

University Hospital Remaining Estate Portfolio (REP)- Facet Surveys

Executive Summary

Prepared for Cardiff & Vale UHB

March 2026



Purpose of This Report

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This Executive Summary presents the key findings from the 10-year estate condition, risk and lifecycle modelling for the Cardiff & Vale Remaining Estate Portfolio (REP).

The portfolio comprises a distributed network of community facilities, clinics, administrative buildings and operational support facilities that play a critical role in supporting local service delivery across the Health Board.

It has been prepared to:

- Provide a clear, evidence-based view of estate condition and risk
- Identify priority investment needs
- Support Welsh Government funding discussions
- Explain the consequences of continued under-investment compared to targeted intervention

The analysis draws directly from the validated Power BI estate model, using asset-level condition, risk, backlog and lifecycle cost data. Functional suitability and space utilisation are outside the scope of this summary.



Estate Overview

Remaining Estate Portfolio at a Glance

The Remaining Estate Portfolio consists of a broad range of community health facilities, clinics, locality hubs and operational support buildings distributed across the Cardiff and Vale region.

These facilities play an essential role in delivering primary care, outpatient services, community health programmes and administrative support functions across the Health Board.

Estate modelling indicates a 10-year lifecycle renewal requirement of approximately £46 million, equivalent to an annualised investment requirement of approximately £4.6 million per year.

While significantly smaller than the two acute hospital sites, the portfolio represents a critical component of the wider healthcare delivery network, supporting community-based services and reducing pressure on acute facilities.

Maintaining estate resilience and operational reliability across these facilities will require consistent lifecycle investment and targeted renewal of ageing building fabric and engineering infrastructure.

57

Total Facilities

£46 m

10 Years Renewals

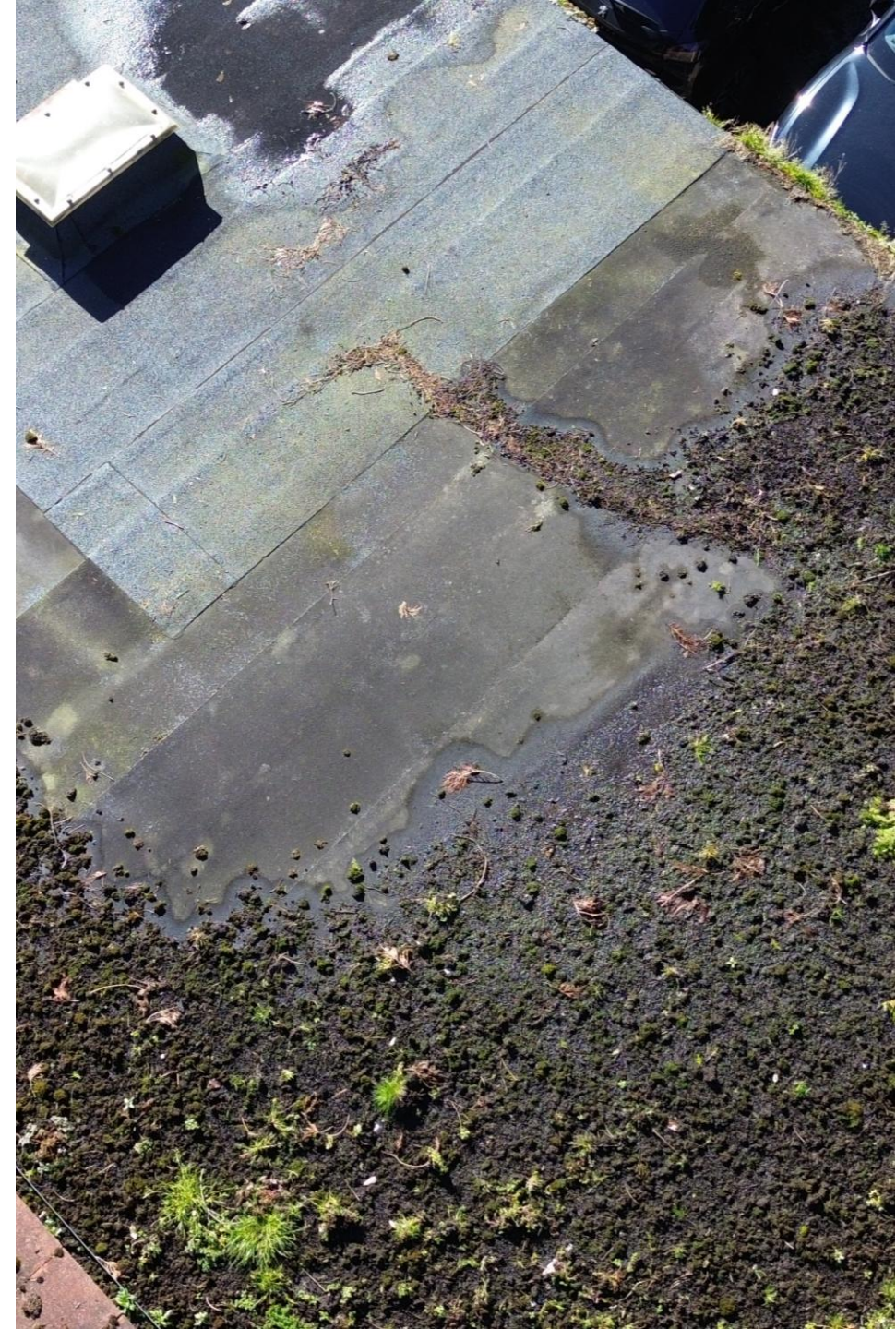
£4.6 m

Annualised spend

£13.8 m

Total backlog
maintenance

***Year 1 Investments*





Model Structure

Estate data inputs and baseline assumptions

The estate model is built from validated, asset-level survey data and structured to allow consistent comparison across the estate.

It combines condition, cost, risk and lifecycle information within a single, coherent dataset that underpins all subsequent analysis.

Core data inputs include:

- Condition grades (A–Dx) for fabric and M&E and assets
- Asset replacement costs aligned to standardised cost libraries
- Remaining service life for each asset
- NHS priority categories (Mandatory, Essential, Desirable, Statutory)
- NHS 1–25 risk scoring inputs (likelihood and consequence)
- Gross internal floor area (m²) for benchmarking and normalisation

Baseline assumptions:

All costs are normalised to a common base year

- Data is aggregated at both building and site level
- Consistent classification and coding is applied across all assets
- Functional suitability and space utilisation are excluded from this model
- This structure provides a single, coherent dataset that underpins all subsequent analysis.





Modelling Approach

How data is converted into backlog, risk and investment need

Key modelling steps:

The model converts survey data into backlog, risk and investment need through a series of clear steps:

- **Backlog:** the cost to return assets in Condition C–Dx to Condition B
- **Lifecycle:** renewal costs profiled over 10 years based on remaining service life
- **Risk:** costs weighted using NHS 1–25 likelihood and consequence scoring
- **Priority:** works classified as Mandatory, Essential, Statutory or Desirable

This approach allows high-risk, high-cost assets to be identified and enables investment decisions to be prioritised on the basis of risk, cost and impact.

What this enables:

- Identification of high-risk, high-cost assets
- Comparison of alternative investment scenarios
- Clear visibility of how deferred investment escalates risk and cost
- Evidence-based prioritisation of capital and revenue spend

Outputs are presented through facility-level and portfolio-level dashboards to support decision-making.





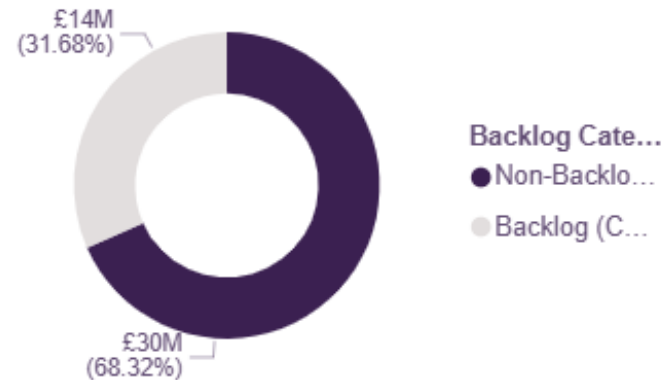
“Around one third of estate liability sits within backlog assets

Condition Distribution

Grade split

- Grade A / B: ~68% – Generally serviceable
- Grade C / Cx: ~28% – Deterioration evident
- Grade D / Dx: ~4% – Significant risk / failure

Replacement Cost by Backlog Category



Escalating Risk from Deferred Investment

While much of the estate remains serviceable, lifecycle liability is increasingly concentrated in Condition C and Cx assets, where deterioration is already evident.

These assets represent the next wave of backlog formation if renewal is deferred.

The Remaining Estate Portfolio currently contains **approximately £13.8M of backlog maintenance**, reflecting ageing building fabric and engineering systems across community facilities.

Targeted lifecycle investment is required to prevent backlog growth and maintain service reliability.

The analysis shows a clear structural difference across the estate:

- UHW and Llandough face significant historic backlog
- The Remaining Estate Portfolio is largely serviceable but entering a period of increasing lifecycle demand.

Backlog Maintenance

Backlog Overview

The Remaining Estate Portfolio contains approximately £14m of backlog maintenance, of which £11m is classified as high or significant risk.

Backlog intensity is £221 per m², significantly lower than the acute hospital sites (UHW ~£2,086 per m²; Llandough ~£2,032 per m²).

This indicates the community estate is **currently in comparatively better condition**, although targeted lifecycle investment will be required to prevent backlog growth.

Note: Backlog = cost to return Condition C-Dx assets to Condition B.

£14 m

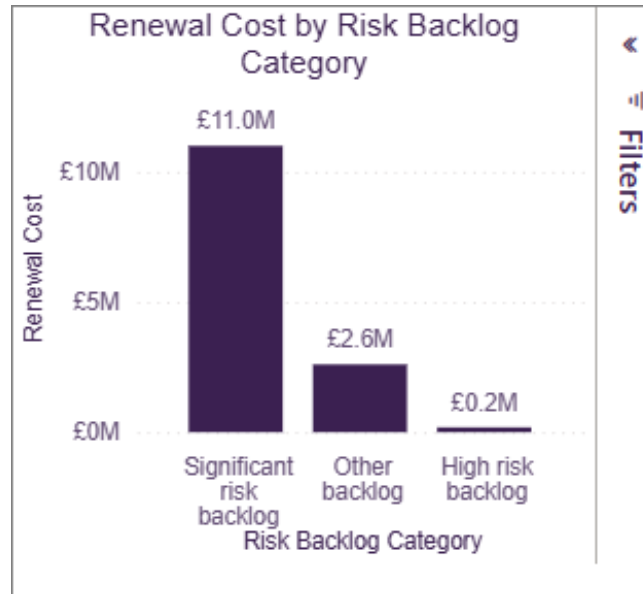
Total Backlog

£11 m

High / Significant backlog

£221

Backlog per m²



Community Estate Shows Lower Backlog Intensity Than NHS Benchmark

Backlog - National Context

£221 v £662

How the Remaining Estate Portfolio compares nationally

Backlog per m² – REP vs NHS England Average

A comparison against the 2023–24 ERIC returns shows that backlog intensity within the Remaining Estate Portfolio is significantly lower than the NHS England average.

£221 per m² vs £662 per m²

This indicates that the community estate is currently in comparatively better overall condition than the typical NHS estate.

While ERIC benchmarking provides useful context, results should be interpreted with caution due to differences in estate composition, service mix and reporting methodologies.

Trust Name	M2 Backlog
AIREDALE NHS FOUNDATION TRUST	£4,379
IMPERIAL COLLEGE HEALTHCARE NHS TRUST	£3,353
ESSEX PARTNERSHIP UNIVERSITY NHS FOUNDATION TRUST	£2,485
BART'S HEALTH NHS TRUST	£2,331
THE HILLINGDON HOSPITALS NHS FOUNDATION TRUST	£2,293
UNIVERSITY HOSPITAL WALES	£2,086
THE QUEEN ELIZABETH HOSPITAL KING'S LYNN NHS FOUNDATION TRUST	£1,907
CLATTERBRIDGE CANCER CENTRE NHS FOUNDATION TRUST	£1,832
UNIVERSITY COLLEGE LONDON HOSPITALS NHS FOUNDATION TRUST	£1,827
LONDON NORTH WEST UNIVERSITY HEALTHCARE NHS TRUST	£1,805



Around 28% of total estate risk is concentrated in just ten buildings.

Risk Profile (NHS 1–25)

Top 10 Sites - Total Risk Exposure

Site Name	Building Name	Total Risk Exposure (Avg x Count)	Renewal Cost	% of Total Risk
Community Premises - Aggregated Smaller Sites	West Services Bdg	3648	£4,662,712	13.65%
Gabalfa Clinic	Gabalfa Clinic	3583	£7,771,713	13.41%
Grangetown Health Centre	Grangetown Health Centre	3085	£7,714,910	11.54%
Community Premises - Aggregated Smaller Sites	Whitchurch Lodge	3075	£6,904,664	11.50%
Loudoun Square	Loudoun Square Medical Centre	2815	£10,483,021	10.53%
Cowbridge Health Centre	Cowbridge Health Centre	2736	£3,189,878	10.24%
Community Premises - Aggregated Smaller Sites	Pendine Centre	2640	£4,520,185	9.88%
Community Premises - Aggregated Smaller Sites	Roath Clinic	2560	£6,704,904	9.58%
Riverside Health Centre	Riverside Health Centre	2553	£16,457,539	9.55%
Community Premises - Aggregated Smaller Sites	Llanishen Clinic	2502	£5,919,115	9.36%

Drivers of Escalating Estate Risk

- ◀ Risk exposure across the estate is partially concentrated within a limited number of sites.
- ▮ **Filters**
- ◀ The **top 5 buildings account for 16%** of total estate risk.
- ◀ The **top 10 buildings account for 28%** of total estate risk.
- ◀ This suggests that targeted investment in a small number of high-risk facilities could materially reduce overall estate risk.



C, CX, D, DX – CONDITION CODES

COST PROFILE

The tables illustrate the renewal cost profile of assets currently within Condition C–Dx across the Remaining Estate Portfolio, representing the primary drivers of near-term lifecycle investment.

In **Year 1**, investment demand is largely concentrated within building fabric elements, including structure, roof and internal fabric, alongside fire safety infrastructure.

Across **Years 1–3**, the profile expands to include a wider range of engineering systems, including heating, water services and electrical infrastructure, reflecting ageing building services across the community estate.

Timely lifecycle investment in these assets will help maintain operational resilience and reduce the risk of service disruption across multiple sites.

YEAR 1

Asset Group	ReplacementCost
Chimneys	£13,588
Drainage and Water Mains	£3,790
Electrical System	£37
External Fabric	£833,069
Fire Safety	£112,313
Grounds & Gardens	£129,794
Health & Safety	£75,327
Internal Fabric	£1,040,074
Internal Fixtures & Fittings	£41,812
Roof	£961,447
Structure	£1,831,550
Total	£5,042,802

YEAR 1 – 3 COMBINED

Asset Group	ReplacementCost
Alarms and Detection	£651,291
BMS	£1,123
Boilers and Calorifiers	£248,594
Chimneys	£13,588
Drainage and Water Mains	£10,535
Electrical System	£308,914
External Fabric	£4,012,173
Fire Safety	£112,313
Fuel Storage and Distribution	£505
Grounds & Gardens	£129,794
Health & Safety	£75,327
Heating System	£798,506
Hot & Cold Water Systems	£460,365
Internal Fabric	£1,371,958
Internal Fixtures & Fittings	£58,237
Lifts and Hoists	£552,541
Lighting	£237,240
Roof	£1,334,124
Structure	£1,831,550
Telecomms	£913
Ventilation System	£141,073
Total	£12,350,664



What Investment Buys You

Translating investment into measurable risk reduction

Targeted, risk-led investment delivers far greater benefit than spreading funding evenly across the estate.

Focused intervention enables:

- **Meaningful risk reduction** – addressing a small number of high-risk facilities removes a disproportionately large share of total estate risk
- **Protection of core clinical services** – prioritising Mandatory and Essential works reduces immediate safety, statutory and operational exposure
- **Better value for money** – early intervention avoids escalation into reactive maintenance, emergency replacement and unplanned disruption
- **Greater certainty over future investment** – tackling front-loaded lifecycle demand stabilises longer-term funding requirements

“Around 80% of the renewal requirement relates to essential lifecycle works needed to sustain safe and reliable estate operation.”

Priority Categorisation

10-Year Priority Spend Profile

Investment requirements over the 10-year period have been categorised in line with NHS Estates priority definitions.

Essential – £5.8m (42%)

Works required to prevent further deterioration and escalating risk, protecting asset integrity and avoiding higher future costs.

Mandatory – £5.2m (38%)

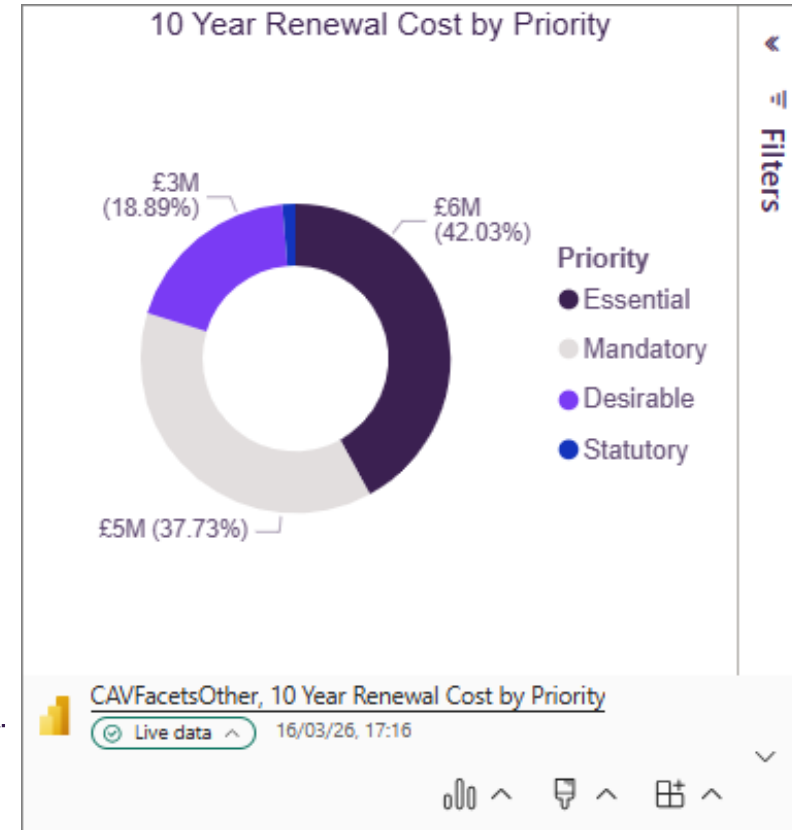
Works essential to maintain safe and continuous operation where failure could result in service disruption or unacceptable operational risk.

Desirable – £2.6m (19%)

Longer-term lifecycle and optimisation works that support estate performance but do not present immediate safety or operational risk.

Statutory – £0.2m (1%)

Works required to meet legal or regulatory obligations, including life safety, fire safety and statutory compliance.



“Although backlog is distributed across many sites, a small number of facilities drive a significant share of the estate’s investment requirement, providing a clear opportunity for prioritised capital intervention.”

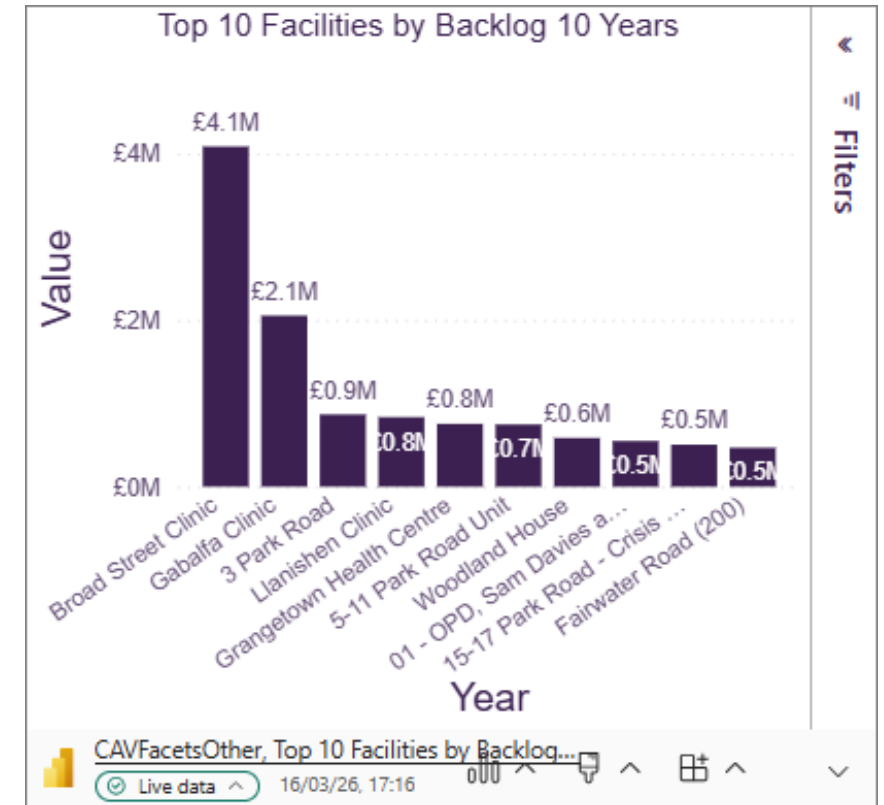
Facility-Level Cost Concentration

Backlog Cost Concentration

Backlog maintenance costs across the Remaining Estate Portfolio are partially concentrated within a relatively small number of facilities, rather than evenly distributed across the estate.

The ten highest-cost facilities account for approximately 35% of the total backlog maintenance requirement, indicating that several key buildings are responsible for a disproportionate share of lifecycle investment demand.

These sites include a number of high-use clinical and operational facilities, where ageing building fabric and engineering systems drive higher renewal costs.



“A relatively small number of high-cost facilities drive a significant proportion of the estate’s long-term maintenance liability, reinforcing the need for prioritised, risk-led capital investment.”



“The investment profile reflects clustered asset lifecycles, indicating the need for planned early-stage capital investment to maintain estate reliability.”

10-Year Renewal Profile

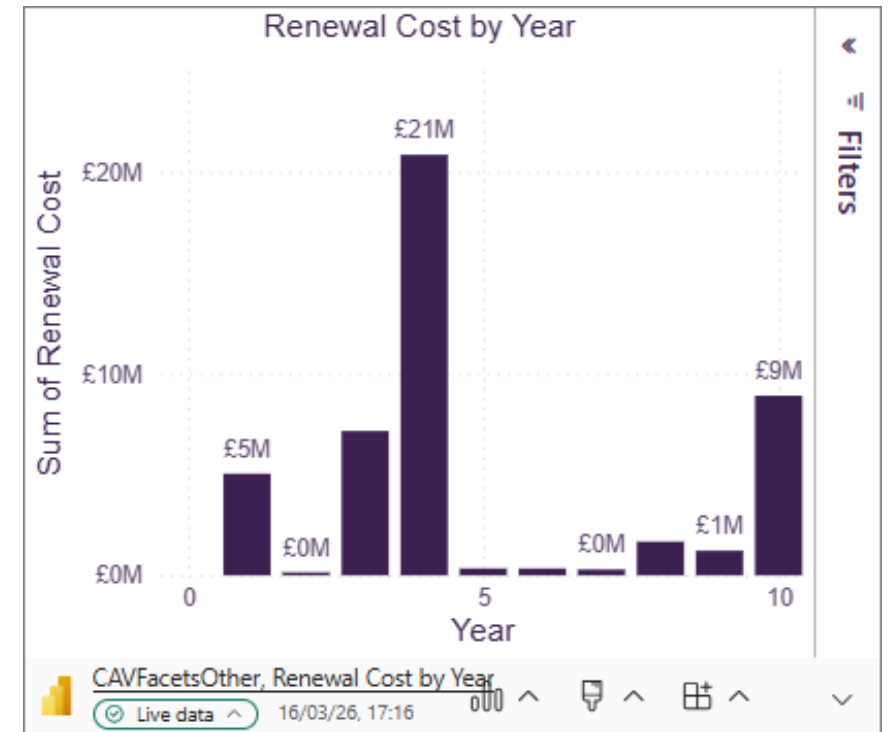
Lifecycle Demand Over Time

The 10-year lifecycle profile indicates that renewal demand is unevenly distributed, with a significant concentration of investment required within the early years of the programme.

This reflects the ageing condition of multiple building fabric and engineering assets reaching the end of their service life within a similar timeframe, creating a pronounced renewal peak.

A **significant investment requirement occurs around Year 4**, where several major lifecycle replacements coincide, followed by a smaller secondary requirement later in the programme.

While investment requirements appear lower in the intervening years, this does not indicate reduced risk, but rather reflects the timing of asset lifecycle replacement cycles.



Renewal investment is strongly front-loaded, with a significant concentration of lifecycle expenditure required within the first five years of the programme.



Consequences of Under-Investment

What Happens If Investment Is Deferred

Without targeted intervention, the estate will experience:

- Escalating clinical and operational risk
- Increased statutory and safety exposure
- Greater reliance on reactive maintenance
- Poorer value for money and higher whole-life cost

These impacts affect both patient safety and the reliability of clinical services.



Conclusions & Recommendations

Strategic Implications for Investment

The 10-year condition, risk and lifecycle model demonstrates that:

1. Estate risk and cost are highly concentrated, not evenly distributed
2. Investment need is driven by Mandatory and Essential requirements
3. Renewal demand is front-loaded and unavoidable
4. Targeted investment will deliver disproportionate risk reduction

Recommendations next steps

- Prioritise funding toward highest-risk, highest-cost facilities
- Focus early investment on Mandatory and Essential works
- Use the model as a live decision-support tool for capital planning
- Deploy outputs to support Welsh Government funding discussions



This report provides a clear, evidence-based platform to support informed decisions on capital prioritisation, risk management and long-term estate planning.