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Archwilydd Cyffredinol Cymru
Auditor General for Wales

The 21st Century Schools and Education Programme



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SWYDDFA ARCHWILIO CYMRU



I have prepared and published this report in accordance with the Government of Wales Act 2006.

The Wales Audit Office study team comprised Claire Flood-Page, Rachel Harries and Mark Jeffs under the direction of Matthew Mortlock.

Huw Vaughan Thomas
Auditor General for Wales
Wales Audit Office
24 Cathedral Road
Cardiff
CF11 9LJ

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Mae'r ddogfen hon hefyd ar gael yn Gymraeg.

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Summary



- 1 In 2009 the Welsh Government announced its 21st Century Schools programme (the programme). Its 2010 business case confirmed that it was to be a long-term capital investment programme to improve learning environments and educational outcomes. It also aimed to enable councils to address the long-standing problem of surplus school places and create a more sustainable education estate (Box 1). In 2012 the then Minister for Education and Skills invited further education colleges to submit their capital investment priorities for inclusion within the programme¹.

Box 1: 21st Century Schools and Education Programme – aims and objectives

The programme's overarching aim is to act as an enabler to enhance teaching and learning within a sustainable environment throughout the whole of Wales. To do this, the Welsh Government, in partnership with the WLGA and councils will deliver:

- learning environments for children and young people in Wales aged from 3 to 19 that enable the successful implementation of strategies for school improvement and better educational outcomes;
- a sustainable education system through better use of resources to improve the efficiency and cost-effectiveness of the education estate and which enhances local public service provision; and
- a 21st Century Schools standard for all schools in Wales which reduces recurrent costs, energy consumption and carbon emissions.

- 2 The programme is a collaboration between the Welsh Government, Welsh Local Government Association (WLGA), local authorities, Diocesan education authorities for the voluntary-aided sector and Colegau Cymru, representing further education. It is co-funded, with the Welsh Government providing 50% of funds in most circumstances.

¹ Subsequently the programme is referred to as the '21st century schools and education programme'.

- 3 The programme is intended to be long-term and is phased. Band A runs between 2014-15 and 2018-19. Initially, the Welsh Government intended Band A to start in 2012 but, an unfavourable funding settlement in 2010 led to the programme being paused. Councils reassessed their schools programme based on a 50% Welsh Government contribution rather than the initial suggestion of 70% government funding. At the end of 2011, the Welsh Government announced Band A of the programme from 2014. It also made available £42 million of transitional funding for councils' priority projects in the meantime. The total budget for Band A is around £1.5 billion with a mix of new and substantially refurbished buildings. Councils must still invest in smaller and routine maintenance to keep existing buildings in good repair. The Welsh Government is currently working with councils, further education colleges and the voluntary-aided sector to develop plans for Band B of the programme from 2019-20.
- 4 We reported previously on capital investment in schools in 2010² and the National Assembly's Public Accounts Committee then produced its own report³. These reports identified weaknesses in the planning and management of capital investment in schools and made recommendations to be taken forward in the 21st Century Schools programme. In our current review, we have not sought to systematically follow-up progress against these recommendations. However, where appropriate we do comment in this report on whether the current programme is better than what went before.
- 5 At what is still a relatively early stage in the programme, we have examined whether the Welsh Government's arrangements for its design and delivery provide a sound basis for the programme now and in the future. We concentrate on Band A of the programme from 2014-15 and plans for Band B from 2019-20. We did not examine individual councils' decision making process in regard to school organisation or developing their local programmes. Nor did we examine the procurement of building and refurbishment works by individual councils or further education colleges or the operation of the procurement frameworks. We do not consider councils' expenditure on routine maintenance and minor refurbishments or school buildings completed from 2014 but funded outside of the programme.
- 6 Overall, we have concluded that **the Welsh Government is generally managing the 21st Century Schools and Education Programme well but will need to clarify some detailed expectations and make adjustments in response to proposed changes in approach and funding to get better value from future public sector investment.**

2 Auditor General for Wales (July 2010) **Capital Investment in schools**

3 National Assembly for Wales Public Accounts Committee (December 2010) **Capital Investment in Schools**

- 7 It is clear from the evidence we have seen that the programme's approach is a vast improvement on what went before. The shift from an annual grant to a long-term programme has led to a profound change in the approach to improving the education estate in Wales. In the past, the short-term focus meant councils would patch-up school buildings to make them last beyond their expected life span. They were reluctant to start major, and often controversial, school re-organisations without any guarantee of the funding required to deliver those plans over many years. The programme addresses those underlying strategic problems and has been welcomed by councils across Wales. Indeed, the close working between the Welsh Government and councils to develop and manage the programme is a very positive feature of this programme.
- 8 The Welsh Government is generally managing programme finance appropriately. Few projects, so far, have gone over-budget and the Welsh Government is flexible in bringing forwards projects where there are potential under spends. Overall, the governance arrangements around project approval are robust. The Welsh Government has a sound process for reviewing and approving the strategic plans for re-organising schools in each council area and the detailed plans for building or substantially refurbishing individual schools. However, there does need to be some tightening up of the analysis to inform final Ministerial decisions.
- 9 The Welsh Government is now addressing some gaps where it did not set out its expectations clearly at the outset. In particular, it is now being clearer about the detailed specifications of new schools (such as how big classrooms should be) and exactly what wider benefits the programme intends to achieve. The Welsh Government's requirement for councils to come together to procure construction and refurbishment using common regional frameworks is a positive development that could result in efficiencies of scale. In practice, these frameworks have not been used as effectively as they could have been.

- 10 The programme is starting to achieve new and refurbished school buildings across Wales. The programme seems broadly on track to achieve the intended number of projects. Of the 176 planned schools and further education projects in the programme, 132 schools and six further education projects have been approved. Of these, 59 are complete. There are 37 schools and one further education project in planning but which have not yet been approved. There have been some delays to projects, particularly secondary school projects that have involved complex and controversial re-organisation of local schools. However, the Welsh Government could have got better value, by requiring projects to adhere to industry standards from the outset and by encouraging the wider use of building information modelling in the construction process which has been shown to be associated with substantially reduced costs. We estimate that had industry standards for school sizes been applied throughout Band A, the programme could have saved between £28 million and £35 million.
- 11 It is difficult to be sure about the scale of change in the overall school estate and the remaining challenge. By the end of 2019-20 almost all schools that were classed as bad in 2010 should have been either replaced or brought up to satisfactory or good condition. However, since 2010 many schools have deteriorated and are now in poor or bad condition. The scale of the remaining challenge is unclear. An independent review of a sample of councils' 2016 condition assessments changed the councils' original categorisations for almost four in ten schools. However, regardless of the quality of the data, it is clear that there remain a significant number of schools across Wales that are in bad or poor condition or are unsuitable. The Welsh Government intends that by 2024-25 there will be no 'bad' schools and the number of 'poor' schools will have reduced by 25%.

- 12 The programme has contributed to a reduction in the overall number of surplus school places. In part, this is due to school re-organisations that have closed down and merged schools. But demographic changes have also contributed, with a rising birth rate at the start of this decade that has seen a rise in the number of primary school pupils. Surplus places in primary schools fell from 21% in 2010 to 13% in 2016. This figure is closer to the Welsh Government's target of 10% surplus places to allow for changes within the year and some parental choice. Surplus places in secondary schools rose from 16% to 20.5% over the same period, but this picture is likely to change as the current cohort of primary school children move through to secondary school. These demographic factors vary considerably from council to council, with some still having large surplus places. Nonetheless, even in areas with high surplus capacity, individual schools may be oversubscribed. More recently, however, the birth rate has dropped off significantly and it is this volatility that adds to the difficulties facing councils and the Welsh Government in predicting and planning for future demand, for primary education in particular.
- 13 The programme is contributing towards the Welsh Government's goal of increasing the number of pupils learning through the medium of Welsh. Planning for and meeting demand for Welsh-medium education is complex. Building and refurbishing schools can only play a part in addressing those issues. Our analysis suggests that councils have prioritised Welsh-medium education in their school re-organisation plans, with more being spent per Welsh-medium learner than English. However, there remain a wider set of challenges if the Welsh Government is to meet its ambitious targets to continue to increase the proportion of pupils learning through the medium of Welsh from 21% in 2009 to 30% by 2020.
- 14 The evidence on the extent to which the Welsh Government is achieving the wider benefits it intended is less clear:
- there is evidence to suggest that the project is leading to local economic and social benefits, but these have not been consistently measured and have recently been defined more clearly;
 - some new school buildings have not achieved the intended environmental standards and there is widespread concern that energy efficiency technology has not delivered the expected cost savings;
 - the evidence on attainment is unclear. It is difficult to establish a causal link between school buildings and educational attainment, but the Welsh Government's plans to get schools to track benefits post-occupancy should help provide some clarity;
 - the programme has led to new schools that are offering a wider range of services to the community.

- 15 Looking forwards, the Welsh Government and its partners will need to manage some new risks as well as learn from progress to date. The Welsh Government is currently developing Band B of the programme, which will run from 2019-20 to 2023-24. It has allocated indicative capital funding for part of the period. Revenue funding of £500 million will also be available for design, build and facilities management of new facilities. This use of the Mutual Investment Model, the Welsh Government's planned form of public –private partnership to design, build, finance and manage new-build schools raises new risks and challenges. The Welsh Government is working with partners in terms of local funding contributions but at the time of drafting this report, had not confirmed its funding plans. Many councils told us that they are struggling to find the funding to continue to invest in schools. Councils have already significantly increased their borrowing and sold off assets in order to fund their contribution to the programme. At the time of drafting, Councils and further education institutions are developing their plans for Band B. There is a degree of urgency to finalising these funding decisions as there is much work to do to plan and engage communities so that projects will be ready to start in April 2019.
- 16 Emerging plans for Band B suggest that the Welsh Government is intending to be more directive. The Welsh Government has already started to be more robust in requiring projects to adhere to industry standards on size and looking at standardising costs. It is also considering introducing a requirement for greater standardisation and joint procurement of new school buildings across council areas. While there are strong arguments that this approach will provide better value for money buildings, the Welsh Government will need to manage the risks that more centralisation and standardisation poses to the collaborative ethos that the programme has engendered to date.
- 17 Looking forwards, the programme will also need to operate in line with the Well-being of Future Generations (Wales) Act 2015. The Act sets a framework of seven goals to develop and protect the social, economic, development and cultural well-being of Wales and five ways of working to achieve sustainable development. Although the programme pre-dates the Act, the way in which the programme was designed means that it already reflects, to some extent, the five ways of working (Box 2) and some of the Welsh Government's well-being objectives⁴. There is, however, scope for improvement in some respects, or potential risks for the future.

4 Welsh Government (November 2016) **Taking Wales Forward: Welsh Government's well-being objectives**

Box 2: The Well-being of Future Generations (Wales) Act 2015

Way of working	Wales Audit Office commentary
Long Term	This is a long-term programme running for at least ten years. For Band B and beyond the Welsh Government faces the challenge of clarifying the funding arrangements for the longer-term, including balancing short-term benefits and long term costs of using private finance to part-fund the programme.
Prevention	The programme aims to support wider policy goals of early years' intervention including using schools to provide community facilities for families. Its emphasis on creating an estate that can deliver the modern curriculum and support attainment is intended to prepare pupils for life. The Welsh Government recognises that, together with councils, it needs to do more to ensure schools are seen and used more as a community resource.
Integration	The programme has clear elements of integration, from a strategy to integrate school building with wider education, through to detailed governance arrangements that involve different parts of Welsh Government and other sectors, including councils, further education and faith schools.
Collaboration	The programme has been designed and managed in a genuine collaboration between the Welsh Government and councils. Going forwards, there are risks balancing the collaborative ethos with emerging plans for greater central control over the programme and the design of schools.
Involvement	The Welsh Government has established processes for involving and consulting with all partners, learners, parents and the general public about school organisation in the 2013 School Organisation Code. There are examples where designers and builders have included learners and teachers in decision-making about the planning and design of new and refurbished buildings. Going forwards, sustaining public and staff engagement may be more challenging if there is a move to more standardised buildings although this is not inevitable.

Recommendations

The Welsh Government has shown a commitment to improving and refining its arrangements for the programme. We are aware that the Welsh Government is developing its approach and thinking in many of the areas covered by the recommendations for improvement below.

Ensuring that the programme's governance arrangements remain fit for purpose as the approach and funding develop for Band B

R1 Overall, our view is that the governance arrangements for overseeing and approving projects are sound. However, we found that the final advice put to Ministers, on which to base their funding decisions, did not adequately reflect outstanding risks and concerns with the projects. The Welsh Government has subsequently updated its approach but there is scope to go further. **The Welsh Government should ensure that Ministerial briefings on which funding decisions are taken set out the actions taken in response to any concerns or conditions identified by the Capital Investment Panel.**

R2 Going forwards, the Welsh Government is likely to make some substantial changes to the way the programme is funded and managed. **The Welsh Government will need to finalise updated governance arrangements for Band B of the programme that take appropriate account of:**

- a **the complexities of making use of revenue funding, learning from the experience of other parts of the UK; and**
- b **any shift in the balance of funding between partners.**

Clarifying the approach to funding for councils, church schools and further education colleges for Band B

- R3 The Welsh Government is currently consulting with councils and further education colleges about the funding for Band B and, in particular, if there is appetite to participate in the Mutual Investment Model. Recognising this on-going work, **the Welsh Government should set out its plans for funding Band B of the programme as soon as possible, taking into account:**
- a **the volume and cost of the remedial work required to bring all schools in Wales, including voluntary-aided schools, up to a good or satisfactory standard; and**
 - b **the capacity of councils, further education colleges and the dioceses to fund further capital or revenue based investment in schools.**

Developing an up to date, reliable picture of the condition and suitability of the education estate

- R4 A national condition survey in 2010 helped to provide a clear baseline on the condition and suitability of the school estate, although there has been little public reporting of the data or the progress of the programme nationally. Since then, councils have updated their data annually. A sample survey was also carried out in 2016 to assess consistency of data. Given the proportion of schools that were judged to be incorrectly categorised, we recommend that **the Welsh Government:**
- a **urgently issue updated guidance on classifying schools, setting out any common issues and errors identified in the sample review;**
 - b **require councils to update their assessment of every school, based on the updated guidance;**
 - c **carry out another review of a sample of the data to check that councils are applying the categories correctly and consistently; and**
 - d **report publicly on progress to improve the condition and suitability of the school estate alongside achievement of wider benefits.**

Addressing surplus places and school place planning

- R5 The programme has prioritised the reduction of surplus places and has been one of several factors contributing to a fall in surplus places although most councils are still above target, especially for secondary school places. For Band B, the Welsh Government is prioritising building condition more than surplus places. **The Welsh Government should continue to work with councils to:**
- a **ensure that the programme continues to contribute to a reduction in surplus places despite the shift in priorities, especially in those council areas where a growth in the secondary age population is not expected;**
 - b **ensure that building programmes for Band B appropriately reflect local demand for Welsh-medium education and the Welsh Government's intentions to substantially increase the number of pupils learning through the medium of Welsh;**
 - c **engage with Diocesan authorities to assess the likely demand for faith schools across Wales; and**
 - d **identify cost effective and timely approaches for councils that face acute pressures for new places.**

Creating a sustainable estate with lower running costs

- R6 Some of the completed new school buildings are not achieving the Welsh Government's energy efficiency and sustainability targets for the programme. We recommend that the **Welsh Government strengthens its work with councils to:**
- a **liaise with industry experts to understand the gap between expected and achieved energy efficiency performance and how it can be remedied and reduced in future projects;**
 - b **challenge business cases that rely on significant savings from energy efficiency technology in the whole life cost assessment robustly; and**
 - c **encourage schools to assess their energy use when the building is first occupied and then annually to ensure that they are benefitting from the anticipated recurring savings in energy costs.**

Ensuring more cost effective procurement of projects

R7 Analysis of the costs of completed Band A projects shows significant variation in the total costs as well as in ICT and fixtures, fitting and equipment costs. New schools have exceeded the maximum industry area standards by 7-10%. Some projects are using an approach known as Building Information Modelling in the design and construction phases that has been shown to achieve time and cost savings as well as improving quality. **The Welsh Government should build on work already carried out to:**

- a **reach agreement with councils, other partners and industry representatives on the options for bringing greater standardisation to the projects including floor area and elements of the build;**
- b **require the use of Building Information Modelling in projects within the programme; and**
- c **provide more detailed guidance about the level of IT and fixtures, fittings and equipment that can be funded from the programme to ensure consistency between projects.**

R8 There is evidence that the regional procurement frameworks are not operating as intended, with some duplication and councils not adopting good practice in procurement methods. **The Welsh Government should:**

- a **ensure that councils adopt accepted good practice in the approach to construction, with a presumption in favour of design and build (excepting projects funded through the Mutual Investment Model);**
- b **improve communication with industry on the likely timing and scale of work under the frameworks;**
- c **understand and address the reasons why some councils are conducting pre-tender exercises despite contractors already having gone through the same process to get on the frameworks; and**
- d **engage stakeholders, including councils and the construction industry, in developing and finalising the procurement frameworks in light of changes for Band B.**

Achieving wider benefits from programme investment and sharing good practice

R9 The Welsh Government has now established more clearly than in the past what benefits it wants to achieve through the programme. It has established a discrete set of targets for local supply chain, apprenticeships and training and STEM engagement with schools. It is also clear that a future priority will be to make more community use of the school buildings. **To increase the wider benefits flowing from investment in the programme, the Welsh Government should:**

- a **ensure that its targets for projects remain stretching over time;**
- b **promote good practice in achieving community benefits, for example through regularly updating the 21st century schools website, regional networks and industry events; and**
- c **review how the identified barriers to increasing community use of school buildings can be addressed in Band B of the programme.**

Ensuring that a suitable level of technical skills and knowledge is available to the programme team and councils

R10 The Welsh Government has put in place arrangements for technical support to the programme. It has strengthened the capacity of its own team through recruitment of experts in public-private finance. It is also setting up framework contracts to provide technical support to councils. **Given the technical changes to the programme under Band B, the Welsh Government should, at the end of 2018, fully review whether the arrangements are working to:**

- a **provide the Welsh Government with the technical expertise it needs to manage and oversee the programme; and**
- b **provide councils with the technical support they need to plan and deliver the programme locally.**

Part 1

The programme is generally well-managed but the Welsh Government will need to make some adjustments if the funding or approach change for the next band of investment from 2019



1.1 In this part of the report, we examine the Welsh Government's establishment and management of the 21st Century Schools and Education programme (the programme). We report both on the arrangements for Band A from 2014-2019 and developing plans for Band B from April 2019. The majority of our analysis focuses on schools which necessarily form the bulk of the programme. However, we also include references to further education colleges in Wales which are part of the programme. We focus on five risks often associated with a programme of this size and complexity:

- clarity of strategic direction and objectives;
- good governance, as regards decision-making and transparency;
- availability of funding and financial management;
- procurement arrangements; and
- capacity and support for delivery.

The Welsh Government set a clear, long-term direction which its partners support although it will need to clarify its detailed expectations and manage relationships if the funding or approach change in future

The Welsh Government made clear that the programme would be long-term, strategic and collaborative with broad ambitions beyond improving buildings

1.2 From the outset, the programme was clearly about more than improving building condition. The November 2010 business case for the programme confirmed that it was to be a major and strategic long-term investment aiming to achieve:

- learning environments for children and young people in Wales aged from 3 to 19 that enable the successful implementation of strategies for school improvement and better educational outcomes;
- a sustainable education system through better use of resources to improve the efficiency and cost-effectiveness of the education estate and which enhances local public service provision; and
- a 21st century schools standard for all schools in Wales which reduces recurrent costs, energy consumption and carbon emissions.

- 1.3 The capital investment programme formed one strand of the Welsh Government's plans to transform education by improving and more clearly linking pre and post 16 education published in September 2008⁵. As well as creating a single capital fund for 21st Century Schools and further education, the Welsh Government's plans included developing the school curriculum and qualifications, requiring councils to offer wide ranging curriculum to 14-19 year olds that included a vocational qualifications through the 2008 Learner Measure and wide ranging initiatives to raise standards⁶.
- 1.4 From the outset, the Welsh Government and the Welsh Local Government Association (WLGA) developed the programme collaboratively. Initially, the WLGA recruited and employed the programme staff although programme management transferred to the Welsh Government in 2012. The WLGA have continued to play an active role on the Programme Board. We found that WLGA staff still retain a strong sense of ownership of the programme. They consider their involvement to have been key in setting the scene for the programme and ensuring councils were well-informed about what to expect.
- 1.5 Our 2010 report found weaknesses in the previous strategic approach. In particular we found that the previous annual grant funding approach did not provide councils with sufficient certainty to be able to develop a strategic approach to school planning or commit to larger investments. As a result, councils' programmes had tended to focus on primary schools rather than costly secondary projects. The approach also encouraged a short-term solution of 'patching-up' schools rather than making a strategic investment in a new school or major refurbishment. In their responses to our survey, many councils referred to the long-term funding commitment as a key strength of the programme.

5 Welsh Government (September 2008) **Transforming Education and Training Provision in Wales: Delivering skills that work for Wales**

6 The Welsh Government set out its approach to raising standards in schools in its **School Effectiveness Framework** (February 2008) and for post-school provision in **Skills that work for Wales** (July 2008). Its plans for higher education were in **For our Future** (November 2009).

Councils were generally clear about the programme's objectives for Band A, although there were some trade offs between local and national priorities and the Welsh Government did not clearly define the wider benefits it expected to get from the programme

- 1.6 Councils focused their plans for the first band of investment on the Welsh Government's top priorities of reducing surplus places and improving building condition. Despite challenging timescales, all councils developed a strategic outline plan for schools re-organisation by the end of 2010. Most councils responding to our survey believed that the Welsh Government's approach and guidance about prioritising individual projects was clear. However, diocesan officers responsible for voluntary aided schools reported that it was difficult to engage with and influence the shape of councils' individual strategic outline programmes, particularly because each diocese officer had to liaise with several councils in the relatively short time available. Voluntary-aided schools' difficulties were compounded by inaccurate Welsh Government guidance which, although corrected later, initially stated that the schools' contribution to costs was to be higher than 15% of the total (Box 3).

Box 3: Voluntary-aided schools in Wales

At the outset of the programme there were 252 church schools in Wales: 92 voluntary-controlled schools where the local authority is totally responsible for admissions and for upkeep of the buildings and 160 voluntary-aided schools. School Governors have a substantial influence in the running of the schools and are required to contribute to capital costs. The Welsh Government funds 85% of the cost of renewing or maintaining the buildings. It also allocates an annual Capital Repair and Maintenance Grant to each diocese for routine maintenance. Regulations on the capital funding of faith schools in England changed in 2002, reducing the Governors' contribution to capital investment from 15% to 10%. This change did not apply in Wales.

Voluntary-aided schools are administered by the seven Church in Wales and four Roman Catholic dioceses, each spanning several local authorities. A representative from nine diocesan directors in Wales sits on the Programme Board.

- 1.7 The Welsh Government intended that all councils would benefit from investment through the programme, even though not all had a high proportion of either poor-condition buildings or surplus places. While the overall programme objectives included improving the school estate and reducing surplus places, councils interpreted what that meant for their local area. The resulting mix of local and national priorities meant that some projects were included in the programme that may not have been if the Welsh Government had adopted a purely national approach to prioritisation.
- 1.8 Funding patterns suggest that, in practice, the main priority during Band A has been reducing surplus places. We found no clear relationship between the value of investment and the condition of councils' schools (Figure A2, Appendix 2). For example, seven of the ten councils with an above average proportion of schools in poor or bad condition had a lower than average investment per learner. There was an arguably clearer relationship between investment per learner and surplus places: four of the eight councils with a higher than average proportion of surplus places also had higher than average investment per learner.

The Welsh Government has only recently begun to be clear about the wider benefits it intends the programme to achieve

- 1.9 The Welsh Government and WLGA set out more clearly what they meant by improving the school estate than was previously the case. In 2010, the Welsh Government commissioned the first independent condition survey of the whole school estate, costing £2.5 million. The survey classified schools on the basis of their condition and suitability for delivering the curriculum. Having four consistent categories – good, satisfactory, poor and bad – has helped to provide a common understanding of what a good or satisfactory school means in these respects. The programme also reflected the requirements for all new public buildings to meet specific industry standards in relation to energy efficiency and sustainability.

- 1.10 While the approach was clearer about improving the condition and suitability of schools, there were still some important omissions. In particular, the Welsh Government chose not to provide detailed specifications for school buildings or set maximum costs or sizes for new builds or refurbishment at the outset, despite there being industry standards at the time. The Welsh Government has now decided to require future projects, including some Band A projects not yet approved, to meet industry standards. Paragraphs 2.11 to 2.14 explain how local discretion over standards has led to significant variation in the size and costs of school buildings across Wales. For comparison, the Scottish Government set out standard costs and designs in its Building Better Schools programme, developed in partnership with the Convention of Scottish Local Authorities⁷.
- 1.11 The Welsh Government has generally been clear in terms of its target for surplus school places. Surplus places represent a drain on resources and the Welsh Government has set councils a target of 10% of surplus places, a level it considers allows sufficient flexibility for councils to meet both parental preferences and accommodate in-year additional demands while using school buildings efficiently. In May 2012, the then Minister for Education and Skills wrote to councils, reminding them of the Welsh Government's target and requesting that councils reduce surplus places in primary and secondary schools below 15% by 1 January 2015.
- 1.12 The Welsh Government also intended to achieve wider benefits from its investment in the programme and identified some broad categories (Figure 1). However, it did not set out the anticipated benefits in detail in its 2010 National Business Case. An Internal Audit report in December 2011 recommended that the Welsh Government more clearly define the intended benefits both from the programme overall and from individual projects. However, the Welsh Government did not act on the recommendation at the time.

⁷ Building Better schools is the Scottish Government programme for school estate renewal. It built on and superseded a previous £2 billion school buildings programme launched in 2003 which it argued was less detailed but set out the then Government's aspirations for the estate. Building Better Schools was supported by a financial strategy and an implementation plan. Source: Scottish Government (September 2009) **Building Better Schools: Investing in Scotland's Future**

Figure 1: The clarity of the Welsh Government's intention for benefits flowing from the public sector investment in the programme

Category of benefits	Wales Audit Office comment on clarity of intended benefits
Improving educational attainment	The Welsh Government has not clearly articulated the intended benefits. This is an inherently difficult area due to the complex causal relationship between school buildings and educational outcomes. The Welsh Government is piloting a post-occupancy toolkit which could provide more evidence of the impact of the programme on attainment. There is potential to incorporate emerging evidence on links between the physical school environment and attainment into future school plans (paragraphs 2.26 - 2.27).
Community benefits (economic and social)	The Welsh Government encouraged councils to take a community benefits approach to procurement, in line with wider procurement policy, but did not set out specific wider benefits for the programme. The focus on community benefits was refined in 2016 to concentrate on key issues, such as increasing local jobs, apprenticeships and skills. However, contracts for early projects varied the type and level of social and economic benefits required. (paragraphs 1.9 - 1.13).
Energy efficiency	The Welsh Government requires new build projects are required to achieve an EPC Rating of A and BREEAM Excellent. Refurbished buildings will be completed to current building regulations so will achieve higher environmental and energy standards than the previous buildings. Councils set out the expected energy efficiency savings in business plans, through 'whole life costing' but the Welsh Government recognises these estimates were not always challenged (paragraphs 2.27-2.28, Figure 13).
Local public service	The 2010 Business case set out the intention that the programme should enhance local service provision. Although not clearly expressed, this referred to 'community schools' offering a range of services to the public in an area. The Welsh Government did not clearly articulate specific intentions in terms of the number and types of benefits it expected to get from the programme in this regard (paragraphs 2.30 - 2.31).

1.13 A 2015 Gateway review recommended that the Welsh Government should take a more robust approach to benefits management, linking intended benefits to the strategic objectives of the programme. In November 2015, the Welsh Government started to improve its approach, focusing initially on the economic benefits which it felt most relevant to the programme. It has developed targets and benchmarks for each category that it believes to be both achievable and realistic (Appendix 3). These targets are included in contracts with programme funding from 2016. The Welsh Government recognises that some councils and further education colleges could struggle to achieve some targets. Its guidance suggests that, in such cases, the council or further education college should seek to raise their standard in another area. However, our analysis shows that where the proposed targets and benchmarks are comparable to current data, some do not appear to be stretching. For example, data from a sample of 26 projects suggests that an average of 1.6 jobs for disadvantaged people were created per £million spent (Figure 2, paragraphs 2.25 and Figure 12). This figure is significantly more than the benchmark of 1 job per £million spent.

Figure 2: The Welsh Government's targets and benchmarks for the programme – January 2017

Benefit type	Measure	Value	Example
Targets			
Apprenticeships	Number of apprentices per £m invested	1	Relating the number of weeks into individuals who have been employed. Promote the use of Y Prentis or other shared apprentice schemes
Environmental	Percent waste diverted from landfill	85	Measured from waste transfer advice note
	Amount of waste produced tonnes/£m	10	Measured from waste transfer advice note
Fair payment	Payment within 10 days by client		Audit percentage of payments
	Payment to sub-contractors within 23 days		Audit percentage of payments
Jobs Created (For people who are not in education, employment or training or long-term unemployed)	Person weeks per £m invested	52	
Jobs Created (For people who are not in education, employment or training or long-term unemployed)	Number of jobs (FTE) per £m invested (based on 52 weeks provision)	1	Relating the number of weeks into individuals who have been employed i.e. 1 person employed for 52 weeks
School Engagement in STEM careers	Number of Pupil interactions per £m invested	150	School assemblies or individual lessons Assembly with 70 children – 70 interventions. Maths lesson with 30 children – 30 interventions
School engagement in STEM careers	Hours donated per £m invested	100	Wider team involvement – interviews, careers fairs
Training (including graduates, work placements, pupil placement)	Person weeks of training provided per £m invested	25	Welsh Graduate engineer sponsored; Welsh Year out student; Work experience

Benefit type	Measure	Value	Example
Welsh Government measurement tool	Complete Welsh Government's measurement tool	1	Complete on completion of the project and update annually
Benchmarks			
Community	Community initiatives per project	2	Work with local scout group to repaint hall.
	Community newsletters per project	2	Letter sent out to local residents
Labour Force	% workforce from postcode	30	Use postcode of the project and measure visits to site
	% workforce from Wales	60	Use postcode of the project and measure visits to site
Supply chain initiatives	Percent spend in Wales per project	60	Value of contract and location of supplier. CBME electrical contractor Cardiff postcode
			£100,000 contract value expressed as percentage
	Number and type of materials produced in Wales	2	Welsh Steel, Welsh slate
	Value of materials	10m ²	£ per tonne (Steel), £ per metre squared (slate)
	Volume of materials	25m ²	Tonnage (Steel), number of metres squared (slate)
	% Welsh sub-contractors per project	60	Total number of contractors used with welsh postcode expressed as percentage
	Number of supply chain engagements per project	2	Meet the buyer event
	Use of sell2wales to advertise opportunities	3	Advise opportunity for subcontractors through the Welsh Government's sell2wales website

Source: Wales Audit Office summary of unpublished information supplied by the Welsh Government (January 2017)

The Welsh Government is developing arrangements for Band B of the programme, in collaboration with partners, although the greater standardisation proposed could pose a risk to their goodwill and co-operation

- 1.14 During 2016 and 2017 the Welsh Government has been preparing for Band B of the programme. It has engaged widely with local government as well as further education and voluntary aided schools. The Strategic Outline Case for Band B suggests a shift in priorities. Band B will have a greater emphasis on improving the condition of the school estate and less on surplus places than in Band A. There is also a strengthened emphasis on making school facilities available for community use. Councils and further education colleges submitted their high level investment plans for Band B at the end of 2015 and were asked to update these at the end of 2016. They are currently revisiting those plans in light of further updates from the Welsh Government regarding its plans.
- 1.15 The Welsh Government's emerging plans for Band B involve a more prescriptive approach to individual projects and procurement. The Strategic Outline Case approved by Ministers in February 2017 includes adopting a standard size and cost per square metre for Welsh Government funding for new buildings, similar to the approach taken in Scotland where central government funding is available to prescribed limits. There will also be strong encouragement for councils to procure some or all of their programme as a single procurement rather than for individual school projects. The greater use of standardisation and collaboration potentially offer some cost, time, and sustainability advantages. However, we found that some councils are opposed to this potentially greater Welsh Government control of co-funded projects, which poses a risk to the goodwill and co-operation which has characterised the programme to date. It is not yet clear how councils will respond to the plans for public-private investment through the Mutual Investment Model (paragraphs 1.36 - 1.38).

1.16 Other policy decisions may have implications for the future of the programme. These currently include:

- a **Increasing the number of hours of free childcare for three and four year olds from 10 to 30 for 48 weeks a year** – The Welsh Government is piloting alternative methods to achieve this commitment in the maintained and non-maintained sectors. Several school projects in Band A included childcare provision ([paragraph 2.30](#)). The Welsh Government has allocated £20 million per year from 2018-19 for investment in childcare settings alongside the programme, either in refurbished or new buildings.
- b **Welsh language** – The provision of sufficient places to allow pupils to learn through the medium of Welsh will make an important contribution to achieving the Welsh Government's goal of one million Welsh speakers by 2050. In planning Welsh medium places, councils must both meet their responsibilities to meet current demand and encourage take-up of Welsh medium education ([paragraph 2.22](#)).
- c **Reducing infant class sizes** – In January 2016, 7.6% of pupils were in classes of over 30. In January 2017 the Welsh Government announced £36 million of capital and revenue funding over 4 years to reduce the size of infant classes. Initially, this will focus on infant schools with classes of over 30. This may mean some schools having to create extra classroom capacity.
- d **Rural schools** – In November 2016, the Welsh Government announced that it would make changes to the School Organisation Code to include a presumption against the closure of rural schools. The case for closing a rural school will have to be strong and local authorities will need to carry out rigorous consultations including looking at opportunities for schools to work together, known as federation. As rural schools often have the highest level of surplus places, this policy has implications for the future priorities and shape of the programme.

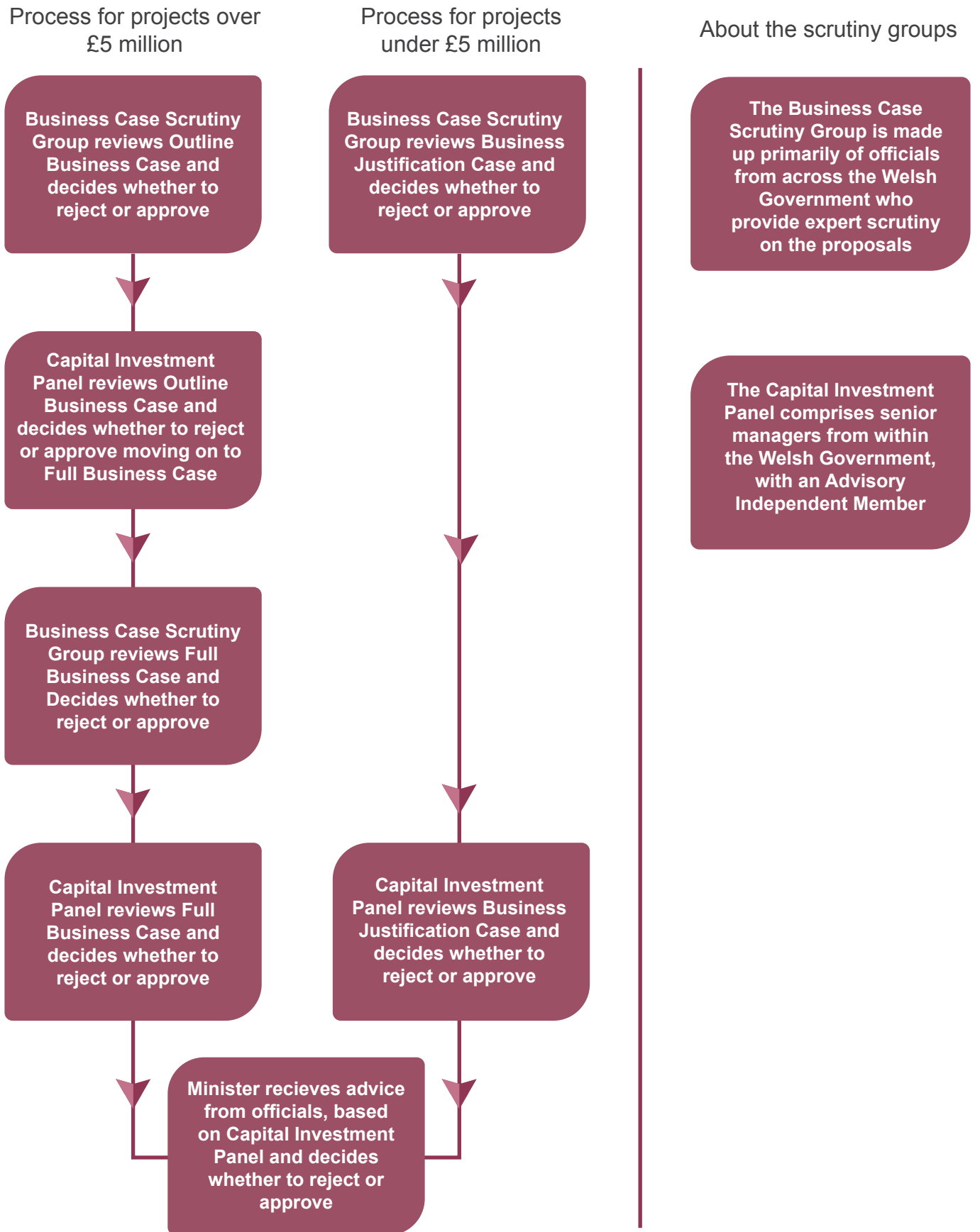
The Welsh Government has a robust approval process which has developed over time but there is a lack of detail in the analysis underpinning final decisions on projects

The Welsh Government has established a well-defined project approval process which has developed in response to feedback

- 1.17 The collaborative and co-funded approach is an important element of the programme. The Welsh Government and WLGA established programme governance to reflect the differing levels of management responsibility appropriately. At a programme level, the Welsh Government is responsible for leading and overseeing the whole programme across Wales. Councils are responsible for ensuring that there are sufficient school places taking account of the demand for Welsh-medium and faith schools and special educational needs. The 2013 School Organisation Code and associated guidance sets out the process for planning and consulting on school plans. The programme is overseen by the Programme Board, which is responsible for monitoring the delivery of the programme. The Programme Board includes representatives from the Welsh Government, the WLGA, the Association of Directors of Education Wales, and Colegau Cymru, diocesan authorities and SOLACE, representing council Chief Executives and senior managers.
- 1.18 The Welsh Government and WLGA worked together to develop a robust method for councils to use to develop their plans. This follows the Five Case Model, which was developed by the Welsh Government, Department of Health and HM Treasury and is widely used in England and Wales⁸. The process started with councils producing a strategic outline plan. These plans set out their programme for re-organising schools in the area, including reducing surplus places, new buildings and refurbishment and an indicative cost. These high level plans were subject to considerable local scrutiny and consultation as well as assessment by the Welsh Government. Estyn, the education inspectorate, provided councils with their views on whether individual school organisation proposals are likely to support school improvement. Finally, the Programme Board reviewed outline plans before they were submitted for Ministerial approval.
- 1.19 The next stage, following approval of strategic outline plans, is to produce business cases for individual projects. The process for scrutinising project proposals ahead of Ministerial approval is described in **Figure 3**. For projects over £5 million, Business Cases are submitted in three stages: Strategic Outline Case (SOC); Outline Business Case (OBC); and Full Business Case (FBC). For smaller projects less than £5 million in value the SOC, OBC and FBC are replaced by a single document, the Business Justification Case (BJC).

8 HM Treasury (2013) **Public Sector Business Cases Using the Five Case Model**

Figure 3: Process for approving individual projects



- 1.20 The scrutiny and approval process has been subject to reviews from the Welsh Government's Internal Audit service in 2011 and 2014 and a Gateway review in 2015. These reviews show that the arrangement for governance of the programme have been strengthened in several ways by:
- a in 2012, moving the programme team fully into the Welsh Government from the WLGA and strengthening the terms of reference for the programme board and programme team;
 - b in 2013, issuing new detailed guidance on developing business cases using the Five Case Model and providing training on it for council officials and developing the 21st Century Schools website; and
 - c in 2015, streamlining the business case approval process for projects up to £5 million in total value.
- 1.21 The Welsh Government recognises that new governance arrangements, particularly around the public-private Mutual Investment Model, will be required for Band B. Work is on-going but will need to recognise that the Welsh Government would need to provide central support for the procurement process for any private finance for the programme and be able to ensure that the programme aligns with other programmes funded through the Mutual Investment Model ([paragraph 1.36 - 1.38](#)) as well as the Welsh Government's wider private finance initiatives.

The Welsh Government uses the approval process to challenge proposals and is now seeking to reduce costs but there are weaknesses in its following up and reporting of concerns ahead of Ministerial decisions on funding

- 1.22 We reviewed how well the approval process works in practice in a sample of 11 projects. In each case, we found examples of good challenge taking place against the key criteria. Assessors from across the Welsh Government provided challenge on impact on links with wider education policy and surplus places. While there was challenge on costs, this appeared ad hoc, for example referring to costs appearing high rather than being clearly linked to a benchmark cost for particular types or sizes of schools. More recently, the Welsh Government has been drawing on Constructing Excellence in Wales' work to challenge the costs of individual projects (Box 7). By doing this, it intends to drive down the cost of projects in the pipeline in order to fund more new and refurbished schools than are currently in the programme.
- 1.23 In 6 of 11 cases we reviewed, assessors required supplementary information or details before they were willing to sign off the business cases. However, the Welsh Government's documentation did not clearly record how those concerns were dealt with. There were examples where the business case was signed off subject to additional information being made available but we could not verify how and when those issues were resolved. The Welsh Government has amended its processes and documentation to improve the recording of decisions and tracking of actions.
- 1.24 We were particularly concerned that outstanding risks and concerns were not included in the briefings that formed the basis for Ministerial approval of project plans. The Ministerial briefings set out a high level description of the project and some of the intended benefits. However, the briefings did not make clear that the Capital Investment Panel had recommended approving the project subject to conditions nor did they set out what outstanding issues and risks remained. The Welsh Government has updated its approach and is including some detail on residual risks in the Ministerial submissions. However, in our view there remains scope to strengthen this further by clearly setting out what actions are being taken in response to any concerns or conditions identified by the Capital Investment Panel.

There has been little public reporting of the programme as a whole

- 1.25 The Welsh Government and councils have been keen to publicise their investment as well as the completion of individual projects. However, to date there has been no public reporting on all of the planned, approved or completed projects on either a one-off or regular basis. The 21st Century Schools website includes some programme information, guidance and examples of good practice but has not been updated since 2015 and does not include information on the progress of the programme. This lack of information means that members of the public cannot see what progress is being made or what work is going on or planned in their area. It is also not clear what work remains to bring all schools in Wales up to a satisfactory or good standard or a timetable for doing so.
- 1.26 School leaders would welcome more information about projects in the programme in order to learn from other schools that have already completed or are undergoing building and/or reorganisation projects. Facilitating this peer support is valuable as school leaders report that some head teachers and senior staff have found managing schools undergoing building work and reorganisation both difficult and frequently stressful, especially where the changes involve mergers, closures or redundancies.

The Welsh Government manages its funding flexibly and the current phase of the programme looks set to remain within budget although there is uncertainty about future investment

The Welsh Government made several important changes to the funding and timetable in the early days of the programme

- 1.27 The Welsh Government's initial announcement, developed in collaboration with the WLGA, envisaged a programme of schools investment worth £2.2 billion over a 10 year period from 2012. However, as councils' plans emerged and better information became available about the condition of schools across Wales, it became clear that the likely costs of eliminating poor and bad condition schools were substantially more than Welsh Government's first estimate. By November 2010, the Welsh Government indicated in its national business case that a programme of between 15 and 20 years, spending £220 million a year was likely to be needed. This equated to a total cost of around £3.3 billion to £4.4 billion, without taking account of inflation. Allowing for economy-wide inflation, that figure for a 15 to 20 year programme is between £3.6 billion and £5.1 billion.
- 1.28 The Welsh Government decided to run the programme in phases or 'bands'. It initially expected Band A to run from 2012 to 2015. Following a difficult funding settlement in the UK Spending Review, the Welsh Government announced in December 2011 that Band A would be completed over seven years from 2014-15 to 2020-21 with a total budget of £1.4 billion. It introduced a 'transition phase' for priority projects that were ready to start ahead of the revised start date. Including the transition projects and further education projects, the total budget is around £1.5 billion. The Welsh Government recognised that councils were disappointed at the prolonged timescale and indicated that it was looking for ways to accelerate that timetable. In October 2013, the Finance Minister announced that the Welsh Government would bring forwards £200 million of its contribution allowing the programme to be delivered by 2018-19, two years earlier than previously announced.
- 1.29 Reduced capital budgets led the Welsh Government to reduce its contribution to Band A. Initially, the Welsh Government told councils it would pay 70% of the cost but in 2011, the Minister for Education and Skills paused the programme and asked the councils to re-submit their plans on the basis of the Welsh Government contributing 50% of the project cost. **Figure 4** sets out the sources of funding for Band A of the programme.

Figure 4: Profile of the funding for Band A of the programme (£ millions)

	Transition Programme	2014-15	2015-16	2016-17	2017-18	2018-19
Total Welsh Government	£42	£72	£146	£198	£187	£107
WG capital (outturn/budget)	£42	£69	£128	£133	£101	£107
Local Government Borrowing Initiative	0	£3	£18	£59	£92	£0
Local sources	£34	£48	£120	£181	£216	£170
Total	£76	£120	£266	£373	£409	£277

Note: Councils expect some projects to extend beyond 2018-19 and have budgeted for around £30 million spending on Band A during 2019-20.

Source: Welsh Government data

1.30 Many councils told us that they had struggled to find an increased contribution and some had to reprioritise funding away from other projects. Nevertheless, all councils have developed plans to fund their full 50% contribution. Collectively, they intend to fund half of their contribution (£382 million) through borrowing, much of which will be funded from savings from reducing the number of surplus school places (Figure 5).

Figure 5: Sources of councils' funding for Band A of the programme.

	Amount (£ millions)	% total funding
Total revenue borrowing	382	50
WG capital (outturn/budget)	167	22
Local authority general capital funding	96	12
Capital reserves programme	88	11
Other	37	5
Total	770	

Source: Wales Audit Office analysis of Welsh Government data

1.31 The Welsh Government is contributing £752 million to the programme in Band A, including transition projects and further education, split between £580 million capital funds and £172 million from the Local Government Borrowing Initiative (Box 4). The Welsh Government agreed a discounted borrowing rate for the programme with the UK Treasury. However, this deal finishes at the end of 2016-17. In part, because the Welsh Government has allocated additional capital funding to the programme from its capital reserves, it has required less funding from the Local Government Borrowing Initiative between 2014-15 and 2016-17 than initially planned. The Welsh Government now intends to use the borrowing facilities in 2017-18 but will not benefit from the discounted borrowing rate.

Box 4: Local Government Borrowing Initiative

The Local Government Borrowing Initiative was launched by the UK Treasury in 2012-13 to enable local authority capital investment. It coincided with a reduction in Welsh Government capital funding following the UK Government's 2010 spending review.

Under the initiative, the Welsh Government provides revenue funding to support council's' borrowing over the 20 year life of the scheme. Councils in Wales have borrowed to invest in a wide range of capital projects including road building and repairs as well as schools. The Welsh Government announced that it would provide £170 million of funding under the initiative in 2012 for Band A of the programme. This enabled Band A to be completed in five rather than seven years.

The Welsh Government is managing the programme finances flexibly to respond to local changes and delays while remaining within the budget

- 1.32 The Welsh Government's approach to funding local programmes includes an element of flexibility which is needed to manage any large capital programme. Each council has been allocated a 'programme envelope' representing their maximum expenditure. It covers the costs of multiple school construction or refurbishment projects within a council area. The Welsh Government expects councils to manage cost increases on a particular project within the cost envelope by making changes that reduce costs on other projects. However, there are circumstances where the Welsh Government will consider revising the cost envelope if there is a clear business case. Over 2016-17 there have been adjustments upwards and downwards to most councils' envelopes, with a net increase of £22 million for the schools programme. There have been three principal reasons where the Welsh Government has adjusted the cost envelope:
- a the council has fundamentally changed its plans for school re-organisation, for example in Pembrokeshire;
 - b a particular project has had to be rethought, for example the Welsh language medium school in Newport; and
 - c a project has encountered unexpected costs, such as happened in the two secondary schools in Monmouthshire where there were higher than expected costs related to the preparation of the site.

- 1.33 To address the risks of over-optimistic cost estimates, the Welsh Government requires councils to make an allowance for optimism bias in their strategic outline plans and in the business case for individual projects. This allowance varies between projects depending on the risks and uncertainties involved. So far, the approach appears to be working well and Welsh Government financial management data suggests that approved projects are generally on track to be completed within their budgets. We are aware of a relatively small number of projects where the cost has changed after the project was approved, notably the Newport and Monmouthshire examples referred to above.
- 1.34 The Welsh Government uses 'over-programming' to manage optimism about the pace of delivery. Over-programming means that the approved spending plans exceed the budget for the whole programme and for individual years. Managing the programme in this way reflects the fact that by end of the year or the programme, it is highly likely that some projects will be delayed and not spend as planned. Conversely, if it looks like the programme will overspend in any year, the Welsh Government can pause some projects or spending until the next year. In future, it anticipates using this flexibility to undertake preparatory work for Band B capital programmes that are able to start early. This approach requires the Welsh Government to work with councils to update the spending profiles regularly. So far, the programme has spent in line with budget. Nonetheless, there remain risks associated with the pace of progress in some councils and with some secondary school projects where complex and difficult public consultations are still being undertaken ([paragraph 2.4](#)).

There are risks to manage around future funding sources

The Welsh Government has committed to providing funding towards Band B from 2019-20 onwards although not all of the funding is in place and it faces new risks associated with a revenue funded programme

- 1.35 In September 2016, the Welsh Government confirmed its earlier manifesto commitment to invest £2 billion in improving the schools and the further education estate by 2024. The draft budget 2017-18 includes around £500 million capital funding over a four year period to improve the school and further education estate, some of which is a reaffirmation of funding committed to Band A. The funding for 2019-20 and 2020-21 is in line with spending trends over the period of Band A but was made ahead of a precise assessment of the condition of the estate being available or the councils submitting their plans. In February 2017, the Cabinet Secretary for Education approved a Strategic Outline Case for Band B⁹. This included a planning assumption that capital funding would continue at the current rate, totalling around £640 million over the five years of Band B.
- 1.36 In 2014, the Welsh Government announced plans to use a form of public-private finance for Band B. At that time it intended to adopt the Non-Profit Distributing model used by the Scottish Government¹⁰. However, the non-profit distributing model has faced significant challenges and the Welsh Government has developed a variant – the Mutual Investment Model – which will enable an additional investment of up to £500 million over Band B (Box 5). The Welsh Government has written to stakeholders to explain the features of the Mutual Investment Model and, at the time of writing, is consulting with councils and further education institutions to establish their appetite for funding projects using the model. Councils who do not wish to pursue schemes through the Mutual Investment Model can still apply for capital funding programme albeit that there is a restricted level of funding.

9 Welsh Government **21st Century schools and education programme: Band B – Strategic Outline Case 2** February 2017 (Unpublished)

10 In 2015, following a change in the European accounting rules, the Office of National Statistics ruled that some of the projects funded under the non-profit distributing model could not be counted as 'off-balance sheet'. Essentially this was because the fixed returns to the private sector and the high degree of Government control inherent within model meant that the asset could not be considered as 'private'. As a result the public sector had to pay capital charges associated with it, reducing funds available for other investment and reducing its attractiveness as an investment option.

Box 5: The Welsh Government's Mutual Investment Model

The Mutual Investment Model is an alternative form of public private partnership developed by the Welsh Government. In essence, Mutual Investment Model is similar to the long established private finance initiative. However there are several important areas of difference, which the Welsh Government intends will promote the public interest, increase transparency, and enhance value for money:

- the Welsh Government is able to invest in the company that is created to design, build, finance and maintain the asset. This ensures that the public sector has a share in profits of the project company;
- the Welsh Government is able to appoint a director to the Board of the company formed to deliver the project giving greater say and visibility on decision-making; and
- the service payment will be made by a monthly revenue charge over a 25 year period and will not start until the facilities are built and ready for use.

The Office of National Statistics has confirmed that the Mutual Investment Model proposal can be classified as off balance sheet.

1.37 The Welsh Government developed the Mutual Investment Model after we completed our fieldwork for this study and we have not reviewed the model in depth. However, it is clear that introducing a form of public-private finance will necessarily carry new risks for the programme which the Welsh Government will need to manage carefully as it moves into Band B. The Mutual Investment Model is unlikely to be suitable for all projects in the programme, including refurbishments or bespoke projects, those likely to result in long and complex consultations, where there are complex land ownership issues or if there is a doubt about the long-term demand for places. It is not clear to us if voluntary aided schools could participate in a revenue funded programme. All public private finance programmes carry the challenge of balancing good value for money for the public sector with providing sufficient incentives to make the model attractive for private investment. Also, the model will require some changes to the approach to procurement which may not be popular, or even feasible, for some councils (paragraphs 1.15 and 1.39).

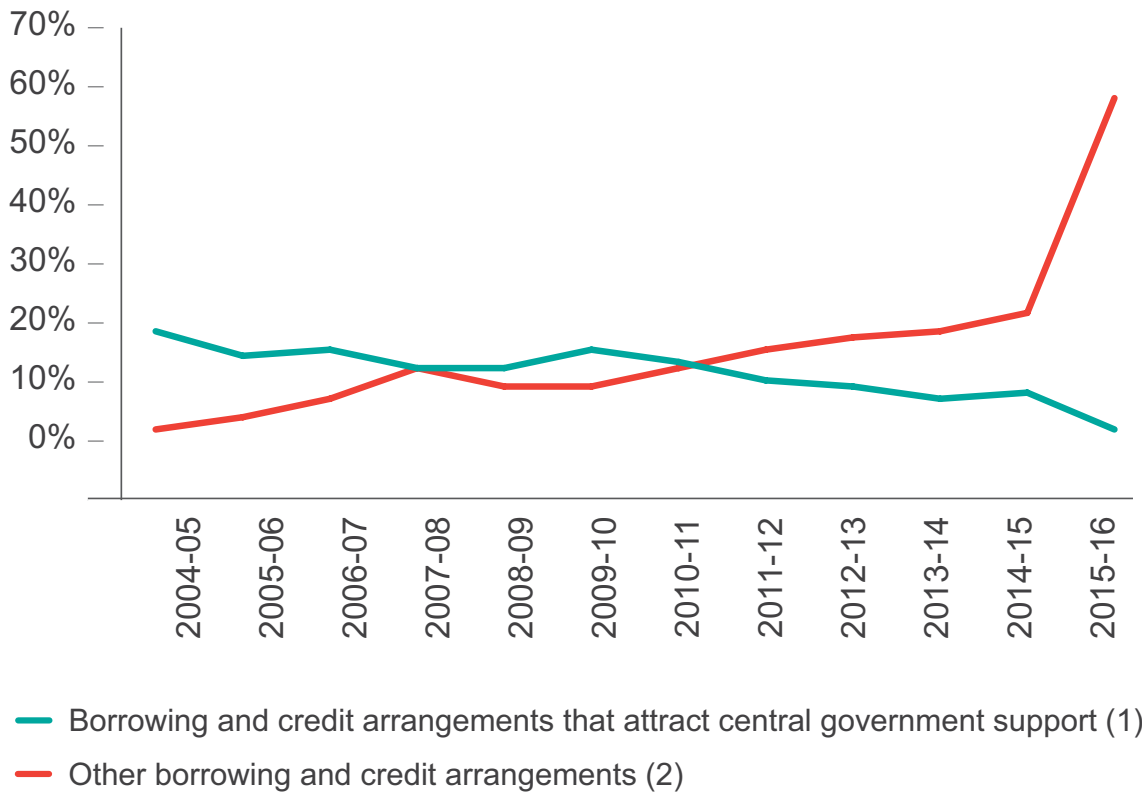
1.38 Taken together, the Welsh Government's capital contribution and the Mutual Investment Model make £1.1 billion of investment. The Welsh Government is yet to confirm what level of contribution it expects councils and further education institutions to make for Band B. At the time of drafting, the Welsh Government is consulting with its partners on the basis of continuing to require a 50% contribution. However, it recognises that there are concerns, particularly amongst councils, as to whether they can continue to fund their school programmes at the same level.

There are concerns that some councils, further education institutions and voluntary-aided schools could struggle to fund the level of capital investment required in Band B

1.39 Councils are concerned about their ability to continue to contribute financially to the programme at the same rate as previously, regardless of the model of funding. Some said that there will be less scope in future to sell assets to fund school investments having already disposed of their most valuable land and buildings. Others reported that they have prioritised their own capital funding towards schools during Band A but will need to address a resulting underinvestment in other areas of infrastructure.

1.40 Councils are also worried about their ability to continue to borrow to fund spending on schools. Over recent years, councils have become increasingly reliant on borrowing to fund their infrastructure programmes. In 2015-16, more than half of capital spending was funded from borrowing: up from around a quarter a decade earlier. **Figure 6** shows that the proportion of borrowing for infrastructure for which councils get funding from Welsh Government has fallen, while borrowing funded from its own revenue sources has increased. Loan repayments still make up a relatively small amount of council revenue expenditure (around 3% of net spending). However, between 2008-09 and 2015-16, the amount that councils spent on loan repayments increased by 16% (£25 million).

Figure 6: Percentage of council infrastructure spending funded by borrowing – Wales, 2004-2016



Notes

1 Covers council borrowing where repayments are provided by central government, primarily the Local Government Borrowing Initiative

2 Covers borrowing where the council makes the repayments from its general revenue funds

Source: Local Government Capital Outturn Dataset

- 1.41 The Welsh Government's own assessment suggests that councils in Wales have borrowed less than their counterparts in the rest of the UK. Nonetheless, the Welsh Government recognises that councils face difficult choices. Because the repayments come from revenue budgets, increased borrowing ultimately means less funding for other areas of day-to-day local service delivery.
- 1.42 In light of the funding pressures on councils, the Welsh Government is reconsidering the relative mix between Welsh Government and local funding of the programme. Currently, councils are developing their plans for Band B on the basis of 50% Welsh Government contribution. At the time of writing, the Welsh Government is consulting with councils and further education colleges before Ministers decide an intervention rate. The Welsh Government has indicated that the grant contribution could be different for capital and revenue funded projects.
- 1.43 Further education college leaders told us that some colleges will face difficulties funding future capital investment. Our recent study of further education college finances¹¹ reported that most colleges saw the future availability of funding for capital investment as a major risk. Some colleges reported using reserves to fund essential maintenance, replace routine assets or fund minor works. In our recent report on the financial position of further education colleges, we recommended that the Welsh Government require colleges to prepare medium term financial plans and long-term financial forecasts which would enable an assessment of capacity to fund further capital work. We also recommended that the Welsh Government reviews how ready colleges are to respond if capital funding becomes available at short notice.

11 Auditor General for Wales (February 2017) Welsh Government oversight of further-education colleges' finances and delivery

1.44 Diocesan education leaders told us that voluntary-aided schools' governors have struggled to meet the 15% contribution required from them either through borrowing or by fundraising efforts. They believe that the dioceses' freedom to raise capital from asset sales is often more restricted than for councils because, as charities, they must meet the particular requirements of charity law in disposing of assets. Endowments and covenants that frequently apply to the land and buildings can also restrict the potential to realise funds through asset sales. Based on evidence from the 2016 estate condition survey and the average costs of projects in Band A, we estimate that addressing voluntary-aided schools rated poor or bad for condition or suitability would require a total contribution of £54.9 million including VAT from the three Catholic dioceses in Wales and of £14.1 million including VAT from the seven Church in Wales dioceses¹². The Welsh Government is currently discussing funding options for Band B with diocesan education leaders and councils.

¹² These estimates are based on 2016 survey data which found that 25 of 67 Catholic voluntary aided primary schools and 8 of 15 voluntary aided Catholic secondary are in poor or bad condition. 14 of 74 voluntary-aided Church in Wales's primaries but none of the secondary schools are in bad or poor condition. These calculations assume that the condition is assessed correctly and that the Governors will contribute 15% of the cost of addressing poor or bad condition voluntary-aided schools. Costs are based on the average costs of Band A projects and including VAT.

The regional frameworks for procurement have been a positive development but could operate more effectively and will need to change for Band B

The Welsh Government requires local authorities to use one of the three regional procurement frameworks unless there are exceptional circumstances

- 1.45 The Welsh Government initially required councils to use one of three regional frameworks¹³ for schools and other public buildings for procuring works unless there are exceptional circumstances not to do so. In 2016, the South and Mid Wales framework was re-tendered and now includes sixteen of the 22 councils, three dioceses and two further education institutions. The frameworks differ in size and the total value of work available. The original South and Mid Wales framework (SEWSCAP) accounted for more than half of the programme with 85 projects valued at £820 million. The re-tendered framework accounts for 71% of the potential projects still to be approved.
- 1.46 Construction industry representatives said they were concerned at the long gap between framework contracts being set-up and the actual work coming through. There is evidence that these concerns are shared more widely across other construction framework contracts in Wales. A report from the National Assembly for Wales Cross-Party Group on Construction in June 2015 highlighted similar concerns across construction projects. As time passes, contractors become uncertain as to what work will become available and when or even if the work will become available at all. The Cross-Party Group argued that minimising uncertainty can reduce the risk that contractors effectively withdraw from the frameworks over time as they commit to other work¹⁴. Greater certainty of the timing of the pipeline of work also allows contractors to plan training and recruitment to increase the potential wider community benefits from the investment.

13 The three initial frameworks were South and Mid Wales (12 councils led by Rhondda Cynon Taf), South West Wales (four councils led by Neath Port Talbot) and North (six councils led by Denbighshire) which finishes in 2018. In 2016, SEWSCAP was re-tendered, combining the 16 councils in South and Mid Wales and South West Wales.

14 National Assembly for Wales (June 2015) **The report of the Cross-Party Group on Construction: The impact of procurement in Wales – a summary of consultation responses**

1.47 Industry representatives also have concerns that the way in which some councils are using the frameworks is leading to delays and extra costs. To get onto the frameworks, companies go through a pre-tender qualification process. Through this qualification process, companies demonstrate that they meet certain criteria, for example financial standing and track record. The aim is that councils will not need to run their own pre-tender competitions for each project. While we did not look at the procurement process for individual projects as part of this study, we did review some documentation as part of our file review. These documents showed that in some cases, councils were still inviting a large number of bidders (up to 12) to participate in pre-tender bids, which suggests that councils are running their own qualification process despite the framework. We did not review why individual councils may have felt the need to run this process. This duplication of activity raises the risk that councils are adding in delay and cost that should have been removed by introducing the regional frameworks.

The current frameworks could operate more effectively and future arrangements must reflect the changed funding and procurement for Band B

1.48 A May 2016 report by Constructing Excellence in Wales¹⁵ highlighted inefficiencies in the operation of the frameworks:

- **Mix of contract types** – contracts let to date include a mix of two-stage procurement with early contractor involvement, design and build and traditional construction-only contracts. Industry good practice suggests a single stage design and build approach best enables collaborative working between the client and contractors. This variation frustrates contractors, increases bidding costs and results in councils bearing differing levels of risk depending on their chosen procurement approach. The strategic outline case for Band B makes clear that contracts will be expected to be either design and build or design, build, finance and maintenance for revenue-funded projects.
- **Difference in project evaluation criteria** – all three frameworks use price and quality to evaluate tenders but differ in the way they use the information. For example, lowest price is scored highest in South East and North Wales but average price is scored highest in South West Wales.

15 Constructing Excellence Wales (May 2016) **Optimising the procurement and delivery of 21st century schools in Wales**, Main report and Appendices B, E and H, Unpublished report

- **Ensuring fair payment** – some smaller companies sub-contracted on projects raised the issue of fair payment. Two schools projects have piloted ‘project bank accounts’ which are ring fenced bank accounts with trust status from which payments are made directly and simultaneously to members of the supply chain. Project bank accounts benefit sub-contractors who receive payment at the same time as the lead contractor which can reduce borrowing and provide greater transparency of the supply chain.

1.49 Constructing Excellence in Wales made recommendations (Box 6) to improve the operation of the regional frameworks¹⁶. The Welsh Government recognises that alongside incorporating lessons identified by Constructing Excellence Wales, any replacement will need to reflect changes brought about in Band B. In particular, a different procurement model will be required for projects funded through the Mutual Investment Model. For such projects, councils will need to procure their projects in batches rather than individually and to collaborate with others in their region. Such batching of projects is necessary to achieve the volume of work necessary to achieve economies of scale and to make the projects attractive to the private sector. To date, most councils have resisted procuring projects in batches. In part this reluctance is because of the risk that protracted consultations on one or two controversial projects that involve mergers or closures can potentially delay procurement for all the projects in a batch. The approach also requires councils to agree sequential timings for their projects with the possibility that some may be completed later than would otherwise be the case. However, failure to collaborate as envisaged in procurement would pose a significant risk to the revenue funded element of the programme.

1.50 The Welsh Government’s Strategic Outline Case for Band B sets out how it would take a stronger role in procurement. It intends to lead the development of regional frameworks and networks, engage with the market and provide guidance and support on specific issues for Local Authorities. The Welsh Government would provide standardised documentation and some other support for projects using the Mutual Investment Model.

¹⁶ Constructing Excellence in Wales (September 2015) **No Turning Back – Review**
 Cross-Party Group on Construction (Wales) (June 2015) **The impact of procurement policy in Wales – a summary of consultation responses**
 Royal Society of Architects (November 2015) **A Procurement Action Plan for Wales**

Box 6: Construction Excellence Wales' recommendations to improve the procurement of public sector construction projects

In recent years there have been several reviews of the public sector construction procurement frameworks and other reports. In 2016, Constructing Excellence Wales summarised common issues identified across projects in Wales:

- procurement expertise needs to be coupled with construction expertise to deliver quality outcomes;
- greater communication is required in terms of both early engagement with the market and visibility of future workload pipelines;
- procurement processes need to be simple, open, and proportionate, and applied consistently across the public sector;
- frameworks, where used, should be appropriate and well structured;
- construction projects can and should deliver benefits to local communities; and
- public sector projects should enable collaborative bidding and ensure fair payment to support smaller suppliers.

Source: Constructing Excellence Wales (May 2016) **Optimising the procurement and delivery of 21st century schools in Wales**. Section 5.2.1

Councils have generally valued the support provided by Welsh Government in developing their programmes to date and new arrangements for specialist advice and technical support are being put in place

Councils have generally welcomed the Welsh Government's support for their local programmes

1.51 The Welsh Government's programme team has supported councils in developing their schools programme from the initial strategic outline cases to individual business cases. The Welsh Government has funded project manager support for two councils that have struggled to manage reorganisation and project planning. We found that Councils believe that partnership working between councils and the Welsh Government has been effective or very effective. They also believe that the Welsh Government's support for partners had been effective or very effective. A Gateway review in early 2015 also found that the Welsh Government team was highly regarded by stakeholders. These close working relationships enable Welsh Government staff to clearly demonstrate a detailed knowledge of local progress and issues in the monthly update reports to the Programme Board.

The programme benefited from technical advice and support from Constructing Excellence in Wales and new arrangements to provide support and technical advice are being made

- 1.52 The Welsh Government has adopted a range of approaches to ensure it has the necessary technical skills to manage the programme, particularly in understanding the construction industry. There were concerns about the level of technical knowledge and advice available within the Welsh Government to shape the programme following the departure of technically qualified staff in 2012-13. The programme's senior responsible officer reassured the National Assembly's Public Accounts Committee in June 2013 that the Welsh Government was taking steps to meet this acknowledged gap. In 2013, a representative from Constructing Excellence in Wales was appointed as a member of the Capital Investment Panel to provide challenge to the technical and cost elements of the business cases as well support to the programme team. However, the position has been vacant since March 2016 and it is not clear how external challenge informed by technical expertise on the panel will be maintained going forward. The Welsh Government has appointed consultants with knowledge of public-private partnerships to the programme team to support the development of the Mutual Investment Model. A technical specialist has also been seconded to the Welsh Government. Legal, financial and insurance advisors have been sourced on a call-off basis.
- 1.53 In September 2014, the Welsh Government awarded Constructing Excellence in Wales a grant of £400,000 to provide technical advice and support to the programme for a two year period (Box 7). The Welsh Government decided that awarding grant funding directly to Constructing Excellence in Wales for this purpose rather than through a competitive procurement process was appropriate in the circumstances and having assessed that Constructing Excellence in Wales was the only external organisation capable of providing the full range of technical expertise required. The Welsh Government had otherwise been planning to recruit three members of staff to undertake equivalent work. In April 2015 the Welsh Government increased its grant offer to £415,000 to provide for some additional work. The Welsh Government later extended the contract to December 2016 to allow work to be completed at no additional cost but is not renewing its grant to Constructing Excellence in Wales. At the time of writing, the Welsh Government was finalising plans to develop a Technical Advisors Framework through which councils could procure advice for both revenue and capital funded projects as they see fit.

Box 7: Constructing Excellence in Wales support for the programme

In 2014, the Welsh Government commissioned Constructing Excellence in Wales to undertake work to suggest an optimal approach to delivering, designing and procuring the Programme. This was originally over two years, but was extended by six months to allow the work to be completed. This work has included:

Design:

- developing a template design for primary and secondary schools; and
- establishing standard costs and area, including standard classrooms.

Procurement:

- reporting on current procurement models and identifying areas for improvement;

Delivery:

- reporting on current delivery models;
- developing a post-occupancy and benefits realisation toolkit;
- developing best practice guides for BREEAM; sustainability; and community use of assets; and
- whole life costing work.

Source: Constructing Excellence in Wales and information supplied by the Welsh Government, February 2017

Part 2

The programme is beginning to deliver improved school buildings and reduce surplus places but needs to get better value from future investment



- 2.1 In this part of the report, we look at the progress made so far in achieving and monitoring the intended benefits of the programme. We focus primarily on improving the condition of school buildings and reducing surplus places, although we do recognise the work done to improve the condition of further education institutions. We then consider wider benefits that could potentially come from the substantial public investment in the programme, improving educational attainment, benefitting local economies and communities and creating a more sustainable estate with lower running costs.

The programme is beginning to achieve improved school buildings but many are still in poor or bad condition and there is scope to get better value from the investment

While the level of investment varies, all councils have school building projects underway and some are complete although progress with some secondary schools is very slow

- 2.2 The Welsh Government set a target of building or refurbishing 150 schools in Band A of the programme. As of 31 March 2017 there are 169 schools projects currently included or planned within Band A although more schools are affected by the programme as a result of mergers or closures (**Figure 7**). Every council has at least 2 individual projects in the programme with an average investment of £68.9 million (ranging from £19.0 million in Merthyr Tydfil to £164.1 million in Cardiff (**Figure A1, Appendix 2**)). There are also seven projects in further education colleges. Just over half (52%) of projects involve refurbishing or remodelling existing school buildings rather than new build projects.
- 2.3 As at March 2017, 132 school projects have been approved by the Cabinet Secretary for Education, the final stage necessary before contracts are signed. Of those that have been approved, 57 school projects have been completed: 11 secondary and post-16 schools, 3 special schools and 43 primary schools. The combined value of the completed schools projects was £432 million. In addition, of the seven further education projects which have been approved, two have been completed with a combined value of £48.9 million.

Figure 7: Profile of the programme at 31 March 2017

	Current Indicative Number of projects	Agreed cost programme £ millions	Number approved as at 31 March 2017	Number complete as at 31 March 2017
Total schools	169	1,516.73	132	57
Further education	7	79.73	6	2
Total programme	176	1,616.78	138	59

Note

- 1 The cost of projects in the programme exceeds the budget available for the programme because there is a degree of over-programming to provide flexibility to allow for delays and changes that can be expected in a programme of this size and complexity (paragraph 1.32)

Source: Wales Audit Office analysis of programme data from the Welsh Government

- 2.4 Some councils have made more rapid progress than others. The business case and finance for all of the councils' planned projects has been approved in 7 of the 22 councils. In Powys, complex consultations mean that just two of seven planned projects have reached final approval. Nationally, secondary school projects which tend to involve more complex consultations affecting more families and several feeder primary schools are less likely to be approved at this point in the programme: of the 37 planned school projects not yet approved, 11 are secondary or post-16 schools. Most councils have completed at least one project in their area although four councils (Anglesey, Blaenau Gwent, Conwy and Merthyr) had not completed any projects at 31 March 2017.
- 2.5 The cost of individual projects varies across a wide range, from £67,000 to £47.7 million. Two-thirds of projects are primary schools, accounting for 41% of the total investment (Figure 8). However, the much greater average cost of a secondary projects means that the 48 secondary school projects (including 6 post-16 centres) account for just over half of programme expenditure. There are five secondary school projects and one further education project which are individually costed at over £40 million¹⁷.

¹⁷ Projects costing over £40 million are: Cardiff City Campus for Cardiff and the Vale College, Eastern High School (Cardiff), Aberdare secondary school and Tonyrefail 3-19 school (Rhondda Cynon Taf) and Caldicot Comprehensive and Monmouth Comprehensive (Monmouthshire).

Figure 8: Planned expenditure by sector at 31 March 2017

	Total project costs (£ millions)	Average cost (£ millions)	% total programme cost
Primary	657.2	5.62	41
Secondary	709.5	16.50	44
Sixth form centres	108.6	21.71	7
Special schools	25.7	4.29	2
Unallocated/ unspecified	15.8	3.96	1
Further education	100.0	14.29	6
Total	£1,616.78	£8.79	100

Source: Wales Audit Office analysis of data supplied by the Welsh Government

A recent survey of estate condition suggests that the number of good or satisfactory school buildings is higher than in 2010 but there are still many schools in poor or bad condition

2.6 The Welsh Government anticipates that, by the end of Band A in 2019, almost all schools that were classified as 'bad' for either condition or suitability at the start of the programme will have either been improved or replaced. In 2014, 44 schools were classed as 'bad' for one or both reasons. As at 31 March 2017, 20 of these schools were either completed or approved as part of the planned Band A. Of the remainder, councils carried out remedial work to three such that they were no longer considered 'bad'; nine were no longer considered in bad condition after an independent reassessment; and nine had either closed or were closing. All of the remaining three are being considered for inclusion within Band A, including Brecon High School in Powys for which the Welsh Government approved the outline business case following lengthy consultation in October 2016. Consultation on the closure of its Welsh-medium stream is on-going.

2.7 Council data shows that the number and proportion of schools in good or satisfactory condition increased between 2010 and 2016. But the data also showed that many schools had deteriorated over the period. Council returns suggested that 21 different schools were in bad condition in 2016 and 37 were classed as bad in terms of their suitability to deliver the curriculum. Five schools were categorised as bad for both condition and suitability. Overall, the Welsh Government estimates that there are about 450 schools and further education institutions which are 'poor' or 'bad' for condition, suitability or both. However, a 10% sample survey to assess consistency of the data held on condition commissioned by the Welsh Government in 2016 raised doubts for us about the accuracy of the councils' data because the surveyors' categorisation of the school's condition was different from that of the local authority in 32% of the schools sampled. In 13% of the sample, the surveyors' categorisation was worse than the councils, which means that, applying this to the whole estate, as many as 490 schools and further education sites could be in poor or bad condition.

New school buildings will improve accessibility for learners with disabilities but the programme will not make the school estate fully accessible

2.8 Schools are exempt from the general duty in the Disability Discrimination Act 1995 to make reasonable adjustments to their buildings. However, they are subject to a duty to plan to progressively make their buildings accessible. They must also make reasonable adjustments for learners attending the school. Councils and schools have been required to have an accessibility strategy and accessibility plans since guidance was issued in 2004¹⁸. The Children's Commissioner reported in 2014 that many councils did not have a comprehensive accessibility strategy in place. In practice, many councils have focused on making at least one secondary school and one primary school fully accessible. While this approach enables limited resources to be focused, it also means that disabled pupils and their parents may not have any choice in schools or be able to attend a local school¹⁹.

18 National Assembly for Wales Circular No: 15/2004 **Planning to Increase Access to Schools for Disabled Pupils**

19 Children's Commissioner for Wales (2014) **Full lives: equal access? Spotlight report on wheelchair accessibility in secondary schools in Wales**

- 2.9 The programme will improve the accessibility of schools to learners with disabilities, including wheelchairs users, because new buildings must comply with current building regulations on accessibility. The UK Government has provided guidance on designing schools for children with disabilities and those with other special needs²⁰ and pupil referral units²¹. However, projects falling short of full refurbishment are not required to meet these access standards. In practice, learners with access needs may also find themselves unable to attend schools which are a mix of old and new buildings because they may not be able to access all parts of the site.
- 2.10 Further education colleges are required to make public buildings accessible to people with disabilities. The Children's Commissioner reported that, compared to schools in 2012, a larger proportion of further education buildings are largely accessible: a picture that is likely to have improved with the completion of several new buildings including the Cardiff city campus of Cardiff and the Vale College and building underway at Coleg y Cymoedd in Aberdare.

The Welsh Government could have achieved more with the available funding through stronger oversight of costs and specifications of new build schools

- 2.11 In 2015 and 2016, Constructing Excellence in Wales analysed the costs of a sample of new build and refurbished schools. Overall, the total costs of 18 new build primary schools varied between £3.2 million and £10.4 million and of 11 new build secondary schools between £16 million and £50 million. Variations in cost largely relate to the number of pupils the school is designed for. However, there were also variations relating to abnormal costs associated with the chosen site of the building²². Like-for-like building construction costs per square metre were reasonably consistent across the projects²³. The 'above ground' construction costs of projects sampled showed a reasonable degree of consistency with an average cost of £2,500 per m² for both primary and secondary schools.

20 Department for Children, Schools and Families (2008) **Building Bulletin 102 – Designing for disabled children and those with special educational needs**

21 Department for Children, Schools and Families (2007) **Learning environment for pupil referral units: accommodation requirements and design guidance**

22 There are significant costs associated with building on some sites which may be unavoidable: for example, it is generally more expensive to build on a steep hill or a brownfield site than on a flat or greenfield site due to the more extensive site preparatory work

23 Construction costs cover all project costs excluding design and professional fees, ICT and fixtures fitting and equipment.

- 2.12 Size is a major driver of costs in any construction project: larger buildings are more expensive to build and subsequently to maintain and run. The size of many school buildings in the programme is greater than suggested by industry standards. The Welsh Government currently considers that Building Bulletins 98 (secondary)²⁴ and 99 (primary)²⁵ are relevant standards for the programme. These bulletins set out the maximum and minimum area requirements needed for teaching and learning²⁶. Constructing Excellence in Wales analysed a sample of schools in the Programme and found that a number of these are in excess of the maximum area guidance detailed in Building Bulletins 98 and 99: on average, the primary schools currently being delivered in Band A are 10% larger than the maximum and secondary schools are 7% larger than the maximum. Applying industry standards at the outset would have enabled the programme to achieve better value: we estimate that reducing the size of new-build schools to the maximum set out in the building bulletins would save between £28 million and £35 million over the programme. Moreover, costs could also be contained by designing new buildings with less than the maximum area standards: using the example of a single form entry primary school, the cost of building the minimum size outlined in Building Bulletin 99 would be £3,410,000 compared to £3,750,000 if it was built to the maximum size suggested, a difference of £340,000 or 10%²⁷. These figures exclude abnormal costs arising from the site or purchase of land.
- 2.13 The cost of ‘non-construction’ elements of the projects have also varied substantially (Figure 9). While the project specification and the efficiency of procurement will influence costs, the level of variation suggests that there scope to standardise the specification of elements in projects. For example, the ICT spend per pupil varied in secondary schools from £118 per pupil to £1,037. It is likely that this represents councils’ differing approach to specifying and funding ICT – in one example, the school borrowed to invest in ICT facilities above basic ICT infrastructure whereas in the other the council included much more ICT within the project’s specification. This formed part of the capital cost of the project shared with the Welsh Government. This is an area where further standardisation or guidance would be beneficial to standardise specifications and Welsh Government contributions.

24 Education Funding Agency (March 2014) **Building Bulletin 98 – Buildings framework for secondary school projects second edition**

25 Education Funding Agency (March 2014) **Building Bulletin 99 – Buildings framework for primary school projects second edition**

26 These standards do not cover additional areas for non-core teaching and learning, pure community use or for other agencies. The Welsh Government has chosen not to adopt updated guidelines that apply in England, which had the effect of reducing the average size of a secondary school by 15% and a primary school by 6%. Their decision followed feedback on a number of operational issues that stakeholders had experienced in the smaller school buildings. Education Funding Agency (June 2014) Area guidance for mainstream schools – Building Bulletin 103

27 These figures are based on a minimum floor area of 1,364 m² and maximum of 1,500 m² and a construction cost of £2,500 per m². Source: Constructing Excellence Wales (May 2016) **Optimising procurement** Appendices A and L, Unpublished briefing note to the Welsh Government

Figure 9: Costs of elements of a sample of new-build schools

	Range for primary schools	Range for secondary schools
External works (£ per pupil) eg landscaping, car parking, sports facilities Table text	£482 - £5,551	£1,240 - £6,621
Fixtures, fittings and equipment (£ per pupil) eg desks, gym equipment, storage	£710 - £2,095	£972 - £2,768
ICT (£ per pupil) eg network, IT screens	£112 - £996	£118 - £1034
Design fees (total)	£162,416 - £656,972	£725,970 – £2,635,076

Source: Constructing Excellence Wales, May 2015 **Optimising procurement, Appendices B and C** Analysis of costs of 7 secondary and 11 primary new build schools

2.14 Constructing Excellence in Wales used its analysis to produce model school costs for a range of types of primary schools and secondary schools of varying sizes²⁸. The Welsh Government’s Strategic Outline Case for Band B has adopted this approach to an extent and assumes that there will greater standardisation of cost, design and area for new-build projects. The Welsh Government is currently consulting with councils on this approach. As noted in Part 1, it is also using the analysis to challenge and drive down the costs of projects currently in the pipeline for Band A.

28 Constructing Excellence Wales (May 2016) **Optimising procurement**, Appendix D Unpublished briefing note to the Welsh Government

Increasing use of Building Information Modelling during the construction process could reduce costs

2.15 Buildings information modelling (BIM) is becoming standard practice in the construction industry. There is considerable evidence of the effectiveness of BIM in reducing costs²⁹. The UK Government has strongly supported its uptake in publicly funded projects (Box 8). The Welsh Government endorsed the approach in its 2013 procurement strategy but it has not required publically funded construction projects to use BIM. A number of initiatives have sought to increase the uptake of BIM in Wales, for example a BIM taskforce was established in 2012 for the whole construction section by Constructing Excellence in Wales who are also planning to produce good practice guidance specifically for the programme. The Consortium of Councils in Wales also developed a BIM Toolkit for clients in 2014 to help public sector clients in Wales to specify their BIM requirements more consistently. There have been examples of the effective use of BIM in 21st century schools but it has not been consistently used across the programme.

The Welsh Government and councils need to challenge the variable costs of refurbishment projects to ensure that they represent value for money over new build options

- 2.16 Just over half (52%) of Band A projects are refurbishments rather than new builds. The building work undertaken ranges from full refurbishments, where the building is taken back to its shell and rebuilt, to more limited work to the existing structure, replacing some services and redecorating.
- 2.17 Constructing Excellence in Wales identified significant variation in total project costs in a sample of refurbishment projects (Figure A4, Appendix 2). The costs for a sample of three secondary schools varied from £755 to £1,471 per m² and for ten primary schools between £524 and £3,274 per m²³⁰. While this may partly reflect abnormal costs – for example because of the nature of the site or if buildings are listed –some refurbishments cost as much or more than the average costs of a new build project per m² (£2,500). We did not examine the details of individual projects in this audit. However, given these apparently high costs, it is important that the Welsh Government and councils examine the costs and benefits of refurbishments against those of new-builds in order to ensure that projects offer the best value for money over the longer term.

29 Mosey, D. et al, (July 2016) **Enabling BIM through procurement and contracts - A Research Report by the Centre of Construction Law and Dispute Resolution, King's College London**

30 Constructing Excellence in Wales (May 2016) Optimising procurement – Appendix D, Pilot Projects Refurbishment Costs Unpublished briefing note to the Welsh Government

Box 8: Building Information Modelling

Building information modelling (BIM) is a process involving the generation and management of digital representations of physical and functional characteristics of buildings and places. It is increasingly common within the construction and property industry. BIM can be applied incrementally, with increasing degrees of integration of stages of the construction process.

Research for the UK Government's Cabinet Office (July 2016) suggests BIM projects can achieve agreed savings in the region of 20-25%. The approach improves the management of construction projects, leads to greater integration of elements of the process, reduces error and provides greater price certainty. Construction industry experts believe that greater savings could come from reduced whole life costs as BIM supports more effective facilities management.

There are examples of projects in the programme that have successfully used BIM. For example the Holywell Learning Campus was the first BIM level 2 project to be commissioned by Flintshire County Council under the 21st Century Schools Programme. They felt that using BIM fostered a genuinely collaborative process between themselves, designers, construction teams, schools and, ultimately, facilities managers. The BIM model was used to cost the major plant on a whole life basis; for example, enabling the client to take maintenance costs into consideration alongside capital expenditure when planning budgets. Facilities managers have been involved throughout. In awarding it 'BIM project of the year' in 2016, Constructing Excellence Wales' judges felt that the project had set new standards in best practice in the use of BIM. The knowledge and lessons learnt will be used in the development of the Consortium of Local Authorities in Wales (CLAW) BIM toolkit.

The programme has contributed to reducing the number of surplus school places although difficulties matching demand and supply remain

Many factors, including the programme, have contributed to a fall in surplus places

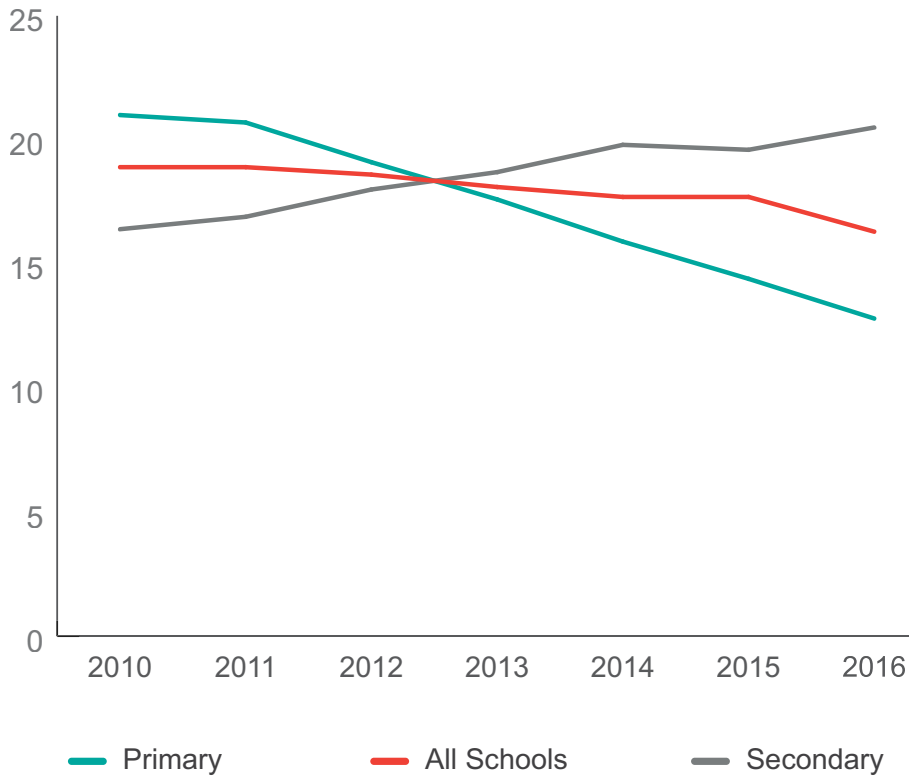
- 2.18 Councils are statutorily responsible for ensuring sufficient school places taking account of parents' preference for language and faith education. The Welsh Government's School Standards and Organisation Act 2013 and associated guidance sets out the factors that they are required to take into account in decisions about school closures and organisation. Demand for school places is affected by many factors including the birth-rate, migration pattern from within and outside of Wales, new housing developments and parents' preferences for language category, faith designation, gender intake, private education³¹ and journey times³².
- 2.19 Historically, there has been significant surplus capacity in Welsh schools: in 2010, 19% of school places were unfilled. 16% of all schools places were unfilled in 2016 although the picture varies between primary and secondary schools (Figure 10 and table A5 in Appendix 2). Some of the fall in primary surplus places is due to the impact of an increasing birth rate since 2006 and to migration to and within Wales. These population changes have combined with school reorganisation to reduce the percentage of unfilled primary school places from 21% in 2010 to 13% in 2016. Over the same period, the proportion of unfilled places in secondary schools increased from 16% to 20.5%. In some councils, this will reduce naturally as the growing number of pupils in primary schools move on to secondary school. The latest population projections however do not expect the birth-rate to continue to increase and certainly not at the current rate³³. Estimating the future population is one of the difficulties that councils face in planning places as population projections have been very volatile in recent years (See also paragraphs 2.22 -2.23).

31 The proportion of learners attending private schools is lower in Wales (4%) than in England or Scotland but varies across the country: in Monmouthshire 11% of learners attend independent schools while in other local authority areas less than 1% do so

32 The Welsh Government's statutory code on School Organisation (June 2013) sets out its expectations for a reasonable journey time as a one way journey time of up to 45 minutes for a primary pupil and an hour for a secondary pupil.

33 Generally, the birth-rate increased across Wales since 2006. Population projections suggest that this increase will peak in 2017-18 and then decline. There is always significant uncertainty in these projections but latest published forecast suggest only Cardiff and Gwynedd will see an increase in the birth-rate post 2020. (Source: Stats Wales **Population projection components of change by local authority and year 2013**)

Figure 10: Percentage of school places that are surplus, Wales, 2010-2016.



Source: Wales Audit Office analysis of Association of Directors of Education in Wales School places – benchmarking exercise (April 2017) (Unpublished)

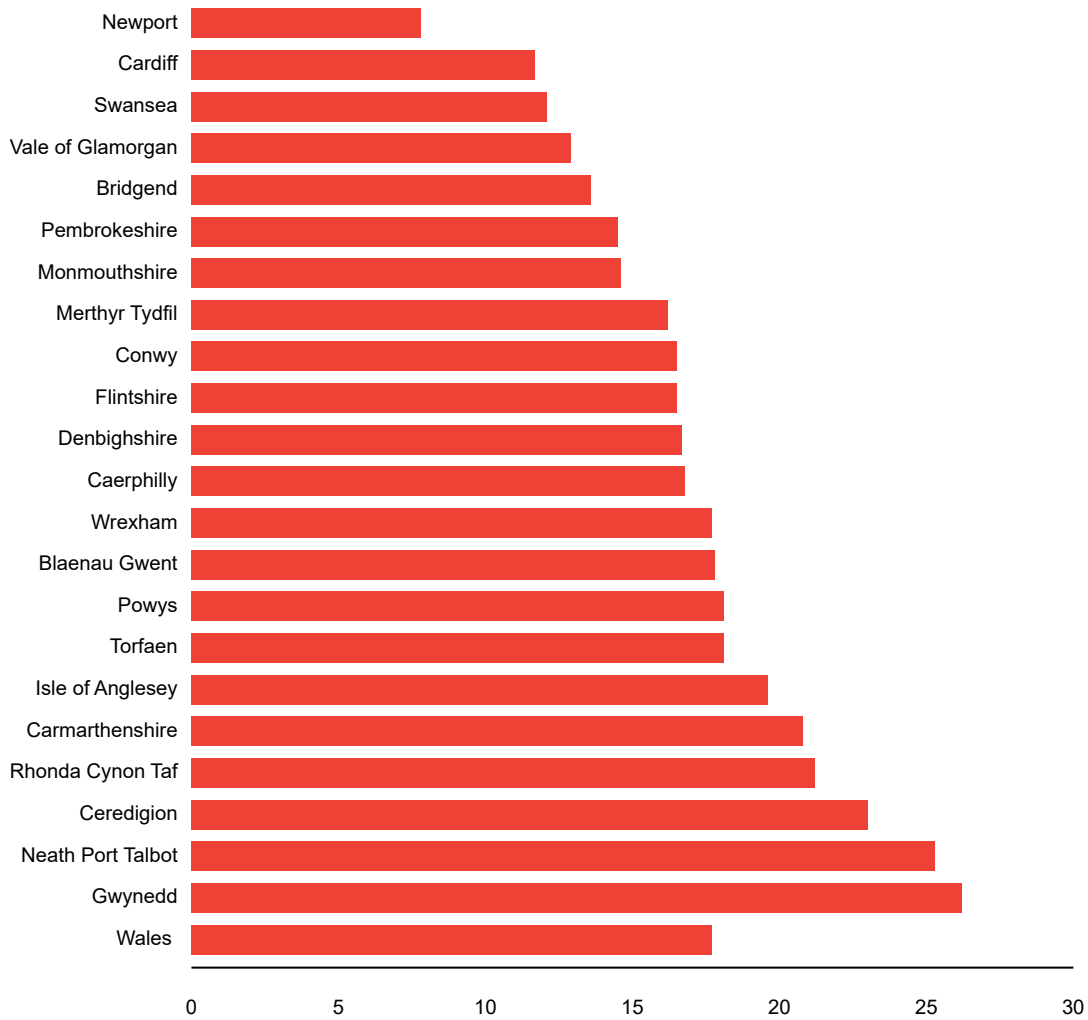
The proportion of surplus places varies across Wales and even in councils with high surplus capacity, individual schools may be oversubscribed.

2.20 The proportion of surplus places and the expected impact of demographic change varies across Wales: overall the proportion of surplus places varies from 7% in Newport to 25% in Gwynedd (Figure 11). Fourteen of 22 councils met the Welsh Government's target of less than 15% surplus places in primary schools by 1 January 2015. In 2016, Bridgend, Cardiff, Merthyr Tydfil, Newport and Torfaen demonstrated a demand for new primary places as they were below the target of 10% surplus capacity. Several other councils are close to the 10% target. However, just three councils (Cardiff, Swansea and Newport) met the 15% 2015 target for secondary schools although just 8% of secondary places in Newport were unfilled in January 2016 and Swansea, Torfaen, Cardiff and the Vale of Glamorgan secondary schools were also close to the target of 10% unfilled capacity (Figure A5, Appendix 2).

2.21 Even in councils with high surplus capacity, individual schools may be oversubscribed either due to parental preferences, catchment area changes and/or because of population shifts within the council. Overall, 13% of schools in Wales were oversubscribed in 2016: 14% (183) of primary schools and 7.5% (16) of secondary schools. In Anglesey, Bridgend, Cardiff, Newport and Torfaen more than a fifth of schools are oversubscribed³⁴. In 2012, the then Minister for Education and Skills made it clear that councils should not build new schools or expand popular schools if there was spare capacity within other schools within reasonable travelling distance. This means that popular schools are not able to expand to meet demand other than as part of the council's plans for the whole authority.

34 Barrett, P. Zhang, Y., Davies, F. and Barrett, L. (2015) **Clever Classrooms: report of the holistic evidence and design project** University of Manchester

Figure 11: Percentage of school places that are surplus by council, January 2016



Source: Association of Directors of Education in Wales – School places benchmarking exercise (April 2017) (Unpublished)

There are inherent difficulties in accurately predicting and providing for demand for Welsh language and voluntary-aided schools

- 2.22 Matching demand for and supply of Welsh language education is complex and a capital programme could only ever help rather than solve these challenges. In 2009, the Welsh Government set a target of 30% of seven year olds being taught through the medium of Welsh by 2020 compared to 21% in 2009. Although overall there is a higher percentage (19%) of surplus places in Welsh medium schools, achieving this target would require a substantial switch in the language classification of the existing school estate and/or building new schools to meet the demand for Welsh-medium education. Fifty two Band A projects (31%) are Welsh-medium schools, including six which are English and Welsh schools. Welsh-medium projects account for 30% (£441.4 million) of the total budget. These projects include new Welsh-medium schools to meet increased demand as well as replacement for existing schools. Although not definitive evidence, that Welsh-medium schools account for a disproportionate amount of the programme budget compared to the number of learners suggests that councils have prioritised Welsh-medium in their reorganisation plans.
- 2.23 There are also difficulties assessing and meeting demand for faith schools across Wales. Most voluntary aided schools are primary schools and, as there are only four Church in Wales and 19 Roman Catholic secondary schools, some pupils do not have the option to continue to secondary faith schools. Some pupils travel across council boundaries under local arrangements to access faith education. There is evidence of a demand for places in voluntary aided schools as the proportion of surplus places is lower than in other schools: 9% of both primary and secondary places were unfilled in 2016. More than a quarter (27%) of voluntary aided schools are oversubscribed. The Welsh Government has worked with Diocesan leaders to assess demand for church schools but it is not clear to us if demand is increasing or falling across all or any parts of Wales.

Identification and monitoring of wider benefits is patchy and there are concerns that intended cost savings from energy efficiency are not being achieved

There is some evidence of wider economic benefits from the investment to date and the Welsh Government improving its approach to measuring these benefits in future

2.24 From the outset, the Welsh Government emphasised the potential economic benefits to local communities from the investment. Projects valued at more than £2 million are required to provide evidence of their wider impact using Value Wales' 'community benefits measurement tool for construction and infrastructure projects'. Using data from 26 completed projects with a value of £177.1 million, the Welsh Government assessed the achievement of benefits against a sample of the measures within the toolkit (Figure 12).

2.25 The Welsh Government is improving the information it gathers about the wider benefits of the programme by revising the generic Value Wales toolkit to better fit the programme (paragraphs 1.12 - 1.13). It is also piloting a post-occupancy survey, which captures staff and learners' views of the building as well as data about running, energy costs and educational outcomes. This will be collected 1, 3 and 5 years after completion to allowing a measure of the long term benefits from the investment. If the pilot is successful, the information from this comprehensive post-occupancy evaluation will provide valuable insight for councils, school leaders and the construction industry.

Figure 12: Welsh Government's measures of the economic benefits from capital investment in 26 completed projects valued at over £2 million in the programme at 31 July 2016.

Total contract value from 26 projects	£177.1 million
Revenue to Welsh businesses	£136.6 million
Percentage to Welsh based business	87%
Percentage spent on Welsh businesses and salaries	83%
Percentage Welsh small and medium sized enterprises	88%
Contribution to Welsh small and medium sized enterprises	£121.3 million
Disadvantaged people helped into employment	277
Training weeks to disadvantaged people	1,587
Income to Welsh residents	£16.7 million

Source: Extract of data supplied from 26 schools projects, Welsh Government, October 2016

The link between school condition and improving educational attainment is not clear but future investment could learn from emerging research in Wales and elsewhere

2.26 The Welsh Government stated at the outset that the Programme should lead to improved educational attainment. At this stage, it is too early to assess what impact, if any, the programme has had on attainment. Many factors influence learners' attainment, in particular the quality of school leadership and teaching. As a result, the causal relationship between the quality of buildings and learning outcomes has been difficult to establish. However, recent academic research by Salford University – The Clever Classrooms project³⁵ – has begun to provide evidence of a correlation between the physical teaching environment (lighting, colours, display work and so on) and the pupils' academic progress. The researchers showed that a well-designed classroom can boost learning progress in primary school pupils by up to 16% in a single year. This research can inform the design of schools going forward. In addition, the Welsh Government's proposed approach to post-occupancy evaluation will provide more evidence of any link between the school design and attainment by linking data about the school to educational outcomes.

More work is needed to ensure that new and refurbished school building achieve the sustainability and energy efficiency targets set for them and benefit from related cost savings

2.27 The Welsh Government requires centrally funded public buildings to achieve several design and energy efficiency standards to meet its aim of a sustainable estate for the future that achieve carbon targets and results in reduced energy costs. A review of 18 new build projects by Constructing Excellence in Wales for the Welsh Government early in 2016 found that some were not achieving the sustainability and energy efficiency standards required for publicly funded buildings³⁶. **Figure 13** sets out progress against the environmental standards.

35 Barrett, P. Zhang, Y., Davies, F. and Barrett, L. (2015) **Clever Classrooms: report of the holistic evidence and design project** University of Manchester

36 Instructing Excellence Wales Briefing note (May 2016) **Optimising procurement** Appendix P Unpublished briefing note to the Welsh Government

Figure 13: Sustainability and energy efficiency standards that apply to the programme

Environmental standard	Wales Audit Office commentary of progress to date
<p>BREEAM Excellent – The Building Research Establishment’s Environmental Assessment Method (BREEAM) is a widely used environmental assessment method for buildings, setting standards for best practice in sustainable design. BREEAM covers nine categories and scores them against 5 different ratings of Pass, Good, Very Good, Excellent and Outstanding</p> <p>Since 2010, all publically funded buildings in Wales are required to achieve a BREEM rating of Excellent. There have been concerns about the cost of achieving BREEAM Excellent for some time. In England, school buildings are required to achieve ‘Very Good’ standards, after research showed high costs associated with achieving a BREEAM – excellent standard. The Welsh Government reviewed this requirement in 2015 but decided to continue with the excellent standard for projects receiving public funding</p>	<p>Constructing Excellence in Wales found that not all new builds had achieved the BREEAM Excellent rating although it is not required for small extensions and refurbishments. As a result aspects of sustainable design have been incorporated into new build projects but are less common in other work. Constructing Excellence in Wales concluded that improving water efficiency (for example through rainfall harvesting) and managing flood risks were progressing well. Some areas including designing for overheating – a particular problem in schools due to their uneven usage and high ICT use – and incorporating sustainable construction methods and materials require further work.</p>

Environmental standard	Wales Audit Office commentary of progress to date
<p>Energy Performance Certificate (EPC) 'A' Measures the potential for energy efficiency at the point of completion. A Welsh Government funding requirement for Band A projects is for an EPC 'A' rating to be achieved. Achieving this rating means that the building has been designed to be energy efficient, but does not take account of actual energy usage.</p>	<p>On completion, only two thirds of new build schools reviewed achieved the desired EPC A rating: 6 of 18 sampled were rated B and 1 was C for part of the build. The reviewers did not establish if these projects had secured a derogation from the requirement at the outset or whether this represented a failure to achieve the original design.</p>
<p>Display Energy Certificates (DEC)</p> <p>A DEC rating will include all energy use on the site including catering, teaching walls and ICT equipment. It can allow renewable technologies installed which may have generated energy and off-set fossil fuel consumption. The assessment is based on records of energy use over 12 months and so provides an accurate assessment of the building actual energy use compared to the EPC. It can repeated annually.</p>	<p>The new buildings that had undertaken the assessment achieved variable results and energy consumption increased at some sites. The exact reasons are unclear but could include more IT leading to higher energy use and additional opening hours for community services. Several sites had renewable technologies that are not included in the DEC assessment.</p> <p>Councils have concerns that some of the technology may not be delivering the intended benefits (paragraphs 2.28 and 2.29).</p>

Note:

- 1 Research for the UK Governments Department for Schools, Children and Families in 2008 suggested that achieving BREEAM – 'very good' cost around £19 per m2 compared to £60 per m2 for 'excellent'. Subsequently, improvements in industry practice have reduced costs: in 2012 it was estimated that achieving 'very good' could be done at no additional cost while BREEAM – Excellent' would add 6-10% for a primary school and around 4% for a secondary schools. Source: Faithful and Gould (2008) **Schools for the future: The cost of BREEAM compliance in schools.**

2.28 It is important to understand the findings on energy efficiency and energy use in the context of a growing awareness within the construction industry that many low energy buildings use more energy than designers envisaged and building owners expected. For schools, this performance gap places demands on their fixed revenue budgets and means that funders may not see the expected pay-back from their investment. The performance of low energy designs is often little better, and sometimes worse, than that of an older building they have replaced or supplemented³⁷. Constructing Excellence in Wales have produced good practice guidance to help school managers understand and manage this risk, which the Welsh Government intends to publish on the 21st Century Schools and Education Website. This can include 'soft landings' where designers and constructors continue to provide support during the first months of operation and beyond, to help fine-tune and de-bug the systems, and ensure the occupiers understand how to control and best use their buildings.

Some projects are clearly benefitting the wider community but the programme could do more to increase the community use of facilities

2.29 The potential for increasing community use of school facilities forms part of the business case approval process for each project in the programme. However, the Welsh Government does not keep a consistent record of the extent to which projects are intended to achieve increased community use. The 2002 Education Act (England and Wales) gave governing bodies powers to provide services to help meet the needs of their pupils, their families and the wider community. In 2003, the Welsh Government produced guidance to schools, governors and councils about how they can develop such services³⁸. The Community Focused School initiative encourages schools and councils to view their schools as a community resource. In practice this means not only using schools for after school clubs for children and young people and increasing use in the weekends and holidays but also as a possible base for additional services such as health, social services, libraries and adult education activities.

³⁷ See for example Constructing Excellence in Wales (2016) **Building better buildings**

³⁸ National Assembly for Wales Circular No: 34/2003 **Community Focused Schools**

- 2.30 In practice, recent research commissioned by the Welsh Government by the Public Policy Institute for Wales found that community use of schools takes various forms (Box 9). Some projects in Band A have incorporated community resource in their design: for example Pontprennau Primary School, Cardiff where the new build primary incorporates a community hall and other facilities that can be used by the community while ensuring appropriate separation from the children during school hours. Some activities that previously took place in a separate community hall have transferred to the new school, including a crèche and pre- and post-school wrap around child care. There are separate showers and changing facilities available for community users. Several projects in the programme have included grant funding from the Flying Start capital grants to include early years' provision. In 2015-16, there were 11 Flying Start³⁹ capital projects ranging from £2,500 for playground adaptations at Ysgol Penmorfa, Denbighshire to £554,000 for a new Flying Start centre at the new Delta Community Primary school in Carmarthenshire.
- 2.31 The Welsh Government and councils recognise that there is more to do to widen the provision of services in school sites as well as to increase the community use of school buildings. The Strategic Outline Business Case for Band B makes community use one of the two key investment objectives. It sets a specific target that 10% of schools/colleges that receive funding from the Programme have co-located public services on site if local demand exists. However, some of the barriers to increased community use are as much about attitudes and school leadership as the available infrastructure of a school building. The 2016 report warned against a 'one size fits all' approach, particularly in urban areas where there may be many potential providers of facilities and services. However schools can play an especially important role in rural areas where the school buildings may be the only community resource and for faith and Welsh-medium schools which can become cultural hubs in community life. The Welsh Government has created a taskforce to examine the potential for increasing the community use of school buildings and increasing the role of schools in providing local services.

³⁹ Flying Start is the Welsh Government's targeted early years programme for families with children under 4 in some of the most disadvantaged areas of Wales.

Box 9: Community use of buildings takes various forms

- **Direct provision of services** – school makes services available to others. For example, accommodation for school staff running extra curricular activities, family learning or sports clubs. Activities for pupils are often free but families or others may pay.
- **Hosting** – The school opens its facilities to others. Examples include adult education classes using classrooms and facilities, sports clubs on the school field or gym or local community groups using the school hall. Can be at no/low cost for community groups or at a market rate for private hire.
- **Separate use of the same building but under indirect school control** – the school relinquishes main use of part of the school building to another organisation but retains the right to use it by agreement with the main user. For example, a further education college may take over part of the school building for adult education and create a computer suite which the school uses by prior agreement. Usually at a competitive but realistic charge to the group.
- **Separate use of the same building but under alternative user control** – part of the school is controlled by another organisation and the school relinquishes the possibility of using that facility/building for the time of any agreement. For example, social services or police take part of the building with responsibility for all associated costs. This is usually at a 'business rate'.
- **Other user builds new facilities on site** – the other user meets all the costs and pays for shared areas or offers use of the facilities as an alternative to payment, for example for child care provision, after school clubs or sports facilities.

Source: Adapted from Public Policy Institute for Wales (2016) **Increasing community use of school facilities** pages 15-16

Appendices

Appendix 1 - audit methods

Appendix 2 - profile of the 21st Century
Schools and Education Programme

Photograph Credit JonesMillbank



Appendix 1 - audit methods

- 1 We have reviewed a range of documents published or provided by the Welsh Government including:
 - a Welsh Government (December 2010) **National Business Case: 21st century schools;**
 - b Business Case Guidance (2012, revised in 2014);
 - c Gateway Review (March 2015);
 - d Constructing Excellence in Wales (May 2016) **Optimising the Procurement & Delivery of 21st century schools in Wales.**
 - e Welsh Government Internal Audit reports (2011, 2014 and 2016);
 - f Minutes and papers of the Business Case Scrutiny Group and the Capital Improvement Panel (on-going); and
 - g Welsh Government (February 2017) 21st century schools and education programme: Band B – Strategic Outline Case.
- 2 We interviewed a range of people including Welsh Government officials, WLGA officials, the Association of Directors of Education in Wales (ADEW), Colegau Cymru, officials from the Church in Wales and Roman Catholic Dioceses in Wales and the Chair of the Association of School and College Leaders Wales. We also sought views from staff in Estyn and the Office of the Children’s Commissioner for Wales.
- 3 We liaised with Constructing Excellence in Wales to understand the work carried out on behalf of the Programme up until December 2016. We also reviewed the 21st century schools website and published good practice guidance.
- 4 We analysed official statistics on school places and local government spending. We also analysed unpublished 2010 data collected by the Welsh Government on school building condition and 2016 data provided by councils. A sample of the 2016 data was tested by consultants for the Welsh Government. Their review found that almost 40% of the schools tested were incorrectly classified by the council. As a result, we have been cautious in drawing on this data in our findings.

- 5 We reviewed the Welsh Government's decision-making process in a randomly chosen sample of 11 approved projects against the criteria set out in the business case guidance for the programme.
- 6 During June 2016, we conducted a survey of councils in Wales to seek their views on Welsh Government's management of the programme so far and its approach to future investment. We received responses from 15 of the 22 councils. Seven councils did not reply (Cardiff, Swansea, Merthyr Tydfil, Pembrokeshire, Flintshire, Denbighshire and Neath Port Talbot).

Appendix 2 - profile of the 21st Century Schools and Education Programme

This appendix reports more detailed information on the programme. Figure A.1 shows the detail of the programme in each council as it stood at 31 July 2016.

Figure A1: Profile of the 21st century schools and education programme by council at 31 March 2017

	Number planned projects	Programme cost (£ millions)	Number approved projects	Number completed projects
Isle of Anglesey	5	33.7	2	0
Blaenau Gwent	4	20.3	3	0
Bridgend	6	43.0	2	2
Caerphilly	4	56.5	3	1
Cardiff	25	164.1	18	15
Carmarthenshire	16	87.4	7	4
Ceredigion	3	39.2	2	1
Conwy	4	19.4	4	0
Denbighshire	9	92.5	6	3
Flintshire	4	64.2	2	2
Gwynedd	6	52.3	6	3
Merthyr Tydfil	2	19.0	1	0
Monmouthshire	3	93.4	3	1
Neath Port Talbot	7	126.9	4	2
Newport	6	51.8	4	2
Pembrokeshire	10	121.9	5	3
Powys	7	80.6	1	1

	Number planned projects	Total project costs (£ millions)	Number approved projects	Number completed projects
Rhondda Cynon Taf	11	160.0	8	3
Swansea	11	51.3	8	4
Torfaen	9	86.1	4	3
Vale of Glamorgan	8	32	4	5
Wrexham	9	22.3	6	2
Total schools	169	1,515.7	132	57
Further education	7	100.0	6	2
Total programme	176	1,616.8	138	59

Notes:

- 1 Figures may not total because of rounding
- 2 Information is based on council progress reports to the Welsh Government

Source: Wales Audit Office analysis of Welsh Government data on programme at 31 March 2017.

Investment per learner varied substantially among councils from £7041 per learner to £1177 (Figure A2). This variation reflects many factors including their ambition for Band A as well as the condition and suitability of their schools and historical patterns of investment in school building and maintenance. For example, Newport council has a relatively low investment per learner in Band A but had significantly invested in new secondary schools prior to 2014. Councils with a higher proportion of their programme focused on secondary schools or with more small schools which face greater costs per learner will also have high levels of investment per learner. There was a clearer link with the proportion of surplus places, suggesting that reorganisation was the bigger driver of Band A of the programme (paragraph 1.8).

Figure A2: Band A Investment in schools per learner by local authority (£s)

Council	Investment per learner (£) 1	% school places which were unfilled in 2010	% schools classed as poor or bad condition in 2010
Isle of Anglesey	3,565	25	2
Blaenau Gwent	2,010	25	52
Bridgend	1,899	16	17
Caerphilly	1,988	19	44
Cardiff	3,278	17	21
Carmarthenshire	3,162	21	52
Ceredigion	3,965	26	58
Conwy	1,177	20	36
Denbighshire	5,744	15	33
Flintshire	2,781	15	44
Gwynedd	2,976	28	41
Merthyr Tydfil	2,047	16	15
Monmouthshire	7,041	17	27
Neath Port Talbot	6,395	26	54
Newport	2,169	12	48
Pembrokeshire	6,666	13	46
Powys	4,083	19	33
Rhondda Cynon Taf	4,046	23	32

Council	Investment per learner (£) 1	% school places which were unfilled in 2010	% schools classed as poor or bad condition in 2010
Swansea	1,519	18	29
Torfaen	5,546	14	11
Vale of Glamorgan	1,518	13	60
Wrexham	1,217	19	29
Wales	3,274	19	36

Note:

1 Based on the Council cost envelope at 31 March 2017

Source: Wales Audit Office analysis of programme data from the Welsh Government

Figure A3 shows the split of the investment across the school estate by local authority. Councils with high levels of investment in secondary schools tended to have larger overall programmes by value even though the number of projects may be less (paragraphs 2.4-2.5, Figure 8)

Figure A3: programme by school type and council at 31 March 2017 (£ millions)

Council	Primary	Secondary	Post-16	Special school or pupil referral unit	Not known / unallocated	Total council programme
Anglesey	31.2	2.3			2.5	33.7
Blaenau Gwent	17.2				0.8	20.3
Bridgend	38.6	28.5				43.0
Caerphilly	28.0	80.8				56.5
Cardiff	83.3	9.7				164.1
Carmarthenshire	77.7	34.7				87.4
Ceredigion	4.5	11.8				39.2
Conwy	7.6	64.0				19.4
Denbighshire	28.5	11.8				92.5
Flintshire	6.7	4.3	45.6			64.2
Gwynedd	21.4	12.0		13.0	12.5	51.3
Merthyr Tydfil	7.0	88.8				19.0
Monmouthshire	4.6	56.0				93.4
Neath Port Talbot	71.0	32.0				126.9
Newport	11.8	85.1				51.8
Pembrokeshire	36.7	0.1				121.9
Powys	58.3	133.7	22.2			80.6
Rhondda Cynon Taf	26.3	15.0				160.0
Swansea	36.2	36.0		0.1		51.3
Torfaen	30.1	0.3	20.0			86.1
Vale of Glamorgan	10.8	2.5	20.7	0.2		32.0
Wrexham	19.8	709.5				22.3
Wales	657.2		108.6	25.7	15.8	1516.7

Source: Wales Audit Office analysis of programme data from the Welsh Government

Figure A4 shows the substantial variation of the costs from a sample of completed refurbishment projects in the programme (paragraphs 2.16 - 2.17).

Figure A4: Costs of school refurbishment projects

		Minimum	Maximum	Average
Primary	Total cost	£1,150,839	£8,200,000	£3,292,475
	Cost per m ²	£524	£3,274	£1,890
	Cost per pupil	£1,702	£16,331	£11,424
Secondary	Total cost	£3,768,964	£12,000,000	£6,793,507
	Cost per m ²	£755	£1,471	£1,144
	Cost per pupil	£14,925	£24,271	£19,598

Source: Constructing Excellence in Wales analysis of data from 10 primary and three secondary schools, Optimising procurement – **Appendix D, pilot projects refurbishment costs**

Overall, 16% of school places are unfilled in Wales but Figure A5 shows that the proportion of surplus places in both primary and secondary school varies significantly between councils. In primary schools, Bridgend, Cardiff, Merthyr Tydfil, Newport, Torfaen and the Vale of Glamorgan have fewer surplus places than the Welsh Government’s target of 10% to allow scope for changes within year and for a degree of parental choice. Several other councils are at or close to this target level. For secondary schools, only Newport has a total number of surplus places below the 10% target although Carmarthenshire, Swansea and Torfaen are close to it (paragraphs 2.20 - 2.21, Figure 11). These figures are only total places, they do not take account of learner and parent preference for particular schools or for Welsh medium schools or faith education (paragraphs 2.21 - 2.22).

Figure A5: the percentage of school places that are unfilled by council, January, 2016

Council	Primary		Secondary		All Schools	
	Total capacity of schools	% total capacity which is unfilled	Total capacity of schools	% total capacity which is unfilled	Total capacity of schools	% total capacity which is unfilled
Anglesey	5,818	13.9	5,171	26.2	10,989	19.7
Blaenau Gwent	6,339	17.7	3,701	20.0	10,040	18.5
Bridgend	11,884	8.8	11,528	20.2	23,412	14.4
Caerphilly	16,790	13.3	14,991	25.4	31,781	19.0
Cardiff	30,552	8.0	23,733	17.2	54,285	12.0
Carmarthenshire	16,385	17.6	12,725	12.9	29,110	15.6
Ceredigion	5,945	20.2	6,050	28.0	11,995	24.1
Conwy	9,021	14.7	7,984	16.9	17,005	15.7
Denbighshire	8,589	11.8	8,398	21.0	16,987	16.3
Flintshire	14,207	14.2	11,769	20.4	25,976	17.0
Gwynedd	10,638	19.2	9,899	31.4	20,537	25.1
Merthyr Tydfil	5,194	9.3	3,759	24.7	8,953	15.8
Monmouthshire	7,079	12.5	5,757	18.0	12,836	15.0
Neath Port Talbot	12,703	16.9	10,836	29.6	23,539	22.8
Newport	13,614	7.2	10,454	7.0	24,068	7.1
Pembrokeshire	10,669	12.1	8,666	21.7	19,335	16.4
Powys	10,911	15.7	9,767	23.5	20,678	19.4
Rhondda Cynon Taf	22,798	16.7	20,427	24.4	43,225	20.3
Swansea	20,478	11.0	15,186	13.2	35,664	11.9

Council	Primary		Secondary		All Schools	
	Total capacity of schools	% total capacity which is unfilled	Total capacity of schools	% total capacity which is unfilled	Total capacity of schools	% total capacity which is unfilled
Torfaen	7,923	7.3	7,235	14.0	15,158	10.5
Vale of Glamorgan	12,036	8.2	10,645	17.4	22,681	12.5
Wrexham	12,747	13.3	8,227	27.3	20,974	18.8
Wales	272,320	12.8	226,908	20.5	499,228	16.3

Source: Association of Directors of Education for Wales (April 2017), School places – benchmarking exercise (Unpublished)

Wales Audit Office
24 Cathedral Road
Cardiff CF11 9LJ

Tel: 029 2032 0500

Fax: 029 2032 0600

Textphone: 029 2032 0660

We welcome telephone calls in
Welsh and English.

E-mail: info@audit.wales

Website: www.audit.wales

Swyddfa Archwilio Cymru
24 Heol y Gadeirlan
Caerdydd CF11 9LJ

Ffôn: 029 2032 0500

Ffacs: 029 2032 0600

Ffôn Testun: 029 2032 0660

Rydym yn croesawu galwadau
ffôn yn Gymraeg a Saesneg.

E-bost: post@archwilio.cymru

Gwefan: www.archwilio.cymru