflects the relative strength of supply and demand forces across the two sectors, along with residential providers preference to develop local arrangements.

### How does this compare to other Welsh Local Authorities?

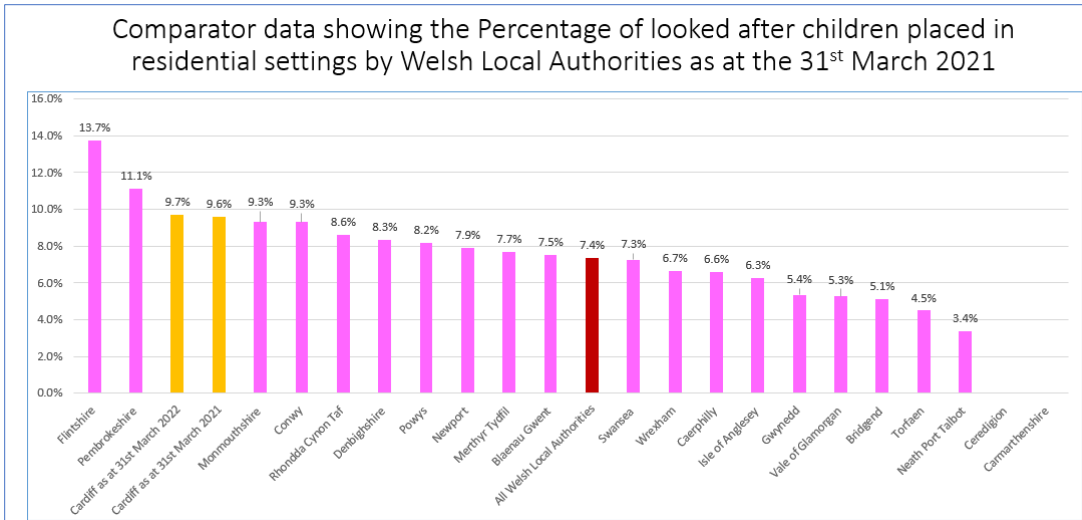
Cardiff has 2% more children placed with parents, 4% more Independent Living placements and 3% more residential placements than the percentage for Wales. All Wales figures indicate 9% more children are placed in foster placements across Wales compared to Cardiff's rate.



The chart below shows that Cardiff sits slightly above halfway in the rate ranking of Welsh Local Authorities Looked After Children Placed with Parents.

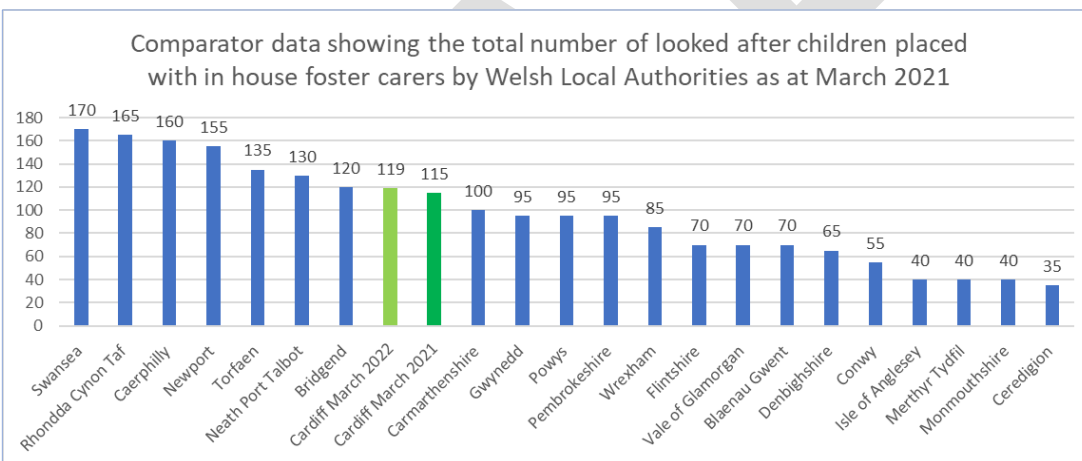


Cardiff has towards the highest rates in Wales of Looked After Children Placed in Residential Settings. Although this is only 2% higher than the Welsh Average.



\*Please note, these figures do include Child Health & Disability Team’s placements.

Cardiff is at the lower end of the upper third of the Welsh ranking of number of Children Placed with In-house Foster Carers.



## Focus on Residential Placements

In alignment with the preference of the First Minister, set out in the Welsh Government’s ‘Removing Profit from the Care of Looked After Children’ Programme Board Terms of Reference, for the initial scope of the work to focus on private profit in relation to children’s care homes, this section focuses on Residential placements.

Future six monthly updates of this Cardiff Placement’s Strategy will add further detail in relation to independent sector foster care, supported accommodation for care leavers and care at home for disabled children, in alignment with the phasing of that Welsh Government’s programme.

The chart above (at the beginning of the What Kind of Homes Section) shows that residential placements have remained a constant proportion of total placements over the 3 year period at 9% (8% external, 1% in-house).

Absolute number of children have increased in external residential settings from 69 to 84, but given the consistency in the percentage, this is most likely to reflect the increasing size of the population of looked after children rather than a shift in dependency.



In house residential provision has increased from 6 to 9 children between 2019 and 2021. This is because we have increased our children’s home capacity with the launch of our Assessment Centre and Pop Up Pop Down emergency accommodation.



Assessment Centre



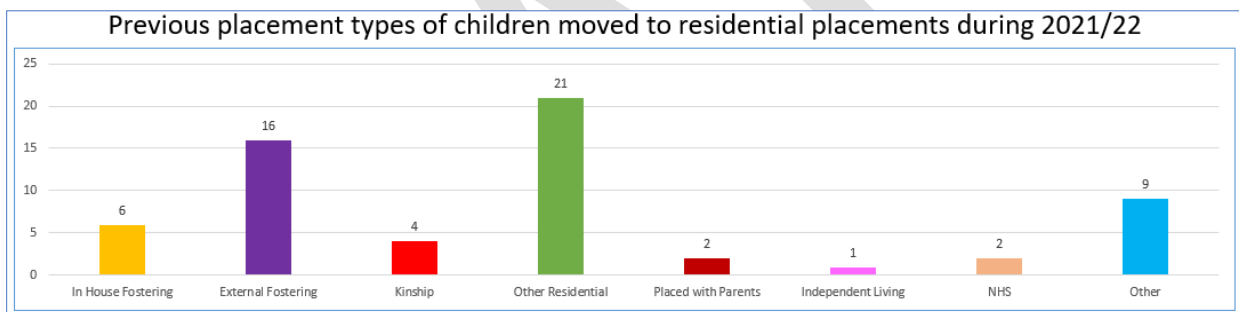
Emergency Accommodation



Existing residential provision

We have continued working with local residential providers to secure an additional 4 residential beds in Cardiff during 2021-22. This builds upon work in previous years to attract independent providers to the area, so that we can place more children close to home.

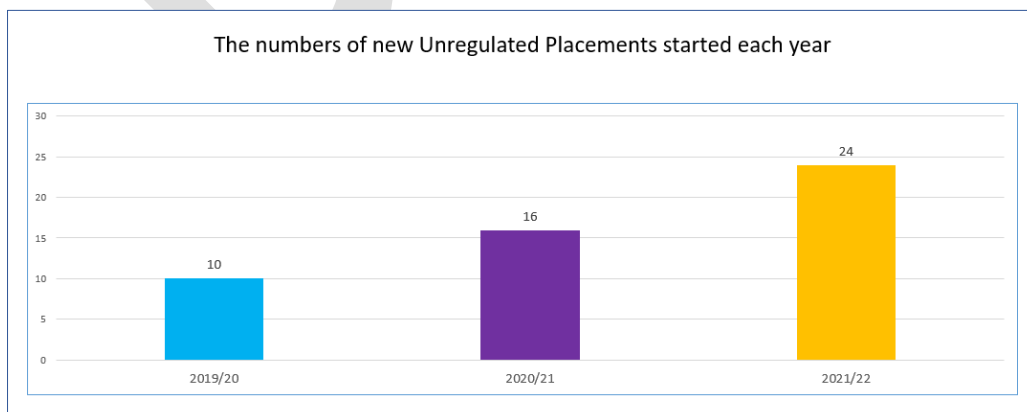
The majority of moves to residential placements (21) have been from another Residential placement (34%), whilst 16 (26%) have been from external fostering placements in the last year.



It should be noted that 2 placements were directly from the NHS.

The issue of increasing complexity can also be seen in that one 5-10 year old was placed in residential care at the start of being looked after (aged 9).

The increasing number of unregulated placements shown in the chart below, also indicates that it is becoming progressively more difficult to find providers for children with the most complex emotional mental health need within or outside Cardiff.



Some of these children were looked after at the time of the crisis, some had previously been known to Children’s Services, a small proportion had never been known to Social Services.

These are children requiring safe accommodation, where no provider responded to placement tenders, or upon further liaison a potential provider withdrew their offer. These placements are exceptional interim arrangements whilst regulated placements are urgently sought, until a specialist placement becomes vacant, or with a view to bringing an unavoidable bespoke arrangement under regulation.

There is an unpredictable pattern of demand noted in terms of numbers of children presenting and complexity of need, with an upward trajectory.

Some of these children require secure welfare care or are on the edge of needing it. During March, April and May 2022, there was one child in each month in secure welfare placements. There is only one Secure setting in Wales. This is Hillside in Neath Port Talbot. It can be difficult to source accommodation in a secure setting in an emergency. Cardiff children have been accommodated in Scotland as well as England.

The table below (2017) highlights that the Cardiff and the Vale of Glamorgan region has significantly lower levels of therapeutic provision for children and young people than in other parts of Wales. This means that to meet the most complex needs of children and young people there is a reliance on services away from Cardiff.

Region	General therapeutic and specialist care		Short break / respite service		Disability only	
	Beds	% of region	Beds	% of region	Beds	% of region
North Wales	119	60%	28	14%	51	26%
West Wales and Powys	85	61%	29	21%	25	18%
Western Bay	77	73%	21	20%	7	7%
Cardiff & Vale	23	26%	28	32%	36	41%
Cwm Taf	37	70%	12	23%	4	8%
Gwent	60	76%	9	11%	10	13%

*Source: Data Cymru; Childrens residential profile of Care Wales -Care providers’ statement of purpose analysis (December 2017)*

This has been a key driver of our plans to add Safe Accommodation to our children’s home portfolio in 2022/23. This additional Therapeutic Children’s Home and outreach service will be part of a Joint Recovery Service which will provide an integrated response to young people requiring support to be safely discharged from hospital following an episode of emotional distress.

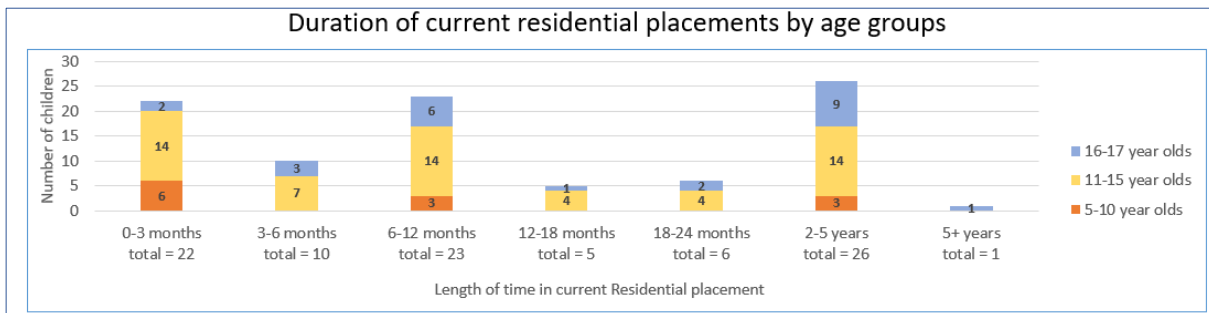
We are currently working on putting this service in place through, Short, Medium and Long-term plans, under three workstreams. The workstreams will aggregate to deliver the vision.

The first workstream will address the immediate presenting pressure, to put immediate arrangement in place to safely care for children who are subject to delayed discharge from hospital for reasons of emotional mental health. The second will tap into existing providers in the market and work with them to wrap a new Assertive Outreach Service around children. The third will commission robust long-term accommodation (a children’s home) and a permanent multi-agency workforce within the next financial year.

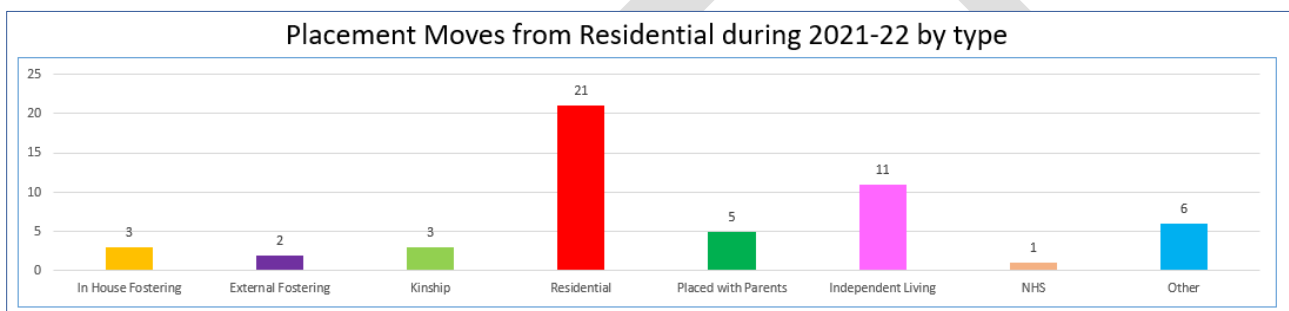
This aligns with work we are doing to adapt the North Yorkshire Model to develop a ‘Right Place’ model for Cardiff, using a No Wrong Door approach. This will link professionals across agencies to

support children across residential, fostering, edge of care, and leaving care settings.

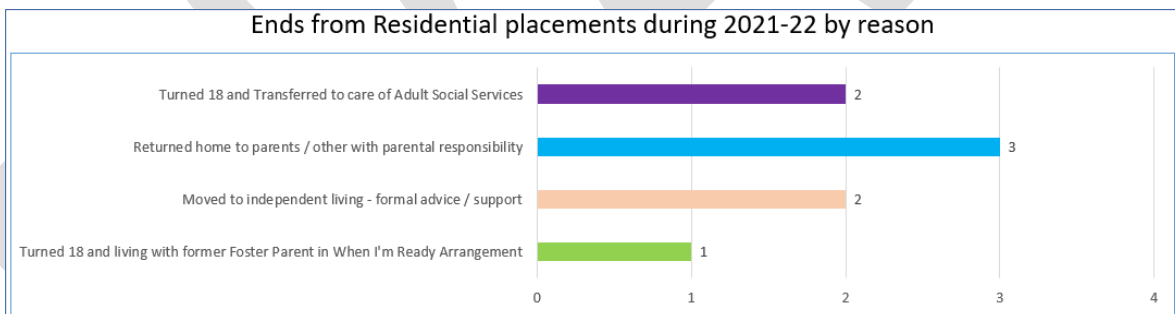
Of all children looked after in residential placement, 28% (26) of children have been in their current placement between 2 and 5 years, 25% (23) have been looked after for 6-12 months, and 24% (22) have been looked after for 0-3 months.



Just one, a 17 year old has been in their residential placement 5 years or more.



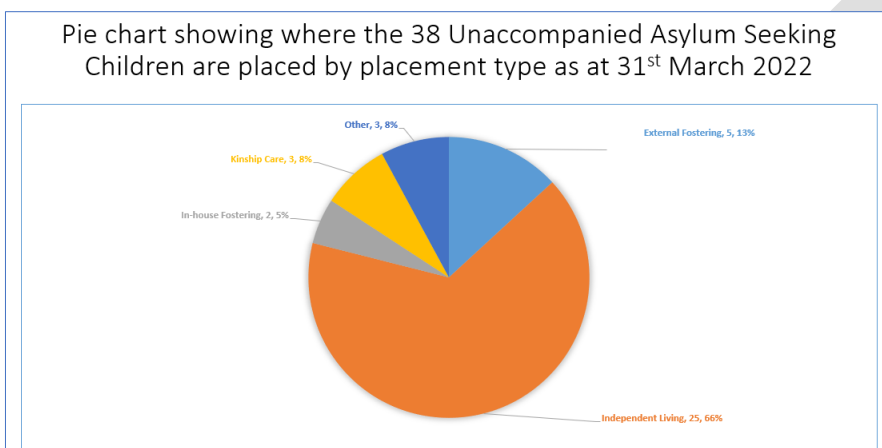
The majority of children (21) who moved from one residential placement moved to another (40.4%), mirroring the moves into residential, whilst 11 (21.2%) moved to an Independent Living placement.



Of those who left care from Residential, 5 (62.5%) turned 18. 3 (37.5%) returned to live with a parent / other person with parental responsibility.

## Overview of placements for Unaccompanied Asylum-Seeking Children

Of the 38 Unaccompanied Asylum Seeking Children being looked after at 31st March 2022. The youngest four aged 15 years were placed in 1 kinship placement, 1 in house foster placement and 2 external fostering placements. The other thirty-four 16 and 17 years olds were living in the remainder of placements shown below. The majority were placed in semi-independent living.



It should be noted that not all unaccompanied asylum-seeking children who are placed in a local authority remain to take up long term placements. If the receiving local authority concludes from its own age assessment that the individual is an adult, they will cease to be eligible for support from the local authority. Young people who are awaiting an age assessment tend mostly to be placed in independent living accommodation until their age assessment is completed. Their numbers are small.

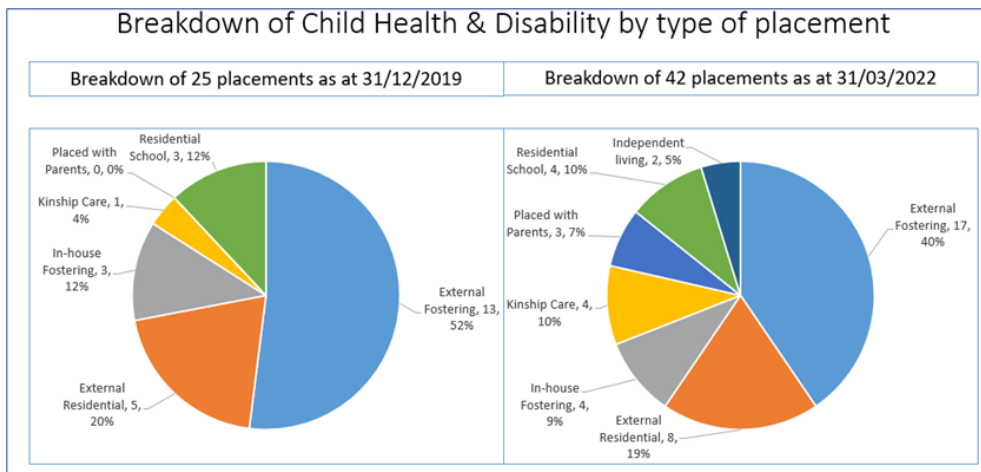
In planning future placement capacity for this group of children and young people, the fact that the majority of these young people are aged 16 and 17 years old along with the need to place those awaiting age assessment with a risk assessment, means that demand is likely to mainly be for semi-independent and independent living placements with floating support. We have worked with the Salvation Army to open a 6-bed unit specifically for unaccompanied asylum-seeking children. This is now full to capacity since its opening in April 2022.

## Overview of Child Health & Disability Placements

Trends in placements for disabled children should be interpreted with care, due to relatively small numbers. Relatively small changes in numbers can result in relatively large changes in rates.

The chart below shows the majority of disabled children were placed in foster care at the end of March 2022. Since 2019 there has been an increase in the proportion of disabled children being placed with kinship carers or placed with parents. This is reflected in a decrease in the proportional use of external foster care.

There is a proportionally higher proportion of disabled children in residential or residential school placements than non-disabled children (29% compared to 9%) at the 31<sup>st</sup> March 2022. This reflects the increasing complexity of need among this group of children. The number of children has increased since 2019 from 8 to 12.



## Overview of Supported Housing

In October 2015 the Young Person’s Gateway was launched in Cardiff, to offer housing solutions for young people aged between 16 and 21. The Gateway enables young people aged over 16 years to access mediation services, supported housing and specialist floating support services.

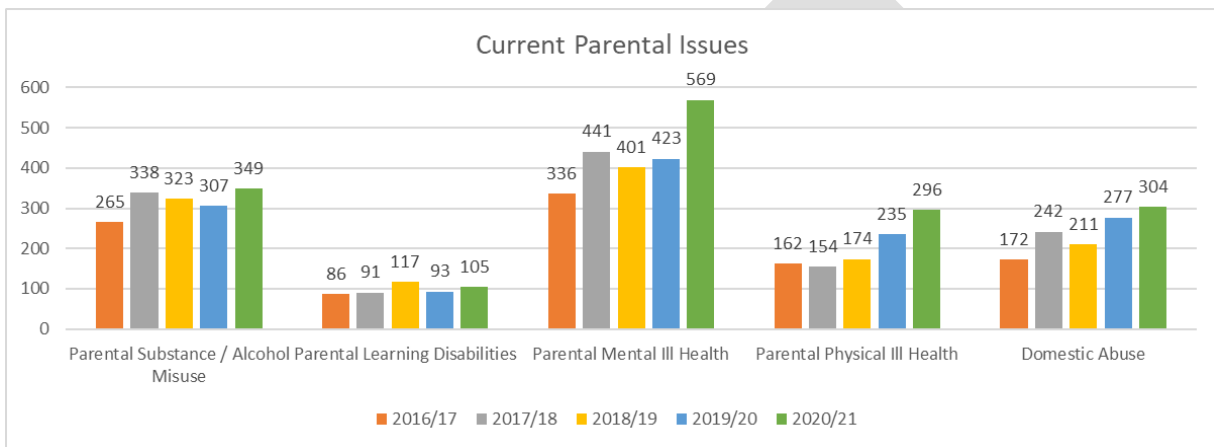
The service is available to young people to whom the Council has a duty through social services or homelessness legislation. During 2021/22 we worked with colleagues in Housing to secure an additional 15 Young Person’s Gateway units in Cardiff, with more due to come on stream in 2022/23.



# Needs Analysis

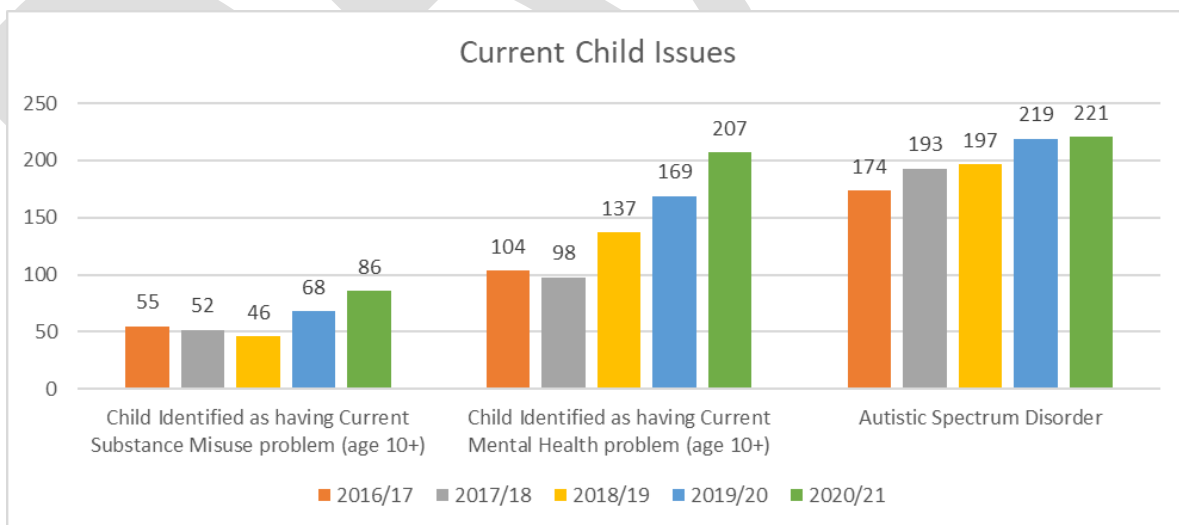
## Children Receiving Care and Support

The two charts below highlight the key challenges facing families evidenced in the 'Children Receiving Care and Support Census'. There are some important messages.



For parents there are consistent issues regarding their mental health, use of substances, and experience domestic abuse. Parental physical ill health is becoming an increasing issue.

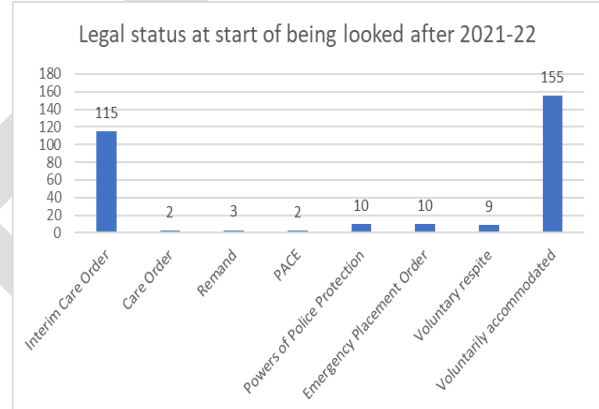
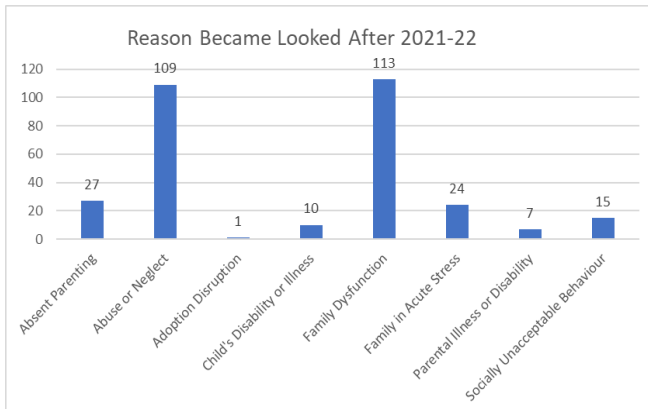
For our children there are also issues regarding their substance misuse and mental health needs. The number of children and young people with autism is much more significant an issue than at the time of writing the previous strategy.



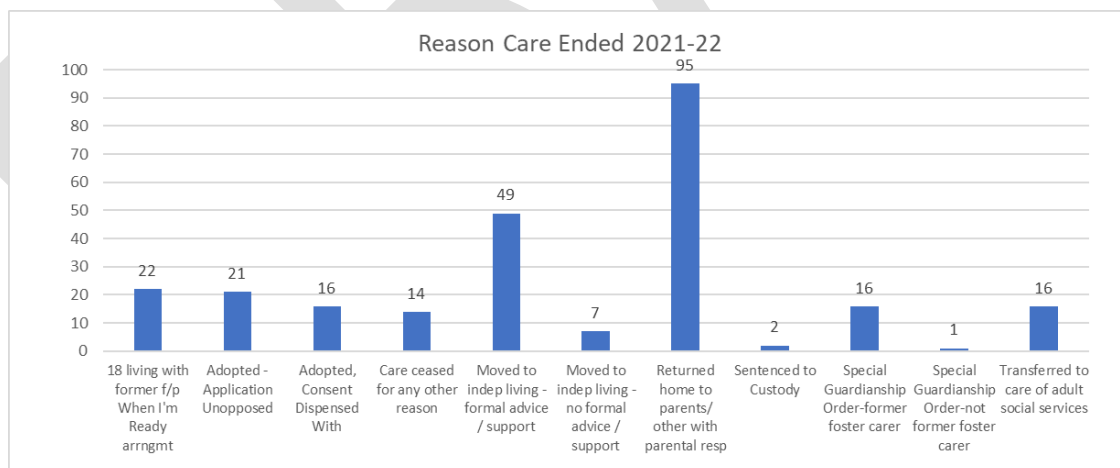
## Reasons Children Became Looked After and Reasons Care Ended

The following charts show the majority of children and young people became looked after in 2021/22 for reasons of family dysfunction, abuse or neglect (37% and 36% respectively). 9% were for reasons of absent parenting. 8% for reasons of family in acute stress. 5% for reasons of socially unacceptable behaviour. 3% were for reasons of the child's disability or illness. No other individual category exceeded 2% of children.

At the start of being looked after, 51% of children and young people had a legal status of voluntarily accommodated and 38% a status of Interim Care Order. No other category exceeded 3%.



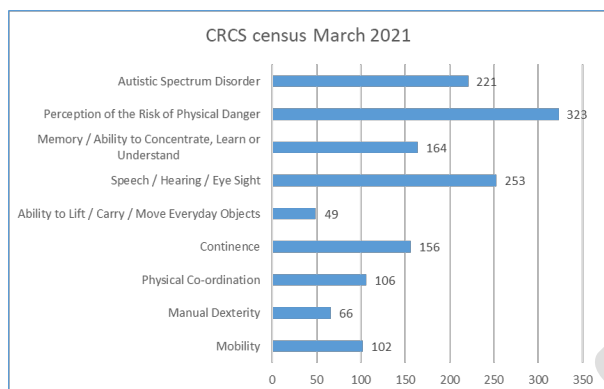
Upon care ending, 37% of children and young people returned home to live with their parent or other person with parental responsibility. 22% moved to independent living (with formal advice and support, or without). 14% were adopted (unopposed, or with consent dispensed with). 8% to live with former foster carers in When I'm Ready arrangements. 6% entered a Special Guardianship Orders with a former foster carer. 6% transferred to the care of adult social services. 1% were sentenced to custody. No other individual category exceeded 1% of children and young people.





## Focus on Disabled Children

The 2021 census shows the types of need experienced by disabled children known to Children’s Services. This is important knowledge in designing service models, designing homes and informing staff training plans.



Further analysis of the needs and services provided to disabled children will be provided in subsequent updates of this strategy.

## Focus on Children at Risk of Exploitation: Support for Our Children in the Youth Justice System

Some children in need of support from the Youth Justice Service remain appropriately at home with their families with support to manage contextual risk and make safer choices.

However, we know children who are looked after are particularly vulnerable to exploitation. That we need to pay extra attention to safeguard them from becoming criminalised and falling victim to those who exploit them. We also know the importance of working with young people who are in, leaving or have left custody to build their resilience and resettle them safely into homes and communities so that they do not go back into custody.

To change this, we need to work with in-house and commissioned placements, across local authority directorates and with partners to achieve a wholesale change in thinking, to better protect our young people and to avoid criminalisation.

In Cardiff, the Safeguarding Adolescents from Exploitation (SAFE) model is being embedded and a suite of SAFE tools are being used to support the process. The SAFE Operational Groups have received strong partnership support and buy in, and we are seeing improved relationships, communication and information sharing as a result. This is key to enable us to keep up to date with the ever-changing themes and trends in relation to criminal exploitation and sexual exploitation, so we can minimise the risks to young people, their families and communities.

Further analysis of the needs and services provided to children at risk of exploitation and children receiving support from our Youth Justice Service will be provided in subsequent updates of this strategy.



## Key Themes from the review of 100 referrals for Residential and

### Foster Care *\*It should be noted that this review was undertaken pre 2019.*

In order to understand the needs of our children and young people who are referred for fostering or residential services, a detailed desk-top audit took place of 104 referrals. This has identified some important key themes. Of the sample 18 were living in residential provision and 86 were living with foster

families. Of the residential homes 14 were standard residential homes, 3 non-standard and 1 was a mother and baby placement. Of the Fostering families, 64 were standard family placements, 9 were for solo carers placements, a further 9 were for sibling placements, and 4 were mother and baby placements.

In terms of their demographics:

- 50 were female and 54 male. 19% were aged under 5, 17% were aged between 6 and 10, and 45% were between 11-15 years old, and 17% were over 16.
- In terms of ethnicity 68% were categorised as white British, 12% were Asian, 9% Black and 9% from Mixed backgrounds.
- Seventy-three had English as their first language
- Five were unaccompanied asylum seekers.

There were a variety of needs evidenced in the review;

- domestic violence (8),
- unaccompanied asylum seekers (10)
- fostering placement breakdown (9)
- new born, 2 children were yet to be born and 5 were new-born. Two were cases of drug dependency.
- There were 21 cases of absconding behaviour.
- Mental health was a significant issue; Self-harm 11 cases. 7 were identified as having therapeutic care needs (3 of these were Residential placements and 4 Fostering). 6 had made threats or attempts at suicide.
- CSE was a factor in 19 cases: 7 children had experienced current or historical CSE; while a further 12 cases were identified as vulnerable to or at risk of CSE.
- 11 were identified as having substance misuse issues. In 7 of these cases cannabis was stated to be the drug abused, while others were unspecified.
- 14 had been or had shown potential to be violent, towards staff or other children.
- Special Needs: 4 were identified as having an ASD and 3 were indicated to have SEN issues.

### What do our staff say regarding this mini-needs analysis?

As part of the development of this strategy, a staff focus group assured the conclusions regarding the needs of our children and young people. Broadly, they were in agreement with the broad outline of needs contained within this section with five additions. The additional issues were raised by the workforce:

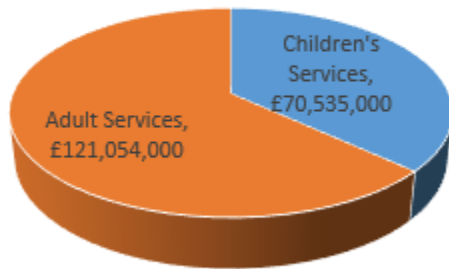
- They thought there should be a greater emphasis placed on behaviour and emotional issues being a key need especially in the 11-15 age group.
- There seem to be more sibling groups being looked after.
- They thought there were significant mental health needs being partly masked by different labels and professional perspectives.
- The needs of children and young people are complex and multi-faceted.
- Needs are becoming more complex which is reflected in the range of needs being described.

There is a great deal of synergy between the Children in Need of Care and Support Census, staff and provider views and the needs of our Children Looked After from the desktop analysis. There is a consistent picture on the range of needs.

# Financial Analysis

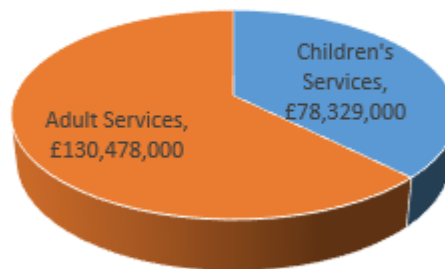
The financial support that is required to ensure that services are available and suitable to meet the needs of vulnerable families and individuals in Cardiff is significant.

Social Services Budget 2021/22  
£191,589,000



Children's Services Adult Services

Social Services Budget 2022/23  
£208,807,000



Children's Services Adult Services

Social Services budgets are a key element of Council costs and work has been focused in the past 12 months to increase the visibility of service performance and its financial impact. Work with corporate colleagues in the Resources Directorate has been exceptional and information based decision making is helping to ensure that the financial impact of implementing service priorities are planned from the outset.

It should be noted:

- Improved value for money has been achieved with increasing use of kinship arrangements and increased in house fostering provision reducing the dependency on external fostering providers. In particular real gains have been achieved in relation to in-house fostering provision for pre-school and primary age children.
- Cost avoidance savings of £4.5 million have been realised as a result of shifting the balance of care.
- The Joint Recovery Service has received £1.4 million from the Regional Integration Fund (RIF).

In previous years, financial planning has been based on the evidence of previous demand and likely population growth but the impact of the pandemic has made predicting demand challenging indeed. In recognition of these challenges Welsh Government have provided a temporary COVID-19 Recovery Fund to assist us to address immediate issues. We very much welcome this additional resource and our use of the Recovery Fund demonstrates our commitment in Cardiff to prioritizing the needs of children, young people and their families and those that care for them.

Additional financial information and analysis, including that relating to the cost of implementing our plans will be provided in the next six monthly update of this strategy.

# Analysis & Key Messages

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## What are the trends we can expect to see?

Analysis of the data above suggests the following:

- The total population of children and young people in Cardiff has been on an upward trend in recent years. The population increase is likely to peak in 2023.
- The peak is expected to last until 2028 for children aged eleven and older.
- Most of our children looked after fall into the 11 and over age band, although some are younger.
- There is potential that the peak in numbers of children looked after could be higher and last for longer than the general population. This is because there are currently fewer children and young people ending care than starting care. We expect the unprecedented impact of the pandemic, the cost-of-living crisis, the increase in pressures on mental health, and the knock-on effect to other Adverse Childhood Experiences such as substance misuse and domestic abuse to continue to increase demand for placements.
- Cardiff's rates of children looked after are in excess of the Wales average, but this is not unexpected given the area's city characteristics. Despite its population size and demographics, Cardiff is not an outlier among the rates of looked after children in Welsh Local Authorities.
- There is increasing complexity in the needs of children and young people being looked after, with a notable increase in the impact of emotional mental health and wellbeing needs requiring larger numbers of specialist placements.
- The effect of the pandemic has been particularly severe on disabled people and there is potential that without mitigation, the disproportionate increase in the number of disabled children becoming looked after could continue.
- It is difficult to predict trends in Unaccompanied Asylum-Seeking Children since rates are affected by global factors which lead people from other countries to seek a safe home in the UK, together with the numbers presenting and dispersed to Cardiff. The number is not expected to decrease.

## What does the intelligence tell us about the shape of provision?

- There is a high degree of stability for most children who are looked after in Cardiff. But there currently remains an imbalance between in-house and externally commissioned services which adds complexity to achieving our not-for-profit objective. We are however beginning to see a shift arising from work in recent years, and have plans which we anticipate will further shift the balance towards achieving our aim.
- We are making good progress in shifting the balance of care by increasing number of children and young people living with their own families or with people connected to their own families - 'placed with parents' or in 'kinship' arrangements. We are also making progress in recruiting more in-house foster carers. As a result, use of external fostering is decreasing in both relative and absolute numbers. This is significant as it is within a context of an increasing number of children looked after. We expect the recent launch of Foster Wales to improve this further.
- There remain however too many out of area placements made for reasons of local sufficiency.

The majority of out of area placements are in South Wales, reflecting the particular challenges of finding either in-house or externally commissioned placements within a city.

- Residential placement sufficiency is a significant issue in particular. Although the rate of external residential has remained a constant proportion of total placements. The market is not currently able to meet the shifting demand for increased numbers of placements for young people with complex emotional and mental health needs.
- There is limited therapeutic residential provision in the Cardiff area, resulting in the need for out of area services or bespoke placements.
- Too often external residential placements breakdown and children have to move to another provider.
- In addition to the challenge of adding residential capacity to the portfolio, during the year there have been a number of external provider performance issues and providers entering escalating concerns. Some of those issues were as a result of COVID-19 and its impact on staffing.
- We have recently seen an increase in the number and consistency of children being placed in unregulated placements because we have not been able to source from the market regulated placements to meet needs.
- It has been challenging for us and for external providers to find properties to develop into children's homes in Cardiff. This is more difficult in Cardiff than surrounding areas because of the extent to which the housing market is competitive and property prices are higher. Despite this, we have increased our children's home portfolio from one to three in recent years, and have worked with external providers to add additional external children's home capacity within the City. Further additions are planned.
- We have identified that the North Yorkshire Model has potential to have a substantial positive impact across our placements. In Yorkshire the model has reduced for that local authority, the use of external agency, the use of out of county placements, and reduce the duration of residential care. As such this model should significantly aid us in achieving our not-for-profit objective. We are working closely with North Yorkshire to develop a 'Right Place' model for Cardiff, and develop Safe Accommodation as part of a Joint Recovery Service. Using a No Wrong Door approach, the model is particularly resilient and effective, because it links professionals across agencies to support children across residential, fostering, edge of care, and leaving care settings, leading wholesale change in a complex system.
- A key feature of the North Yorkshire Model is that it positions complex issues systemically within relationships rather than in children or people. This aligns importantly with four of the five priorities in Cardiff's Corporate Parenting Strategy. These priorities were identified through engagement with looked after children and young people who told us what they wanted for their futures. The four priorities are:
  - Improving emotional wellbeing and physical health
  - Better connections, improved relationships
  - A comfortable, safe and stable home whilst in care and after
  - Celebrating our children and young people
- Further collection and analysis of data and intelligence is required to improve capacity and model services for children at risk of exploitation, children in the Youth Justice System, teenagers, sibling groups, step down from residential, disabled children, Unaccompanied Asylum-Seeking Children, children from different ethnic and cultural background. This will be included in future six monthly updates of this strategy.

**"I want to live in Cardiff. I've been all over Wales and it doesn't work"**





# Children's Services

## Commissioning Priorities

Our commissioning priorities set out below reflect our commitment to working in partnership to improve outcomes for our children looked after.

The Cardiff 'Corporate Parenting Strategy' sets out the shared vision of the Cardiff Council and the University Health Board for children looked after.

'A child who is cared for by the Council has the right to expect everything from a corporate parent that would be expected from a good parent. Every good parent knows that children require a safe and secure environment in which to grow and thrive. Parents protect and support their children against the dangers and risks of life. Parents are ambitious for them and want them to reach their potential. Parents celebrate and share in their achievements.'

This Commissioning strategy aims to contribute to this vision with a particular focus on 'safe and secure environments in which to grow and thrive, and parents protect and support their children against the dangers and risks of life'. It will contribute through focusing on 4 key objectives, under which there are 9 priorities which will collectively deliver our commissioning intention.

**Our Commissioning Intention is 'the right homes for our Children Looked After'**

To deliver this we will need to deliver all three Practice, Place and People Priorities of our 'Striving for Excellence Strategy'.

**Our Placement Strategy objectives are:**

1. **Shifting the Balance of Care:** To ensure we are working with families at the lowest safe level of intervention and minimizing the need for children to become looked after.
2. **The Right Place:** the right model of care.
3. **Sufficiency:** increasing the availability of local placements.
4. **To be responsive:** through better needs analysis.

Our analysis of need, and the experiences of our young people, has enabled us to develop the following commissioning priorities:

1. **Early Help and Support to Families:** To develop a range of support services to ensure children can remain at home with their families when it is in their best interests to do so.
2. **Supporting children to return safely to their own homes:** To embed and extend implementation of the Re-unification Framework to support children to return safely to their own homes when it is safe to do so.
3. **Therapeutic and Mental Health Support:** To respond to the therapeutic and mental health and well-being needs of Children Looked After, their parents and carers through the development of a range of services with partners.
4. **Reshaping Support for Disabled Children:** To redesign the pathway for disabled children, including the development of a greater range of support, activity, short break, looked after placements and emergency provision.
5. **Support for Children at Risk of Exploitation:** To implement the Safeguarding Adolescents From Exploitation (SAFE) model across placements and partners, to address and protect children who are looked after from the disproportionate risks of exploitation, criminalisation and the recent increase in serious youth violence.
6. **Our Fostering Service:** To increase the number of children looked after by local authority foster carers.

7. **Our Children's Homes:** To increase the range of local authority residential services to meet the demand from children with most complex needs and continue to invest in our existing portfolio.
8. **Our Commissioned Providers:** To increase the availability of local placements through our collaborative market engagement with Providers to shape provision to better meet the needs of our children and young people. Embedding not-for profit models in the commissioning arrangements wherever possible.
9. **Needs Analysis:** To further develop our understanding of the needs of this important group of children and young people by completing a detailed needs analysis.

As this commissioning program is implemented provision will be accessible to all young people based on their own unique set of circumstances, including; those affected by disability and ill health, those affected by adverse childhood experiences, those from BME communities and those affected by any form of exploitation including unaccompanied children seeking asylum.

The 9 commissioning intentions are explained in more detail on the following pages.





# Objective 1: Shifting the Balance of Care

To ensure we are working with families at the lowest safe level of intervention.

## 1. Early Help and Support to Families

**Priority 1:** To develop a range of support services to ensure children can remain at home with their families when it is in their best interests to do so.

**Outcome:** Fewer children will require commissioned placements.

**Progress:** We have implemented an Interventions Hub to bring together all our in-house interventions. This includes Family Intervention and Support Service (FISS) workers, on call out of hours FISS, Rapid Response workers, Think Safe! and our Adolescent Resource Centre. This has enabled one referral pathway to request support services whilst also improving clarity of roles, reducing duplication, and helping to ensure that children and their families receive the right support from the right person at the right time.

A Family Group Conferencing Service is now commissioned. The number of children remaining with their families in kinship arrangements is increasing, as has the number of children who are on a Care Order but placed with their parents.

During the year we have undertaken a review of children on Placement Orders with prospective adopters, who are not yet placed for adoption.

We have also introduced a Reviewing Hub that builds on the services we already had in place for children on the Child Protection Register and children looked after. This independent review of all children in need of care and support will improve our planning and help to ensure that cases are stepped up and down in a timely manner. It will help us to evidence that children and their families are receiving the right support from the right person at the right time, and reassurance that cases are being managed and closed appropriately.

### Actions:

1. Continue work to discharge Care Orders for children who are placed with their parents where it is appropriate to do so.
2. Work to convert kinship arrangements to Special Guardianship Orders.
3. An integrated edge of care service, based on the North Yorkshire Model is being developed.

**Financial Assumption:** Prevention of placement cost.

## 2. Supporting children to Return Safely to their Own Homes

**Priority 2:** To embed and extend implementation of the Re-unification Framework to support children to return safely to their own homes when it is safe to do so.

**Outcome:** Where it is in their best interests to do so, children who return to live with their families will achieve better individual outcomes. They will not require placements.

**Progress:** The Reunification Framework, was launched during 2021/22. A Reunification Team comprising a principal social worker, social worker and 4 support workers has been set up. In the first instance the team are working with young people subject to section 76 (voluntary care) or who have been looked after for a period of 2 and a half years.

### Actions:

1. Use the Reviewing Hub to ensure cases are appropriately stepped up or down.
2. Broaden the range of cases under the Reunification Team over time.

**Financial Assumption:** Reduction in costs by moving from higher cost to lower cost placements / placement end.

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## Objective 2: The Right Place

### The right model of care

#### 3. Therapeutic and Mental Health Support

**Priority 3:** To respond to the therapeutic and mental health and well-being needs of children looked after, their parents and carers through the development of a range of therapeutic service with partners.

This includes the development of a Joint Recovery Service including Safe Accommodation, for children and young people requiring wraparound support. This is a new service which will provide an integrated response to young people requiring support to be safely discharged from hospital following an episode of emotional distress.

**Outcome:** Children and young people will become more resilient, having received wrap around emotional mental health support. We will achieve this by improving the support, training and model of working provided to staff, carers and parents. Young people with the most serious mental health or emotional wellbeing difficulties will be discharged with less delay from hospital.

**Progress:** We are rolling out a trauma informed workforce across all our teams and services. The Enfys service provides specific consultation and advice to foster carers and social workers to help them to understand the child and respond to their individual needs in a therapeutic trauma informed way. We are developing a Joint Recovery Service composed of accommodation and outreach services for children and young people with the highest needs, in partnership with mental health and psychology services.

**Actions:**

1. Continue trauma informed training.
2. Put in place the developments arising from the Short, Medium and Long Term workstreams of the Children and Young People in Emotional Distress Project. Beginning with the recruitment of the Assertive Outreach Team to work across all three phases.
3. Complete market engagement process and event for the Joint Recovery Service.
4. Commence Joint Recovery Service commissioning process to deliver provider solution.
5. Joint Recovery Service implementation, including set up and development of appropriate pathways and connections to in-house and external delivery.
6. The University Health Board are recruiting to posts including a lead psychologist for the Joint Recovery service.
7. Implement the Safeguarding Adolescents From Exploitation (SAFE) model across the Directorate and work with partners to address the recent increase in serious youth violence.
8. Ensure the service is compliant with Liberty Protection Safeguarding legislation.

**Financial Assumption:** The Joint Recovery Service has received £1.4 million from the Regional Integration Fund (RIF).

#### 4. Reshaping Support for Disabled Children

**Priority 4:** To redesign the pathway for disabled children, including the development of a greater range of support, activity, short break, looked after placements and emergency provision.

**Outcome:** The growing rate of disabled children becoming looked after because of family breakdown will be reduced. This is important because disabled people were among those who felt the impact of the pandemic most severely. The rate of family breakdown has been increasing.

**Progress:** A project has been established to oversee the development of services for children with disabilities, including the implementation of the action plan in response to the "Let Me Flourish" report. The initial focus of the project is to ensure that our in-house provision for overnight short breaks (Ty Storrie) is modernised and able to meet the demand and complexity of current caseloads. Options for the reshaping of Ty Storrie have been considered and the preferred design has been chosen - a 4 bed modular design. The detailed work is in the process of being commissioned.

**Actions:**

1. Develop an incremental pathway of support, activity and short break services which constitutes the Offer to disabled children and their families, to help prevent family breakdown and children becoming looked after.
2. Develop models and design / specification for further overnight short break accommodation to meet demand.
3. Develop models and design / specifications for local children's home(s), including shared care options.
4. Market sounding to determine if existing providers, procurement, in-house or hybrid arrangements offer the best route to reliable and cost-effective service delivery.

**Financial Assumption:** Invest to save through a pathway of incremental support to prevent family breakdown and subsequent placements. Capital funding is in place to modernise the current overnight short break accommodation (Ty Storrie). Funding has been identified to develop further children's homes for short breaks and / or residential placements.

## 5. Support for Children at Risk of Exploitation

**Priority 5:** To implement the Safeguarding Adolescents From Exploitation (SAFE) model across placements and partners, to address and protect children who are looked after from the disproportionate risks of exploitation, criminalisation and the recent increase in serious youth violence.

**Progress:** The SAFE framework has been reorganised consisting of layers of data and information gathering (including locality assessment work), the SAFE partnership group (action and task focused) and the SAFE policy group with oversight of priorities. This is all now supported by the SAFE project team who are liaising with staff from all partners across Cardiff.

**Actions:**

1. All partners are ensuring their staff are fully apprised of the SAFE approach.
2. Locality assessments are ongoing.
3. An action plan will arise from the finding of locality assessments and be reviewed and monitored via the Partnership and Policy groups

**Financial assumption:** Investment in this model of will increase placement stability, reduce breakdown and escalation of need to more costly provision or custodial sentences. Appropriate intervention will result in avoidance of costs to the public sector across individual lifetimes.



## Objective 3: Sufficiency

### Increasing the availability of local placements

#### 6. Our Fostering Service

**Priority 6:** To increase the number of children looked after by local authority foster carers.

**Outcome:** Cardiff Council's position as a commissioner will be improved in the market by being less reliant on external suppliers, and better able to target areas where there are gaps in provision.

**Progress:** Foster Wales was launched in July 2021. It is the nationwide collective of the 22 Local Authority fostering teams including Cardiff. Its objectives include working collaboratively to increase the number of in-house foster carers available for placements. We have also redesigned our Local Fostering service with the aim of increasing our numbers of Internal Foster Carers and ensure the placement process is fit for purpose. Work to grow the in-house fostering service is progressing well with the number of in-house carers increasing from 104 to 114 during 2021/22 and an additional 18 full assessments in the pipeline. Campaigns to grow our in-house fostering service continue. We have recently appointed a Market Engagement Officer to develop the relationship between Cardiff and the Independent Fostering Agencies (IFAs), so they are better able to meet our needs. We have piloted a Teen Scheme which aims to help young people step down from residential to foster care and an e-bed which is dedicated to emergency placements.

#### Actions:

1. Implement the All Wales Fostering Brand.
  2. Improve the placement finding process.
  3. We are currently focusing on attracting carers specifically for children with disabilities, teenagers and parent and baby placements. We will be broadening this further to attract carers who are able to take siblings specifically, for Unaccompanied Asylum-Seeking Children, and to attract foster carers from ethnic and cultural backgrounds which better reflect the population of the city.
  4. Engagement with larger Independent Fostering Agencies and small independent providers to develop parent and baby placements, placements for teenagers, therapeutic placements and to revisit a step-down from residential & reunification model.
  5. We will work positively with Independent Fostering Agencies to transition to not-for-profit arrangements, through a programme of engagement events and forums. We hope to create a local culture of support and joint learning between commissioner, local authority foster care teams and local fostering providers.
- **Financial Assumption:** Significant financial gains have already been achieved in relation to the expansion of in-house fostering provision for pre-school and primary age children. Further gains are expected to be realised from the planned activity. This enables the Council to move towards achieving the not-for-profit objective.

#### 7. Our Children's Homes

**Priority 7:** To increase the range of local authority residential services to meet the demand from children with the most complex needs and continue to invest in our existing portfolio.

**Outcome:** We will have purposeful cost-effective residential provision in Cardiff, reducing the length of stays and the need for out of area placements. Local capacity will be increased. Our position as a commissioner will be improved in the market by being less reliant on third party providers. We will be better able to target areas where there are gaps in provision. This will result in fewer out of county placements.

**Progress:** During the year we have launched our Assessment Centre and Pop Up Pop Down Emergency Accommodation. A project group has been established to ensure that work to develop

our accommodation portfolio dovetails with our implementation of the Integrated Edge of Care Service (North Yorkshire Model).

**Actions:**

1. Design and develop 3 or 4 additional residential children's homes, including an additional short breaks home, and semi-independent accommodation for children looked after aged 16+ for care leavers and young people who cannot live with family and friends or independently, including Unaccompanied Asylum Seeking Children who are subject to Age Assessments.
2. Refurbish our Crosslands Children's home.
3. Refurbish our Ty Storrie Short Breaks children's home.
4. Design and develop in-house elements of the Joint Recovery Service, including the therapeutic children's home.
5. Commission a range of furnished family homes across Cardiff, from existing Local Authority housing-stock, which can be utilised on a flexible basis by Children's Services.
6. Alongside the new homes we will create a skilled and experienced workforce that have the skills to achieve positive outcomes and sustain placements.

**Financial Assumption:** Funding is available. This investment will enable the Council to move towards realising the not-for-profit objective.

## 8. Our Commissioned Providers

**Priority 8:** To increase the availability of local placements through our collaborative market engagement with Providers, to shape provision to better meet the needs of our children and young people. Embedding not-for profit models in the commissioning arrangements wherever possible.

**Outcome:** Resilience will be built across the sector, by working in partnership to meet the needs of our children where they will best be met, with a view towards achieving plans for permanence. This will include a tiered approach to matching needs with resources so that the children with the highest needs are placed with carers who have the highest levels of expertise.

**Progress:** Engagement with Providers is already taking place and a more positive and collaborative relationship is being established. We have worked with local residential providers to secure an additional 4 residential beds in Cardiff in the last year, with more due to come on stream in 2022/23. We have worked with colleagues in Housing to secure an additional 15 Young Person's Gateway units in Cardiff, with more due to come on stream in 2022/23. We have also worked with the Salvation Army to open a 6-bed unit specifically for unaccompanied asylum-seeking children that opened in early 2022/23. We have recently appointed a Market Engagement Officer to further develop collaborative relationships with providers. Meetings have taken place with local small / medium enterprise (SME) providers in relation to the not-for profit objective and models are being considered, with mixed responses.

**Actions:**

1. Work with providers to shape the care market in line with the market position statement.
2. Increase the pace of existing market engagement to attract additional providers to share best practice and establish provision in the locality. These engagement mechanisms will include provider forums, the encouragement of specialism and direct individual engagement.
3. Market engagement regarding shortfall in therapeutic provision.
4. Continued engagement to encourage existing and new providers to enter not-for profit contractual agreements. This will include exploring legal and contractual options, exploring motivators and inhibitors, piloting and phasing of such arrangements.
5. Market engagement to identify a not-for-profit provider for elements of the Joint Recovery Service.
6. Engagement to develop a one-workforce ethos and culture, beginning with enabling external providers to access Council training.
7. Implement 'Quality Services: Delivering What Matters', the Cardiff & Vale of Glamorgan procedures for children, young people and adult's contracted care and support services, to ensure quality services and respond to escalating risks or concerns

**Financial Assumption:** That demand can be managed down sufficiently through our shifting the

Balance of Care and Sufficiency initiatives, along with our collaborative market engagement to make not-for-profit models attractive to market providers.

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## Objective 4: To be responsive

### Through better needs analysis

#### 9. Needs Analysis

**Priority 9:** To further develop our understanding of the current and future needs of this important group of children and young people by completing a detailed needs analysis.

**Outcomes:** A dynamic and responsive Placement Commissioning Strategy which continues to deliver the right provision for the population as its needs change.

**Progress:** Provider sufficiency analysis is underway and provider monitoring systems are currently being re-designed to enable better strategic analysis.

**Actions:**

1. A set of needs assessments on key cohorts including placements resulting from; placement breakdown, children on the edge of care, children at risk or exploitation, and children with disabilities going into residential provision remain a priority.
2. Engagement with providers in relation to placements to teenagers, sibling groups, step down from residential, disabled children, Unaccompanied Asylum-Seeking Children, children from different ethnic and cultural background.
3. Accommodation sufficiency analysis and cost of care analysis.
4. Review Commissioned services.
5. Engagement with workforce, to understand how best to attract and retain experienced staff, and how to best embed a mix of skills and multi-disciplinary working into teams.

**Financial Assumption:** A more detailed needs analysis will enable us to best design our provision to meet the evolving needs of the population. Thereby avoiding high cost out of area placements.

**“I am very grateful and extremely lucky, to have loving and caring foster carers who have made me feel a part of their family”**

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# Our Commissioning Approach

Commissioning can take place at many levels or scales, from micro (individual) to macro (Cardiff wide). There will be an optimal level of commissioning for all services – our task is to identify at what level commissioning should take place in order to meet need in the most efficient and effective way. This commissioning strategy is focused on both the individual child looked after and the provision we need across Cardiff to respond to their needs.

Our commissioning approach will strive to ensure we commission confidently, working in partnership with providers of quality services and partner organisations, engaging in continuous improvement resulting in services, which respond to the needs and aspirations of service users and carers.

The following diagram shows some of the key actions that are involved in our commissioning approach. Depending on the specific commissioning task different aspects of the commissioning cycle will be used.



IPC commissioning model



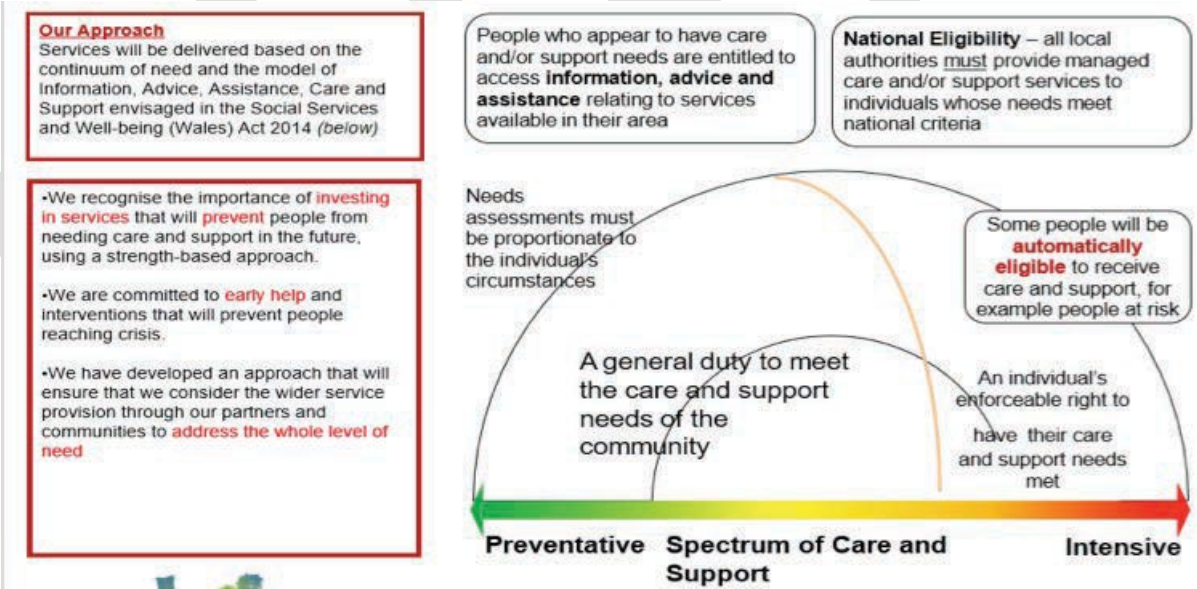
The key principles that drive our approach to commissioning are that all commissioned provision should be:

- Informed and listen to the voice of our children and young people,
- child centred, family focused, strength based and restorative,
- evidence based and trauma informed,
- appropriately skilled Carers,
- flexible and responsive,
- best value for money,
- outcome based.

Whether we are commissioning a service for an individual, or for a client group, it is essential that a common approach is used. This involves:

- Engaging with and taking ownership of a needs analysis,
- Using the business planning process to monitor our commitments,
- Basing our commissioning plans around meeting those commitments,
- Establishing what we can and can't provide and the risks of service failure,
- Gaining clarity over the finances available now and in the future,
- Joint planning with other authorities and partner organisations,
- Understanding and stimulating the Market,
- Maintaining robust monitoring and reporting to ensure quality assurance,
- Decommissioning services where there is no longer a need, or the need can best be met using an alternative approach.

Services will be delivered based on the continuum of need and the model of Information, Advice, Assistance, Care and Support envisaged in the Social Services and Well-being (Wales) Act 2014 (diagram 4)

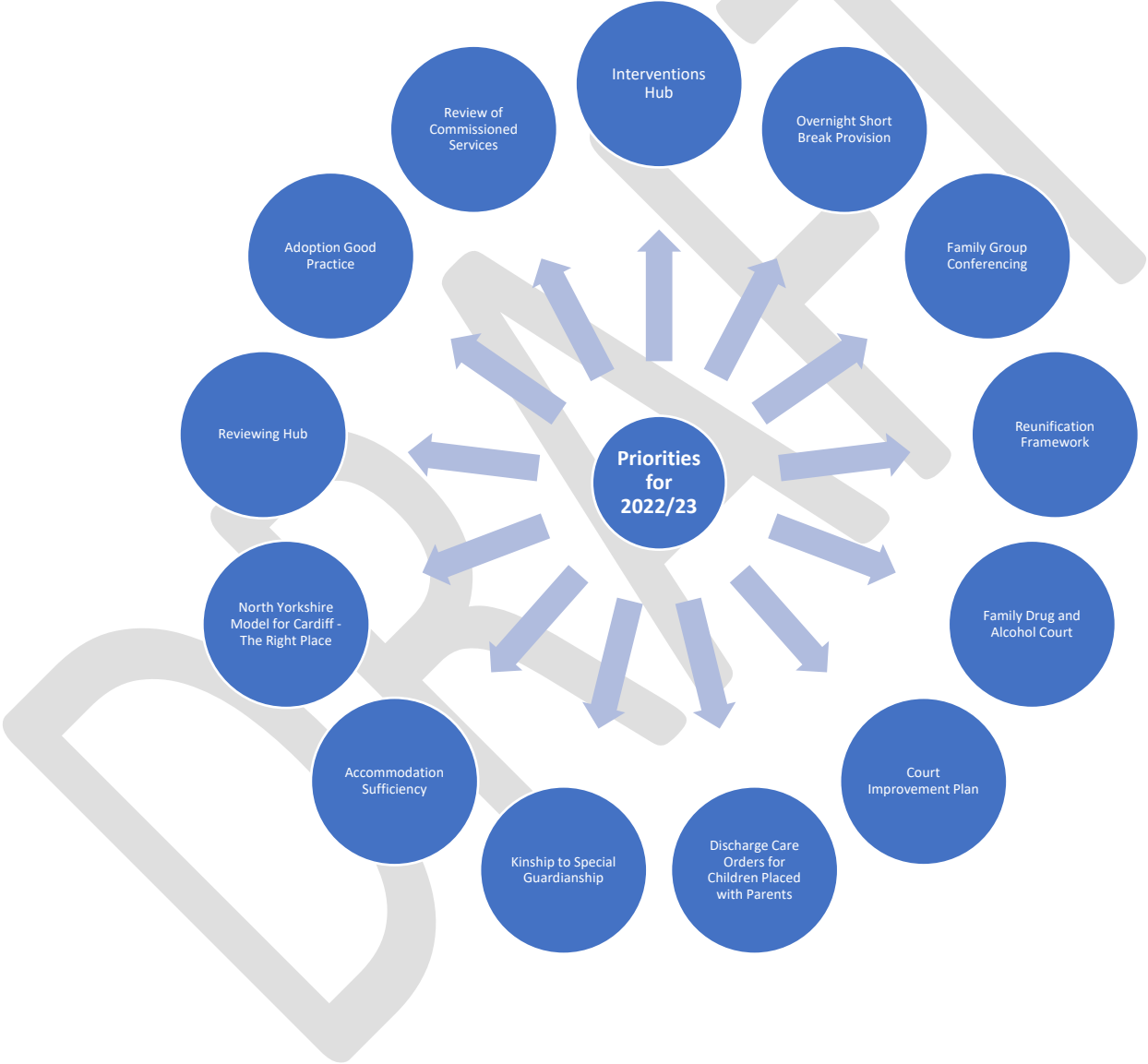


# Next Steps

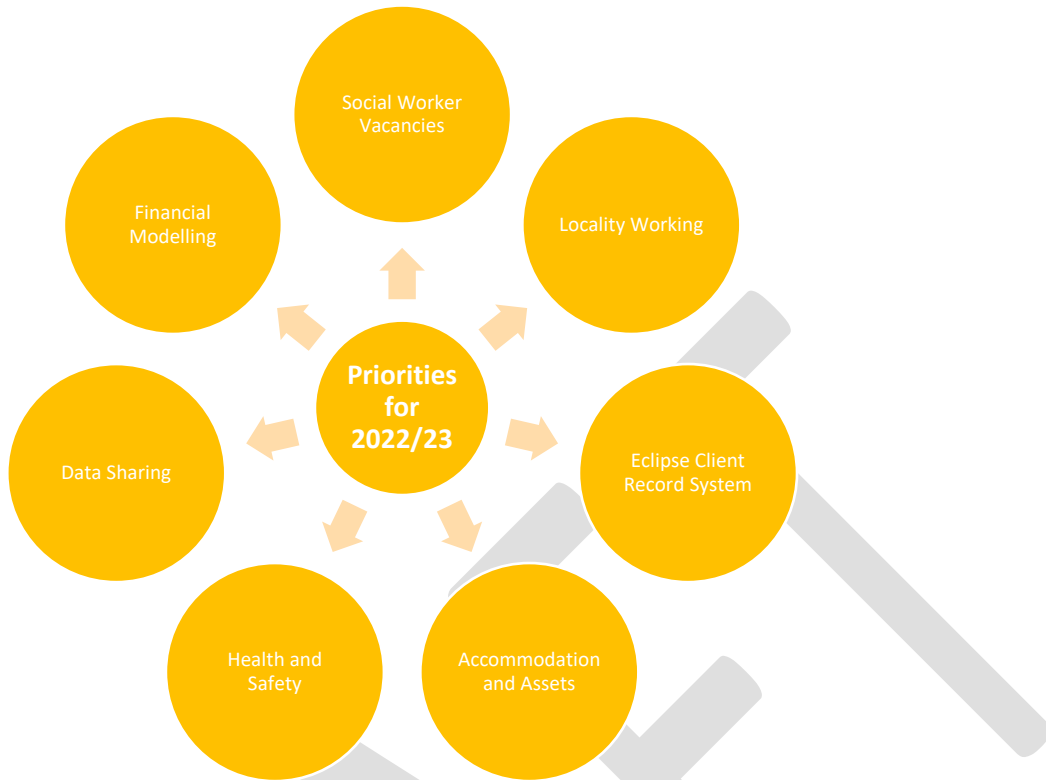
The activities set out above will be delivered through the programmes established to achieve our Children’s Services ‘Delivering Excellence’ Strategy.

The 3 diagrams below set out the Children’s Services ‘Striving for Excellence Strategy’ priorities for ‘Place’, ‘People’ and ‘Practice’ in 2022/23.

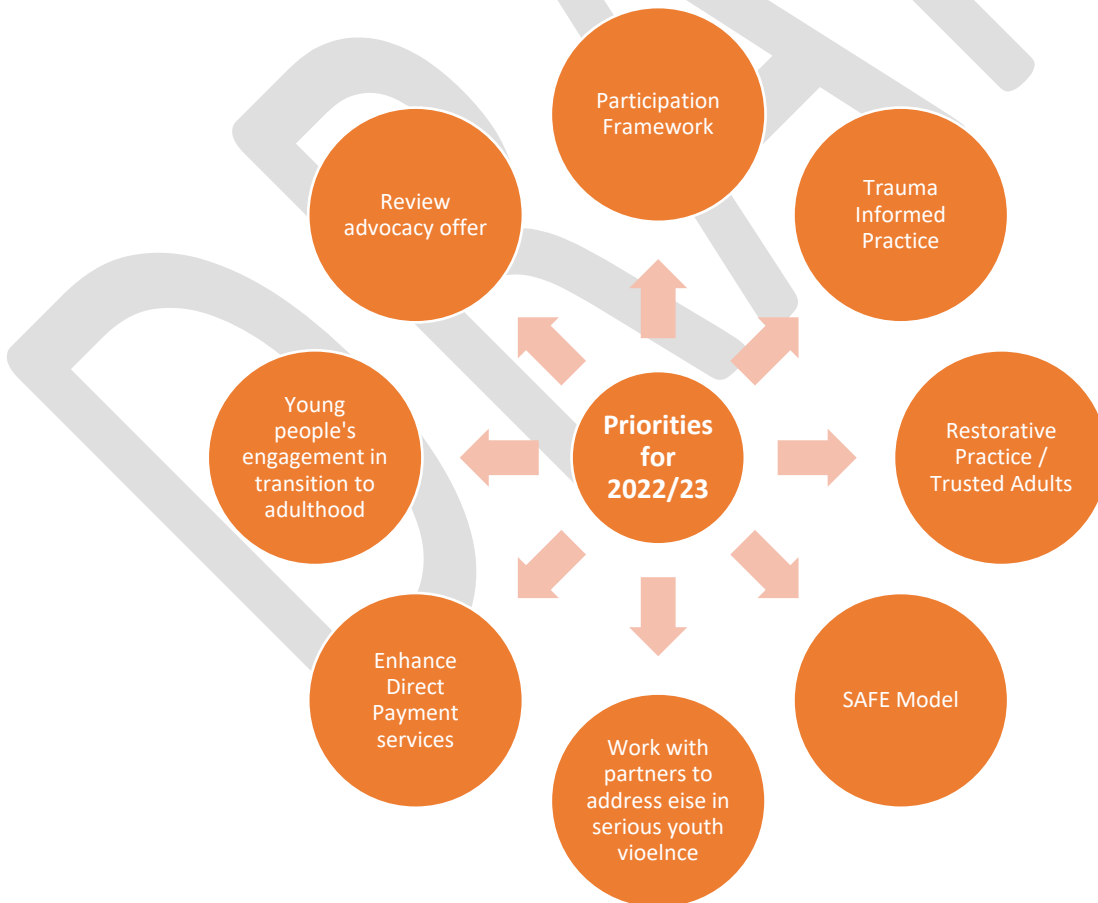
**Place Priorities:** Ensuring a range of support in the community and a variety of homes for children are available in Cardiff.



**People Priorities:** Supporting a permanent workforce. Further detail is available in our Workforce Strategy.



**Practice Priorities:** Developing our practice and procedures.



A considerable amount of this work has already been started and the programme will build on this

strength. A programme management approach will be put in place.

The governance of this programme will be through the existing Social Services Commissioning Board which meets monthly and is chaired by the Director of Social Services. A number of the priorities will involve partner agencies and they will be invited from the outset.

We will define success in six key ways:

- **Improved outcomes for our children and young people looked after.**
- **A stabilisation and then gradual reduction in demand for alternative family placements.**
- **More children and young people placed in Cardiff.**
- **A reduction in the use of residential placements.**
- **Better value for money.**
- **Reduction in use of for-profit placement provider.**





## Record of Staff Consultation

## Shifting the Balance of Care - Place

What's Working Well	What We Are Worried About	What We Need To Do To Make The Necessary Change
Interventions Hub	Loss of Rapid Response Team	Reconsider placement of Rapid Response staff in the Interventions Hub
Family Group Conferences (FGC) – where used	Consistency of use of FGC Capacity to respond to FGC referrals	Embed use of FGC
Reunification process and dedicated team	Improved outcome focus for Reunification Framework required	Embed Reunification framework across service Develop guidance for families in relation to all processes
Increase in kinship arrangements	Ability to complete Viability Assessments in timeframe	Do parenting assessments earlier in the process
Increase in use of Special Guardianship Orders (SGO) and timeliness of process	Consistency of approach across the service Timeliness of kinship to SGO conversions	Support packages for carers wanting to step down to SGO Embed kinship to SGO framework
Family Drug and Alcohol Court (FDAC)	Arrangements for FDAC when pilot ends	Plan for end of FDAC pilot
Discharge of Care Orders for children Placed With Parents		
Foster carer recruitment strategy and campaign, and support for in house carers	Length of time taken to recruit foster carers and lack of carers for children with exploitation concerns	Upskill existing carers Targeted recruitment campaign Review offer to in house carers
Increased in house residential provision	Sufficiency of accommodation Use of residential care for younger children Use of unregulated placements	Develop support for families to reduce use of residential care Develop in house services
Adoption good practice – and timeliness in particular		
	Impact of out of area placements on families and likelihood of children going missing	



## Shifting the Balance of Care – People / Workforce

What's Working Well	What We Are Worried About	What We Need To Do To Make The Necessary Change
Reduction of permanent social worker vacancy rate	Decline in applications to social work degree course Staff turnover Recruitment and retention of experienced social workers and business support Timeliness of recruitment process, e.g. DBS Different pay scales across Wales Media portrayal of social work profession Pressure on social workers / no time to pause and reflect Unallocated cases and impact on children and other teams Changes of social worker	Team building days Review offer to staff / rewards Consider structure of support services  Improve comms and share good news stories Increase use of other roles and ensure prudent social work  Improve engagement
Developing opportunities with universities		
OM and social worker resource assistants	Clarity around role / remit	Improve consistency of approach across service
Social Work Assistants (SWA)	Complexity of cases held by SWAs	Triangulation / learning loop
Use of technology / hybrid working	Availability of informal support when working from home Level of face to face interaction with children	Agree hybrid working model requirements for teams
Induction Support for newly qualified social workers / practice leads Principal social workers	Induction	Improve consistency of induction across the service
Supervision / reflective discussions	Supervision	Ensure consistency of supervision across the service
Locality working	Awareness of other service provision – e.g. Housing and charities Are we creative enough or too risk averse ?	Improve communication Produce an A-Z of services. Workshops for teams to showcase what they do Develop / improve links with other services – e.g. Money Advice Team Community profiling
	Overspend Cost of care and support for children with disabilities	Take accountability for spending, follow process, improve financial modelling





What's Working Well	What We Are Worried About	What We Need To Do To Make The Necessary Change
	Expertise in service to respond to specialisms - loss of 11+ service / UASCs	Upskill workforce
	Impact of complexity Understanding of thresholds Need for emotional support for staff / vicarious trauma	Develop resilience of workforce
	Transfers from Intake & Assessment to localities	Review transfer policy
	Delay with Eclipse	Continue work with provider
	Developing Health & Safety – e.g. lone working	Ensure lone working reflects hybrid model Complete roll out of lone working devices whole service
	Work required on buildings	Continue work with corporate colleagues



## Shifting the Balance of Care – Practice

<b>What's Working Well</b>	<b>What We Are Worried About</b>	<b>What We Need To Do To Make The Necessary Change</b>
Mind of My Own app - where implemented	Consistency of implementation of Mind of My Own app	Raise awareness and continue implementation.
Safeguarding Adolescents From Exploitation (SAFE) Model and exploitation toolkit	Loss of expertise in localities and sharing of intelligence	Raise awareness of SAFE Continue work with partners re: information sharing
Transition to adulthood	Transition for young people who have experienced exploitation Supporting young people to stay where they are post 18 Transition for young people with substance misuse issues	Ensure transition process considers future risks Improve involvement of young people in future planning Develop links with other councils to support young people to stay out of area
Joined up working with Youth Justice Service (YJS)	Rise in knife crime Exclusions and disenfranchised children	Develop partnership response Develop YJS links with early help Weapons awareness Develop links with youth clubs
Care planning	Current care plan template Permanence / drift Delay in developing pathway plans	Improve care plan for Eclipse  Apply systems that are in place
Engagement with young people / hearing voice of child	Participation of children in meetings where parents are / may be in attendance	Consider role of Education in core groups
Child Health & Disability Needs Panel	Too many panels	Streamline panel processes Develop process maps
Relationships with parents in difficult circumstances	Awareness of what information can / cannot be shared	Review terminology, e.g. "parenting support" Therapeutic support for parents Whole family approach
Trauma Informed Practice training	Trauma Informed Practice training Time to attend training	Develop structure of training, including provision of workflows Improve consistency of approaches across service
Reviewing Hub	Placement breakdowns	Increase / improve training and development opportunities for foster carers Improve chronologies Improve timeliness of visits
Advocates	Understanding of Active Offer of Advocacy and use of terminology "issue based"	Review process for arranging advocacy



What's Working Well	What We Are Worried About	What We Need To Do To Make The Necessary Change
	Internet and social media	Empower parents re: online safety
	Timeliness of life story work	Improve consistency across service
	Waiting lists for CAMHS / Enfys Length of Enfys forms	Improve process to access services
	Data sharing	Systems need to talk to each other











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## Demand Analysis

### Introduction

Children's Services in Cardiff are experiencing ongoing high demand for services combined with an increase in the complexity of cases. The impact of this on our capacity to manage demand is becoming more evident as we experience the longer term impact of COVID-19 harms. This report sets out the increase in demand that has been experienced across the child's journey and some of the effects this is having on our services and consequently on our children and young people. This analysis has been used to inform the development of the new Children's Services Strategy and our plans for how we will shape our services going forward - in the context of significant budget pressures and the current cost of living crisis.

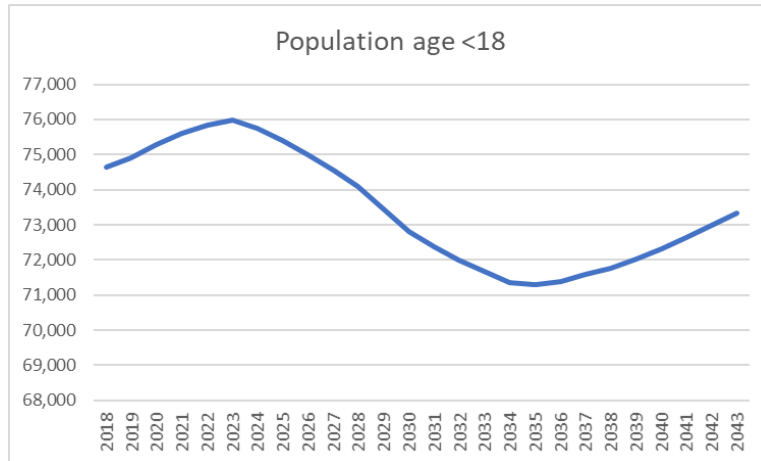
A brief overview of the increase in demand from 2019/20 to 2021/22 is summarised below, with further detail provided throughout this report.

Contacts	Referrals	Well-being assessments completed	Strategy discussions	Section 47 enquiries	Initial child protection conferences	Added to Child Protection Register	Started to be looked after
							
<b>47,424</b>	<b>5,108</b>	<b>2,509</b>	<b>5,338</b>	<b>4,171</b>	<b>689</b>	<b>612</b>	<b>306</b>
<b>↑ 51%</b>	<b>↑ 115%</b>	<b>↑ 13%</b>	<b>↑ 62%</b>	<b>↑ 58%</b>	<b>↑ 49%</b>	<b>↑ 46%</b>	<b>↑ 20%</b>
31,323 (2019/20)	2,373 (2019/20)	2,218 (2019/20)	3,293 (2019/20)	2,645 (2019/20)	462 (2019/20)	419 (2019/20)	255 (2019/20)

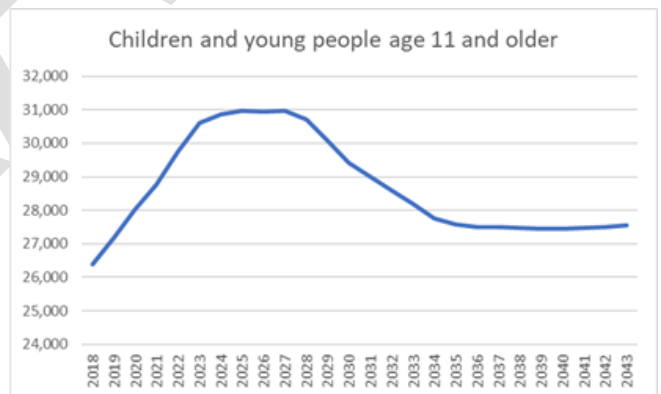
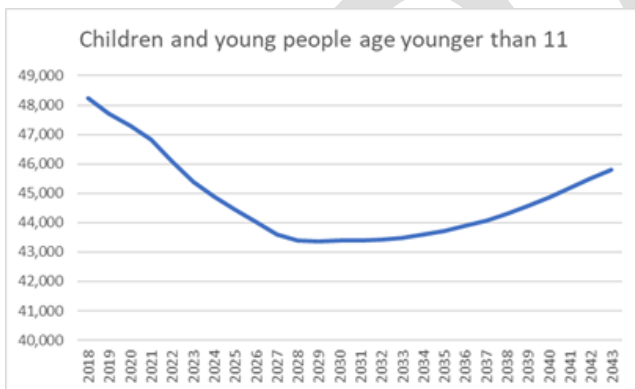
Our Children's Services Strategy for the next 3 years sets out our vision and gives an overview of the work that we are doing to enable us to manage and respond to the demand that we are experiencing. We are working to future proof our services, ensuring that the right services are provided by the right people and at the right time, and that we have the right resource and capacity to meet our statutory duties. This approach dovetails and delivers on the Welsh Government policy to safely reduce the number of children looked after and ensures that we maintain the lowest safe level of intervention with children and families. We are also mindful of the Welsh Government commitment to eliminate private profit from the care of children looked after and this intention is woven into all of our strategies and plans which focus on increasing our in house provision for children looked after in Cardiff.

### Cardiff 0-18 Population

Welsh Government projections suggest that the number of children aged 0-18 in Cardiff will peak in 2023 at 75,980. There is a projected decrease to 71,295 by 2035 followed by an increase to 73,345 by 2043 (based on 2018 population projections).

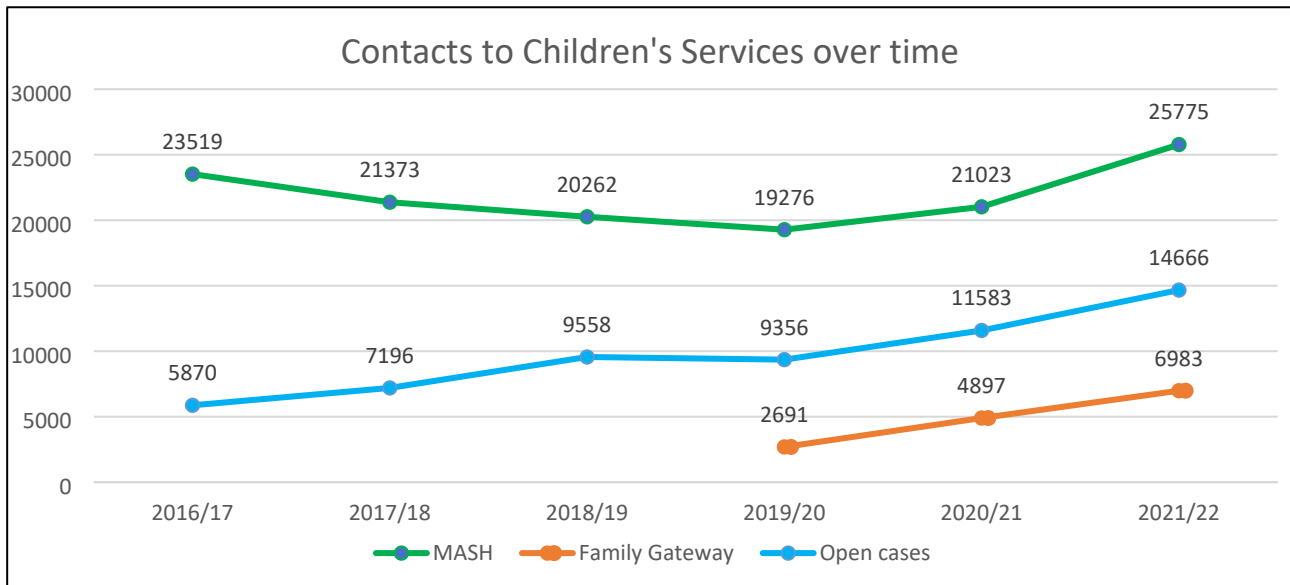


However, it should be noted that there is variation within the age bands which make up the population of children and young people. The charts below show that whilst the population of primary school aged children is likely to decrease in the coming decade, the population of secondary school aged children and young people is will increase and is likely to peak in 2028.

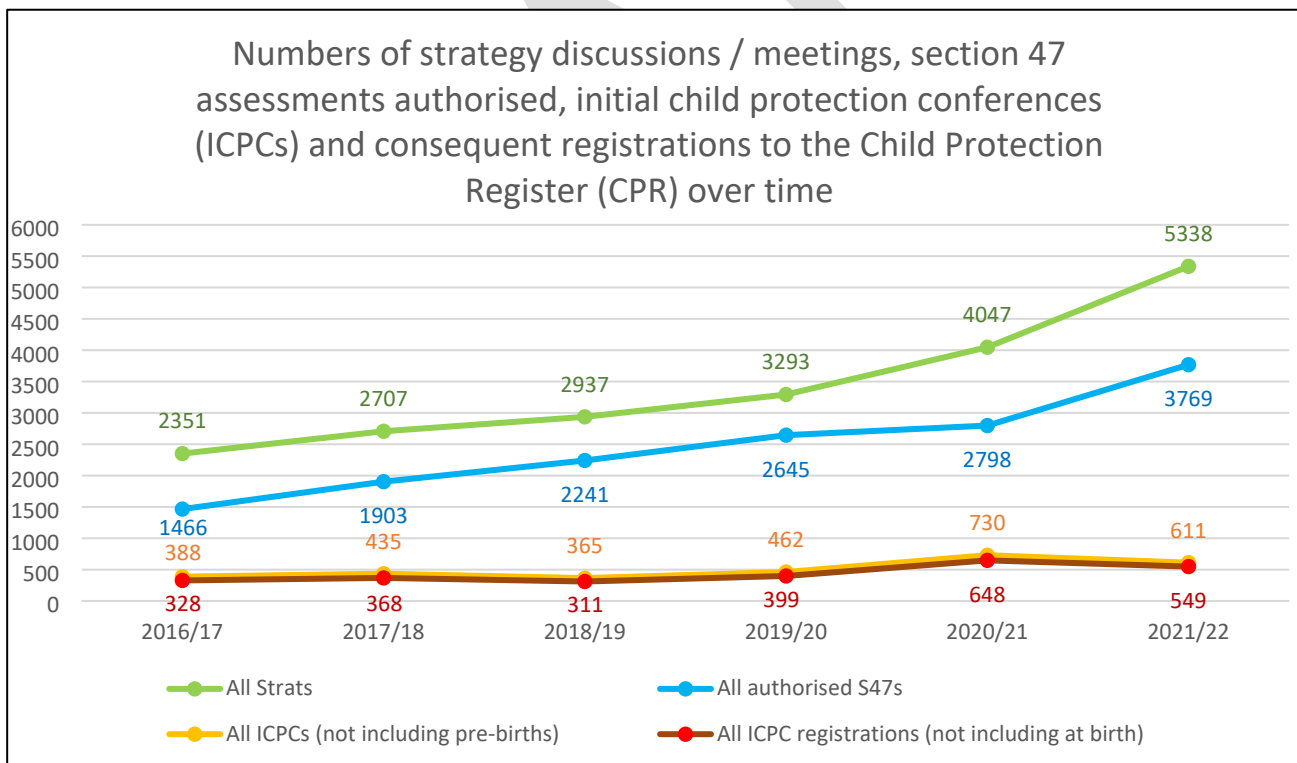


The projections do not take into account the as yet unknown impact of Brexit and the COVID-19 pandemic. The figures may therefore be subject to further revision as those events are incorporated into population trends over time.

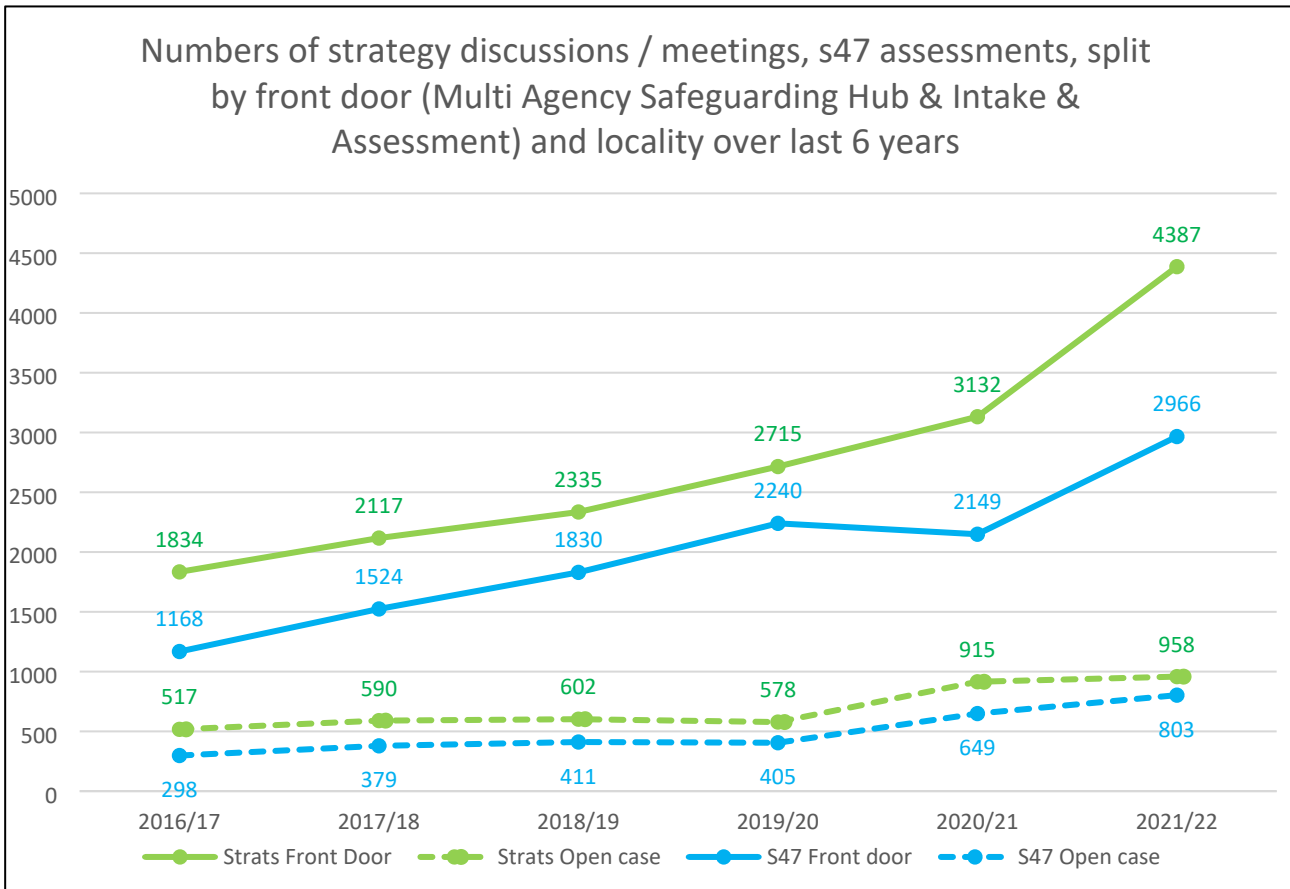
## Contacts, Assessments and Child Protection Process



The graph above shows the increase in contacts to Children's Services and the front door over the last 6 years – with a 34% increase in contacts to the Multi Agency Safeguarding Hub (MASH) since the start of the COVID-19 pandemic.

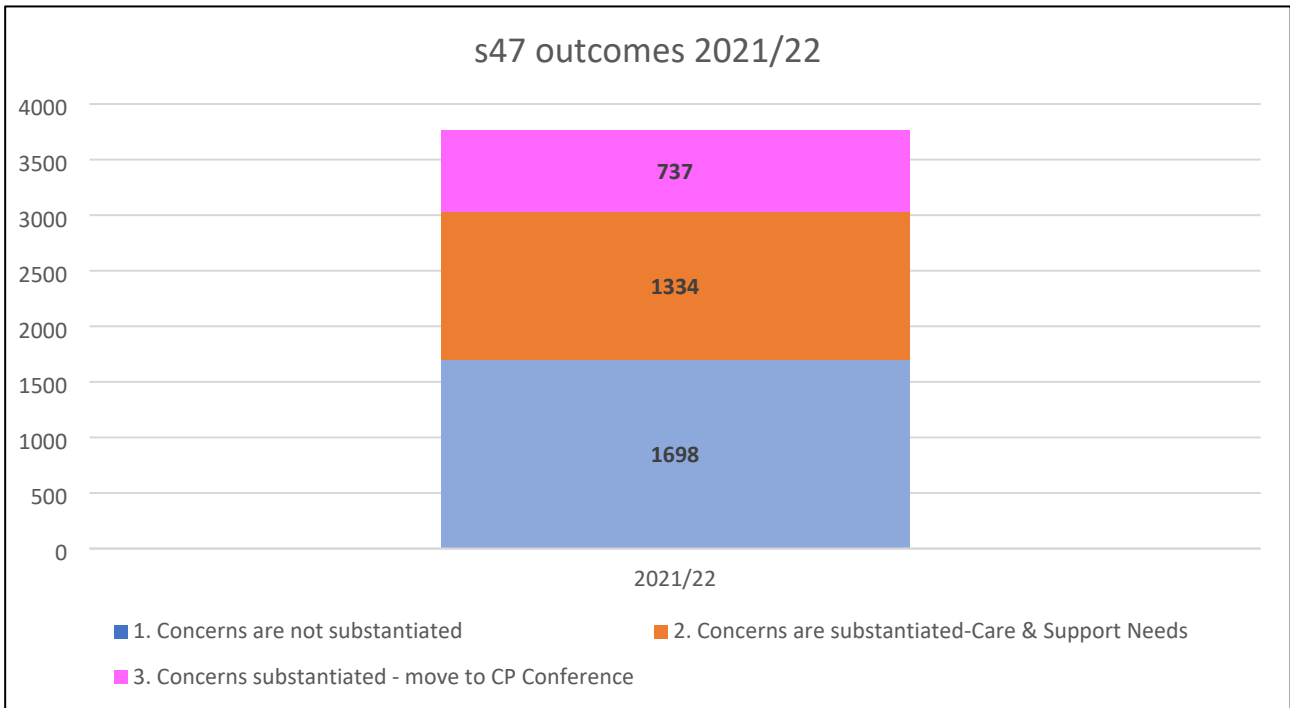


This graph shows the steady increase in the numbers of strategy discussions taking place over time with the significant 32% leap during 2020/21. This increase is reflected in the number of s47s, ICPCs and registrations until 2020/21, except for the year 2018/19 which showed a reduction in numbers going to ICPC and being registered. Results for 2021/22 show a further increase in strategy discussions and s47s but a reduction in ICPCs and registrations from 2020/21. Please note children often have more than one strategy discussions or s47 during the year.

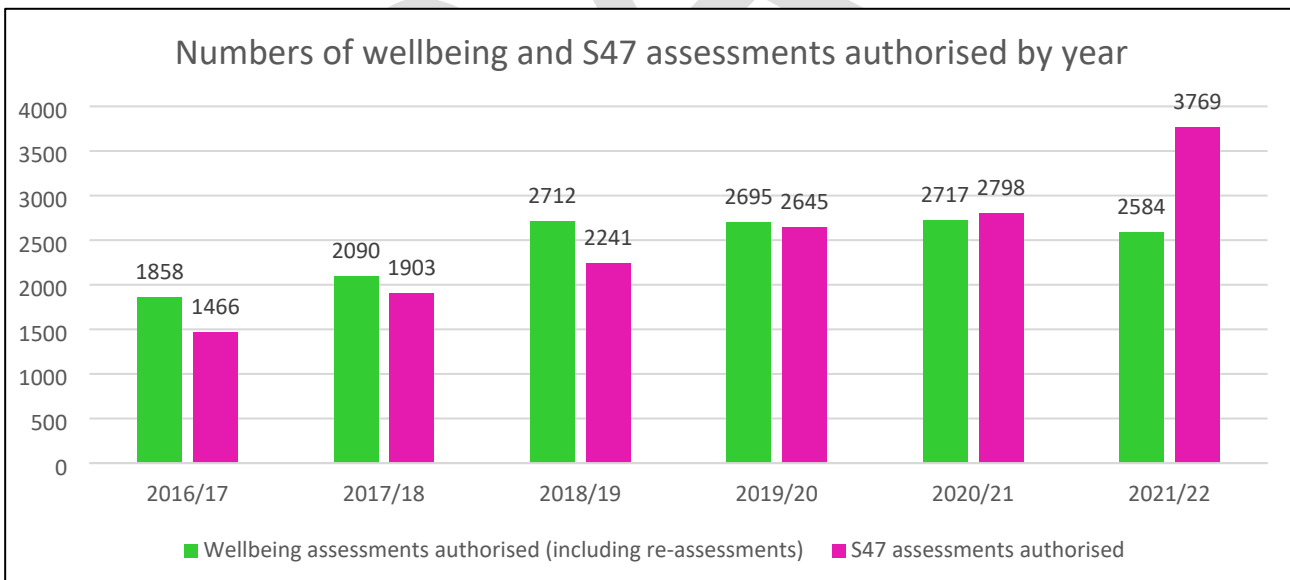


This graph shows the number of strategy discussions and s47 assessments completed at the front door and separately those completed on open cases. There has been a noticeable increase in strategy discussions both at the front door and on open cases over the last two years.





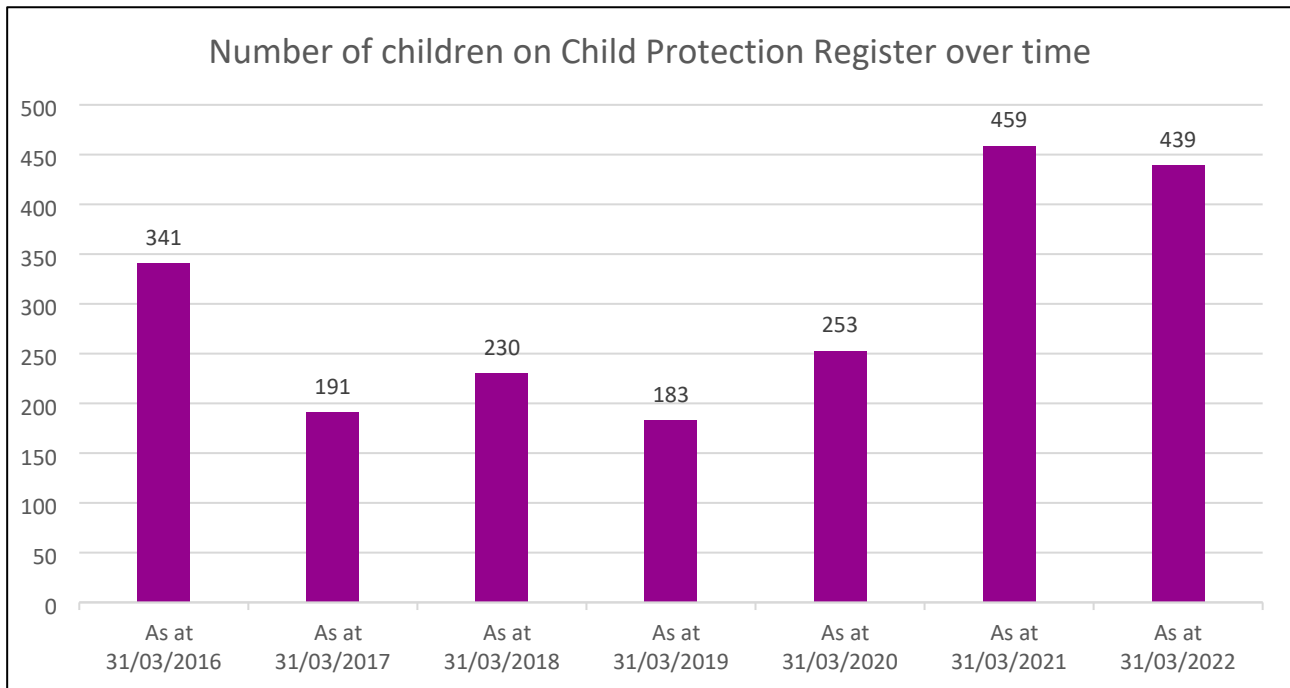
This graph shows the breakdown of s47 outcomes over 2021/22. 737 (19.6%) went to ICPC. 1,334 (35.4%) had the outcome of care and support needs whilst for 1,698 (45.1%) the concerns were not substantiated.



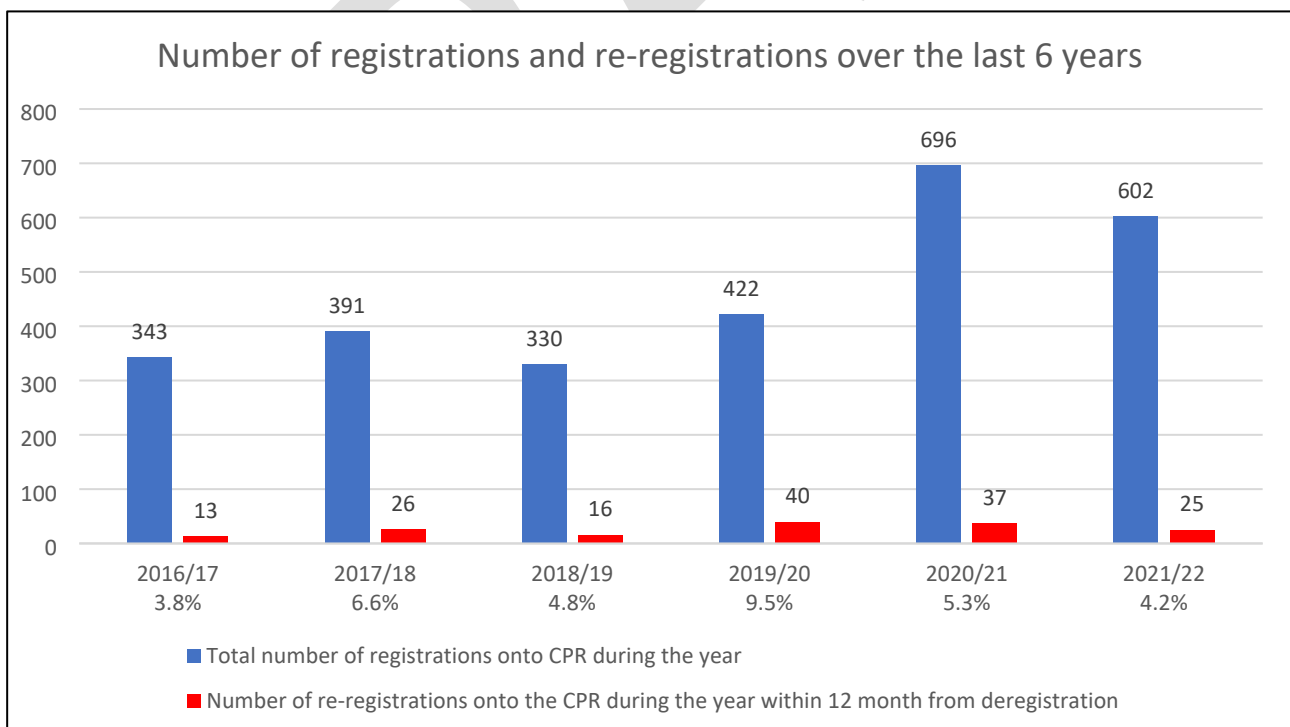
Graph showing the increase of wellbeing assessments undertaken and authorised from 2016/17 to 2018/19 and then how the number has remained fairly constant around 2,700 authorised per year. However, we need to take the increase in the number of s47 assessments into account alongside these figures – demonstrating the increase in complexity of cases coming through the front door.



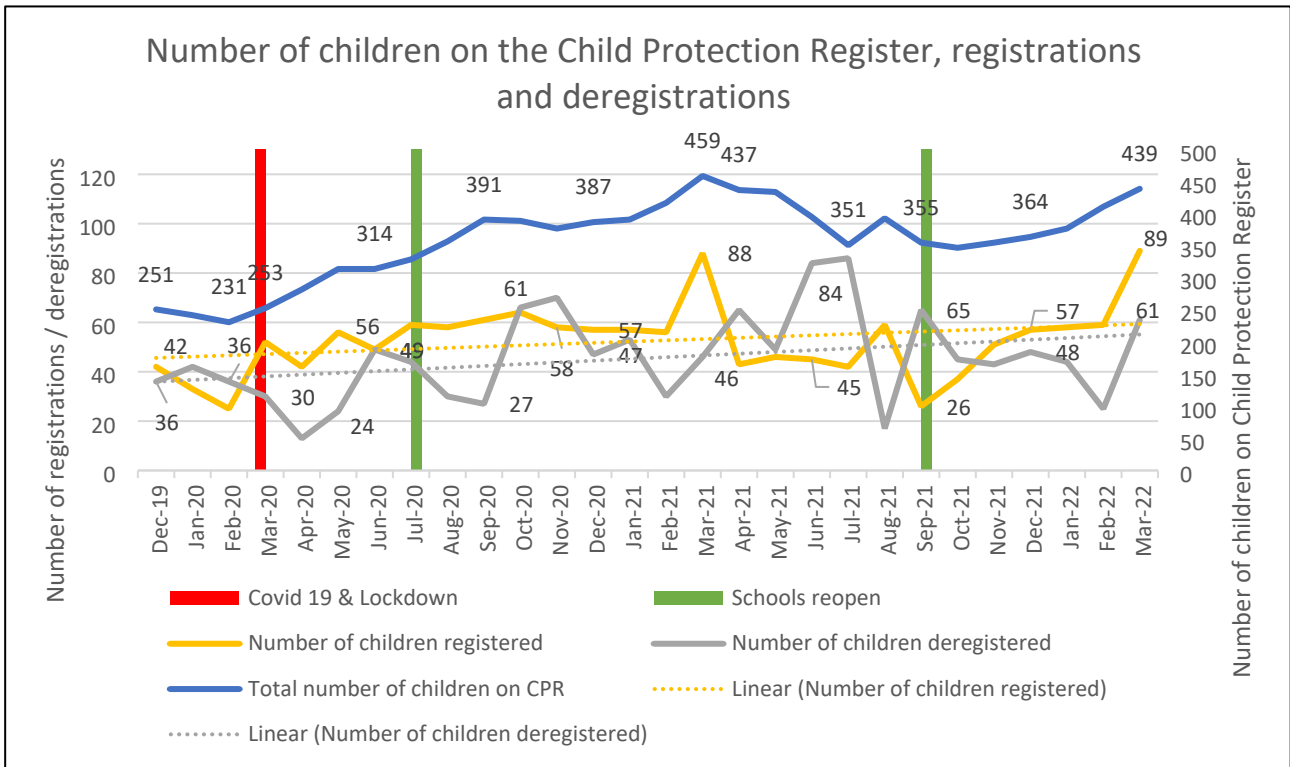
## Child Protection Register (CPR)



Graph showing the numbers of children on the CPR in Cardiff as at 31<sup>st</sup> March over the last six years. There was a 151% increase in numbers from March 2019 to March 2021. During 2021/22 the number of children decreased over the first 6 months but then increased back to 439.

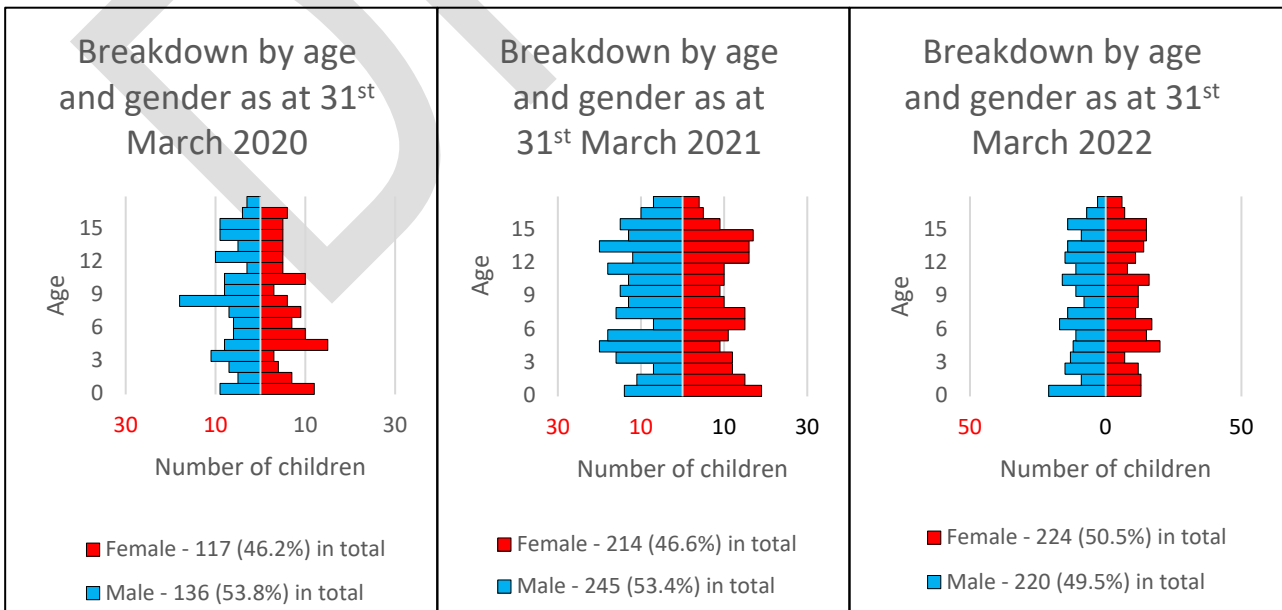


Graph showing the re-registrations within 12 months of a de-registration. The rate was low for both 2020/21 and 2021/22, showing that children aren't being de-registered too soon.

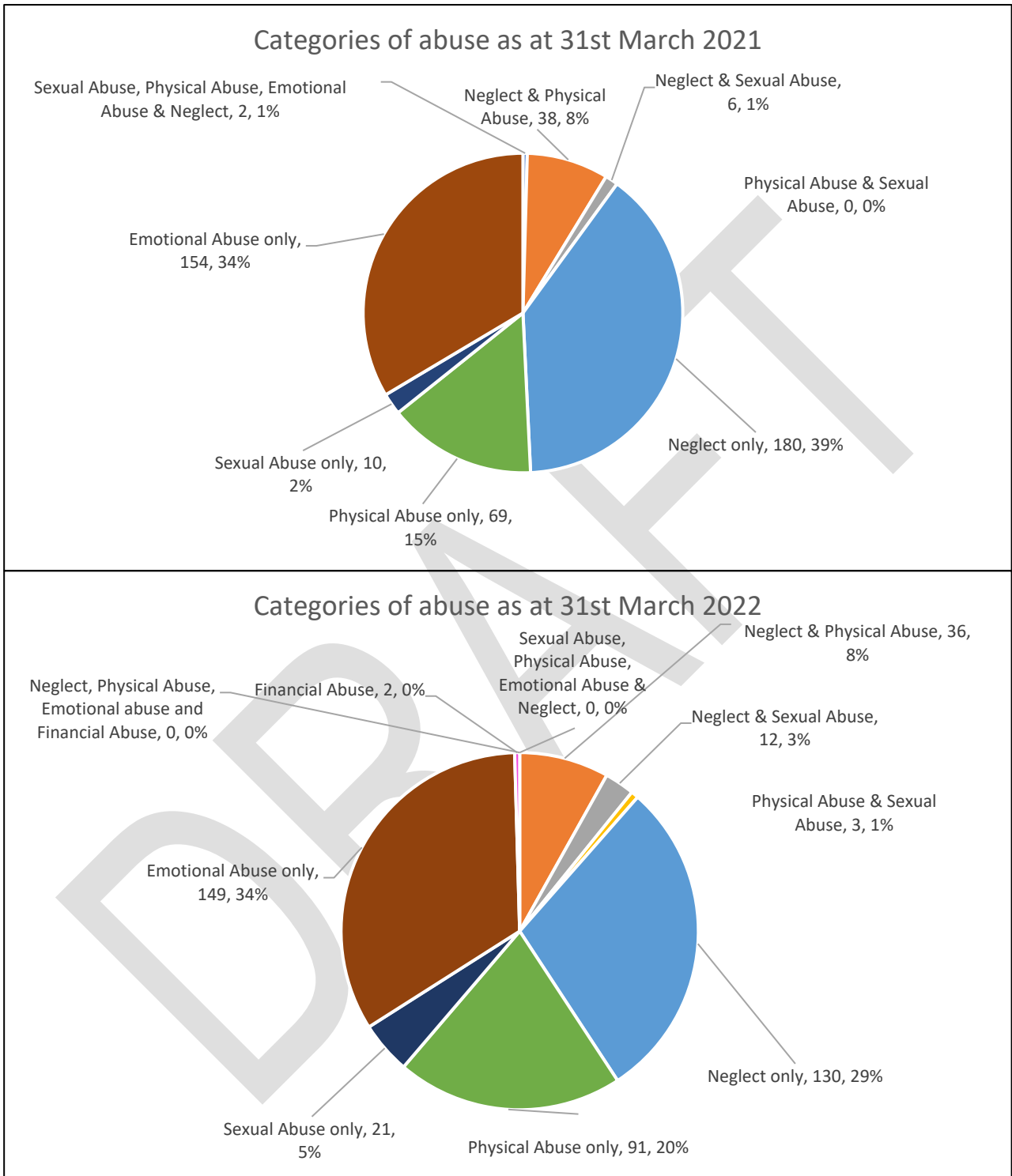


Graph showing the steady increase of numbers of children on the CPR up until the 31<sup>st</sup> March 2021, when there were 459 children on the register. The number of children fell to 351, although later increased back to 444. In 2021/22 there was an average of 45 registrations a month compared to 59 a month over 2020/21. The registrations trend line has flattened whilst the trend line for the number of de-registrations shows a more marked increase over the whole period as there are on average 52 deregistrations a month since April 2021 compared to 42 a month last year.

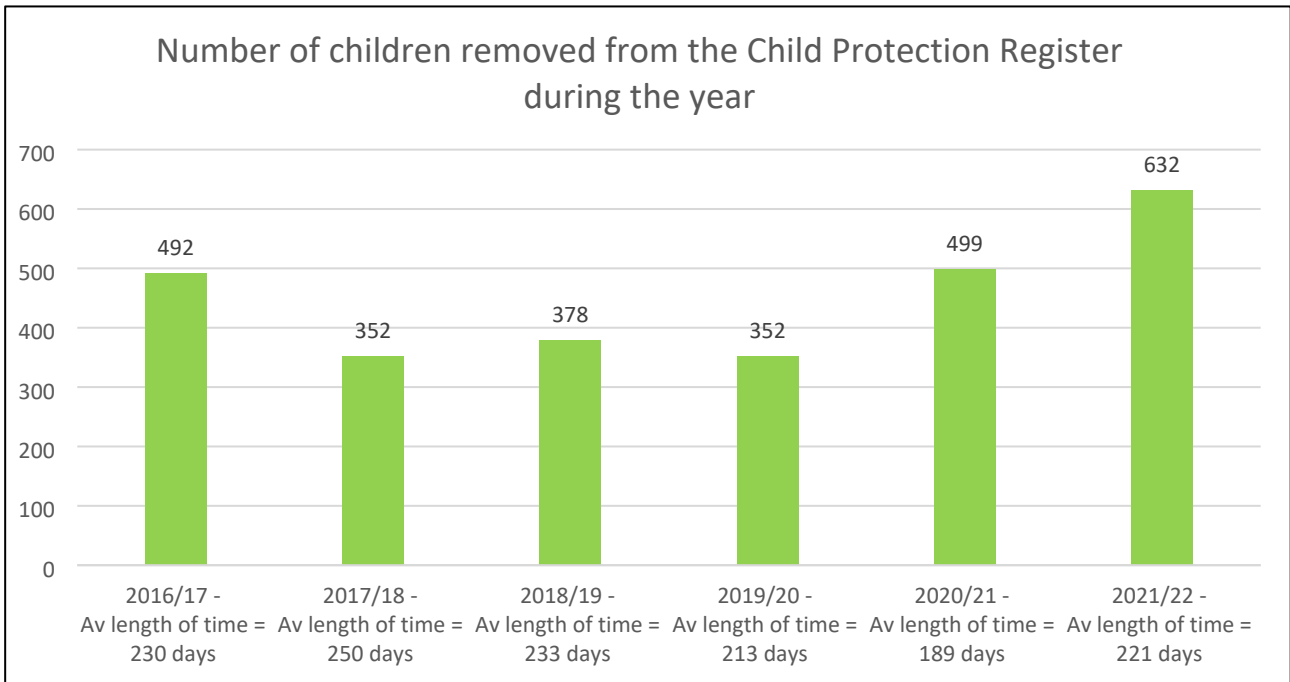
### Breakdowns of Children on the CPR by Age and Gender Over Time



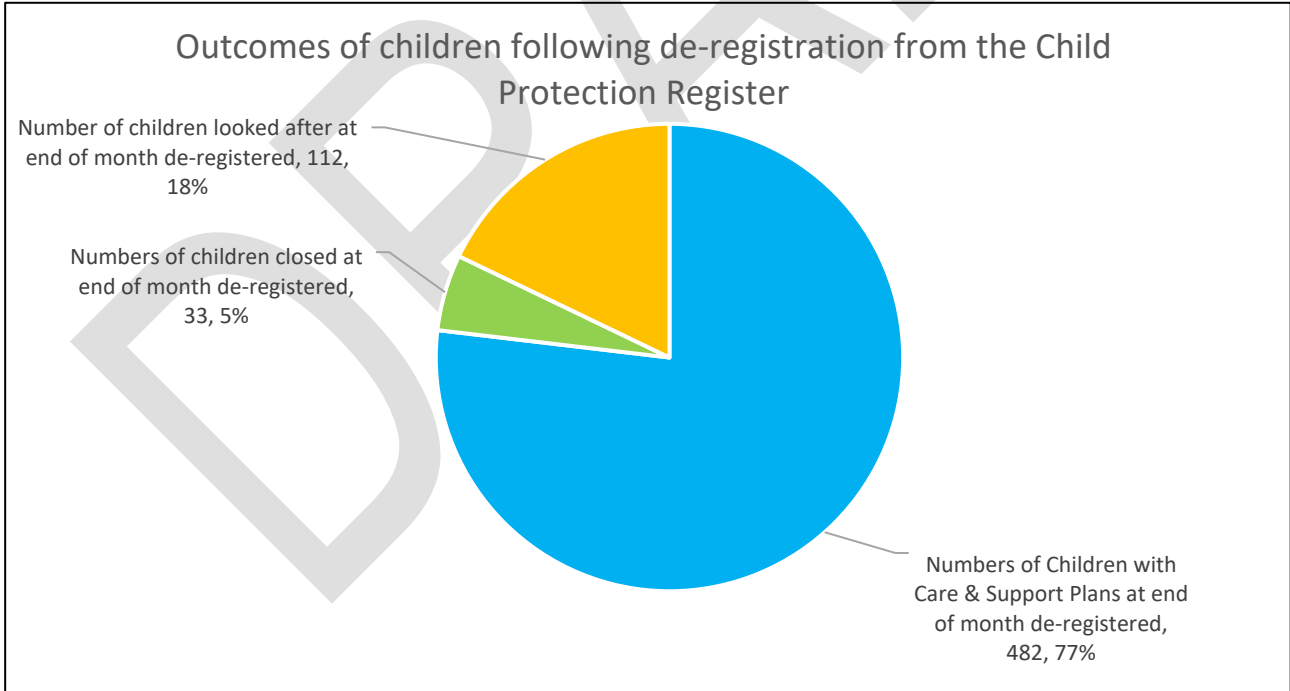
### Categories of Abuse Over Time



The pie charts above show that the primary change of the last 2 years has been a decrease in the percentage of children registered against Neglect only and an increase in the percentage of children registered against physical abuse only. There has also been a small increase in the percentage of children registered against a category including Sexual Abuse.

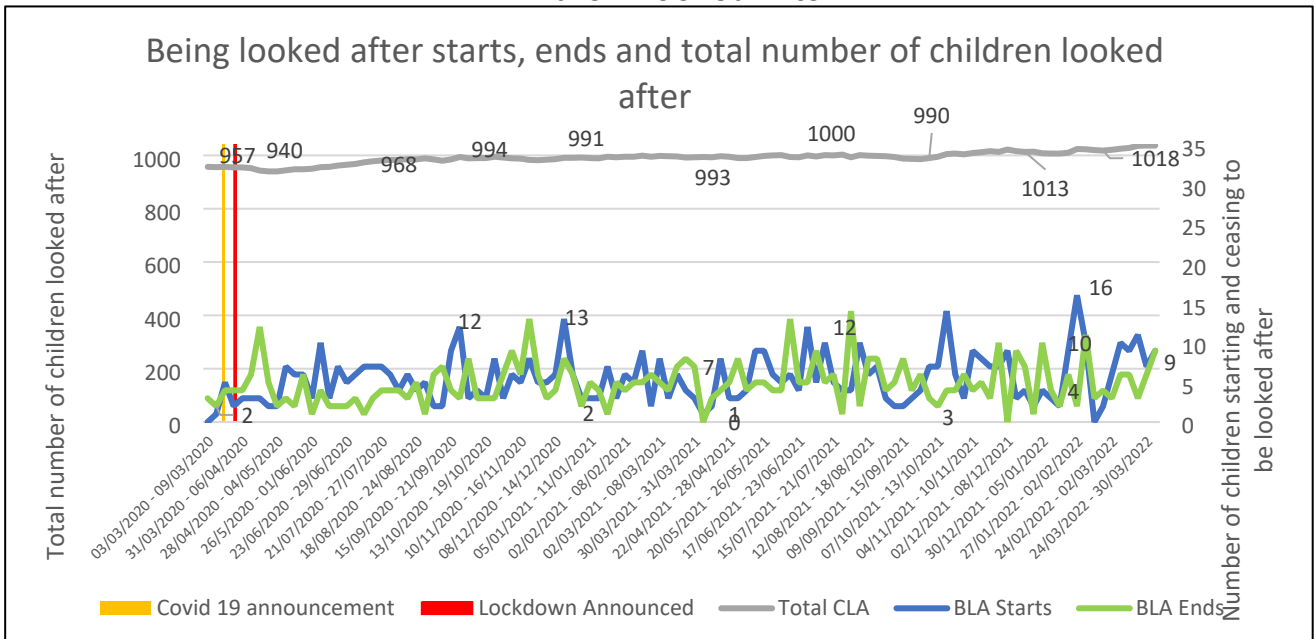


This graph shows the number of deregistrations per year in Cardiff and the average length of time on the register at the point of deregistration. It demonstrates the increase in activity over the last 2 years.

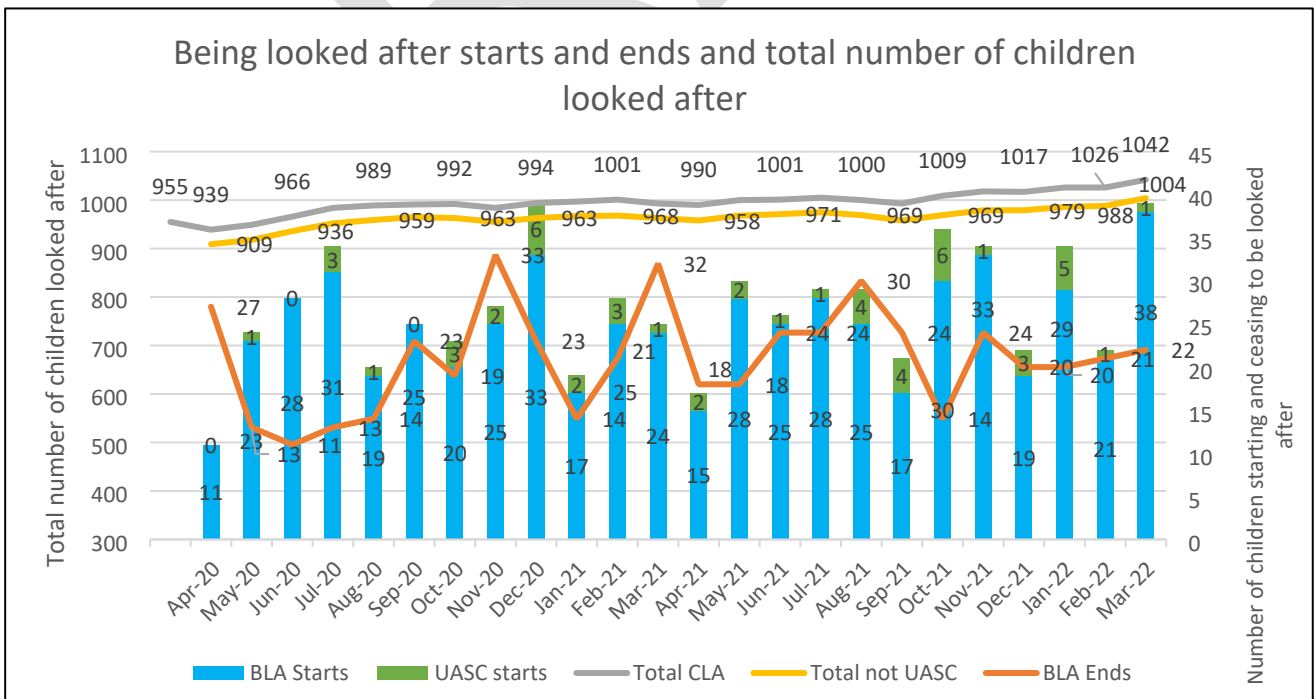


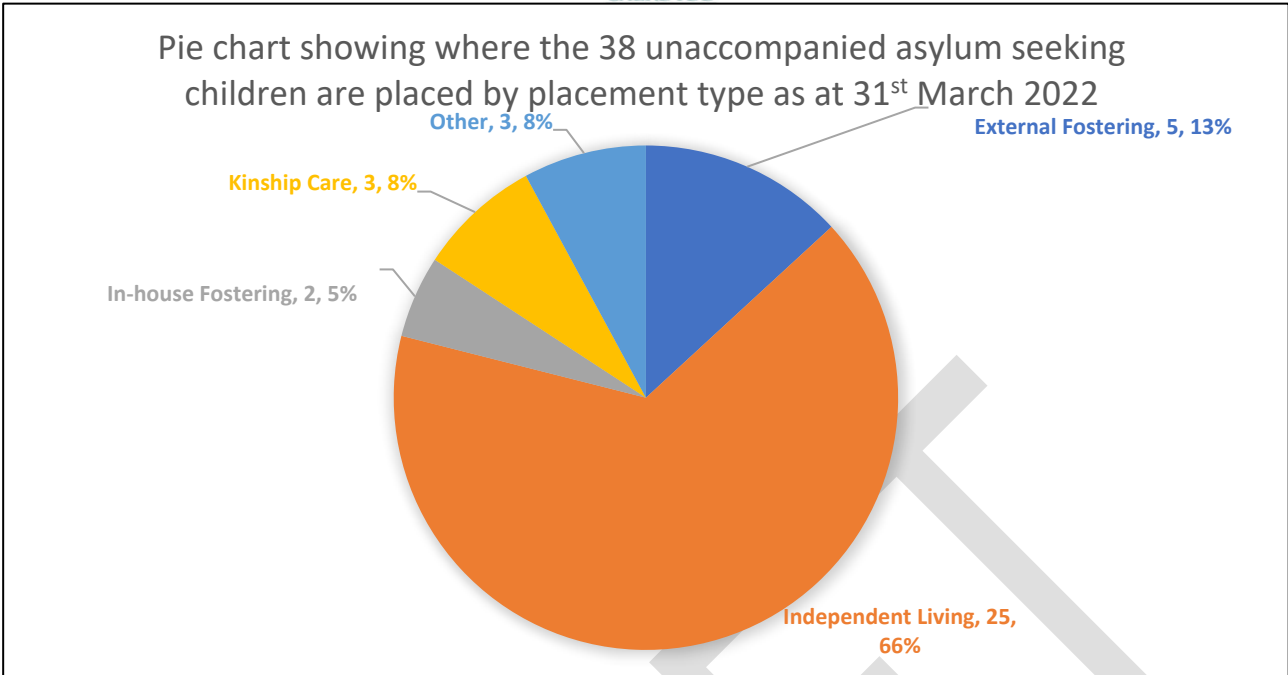
The pie chart for 2021/22, shows the vast majority (515 / 627) or 82.1% were stepped down following de-registration from the Child Protection Register, whilst 112 or 17.9% then became looked after. Of the 112 who became looked after, 32 or 28.6% were under 6 months of age.

### Children Looked After

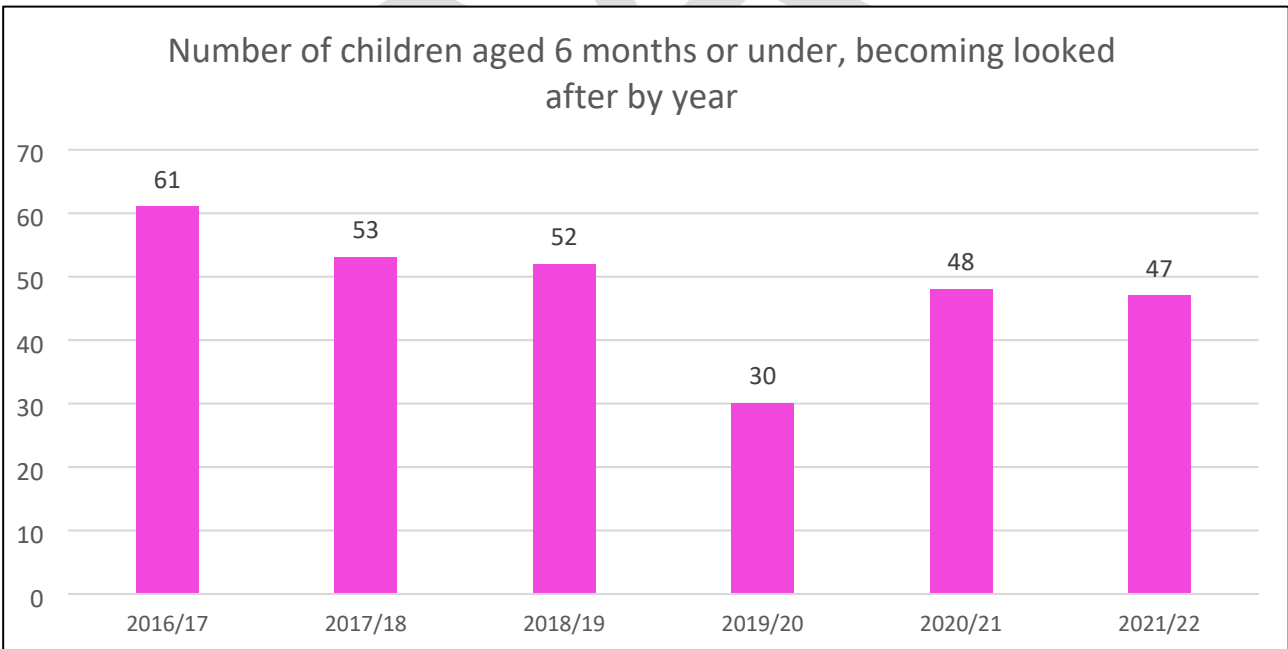


The graph above shows the difference between the number of children and young people becoming looked after and those ending being looked after between March 2020 and March 2022. 273 children started being looked after and 236 children ended being looked after in 2020/21 compared with 290 and 247 respectively in 2021/22. The net result was a period of increase in the total number of children looked after during the first wave of the pandemic (a societal crisis), followed by a period of relative stability between October 2020 and October 2021 (whilst society remained under restrictive measures). Since then the number of looked after children has increased to 1,040 at the end of March 2022. Please note that these figures include unaccompanied asylum seeking children (UASCs). 12 of our current 49 UASCs arrived under the National Transfer Scheme. The impact of UASCs on our current children looked after numbers is set out in the graph below.



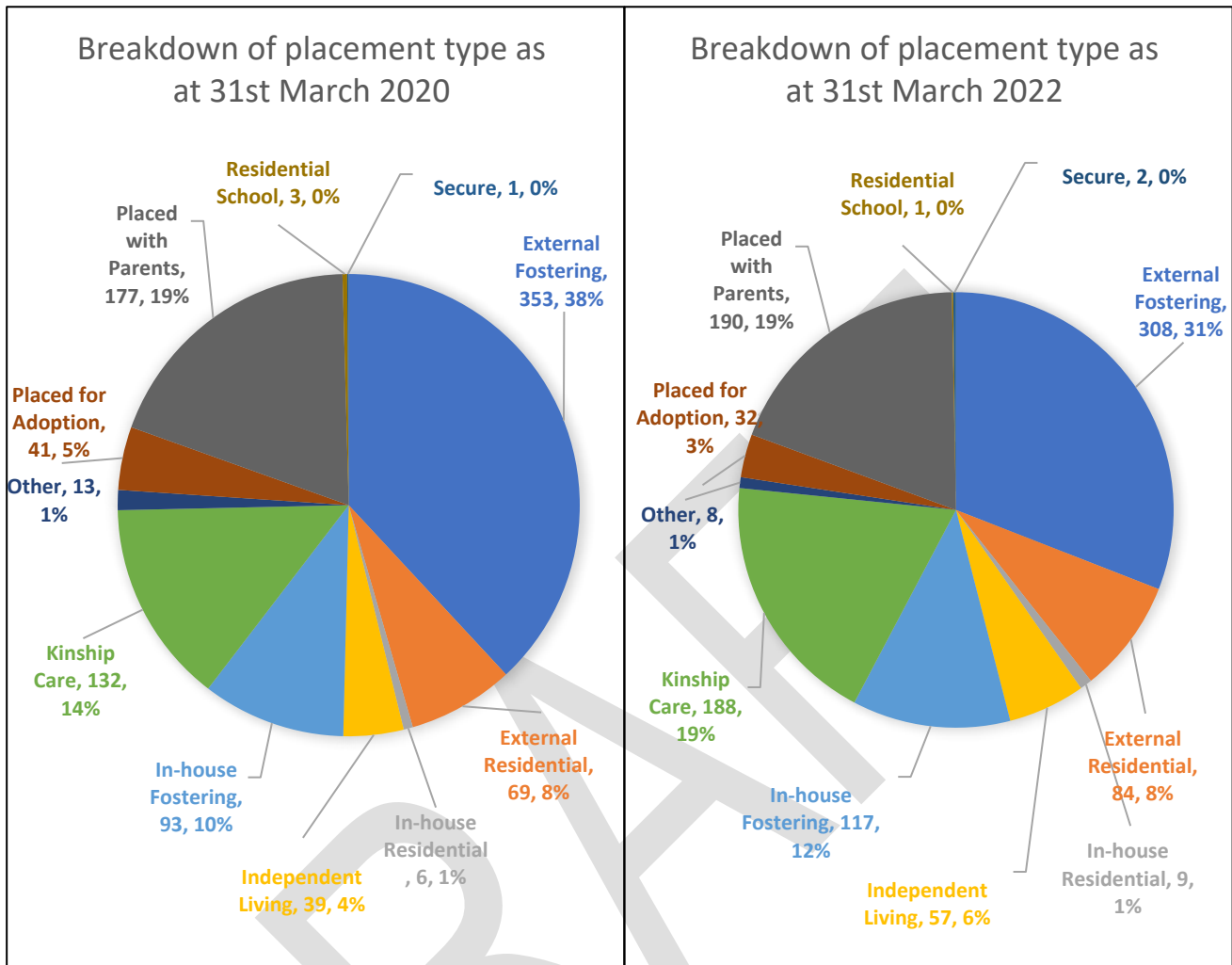


This graph shows where our 38 unaccompanied asylum seeking children were placed as at the 31<sup>st</sup> March 2022. The youngest 4 are 15 years of age and they are placed in 1 kinship placement, 1 in house foster placement and 2 external fostering placements. The other 34 are 16 and 17 years old and are living in the remainder of placements shown above.



This graph shows the number of children aged 6 months or under who became looked after each year. During 2021/22 there were 47 children who were 6 months old or less at the start of being looked after evidencing a recent increase in demand for placements for babies, including parent and baby placements.

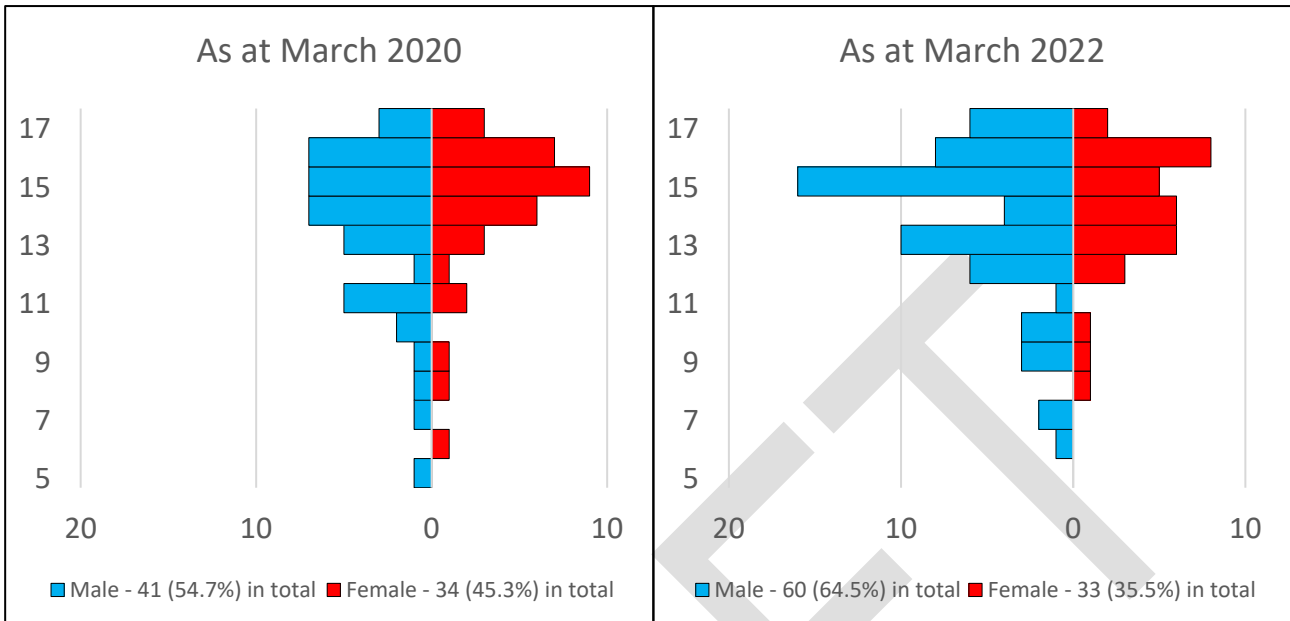
### Breakdown of Where Children Are Placed Over Time



The pie charts above show the increase in demand for residential placements and the increasing number of children and young people in kinship and in house foster care. It also shows the ongoing increase in the number of children who are on a Care Order, but placed with their parents. The number of young people in Independent Living placements has increased from 39 to 57.

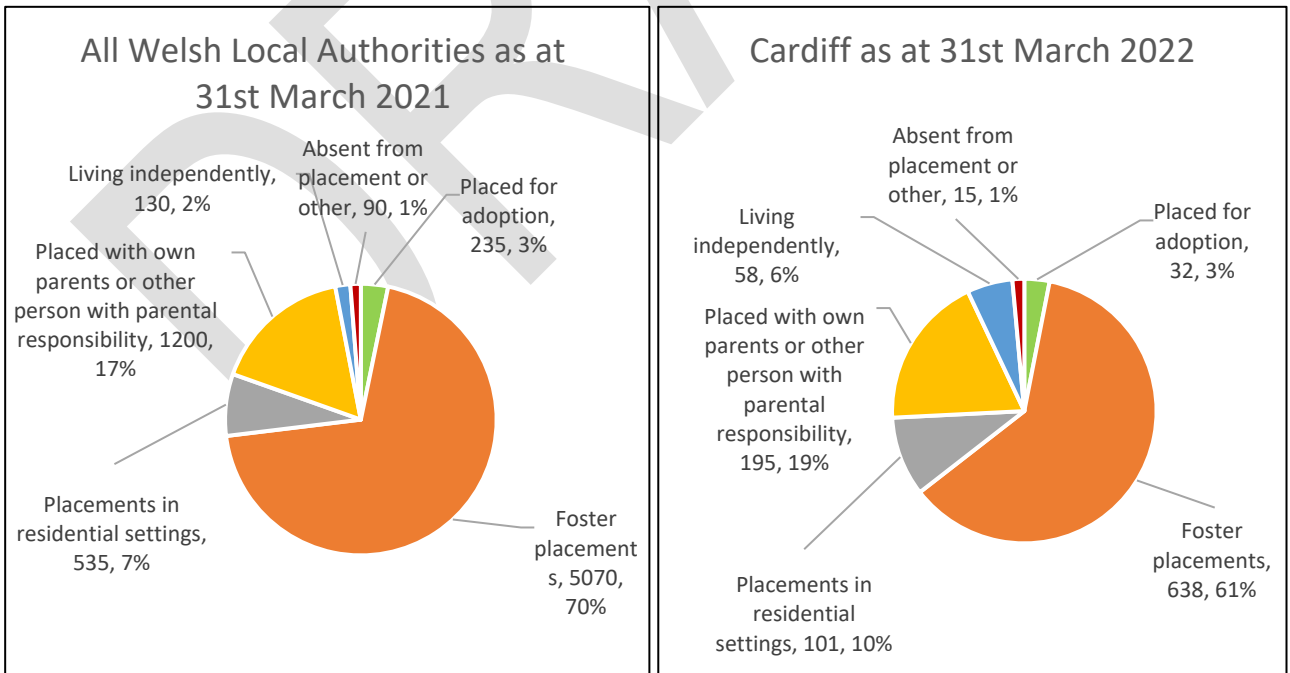


### Graphs Showing the Number of Children in Residential Placements by Age and Gender as at 31<sup>st</sup> March 2020 and 31<sup>st</sup> March 2022

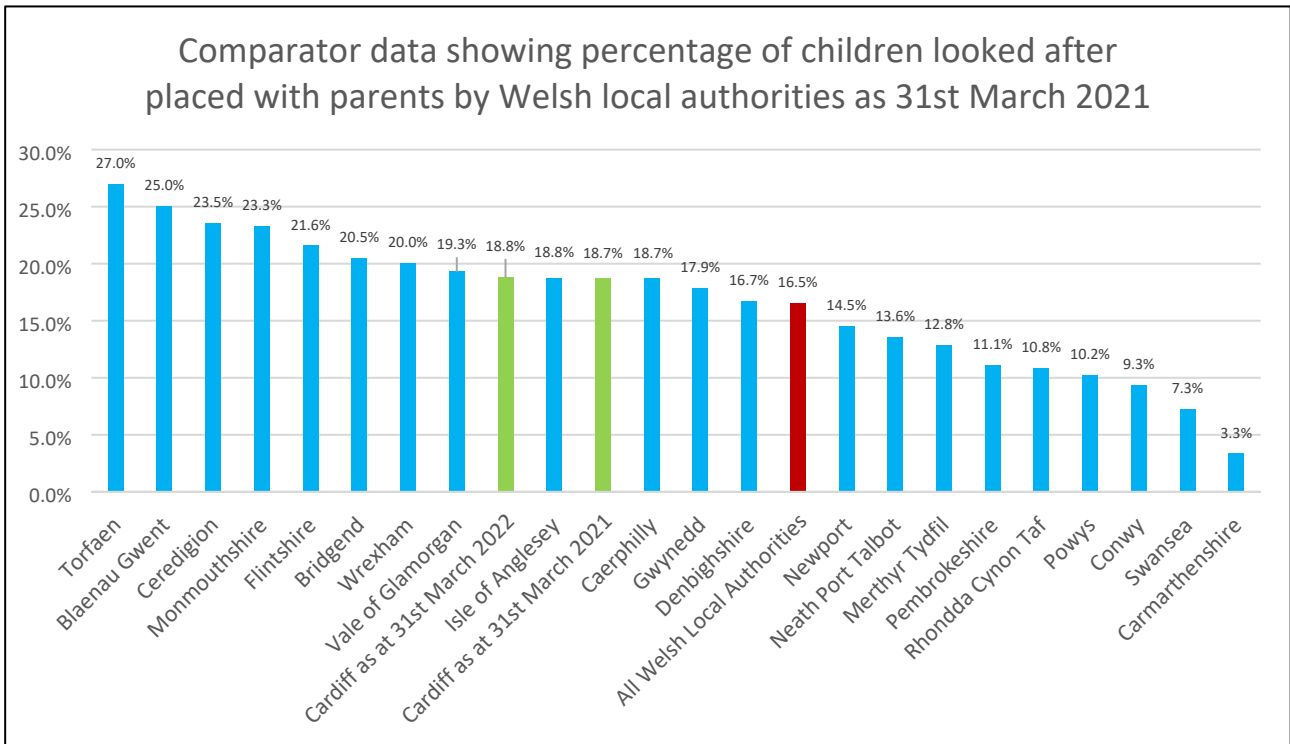


The charts above set out the increase in demand for residential placements for older teenage boys. Looking at the age structure of children looked after, together with the population projections for 11-18 year olds, the data suggests that the peak in demand for looked after placements, based on population size alone, might not be reached until 2023 and extend until 2028.

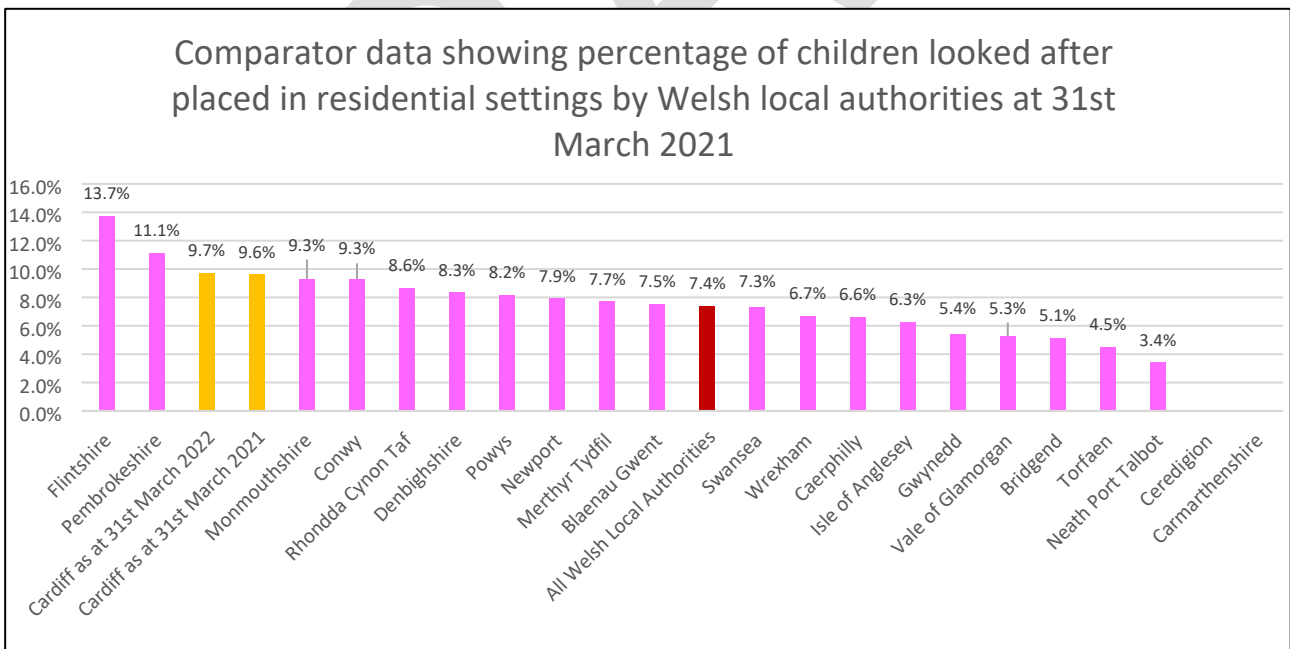
### Comparison of Breakdown by Type of Placement for Children Looked After



These pie charts show what type of placements children are placed in by All Wales Local Authorities compared to Cardiff's children looked after, 9% more children are placed in foster placements by All Welsh LA's compared to Cardiff, Cardiff have 3% more residential placements, 2% more placed with parents and 4% more independent living placements.

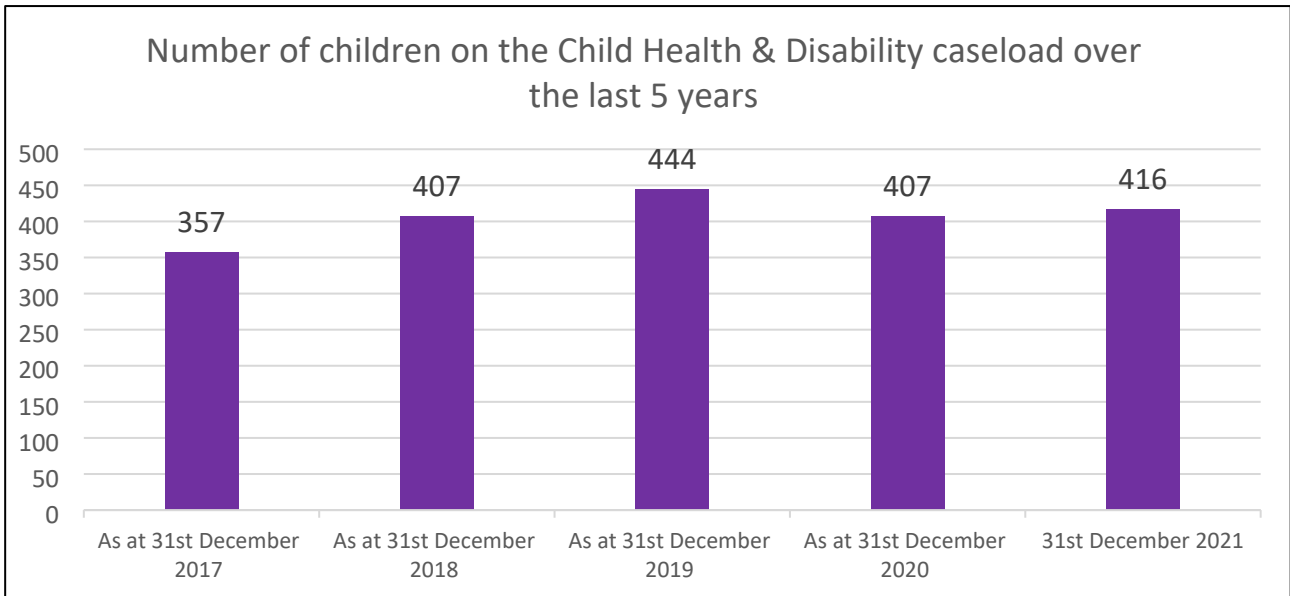


This graph shows the percentage of children looked after placed with their parents or other person with parental responsibility by Welsh LAs as at the 31<sup>st</sup> March 2021. The All Wales average is 16.5% placed with parents, Cardiff is not an outlier at 18.7% increasing slightly to 18.8% as at 31<sup>st</sup> March 2022.



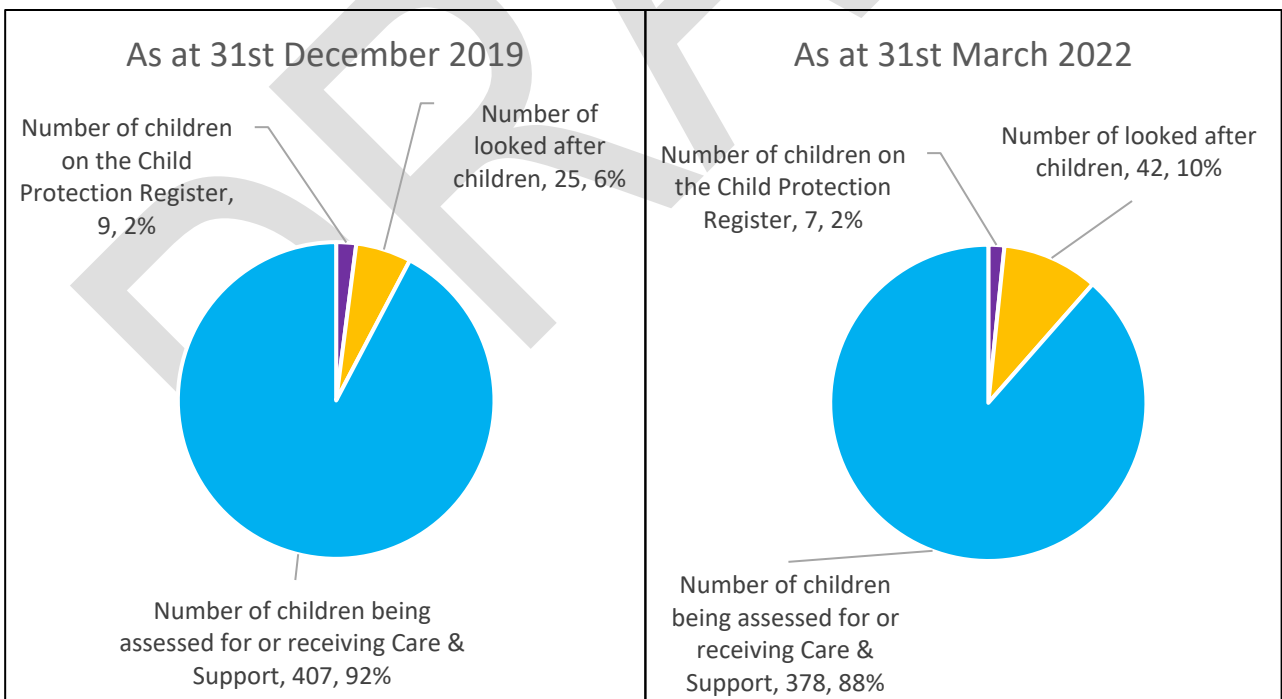
This graph shows the percentage of children looked after placed in residential settings by Welsh LAs as at the 31<sup>st</sup> March 2021. Cardiff currently has 9.7% of our children looked after in residential placements, compared to the All Wales average of 7.4% placed in residential settings. Only two other LAs in Wales have higher rates of residential placements.

### Children With Disabilities



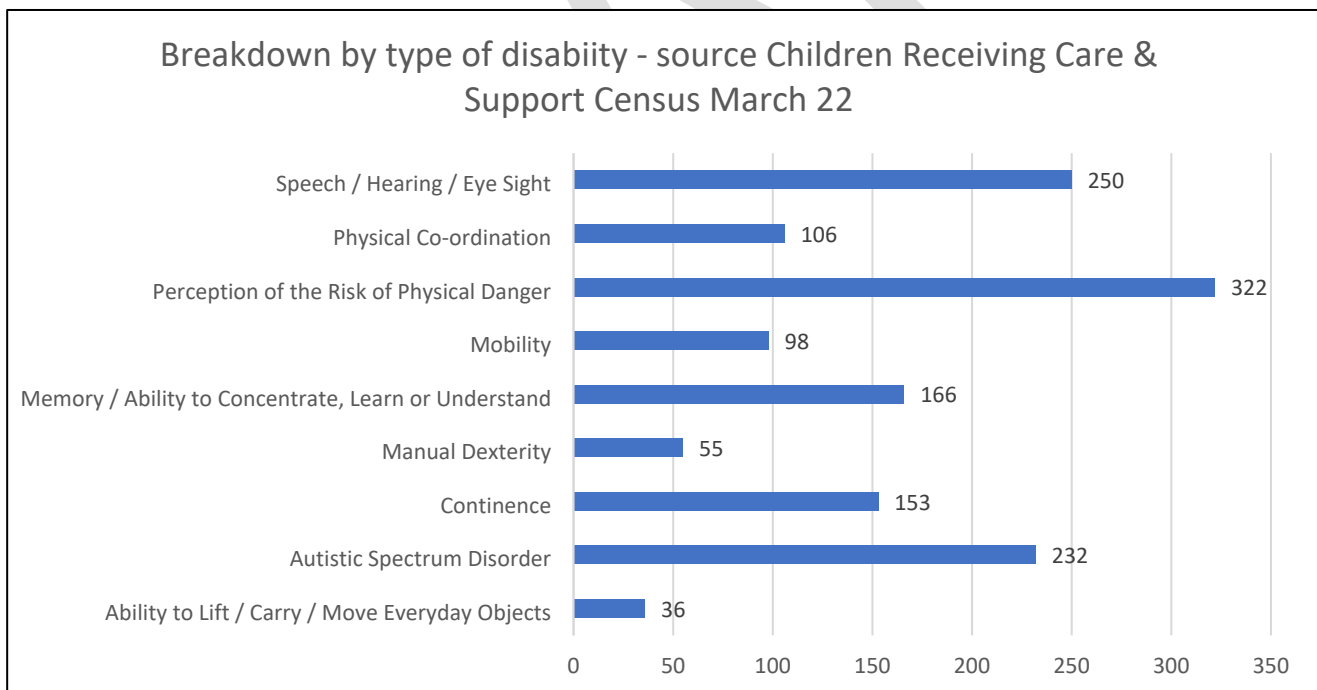
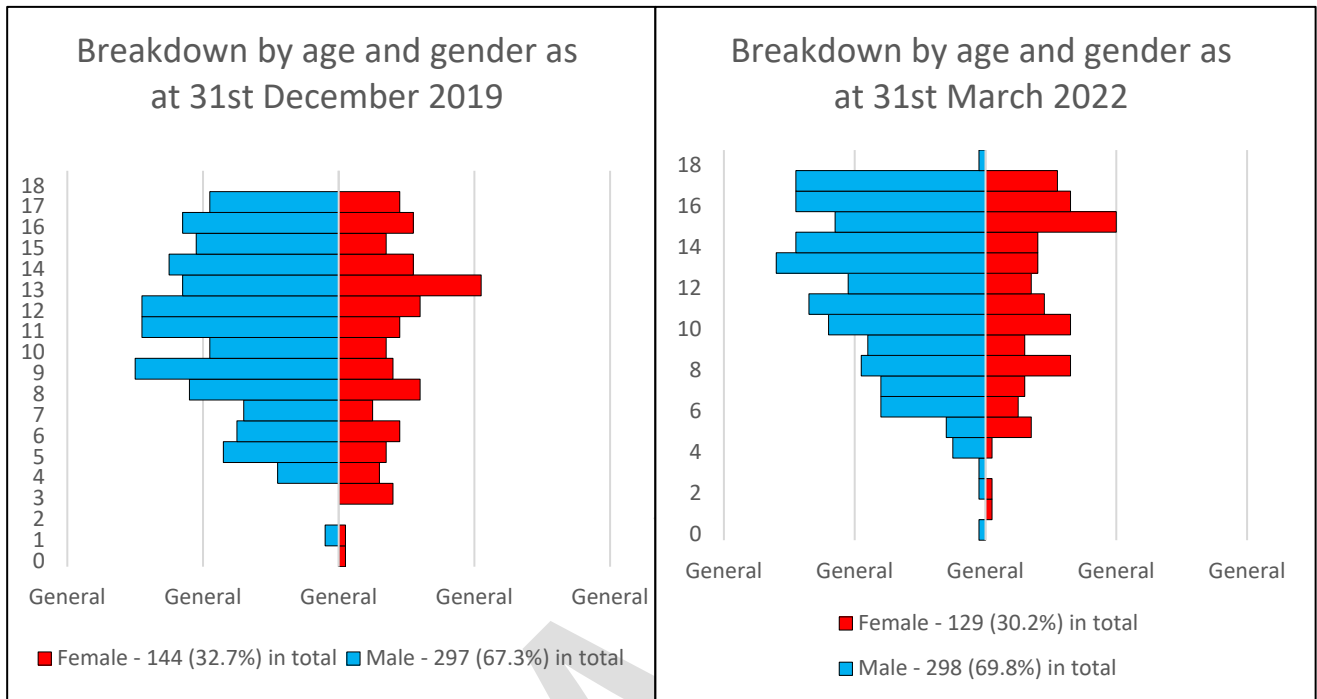
The number of children on the Child Health & Disability Service caseload has since increased to 427 as at 31<sup>st</sup> March 2022.

### Breakdown of Child Health & Disability Caseload by Whether on the Child Protection Register, Looked After or Being Assessed / Receiving Care and Support

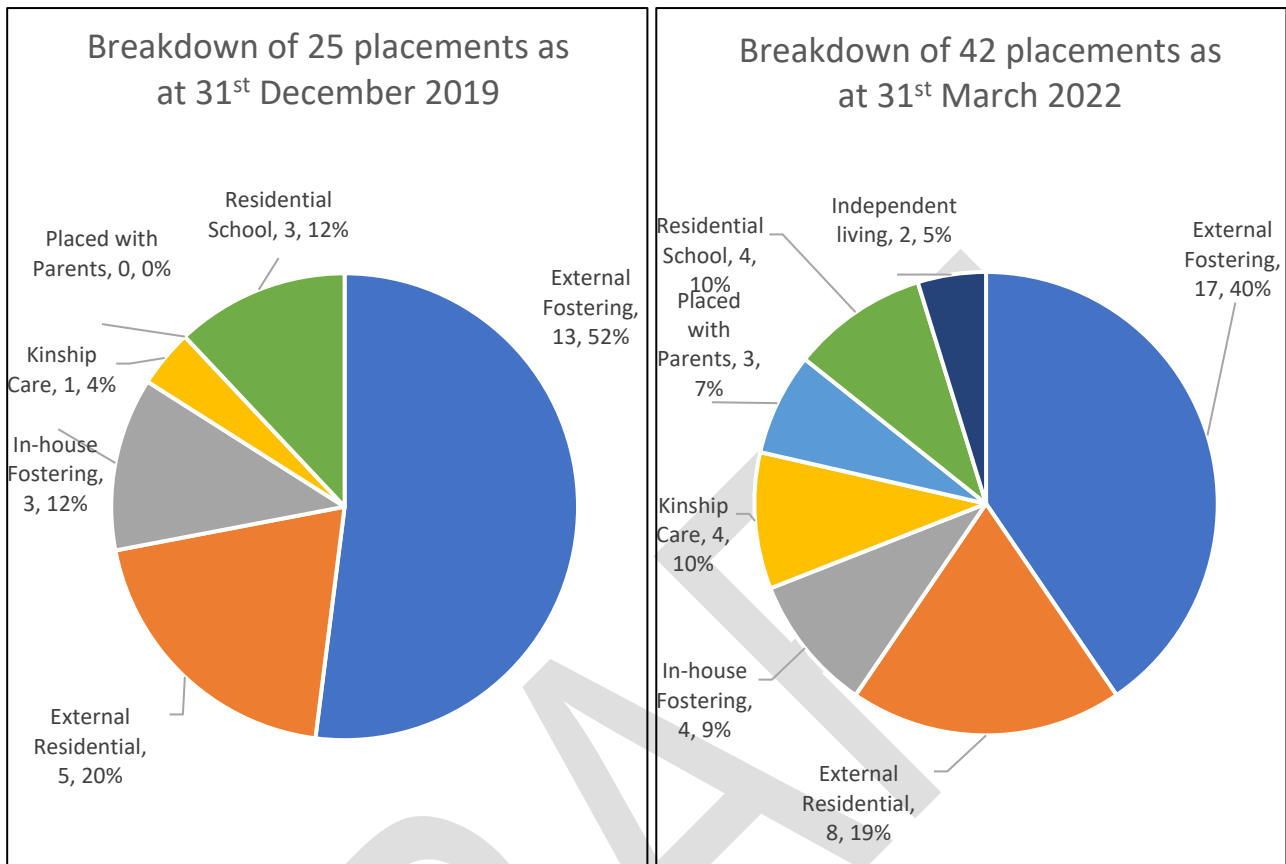


The number of children looked after on the Child Health & Disability caseload has increased from 25 to 42, 6% to 10% of the caseload, over the last two years. This equates to a 68% increase in children looked after.

## Breakdown of Children on the Child Health & Disability Caseload by Age and Gender Over Time

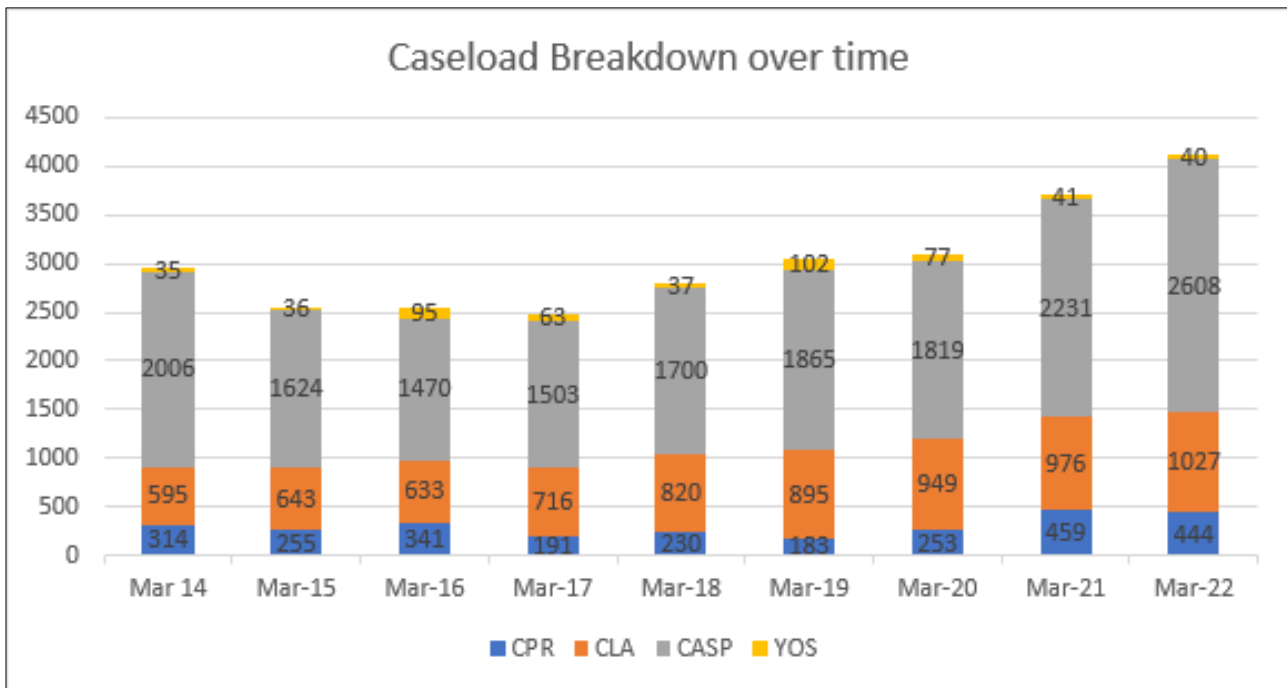


## Child Health & Disability Children Looked After Placements



These pie charts show the type of placements where children looked after in the Child Health & Disability Service are living and the change in type over the last two years.

## Caseload Overview



The graph above shows the gradual increase in the number of cases open to Children's Services over time.

## Conclusion

The data clearly shows the increasing demand and pressure on Children's Services in Cardiff. It is evident that we need to future proof our services to ensure we can continue to manage and respond to the continuing demand.

Our Children's Services Strategy sets out how we planning to deliver progressive change by shifting the balance in relation to:

- Ensuring a range of support in the community and a variety of homes for children are available in Cardiff - **place**.
- Supporting a permanent workforce – **people**.
- Developing our **practice** and procedures.

## CARDIFF COUNCIL

**Equality Impact Assessment  
Corporate Assessment Template**



**Policy/Strategy/Project/Procedure/Service/Function Title:** Children's Services Strategy 2023-2026

**New/Existing/Updating/Amending:** Updating

**Who is responsible for developing and implementing the Policy/Strategy/Project/Procedure/Service/Function?**

Name: Deborah Driffield      Job Title: Director of Children's Services

Service Team: Children's Management Team      Service Area: Children's Services

Assessment Date: 23<sup>rd</sup> November 2022

**1. What are the objectives of the Policy/Strategy/Project/ Procedure/ Service/Function?**

The Children's Services Strategy 2023-2026 sets out the vision for the Directorate including our direction and key priorities for the next 3 years to ensure that we are able to manage the demand for services and meet the increasingly complex needs of children and families in Cardiff.

**2. Please provide background information on the Policy/Strategy/Project/Procedure/Service/Function and any research done [e.g. service users data against demographic statistics, similar EIAs done etc.]**

The Children's Services Strategy for 2023-26 builds on the previous 3 year strategy and brings it up to date to ensure that it is consistent with the Children's Services steps in the Corporate Plan. The detail of how the strategy will be implemented will be set out in the Directorate Delivery Plan.

In terms of research, a demand analysis has been completed to inform our understanding of the increase in demand for services, and the impact of this increase on our services and consequently on our children and young people. This analysis has been used to inform the development of the new Children's Services Strategy and our plans for how we will shape our services going forward - in the context of significant budget pressures and the current cost of living crisis.

Consultation has been undertaken with children and young people so we can better understand what has, and has not, worked well for them. In addition to this a series of workshops were held with staff to obtain their views on what is / isn't working well and what we need to do next. We have also considered themes from complaints from children and young people, parents and carers to ensure that lessons are learned and feedback is considered when planning future developments. The Children and Young

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People’s Scrutiny Committee were given the opportunity to comment on the future direction of the service as part of the consultation that was undertaken during the production of the Local Authority Social Services Annual Report 2021/22. All of the above was taken into account during the development of the strategy.

**3 Assess Impact on the Protected Characteristics**

**3.1 Age**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative/]** on younger/older people?

	Yes	No	N/A
Up to 18 years	✓		
18 - 65 years	✓		
Over 65 years			✓

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The Strategy will have a positive impact on vulnerable children and young people including care leavers up to the age of 25 as it sets the scene for how we manage demand to respond to the needs of children and young people and ensure that they are safeguarded.

The focus of the strategy is on how we will deliver our primary aim to “shift the balance of care” to ensure that children in Cardiff are provided with the right support, from the right person at the right time, in the right place and at the lowest safe level of intervention. This will allow children to remain with their family where it is safe for them to do so and achieve their full potential.

The strategy sets out our commitment to putting children at the centre of all that we do, respecting their rights, hearing their voice and understanding their lived experience. We will undertake our work to shift the balance of care whilst ensuring that the child’s voice is heard and accounted for in both individual and service planning.

A Child’s Rights Impact Assessment has been undertaken.

**What action(s) can you take to address the differential impact?**

Positive impact identified - no action necessary.



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**3.2 Disability**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on disabled people?

	Yes	No	N/A
Hearing Impairment	✓		
Physical Impairment	✓		
Visual Impairment	✓		
Learning Disability	✓		
Long-Standing Illness or Health Condition	✓		
Mental Health	✓		
Substance Misuse	✓		
Other	✓		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The needs of any children or young people with a disability would be addressed as part of their Care and Support Plan. Further detail is available in the Strategy for Children with Disabilities and Additional Learning Needs.

**What action(s) can you take to address the differential impact?**

Positive impact identified - no action necessary.

**3.3 Gender Reassignment**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on transgender people?

	Yes	No	N/A
<b>Transgender People</b> (People who are proposing to undergo, are undergoing, or have undergone a process [or part of a process] to reassign their sex by changing physiological or other attributes of sex)	✓		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The Strategy will have a positive impact on children and young people regardless of Gender Reassignment. Any child or young person presenting as Transgender will be supported and respected in their preferred identity.

**What action(s) can you take to address the differential impact?**

Positive impact identified - no action necessary.

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**3.4. Marriage and Civil Partnership**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on marriage and civil partnership?

	Yes	No	N/A
Marriage			✓
Civil Partnership			✓

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

No impact - service provision will continue for care leavers up to the age of 25 who get married or enter a civil partnership.

**What action(s) can you take to address the differential impact?**

**3.5 Pregnancy and Maternity**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on pregnancy and maternity?

	Yes	No	N/A
Pregnancy	✓		
Maternity	✓		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The needs of any young people who become pregnant would be addressed as part of their Care and Support Plan.

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<b>What action(s) can you take to address the differential impact?</b>
Positive impact identified - no action necessary.

**3.6 Race**

Will this Policy/Strategy/Project//Procedure/Service/Function have a **differential impact [positive/negative]** on the following groups?

	Yes	No	N/A
White	✓		
Mixed / Multiple Ethnic Groups	✓		
Asian / Asian British	✓		
Black / African / Caribbean / Black British	✓		
Other Ethnic Groups	✓		

<b>Please give details/consequences of the differential impact, and provide supporting evidence, if any.</b>
This will have a positive impact on vulnerable children and young people from all ethnicities and backgrounds as above.
<b>What action(s) can you take to address the differential impact?</b>
Positive impact identified - no action necessary.

**3.7 Religion, Belief or Non-Belief**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on people with different religions, beliefs or non-beliefs?

	Yes	No	N/A
Buddhist	✓		
Christian	✓		
Hindu	✓		
Humanist	✓		
Jewish	✓		
Muslim	✓		
Sikh	✓		
Other	✓		

<b>Please give details/consequences of the differential impact, and provide supporting</b>
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<b>evidence, if any.</b>
This will have a positive impact on vulnerable children and young people regardless of religion, belief or non-belief.
<b>What action(s) can you take to address the differential impact?</b>
Positive impact identified - no action necessary.

**3.8 Sex**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on men and/or women?

	Yes	No	N/A
Men	✓		
Women	✓		

<b>Please give details/consequences of the differential impact, and provide supporting evidence, if any.</b>
This will have a positive impact on vulnerable children and young people both male and female.
<b>What action(s) can you take to address the differential impact?</b>
Positive impact identified - no action necessary.

**3.9 Sexual Orientation**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on the following groups?

	Yes	No	N/A
Bisexual	✓		
Gay Men	✓		
Gay Women/Lesbians	✓		
Heterosexual/Straight	✓		

<b>Please give details/consequences of the differential impact, and provide supporting evidence, if any.</b>
All children and young people should experience a positive impact regardless of their sexual orientation.
<b>What action(s) can you take to address the differential impact?</b>
Positive impact identified - no action necessary.

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**3.10 Socio-economic Duty**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on the Socio-economic Duty?

	Yes	No	N/A
	✓		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

The Strategy will be applicable to children from all backgrounds and will have a positive impact on those facing socio-economic disadvantage.

**What action(s) can you take to address the differential impact?**

Positive impact identified - no action necessary.

**3.11 Welsh Language**

Will this Policy/Strategy/Project/Procedure/Service/Function have a **differential impact [positive/negative]** on Welsh Language?

	Yes	No	N/A
Welsh Language	✓		

**Please give details/consequences of the differential impact, and provide supporting evidence, if any.**

Any child or young person (or parent / carer) wishing to communicate through the Welsh language will be able to do so.

**What action(s) can you take to address the differential impact?**

Ensure where a preference for communicating in Welsh is noted and adhered to.

**4. Consultation and Engagement**

What arrangements have been made to consult/engage with the various Equalities Groups?

Consultation has not been undertaken specifically with Equalities groups, but consultation with staff, service users and members has been undertaken to inform the development of the strategy – as set out in point 2 above.

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### Equality Impact Assessment Corporate Assessment Template

#### 5. Summary of Actions [Listed in the Sections above]

Groups	Actions
Age	None – impact is positive.
Disability	None – impact is positive.
Gender Reassignment	None – impact is positive.
Marriage & Civil Partnership	None – impact is positive.
Pregnancy & Maternity	None – impact is positive.
Race	None – impact is positive.
Religion/Belief	None – impact is positive.
Sex	None – impact is positive.
Sexual Orientation	None – impact is positive.
Socio-economic Duty	None – impact is positive.
Welsh Language	None – impact is positive.
Generic Over-Arching [applicable to all the above groups]	None – impact is positive.

#### 6. Further Action

Any recommendations for action that you plan to take as a result of this Equality Impact Assessment (listed in Summary of Actions) should be included as part of your Service Area's Business Plan to be monitored on a regular basis.

#### 7. Authorisation

The Template should be completed by the Lead Officer of the identified Policy/Strategy/Project/Function and approved by the appropriate Manager in each Service Area.

Completed By : Kim Brown	Date: 23.11.22
Designation: Service Manager, Policy & Performance	
Approved By:	
Designation:	
Service Area:	

7.1 On completion of this Assessment, please ensure that the form is submitted to the Equality Team mailbox so that there is a record of all assessments undertaken in the Council- [equalityteam@cardiff.gov.uk](mailto:equalityteam@cardiff.gov.uk).

For further information or assistance, please contact the Equality Team- [equalityteam@cardiff.gov.uk](mailto:equalityteam@cardiff.gov.uk)

**CHILD RIGHTS IMPACT ASSESSMENT (CIA)**

<b>Policy/ Strategy/ Project/ Procedure/ Service Title:</b>	<b>Children’s Services Strategy</b>
<b>New/ Existing/ Updating/ Amending:</b>	<b>Updating</b>

<b>Who is responsible for developing and implementing the policy/ strategy/ project/ procedure/ service?</b>	
<b>Name:</b>	Deborah Driffield
<b>Job Title:</b>	Director of Children’s Services
<b>Service/ Team:</b>	Children’s Management Team
<b>Directorate:</b>	Children’s Services
<b>CRIA Completion Date:</b>	16 <sup>th</sup> June 2022

**STAGE 1: PURPOSE/ SCOPE**

- 1. What is the policy/ strategy/ project/ procedure/ service?  
Summarise/ describe its overall aims and any aims specific to children.**

The Children’s Services Strategy sets out the vision for the Directorate and sets out our direction and key priorities for the next 3 years to ensure that we are able to manage the demand for services and meet the increasingly complex needs of children and families in Cardiff.

- 2. Will the policy/ strategy/ project/ procedure/ service affect children and young people? Please think about which groups of children and young people it will affect.**

Yes.  
The strategy will affect any children who are referred to Children’s Services, including young people aged 18-25 who are care leavers. This includes children with disabilities, children from all races and of all religions.

**STAGE 2: BUILD AND ASSESS**

- 3. The General Principles of the UNCRC (United Nations Convention on the Rights of the Child) are at the heart of a child rights-based approach, and are enshrined in articles 2, 3, 6 and 12 of the Convention. Please set out how your policy/ strategy/ project/ procedure/ service has taken account of these.**

Article	How does your proposal take account of the articles?
<p><b>Article 2 (non-discrimination):</b> The Convention applies to every child without discrimination, whatever their ethnicity, sex, religion, language, abilities or any other status, whatever they think or say, whatever their family background.</p>	<p>The purpose of the strategy is to ensure that we are able to manage the demand for our services and meeting increasingly complex needs of the children and families in our city. This applies to all children equally.</p>
<p><b>Article 3 (best interests of the child):</b> The best interests of the child must be a top priority in all decisions and actions that affect children.</p>	<p>Respecting children’s rights and putting children and families at the heart of everything that we do is the essence of the strategy. Children’s Services believe that our interventions should be at the lowest safe level appropriate for each individual child and the strategy sets out how we will achieve this.</p>
<p><b>Article 6 (life, survival and development):</b> Every child has the right to life. Governments must do all they can to ensure that children survive and develop to their full potential.</p>	<p>Safeguarding children is our core business. Although our interventions will be at the lowest safe level, for some children this will mean that they are subject to child protection investigations, Court proceedings and / or become looked after to ensure their safety and support them to develop their full potential.</p>
<p><b>Article 12 (respect for the views of the child):</b> Every child has the right to express their views, feelings and wishes in all matters affecting them, and to have their views considered and taken seriously.</p>	<p>The strategy was developed in consultation with young people and sets out our commitment to putting them at the centre of all that we do, respecting their rights, hearing their voice and understanding their lived experience.</p>



<p><b>Any other relevant articles</b></p>	<p><b>Article 16 (right to privacy)</b></p> <p><b>Article 18 (parental responsibilities and state assistance)</b> Governments must support parents by creating support services for children and giving parents the help they need to raise their children.</p> <p><b>Article 19 (protection from violence, abuse and neglect)</b> Governments must do all they can to ensure that children are protected from all forms of violence, abuse, neglect and bad treatment by their parents or anyone else who looks after them.</p> <p><b>Article 20 (children unable to live with their family)</b> If a child cannot be looked after by their immediate family, the government must give them special protection and assistance. This includes making sure the child is provided with alternative care that is continuous and respects the child's culture, language and religion</p> <p><b>Article 21 (adoption)</b> Governments must oversee the process of adoption to make sure it is safe, lawful and that it prioritises children's best interests. Children should only be adopted outside of their country if they cannot be placed with a family in their own country.</p>
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**Article 23 (children with a disability)**

A child with a disability has the right to live a full and decent life with dignity and, as far as possible, independence and to play an active part in the community. Governments must do all they can to support disabled children and their families.

**Article 25 (review of treatment in care)**

If a child has been placed away from home for the purpose of care or protection (for example, with a foster family or in hospital), they have the right to a regular review of their treatment, the way they are cared for and their wider circumstances.

**Article 28 (right to education)**

Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights. Richer countries must help poorer countries achieve this.

**Article 29 (goals of education)**

Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.

	<p><b>Article 33 (drug abuse)</b> Governments must protect children from the illegal use of drugs and from being involved in the production or distribution of drugs.</p> <p><b>Article 34 (sexual exploitation)</b> Governments must protect children from all forms of sexual abuse and exploitation.</p> <p><b>Article 42 (knowledge of rights)</b> Governments must actively work to make sure children and adults know about the Convention.</p>
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You should refer to the [full list of UNCRC Articles](#) when completing this form and add any other relevant articles above. For further information or assistance on UNCRC Articles, please email the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)

**4. What is the likely/ actual impact of the proposal on children’s rights? Is it positive, negative or neutral?**

*[If a negative impact is assessed for any area of rights or any group of children and young people, you must list and recommend options to modify the proposal or mitigate the impact.]*

Positive. The focus of the strategy is on how we will deliver our primary aim is “shift the balance of care” to ensure that children in Cardiff are provided with the right support, from the right person at the right time, in the right place and at the lowest safe level of intervention, enabling them to remain with their family where it is safe for them to do so and achieve their full potential.

The strategy sets out our commitment to putting children at the centre of all that we do, respecting their rights, hearing their voice and understanding their lived experience. We will undertake our work to shift the balance of care whilst ensuring that the child’s voice is heard and accounted for in both individual and service planning.

The shift in the balance of care refers to all aspects of our work:

- The Place element sets out the actions we will take to support children to remain at home, return home from being looked after or achieve permanence for children who need to be looked after are. Examples include:
  - Family Group Conferencing.
  - Reunification Framework.
  - Family Drug and Alcohol Court.
  - Discharging Care Order for children placed with their parents.
  - Conversion kinship care arrangements to Special Guardianship Orders.
  - The Right Place model.
  - Reviewing Hub.
  
- The People / Workforce element sets out the actions we will take to develop a primarily permanent workforce with agency workers being used in exceptional and short term circumstances only. Examples include:
  - Initiatives to reduce social worker vacancies, including ensuring that social workers only do what only social workers can do.
  - Locality working.
  
- The Practice element of the strategy sets out the actions we will take to move from a child protection focus to a wellbeing focus starting at the front door and working through the child's journey. Examples include:
  - Participation Framework.
  - Trauma Informed Practice.
  - Safeguarding Adolescents from Exploitation (SAFE) model.

### STAGE 3: VOICE AND EVIDENCE

- 5. Have you sourced and included the views and experiences of children and young people? What do you know about children and young people's views and experiences that are relevant to the proposal?**

Children's views from the challenge in relation to the 2021/22 annual report will be accounted for and further consultation / engagement will be undertaken as part of the development of the strategy. The strategy will be updated accordingly.

- 6. How do you plan to review the policy/ strategy/ project/ procedure/ service to ensure that it respects, protects and fulfils children's rights?**

**Please provide an outline of the monitoring and review process for the implementation of the strategy/ policy/ project/ procedure or delivery of the service and how children and young people will be included in this process.**

The strategy will be formally reviewed on a 3 yearly cycle in consultation with children and young people. However, each year we produce an annual report on the effectiveness of our services which will help us to monitor our progress against the priorities set out in our strategy and any new priorities for the following year. Challenge sessions with children and young people are undertaken in relation to the report and the report summarises how children have contributed and participated in their care planning and in service development throughout the year.

#### STAGE 4: BUDGET

##### 7. What is the budget for this policy/ strategy/ project/ procedure/ service? Are any parts of it allocated to children and young people?

The budget for the strategy is essentially the Children's Services budget - £78,329,000 for 2022/23, all of which is allocated to children and young people.

#### STAGE 5: IDENTIFIED ACTIONS

##### 8. What actions have been identified or changes made to the policy/ strategy/ project/ procedure/ service as a result of this assessment?

- Update the strategy to reflect outcome of challenge undertaken with children and their families as part of the production of the annual report when it is completed.
- Update the strategy to take account of consultation / engagement processes undertaken with children and their families during the production of the strategy.

#### AUTHORISATION

The template should be completed by the Lead Officer of the identified policy/ strategy/ project/ procedure/ service and approved by the appropriate manager.

<b>Completed By:</b>	Kim Brown
<b>Date:</b>	16 <sup>th</sup> June 2022
<b>Job Title:</b>	Service Manager
<b>Approved By:</b>	Nick Blake

<b>Job Title:</b>	Operational Manager
<b>Directorate/ Service:</b>	Children's Services

### **Governance & Decision-Making**

Where it is considered that a CRIA is required, you must append the completed form to the Cabinet or Officer Decision Report. A copy must also be emailed to the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)

### **Advice & Support**

UNICEF Child Rights Impact Assessment Guidance for Local Government:  
[Child rights impact assessment - Child Friendly Cities & Communities \(unicef.org.uk\)](https://www.unicef.org.uk/child-rights-impact-assessment-child-friendly-cities-communities)

For further information or assistance in completing the CRIA, please email the Child Friendly Cardiff Team [ChildFriendlyCardiff@cardiff.gov.uk](mailto:ChildFriendlyCardiff@cardiff.gov.uk)