Colleges
West Midlands

A prospectus for capital investment in further education colleges in the West Midlands

Foreword

Andy Street, Mayor West Midlands Combined Authority

Covid-19 has impacted on businesses and communities across the world. The UK is entering its deepest recession in the post-war era, where we expect the West Midlands to be one of the hardest hit regions.

It is therefore vital that the region's leaders work together, across the public, private and voluntary sectors, to ensure that our economy emerges stronger and more productive than before. This means working together in new ways, to mitigate the social and economic impact of the virus and provide our businesses and individuals with the support that they need.

Pre-Covid, our Local Industrial Strategy and our Regional Skills Plan had set ambitious goals for our region. We had begun to make progress towards these goals – with increasing levels of employment and productivity, and growing skills levels across our population. As we chart a course back to the economic growth we were seeing before the pandemic, we know that improving our region's skills will be critical to our success.

The West Midlands has seen significant increases in the number of people with qualifications at level 3. However, we know that future jobs will require even greater numbers of people skilled to this level, in a range of new occupations, many involving greater technical and technological skills.

FE Colleges are essential to the development of these skills in both our young people and our adults – helping them to re-train and upskill, to take advantage of the new jobs that will be created. We have some excellent facilities in our colleges, but this is not universal and recent years have seen lack of sustained and strategic investment in our FE estate.

We need a new approach – one which recognises the importance of collaboration, across colleges and with employers. We also need new investment - with industry-standard kit and facilities to support higher level technical learning.

This prospectus is a welcome step in that direction – where all of the region's colleges have worked together, with the West Midlands Combined Authority, to identify what support is needed to underpin our economic growth.

This document provides a welcome route map for the investment required over the next five years. The prospectus sets out a vision for an FE estate which provides a good standard for all learners; a digital infrastructure that can support flexible delivery of learning and training; and specialist technical facilities that will underpin a growth in technical skills, including for the new Technical Levels.

This document sets out the way in which we in the West Midlands are working jointly, to tackle and respond to future challenges and opportunities. I commend these proposals and look forward to continued discussion with Government about the need for future capital investment in the region's FE sector.

Foreword

David Hughes, Chief Executive Association Of Colleges

Colleges in the West Midlands are vital to the COVID recovery that's needed in the economy, labour market and across the diverse communities of the region. They will provide the local focus for people to get the skills they need to prosper in a changed and competitive labour market.

They will be where businesses look for advice and services as they emerge from lockdown and develop new ways of working in a technology rich world where new skills will be indispensable. They will be anchor institutions for investment as the Government and the Mayor of the West Midlands craft their plans for a better future.

To be able to deliver, though, colleges need the right investment in physical and digital infrastructure. After a decade of neglect during austerity, the investment needed is both urgent and far-reaching. Colleges have worked hard to invest themselves, but the funding regime has been too tight to allow for the right levels across every college.

This prospectus is therefore a timely and very important step towards a better future. It also shows how important it is to get this right. In all of my visits to colleges in the West Midlands I see impressive work going on, often in premises which are state of the art, but sometimes in premises we urgently need to improve. I always leave proud of what colleges do, angry about the lack of proper investment and thinking about how much more colleges could do with better funding.

Students want to study in good accommodation with up to date facilities and equipment, matching the industries and businesses they are training for. Employers want to employ people familiar with their working environment and equipment. This prospectus shows how that investment can deliver in the priority sectors for the West Midlands and we know that would result in more students studying the right things and more employers able to improve their productivity. That's what capital investment does – it improves the quality of the student experience and leads to better outcomes.

The prospectus also helpfully sets out the digital infrastructure needs at a time when we have seen just how important online learning is. The forthcoming academic year, with social distancing requirements, will see most students partly studying online, using new technology to enhance their learning. That requires urgent investment now to be ready to provide the best possible experience for all learners and to deliver the platform which will make blended and hybrid learning the new normal in subsequent years.

The colleges in the West Midlands have done a great job in collaborating on this prospectus. They have set down a challenge to the Government and offered up an opportunity too. A challenge to release the funds announced in the March 2020 Budget by the Chancellor when he recognised the burning need to improve the college estate. An opportunity to spend that quickly on the priorities which are so cogently set out in the prospectus and to have an impact in time to support a better future as the country eases out of lockdown, facing enormous economic and social challenges.

I am optimistic that the Government recognises that challenge and will seize the opportunity. With the support of the West Midlands Mayor, this prospectus will provide the platform for a long term capital investment strategy which will secure a better future for thousands of people and businesses.

Executive summary

During the austerity years there has been little strategically coordinated and planned investment in the further education estate in the West Midlands region in support of the development and delivery of technical learning. This limited and uncoordinated investment presents a risk to the region's future economic development.

Further, in the predicted Post Covid 19 recession, the West Midlands is likely to be one of, or indeed the most, badly affected regions in the UK. The region faces the combined effects of a major decline in demand in the automotive and aerospace sectors, the loss of substantial business in the leisure, tourism and hospitality sectors and an accelerated decline in retail shopping.

As a formal partnership of the region's 21 further education colleges, *Colleges West Midlands* recognises the need to raise the technical skills of young people and adults in further education, to support the upskilling of the region's work force and to promote inclusive growth. In pursuit of this aim *Colleges West Midlands* has undertaken a formal assessment of the 'fitness for purpose' of the region's further education estate and in particular, given its emerging importance, the digital capacity and capability of the region's colleges.

This prospectus identifies both the pressing need and the significant opportunities which exist to reinvest in the region's further education estate and digital capacity. It is estimated that, in total, some £636m capital investment is required over the next five years to ensure colleges are resourced adequately to deliver the regional skills plan, with fair access to high quality learning resources for all learners. This equates to an investment of just over £500 per each learner the region's further education colleges will support in this period.

Currently 21% of the existing college estate is in poor condition. There is an uneven distribution of poor estate across colleges. In two colleges major new builds of all, or of substantial parts, of their campuses are required. Further there are significant maintenance costs facing colleges in the near future to ensure that the existing good and better estate does not deteriorate in the coming years and further costs associated with the redevelopment and repurposing of elements of the existing estate. Collectively the operation of poor condition estate hampers colleges' ability to deliver against the 2050 carbon zero target.

Investment of some £471m is required to ensure all of the region's estate is good or better standard.

Limited investment in the region's further education estate has also stifled college's ability to develop industry standard facilities to fully support the region's business and employers. This is particularly true in the development of advanced and higher level technical training facilities and is most marked in capital-intense sectors like advanced manufacturing and engineering, building technologies, digital technologies, and health and life sciences. These are the priority sectors underpinning the region's future economic development and prosperity. The region has secured funds for two new *Institutes of Technology* and some capital funding to support new T levels. Whilst helpful these investments are unlikely to be sufficient to provide the facilities and resources needed to deliver the regional skills plan and to support the region's economic recovery post Covid-19.

Further investment of some £89m is required in the development of new facilities and resources for advanced and higher skills in the region's priority sectors. Colleges have planned, to feasibility stage, a number of pipeline

projects which if realised might provide an immediate start in creating the new facilities required for the region's priority sectors.

The digital infrastructure of the region's colleges is reasonably strong. That said there is an under investment in resources to support the application of emerging technologies, such as augmented and virtual reality, across the wider curriculum. In a post Covid-19 world there is also a heightened challenge to ensure all learners have remote access to digital learning and are supported to develop advanced digital literacy skills - a 'digital entitlement' as such. This is, in part, influenced by a learner's home access to an end user device(s) with appropriate levels of connectivity. Colleges are faced with the dual challenge of ensuring they are adequately resourced to significantly enhance the application of digital learning technologies across the wider curriculum and of meeting the 'digital entitlement' of all of the learners they support. A comprehensive capital investment strategy therefore goes well beyond investment in college facilities and resources.

Further, colleges require investment to ensure they can adequately support the digital skills development and innovation of businesses in the region's priority sectors, such as building information and drone technology skills for the construction industry and cyber security and informatics skills for digital industries. There has been under investment in transformational digital technologies and some employers have not fully appreciated the impact that these technologies might have on the productivity of their businesses and that, in turn, there is limited demand to develop the workforce in these digital skills. The region has a number of exciting infrastructure projects, such as HS2, requiring a highly skilled and digitally competent workforce. A closer working relationship between colleges and businesses on investing in this shared agenda is required.

Investment of some £75m is required to ensure the necessary future digital capacity and capability of the region's further education colleges.

The strength of partnership working between colleges in *College West Midlands* and in turn between *Colleges West Midlands* and key stakeholders, such as national government, through the Department for Education, the West Midlands Combined Authority and the region's local enterprises partnerships, provides an opportunity to develop a new way of working around capital investment and collaborative resourcing to ensure, collectively, colleges can meet the region's future skills need.

The region's further education colleges have a desire to work collaboratively in creating a regional investment strategy which maximises value for money and reduces wasteful overlap and which secures urgent capital investment for the region.

This prospectus calls for the creation and implementation of a 'regional skills capital investment plan' to ensure further education colleges are properly resourced to deliver economic prosperity for the region.

Contents

1. Introduction

Colleges West Midlands is a formal partnership of 21 further education colleges situated in, and adjacent to, the West Midlands Combined Authority area. Every year we support in excess of 250,000 students. 74,000 young people aged 16 to 18 participate in full-time programmes in our colleges, alongside 145,000 adult students and 27,000 apprentices. Collectively we support over 12,000 employers.

Colleges West Midlands is committed to partnership working and collaborative arrangements to ensure the best outcomes and effective distribution of public funding for young people, adults and businesses in the region. Alongside strong partnership working between our own colleges, we engage closely with the West Midlands Combined Authority, the Association of Adult Education Learning Providers, Universities West Midlands, employer networks, the Midlands Engine for Growth and other regional groups with an interest in skills and economic development.

More recently *Colleges West Midlands* has engaged in consultative dialogue with the Department for Education, the Education and Skills Funding Agency (ESFA) and the Commission for the College of the Future. We have also provided support to further education colleges in developing collaborative arrangements in their own regions. *Colleges West Midlands* works closely with the Association of Colleges, regionally and nationally.

Colleges West Midlands recognises the need to raise the technical skills of young people and adults in full-time education, to support the upskilling of the region's work force and to promote inclusive growth. Core to achieving this is the creation of a regional skills ecosystem that is characterised by a depth of investment which coherently shapes future skills provision. We recognise the pressing need for both a heightened status for advanced and higher technical learning and the collaboration of education providers across sectors and specialisms to create a network of clusters driving innovation and skills aligned to regional priorities.

This prospectus provides a high level assessment of the capability and capacity of the collective further education estate of colleges in the West Midlands to support the delivery of the region's future skills need.

The prospectus details the location and the specialisms supported by the existing estate and reports on major capital projects, aligned to regional skills priorities, which will be completed over the next two to three years.

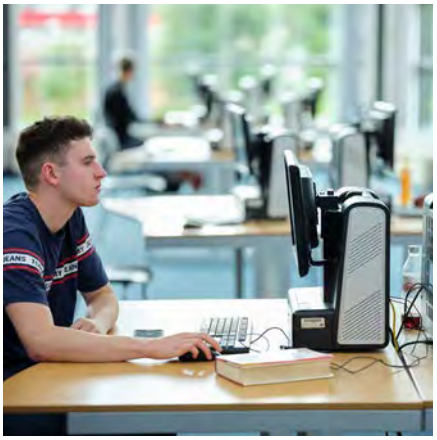
The prospectus reports the outcome of two surveys initiated and conducted by *Colleges West Midlands*. The first survey assesses the collective condition of the existing built environment using ESFA's grade A, B, C & D descriptors and estimates the cost of ensuring all future learning is supported by physical estate at condition B or above. This survey provides some further assessment of levels of utilisation of the existing estate and the energy efficiency of existing arrangements, cognisant of college's role in achieving a future carbon-zero delivery model. Using the survey and through the work of *Colleges West Midlands* Estates Reference Group an assessment is also provided of how fit for purpose the current estate is to support the advanced and higher technical skills needs of the region's priority sectors.

The second survey assesses the collective digital capacity and capability of colleges in the West Midlands and how fit the existing digital infrastructure is to support both digital innovation in the region's priority sectors and the delivery of digital and blended learning in a post Covid-19 world. The survey estimates levels of investment required to

ensure the digital infrastructure is fit for purpose.

The prospectus suggests where investment may be required in new build projects to meet the advanced and higher technical skills needs of the region's priority sectors. In the appendices the prospectus identifies pipeline projects, those which were being developed at feasibility stage prior to the collaborative approach to the development of the region's further education estate, which, if funded and integrated into a more coherent plan, could accelerate the development of advanced and higher level technical skills in priority sectors.

In summary, the prospectus provides a costed high level outline of the capital investment required to ensure the further education estate in the West Midlands can effectively support the delivery of the regional skills plan and meet the skills needs of the region. The prospectus makes a number of suggestions on the way forward.



2. The region's further education estate in context

2.1 The regional further education estate during austerity years

During the austerity years there has been little strategically coordinated and planned investment in the further education estate in the West Midlands region in support of the development and delivery of technical learning. Whilst some colleges have managed to maintain a programme of on-going investment in their estate, against a backdrop of sector wide reducing financial health it is now widely recognised that levels of on-going capital investment have been inadequate.

There are some good examples of college led capital projects which have been realised during the period of austerity and which are aligned to regional skills needs. These projects tend to have been funded by the use of college reserves or prudential borrowing supported, in part, with funding from a local enterprise partnership. However beneficial these individual projects are, they tend to have been developed on an ad hoc basis, often subject to the availability of funds. As such, they have been developed in the absence of a regional strategy.

And major college capital projects during recent years are notable as exceptions. Often those colleges, whose estates are most in need of investment, have not been able to develop their estate as with limited or no reserves they have not had the matched funding required to secure investment from LEPs or other fund holders. Recent investments in the region's further education estate, where occurring, are typified by routine maintenance and small scale technical updating projects.

This limited and uncoordinated investment presents a risk to the future economic development of the region.

2.2 Future skills priorities and the further education estate

The West Midlands Industrial Strategy sets out a clear ambition for growth in high value areas, including advanced manufacturing and automotive, digital and construction. West Midlands Combined Authority recognise the need for a complementary training and skills offer that will enable both employers and residents to better access and capitalise on these growth opportunities.

The existing further education estate will be the foundation for the delivery of these technical skills. However, investment is needed to ensure that the region has a suitable technical offer in place, one that will enable the successful roll out of Technical Levels, the expansion of Apprenticeships (particularly at higher levels) and the retraining and upskilling of adults through the National Retraining Scheme and the Adult Education budget.

The lack of development of the further education estate during the austerity years has resulted in the fact that not all learners will necessarily have access to learning in facilities which are fit for purpose. A learner's access to high quality facilities will be determined, to some extent, by their home location. This impacts, in particular, on disadvantaged learners, often studying at lower levels with limited access to transport. To some extent, a post code lottery exists in respect of access to the best quality learning facilities for disadvantaged learners.

There is also a significant risk that the regional further education estate lacks the requisite industry standard facilities to properly support the development of technical skills, particularly at advanced and higher levels for businesses in priority sectors.

The strength of partnership working between colleges in the *College West Midlands* partnership and in turn between *Colleges West Midlands* and key stakeholders, such as the West Midlands Combined Authority, provides an opportunity to develop a new way of working around capital investment and shared resource mapped to regional need. There is a palpable sense that the region is keen to oversee a collaborative approach to investing in facilities and equipment so that the maximum numbers of businesses and residents can have access to new technical provision.

2.3 Post-COVID-19 considerations

In recent years, the world has witnessed the rise of SARS, Zika virus, Ebola and now COVID-19. Epidemics are a rising threat. *Colleges West Midlands* members have made infrastructure innovation a priority to safeguard their physical systems and maintain business continuity. The Covid-19 pandemic has shown that these methods aren't enough when it comes to ensuring connectivity and accessibility for all staff and students during biological disasters. Colleges' digital infrastructure needs strengthening to deal with the impact of COVID-19 and future public health crises.

The outset of 2020 has witnessed heightened awareness of the threat from the outbreak of COVID-19 and colleges are adapting their existing education systems by reducing access to college sites for all but the most vulnerable of our learners whilst implementing online and distance learning measures for the majority of other learners. Digital and distributed technology seems to be the answer, but the spread, use and availability is key, as is the availability of online learning materials, as well as devices and the level of internet connectivity to the colleges and at home for all learners. Early anecdotal feedback suggests that learners are engaging online and embracing the flexibility of choosing a time to study that fits with their other commitments.

Colleges across the region will continue to use this current pandemic to determine whether learners are adequately benefiting from technology at home and what is actually happening on the other end of the internet cable. In many cases colleges can already see that home connectivity has become widespread and home internet connections are enabling learners to connect to many different types of learning resources. At the same time, colleges have clearly identified an equity issue. While financially well-off families can afford computers and multiple devices, students from struggling families can hardly afford simple devices and may likely not have internet connectivity at home. This lack of any device or broadband internet connection puts learners at a large disadvantage in terms of educational achievement. There is a challenge, therefore, to ensure a 'digital entitlement' is in place for all learners, regardless of the economic situation.

The implications of Covid-19 on the digital capacity of colleges in the West Midlands are considered in more detail in section 5.3.

There are also likely to be major economic and hence skills consequences of the expected recession post-Covid-19. The West Midlands is likely to be the region most badly affected through the combined effects of a major decline in demand in the automotive and aerospace sectors, the loss of substantial business in the leisure, tourism and hospitality sectors and an accelerated decline in retail shopping *(Yael Selfin, KPMG Chief Economist in the UK assess the UK regional impact of COVID-19, The Guardian, 22 April 2020).* The majority of 16-19 year olds participating in learning across the region do so in further education colleges. It is anticipated that post-Covid-19 recession will see a substantial increase in youth (16-24 year olds) unemployment, where some young people are not able to progress into employment, apprenticeships or onto university. This worrying effect is already biting. The government will inevitably call on colleges to meet the needs of young people who find themselves unemployed as a result of the post-Covid-19 recession. It would be surprising, therefore, if any new government initiative to tackle the issue of rising youth unemployment did not result in new demands on college capacity.

3. An overview of the West Midlands' further education estate

3.1 The existing estate

The total estate of the 21 colleges in the West Midlands comprises some 90 campuses (significant clusters of learning facilities in distinct locations). In total the estate provides 904,000m² of learning facilities in built form.

Birmingham & Solihull

- Birmingham Metropolitan College
- Fircroft College
- Joseph Chamberlain College
- National College for Advanced Transport & Infrastructure
- Solihull College & University Centre
- South & City College Birmingham
- University College Birmingham

Black Country

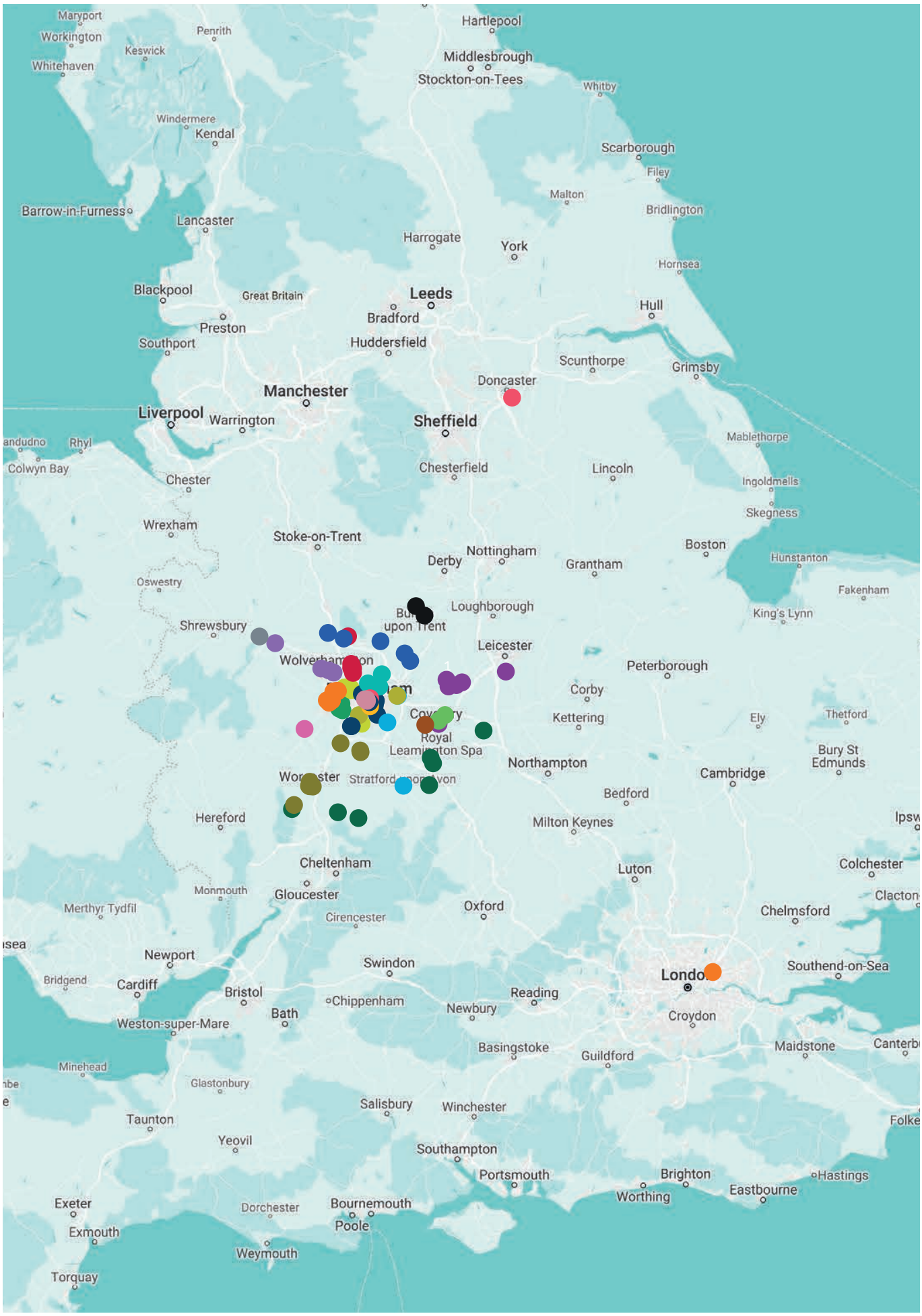
- City of Wolverhampton College
- Dudley College of Technology
- Halesowen College
- Sandwell College
- Walsall College

Coventry & Warwickshire

- Coventry College
- Hereward College
- North Warwickshire & South Leicestershire College
- Warwickshire College Group

Adjacent Areas

- Kidderminster College
- South Staffordshire College
- Telford College
- Burton and South Derbyshire College
- Heart of Worcester College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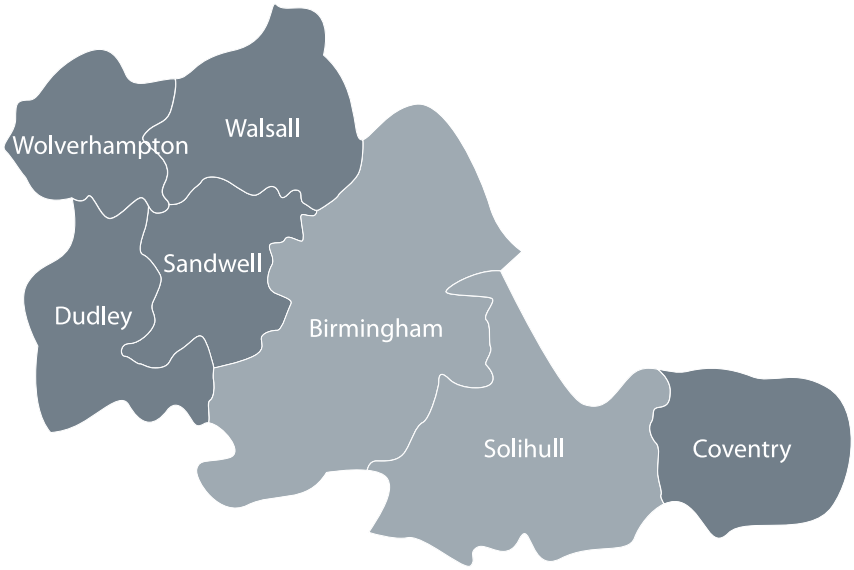
Malton
Barrow-in-Furness
Lancaster
Bridlington
Harrogate
York
Hornsea
Blackpool
Great Britain
Leeds
Bradford
Hull
Preston
Southport
Huddersfield
Scunthorpe
Grimsby
Doncaster
Manchester
Liverpool
Warrington
Sheffield
Mablethorpe
Rhyl
Colwyn Bay
Chesterfield
Lincoln
Chester
Ingoldmells
Skegness
Wrexham
Stoke-on-Trent
Boston
Nottingham
Derby
Grantham
Hunstanton
Oswestry
Fakenham
Loughborough
King's Lynn
Shrewsbury
Leicester
Peterborough
Corby
Kettering
Ely
Thetford
Royal
Northampton
Bury St
Edmunds
Cambridge
Bedford
Hereford
Milton Keynes
Cheltenham
Luton
Colchester
Monmouth
Gloucester
Merthyr Tydfil
Oxford
Chelmsford
Cirencester
Newport
Swindon
Southend-on-Sea
Bridgend
Cardiff
Bristol
Reading
Chippenham
Newbury
Croydon
Bath
Weston-super-Mare
Basingstoke
Maidstone
Guildford
Minehead
Glastonbury
Salisbury
Winchester
Taunton
Yeovil
Southampton
Portsmouth
Brighton
Hastings
Worthing
Eastbourne
Exeter
Dorchester
Bournemouth
Poole
Exmouth
Weymouth
Torquay

Birmingham & Solihull



Birmingham Metropolitan College

1. Erdington Skills Centre – Birmingham B24 9EW
2. James Watt College – Great Barr B44 8NE
3. Matthew Boulton College – Birmingham B4 7PS
4. Sutton Coldfield College – Sutton Coldfield B74 2NW

Fircroft College

5. Bristol Road – Birmingham B29 6LH

Joseph Chamberlain College

6. Belgrave Road – Birmingham B12 9FF

National College for Advanced Transport & Infrastructure

7. Birmingham Campus – Birmingham B7 4AG
8. Doncaster Campus – Doncaster DN4 5PN

Solihull College & University Centre

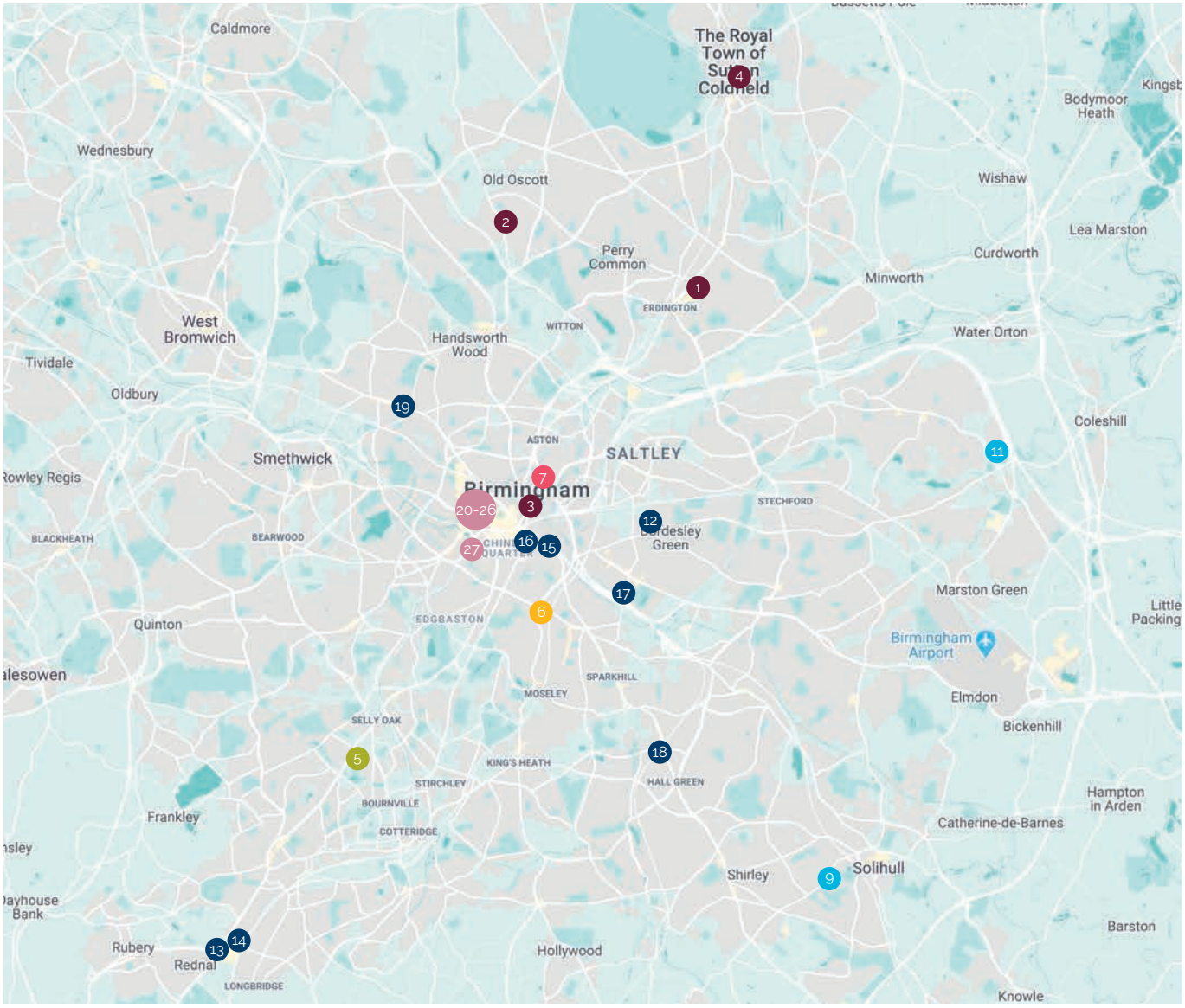
9. Blossomfield Campus – Solihull B91 1SB
10. Stratford-upon-Avon College – Stratford-upon-Avon CV37 9QR
11. Woodlands Campus – Solihull B36 0NF

South & City College Birmingham

12. Bordesley Green Campus – Birmingham B9 5NA
13. Bournville College – Longbridge B31 2AJ
14. Construction Centre Bournville College – Longbridge B31 2TW
15. Digbeth Campus – Birmingham B5 5SU
16. Fusion Centre – Birmingham B5 6ES
17. Golden Hilllock Women's Centre – Birmingham B10 0DP
18. Hall Green Campus – Birmingham B28 8ES
19. Handsworth Campus – Birmingham B21 9DP

University College Birmingham

20. Cambrian Hall – Birmingham B1 2NB
21. Camden House – Birmingham B1 3PY
22. McIntyre House – Birmingham B3 1PW
23. Moss House – Birmingham B3 1QH
24. Richmond House – Birmingham B3 1PB
25. Summer Row – Birmingham B3 1JB
26. The Link – Birmingham B3 1LB
27. The Maltings – Birmingham B1 1SB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Wednesbury
Old Oscott
Wishaw
Lea Marston
Perry Common
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West Bromwich
WITTON
Handsworth Wood
Water Orton
Tividale
Oldbury
Coleshill
ASTON
SALTLEY
Smethwick
Rowley Regis
Birmingham
STECHFORD
BLACKHEATH
BEARWOOD
Bordesley Green
Marston Green
Quinton
EDGBASTON
Birmingham Airport
SPARKHILL
MOSELEY
Elmdon
SELLY OAK
Bickenhill
KING'S HEATH
STIRCHLEY
HALL GREEN
BOURNVILLE
Hampton in Arden
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Shirley
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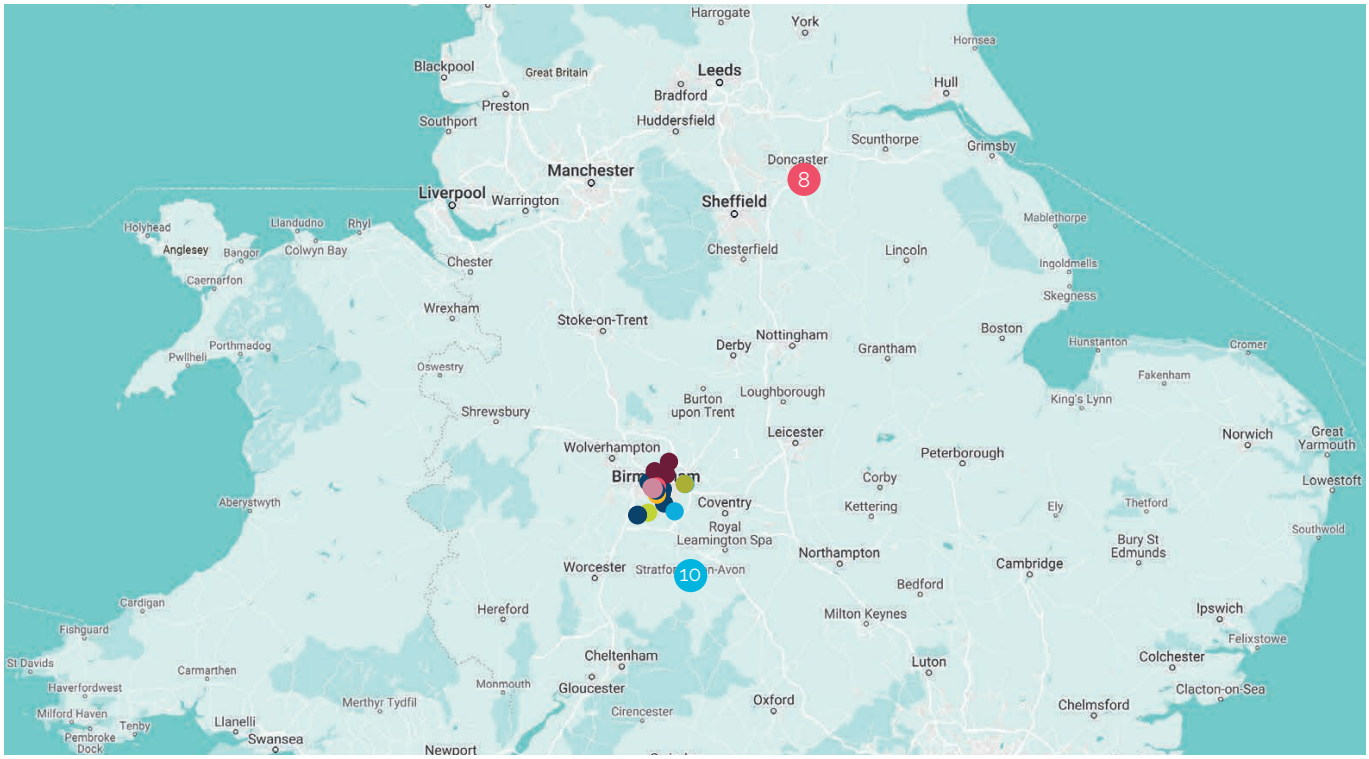
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Holyhead
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Rhyl
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Bangor
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Chesterfield
Lincoln
Ingoldmells
Caernarfon
Chester
Skegness
Wrexham
Stoke-on-Trent
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Porthmadog
Derby
Nottingham
Grantham
Hunstanton
Cromer
Pwllheli
Oswestry
Fakenham
Loughborough
King's Lynn
Burton upon Trent
Shrewsbury
Leicester
Norwich
Great Yarmouth
Wolverhampton
Peterborough
Corby
Lowestoft
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Coventry
Kettering
Ely
Thetford
Royal Leamington Spa
Southwold
Northampton
Bury St Edmunds
Worcester
Cambridge
Bedford
Cardigan
Hereford
Milton Keynes
Ipswich
Fishguard
Felixstowe
Cheltenham
Luton
Colchester
St Davids
Carmarthen
Haverfordwest
Monmouth
Gloucester
Clacton-on-Sea
Merthyr Tydfil
Oxford
Chelmsford
Milford Haven
Tenby
Cirencester
Llanelli
Pembroke Dock
Swansea
Newport

Black Country

City of Wolverhampton College

1. Metro One Campus – Wolverhampton WV1 3AH
2. Paget Road Campus – Wolverhampton WV6 0DU
3. Telford Campus – Telford TF3 3BA
4. Wellington Road Campus – Bilston WV14 6RN

Dudley College of Technology

5. Advance Technical Engineering & Construction Centre – Leytonstone E11 4DD
6. Art & Design Centre – Brierley Hill DY5 1RG
7. Black Country Skills Shop – Brierley Hill DY5 1SW
8. Broadway – Dudley DY1 4AS
9. Construction Apprenticeship Training Centre 1 – Brierley Hill DY5 1LX
10. Construction Apprenticeship Training Centre 2 – Brierley Hill DY5 3ZU
11. Dudley Advance 1 – Dudley DY1 4AD
12. Dudley Advance 11 - Dudley DY1 4AD
13. Dudley Aspire – Dudley DY1 4AR
14. Dudley Evolve – Dudley DY1 1AF
15. Dudley Sixth Form Centre – Dudley DY1 1HL
16. Dudley Enhance – Dudley DY1 4AD
17. Independent Living Centre – Brierley Hill DY5 1RG
18. Motor Vehicle Centre – Dudley DY1 3AH

Halesowen College

19. Coombs Wood – Halesowen B62 8BB
20. Shenstone House – Halesowen B63 3NT
21. Whittingham Road – Halesowen B63 3NA

Sandwell College

22. Cadbury Sixth Form College – Birmingham B38 8QT
23. Central Campus – West Bromwich B70 6AW
24. Central Saint Michael's Sixth Form – West Bromwich B70 7PG
25. Sandwell Engineering – West Bromwich B70 0AE
26. Terry Duffy House – West Bromwich B70 6NT

Walsall College

27. Cannock Office – Cannock WS11 7XA
28. Digital Engineering Skills Centre – Walsall WS2 8AB
28. Green Lane Campus – Walsall WS2 8HX
30. Hawbush Campus – Walsall WS3 1AG
31. The Hub – Walsall WS2 8ES
32. Whitehall Campus – Walsall WS1 4EQ
33. Wisemore Campus – Walsall WS2 8ES

Adjacent Areas

Kidderminster College

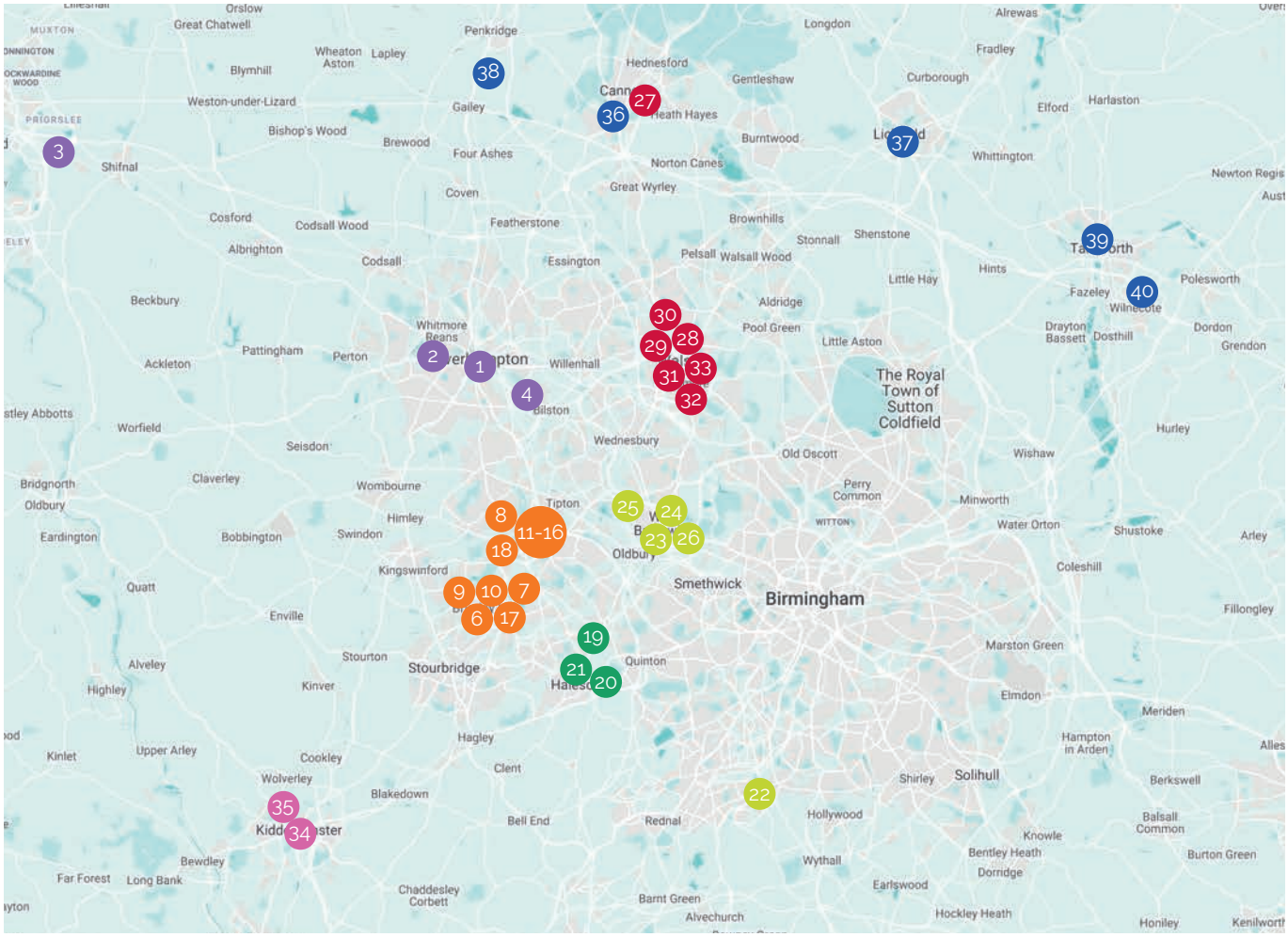
34. Market Street – Kidderminster DY10 1AB
35. Vocational Skills Centre – Kidderminster DY10 1HY

South Staffordshire College

36. Cannock College – Cannock WS11 1UE
37. Lichfield College – Lichfield WS13 6QG
38. Rodbaston College – Penkridge ST19 5PH
39. Tamworth College – Tamworth B79 8AE
40. Torc and Technical Centre – Tamworth B77 2HJ

Telford College

41. Haybridge Road – Telford TF1 2NP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Ackleton
The Royal Town of Sutton Coldfield
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Old Oscott
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Coleshill
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Stourton
Stourbridge
Quinton
Marston Green
Alveley
Highley
Kinver
Elmdon
Meriden
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Kinlet
Upper Arley
Cookley
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Wolverley
Blakedown
Shirley
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Berkswell
Bell End
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Balsall Common
Knowle
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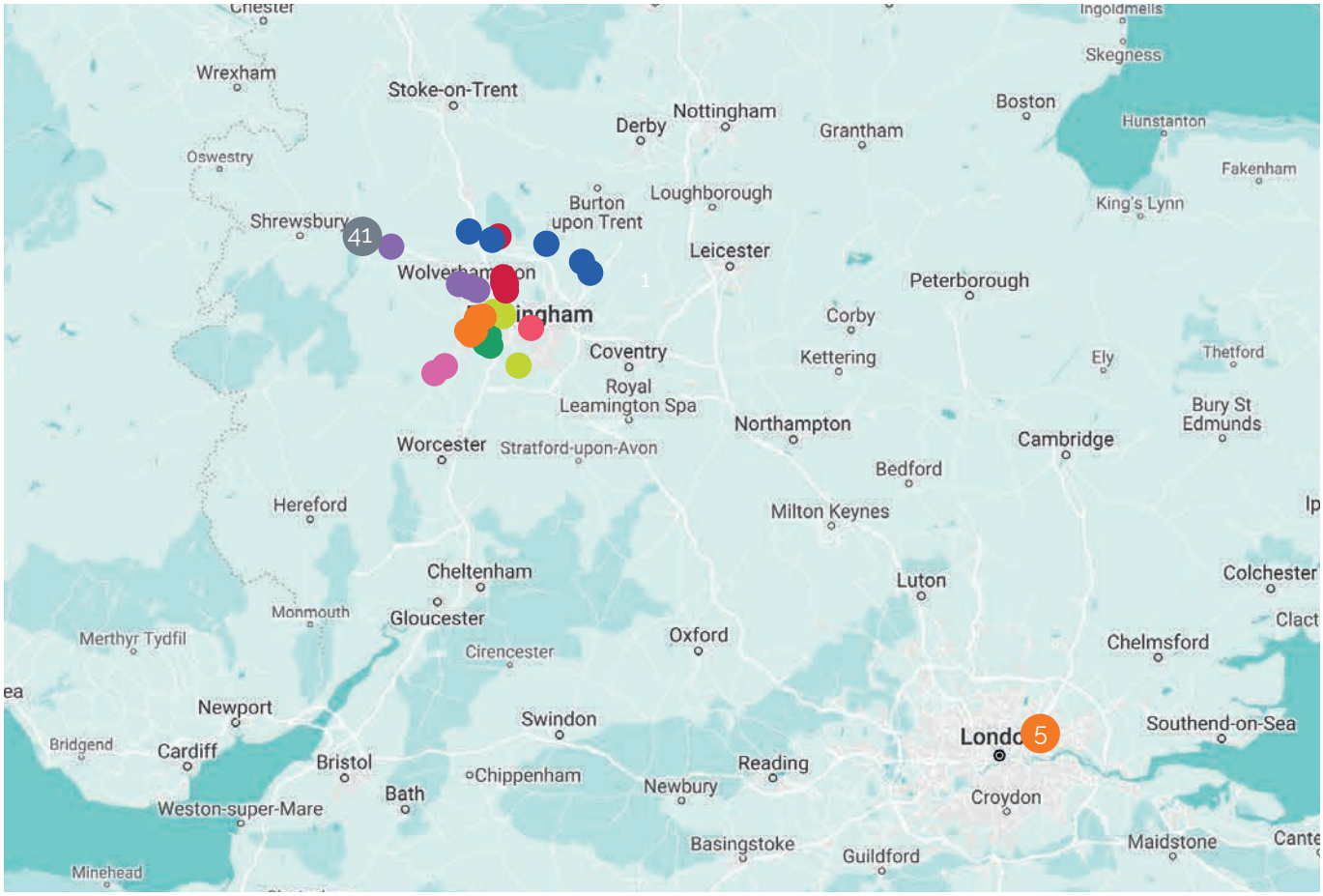
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Worcester
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Luton
Colchester
Monmouth
Gloucester
Merthyr Tydfil
Oxford
Chelmsford
Cirencester
Newport
Swindon
Southend-on-Sea
Bridgend
Cardiff
Bristol
Reading
Chippenham
Newbury
Croydon
Bath
Weston-super-Mare
Basingstoke
Maidstone
Guildford
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Coventry & Warwickshire

Coventry College

1. City Campus – Coventry CV1 5DG
2. Henley Campus – Coventry CV2 1ED

Hereward College

3. Bramston Crescent – Coventry CV4 9SW

North Warwickshire & South Leicestershire College

4. Harrowbrook Campus – Hinckley LE10 3DT
5. Digital Skills Academy – Coventry CV1 2TT
6. Hinckley Campus – Hinckley LE10 1QU
7. MIRA Technology Institute – Nuneaton CV10 0UX
8. Nuneaton Campus – Nuneaton CV11 6BH
9. Wigston Campus – South Wigston LE18 4PH

Warwickshire College Group

10. Evesham College – Evesham WR11 1LP
11. Malvern Hills College – Malvern WR14 2YH
12. Moreton Morrell College – Warwick CV35 9BL
13. Pershore College – Pershore WR10 3JP
14. Royal Leamington Spa College – Leamington Spa CV32 5JE
15. Rugby College – Rugby CV21 1AR
16. Warwick Trident College – Warwick CV34 6SW

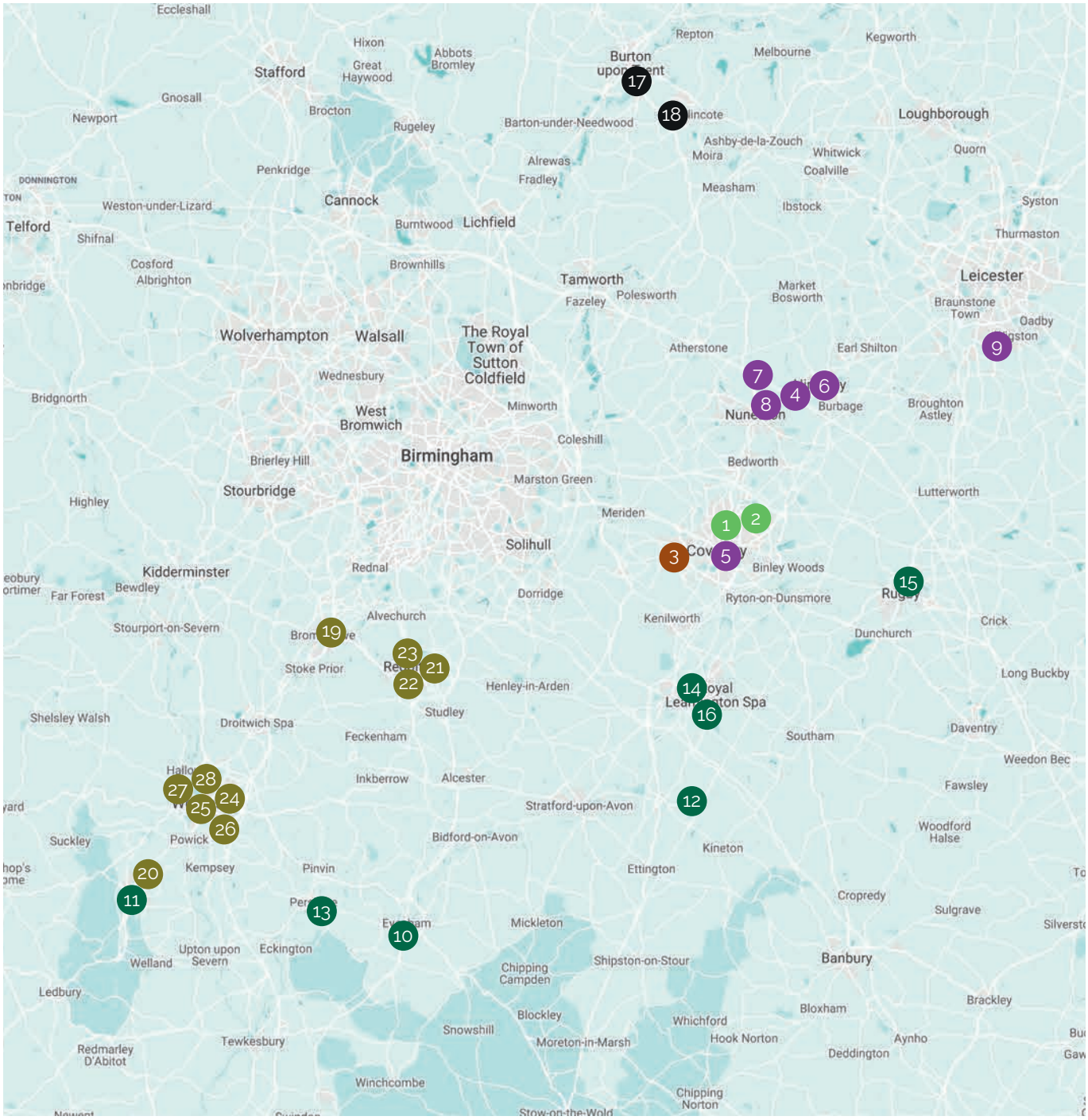
Adjacent Areas

Burton and South Derbyshire College

17. Burton Town Centre Campus – Burton on Trent DE14 3RL
18. Stephen Burke Construction Academy – Swadlincote DE11 0BB

Heart of Worcester College

19. Bromsgrove Campus – Bromsgrove B60 1PQ
20. Malvern Campus – Malvern WR14 1BY
21. Redditch Campus: Osprey House, - B97 4DE
22. Redditch Campus, – B98 8DW
23. Alliance House, B97 6EE
24. The Duckworth Centre of Engineering – Worcester WR5 1DU
25. Worcester Campus: All Saints Building WR1 2JF
26. Worcester Campus: St Andrew's Building & St Wustan's Building WR1 2ES
27. Worcester Campus: St Dunstan's Building WR1 3PA
28. Worcester Campus: 2,5,6 Northbrook Automotive Centre – WR3 8BP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Rugeley
Barton-under-Needwood
Loughborough
Ashby-de-la-Zouch
Moira
Whitwick
Quorn
Coalville
Alrewas
Fradley
Penkridge
Measham
Ibstock
Cannock
Weston-under-Lizard
Syston
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Shifnal
Burntwood
Lichfield
Thurmaston
Cosford
Albrighton
Brownhills
Tamworth
Fazeley
Polesworth
Market Bosworth
Leicester
Braunstone Town
Oadby
Wolverhampton
Walsall
The Royal Town of Sutton Coldfield
Atherstone
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Broughton Astley
West Bromwich
Coleshill
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Brierley Hill
Bedworth
Marston Green
Stourbridge
Highley
Lutterworth
Meriden
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Solihull
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Kidderminster
Rednal
Binley Woods
Bewdley
Far Forest
Dorridge
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Alvechurch
Kenilworth
Crick
Stourport-on-Severn
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Droitwich Spa
Feckenham
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Daventry
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Welland
Banbury
Shipston-on-Stour
Chipping Campden
Ledbury
Brackley
Bloxham
Blockley
Whichford
Snowshill
Hook Norton
Aynho
Redmarley D'Abitot
Tewkesbury
Moreton-in-Marsh
Deddington
Winchcombe
Chipping Norton

3.2 Funded future projects

The region has been successful in the first round of the government-led competition for the selection of Institutes of Technology (IoT) with two of the eleven contracted projects in the Black Country & the Marches and Greater Birmingham and Solihull LEP areas. IoTs are collaborations between further education providers, universities and employers. They will specialise in delivering higher technical education (at Levels 4 and 5) with a focus on STEM (science, technology, engineering and mathematics) subjects, such as engineering, digital and construction.

IoTs will focus on the specific technical skills needs required in the region and the intention is that they will provide employers with a skilled workforce and students with a clear route to technical employment. The first stage of the competition included detailed labour market analysis and skills demands to articulate how local need was being addressed. The intention is that IoTs will result in more people in the labour market with higher level skills and will help boost the local, regional and national economy and productivity levels.

Black Country & Marches IoT

This is an ambitious new build project costing £22.3million entailing land purchase, development of a new building and purchase of industry standard equipment to provide high-quality training opportunities at level 4 and above with clear pathways to skilled jobs in the three transformational sectors: advanced manufacturing and automotive; modern construction methodologies; and medical engineering. As a cross-cutting theme, the IoT will focus on the application of digital technologies within these sectors to increase uptake from the local SME community.

The partners involved are Dudley College of Technology, InComm Training & Business Services Limited, Marches Centre for Manufacturing Technology, University of Wolverhampton and University of Worcester.

Greater Birmingham and Solihull IoT

This is a hub and spoke approach with a new build and investment for the hub at Aston University with cyber physical manufacturing rig for all IoT partners and students. The cost is £10m and is due to be completed summer 2021. There are refurbishments and or equipment purchase at partner sites: South and City College Birmingham to provide workshop and labs for new provision at level 4 & 5; Birmingham City University to install a fuel test cell to support Greater Birmingham and Solihull IoT's applied research into new automotive technologies and innovation for the sector; Solihull College and University Centre to install industry standard precision manufacturing facilities for Level 3 – 6 IoT learners; Aston University to install industry standard manufacturing facilities for Level 6 and Degree Apprenticeship IoT learners and for applied research.

The sector specialisms are engineering and manufacturing and in addition to the partners listed above BMet College, University of Birmingham and University College Birmingham are also involved.

A range of relevant employers are key members of both IoTs as the IoTs seek to play a pivotal role in determining the future skill needs within these sectors and will work in collaboration with other partners from academia and industry.

T Level Centre- Dudley College of Technology

The fund is a 50% contribution to the cost of redeveloping the Art and Design Centre at Stourbridge acquired as part of the BMet College transfer. The funding will refurbish rooms, provide PCs, virtual reality equipment, a games development studio and associated technologies. The new digital and creative centre is due to open in September 2020 and will specialise in digital, creative and related curriculum areas to support T Level delivery but also adults wishing to retrain.

T Level Centre - Walsall College

Walsall College is planning an expansion of its Green Lane campus to accommodate a Technical Education Centre. This expansion will include cutting edge teaching accommodation for digital, construction, design, surveying and planning, education and science T level pathways. The expansion will include digital workshops, virtual reality rooms, practical laboratories and associated resource centres to support the delivery of the first two phases of T level qualifications for young people.

In addition there is a £750k investment in a plant training centre at Solihull College and University Centre and £250k music and media expansion at South and City College Birmingham.


EXCEL

4. Condition and capacity of the further education estate in the West Midlands

4.1 *Colleges West Midlands* estates survey

In mid-January 2020 *Colleges West Midlands*' intention was to secure a comprehensive view of the college estate in the West Midlands using the DfE's estate condition reports. Receipt of some early DfE survey reports proved that they were too cumbersome and detailed for the purpose of this prospectus and there was an uncertain timeline for receipt of all college reports. As a result *Colleges West Midlands*' Estates Reference Group designed a survey to capture information relating to estate condition and maintenance projects. Following a series of iterations the survey took place 30 January to 7 February 2020. The survey itself is attached at Appendix 2 and members of the *Colleges West Midlands* Estates Reference Group at Appendix 3. The survey used ESFA's condition descriptors as follows:

Condition A - As new condition - Typically features one or more of the following:
- typically built within the last five years or may have undergone a major refurbishment within this period,
- maintained/serviced to ensure fabric and building services replicate conditions at installation,
- no structural, building envelope, building services or statutory compliance issues apparent,

Condition B - Sound, operationally safe, and exhibiting only minor deterioration - Typically features one or more of the following:
- maintenance will have been carried out,
- minor deterioration to internal/external finishes,
- few structural, building envelope, building services or statutory compliance issues apparent,
- likely to have minor impacts upon the operation of the building.

Condition C - Operational but major repair or replacement needed in the short to medium-term (generally 3 years) - Typically features one or more of the following:
- requiring replacement of building elements or services elements in the short to medium-term,
- several structural, building envelope, building services or statutory compliance issues apparent, or one particularly significant issue apparent,
- often including identified problems with building envelope (windows/roof etc.), building services (boilers/chillers etc.),
- likely to have major impacts upon the operation of the building, but still allow it to be operable.

Condition D - Inoperable or serious risk of major failure or breakdown - Typically features one or more of the following:
- building is inoperable or likely to become inoperable, due to statutory compliance issues or condition representing a health and safety risk or breach,
- may be structural, building envelope, or building services problems coupled with compliance issues,
- the conditions are expected to curtail operations within the building (exclude very minor items which can be rectified easily).

In assessing cost estimates arising from the survey, consistency of approach was deemed to be important. It was agreed that a realistic level of building condition for effective college operations was category B, not A as originally intended and that the ESFA standard cost model should be used in assessing remedial costs. Discussion also highlighted the importance of the current space utilisation position and DEC ratings which show how efficiently buildings are being used from an energy perspective and impact on the sector's ability to deliver against the Government's net zero carbon target by 2050. Means of capturing this data was agreed and issued as a follow up to the original survey.

A template was also issued to understand college plans for new capital projects in their various stages of development within respective sub regions. For ease of handling these plans were categorised as: funded projects underway or due to start; proposed projects directly aligning with regional skills priorities; and other proposed college projects (recognising the broader further education agenda over and above skills for the region's priority sectors). These results went through a series of discussions to reclassify some new projects into 'maintenance and repurposing' projects (see section 4.2).

In respect of the 'fit' of the existing estate to support the future provision of advanced and higher technical skills for the region's priority sectors, *College West Midlands* officers have worked with the support of the Estate Reference Group, other *College West Midlands* working groups (such as the Construction Strategy Group) and the West Midlands Combined Authority to develop the assessment detailed below in section 4.3.

4.2 Estates survey: key findings

Estate condition

Despite years of austerity colleges in the West Midlands have maintained their overall estate in reasonable condition. Some 79% of the region's estate is condition rated A or B with 21% condition rated C or D (see figure 1).

Whilst the overall estate condition is broadly good, the proportion of estate in poor condition varies significantly between individual colleges, ranging from 0% category C or D to 49%. Five colleges in the region, City of Wolverhampton College, Heart of Worcester College, North Warwickshire and South Leicestershire College, South & City College Birmingham and South Staffordshire College are faced with the legacy of significant levels of under investment in part or all of their estate. As a result they have unacceptably high proportions of their estate in condition C or D (see figure 2).

It has been difficult to accurately identify the learner groups most significantly impacted by provision offered in poorer quality estate. It should be noted that the quality of provision is not synonymous with the quality of estate. High quality learning and learning outcomes can be delivered in estate rated category C & D. But it is widely recognised that well designed and equipped estate is beneficial to the learners' experience and that delivering high quality learning in poor quality estate is not a tenable position in the mid to long term. In the five colleges with higher levels of condition C & D estate, learners across a number of curriculum areas are affected by the estate condition. Taking into account the wider findings of the survey, there is some evidence to suggest that a higher proportion of programmes for adult learners, those on ESOL or employability programmes, are delivered in category C or D learning facilities.

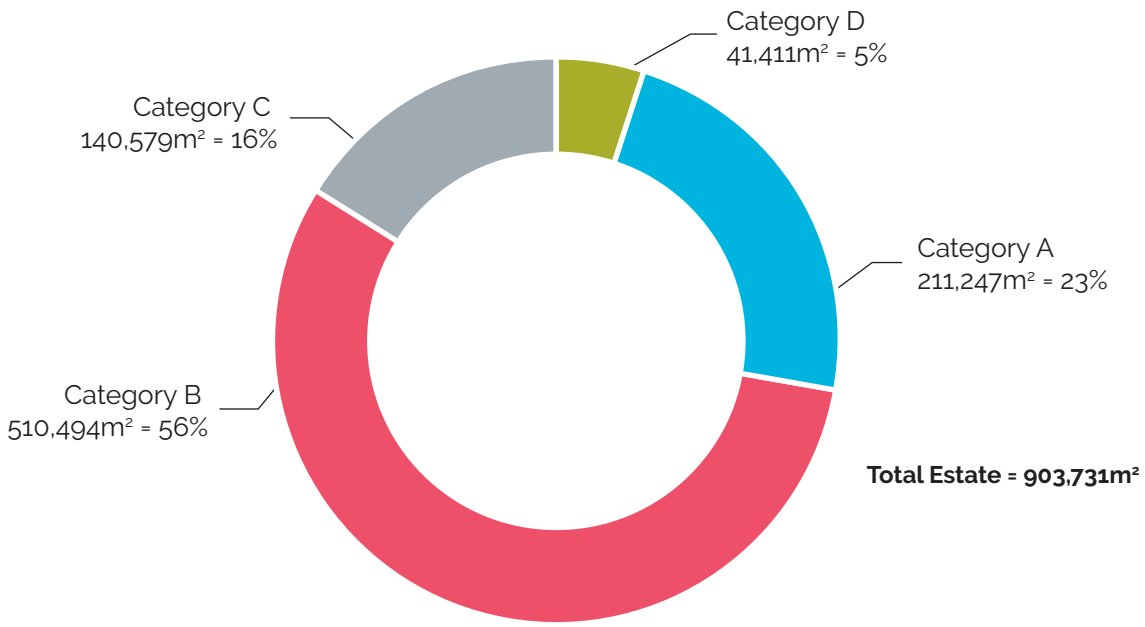

Figure 1: the further education estate in the West Midlands by condition rating.

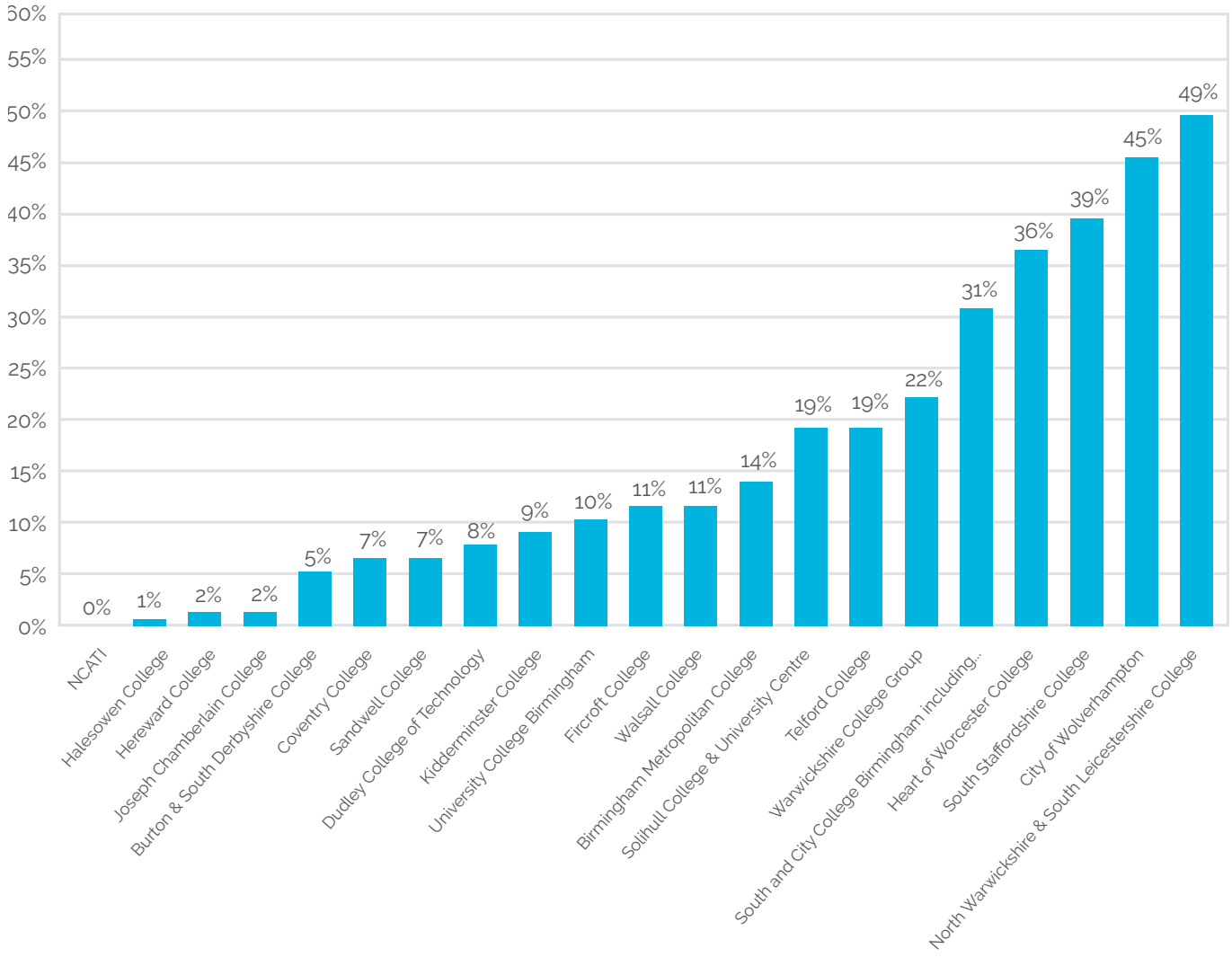

Figure 2: percentage category C & D condition estate in West Midlands colleges

Space utilisation

Recognising the need to understand the levels of space utilisation colleges were asked to submit the findings of their most recent space utilisation survey. Since the demise of Education & Skills Funding Agency capital funding there has been no requirement for a single model to calculate space usage. Colleges have migrated to alternative systems using electronic registers for ease and cost efficiency. The information provided identifies a range across colleges of 25% to 61%, with a 79% figure for a sixth form college, which due to class sizes would naturally be expected to have a higher utilisation. Historical sector guidelines suggest 28% for large-scale vocational space rising to 42% for general teaching/IT resources giving rise to an average figure of circa 36%.These are within the range and where the figures are higher it may be suggesting space limitations and overcrowding rather than excellent utilisation. We have not explored this further at this stage. The findings of the space utilisation assessment are detailed below (see figure 3).

College	Space utilisation %
BMet College	26
Burton & South Derbyshire College	61
City of Wolverhampton College	48
Coventry College	45
Dudley College of Technology	41
Fircroft College	41
Halesowen College	53
Heart of Worcester College	27
Hereward College	43
Joseph Chamberlain College	79
Kidderminster College	47
National College for Advanced Transport & Infrastructure	25
North Warwickshire & South Leicestershire College	29
Sandwell College	47
Solihull College & University Centre	28
South and City College Birmingham	57
South Staffordshire College	29
Telford College	30
University College Birmingham	44
Walsall College	37

Figure 3: space utilisation in West Midlands colleges

Energy efficiency

Colleges have provided the range of ratings based on the DEC certificate and the average based on the proportion of the estate in the various categories. These average readings range from 42 to 98 with the lower the rating the more efficient the operation. The range is 0 to 150+. These average figures need to be further contextualised as they mask some pockets of poor estate with a number of readings in the 140-150 and as high as 267. The findings of the energy efficiency assessment are detailed below (see figure 4).

College	DEC Rating
BMet College	78
Burton & South Derbyshire College	53
City of Wolverhampton College	69
Coventry College	61
Dudley College of Technology	72
Fircroft College	61
Halesowen College	66
Heart of Worcester College	64
Hereward College	71
Joseph Chamberlain College	98
Kidderminster College	90
National College for Advanced Transport & Infrastructure	124
North Warwickshire & South Leicestershire College	60
Sandwell College	87
Solihull College & University Centre	42
South and City College Birmingham	77
South Staffordshire College	46
Telford College	63
University College Birmingham	97
Walsall College	68
Warwickshire College Group	95

Figure 4: Proportionate DEC ratings in West Midlands Colleges

Maintenance, redevelopment and repurposing

In completing the estates survey members of the *Colleges West Midlands* Estates Reference Group highlighted the need to be cognisant of future liabilities in respect of the maintenance of the existing estate. A summary of the typical future investment items is listed below (see figure 5.)

Future maintenance items
Boilers, heating, plumbing, pipework, upgrading toilet and kitchen facilities.
Electrical work, rewiring, lighting, air conditioning systems, LED sensors.
Roofing, windows, doors.
Drainage, guttering.
Lift.
Internal and external redecoration.
Improvement of accommodation and student areas.
External works, car parking, gardens, sports playing surfaces, groundworks, paths, roads, sewage pipes.
Fire prevention upgrade.
Removal of asbestos.

Figure 5: future maintenance items in West Midlands colleges.

In completing the estates survey members of the *Colleges West Midlands* Estates Reference Group highlighted the need to be cognisant of future opportunities in respect of the repurposing of the existing estate. Simply put, whilst the survey found much of the estate was fit for purpose further investment would release the potential to use the estate more effectively and integrate digital technologies. These changes come with an associated investment cost. A summary of the typical future investment items is listed below (see figure 6). The investment cost associated with meeting the future redevelopment or repurposing opportunities is detailed in section 6.2.

Redevelopment and repurposing items
Redevelopment and configuration of existing spaces to create facilities to extend provision in priority areas and skill gaps and to improve learning environment.
Relocation and redevelopment of areas including, but not limited to, sports facilities, health and social care hubs, beauty therapy clinics, libraries, theatres, engineering workshops, blended learning hubs and study areas.
Major redevelopment of teaching accommodation.
Solar panels, ground source heat pumps, water recycling systems.

Figure 6: future redeveloping and repurposing items in West Midlands Colleges.


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4.3 Assessment of survey findings

Condition

As detailed in section 2.1, during the austerity years there has been limited capital funding for new build and refurbishment in the further sector. The *Colleges West Midlands* estates survey identifies that 21% of the region's further education estate is condition rated C or D. In some senses this is a positive finding considering the difficult period of austerity that colleges have navigated. However, the proportion of C and D estate is not equally shared across colleges with a more significant impact on some learners, often based on their home location. There is also some evidence of a disproportionate impact on adult learners with too many adult programmes delivered in poorer condition learning environments. Addressing the condition of these buildings is a priority for skills development in the region, in delivering inclusive growth and in ensuring equality of access to good quality learning facilities. It is likely, post-Covid-19, that levelling up access to opportunity will figure even more prominently in government policy, especially in education.

Space utilisation

It can be seen that space utilisation, whilst variable, is relatively high. It is recognised that lessons learnt from delivering more on-line and blended learning solutions during the Covid-19 epidemic may impact on future delivery models and could, theoretically reduce the overall space requirement. This would require careful future modelling mapped against a growing cohort of 16-19 learners, the added space requirement of delivering T levels and an anticipation of more learners at levels 4 and 5. For the purpose of this prospectus an assumption has been made that these challenges balance out to some extent and that the 'over' or 'under' size of the current estate is not a significant consideration. This does however assume no major new demand for provision from government in response to youth unemployment. It is at least possible that there may be a short-term investment in this area comparable to the Nightingale Hospitals in response to the immediate Covid-19 peak. Some outline thinking on how we might deal with a short-term major increase in capacity would be worthwhile.

Energy efficiency

The diverse mix of estates and estate condition has resulted in variable energy efficiency performance of the estate. There is a pressing need to improve the energy performance of college buildings to reduce carbon footprint and negative impact on the environment. Sustainability should be at the heart of the capital investment strategy for estates. Through investment colleges' commitment to sustainability can become a reality. Investment in innovative designs, including sustainable technologies and implementing improvements across the collective estate, will significantly reduce carbon emissions. For example, the roll-out of LEDs could cut electricity consumption by up to 30%; upgrading the building management systems could cut energy consumption by 15%. Additionally, installing energy efficient windows could reduce heat loss (and our need to replace it from unsustainable sources) by 30% - a newly insulated roof could save a similar amount, 30% in heat loss too. The C and D buildings in the further education estate are in vital need of investment to allow for refurbishment work which will have the added benefit of reducing the carbon footprint at these sites, as they will become more energy efficient and allow energy savings to be directed into learning.

Maintenance, redevelopment and repurposing

Whilst the survey found much of the estate rated as condition A or B, significant future maintenance items were identified which will need to be addressed to maintain the estate in condition A and B. These items come with an associated investment cost, but also an opportunity to redevelop and repurpose areas of the estate. To be sure the full level of the required future investment in the collective estate of the region's further education colleges are estimated in this prospectus, the costs associated with meeting the future maintenance, redevelopment and repurposing of the estate are detailed in section 6.2.

Supporting regional skills priorities

Limited investment in the region's further education estate has also stifled, to some extent, colleges' ability to develop industry standard facilities. This is particularly true in the development of advanced and higher level technical training facilities and is most marked in capital-intense sectors like advanced manufacturing, automotive and engineering, building technologies, digital technologies, and health and life sciences. These are the priority sectors underpinning the region's future economic development and prosperity.

From the survey and further analysis, it is clear there is limited regional estate capability to support technical training linked to advanced manufacturing practice, including the internet of things, robotics, battery technology and the application of artificial intelligence. For example, the transport industry is currently experiencing major changes, thanks to transformative transportation technologies. The automotive industry continues to advance in its use of technology with developments around autonomous vehicles and battery technology. Some colleges have developed facilities to support automotive hybrid technology but a significant step change is needed in resources and facilities to position colleges to equip learners across the region with the skills they will need to support large employers and their significant supply chain in the automotive industry. This is even more the case given the likely overall decline in demand in the automotive sector. The region has to position itself at the cutting edge of new technologies and markets. The region is also seeing the development of high-speed rail and light and very light rail transport which again requires significant estate resources to support the sectors' skills need.

Colleges have, in the main a good standard of construction workshop space but do not have the volume of workshops needed to support the delivery of all required trade related pathways. Equally there is the need for new facilities or to repurpose existing space to enhance the existing offer in areas such as scaffolding, roofing and digital technologies (to incorporate the use of technology such as drones, building information modelling and related modern methods of construction). The region's large-scale infrastructure projects, including HS2, require more civil engineers over the next 15 years. There are limited plant facilities where the practical heavy-duty aspect of civil engineering can be practised. *Colleges West Midlands* has also identified further gaps in steelwork, concrete formwork, and potentially specialist erection, piling and drilling.

To reflect on the current economic situation and the challenges which face the region, in this prospectus health and life sciences has been classified as 'defacto' one of the region's priority sectors. In the health and life sciences sector genomics, digital medicine and artificial intelligence will have a major impact on patient care in the future. A number of emerging technologies, including low-cost sequencing technology, telemedicine, smartphone apps, biosensors for remote diagnosis and monitoring, speech recognition and automated image interpretation, will be particularly important for the healthcare workforce. 5G will eventually change how healthcare workers and patients interact with the data created throughout the patient's journey. Within 20 years, 90% of all jobs in the NHS will require some element of digital skills. Staff will need to be able to navigate a data-rich healthcare environment and will need digital and genomics literacy skills.

The shortage of nurses and other allied health professionals in the Midlands is growing and has been declared as a full blown crisis by the Royal College of Nursing. To address the shortage, the NHS is recruiting more home-grown nurses and other healthcare professionals than ever before by significantly increasing training to promote the return to practice programmes and to improve retention and succession planning through upskilling of existing staff. Training will include retired staff who may wish to maintain their professional registration, staff that prefer bank working, staff in leadership and strategic roles who may wish to retain their clinical skills and staff wishing to develop their skills in primary care with a view to moving into a nurse and other healthcare roles. There is also a need to build and strengthen leadership skills through a range of apprenticeships and other Continuing Professional Development and leadership programmes.

Education is key to the development and maintenance of a "home-grown" workforce of the future. Covid-19 has demonstrated the need for a well-equipped and skilled health and life science workforce. It is reasonable to assume there will be a significant and charging demand for skills in the health and life science sector. Further education colleges will need to ensure they are suitably equipped to support future skill demand in the health and life science sector. The adequacy of their estate, facilities and digital capacity are key considerations. Suitably resourced colleges can help drive collaboration between academia, industry, health and care providers and commissioners, and citizens, and accelerate the adoption of innovation to generate continuous improvement in the region's health provision. Much of college's current estate is not well resourced or configured to do this, nor to meet this rising demand.

The associated challenge of ensuring all colleges have the required digital infrastructure to help develop the digital skills learners will need in the future and that colleges can adequately support the digital development of businesses in priority sectors is addressed in section 5.

The survey does show that colleges are beginning to address some of their estates challenges through funded projects such as the region's two planned IoTs in Greater Birmingham and Solihull and the Black Country and the Marches. Whilst more modest, there are also T level capital investments planned in Dudley and Walsall.

Encouragingly there is also an ambitious list of proposed, but currently unfunded, projects at feasibility stage, some of which align directly with the region's future advanced and higher technical skills need.

Summary of survey findings

In summary, the survey identifies that the region's further education estate is not fully fit for purpose. The funded projects due to be delivered over the next two years are helpful, but are unlikely to be sufficient to provide the facilities and resources needed to deliver the regional skills plan and to support the region's economic recovery post Covid-19. Colleges face significant condition and maintenance challenges in the future. The survey provides evidence that investment is required across the region's further education estate, in a coordinated and sustained manner. Investment opportunities and costs in response to these findings are detailed in sections 6.1-6.3.

5. The digital capacity and capability of further education Colleges in the West Midlands.

5.1 *Colleges West Midlands* digital capacity and capability survey

The *Colleges West Midlands* Digital Reference Group recognised the need to assess the digital capacity and capability of West Midlands colleges cognisant of the likely need for significant capital investment in digital technology in the future. The group considered the availability of existing information and worked closely with colleagues from JISC in assessing information available at a sector wide level. The group concluded that a bespoke survey would provide more relevant data for this prospectus and designed and implemented a *Colleges West Midlands* digital survey. The initial survey took place 12-28 February 2020. The Digital Reference Group conducted a subsequent follow up review in April 2020 to ensure the implications of Covid-19 had been fully considered in the initial survey. The survey consisted of two parts: part one, digital infrastructure; part two digital applications.

In part one colleges were asked to self-assess the capacity and capability of their digital infrastructure considering specifically connectivity, internal infrastructure, Wi-Fi, security, systems, access, end devices and commercial activity using the following scale;

Rating 1 = meeting current requirements and able to cope with any planned future activity.

Rating 2 = just meeting current requirements but will require investment to be able to accept any further expansion relating to change / increase in activity or functional improvement.

Rating 3 = not meeting current requirements.

Where colleges assessed their infrastructure as rating 2 or 3, they were asked to provide a high level estimate of the cost of upgrading their capacity and capability to rating 1. For many questions guidance was provided in the form of a specification to help colleges to rate each element and to achieve some level of standardisation. On other questions it was necessary to allow colleges to make their best self-assessed judgement.

In part two colleges were asked to explain how they prioritised investment in educational technologies. Colleges were also asked to self-assess their capacity and capability in digital applications across both the wider curriculum and on advanced and higher provision specifically for the region's priority sectors using the following scale:

Rating 1 = substantial and effective use;
Rating 2 = limited use;
Rating 3 = not using at all.

For investment in educational technologies colleges were asked to explain:

- the level of importance they place on curriculum planning, teaching, assessment, support, communication and continuing professional development.

In assessing their digital capacity and capability they were specifically asked to consider:

- across the wider curriculum - the use of augmented reality, virtual reality, assistive technology, learner analytics, artificial, intelligence and industry digital innovations;
- for the construction industry - the use of building information modelling, drone technologies, artificial intelligence virtual, augmented and mixed reality, assistive technologies;
- for the advanced manufacturing and automotive industry - the use of CNC machinery, high specification devices, robotic technologies, artificial intelligence; virtual, augmented and mixed reality, 3d scanners printers and cutters, assistive technologies;
- for business and professional services - the use of virtual training simulation, big data analytics, artificial intelligence, virtual, augmented and mixed reality, assistive technologies;
- for the health and life sciences - the use of virtual training simulation, artificial intelligence simulation equipment, artificial data analytics, virtual, augmented and mixed reality, assistive technologies;
- for employability provision - the use of virtual training simulation, virtual, augmented and mixed reality, student devices, assistive technologies.

The key findings of the survey are detailed in section 5.2. The survey itself can be found at Appendix 4 and members of the *Colleges West Midlands* Digital Reference Group at Appendix 5.

5.2 Digital capacity and capability survey: key findings

Digital infrastructure

With an average rating of 1.9 (1.0 being fully 'fit' for the present and future and 3.0 being 'unfit') colleges broadly assess their digital infrastructure as 'fit' for the present but 'not fully fit' for the future. Unlike the findings from the estates condition survey, there is a narrow range in the self-assessed 'fitness' of colleges' digital infrastructure. This suggests all colleges have prioritised digital updating in recent years. The assessment of digital infrastructure by college is detailed below (see figure 7).

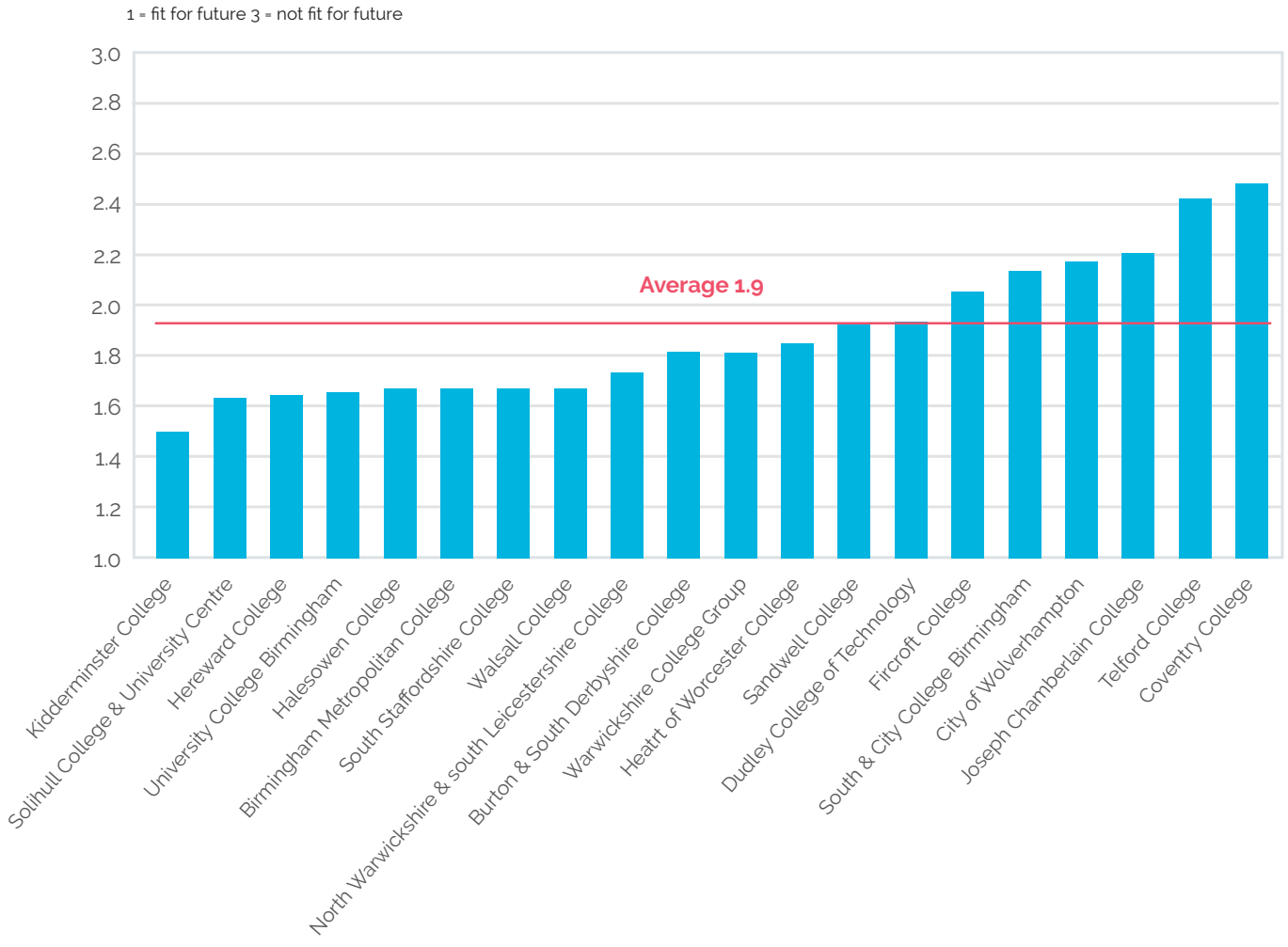

Figure 7: 'fit for purpose' assessment of the digital infrastructure in West Midlands colleges.

The self-assessed 'fitness' of colleges' digital infrastructure varies between the elements assessed in the survey. End devices (2.1), connectivity (2.1), internal infrastructure (2.0) and Wi-Fi (1.9) are the 'least fit' elements in the collective college infrastructure. The 'fit for purpose' assessment of key elements of the digital infrastructure in West Midlands colleges is detailed below (see figure 8).

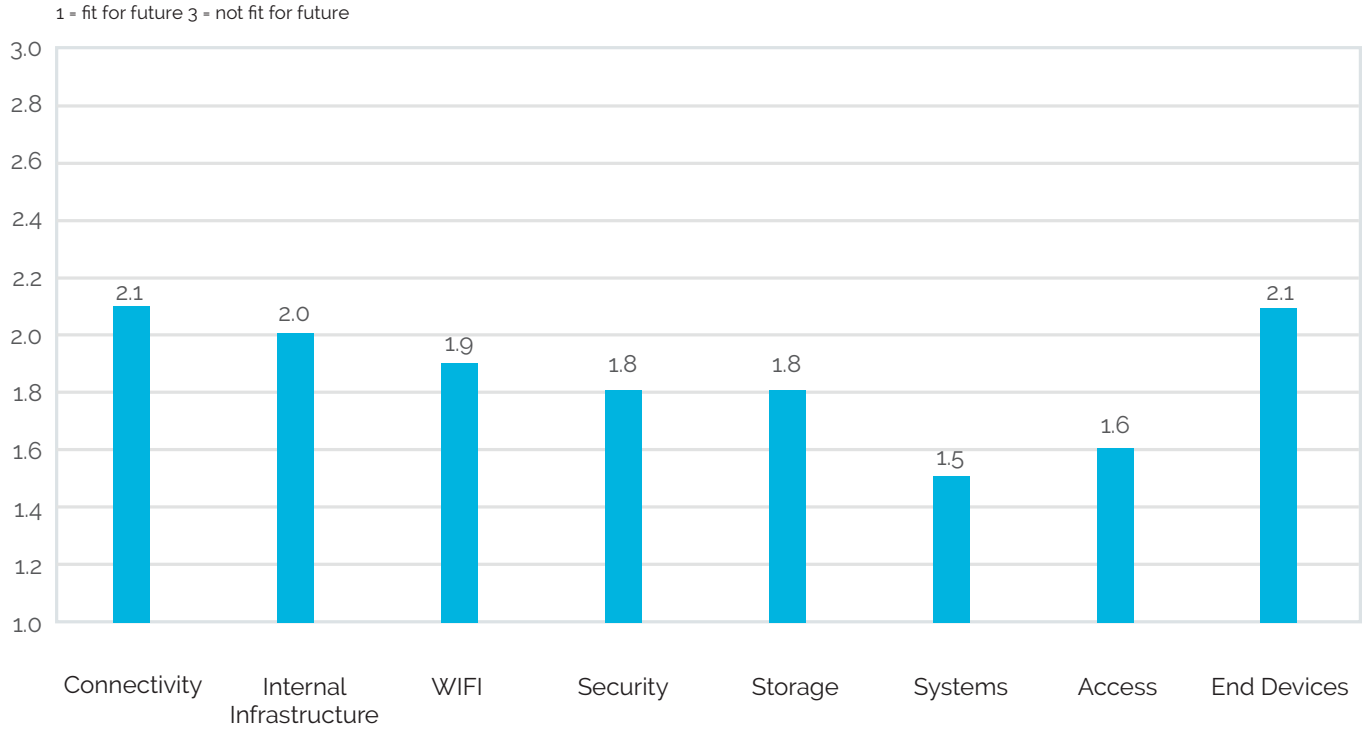

Figure 8: assessment of most and least 'fit for purpose' elements of the digital infrastructure of West Midlands colleges.

The survey finds that relatively high priority is given to all elements of curriculum delivery and support when prioritising investment in digital and education technology. Pleasingly teaching (1.1) is the highest priority when considering investment (see figure 9).

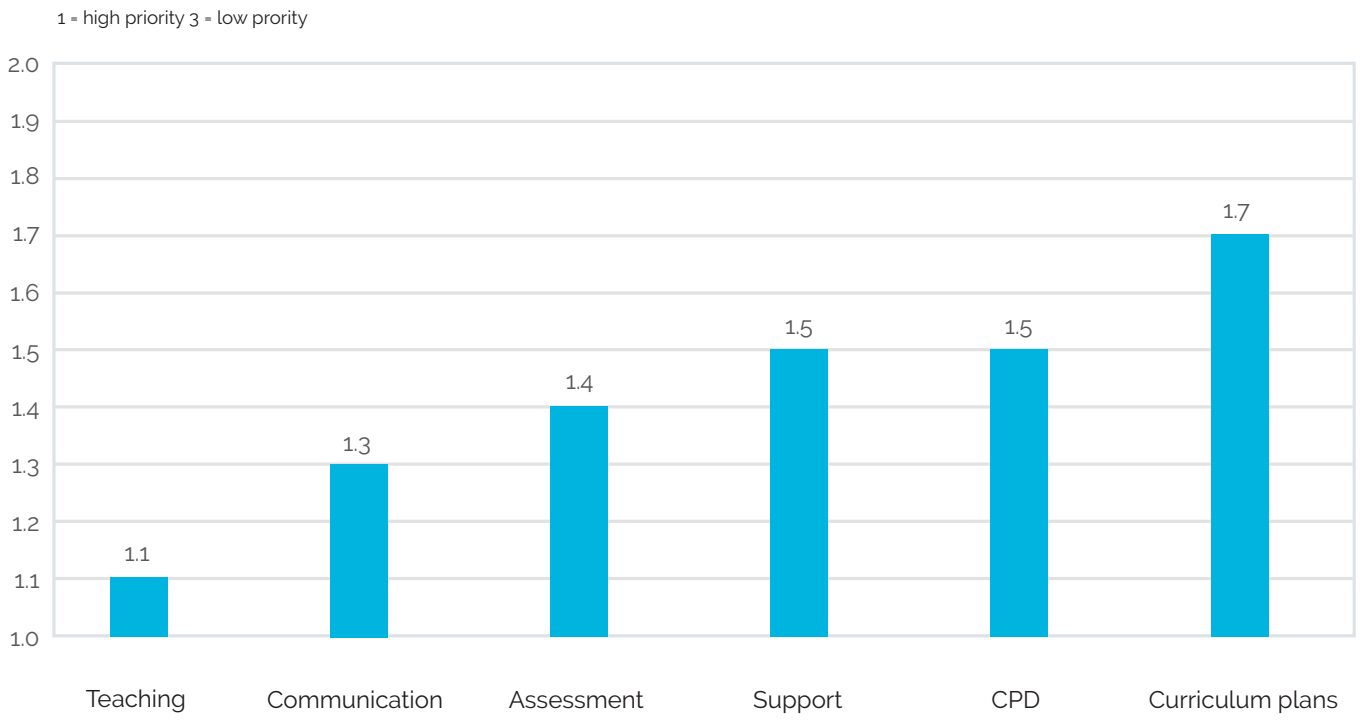

Figure 9: prioritisation of digital learning technology spend in West Midlands colleges.

Whilst teaching is the foremost priority in investment decision making, the survey finds relatively low levels of the application of digital learning technologies across the wider curriculum. In designing the survey the *Colleges West Midlands* Digital Reference Group set a high benchmark identifying augmented reality, virtual reality, assistive technology, learner analytics, artificial, intelligence and industry digital innovations as those technologies colleges might now routinely be using across the wider curriculum. College's application of these technologies is weak, particularly artificial intelligence (2.7), augmented reality (2.5) and virtual reality (2.4) (see figure 10).

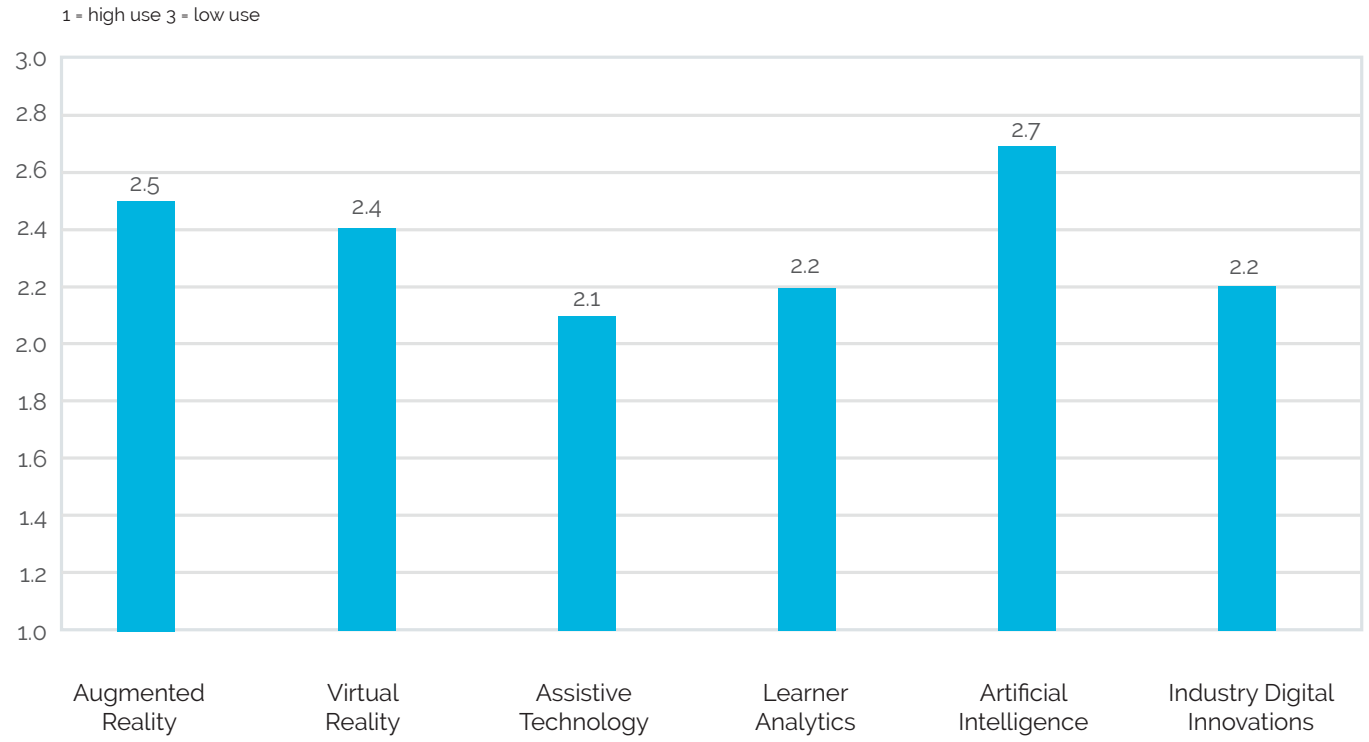

Figure 10: application of transformative digital technologies across the wider curriculum in West Midlands colleges

The *Colleges West Midlands* Digital Reference Group also set a high benchmark in the application of transformative digital technologies in the region's priority sectors (see 5.1 above). Only colleges with a substantive interest in supporting one or more of these sectors responded to each question. So, for example, the assessment of the effective use of transformative digital technologies in programmes for the construction industry only includes those colleges with substantive provision and interest in construction.

Across the region's priority sectors, and also in provision for low skilled and the unemployed, collective college application of transformative digital technologies was relatively low with construction industry (2.6), business and professional services (2.6), advanced health and life sciences (2.6), provision for unemployed and low skilled (2.5), manufacturing (2.2) and digital industries (2.2). The application of transformative digital technologies in college programmes for priority sectors in West Midlands is detailed below (see figure 11).

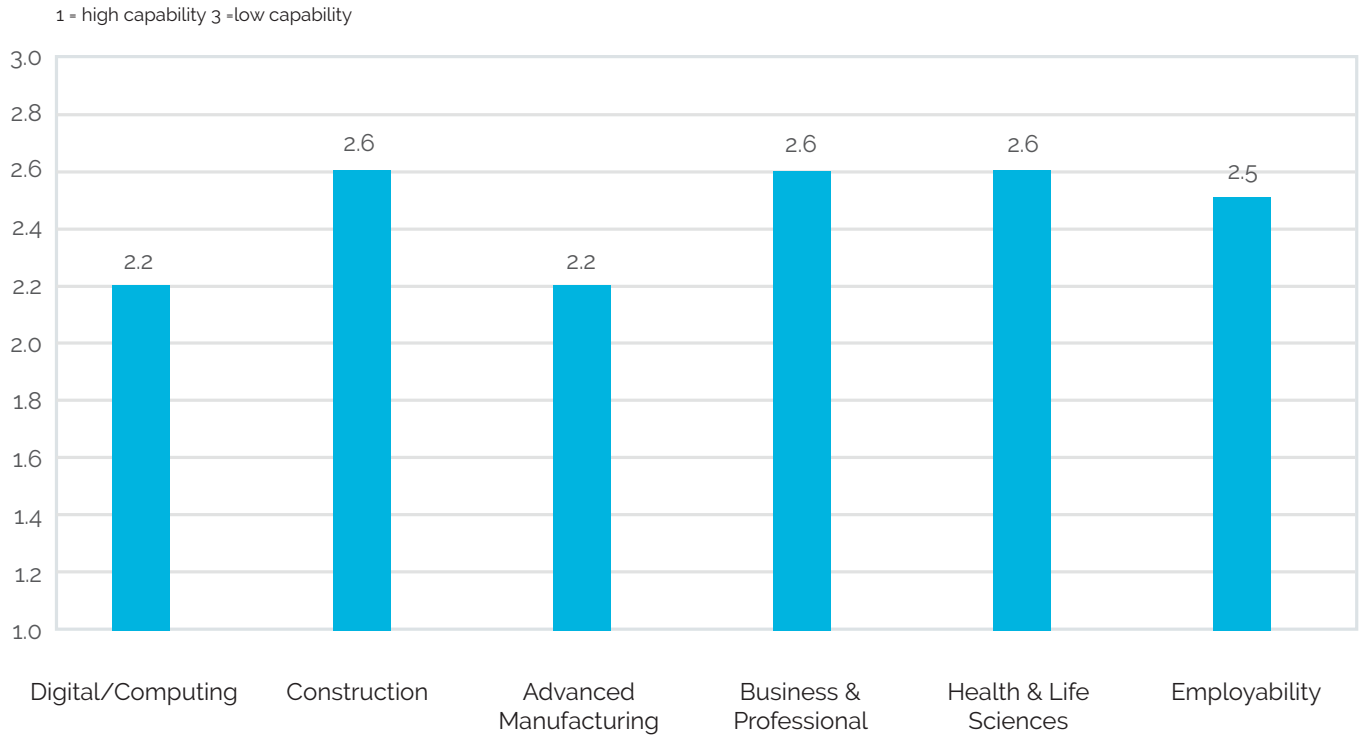

Figure 11: application of transformative digital technologies in programmes for West Midlands priority sectors.

5.3 Assessment of survey findings

Digital infrastructure

In terms of colleges' collective digital infrastructure the survey confirms that the region's colleges have an appropriate digital infrastructure in place to meet current needs. Many colleges have prioritised a rolling programme of digital investment through the austerity years and the benefits of this investment are seen in the findings of this survey. Systems (1.5), security (1.8), and storage (1.8) are broadly 'fit' for the present and near future.However, the survey finds that in the future investment is required in end devices (2.1), connectivity (2.1), infrastructure (2.0) and Wi-Fi (1.9) to ensure the region's digital infrastructure remains 'fit' for purpose.

As detailed above, a follow up review took place in April 2020 to ensure the implications of Covid-19 had been fully considered. The review found that there is now a heightened challenge to ensure all learners have remote access to digital learning and are supported to develop advanced digital literacy skills - a 'digital entitlement' as such. This is, in part, influenced by a learner's home access to an end user device(s) with appropriate levels of connectivity. Colleges are faced with the dual challenge of ensuring they are adequately resourced to significantly enhance the application of digital learning technologies across the wider curriculum and of meeting the 'digital entitlement' of all of the learners they support. The review took into account anecdotal information provided by members of *College West Midlands* Digital Reference Group which reported small but significant groups of learners who could not access digital learning provided remotely as they did/do not have access to appropriate end user devices and connectivity. The cost of meeting the 'digital entitlement' of all learners is incorporated in the future digital infrastructure investment opportunities detailed at section 6.4.

Prioritising investment in educational technologies

The *Colleges West Midlands* digital survey confirms that colleges put a high value on all the surveyed applications of educational technologies when prioritising spending including; teaching (resources, face to face, blended, on-line); assessment (initial, formative, summative, plagiarism, feedback); support (guidance, employability, well-being, SEND); communication (website, social media, intranet, engagement with learners and parents); continuing professional development (self-assessment, digital skills development, research and collaboration); and curriculum planning (including timetabling, schemes of work and lessons).

This implies that colleges both understand and have an appetite for a much greater roll out of digital technologies in the delivery of learning programmes. However, as detailed below, colleges assess their application of the identified digital technologies, both across the wider curriculum and in the region's priority sector, as relatively weak.

In the broadest sense, the survey suggests that whilst colleges have an appetite for a major roll out of digital technologies, this will require significant investment and action to be realised in the near future.

Digital capacity and capability for the wider curriculum

With an average overall rating of 2.4 ('limited use' verging on 'not using at all') the survey suggests that there is a significant weakness in the use of transformative digital technologies across the wider curriculum. This is not to say that there are not pockets of excellent practice which can be found in a number of the region's colleges. Whilst remembering that the *Colleges West Midlands* Digital Reference Group set a high benchmark, the use of the listed digital applications across the wider curriculum is weak: artificial intelligence (2.7); augmented reality (2.5); virtual reality (2.4); learner analytics (2.2); industry digital innovations (2.2); and assistive technology (2.1).

The overwhelming response is that the use of these technologies across the wider curriculum is either limited or not at all. This suggests that there will need to be significant capital and indeed revenue investment (although not considered in this prospectus) to accelerate the effective application of these technologies across the wider curriculum in West Midlands colleges, to ensure all learners benefit from these technologies and that their digital literacy skills keep pace with global developments.

Digital capacity and capability in priority sectors

Perhaps of more concern are the findings in respect of the use of transformative digital technologies in programmes for the region's priority sectors. Again, it must be noted that the *Colleges West Midlands* Digital Reference Group provided an ambitious list for the use of these technologies in each of the region's priority sectors (see 5.2 above). And it is clear that there are a number of examples where individual colleges are highly effective in the use of these technologies, working in close partnership with employers

in the delivery of advanced and higher digital skills in the given priority sector. This can be seen in college's delivering higher level skills programmes in technologies such as robotics, drone technology, building information modelling and CNC machining.

But the survey finds that collectively, in each of the region's priority sectors, there is not substantive and effective use of these transformational digital technologies in delivering skills programmes for priority sectors: business and professional (2.6), construction (2.6), health and life sciences (2.6), advanced manufacturing (including automotive) (2.2) and digital (2.2).

The starkest assessment of these findings is that a lack of investment has left colleges without the required capacity and capability for the delivery of digital skills development programmes in these technologies for the region's priority sectors. An alternative reading of these findings might be that employers have not fully appreciated the impact that these technologies might have on the productivity of their businesses and that, in turn, there is limited demand to develop the workforce in these digital skills. Both might be true to some extent. Both explanations will have been affected substantially by the experience of the lockdown.

In any event it is clear that significant capital (and revenue) investment will be needed to build the capacity and capability of colleges across the West Midlands' to embed these transformative technologies into skills programmes for the region's priority sectors. Without this investment it is hard to see how the regional skills plan can be delivered and the future skills needs of the region met. The current estimated cost to address this challenge is detailed in section 6.6. These investment assessments may be understated.

Summary of survey findings

In summary, the survey identifies that investment is required in the digital capacity and capability of colleges over the coming years to ensure colleges are well placed to support regional growth. Whilst college's digital infrastructure is reasonably strong, the application of digital technologies across the wider curriculum is not extensive, nor is the use of transformative digital applications on skills programmes for the region's priority sectors. Investment opportunities and costs in response to these findings are detailed in sections 6.4-6.6.

6. Investment opportunities

This section of the prospectus identifies investment opportunities to address the findings detailed in sections 4 and 5 above. The cost estimates are for 100% of the investment required. As discussed in section 7, it is recognised that any investment secured is likely to be on some form of co-funded or matched basis. Therefore, the costs detailed here are not necessarily the 'ask' of colleges in the region. Rather they are the recognition of the level of total investment required, however achieved, over a five year period to ensure the region's further education estate is 'fit for purpose'.

6.1 Estate condition incorporating substantive new builds

181,990m² (21%) of the total further education estate is currently C & D category. Each college returning the estates survey estimated the cost of improving their poor condition estate to category B using one of three refurbishment cost norms:

- light refurbishment at £1,243m²: retain building in its current form limited elements of internal refurbishment including part furnishings, fittings and equipment;
- medium refurbishment cost of £2,260m²: retain existing building structural fabric and envelope and introduce extensive new internal finishes and layout including replacing furnishings, fittings and equipment, with partial renewal of mechanical and electrical, IT and communication installations;
- full refurb cost of £2,938 per m²: strip the building back to its primary frame, retain structural floors, provide new envelope, replace and resurface roof and fully fit out internally including mechanical and electrical, IT and communication installations;

The total cost of upgrading the existing estate to condition B is estimated at £414m (see figure 12).

College	Estate m²	C/D m²	C/D %	Cost estimate	Per m²
BMet College	78281	10825	14%	£ 24,701,800	£ 2,282
Burton & South Derbyshire College	33143	1794	5%	£4,171,056	£2,325
City of Wolverhampton College	33319	15078	45%	£48,850,000	£3,239
Coventry College	55520	3678	7%	£7,091,880	£1,928
Dudley College of Technology	59176	4550	8%	£12,904,148	£2,836
Fircroft College	3272	349	11%	£433,434	£1,242
Halesowen College	26090	246	1%	£723,252	£2,940
Heart of Worcester College	47495	16954	36%	£41,210,000	£2,431
Hereward College	13476	235	2%	£563,644	£2,398
Joseph Chamberlain College	19074	433	2%	£538,219	£1,243
Kidderminster College	9274	800	9%	£1,808,000	£2,260
National College for Advanced Transport & Infrastructure	5711	0	0%	£ -	£ -
North Warwickshire & South Leicestershire College	49010	23921	49%	£54,061,460	£2,260
Sandwell College	33564	2260	7%	£5,125,000	£2,268
Solihull College and University Centre	53453	10155	19%	£15,255,640	£1,502
South & City College Birmingham	87102	27336	31%	£36,490,751	£1,335
South Staffordshire College	50374	19665	39%	£48,959,755	£2,490
Telford College	30947	5997	19%	£13,553,220	£2,260
University College Birmingham	42913	4280	10%	£9,673,094	£2,260
Walsall College	39870	4402	11%	£12,400,000	£2,817
Warwickshire College Group	132667	29032	22%	£75,742,996	£2,609
Total	**903731**	**181990**	**21%**	**£ 414,257,349**	**£ 2,276**

Figure 12: investment opportunities in estate condition improvement in West Midlands colleges.

Within the £414m is £98m is for substantial new builds in two colleges. It may be that the total costs could be reduced by more cost effective new builds and/or reduction in space required.

6.2 Maintenance, repurposing and redevelopment

The *Colleges West Midlands* Estates Reference Group identified forward maintenance liabilities on a site by site basis, considering at the same time repurposing and redevelopment opportunities and costs. Colleges estimate forward costs of £57m (see figure 13.)

College	Total
BMet College	£8,467,000
Burton & South Derbyshire College	£600,000
City of Wolverhampton College	£600,000
Coventry College	£1,150,000
Dudley College of Technology	£6,762,000
Fircroft College	£3,273,700
Halesowen College	£6,196,000
Heart of Worcester College	£3,577,000
Hereward College	£250,000
Joseph Chamberlain College	£343,000
Kidderminster College	£345,000
National College for Advanced Transport & Infrastructure	£ -
North Warwickshire & South Leicestershire College	£1,046,020
Sandwell College	£3,010,000
Solihull College & University Centre	£874,660
South and City College Birmingham	£10,140,000
South Staffordshire College	£1,798,700
Telford College	£620,000
University College Birmingham	£6,171,000
Walsall College	£395,000
Warwickshire College Group	£1,547,000
Total	**£57,166,080**

Figure 13: future maintenance, repurposing and redevelopment costs in West Midlands colleges.

A detailed list of college maintenance, repurposing and redevelopment cost can be found in Appendix 6.

6.3 Proposed new capital projects for priority sectors

In assessing the fitness of the existing estate to meet the advanced and higher technical skills needs in the region's priority sectors *Colleges West Midlands*, through this survey and the workings of a number of its sector specific groups, is proposing new capital projects which may be needed to ensure there are appropriate facilities and resources. In doing so, *Colleges West Midlands* has considered alignment with West Midlands Combined Authority T level Investment Taskforce paper. These new capital projects might be developed by one or more college and could be single or multi-site. A list of the proposed projects is below (see figure 14) and an alignment of these proposals with West Midlands Combined Authority T level Investment Taskforce paper can be found at Appendix 7.

Sector	Estimated Cost
Construction Expansion of the plant industry provision to increase capacity and incorporate new learning technologies, including new investment in sites, plant equipment and virtual learning resources across 5 centres to deliver a comprehensive civil engineering solution for infrastructure projects such as HS2.	£6,600,000
Add to existing plant provision with up to 5 colleges centres recruiting workforce for specialist erection, piling and drilling equipment - ideally located close to all major building sites across the region	£1,000,000
Further develop scaffolding, roofing and introduce steelwork, concrete formwork solutions across in 3 centres across the region	£3,000,000
Investment to support development of higher level advanced design courses across number of colleges linked to modern methods of construction specialist facility linked to MOBIE	£5,000,000
Investment to support development of higher level advanced design courses across number of colleges, Repurposing of college space to build additional workshops including digital technologies – BIM, CAD and off site modular build	£4,500,000
Total	**£20,100,000**
Advanced manufacturing, automotive and engineering New transport technologies, including electric, driverless vehicle technologies, battery technologies rail (HS2) and light rail (Metro) targeted at level 3-4 full time and advanced apprenticeship provision.	£11,700,000
Polymer, aviation and advanced manufacturing in robotics, track and equipment that can be reconfigured and designed to enable innovation of process and design	£27,000,000
Total	**£38,700,000**
Digital technologies Digital – specialist AI, software development, cyber hub with specialist facilities in each college – live lab capability with secure private networks and data storage, firewall and penetration technology to industry specifications comparable to fintech and medical data security.	£5,000,000
Infrastructure development to provide adequate digital platform across colleges	£ 3,000,000
Total	**£8,000,000**
Science and health 3 x lab tech and med tech environments with robotics, programmable medical and lab equipment	£22,140,000
Total	**£22,140,000**
Overall Total	**£88,940,000**

Figure 14: investment opportunities in new capital projects (single or multi-site) to meet the advanced and higher technical skills needs of the region's priority sectors.

6.4 Digital infrastructure and digital entitlement

With an average rating of 1.9 (1.0 being fully 'fit' for the present and future and 3.0 being 'unfit') colleges broadly assess their digital infrastructure as 'fit' for the present but 'not fully fit' for the future. Colleges have estimated £49m of costs as detailed below to ensure their digital infrastructure is fit for the future (see figure 15). With an additional estimate of £3.36m in response to Covid 19 to meet the 'digital entitlement' of all learners, based on an allocation of £400 per learner multiplied by the number of learners on free school meals supported by the region's colleges.

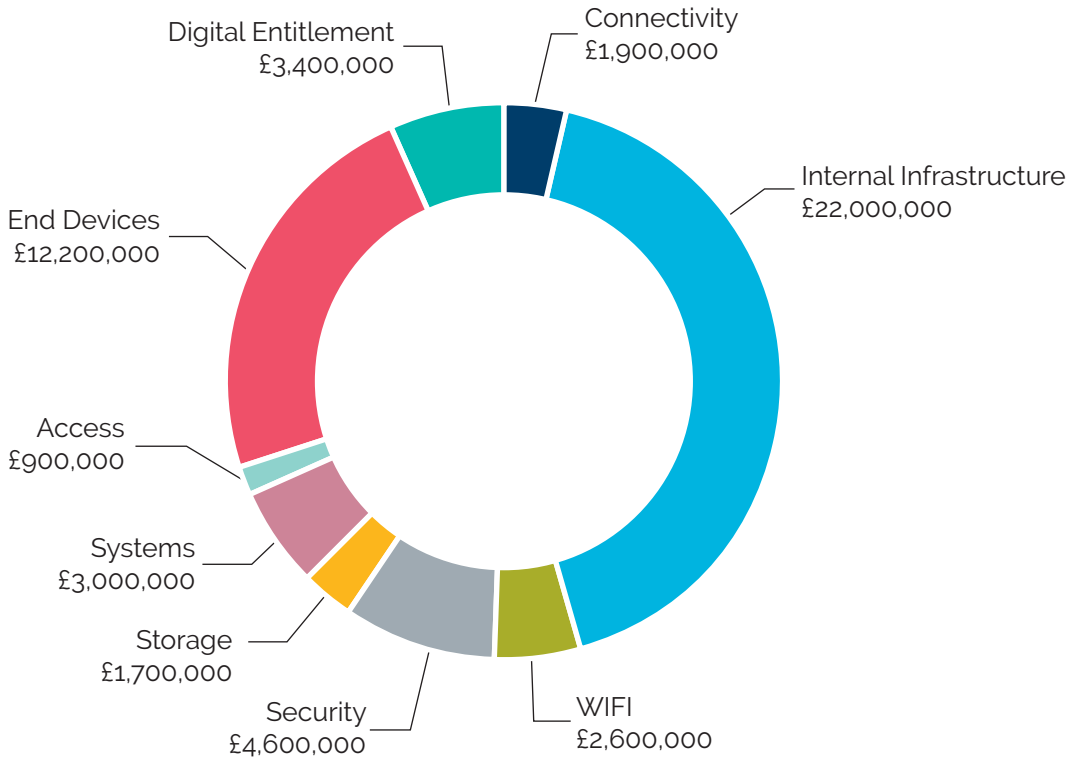

Figure 15: investment opportunities in the digital infrastructure of West Midlands colleges.

A detailed breakdown of elements making the costs detailed in figure 15 above can be found at Appendix 8.

6.5 Digital technologies for application across the wider curriculum

The survey found that there is not substantive and effective use of transformational digital technologies across the wider curriculum. Colleges have estimated that investment of £5.1m is required to help ensure these technologies are widely used across the curriculum and that the digital skills of all learners are enhanced (see figure 16).

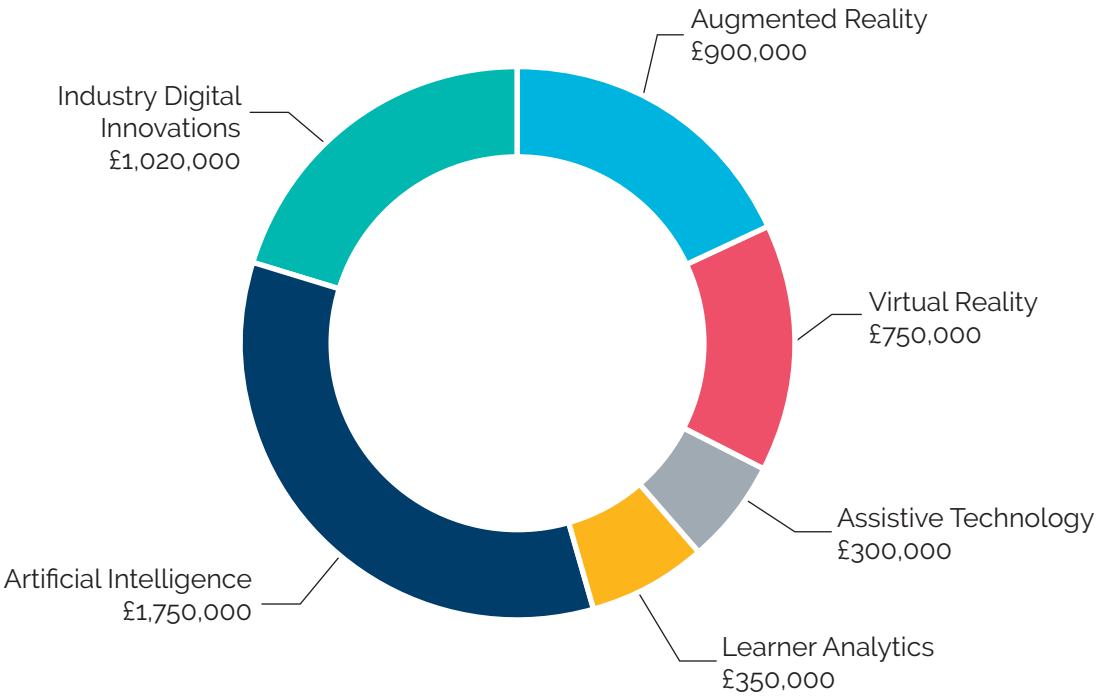

Figure 16: investment opportunities for the application of digital technologies across the wider curriculum West Midlands colleges.

A detailed breakdown of elements making the costs detailed in figure 16 above can be found at Appendix 9.

6.6 Digital investment for priority sectors

The survey found that there is not substantive and effective use of transformational digital technologies in delivering skills programmes for the region's priority sectors. Colleges have estimated that investment of £18m is required to help ensure a step change in the application of these technologies to skills programmes in priority sectors (see figure 17).

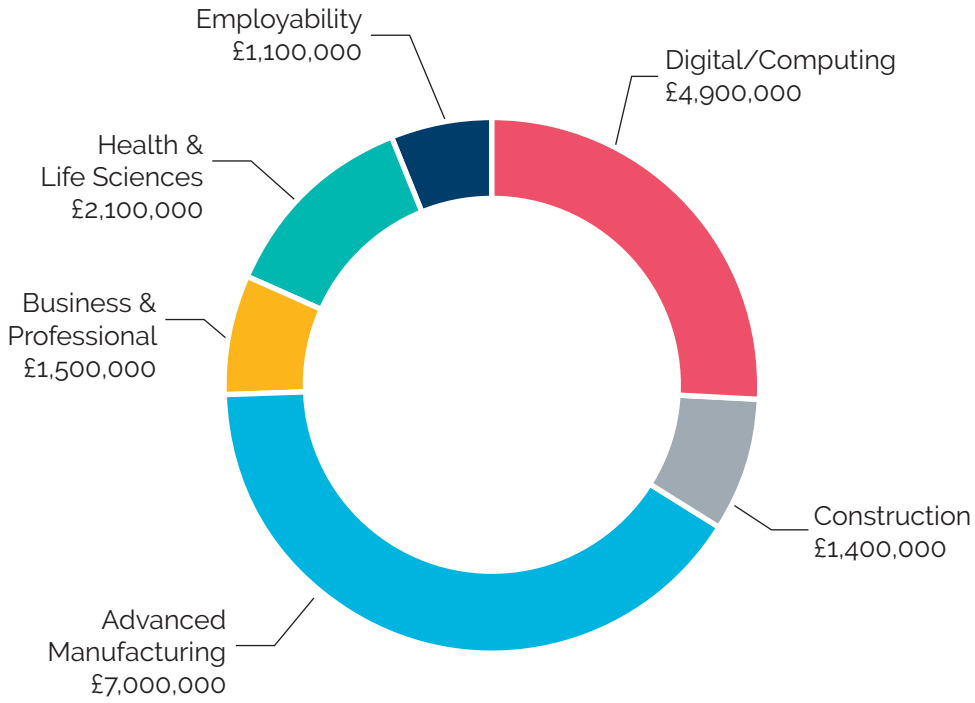

Figure 17: investment opportunities for the application of digital technologies in the region's priority sectors in West Midlands colleges

A detailed breakdown of elements making the costs detailed in figure 17 above can be found at Appendix 10.

6.7 Total investment opportunities

The total investment opportunity identified in this prospectus is £636m (see figure 18).

Investment element	Cost
Estates condition incorporating new builds	£414,257,349
Maintenance and repurposing	£57,166,080
New capital projects for priority sectors	£88,940,000
Digital infrastructure	£48,696,000
Digital entitlement	£3,360,000
Digital technologies for the wider curriculum	£5,066,000
Digital technologies for priority sectors	£18,034,000
Total	**£635,519,429**

Figure 18: total capital investment opportunities in the further education estate in the West Midlands

6.8 Pipeline projects

Whilst investment in new capital projects has been limited during the austerity years, colleges have continued to be both active and ambitious in developing new capital projects to address various needs. For example, colleges may have developed an estate plan to address high levels of poor condition estate or envisaged a new capital project specifically aligned to advanced and higher technical skills in priority sectors.

This prospectus provides a high level summary of the region's 'pipeline projects' at Appendix 11. No assessment has been made on either the feasibility or validity of these project proposals. It is recognised, however, that if properly assessed, prioritised and contextualised into a coherent framework, a number of these projects could represent an immediate investment opportunity for the region.

7. Conclusions and next steps

It is fully recognised that the totality of the capital investment required in further education colleges in the region, as detailed in this prospectus, is very significant indeed. This perhaps should not come as a surprise.

The prospectus represents the first comprehensive and collective survey of the region's further education estate. It extends to twenty one colleges and has been undertaken in the aftermath of years of austerity. It is accepted, in government and across the political spectrum, that further education was under funded during the austerity years, disproportionately to other parts of the education system. Inevitably, with weak financial health across the sector, capital investment did not keep up with need.

The prospectus is far reaching. It considers the condition of the entirety of the existing estate, identifies the future maintenance challenges colleges face and assesses the fitness of colleges' digital infrastructure for the present and future.

The prospectus also comes at a time of unprecedented demand for advanced and higher technical skills. National policy is reaffirming the role of further education as the nation's driver of technical skills. The regional skills plan sets out ambitious objectives for the renaissance of the regional economy and the creation of high value employment through innovation and inclusive growth in the region's priority sectors. The survey assesses, with candour, where capital investment is required to ensure colleges are equipped to deliver those technical skills programmes which will meet the future skills needs of businesses in priority sectors.

The prospectus has been developed during, and in full cognisance of, the impact and aftermath of Covid-19. Colleges have proved remarkably effective in quickly moving to a distributed learning model. Their digital capacity in this respect has been robust. But not all of the sectors' learners have access to end user devices and connectivity to ensure they can participate actively in a digitally based and distributed learning model. This prospectus addresses the 'digital entitlement' of our most disadvantaged learners.

And post Covid-19 the region's economy will need restarting, with investment and confidence. Capital investment in further education could be a critical element in accelerating this restart.

Colleges recognise that there is significant work to be done, collectively, to prioritise where investment funding should be directed in the first instance. Based on the opportunities detailed in this prospectus, their desire is to work collaboratively in creating a three to five year 'regional skills capital investment plan' which maximises value for money and reduces wasteful overlap.

Colleges are seeking to work with national and regional government in the creation of this investment plan. Through *College West Midlands* there is an effective structure in place to support the development of a regional plan, in partnership with regional and national agencies. *Colleges West Midlands* is funded by the region's colleges themselves, with some welcome support from the West Midlands Combined Authority. The creation of a regional skills capital investment plan would require further developmental funding from government or the West Midlands Combined Authority to enhance the capacity of *Colleges West Midlands*.

Colleges call for investment funders to be bold in thinking how future investment models could be developed so colleges can share, appropriately, in capital investment costs, noting the problems and legacy caused by former methodologies.

In any future model investment funds should flow directly from the funder to an individual college. But investment funds could first be categorised against the specific priorities clearly articulated in the regional skills capital investment plan and allocated on this basis.

For example, an investment fund could be created specifically to enhance the digital capacity of colleges, with funds flowing to all colleges, on an allocation basis, to be used in accordance with the identified and agreed priorities in the regional plan.

An investment fund could be created specifically to support remediation and repurposing of unfit estate with allocations assessed and based on the need of each individual college.

An investment fund could be created to support the delivery of advanced and higher technical skills for priority sectors. This investment funding might be allocated on a project basis engaging one or more colleges in the development of new capital projects for priority sectors. These single or multi college projects would be assessed and contextualised against the regional plan to ensure best value is achieved. The prospectus identifies a number of pipeline projects which, if prioritised and developed further in the context of a regional capital skills plan, could be brought to site quickly.

Colleges recognise the continued and pressing need for investment. This prospectus provides the opportunity to create and implement a regional skills capital investment plan to ensure further education colleges are properly resourced to deliver future economic prosperity for the region.

Appendices

1. Further education college campuses in the West Midlands.
2. *Colleges West Midlands* estates survey.
3. Members of *Colleges West Midlands* Estates Reference Group.
4. *Colleges West Midlands* digital survey.
5. Members of *Colleges West Midlands* Digital Reference Group.
6. Detailed list of maintenance and repurposing projects.
7. Alignment of *Colleges West Midlands*' proposals with West Midlands Combined Authority T level Investment Taskforce Paper.
8. Breakdown of costs in respect of digital infrastructure.
9. Breakdown of costs in respect of digital technology applications across the wider curriculum.
10. Breakdown of costs in respects of digital applications for priority sectors.
11. Pipeline projects which could be developed as key elements of the regional estate strategy.

Appendix 1 Further education college campuses in the West Midlands

Birmingham & Solihull Colleges

College	Total estate	Campuses	Curriculum Area
Birmingham Metropolitan College	78,300m²	Erdington Skills Centre – Birmingham B24 9EW	Construction Trades (Plumbing, Electrical, Bricklaying, Carpentry) English, Maths, ESOL
		James Watt College – Great Barr B44 8NE	Construction- Plumbing, Gas Engineering, Electrical Engineering and Manufacturing Rail Engineering Health and Social Care and Early Years Media and Games Design English, Maths and ESOL Foundation Learning
		Matthew Boulton College – Birmingham B4 7PS	Business, Accounts, Law, Art and Design, Fashion, Graphics, Digital, Photography, Health and Social Care, Early Years, Science, Pharmacy, Dental Nursing, Dental Technology, Podiatry, Horticulture (Birmingham Botanical Gardens), English, Maths, ESOL, Foundation Learning
		Sutton Coldfield College – Sutton Coldfield B74 2NW	A Levels Vocational Science, Business, Accounts, Law, English, Maths and ESOL, Digital and Computing Science, Multimedia, Art and Design, Media, Fashion and Textiles and Graphics, Performing Arts and Musical Theatre, Foundation Learning and Princes Trust, Health and Social Care and Early Years, Sports, football coaching, sports science, sports coaching and fitness training, Uniform Public Services and Travel and Tourism
Fircroft College	3,300m²	Bristol Road – Birmingham B29 6LH	Health and social care, Social sciences and humanities, English, Maths and ESOL, IT and Digital, Management, Personal and social development, Preparation for life and work
Joseph Chamberlain College	19,000m²	Belgrave Road – Birmingham B12 9FF	Science, Arts - Including Performing Arts, Media and Film Studies, English, ESOL, Humanities - Including History, Geography, Geology, Religious Studies and Philosophy, Social Sciences - Including Psychology, Sociology and Law, Maths, Business Studies, IT, Health and Social Care, PE and Sport, Adult Learning
National College for Advanced Transport & Infrastructure	5,700m²	Birmingham Campus – Birmingham B7 4AG	Engineering, High speed rail & Infrastructure, Commercial Training – first aid, health & safety, leadership & management, rail industry compliance
		Doncaster Campus – Doncaster DN4 5PN	Rolling Stock, Track Systems and Power

College	Total estate	Campuses	Curriculum Area
Solihull College & University Centre	53,500m²	Blossomfield Campus – Solihull B91 1SB	Accounting, Animal Welfare & Veterinary Nursing, Art & Design, Beauty Therapy, Built Environment & Sustainable Technologies, Business Computing & Emerging Technologies, Construction, Customer Service, Early Years and Childhood Studies, ESOL, Event Planning, Forensic and Criminal Investigation, Foundation Learning, Graphic Design, Hair & Media Make-Up, Hairdressing and Barbering, Health & Social Care, Media, Performing Arts, Photography, Psychology & Criminology, Public Services, Retail, Science, Sport & Exercise Science, Travel & Cabin Crew
		Stratford-upon-Avon College – Stratford-upon-Avon CV37 9QR	Art & Design, Business & Administration, Computing & Emerging Technologies, Early Years & Childhood Studies, Event Planning Fashion, Foundation Learning, Graphic Design, Hair & Media Make-Up, Health & Social Care, Hospitality & Catering, Media, Motor Vehicle, Music Performance & Production, Performing & Production Arts, Photography, Psychology & Criminology, Public Services, Sport & Exercise Science, Technical Theatre
		Woodlands Campus – Solihull B36 0NF	Aerospace Engineering, Beauty Therapy, Bricklaying, Carpentry & Joinery, Construction, Early Years and Childhood Studies, Electrical Installation, Electronic Engineering (Robotics), Engineering, Foundation Learning, Hair & Media Make-Up, Hairdressing and Barbering, Hair & Social Care, Manufacturing Engineering, Motor Vehicle, Painting & Decorating, Plastering, Travel & Cabin Crew
South & City College Birmingham	87,000m²	Bordesley Green Campus – Birmingham B9 5NA	Access to HE, Brickwork, Business Studies, Building Services, Carpentry & Joinery, Civil Engineering, Construction University Level courses, Electrical, Engineering, English & Maths, ESOL, Gas, General Construction, ICT, Motor Vehicle, Painting & Decorating, Plastering, Plumbing, Public Services, Refrigeration & Air Conditioning
		Bournville College – Longbridge B31 2AJ	A levels, Accounting & Finance, Art & Design, Beauty Therapy & Media Makeup, Business Administration, Business Studies, Childcare & Early Years, ESOL, Foundation learning, GCSEs, Hairdressing & Barbering, Health & Social Care, Hospitality & Catering, IT & Computing
		Construction Centre Bournville College – Longbridge B31 2TW	Carpentry & Joinery, Electronics & Engineering
		Digbeth Campus – Birmingham B5 5SU	Accounting & Finance, Business Administration, Business Studies, English & Maths, Finance & Management, Games Development, HE & Foundation Degree in Early Years, ICT, Media, Music, Photography, Trade Union Education
		Fusion Centre – Birmingham B5 6ES	ESOL, Fashion
		Golden Hilllock Women's Centre – Birmingham B10 0DP	Childcare & Early Years, English & Maths, ESOL, Health & Social Care
		Hall Green Campus – Birmingham B28 8ES	Access to Science, Beauty, Business Studies, Childcare, English & Maths, Hairdressing, Health & Social Care, Pre-16 Academy, Science, Supported Learning, Theatrical Media Hair & Make Up, Travel & Tourism
		Handsworth Campus – Birmingham B21 9DP	Early Years, English & Maths, ESOL, Health & Social Care, ICT, Supported Learning

Birmingham & Solihull Colleges continued

College	Total estate	Campuses	Curriculum Area
University College Birmingham	43,000m²	Cambrian Hall – Birmingham B1 2NB	Student Accommodation
		Camden House – Birmingham B1 3PY	Student Support: The Tech Hub and the Digital Hub
		McIntyre House – Birmingham B3 1PW	HE programmes: all curriculum areas
		Moss House – Birmingham B3 1QH	HE programmes: all curriculum areas
		Richmond House – Birmingham B3 1PB	FE programmes: Sports and Creative Services, Education, Health and Community, Business School. FE library and FE Gym
		Summer Row – Birmingham B3 1JB	FE programmes: College of Food, Education, Health and Community, Business School
		The Link – Birmingham B3 1LB	Student Services, Resources Centre, Library, Finance, Admission, Marketing and International, Registry
		The Maltings – Birmingham B1 1SB	Student Accommodation

Black Country Colleges

College	Total estate	Campuses	Curriculum Area
City of Wolverhampton College	33,300m²	Metro One Campus – Wolverhampton WV1 3AH	Hair, Beauty, Hospitality, Maths, English and Functional Skills, Community Learning
		Paget Road Campus – Wolverhampton WV6 0DU	Motor Vehicle, Engineering, A Levels, Apprenticeships, Science, Access, Creative Arts, ESOL, Business, Education Studies, Community Learning, GAP/Laser, Maths, English and Functional Skills
		Telford Campus – Telford TF3 3BA	Polymer, Lean, Health and Safety, Hair, Community Learning, Prince's Trust
		Wellington Road Campus – Bilston WV14 6RN	Construction, Early Years, SLDD/Pathways, Sport, Uniformed Public Services, Health and Social Care, Maths, English and Functional Skills, ESOL, Community Learning, Travel & Tourism, IT/Digital, Accountancy, ILM, Prince's Trust
Dudley College of Technology	59,100m²	Advance Technical Engineering & Construction Centre – Leytonstone E11 4DD	Construction, engineering & building technologies
		Art & Design Centre – Brierley Hill DY5 1RG	Digital and creative studies
		Black Country Skills Shop – Brierley Hill DY5 1SW	Adult Skills, Employability
		Broadway – Dudley DY1 4AS	Information Technology, Public Uniform Services, Health and Social Care, Care & Early Years, Animal Science, Applied Science, Access, 14-16 Provision, Motor Vehicle, International Studies, Hospitality, Catering, Motor Vehicle, ESOL, Employability, English & Maths, Administrative Studies, Customer Services
		CAT Centre – Brierley Hill DY5 1LX	Construction trades
		CAT Centre – Brierley Hill DY5 3ZU	Construction trades
		Dudley Advance 1 – Dudley DY1 4AD	Engineering & Manufacturing
		Dudley Advance 11 – Dudley DY1 4AD	Building technologies
		Dudley Aspire – Dudley DY1 4AR	Foundation learning
		Dudley Evolve – Dudley DY1 1AF	Sport, Photography, Art, Media, Music, Dance, Musical Theatre, Hairdressing and Barbering, Beauty, Fashion
		Dudley Sixth Form Centre – Dudley DY1 1HL	Academic Studies (A Levels)
		Dudley Enhance – Dudley DY1 4AD	A Levels, Hospitality & Catering
		Independent Living Centre – Brierley Hill DY5 1RG	Foundation learning
		Motor Vehicle Centre – Dudley DY1 3AH	Motor Vehicle

Black Country Colleges continued

College	Total estate	Campuses	Curriculum Area
Halesowen College	26,000m²	Coombs Wood – Halesowen B62 8BB	IT, Media, Business, Apprenticeships
		Shenstone House – Halesowen B63 3NT	Early Years, Health and Social Care, Hair, Beauty
		Whittingham Road – Halesowen B63 3NA	A levels, ESOL, Elected Home Educated, Media, Performing Arts, Art and Design, Sport, Public Services, Media, Business, IT, Catering, Travel, Animal Care, Engineering, Foundation
Sandwell College	33,600m²	Cadbury Sixth Form College – Birmingham B38 8QT	32 x A levels options and Applied Generals (Law, Science, Business, Criminology, Engineering, Health & Social Care, ICT, Music , Performing Arts, Sport & Exercise Sciences and Travel & Tourism)
		Central Campus – West Bromwich B70 6AW	Vocational and Technical Centre all sector subject area, all Levels. Apprenticeships (Business & Professional Services, Construction, Automotive, Engineering, Medical, Dental, Teaching and Health) and HE.
		Central Saint Michael's Sixth Form – West Bromwich B70 7PG	30 x A levels options, Applied Generals (Law, Psychology, Criminology, Business, Forensic & Medical Science, and Health & Social Care) and AAT Accounting
		Sandwell Engineering – West Bromwich B70 0AE	Engineering Apprenticeships, Construction Gateway
		Terry Duffy House – West Bromwich B70 6NT	Programmes for the Unemployed (Adults), Traineeships
Walsall College	39,900m²	Cannock Office – Cannock WS11 7XA	Retail Academy, CSCS, Connecting Communities.
		Digital Engineering Skills Centre – Walsall WS2 8AB	Construction Design and Engineering including Apprenticeships
		Green Lane Campus – Walsall WS2 8HX	Construction including M&E Engineering and Construction Apprenticeships. CSCS Testing Centre
		Hawbush Campus – Walsall WS3 1AG	Foundation and Community Learning including SLDD, Horticulture, ESOL, Essential Skills, Connecting Communities, Employability
		The Hub – Walsall WS2 8ES	Sports, Hospitality and Catering, Risual IT Academy
		Whitehall Campus – Walsall WS1 4EQ	Foundation and Community Learning including ESOL and Essential Skills
		Wisemore Campus – Walsall WS2 8ES	Health including Dental, Pharmacy and Access including Apprenticeships, Public Services, Childcare and Early Years, Teacher Education, Travel and Tourism including Cabin Crew, GCSE, Access to HE, Maths and English, Distance Learning, Hospitality and Catering, SLDD, ESOL, Hair and Beauty including Apprenticeships, Creative Industries including Photography, Fashion, Media, Performing Arts and Music, Business and Management including Apprenticeships, Finance and Accounting including Apprenticeships, Computing including Apprenticeships and Cisco Academy, Engineering (Motor Vehicle) including Apprenticeships, Sport

Coventry & Warwickshire Colleges

College	Total estate	Campuses	Curriculum Area
Coventry College	55,000m²	City Campus – Coventry CV1 5DG	Construction, Motor Vehicle & Engineering, ESOL, Business & Professional, Foundation & Life Skills, Digital, Performing Arts, Fashion, Photography, Graphic Design, English & Maths, HE, 14-16, Hair & Beauty.
		Henley Campus – Coventry CV2 1ED	Sport & Public Services, ESOL, Foundation & Life Skills, Childcare, Health & Social Care, Hospitality, Travel & Tourism, English & Maths, HE, Science & Access, 14-16.
Hereward College	13,500m²	Bramston Crescent – Coventry CV4 9SW	Learning for Life, Independence and Life Skills, Functional Skills in English, Functional Skills in Mathematics, Vocational Studies, Hospitality, Art & Design, Business and Administration, Creative Media Production, IT Users, Performing Arts, Sports and Active Leisure, Music, Horticulture, Information and Creative Technology, Music, Performing Arts, Sport, Supported Internships, Work Related Learning
North Warwickshire & South Leicestershire College	49,700m²	Harrowbrook Campus – Hinckley LE10 3DT	Construction, FLT driving and Vehicle Maintenance, English, Maths and ICT
		Digital Skills Academy – Coventry CV1 2TT	Software development, IT User Skills
		Hinckley Campus – Hinckley LE10 1QU	Performing Arts and Music, Creative Arts and Design, Media, English, Maths and ICT
		MIRA Technology Institute – Nuneaton CV10 0UX	Automotive, Electrical, Mechanical and Manufacturing Engineering, Light Vehicle Maintenance and Repair, Business and Leadership, Emissions, Electric and Hybrid vehicles, Connected and Autonomous Vehicle resilience
		Nuneaton Campus – Nuneaton CV11 6BH	Hair and Beauty, Media Make up, Catering, Motor Vehicle, Computing, Electrical Installation, Engineering, Fabrication and welding, Computer Maintenance, Sport, Public Service, Business, Travel and Tourism, Foundation Learning, Floristry, Counselling, Professional Business Programmes, Child Care, Health and Social Care, English, Maths and ICT, EHE (Home School 14-16)
		Wigston Campus – South Wigston LE18 4PH	Construction, Hair and Beauty, Media, Computing and Games Design, Engineering, Business, Travel and Tourism, Counselling, Professional Business Programmes, Foundation Learning, Sport, Public Service, Child Care, Health and Social Care, English, Maths and ICT, EHE (Home School 14-16)

Coventry & Warwickshire Colleges continued

College	Total estate	Campuses	Curriculum Area
Warwickshire College Group	132,667m²	Evesham College – Evesham WR11 1LP	Arts & Design, Engineering & Motor Vehicle, IT, Health & Care, Hair & Beauty, Construction,
		Malvern Hills College – Malvern WR14 2YH	Arts & Design, Hair & Beauty, Fashion, IT, Counselling, French, Spanish, Floristry, Psychology, Italian, Performing & Production Arts,
		Moreton Morrell College – Warwick CV35 9BL	Sport, Floristry, Equine, Construction, Animal Care and Veterinary Nursing, Agriculture
		Pershore College – Pershore WR10 3JP	Horticulture, Accounting, Computing & IT
		Royal Leamington Spa College – Leamington Spa CV32 5JE	Engineering & Motor Vehicle, Computing & IT, Visual & Performing Arts, Health & Social Care, Hair & Beauty, Construction, Business, A Levels, A2 Levels
		Rugby College – Rugby CV21 1AR	Visual & Performing Arts, Sports, Public Services & Catering, Health and Care, Hair & Beauty, Engineering & Motor Vehicle, Construction, Business and Computing, A Levels
		Warwick Trident College – Warwick CV34 6SW	Engineering & Motor Vehicle, Computing & IT, Visual & Performing Arts, Health & Social Care, Hair & Beauty, Construction, Business, A Levels, A2 Levels,

Outlying Areas College

College	Total estate	Campuses	Curriculum Area
Burton and South Derbyshire College	33,100m²	Burton Town Centre Campus – Burton on Trent DE14 3RL	Health, Care & Science, Business & Accounting, Sport & Public Services, Access to Higher Education, Education & Training, Early Years Educational Support, Math & English, ESOL, Motor Vehicle, Welding, Hair & Beauty Hospitality & Catering, Events & Tourism, Computing, Art & Design, Digital Media, Performing Arts, Foundation Learning, Distance Learning
		Stephen Burke Construction Academy – Swadlincote DE11 OBB	Engineering, Construction
Heart of Worcester College	47,500m²	Bromsgrove Campus – Bromsgrove B60 1PQ	Art, Design, Automotive, Engineering, Games Design & Digital Media
		Malvern Campus – Malvern WR14 1BY	Construction
		Redditch Campus: Osprey House, – B97 4DE Redditch Campus, – B98 8DW Alliance House, – B97 6EE	HE, Sports, IT, Business, Hair & Beauty, Construction, Hospitality, Travel & Tourism, Business, ESOL, SEND, H&SC and Early Years, Public Services, Arts, Science, Apprenticeships
		The Duckworth Centre of Engineering – Worcester WR5 1DU	Automotive, Plumbing & Heating
		Worcester Campus: All Saints Building – WR1 2JF St Andrew's Building & St Wustan's Building – WR1 2ES St Dunstan's Building – WR1 3PA 2,5,6 Northbrook Automotive Centre – WR3 8BP	HE, Sports, IT, Business, Hair & Beauty, Construction, Engineering, Automotive, Sports, Hospitality, Travel & Tourism, SEND, Arts, H&SC and Early Years, Apprenticeships, Public Services
Kidderminster College	9,300m²	Market Street – Kidderminster DY10 1AB	Hair & Beauty, Construction, Creative Industries & HE, AEM, Foundations, IT, Sport, UPS, Tourism, Music
		Vocational Skills Centre – Kidderminster DY10 1HY	Motor Vehicle & Brickwork
South Staffordshire College	50,000m²	Cannock College – Cannock WS11 1UE	Engineering, Electrical, Construction, Childcare, Health & Social Care, Digital/IT, Business
		Lichfield College – Lichfield WS13 6QG	Media, Art & Design, Music Production, Performance Arts, Fashion, Photography
		Rodbaston College – Penkridge ST19 5PH	Construction, Motor Vehicle, Animal Care, Horticulture, Agriculture, LLDD
		Tamworth College – Tamworth B79 8AE	Digital/IT, Engineering, Electrical, Health & Social Care, English, Maths, Catering, Hair & Beauty, Leisure & Tourism, Sport
		Torc and Technical Centre – Tamworth B77 2HJ	Construction, LLDD
Telford College	31,000m²	Haybridge Road – Telford TF1 2NP	A levels, access to HE, creative media, hair and beauty, business, hospitality and catering, computing, construction, early years and childcare, engineering, foundation level courses, health and social care, public and uniformed services, sport, automotive engineering, employability courses, distance learning and apprenticeships.

Appendix 2 Estates Condition Information

Part A

Total Floor area / m²				**Notes**
		Curriculum provision in building/area	Cost to raise to Level B	See below
Condition A	0			
Condition B	0			
Condition C	0			
Condition D	0			
Check	0	**Sub Total**	**£0**	

Cost Guide	**£/m²**	**Notes**
Light refurbishment	£1,243	Retain building in its current form limited elements of internal refurbishment including part F F and E
Medium refurbishment	£2,260	Retain existing building structural fabric and envelope and introduce extensive new internal finishes and layout including replacing F F and E, with partial renewal of M and E, IT and communication installations
Full refurbishment	£2,938	Strip the building back to its primary frame, retain structural floors, provide new envelope, replace and resurface roof and fully fit out internally including M and E, IT and communication installations

Note:
All costs are full project costs including fees, and VAT liability Costs will vary considerably between one project and another. The above are a guide, and an estimate between the above figures may be used were specific requirements dictate.

Part B
Major Individual replacement costs. ie Heating and or hot water Systems, plant, wiring

	Element	Cost		
1				
2				
3				
4				
5				
6	**Sub Total**	**£0**	**Total requirement**	**£0**
			Date	

Appendix 3 Members of *Colleges West Midlands* Estate Reference Group

Andy Crowter	Birmingham Metropolitan College
Daniel Harris	City of Wolverhampton College
Paul Pattison	Coventry College
Steve Johnson	Dudley College of Technology
Andy Gazey	Fircroft College
Michael Conway-Jones	Fircroft College
Jacquie Carmen	Halesowen College
Simon Shackleton	Hereward College
Daryl Unitt	National College for Advanced Transport & Infrastructure
Kerrie Dickens	North Warwickshire and South Leicestershire College
Natalie Rogers	North Warwickshire and South Leicestershire College
Ann Sheridan	Sandwell College
Simon Griffiths	Sandwell College
Alan Hastings	Solihull College & University Centre
Dave Birks	South and City College Birmingham
Paul Morris	South and City College Birmingham
John Snow	South Staffordshire College
Dave Candlin	Telford College
Amin Pradhan	University College Birmingham
Roland Barrett-Price	University College Birmingham
John Adams	Walsall College

Appendix 4 *Colleges West Midlands* - Digital survey

Part 1: Infrastructure

Guidance for completing this Part 1 of this survey.

The questions in Part 1 of this survey ask you to rate aspects of your digital infrastructure on a three-point scale as follows:

Rating 1 = Meeting current requirements and able to cope with any planned future activity.
Rating 2 = Just meeting current requirements but will require investment to be able to accept any further expansion relating to change / increase in activity or
Rating 3 = Not meeting current requirements. functional improvement.

For some questions further guidance is provided in the form of a specification to help you to rate the element in question. On other questions please make your best judgement using the rating scale above.

On each question where you assess your infrastructure as rating 2 or rating 3, please provide:

- a high level estimate of the cost of upgrading your infrastructure to rating1 standard (please include VAT in your cost estimate).
- a brief comment on why you have assessed your infrastructure as rating 2 or rating 3 and the substantive items in your cost estimate.

Where no costing box is provided the question is for information purposes only.

Section 1: Connectivity

Question 1a How effective is your primary internet connection?

Element	Rating 1-3	Cost estimate	Comment
Primary internet connection			

Note: Rating 1 = 10 Gbps or better; rating 2 = between 1Gbps and 10Gbp; rating 3 = Less than 1 Gbps.

Question 1b How effective are your additional internet connections?

Element	Rating 1-3	Cost estimate	Comment
Additional internet connection			

Note: Rating 1 = 10 Gbps or better; rating 2 = between 1Gbps and 10Gbp, rating 3 = Less than 1 Gbps.

Note: In the comments please indicate if a specific connection is used as a failover internet connection for your primary or for particular commercial activity such as Cisco, networking courses, etc.

Question 1c How effective is the connectivity between the main campus and other campuses?

Element	Rating 1-3	Cost estimate	Comment
Inter site connectivity			

Note: Rating 1 = All campuses have inter-site connectivity; rating 2 = only major campuses have inter-site connectivity; rating 3 = Some campuses have inter-site connectivity.

Question 1d What additional connections do you require between the main campus and other campuses?

Element	Rating 1-3	Cost estimate	Comment
Additional Inter site connectivity			

Note: Rating 1 = 10 Gbps or better; rating 2 = between 1Gbps and 10Gbp; rating 3 = Less than 1 Gbps.
Note: In the comments box please list the required speed of your additional inter-campus connections.

Section 2: Internal Infrastructure

Question 2a How effective are the following elements of your internal infrastructure?

Element	Rating 1-3	Cost estimate	Comment
Internal connections (copper, fibre)			
Local area network (switches and routers)			
Network management tools			
Servers			
Storage (SAN, NAS, etc)			
Compute resources			
Backup devices			
Telephony			
CCTV			
Access control			

Section 3: Wi-Fi

Question 3a How effective is your current Wi-Fi provision?

Element	Rating 1-3	Cost estimate	Comment
Wi-Fi			

Note: For rating 1 your current Wi-Fi solution should provide full coverage and appropriate performance to staff, students and guests and the system should support standards such as 802.11 ac.

Section 4: Security

Question 4a Are your end device operating systems effective and up to date?

Element	Rating 1-3	Cost estimate	Comment
End device operating systems.			

Note: Rating 1 = All deployed operating systems are at the appropriate version; rating 2 = the majority are at the appropriate level and updating of the others is planned; rating 3 = a significant part of the estate is not using currently supported operating systems.

Note: Please consider PC's, Macs, tablets, etc. If updating of operating systems is restricted by the performance of end devices do not include costings for that in this question.

Question 4b Are your end devices effectively deployed via centralised systems e.g. SCCM.

Element	Rating 1-3	Cost estimate	Comment
Centralized end device operating systems.			

Note: Rating 1 = all deployed operating systems are deployed via centralised system(s); rating 2 = the majority of devices are deployed via centralised system; rating 3 = a significant part of the estate has to be manually updated.

Question 4c How up to date are your server operating systems?

Element	Rating 1-3	Cost estimate	Comment
Server operating systems.			

Note: Rating 1 = all deployed operating systems are at the appropriate level; rating 2 = the majority are at the appropriate level and updating of the others is planned; rating 3 = a significant part of the estate is not rating using currently supported operating systems.

Note: Please consider all servers and include SQL server versions.

Question 4d How effective is your perimeter firewall or UTM system current and how capable is it of using application level restrictions rather than just IP address / port restrictions?

Element	Rating 1-3	Cost estimate	Comment
Perimeter firewall or UTM			

Question 4e How effective is your web content filtering effective and is it providing appropriate reporting?

Element	Rating 1-3	Cost estimate	Comment
Web content filtering			

Question 4f Do you have effective automated security patching?

Element	Rating 1-3	Cost estimate	Comment
Automated security patching			

Question 4g Do you have email filtering effectively blocking spam, phishing and malware risks?

Element	Rating 1-3	Cost estimate	Comment
E mail filtering			

Question 4h Do you have an effective network access control system?

Element	Rating 1-3	Cost estimate	Comment
Network access control			

Note: Rating 1 = a fully integrated system; rating 2 = a system which covers some aspects of access management; rating 3 = no system.

Question 4i How well accredited are you?

Element	Rating 1-3	Cost estimate	Comment
Cyber security accreditation.			

Note: Rating 1 = ISO27001 and/or Cyber Essentials +; rating 2 = Cyber Essentials, rating 3 = No cyber security accreditation.

Question 4j How effectively do you use multi factor authentication?

Element	Rating 1-3	Cost estimate	Comment
Multi factor authentication			

Note: Rating 1 = As required within the College; rating 2 = key systems only; rating 3 = not used.

Section 5: Storage

Question 5a How effective is your staff file storage?

Element	Rating 1-3	Cost estimate	Comment
Multi factor authentication			

Note: Rating 1 = Mixture of onsite and cloud which suits requirements; rating 2 = cloud only; rating 3 = onsite only

Question 5b Do you use the following for student file storage?

Element	Rating 1-3	Cost estimate	Comment
Multi factor authentication			

Note: Rating 1 = Mixture of onsite and cloud which suits requirements; rating 2 = cloud only; rating 3 = onsite only

Question 5c How effective are your primary email and cloud storage solutions?

Element	Rating 1-3	Cost estimate	Comment
Primary email storage			

Note: Rating 1 = Office 365; rating 2 = Google suite; rating 3 = Onsite only

Question 5d Do you have effective data backups from Office 365 or Google applications?

Element	Rating 1-3	Cost estimate	Comment
Data back ups			

Question 5e Do you have effective cloud based backups?

Element	Rating 1-3	Cost estimate	Comment
Cloud based back ups			

Note: Rating 1 = have all cloud based backups; rating 2 = have a mixture of cloud and local backup; rating 3 = local backups only.

Section 6: Systems

Question 6a How effective is the infrastructure supporting your MIS system?

Element	Rating 1-3	Cost estimate	Comment
MIS infrastructure			

Note: Rating 1 = Via onsite servers; rating 2 = cloud based (software as a service); rating 3 = hosted.

Question 6b How effective is your MIS systems in terms of performance and functionality?

Element	Rating 1-3	Cost estimate	Comment
MIS performance			

Question 6c How effective is the infrastructure supporting your HR / payroll system?

Element	Rating 1-3	Cost estimate	Comment
HR/payroll infrastructure			

Note: Rating 1 = Via onsite servers; rating 2 = cloud based (software as a service); rating 3 = hosted.

Question 6d How effective is your HR/payroll systems in terms of performance and functionality?

Element	Rating 1-3	Cost estimate	Comment
HR/payroll performance			

Question 6e How effective is your finance system infrastructure

Element	Rating 1-3	Cost estimate	Comment
Finance system infrastructure			

Note: Rating 1 = Via onsite servers; rating 2 = cloud based (software as a service); rating 3 = hosted.

Question 6f How effective is your finance system in terms of performance and functionality?

Element	Rating 1-3	Cost estimate	Comment
HR/payroll performance			

Question 6g How effective is your virtual learning environment (VLE) infrastructure?

Element	Rating 1-3	Cost estimate	Comment
VLE infrastructure			

Note: Rating 1 = Via onsite servers; rating 2 = cloud based (software as a service); rating 3 = hosted.

Question 6h How effective is your VLE in terms of performance and functionality?

Element	Rating 1-3	Cost estimate	Comment
VLE performance			

Section 7 Access

Question 7a How effective is your provision and quality of services such as file storage, email and information systems that staff can access from outside the college?

Element	Rating 1-3	Cost estimate	Comment
Outside College Access			

Note: Rating 1 = The correct security is in place and the College fully supports BYOD for students; rating 2 = Students can access the college wireless and gain access to internet based college resources; rating 3=Security concerns and/or wireless performancelimits BYOD at the moment.

Question 7b How effective are bring your own device (BYOD) operations?

Element	Rating 1-3	Cost estimate	Comment
BYOD			

Note: Rating 1 = The correct security is in place and the College fully supports BYOD for students; rating 2 = Students can access the college wireless and gain access to internet based college resources; rating 3=Security concerns and/or wireless performancelimits BYOD at the moment.

Note: Cost estimates for question 4h may also relate to this question.

Section 8: End Devices

Question 8a How fit for purpose are end devices used by students?

Element	Rating 1-3	Cost estimate	Comment
End Devices - Student			

Note: Rating 1 = All end devices are fit for purpose; rating 2 = A small minority of devices are unfit for purpose; rating 3 = a significant amount of the estate is unfit for purpose.

Note: Please indicate the quantity and percentage of the total for this category in the comments box.

Question 8b How fit for purpose are end devices used by curriculum staff (lecturers, assessors, trainers and LSA's)?

Element	Rating 1-3	Cost estimate	Comment
End Devices – Curriculum Staff			

Note: Rating 1 = All devices are fit for purpose; rating 2 = a small minority of devices are unfit for purpose; rating 3 = a significant amount of the estate is unfit for purpose.

Note: Please indicate the quantity and percentage of the total for this category in the comments box.

Question 8c How fit for purpose are end devices used by support staff.

Element	Rating 1-3	Cost estimate	Comment
End Devices – Business Support Staff			

Note: Rating 1 All devices are fit for purpose; rating 2 = a small minority of devices are unfit for purpose; rating 3 = a significant amount of the estate is unfit for purpose.

Note: Please indicate the quantity and percentage of the total for this category in the comments box.

Section 9: Commercial Activity

Question 9a Does your college have commercial or specific curriculum activity which requires separate connectivity?

Element	Y/N	Comment
Microsoft Academy		
Cisco Networking		
Network curriculum		
Cyber security		
Commercial networking courses		
Other		

Note: The connections themselves should have been detailed in section 1b.

Part 2: Curriculum Applications

Guidance for completing Part 2 of this survey.

Part 2 of this survey follows a similar pattern to part one but is focused on curriculum applications of digital technologies.

Again on each question where you assess your college's capability as rating 2 or rating 3, you are invited to provide:

- a high level estimate of the cost of upgrading to rating 1 (please include VAT in your cost estimate).
- a brief comment on why you have assessed your capability as rating 2 or rating 3 and the substantive items in your cost estimate.

It is not anticipated that every college will need to complete each section between sections 2 – 7.

Section 1: College Wide Digital Strategy

Question 1a What priority would you give each of these areas when investing in educational technology?

Element	Rating 1-3
Curriculum planning (including timetabling, schemes of work and lessons)	
Teaching (resources, face to face, blended, on-line)	
Assessment (initial, formative, summative, plagiarism, feedback)	
Support (guidance, employability, well-being, SEND)	
Communication (website, social media, intranet, engagement with learners and parents)	
CPD (self-assessment, digital skills development, research and collaboration)	

Note: Rating 1 = high priority; rating 2 = medium priority; rating 3 = low priority.

Question 1b How effective is your college's use of emerging technologies in general curriculum applications?

Element	Rating 1-3	Cost estimate	Comment
Augmented reality			
Virtual reality			
Assistive technology			
Learner analytics			
Artificial Intelligence			
Industry digital innovations			

Note: Rating 1 = substantial and effective use; rating 2 = limited use 3 = not using at all.

Section 2: Meeting The Needs Of Digital/Computing Industries

Question 2a Is your college strategically planning to develop the capacity to meet the future advanced and higher technical needs of the digital/computing industry?

Yes	
No	

If yes, please answer question 2b below. If no, please move onto question 3.

Question 2b How would you rate your college's current capability to support advanced and higher technical skills in digital/computing industry in the following areas?

Element	Rating 1-3	Cost estimate	Comment
Cyber security			
5G and digital infrastructure			
Networking			
Games design			
Creative media including animation and 3D modelling			
Big Data Analytics			
AI and Machine Learning			
Virtual, Augmented and Mixed Reality			
Assistive Technologies			
Research and Data analysis			
Robotics and Control Systems			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current capability

Section3: Meeting The Needs Of The Construction Industry

Question 3a Is your college strategically planning to develop the capacity to meet the future advanced and higher technical needs of the construction industry?

Yes	
No	

If yes, please answer question 3b below. If no, please move onto question 4.

Question 3b How would you rate your college's current capability to support advanced and higher technical skills for the construction industry in the following areas?

Element	Rating 1-3	Cost estimate	Comment
BIM			
Drone technologies			
Artificial Intelligence			
Virtual, Augmented and Mixed Reality			
Assistive technologies			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current capability

Section4: Meeting The Needs Of The Advanced Manufacturing Industry

Question 4a Is your college strategically planning to develop the capacity to meet the future advanced and higher technical needs of the advanced manufacturing industry?

Yes	
No	

If yes, please answer question 4b below. If no, please move onto question 5.

Question 4b How would you rate your college's current capability to support advanced and higher technical skills for the advanced manufacturing industry in the following areas?

Element	Rating 1-3	Cost estimate	Comment
CNC Machinery			
High specification devices			
Robotic technologies			
Artificial Intelligence			
Virtual, Augmented and Mixed Reality			
3D Scanners/printers/cutters			
Assistive technologies			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current capability

Section 5: Meeting The Needs Of The Business And Professional Industry

Question 5a Is your college strategically planning to develop the capacity to meet the future advanced and higher technical needs of business and professional services?

Yes	
No	

If yes, please answer question 5b below. If no, please move onto question 6.

Question 5b How would you rate your college's current capability to support advanced and higher technical skills for business and professional services in the following areas?

Element	Rating 1-3	Cost estimate	Comment
Virtual Training Simulation			
Artificial Intelligence Simulation Equipment			
AI/Data analytics			
Virtual, Augmented and Mixed Reality			
Assistive technologies			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current capability

Section 6: Meeting The Needs Of The Health & Life Sciences Industry

Question 6a Is your college strategically planning to develop the capacity to meet the future advanced and higher technical needs of the health and life science industry?

Yes	
No	

If yes, please answer question 6b below. If no, please move onto question 7.

Question 6b How would you rate your college's current capability to support advanced and higher technical skills for the health and life science in the following areas?

Element	Rating 1-3	Cost estimate	Comment
Virtual Training Simulation			
Artificial Intelligence Simulation Equipment			
AI/Data analytics			
Virtual, Augmented and Mixed Reality			
Assistive technologies			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current capability

Section 7: Meeting The Needs Of Unemployed Students (Employability)

Question 7a Is your college strategically planning to develop the capacity to support employability provision?

Yes	
No	

If yes, please answer question 7b below. If no, the survey is complete.

Question 7b How would you rate your college's current capability to use digital technologies to support employability provision in these ways?

Element	Rating 1-3	Cost estimate	Comment
Virtual Training Simulation			
Virtual, Augmented and Mixed Reality			
Student devices			
Assistive technologies			

Note: Rating 1 = highly capable; rating 2 = some capability; rating 3= low or no current

Appendix 5 Members of *Colleges West Midlands* Digital Reference Group

Jo Shirley	Birmingham Metropolitan College
Conrad Taylor	City of Wolverhampton College
Gemma Knott	Coventry College
Judy Kay	Coventry College
Neil Marsh	Dudley College of Technology
Bobby Burchill	Dudley College of Technology
Andy Gazey	Fircroft College
Michael Conway-Jones	Fircroft College
James Duckhouse	Heart of Worcester College
Simon Shackleton	Hereward College
Patrick O'Donohue	Joseph Chamberlain College
Randeep Sami	Solihull College and University Centre
Jacquie Deane	South and City College Birmingham
Jason Whitaker	South Staffordshire College
Ed Bird	University College Birmingham
Jayne Holt	Walsall College

Appendix 6 Detailed list of maintenance and repurposing projects

College	Campus	Item	Cost	Total
BMet College	Matthew Boulton	Redevelopment and configuration of existing space to create facilities to extend provision in priority areas and skills gaps	£40,000	
	James Watt	Reconfiguration and conversion of existing space to create facilities to extend provision in priority areas and skills gaps	£2,630,000	
		Roof Replacement.	£1,170,000	
		Replacement of all single glazed windows.	£723,600	
		Rewire, new distribution and replacement lighting.	£247,200	
		Replacement of distribution pipework.	£340,800	
	Erdington Skills Centre	Electrical Distribution and Lighting Replacement.	£51,600	
		Air Conditioning Replacement.	£51,600	
	Sutton Coldfield	Redevelopment and configuration of exisiting space to create facilities to extend provision in priority areas and skills gaps	£320,000	
		Redevelopment of Sports Hall,inclusion of a gym area and redevelopment of the theatre	£180,000	
	Matthew Boulton	Redevelopment of Sports Hall,inclusion of a gym area and redevelopment of the theatre	£65,000	
		Fire Alarm and Detection replacement.	£165,600	
	Sutton Coldfield	Roof Replacement.	£1,170,000	
		Replacement of all single glazed windows.	£723,600	
		Rewire, new distribution and replacement lighting.	£247,200	
		Replacement of distribution pipework.	£340,800	£8,467,000
Burton & South Derbyshire College		LED lighting and sensors	£450,000	
		New boilers, radiators and thermostatic valves	£100,000	
		Sewage pipes replacement	£50,000	£600,000
City of Wolverhampton College		Replacement of Asbestos Roof	£200,000	
		Boiler Upgrade	£300,000	
		External Works - Car park resurfacing	£100,000	£600,000
Coventry College	Henley	Flat roof replacement Sports, Exams, Ground floor areas	£450,000	
		L.V Distribution boards	£100,000	
		Heating network in parts due to age/layout	£50,000	
	City	Passenger Lifts - near end of life	£400,000	
		HVAC, DN100 pipework porous inc. AHU works	£150,000	£1,150,000

College	Campus	Item	Cost	Total
Dudley College of Technology	Broadway	Re-roofing all flat roofs (end of life) following report	£1,400,000	
		Pitched roof repairs, renewel of valley gutter and replacement of defective cast iron gutters/ downpipes	£198,000	
		replacement of boilers in G&H Blocks	£75,000	
		Replace corroded pipework, defective zone and radiator valves to the main block A, B & C (Provisonal sum to be based on pipe report).	£180,000	
		car park and external works repairs.	£35,000	
		replacement Disability lift A-C floor and main hall	£110,000	
		replacement defective/failed window units	£300,000	
		Upgrade of fire alarm systems	£60,000	
		Replacement corridor floor finishes	£215,000	
		Replacement of link bridge	£50,000	
		upgrade of defective toilet accommodation and provision of suitable facilties	£450,000	
		Replacement of the 'end of life' boiler pumps and inverters	£35,000	
		Replacement and upgrade of fire doors	£60,000	
		Alter plumbing systems to remove deadlegs following report	£30,000	
		Replace end of life laundry washing machines and dryers.	£30,000	
		Replace end of life main kitchen machines and equipment	£65,000	
		Replace defective and 'end of life' automatic door closers	£48,000	
	Evolve	Replacement of all roof pipework insulation and reinstate defective areas of ductwork wrapping/ Insulation	£150,000	
		Replace internal glazing to atrium	£225,000	
		Renew paintwork to external steelwork	£25,000	
		Repair roof leak and damage to sports hall floor	£50,000	
		Replacement of 6no gas heat pumps with electric	£278,000	
		Alter high level steel gantry locations and Theatre air baffles to reduce noise	£60,000	
		Alter main reception/entrance and method of heating to improve environment	£75,000	
	CAT Centre	CAT Centre (unit 5) Replace boilers	£85,000	
		CAT Centre (unit 5) Major lift works	£135,000	
		CAT Centre (unit 5) Replace inoperative chiller plant, pumps, valves	£264,000	
		CAT Centre (unit 5) Replace all defective heater panels and valves, alter pipework as necessary and comission to the BMS system	£210,000	
		CAT Centre (unit 5) Alter level 3 heating/cooling and fresh air and builders works to computer rooms in order to provide a suitable environment	£85,000	
		CAT Centre (Unit 4) Replace inoperable and defective high level heaters to workshop together with boilers	£40,000	
	3G Pitch Complex	3G Sports facility - Replace the entire playing surface	£300,000	
		3G Sports facility - Replace the perimeter fence to the main road	£21,000	
	AdvanceTech (Waltham Forest)	Waltham Forest - Upgrade of plant, pumps, valves and inverters	£132,000	
	Wolverhampton Street	Wolverhampton Street - Major lift works	£135,000	
		Wolverhampton Street - External joinery replacement and replacement glazing to the link	£45,000	
		Wolverhampton Street - Replacement heating to the workshop	£30,000	
	Art & Design Centre Brierley Hill	ADC - Replacement 5no. pumps and inverters, replacement valves and actuators	£22,000	
	All sites	Fifty percent of sites - Comprehensive external and internal redecoration	£594,000	
	Castle View Sports Pitches	Castle view - Replace the defective perimeter fence to sports ground	£65,000	
	12 The Broadway	Refurbish/extend and alter No 12 The Broadway to provide suitable accommodation.	£395,000	£6,762,000

Appendix 6 Detailed list of maintenance and repurposing projects continued

College	Campus	Item	Cost	Total
Fircroft College	Main building	Main Building (offices/accommodation/dining/common areas) new ventilation including kitchen canopy	£31,200	
		Main Building (offices/accommodation/dining/common areas) New radiators and pipework	£62,400	
		Main Building (offices/accommodation/dining/common areas) Calorifiers (Direct & Indirect)	£23,400	
	Oak Tree	Oak Tree (Teaching): New heating system	£23,400	
	Primrose Hill	Primrose Hill (Residential student accommodation): Lighting	£6,240	
		Primrose Hill (Residential student accommodation): ventilation	£15,600	
		Primrose Hill (Residential student accommodation): Calorifiers & Thermal sources	£46,800	
	Former Principals	Former Principals House (to be redeveloped as additional accommodation): Calorifiers & Thermal sources & ancillary plant	£16,380	
	Whole site	Whole site: Drainage	£93,600	
		External: teaching sheds/canopies: improve/replace	£4,680	
		Significant development of grounds to create additional parking; learning & teaching spaces; vehicle charging points; sanctuary spaces; student meeting areas; new entrance to improve the experience of visitors.	£750,000	
		Installation of ground source heat pumps to heat various buildings across the site thus reduce hydrocarbon consumption	£125,000	
		Development of college rear estates (Utilising current land to enable embidding of rural and sustainable learning into cross curriculum programme)	£300,000	
	Breeze Hall	Breeze Hall (teaching accommodation): major refurbishment to increase teaching space and reduce carbon footprint.	£1,500,000	
	Whole site	Installation of large solar PV array to generate electricity with the aim of moving towards being a net exporter.	£150,000	
		Installation of grey water recycling system to capture ground water (thus minimise flooding) and reuse for toilets	£100,000	
		Removal of asbestos in vulnerable locations	£25,000	£3,273,700
Halesowen College		Remodel car park, external landscaping and bus lay by at Whittingham	£1,925,000	
		Remodel student social place	£1,100,000	
		Replace IWB	£500,000	
		Replacement lifts to ensure full accessibility; block 1,3,7,6,8,9	£534,000	
		Boiler replacement block 9	£95,000	
		Block 1 window replacement/refurb/replacment roof/frontage	£875,000	
		Replacement fire and intruder alarms	£267,000	
		Block 6 replace roof	£225,000	
		Placement heating and ventilation at SH	£315,000	
		Replacement soffits	£85,000	
		SH refurbish rear stairwell and roof	£275,000	£6,196,000

College	Campus	Item	Cost	Total
Heart of Worcester College	All Saints	Roof and Skylights	£230,000	
		Heating System - assumes new piping, zonal controls, new radiators, removal of current system (full Air Con likely more expensive)	£350,000	
		Electrical Services (Distribution Boards)	£40,000	
		Emergency Lighting	£40,000	
		Boilers	£40,000	
		Hot Water Supply	£36,000	
		External Windows (Assume complete replacement with double glazing). Redecoration of windows and cills not a real option	£400,000	
	St Andrews	Electrical Services	£20,000	
		Emergency Lighting	£25,000	
		External Lighting	£10,000	
		Heating System - assumes new piping, zonal controls, new radiators, removal of current system (full Air Con likely to be more expensive)	£200,000	
	St Wulstans	Flat Roof	£125,000	
		Drains and Gutters (assumes all plastic - may be problem due to heritage status of building)	£25,000	
		Emergency Lighting	£25,000	
		Air Conditioning (12 units in total)	£60,000	
		Heating System - assumes new piping, zonal controls, new radiators, removal of current system (full Air Con alternative would likely be more expensive)	£300,000	
		External Sash Windows and Doors (this is refurbishment of windows incl new secondary glazing). Replacement of solid sash windows would cost £380k	£180,000	
	Malvern Construction	Internal Lighting	£60,000	
		External Lighting	£6,000	
		Front Car Park Relaying or Significant repair	£10,000	
		Workshop Courtyard relaying or significant repair	£15,000	
	Alliance House	Floors and Stairs Finishes	£30,000	
		Emergency Lights	£25,000	
		Lift (currently out of action)	£35,000	
		External Structures incl lean to and tent	£590,000	
	Peakman	Mechanical Services Anciillary Plant (not clear what this should include ex Surveyor report - complex electronics)	£100,000	
		Heating System	£300,000	
		Lift	£35,000	
	Archer	Flat Roof	£85,000	
		External Lighting	£10,000	
		Air Conditioning/Mechanical Services	£40,000	
	Gilbert/Halcyon	Building Management System	£20,000	
		Lift (Keighley Lift unserviceable, running with just Thyssen Lift)	£40,000	
	Bromsgrove - A	Pitched Metal Roof	£70,000	£3,577,000
Hereward College		Heating Systems	£75,000	
		Paths and Roads	£50,000	
		Roofing	£50,000	
		Window Replacement	£75,000	£250,000
Joseph Chamberlain College		Internal decorations	£170,000	
		Student toilet full refurbishment	£120,000	
		Pipework	£20,000	
		Inverter replacement	£12,000	
		Cooling Units	£21,000	£343,000
Kidderminster College		Removal of asbestos in vulnerable locations	£25,000	
		Boilers & Heating	£120,000	
		Air conditioning system	£150,000	
		Building Management System	£50,000	£345,000

Appendix 6 Detailed list of maintenance and repurposing projects continued

College	Campus	Item	Cost	Total
National Advanced Transport & Infrastructure College				
North Warwickshire & South Leicestershire College		Relocation of Inspire provision	£24,310	
		Create an inspire dedicated space at our South Wigston campus	£24,310	
		Re-provision of the engineering Workshops: allowance for moving the facilities in the demolished section to space vacated by Inspire	£481,000	
		Learning Hubs for Blended learning	£66,400	
		Heating refurbishment and BMS Control	£250,000	
		Lift refurbishment	£100,000	
		Fire alarm upgrade	£50,000	
		Roof Refurbishments - Art Block	£50,000	£1,046,020
Sandwell College	Central Saint	Heating Plant	£180,000	
	Central Campus	Chilling Plant - Air Handling Unit	£505,000	
		Combined Heat Power Source	£650,000	
	Sandwell Engineering	Asbestos Treatment (internal and external to workshop)	£45,000	
		Complete Electrical Rewire (of workshop space)	£35,000	
		Gas pipe reinstallation and mains connection (with groundworks)	£110,000	
	Cadbury Colllege	Complete rewire of electrics in North, South, East and West Blocks	£285,000	
		Replacement of all flat-roofs right across estate, including movement of plant machinary from roof and relocation	£1,200,000	£3,010,000
Solihull College & University Centre		Air conditioning/ventilation plant	£291,157	
		Lifts	£529,932	
		Boiler plant	£53,571	£874,660

College	Campus	Item	Cost	Total
South and City College Birmingham		Replacement of single membrane flat roofs to Tech Bldg	£130,000	
		Replacement of ext roller shutters & doors to Tech Bldg	£200,000	
		Replacement of boilers, pumps, controls, etc to Tech Bldg	£105,000	
		Replacement of AC units to Tech Bldg	£120,000	
		Replacement of AHUs to Ford Bldg	£160,000	
		Upgrade of fluorescent lighting to LED to both buildings	£330,000	
		Upgrade of CCTV & security alarm to campus	£75,000	
		Upgrade of boundary fencing to campus	£35,000	
		Replacement of heating & HW pumps, controls, etc	£130,000	
		Upgrade of fluorescent lighting to LED to both buildings	£50,000	
		Replacement of single membrane flat roofs to main Bldg	£605,000	
		Replacement of windows to St Michael's Bldg	£265,000	
		Replacement of ext roller shutter to main building	£10,000	
		Replacement of Lifts to campus	£530,000	
		Replacement of boilers, pumps, controls, etc to campus	£200,000	
		Replacement of AHUs to main Building	£130,000	
		Upgrade of fluorescent lighting to LED to all buildings	£265,000	
		Upgrade of CCTV & security alarm to campus	£45,000	
		Replacement of windows to front building	£45,000	
		Replacement of boilers, pumps, controls, etc to both bldgs	£65,000	
		Upgrade of fluorescent lighting to LED to all buildings	£30,000	
		Replacement & upgrade of flat roof covering to Block A	£375,000	
		Repairs to reinforced concrete structural frame to Block C	£300,000	
		Removal of remaining ACM to Blocks A, B & C	£35,000	
		Replacement of pitched roof covering to Block D, incl ACM	£365,000	
		Replacement of rain screen cladding to Block A	£840,000	
		Resurfacing of external hard surfaces	£160,000	
		Upgrade of biomass boiler installation to Blocks B & D	£100,000	
		Replacement of AC units	£130,000	
		Replacement of back up boilers to Blocks A & B	£130,000	
		Replacement of Electrical DBs & switchgear	£105,000	
		Replacement of lift to Block A	£90,000	
		Upgrade of fluorescent lighting to LED to all buildings	£190,000	
		Replacement of Block 2 roof coverings & ACM insulation	£925,000	
		Replacement of Block 3 (1890s) pitched roof covering	£790,000	
		Replacement of cladding to Block 3 (1960s)	£580,000	
		Replacement of external fire escape to Block 3	£25,000	
		Replacement of windows & ext doors Block 3 (1890s)	£260,000	
		Resurfacing of external hard surfaces	£150,000	
		Rewiring & replacement of electrical DBs & switchgear	£120,000	
		Replacement of Lift to Block 2	£110,000	
		Upgrade of biomass boiler installation to Block 2	£50,000	
		Replacement of AC units	£60,000	
		Replacement of back up boilers to Blocks 2 & 3	£130,000	
		Removal of remaining ACM to Blocks 2 & 3	£50,000	
		Upgrade of fluorescent lighting to LED to all buildings	£145,000	
		Upgrade of telephony system	£125,000	
		Kitchen appliances	£250,000	
		Electronic till systems	£25,000	£10,140,000

Appendix 6 Detailed list of maintenance and repurposing projects continued

College	Campus	Item	Cost	Total
South Staffordshire College	Rodbaston, Lichfield, Cannock	CCTV replacement	£135,000.00	
		Replacement LED lighting	£147,200.00	
	Cannock	Heating and Ventilation Upgrade/Replacements	£145,400.00	
		External Construction "Greenhouses"	£375,000.00	
	Lichfield	Replacement flat membrane roof	£425,800.00	
		Car Park Repairs and Layout	£255,000.00	
		Heating and Ventilation Upgrade/Replacements	£128,000.00	
	Rodbaston	Approach Drives - full resurface	£187,300.00	£1,798,700
Telford College		Replacement cold water tank, A and B Block, and associated reconfiguration works.	£35,000	
		Relocation and refurbishment of curriculum area.	£140,000	
		Relocation of support services, and student services in to vacated area above.	£70,000	
		Replacement windows and glazing.	£145,000	
		Resurface of existing sports dome playing area, 3G.	£75,000	
		Removal of temporary building and reinstatement works.	£40,000	
		Lighting Upgrade - to LED fittings	£20,000	
		Lighting Upgrade - to LED fittings	£60,000	
		Replacement boilers in E Block, Orange Tree, and water heater in S Block.	£35,000	£620,000
University College Birmingham	Summer Row	Plant / Boilers	£925,000	
		Relocation of Sports Therapy clinics	£1,557,000	
		Relocation of make up suite	£906,000	
		Relocation of Hair salon	£909,000	
		Relocation of Beauty Therapy salon	£301,000	
		Relocation of Health and Social Care Hub	£215,000	
		Relocation of Gym	£472,000	
		Development of English and maths study area	£371,000	
		Development of FE Library/study area	£515,000	£6,171,000
Walsall College	Wisemore	Chiller unit replacement in Wisemore Campus	£180,000	
	Wisemore & Green Lane	Hot water boiler replacement (Wisemore and Green Lane)	£40,000	
	Wisemore	Main computer server room temperture control replacement	£30,000	
		AHU Heater/Cooling coil and AC units replacements	£145,000	£395,000

College	Campus	Item	Cost	Total
Warwickshire College Group	Royal Leamington Spa	Refurbish S Block Lift	£75,000	
		Refurbish Centralia Lift	£75,000	
		A & B Block flat roof replacement	£200,000	
		Sports Hall Access Improvements	£120,000	
	Pershore	Rewire Avonbank building	£75,000	
		Re-roof Avonbank	£100,000	
		Resurface Roadways	£50,000	
		Replace Refectory roof and fascia	£22,000	
		Removal of old Boiler house and plant	£40,000	
	Moreton Morrell	Cotswold Court, building rewire and re-roof	£350,000	
		Installation of expansion of CCTV systems	£55,000	
		Resurfacing of roads	£65,000	
		Water reservoir replacement/refurbishment	£160,000	
		Replacement heating system	£60,000	
		Replace roof to Garland Stables	£50,000	
	Trident	Door Enlargement Motor Vehicle Workshop	£50,000	£1,547,000
				£57,166,080

Appendix 7 Alignment of *Colleges West Midlands* proposals with West Midlands Combined Authority T level Investment Taskforce Paper

	West Midlands Combined Authority	Proposed Investment	Colleges West Midlands	Proposed Investment
Construction	Single heavy duty site prep, bringing facilities to site and machine operative Specialist plant (earth moving etc.) equipment in new large dedicated training centre – ideally at or adjacent to major building sites	£20m	Expansion of the Plant Industry Provision to 5 sites, increase capacity, range and incorporate new learning technologies, including new investment in sites, plant equipment and virtual learning resources across 5 centres to deliver a comprehensive civil engineering solution for infrastructure projects such as HS2.	£6.6m
	Specialist erection, piling and drilling equipment scaffolding in new large dedicated training centre – ideally at or adjacent to major building sites	£15m	Add to existing Plant provision with up to 5 colleges centres recruiting workforce for specialist erection, piling and drilling equipment - ideally located close to all major building sites across the region	£1m
	Modern methods of construction specialist facility linked to MOBIE	£5m	Investment to support development of higher level Advanced Design courses across number of colleges linked to modern methods of construction specialist facility linked to MOBIE	£5m
	Repurposing of college space to build additional workshops including digital technologies – BIM, CAD and off site modular build	£4.5m	Investment to support development of higher level Advanced Design courses across number of colleges, Repurposing of college space to build additional workshops including digital technologies – BIM, CAD and off site modular build	£4.5m
			Further develop scaffolding, roofing and introduce Steelwork, concrete formwork solutions across in 3 centres across the region	£3m
Engineering and Manufacturing	New transport technologies, electric and driverless vehicle technologies, battery technologies - Specialist provision in new dedicated training centre specifically targeted at level 3-4 full time and advanced apprenticeship provision Manufacturing Apprenticeship Centre, Ansty Park. IOTs Dudley/ Birmingham/ Solihull, Very light Rail Innovation Centre (WMG).	£20m	New transport technologies, including electric, driverless vehicle technologies, battery technologies Rail (HS2) and Light Rail (Metro) targeted at level 3-4 full time and advanced apprenticeship provision.	£11.7m
	Factory in a faculty - 3 x 1000 sqm simulator environment plus kit – robotics, track and equipment that can be reconfigured and designed to enable innovation of process and design	£10.5m	Polymer, Aviation and advanced manufacturing in robotics, track and equipment that can be reconfigured and designed to enable innovation of process and design	£27m
Digital technologies	Digital – specialist AI, software development, cyber hub with specialist facilities in each college – live lab capability with secure private networks and data storage, firewall and penetration technology to industry specifications comparable to fintech and medical data security.	£5m	Digital – specialist AI, software development, cyber hub with specialist facilities in each college – live lab capability with secure private networks and data storage, firewall and penetration technology to industry specifications comparable to fintech and medical data security.	£5m
	Infrastructure development to provide adequate digital platform across colleges	£3m	Infrastructure development to provide adequate digital platform across colleges	£3m
Science and health	3 x lab tech and med tech environments with robotics, programmable medical and lab equipment	£2m	Proposing multiple lab tech and med tech environments with robotics, programmable medical and lab equipment in response to Covid-19 and NHS investment	£22.14m

Appendix 8 Breakdown of costs in respect of digital infrastructure

	CONNECTIVITY					INTERNAL. INFRASTRUCTURE											WIFI	
	1a Primaay Connection	1b Addnl Connection	1c Campus Connectivity	1d Addnl Connections	QUESTION 1 SUBTOTAL	Internal Connections	Local Area Network	Network Management Tools	Servers	Storage (SAN,NAS)	Computer Resources	Backup Devices	Telephony	CCTV	Access Control	QUESTION 2 SUBTOTAL	3a Current Wi-fi Provn	QUESTION 3 SUBTOTAL
	£,000	£,000	£,000	£,000	£'000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£'000	£,000	£'000
Birmingham Metropolitan College	0	0	0	0	£0	0	252	0	0	0	0	0	0	0	0	£252	10	£10
Burton and South Derbyshire College	36	N/A	N/A	2	£38	20	100	0	250	100	250	0	0	15	0	£735	10	£10
City Of Wolverhampton	17	16	23	0	£56	0	50	0	60	100	100	60	25	50	100	£545	200	£200
Coventry College	8	4	1	5	£18	300	150	40	72	0	705	50	50	56	40	£1,463	15	£15
Dudley College of Technology	50	50	200	200	£500	30	200	20	200	200	100	100	70	100	250	£1,270	100	£100
Fircroft College	50	0	0	25	£75	0	0	10	50	20	100	10	35	40	100	£365	36	£36
Halesowen College	50	30	15	12	£107	15	32	0	20	30	0	10	20	0	20	£147	0	£0
Heart of Worcestershire College	74	10	0	0	£84	0	250	0	45	45	N/A	50	0	0	0	£390	0	£0
Hereward College	5	17	0	0	£21	6	7	20	8	30	121	0	0	10	26	£228	11	£11
Joseph Chamberlain College	5	5	2	2	£14	15	46	0	20	0	100	0	15	8	10	£214	180	£180
Kidderminster College	0	0	0	0	£0	0	20	0	0	0	0	0	0	37	90	£147	0	£0
North Warwickshire & South Leicestershire	0	6	19	50	£75	811	1363	10	300	55	0	136	15	44	66	£2,800	1002	£1,002
Sandwell College	85	86	40	0	£211	84	100	25	110	80	20	36	50	60	258	£823	15	£15
Solihull College & Universiy Centre	0	0	0	0	£0	0	90	0	60	0	0	0	50	50	10	£260	50	£50
South & City College Birmingham	11	11	80	0	£102	100	600	20	435	200	4350	50	125	120	100	£6,100	500	£500
South Staffordshire College	15	45	0	60	£120	15	400	0	80	40	350	15	20	200	200	£1,320	0	£0
Telford College	0	19	0	0	£19	0	500	10	100	750	60	0	0	0	0	£1,420	30	£30
University College Birmingham	8	0	0	0	£8	5	12	3	15	40	21	0	0	0	0	£96	10	£10
Walsall College	15	15	21	0	£51	0	150	30	250	0	1250	20	100	80	80	£1,960	120	£120
Warwickshire College Group	25	225	22	85	£357	75	360	0	100	150	250	0	0	150	150	£1,235	360	£360
TOTAL	454	539	423	441	£1,856	1476	4682	188	2175	1840	7777	537	575	1020	1500	£21,770	2649	£2,649

Appendix 8 Breakdown of costs in respect of digital infrastructure continued

	SECURITY											STORAGE					
	4a end dev operating sys	4b end dev effectively deploy	4c Server Operating Systems	4d perimeter firewall or UTM	4e Web Content Filtering	4f Automated Security Patch	4g email filtering	4h network access control	4i Accreditation	4j MultiFactor Authentication	QUESTION 4 SUBTOTAL	5a Staff file storage	5b Use for staff file storage	5c email & cloud storage	5d data backups	5e cloud based backups	QUESTION 5 SUBTOTAL
	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000
Birmingham Metropolitan College	841	0	0	100	0	0	0	0	20	71	£1,032	71	71	0	0	0	£142
Burton and South Derbyshire College	5	10	50	0	25	0	0	0	1	0	£91	0	0	18	0	0	£18
City Of Wolverhampton	0	0	0	0	0	0	0	0	0	0	£0	0	0	0	0	0	£0
Coventry College	40	30	0	25	75	12	27	50	5	5	£269	20	20	0	60	50	£150
Dudley College of Technology	50	150	150	100	80	10	50	150	10	50	£800	100	100	0	100	50	£350
Fircroft College	0	20	20	20	15	0	10	12	20	0	£117	0	0	0	0	0	£0
Halesowen College	0	0	0	0	0	0	0	0	0	0	£0	0	0	0	0	0	£0
Heart of Worcestershire College	120	0	0	50	0	0	0	0	25	0	£195	0	0	0	0	0	£0
Hereward College	0	0	0	0	0	0	0	0	15	0	£15	0	9	0	0	40	£49
Joseph Chamberlain College	100	0	3	75	0	0	0	11	2	3	£194	1	0	0	30	20	£51
Kidderminster College	0	0	0	0	0	0	0	0	0	0	£0	0	0	0	0	10	£10
North Warwickshire & South Leicestershire	0	33	0	24	0	0	6	0	0	0	£63	65	65	65	23	0	£218
Sandwell College	0	0	70	0	35	0	0	10	15	18	£148	0	0	25	10	75	£110
Solihull College & Universiy Centre	0	10	0	75	20	10	0	0	15	0	£130	10	0	0	0	0	£10
South & City College Birmingham	120	0	50	30	30	50	120	100	10	50	£560	50	50	120	0	50	£270
South Staffordshire College	0	10	0	0	8	0	0	25	10	0	£53	0	0	0	0	0	£0
Telford College	0	0	0	0	10	0	0	0	0	0	£10	0	0	0	0	0	£0
University College Birmingham	7	0	0	0	0	0	0	0	9	0	£16	5	0	0	5	5	£15
Walsall College	0	0	0	9	0	0	3	0	10	32	£54	0	0	0	12	0	£12
Warwickshire College Group	100	0	10	250	75	100	0	250	75	30	£890	50	50	0	150	0	£250
TOTAL	1383	263	353	758	373	182	216	608	242	259	£4,637	372	365	228	390	300	£1,655

	SYSTEMS									ACCESS			END DEVICES				SUBTOTAL
	6a Support MIS System	6b MIS Performance	6c MIS Support HR/Payroll	6d Performance HR/Payroll	6e Finance System	6f Finance performance	6g VLE	6h VLE Pefromance	QUESTION 6 SUBTOTAL	7a Outside Access	7b BYOD	QUESTION 7 SUBTOTAL	8a End devices by students	8b End devices curric staff	8c End devices support staff	QUESTION 8 SUBTOTAL	
	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000
Birmingham Metropolitan College	0	0	0	0	0	0	7	7	£14	0	0	£0	651	20	170	£841	£2,291
Burton and South Derbyshire College	0	0	0	15	0	0	0	0	£15	0	0	£0	450	0	50	£500	£1,407
City Of Wolverhampton	0	0	0	0	0	0	0	0	£0	0	0	£0	40	25	25	£90	£891
Coventry College	60	50	84	0	0	0	0	40	£234	60	0	£60	180	190	20	£390	£2,599
Dudley College of Technology	50	70	50	50	50	30	30	30	£360	200	50	£250	350	150	100	£600	£4,230
Fircroft College	0	70	30	25	0	25	0	0	£150	10	0	£10	100	35	65	£200	£953
Halesowen College	0	0	0	0	0	0	0	0	£0	20	0	£20	150	50	15	£215	£489
Heart of Worcestershire College	0	300	0	300	0	300	0	0	£900	0	0	£0	100	150	0	£250	£1,819
Hereward College	0	0	0	0	0	0	0	0	£0	0	0	£0	0	0	0	£0	£324
Joseph Chamberlain College	0	0	0	0	0	0	0	0	£0	5	11	£16	100	12	10	£122	£791
Kidderminster College	0	0	0	0	0	0	0	0	£0	0	0	£0	200	300	0	£500	£657
North Warwickshire & South Leicestershire	0	70	0	20	38	0	0	0	£128	0	0	£0	1500	405	124	£2,029	£6,315
Sandwell College	0	0	0	20	0	100	0	45	£165	0	0	£0	600	100	85	£785	£2,257
Solihull College & Universiy Centre	50	0	0	0	100	0	0	0	£150	0	0	£0	300	300	0	£600	£1,200
South & City College Birmingham	0	0	40	40	0	0	0	0	£80	0	0	£0	3580	384	384	£4,348	£11,960
South Staffordshire College	0	110	0	60	0	75	0	0	£245	0	15	£15	200	150	0	£350	£2,103
Telford College	0	10	0	0	0	10	0	10	£30	0	0	£0	120	60	20	£200	£1,709
University College Birmingham	0	20	0	15	0	0	0	0	£35	7	0	£7	0	0	0	£0	£187
Walsall College	0	0	0	75	0	0	0	0	£75	0	100	£100	100	100	0	£200	£2,572
Warwickshire College Group	0	250	0	75	0	75	0	0	£400	150	300	£450	0	0	0	£0	£3,942
TOTAL	160	950	204	695	188	615	37	132	£2,981	452	476	£928	8721	2431	1068	£12,220	£48,696

Appendix 9 Breakdown of costs across the wider curriculum

	COLLEGE WIDE						
	Augmented Reality	Virtual Reality	Assistive Technology	Learner Analytics	Artificial Intelligence	Industry Digital Innovations	QUESTION 1b SUBTOTAL
	£.000	£.000	£.000	£.000	£.000	£.000	£.000
Birmingham Metropolitan College	30	30	0	0	0	0	£60
Burton and South Derbyshire College	15	10	10	5	20	10	£70
City Of Wolverhampton	100	50	25	15	30	50	£270
Coventry College	0	0	0	0	0	0	£0
Dudley College of Technology	200	100	100	100	1000	300	£1,800
Fircroft College	100	100	70	30	40	50	£390
Halesowen College	15	17	0	0	25	21	£78
Heart of Worcestershire College	50	50	0	0	0	200	£300
Hereward College	10	9	0	20	12	0	£51
Joseph Chamberlain College	0	0	0	0	0	0	£0
Kidderminster College	15	15	10	0	12	12	£64
North Warwickshire & South Leicestershire	200	50	50	0	200	38	£538
Sandwell College	50	100	20	0	200	20	£390
Solihull College & Universiy Centre	0	0	0	0	100	0	£100
South & City College Birmingham	0	0	0	25	0	0	£25
South Staffordshire College	15	30	0	0	8	0	£53
Telford College	0	0	0	0	0	0	£0
University College Birmingham	20	50	10	0	0	20	£100
Walsall College	0	40	0	0	30	207	£277
Warwickshire College Group	70	100	5	150	75	100	£500
TOTAL	890	751	300	345	1752	1028	£5,066

Appendix 10 Breakdown of costs in respect of digital applications for priority sectors

	DIGITAL/COMPUTING INDUSTRIES												CONSTRUCTION					
	Cybe Security	5G and digital infrastructure	Networking	Games design	Creative media inc animation & 3D modelling	Big Data Analytics	AI and Machine Learning	Virtual, Augmented & Mixed Reality	Assistive Technologies	Research and Data analysis	Robotics and Control Systems	QUESTION 2 SUBTOTAL	BIM	Drone technologies	Artificial Intelligence	Virtual, Augmented and Mixed Reality	Assistive technologies	QUESTION 3 SUBTOTAL
	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000
Birmingham Metropolitan College	0	0	0	0	0	0	0	60	0	0	0	£60	0	0	0	0	0	£0
Burton and South Derbyshire College	20	10	10	20	30	15	10	10	10	10	60	£205	20	25	10	10	10	£75
City Of Wolverhampton	50	50	20	50	75	10	10	15	8	2	10	£300	5	5	0	80	5	£95
Coventry College	0	0	0	0	0	0	0	0	0	0	0	£0	0	0	0	0	0	£0
Dudley College of Technology	100	200	100	100	150	50	100	50	0	0	50	£900				200		£200
Fircroft College	20	10	10	0	80	0	0	50	20	0	0	£190	N/A	N/A	N/A	N/A	N/A	£0
Halesowen College	100	0	30	15	0	30	0	60	0	0	250	£485	N/A	N/A	N/A	N/A	N/A	£0
Heart of Worcestershire College	50	100	50	0	0	0	0	0	0	0	50	£250	N/A	N/A	N/A	N/A	N/A	£0
Hereward College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	N/A	N/A	N/A	N/A	N/A	£0
Joseph Chamberlain College	0	0	0	0	0	0	0	0	0	0	0	£0	N/A	N/A	N/A	N/A	N/A	£0
Kidderminster College	30	25	25	40	0	0	0	0	0	0	0	£120	N/A	N/A	N/A	N/A	N/A	£0
North Warwickshire & South Leicestershire	38	0	5	0	0	5	20	5	2	0	10	£85	0	10	0	200	0	£210
Sandwell College	0	0	0	100	100	0	0	0	0	0	50	£250	50	0	0	50	0	£100
Solihull College & Universiy Centre	0	0	0	0	0	50	100	0	0	0	0	£150	100	0	100	0	0	£200
South & City College Birmingham	0	120	0	0	0	0	0	0	0	0	0	£120	70	50	0	160	0	£280
South Staffordshire College	60	60	60	0	0	0	60	175	18	0	0	£433	0	23	0	0	18	£41
Telford College	0	0	0	0	40	0	0	40	0	0	0	£80	0	0		25	20	£45
University College Birmingham	0	0	0	0	18	17	0	40	0	0	0	£75	N/A	N/A	N/A	N/A	N/A	£0
Walsall College	0	50	0	80	50	10	0	15	0	2	5	£212	10	8	0	15	0	£33
Warwickshire College Group	100	20	200	80	80	30	100	150	50	0	120	£930	50	10	0	100	0	£160
TOTAL	568	645	510	485	623	217	400	670	108	14	605	£4,845	305	131	110	840	53	£1,439

Appendix 10 Breakdown of costs in respect of digital applications for priority sectors continued

	ADVANCED MANUFACTURING								BUSINESS & PROFESSIONAL					
	CNC Machinery	High specification devices	Robotic technologies	Artificial Intelligence	Virtual, Augmented & Mixed Reality	3D Scanners/printers/cutters	Assistive technologies	QUESTION 4 SUBTOTAL	Virtual Training Simulation	Big Data Analytics	Artificial Intelligence	Virtual, Augmented & Mixed Reality	Assistive technologies	QUESTION 5 SUBTOTAL
	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000	£,000
Birmingham Metropolitan College	0	0	0	0	0	0	0	£0	0	0	0	0	0	£0
Burton and South Derbyshire College	80	100	100	20	30	25	10	£365	50	20	30	25	10	£135
City Of Wolverhampton	300	100	200	75	75	20	30	£800	20	12	5	10	5	£52
Coventry College	0	0	0	0	0	0	0	£0	0	0	0	0	0	£0
Dudley College of Technology	500	200	200	100	200	100	200	£1,500	50	30	70	30	50	£230
Fircroft College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	10	0	0	10	0	£20
Halesowen College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	15	10	0	0	0	£25
Heart of Worcestershire College	0	0	50	0	0	0	50	£100	N/A	N/A	N/A	N/A	N/A	£0
Hereward College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	N/A	N/A	N/A	N/A	N/A	£0
Joseph Chamberlain College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	N/A	N/A	N/A	N/A	N/A	£0
Kidderminster College	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	N/A	N/A	N/A	N/A	N/A	£0
North Warwickshire & South Leicestershire	0	100	50	50	200	0	25	£425	100	0	0	200	0	£300
Sandwell College	250	0	0	0	0	100	0	£350	50	45	0	0	0	£95
Solihull College & Universiy Centre	0	0	0	100	0	0	0	£100	0	50	50	0	0	£100
South & City College Birmingham	1300	200	0	100	0	0	0	£1,600	0	0	0	0	0	£0
South Staffordshire College	0	0	0	0	175	0	18	£193	45	0	0	175	18	£238
Telford College	0	400	0	0	30	40	0	£470	0	0	0	25	0	£25
University College Birmingham	N/A	N/A	N/A	N/A	N/A	N/A	N/A	£0	50	10	0	20	3	£83
Walsall College	0	36	2	0	15	15	0	£68	15	5	0	5	0	£25
Warwickshire College Group	300	240	140	150	120	130	30	£1,110	25	10	25	60	5	£125
TOTAL	2730	1376	742	595	845	430	363	£7,081	430	192	180	560	91	£1,453

	HEALTH & LIFE SCIENCES						EMPLOYABILITY					
	Virtual Training Simulation	Artificial Intelligence Simulation Equipment	AI/Data analytics	Virtual, Augmented & Mixed Reality	Assistive technologies	QUESTION 6 SUBTOTAL	Virtual Training Simulation	Virtual, Augmented & Mixed Reality	Student devices	Assistive technologies	QUESTION 7SUBTOTAL	TOTAL
	£.000	£.000	£.000	£.000	£.000	£.000	£.000	£.000	£.000	£.000	£.000	£.000
Birmingham Metropolitan College	0	0	0	0	0	£0	0	0	0	0	£0	£60
Burton and South Derbyshire College	N/A	N/A	N/A	N/A	N/A	£0	N/A	N/A	N/A	N/A	£0	£780
City Of Wolverhampton	25	15	10	20	5	£75	50	20	50	20	£140	£1,462
Coventry College	0	0	0	0	0	£0	0	0	0	0	£0	£0
Dudley College of Technology	500	200	100	12	20	£832	15	15	30	10	£70	£3,732
Fircroft College	N/A	N/A	N/A	N/A	N/A	£0	30	30	100	20	£180	£390
Halesowen College	60	0	15	0	0	£75	0	0	15	0	£15	£600
Heart of Worcestershire College	200	0	0	0	0	£200	0	0	0	0	£0	£550
Hereward College	N/A	N/A	N/A	N/A	N/A	£0	0	0	0	15	£15	£15
Joseph Chamberlain College	0	0	0	0	0	£0	0	0	0	0	£0	£0
Kidderminster College	N/A	N/A	N/A	N/A	N/A	£0	0	0	0	0	£0	£120
North Warwickshire & South Leicestershire	N/A	N/A	N/A	N/A	N/A	£0	10	50	30	25	£115	£1,135
Sandwell College	150	50	20	150	50	£420	0	0	15	5	£20	£1,235
Solihull College & Universiy Centre	75	50	0	0	0	£125	100	30	0	0	£130	£805
South & City College Birmingham	70	0	0	0	0	£70	0	0	0	0	£0	£2,070
South Staffordshire College	N/A	N/A	N/A	N/A	N/A	£0	45	0	0	18	£63	£968
Telford College	0	50	20	20	50	£140	N/A	N/A	N/A	N/A	£0	£760
University College Birmingham	50	20	0	20	3	£93	50	20	20	3	£93	£344
Walsall College	0	30	0	20	0	£50	5	0	10	5	£20	£408
Warwickshire College Group	0	20	15	25	0	£60	75	100	30	10	£215	£2,600
TOTAL	1130	435	180	267	128	£2,140	380	265	300	131	£1,076	£18,034

Appendix 11 Pipeline projects which could be developed as key elements of the regional estate strategy

Sector	College name	Description	Cost
Adult education & high needs	Dudley College of Technology	Adult education centre (Stourbridge)	£1,000,000
		Special educational needs centre (Dudley)	£500,000
	Fircroft College	Learner accommodation and teaching space (Birmingham)	£7,000,000
	Joseph Chamberlain College	Adult Learning Centre	£4,100,000
Advanced manufacturing and engineering	Burton & South Derbyshire College	Mechatronics Suite	£350,000
	Telford College	Aviation academy (tbc)	£25,000,000
	City of Wolverhampton College	National polymer training centre (Telford)	£2,000,000
	Sandwell College	Engineering centre (Sandwell)	£3,000,000
Agricultural technology	Warwickshire College Group	Creation of a Food Security & Agritech facility (Moreton Morrell)	£3,000,000
Business and professional	Solihull College & University Centre	Enterprise centre (Solihull)	£1,000,000
Construction	Dudley College of Technology	Civil engineering and construction plant centre (Brierley Hill)	£1,000,000
		Regional scaffolding training centre (tbc)	£1,000,000
	Solihull College & University Centre	Plant Training Centre	£750,000
	South & City College Birmingham	Construction (L2-L5 Plant, Demolition, Design & Management) Provision at Bordesley Green.	£160,000
	Walsall College	Construction centre (Walsall)	£3,900,000
	Warwickshire College Group	Expansion of the Construction facilities (Royal Leamington Spa)	£5,000,000
Creative Arts	South & City College Birmingham	Relocation and expansion of Creative (Music & Media) Provision.	£250,000
Digital	Burton & South Derbyshire College	Cyber Security Lab	£250,000
		Creative Digital Learning Hub	£1,250,000
		Games Development Facility	£450,000
	South & City College Birmingham	Expansion Cyber Security, Network Infrastructure, Games, Creative Media & 3D Animation/ Modelling	£990,000
	University College Birmingham	Digital and computing suite (Birmingham)	£800,000
	Warwickshire College Group	Expansion of the Digital & Games facilities (Royal Leamington Spa)	£2,000,000
Healthcare science	Burton & South Derbyshire College	Health & Social Care Realistic Future Working Environment	£800,000
	Halesowen College	Healthcare science centre (Halesowen)	£4,140,000
	Dudley College of Technology	T level healthcare science centre (Dudley)	£1,500,000
		Health and life sciences higher education centre (Towns Fund - Castle Hill Dudley)	£25,000,000
	Sandwell College	Health professions centre (West Bromwich)	£18,000,000
	South & City College Birmingham	Access to Health Professionals, (Biochemistry & Forensic Science) Provision.	£1,750,000

Logistics	North Warwickshire & South Leicestershire College	Logistics centre (Hinckley)	£12,000,000
Sports, hospitality, tourism	Burton & South Derbyshire College	International Training Hotel	£5,000,000
	Sandwell College	Commonwealth games legacy centre (Sandwell)	£3,000,000
	Warwickshire College Group	Expansion of the Hospitality & Tourism facilities (Rugby)	£2,000,000
STEM	Sandwell College	STEM centre (West Bromwich campus new annex)	£15,000,000
		Science centre (Chances Glass works)	£3,900,000
		STEM centre (Cadbury Sixth Form College)	£5,000,000
Student support	Warwickshire College Group	Replacement and upgrade of Refectory, Student Services and classrooms (Moreton Morrell)	£10,000,000
Transport technologies	Walsall College	Electrical vehicle technology centre (Walsall)	£3,600,000
	North Warwickshire & South Leicestershire College	Motor vehicle centre (Nuneaton)	£3,100,000
	Warwickshire College Group	Kit & Equipment for Electrification and Automation of the Automotive sector (Trident)	£1,000,000
	South & City College Birmingham	Automotive Engineering (Hybrid & Electric) Provision.	£500,000
	Dudley College of Technology	Transport technologies centre (Dudley Castle Hill)	£5,000,000
Veterinary	Solihull College & University Centre	Veterinary nursing laboratory (Solihull)	£500,000
			£185,540,000

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