Funded by

Department for Education

March 2022

WEST OF ENGLAND PLUS TRAILBLAZER LOCAL SKILLS IMPROVEMENT PLAN

Report

BusinessWest

LSIP Trailblazer partners:

WEST OF ENGLAND Combined Authority

WEST OF ENGLAND INSTITUTE OF TECHNOLOGY

Contents

1 Strategic Overview 5
1.1 Trailblazer Focus and Objectives 5
1.2 Methodology & Methodology Reasoning 7
1.3 Process of development with Mayoral Combined Authority (Mayoral Combined Authority statement) 8
1.4 Strategic Context and Rationale 9
1.5 Audience Engagement 11
1.5.1 Overview 11
1.5.2 Delivery Team 16
1.5.3 Engagement and Marketing Methods 16
1.5.4 Events 18
1.6 Methodology Analysis and Impact 21
1.6.1 Overview and Principles 21
1.6.2 Engagement Methodologies and Analysis 23
1.6.3 Social Media Marketing and Communication 25
1.6.4 Direct Communications 28
1.6.5 Other Key Call-to-Actions 28
1.6.6 Project Outputs and KPIs 29
1.6.7 Key Partners and Stakeholders 31
2 Employer Needs: Research Findings 33
2.1 Background and Overview 33
2.1.1 Overview: Demographics and Sectors 33
2.1.2 National and Local Priorities 34
2.2 Research Findings 37
2.2.1 Training and Skills 37
2.2.2 Recruitment and Retention 44
2.2.3 Changing Demands on Sector 47
2.2.4 Leadership, Management and Workforce Planning 49
2.2.5 Sustainability, Climate Change and Decarbonisation 51
2.3 Summary of Core Challenges 54
3 What Needs to Change and Why 55
3.1 A New Approach to Skills Training Design 55
3.1.1 Content, Modularity, and Connections Between Courses 56
3.1.2 Delivery Methods, Tailored Provision Design 57
3.2 System Approaches to Workforce Planning 57

3.2.1 Cross-sector: Planning Ahead 58
3.2.2 Cross-sector: Short-, Medium- and Long-term Industry Needs vs Length of Training Pathways Required 58
3.2.3 Care Sector: Planning Across Health and Care 59
3.2.4 AAE Sector: Planning Across Supply Chains 59
3.3 Leadership and Management Skills 59
3.4 Shifting Reputations, Driving up Recruitment 59
3.5 Changing the Paradigm: a Career Not a Job 60
3.6 Building the Coordination Infrastructure 60
3.7 Better Industry Led Skills Planning with Central / Regional Government Strategy 61
3.7.1 Funding 61
3.7.2 Connection Between Economic Strategy, and Skills Planning 61
4 Roadmap 63
4.1 Proposed Actions 63
4.1.1 Next Steps at Regional Strategic Partnership Level 65
4.1.2 Next Steps Within the AAE Sector 65
4.1.3 Social Care 66
4.2 Expected Benefits 66
4.2.1 Overview of Impacts Within Sectors 67
4.2.2 New Projects: Already Underway, and Emerging 68
4.2.3 Examples of New Approaches to Course Design 70
4.3 Whole Systems Approach 71
4.3.1 Alignment with Wider Regional Strategies and Programmes 71
4.3.2 Connections Across Sector Systems 73
4.4 SDF Specifics 73
4.5 In Summary 74
5 ANNEX Further Process Analysis 76
5.1 Engagement Activities and Analysis 76
5.1 Timescales, Comms, and Project Management 76
5.2 Readiness for Change/Uptake 77
5.3 Suggested Alternative Structures and Content for Future LSIP Phases 78
6 Further Reading and Resources 80
6.1 Key Devolved Programmes Information (WECA Programmes) 80
6.2 Reports 80
6.3 Event Recording 80
6.4 Organisations 80

British Chambers of Commerce Statement

This Trailblazer Local Skills Improvement Plan (LSIP) for the West of England Plus (WoE+) has been produced by the Bristol Chambers of Commerce, one of eight employer representative bodies testing an employer-led approach to skills planning. This will help the DfE determine how best to roll out LSIPs across the country. It is DfE's intention that the employer voice articulated in this plan should help inform the decisions of local skills providers and inform relevant future funding bids. This Local Skills Improvement Plan will be a starting point for any future Local Skills Improvement Plan produced under a national roll out of the programme.

The Chamber Network

The British Chambers of Commerce (BCC) is a network of 53 Accredited Chambers of Commerce across the UK, and a global network of over 75 British Chambers in markets around the world. Accredited Chambers in the UK represent, support and campaign for business in their local communities. Our roots are local, our influence is national and our reach is global. Our unique perspective gives us unparalleled insight into British and global business communities – every sector, every size, everywhere. Businesses trust us to be their advocates, and we're passionate about helping them trade and grow. We drive change from the ground up – and our bottom line is helping companies, places and people achieve their potential.

We are place makers, taking a leadership role in developing our regional economies. We focus on creating real change and influencing the agenda to ensure the future success of our regions and nations – creating the economic conditions to ensure our areas remain great places to live, work, study, invest and do business. Chambers across England have stepped forward to play their part in ensuring more people can train and retrain for new and emerging jobs in their local communities, working in conjunction with local FE institutions, mayoral combined and local authorities, and other partners. Accredited Chambers are well placed to bring these coalitions together. Learning from the work of the trailblazers, we believe LSIPs should be rapidly rolled out across the country.

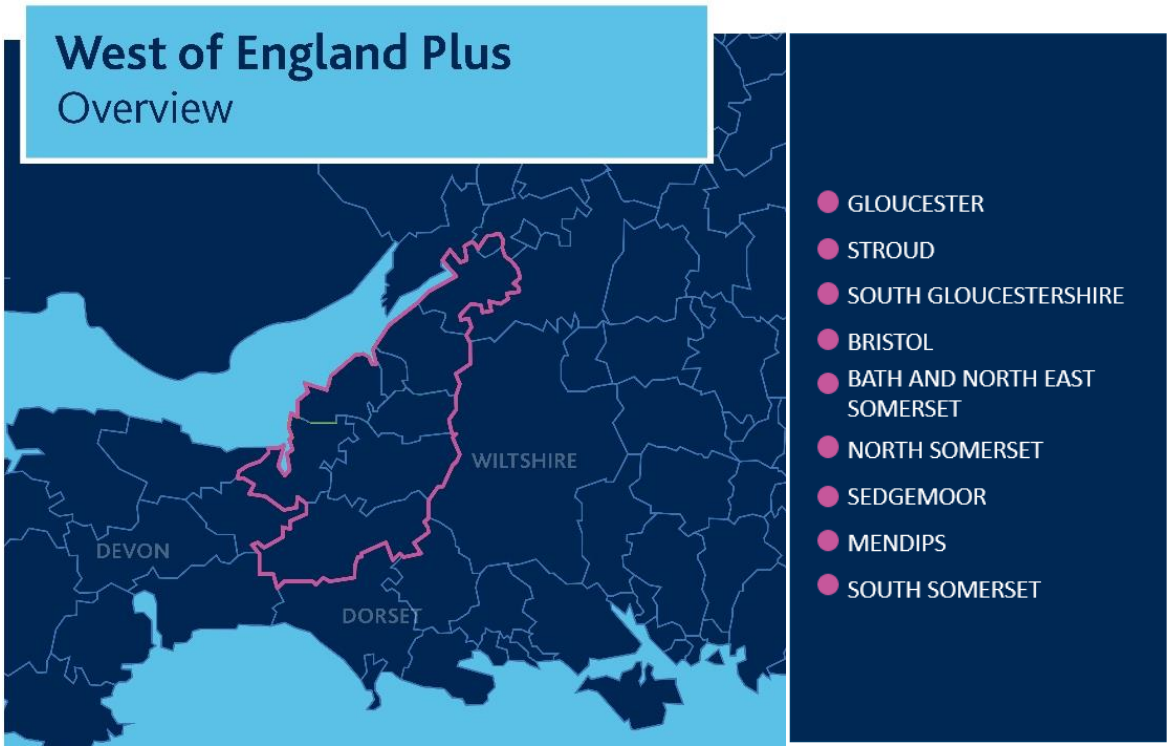
Chambers:

- Are independent, impartial and part of a quality-assured, accredited and not-for-profit national network
- Are business led and business focused. We work with micro-, small, medium and large employers from the widest range of industry sectors
- Provide a business-centred view of in-demand and future skills needs to ensure that LSIPs focus on skills that will lead to good and sustainable employment opportunities
- Are rooted in local business communities, with strong local infrastructure. Our business advisers on the ground support employers with a broad range of business issues. Through these multiple touch points, chambers are well placed to ensure all initiatives include a skills conversation with employers
- Have well-established relationships with economic partners and broader stakeholders, at a strategic and operational level, locally, regionally and nationally
- Have the flexibility to operate across varying geographical levels and locations
- Combine national and local working - affording efficiencies, the sharing of best practice and the identification of national and regional trends alongside local, unique variances in skills demand

1 Strategic Overview

1.1 Trailblazer Focus and Objectives

The focus of the West of England Plus LSIP Trailblazer is to contribute robust, current and granular business voice to help the region deliver training that the region's employers need, through the methods and at the times and prices they want, now and in the future.



Districts Covered by the West of England Plus LSIP Trailblazer

- Gloucester *(Gloucestershire, G First LEP)*
- Stroud *(Gloucestershire, G First LEP)*
- South Gloucestershire *(West of England CA)*
- Bristol (*West of England CA)*
- Bath and North East Somerset *(West of England CA)*
- North Somerset *(West of England LEP)*
- Sedgemoor *(Somerset, Heart of the South West LEP)*
- Mendips *(Somerset, Heart of the South West LEP)*
- South Somerset *(Somerset, Heart of the South West LEP)*

The **West of England Plus LSIP (WoE+ LSIP)** Trailblazer, covering the West of England region and parts of Somerset and Gloucestershire, is geographically aligned with the West of England Institute of Technology (WEIoT)'s **Strategic Development Fund (SDF)** (under the Skills Accelerator remit) ensuring a cohesive approach across the two programmes

The WEIoT represents a collaborative network of seven of the Trailblazer region's colleges and Higher Education Institutes, providing a valuable resource for ongoing collaboration in an effective existing body.

The LSIP's geographic and sectoral coverage also aligns with the wider region's recognition as a Functional Economic Market Area (FEMA), as it is centred on a critical mass of economic activity and priority sectors.

The WoE+ LSIP Trailblazer:

- Focusses on core and priority sectors alongside cross-cutting themes key to this economic geography;
- Tests out the best way of getting to businesses' current and future needs (see sections 1.2 and 1.5 for in-depth methodology analysis);
- Develops ongoing relationships and processes through which providers can understand these needs;
- Works iteratively with the SDF project via the Institute of Technology, which is aimed at trialling known delivery improvements required by these sectors and within these themes.

The WoE+ LSIP Trailblazer has attempted to address this challenge across two prioritised sectors that have faced greater than average recent upheaval and change. It has also provided exploration and evaluation of best practice methodologies, to inform the continued business engagement activities for alignment of post-16 technical training provision through the LSIP mechanism in future.

The four-fold aims from this Trailblazer project were to:

1. Ensure relevant businesses (including those traditionally harder to reach) feed into current and future planning for post-16 technical education and training delivery - in both content and delivery models - to ensure better alignment with the region's businesses' specific needs, and learners' requirements for high-value, future-proofed employment;

2. Ensure engaged businesses (and through this businesses as a whole) are better informed on how they can engage with and take advantage of the region's training and education providers;

3. Ensure that a methodology for ongoing engagement has been iteratively improved and evaluated for the ongoing continuation of the LSIP across further geographies and sectors;

4. Ensure that Business West, as a leading BRO incorporating a Chamber of Commerce, is well placed to continue a leading role in this work once the structure, format and funding for future LSIP activity is announced by central government.

1.2 Methodology & Methodology Reasoning

The WoE+ LSIP Trailblazer project has focussed on gathering and reviewing in-depth and current business voice; on translating business needs into understanding of skills needs; and on adding valuable ongoing data to the process within the region (and via national sectoral bodies and initiatives) of understanding current and expected drivers of change – overall, helping to 'true the wheel' of current insight. We believe that the region covered by this project (including its education and training providers) is amongst the most collaborative and accessible in the country. We have therefore focussed on adding value to existing datasets; on testing hypotheses to add additional business voice to both the Combined Authority's and LEPs' planning and strategic delivery mechanisms; and on providing direct input into post-16 education providers.

Our methodology has been grounded in an in-depth and open-format discussion of business growth and needs, to provide illustrative and not proscriptive input into training provision. We believe that this methodology

- adds a vital and appropriate level of current business intelligence to existing data sets and knowledge
- provides granular and robust input on existing business needs and perceived gaps in provision in a way that surveying and lighter touch research methodologies cannot
- provides better understanding of sectoral and technological changes than in existence previously
- works with the qualitative nature of existing LMI, jobs postings and sectoral and regional data sets and reviews.

This data will help with additional provision within devolution principles, statutory needs and policy, and will ensure education and training provision is more aligned to business needs. The impacts of the Covid pandemic and Brexit on workforces and technological change have become concatenated and entrenched, and we believe this body of work offers a better representation that the available existing data of the significant recent shifts industry has faced in the last two years.

Between October 2021 and March 2022, we carried out more than 160 in-depth engagements via individual and small group interviews, research-focussed events (including task-and-finish, roundtable, focus group and immersion events) and have also utilised additional tools such as galvanic and awareness-raising events and communications, light-touch surveys and partner collaboration. We also identified an opportunity to add to our understanding of the shifts in skills requirements resulting directly from the impacts of Brexit and Covid, both of which have led to significant shifts in person availability, requirements in the workforce and skills needs for continued survival, growth and global competitiveness.

The primary methodology of engagement revolved around a review of business needs across the following five topics:

- Business Growth
- Workforce Development
- Recruitment, retention and upskilling
- Technological change and digitalisation
- Climate change and sustainability

Each interview-format engagement was in the form of a semi-scheduled interview, using a topic guide, based on these five topics, with accompanying (and where relevant, sector-specific) prompts; with all research interviews carried out by an experienced internal business engagement team. This research methodology was developed to reinforce the existing understanding and landscape of sectoral, regional and general data; to add in-depth knowledge on current drivers and expected future needs; and to judge the assimilation so far of potential technological and policy drivers.

The events either replicated this topic guide, or isolated one aspect for in-depth discussion, gap filling/immersion, or discussion and development. A number of these topics and sub-sections have since generated additional projects, forums or ongoing conversations as the LSIP partners have recognised these as being most urgent and/or significant opportunities to support regional growth and skill requirements in a cohesive and direct way (see sections 4.1.1.1, 4.1.1.2 and 4.2.2 for further information and examples).

Through our stakeholder engagement conversations running concurrently with the project's research function, we liaised with the High Value Manufacturing Catapult via the regional leads at the National Composites Centre, and ensured ongoing alignments with their emerging skills value chain methodology, as put forward to the Department for Education as part of the Manufacturing The Future Workforce report.

We believe the level of information we have gathered would simply not be possible to obtain via lighter touch methodologies. The interviews and events have required expertise in both sectoral understanding and the ability to successfully identify root concerns and probe effectively into meaningful change, through in-depth conversation and engagement, generating a richness of data and analysis that is not obtainable from statistical analysis, or lighter engagement activities.

We see the activities undertaken during this Trailblazer as the first stage in ongoing methodologies for the creation LSIPs as 'living documents'. Indeed, we have focussed a number of conversations on ongoing identified skills needs and gaps in wider understanding, with Business West committing further resource and time outside of this Trailblazer to continue to support the skills needs of the region's businesses.

For further information on what we would suggest as changes to how future LSIP activities and formats are designed and structured base on our learning, please see section 5.

1.3 Process of development with Mayoral Combined Authority (Mayoral Combined Authority statement)

The West of England Combined Authority is the recognised Mayoral Combined Authority (MCA) for this LSIP trailblazer and has closely supported its development, including:

- Providing continuous input by senior skills leads to help shape and inform the process;

- Skills leads, the Growth Hub, Inward Investment Service, delivery partners and centralised Comms team have all promoted Business West's surveys and events to help ensure strong business attendance;
- Ensuring that Business West had the opportunity to attend and present to the Skills Advisory Panel (SAP) but early on and later in the development of the LSIP, helping to shape and inform thinking and developments;
- Informing other networks and forums of the LSIP and its progress and promoted ways in which business could engage with the LSIP process; and
- The MCAs central LMI team has provided significant strategic LMI, data and intelligence.

As highlighted above, robust business engagement activities facilitated through the MCAs own forums, links and networks have helped to shape and inform other key regional policy and engagement mechanisms, forming a vital part of the region's ability to continue to prepare for its ongoing competitiveness and preparedness for the future.

In recognising how the LSIP can complement existing intelligence, and provide granular business insights, there has been ongoing liaison with the LSIP team in Business West via project leads since inception. This has included regular / biweekly opportunities to meaningfully discuss progress and develop questioning routes and activities that align with both organisation's priorities where applicable.

The MCA and Business West also facilitated a joint workshop at the Western Training Provider Network on 24 February, consulting Independent Training Providers (ITPs) and highlighting the ongoing importance of collaborative and meaningful engagement with the region's business community.

1.4 Strategic Context and Rationale

The Trailblazer geography was built around the West of England: a strong Functional Economic Market Area (FEMA) delivering above average economic benefits to the wider UK economy. Recognising the role the West of England plays in driving growth across the region, and that employers overlap administrative boundaries, the LSIP Trailblazer also brought in parts of Somerset and Gloucestershire, giving it a unique mix of urban, rural and coastal regions.

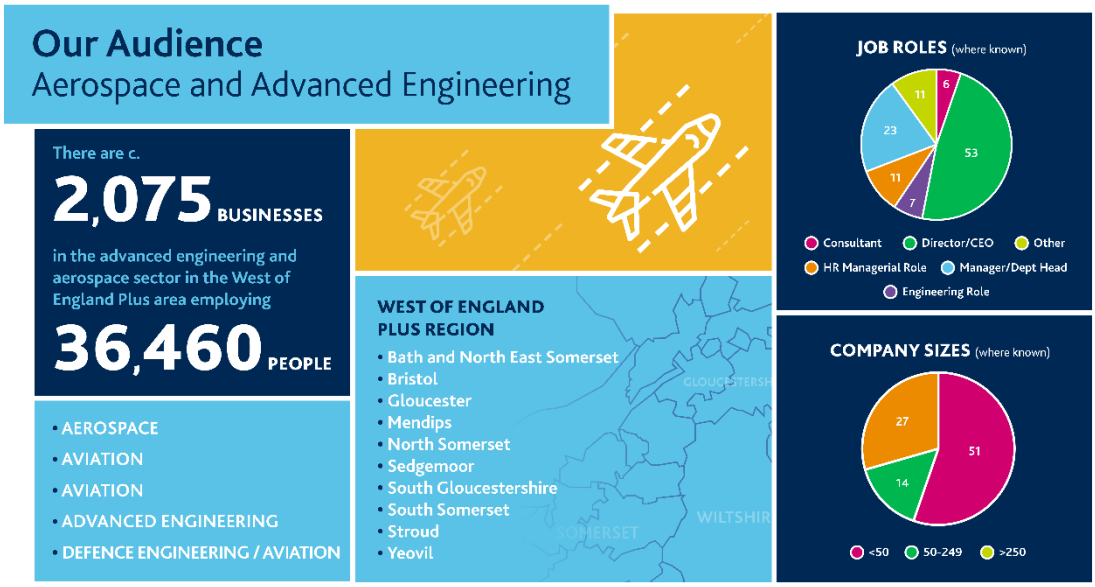
We prioritised two key sectors and two underlying cross-sectoral themes as the foci for the West of England Plus LSIP Trailblazer.

Aerospace and Advanced Engineering (AAE)

The largest aerospace cluster in the UK (2nd-largest in Europe) directly employing c.29,500 people (2018) in the West of England alone with an estimated worth (pre-COVID) of £7bn.

- The opportunity is to lead on 'net' zero.
- The challenge is to future proof workforce skills.

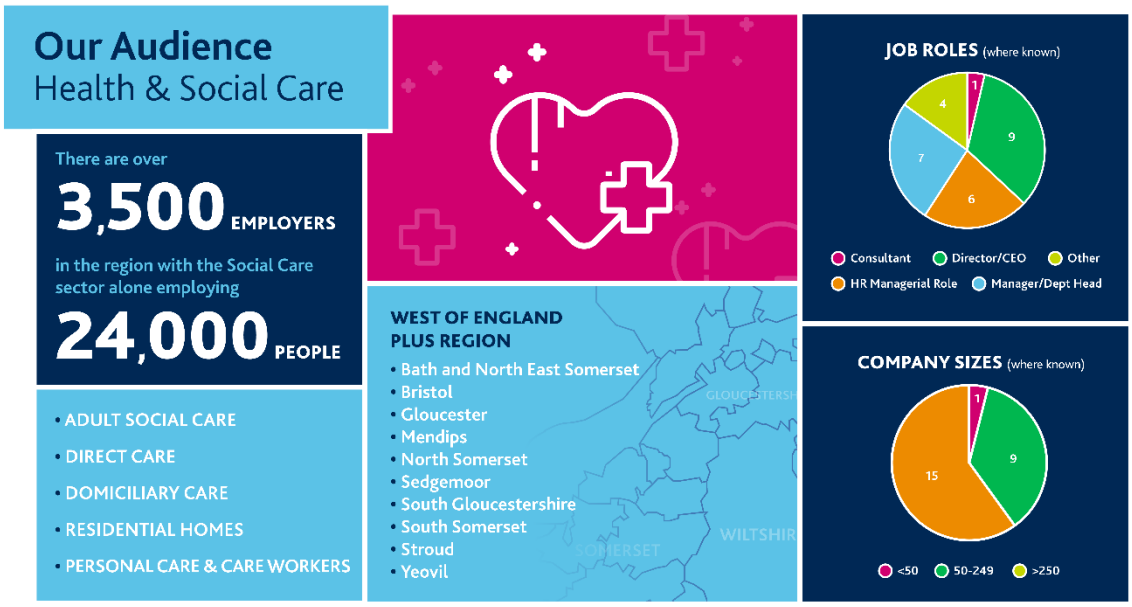
The aerospace and advanced engineering sector is facing both threat and opportunity from decarbonisation, 'Jet Zero' and digital agendas alongside the significant system-shocks that it has faced with the global pandemic – both in terms of uptake of air travel (and subsequent opportunity for continued growth) and the loss of experienced employees via early retirement. With 14 out of the 15 Aerospace Primes in the region, this is the largest aerospace cluster in the UK and second largest in Europe. We have both the opportunity and the facilities to lead the sector's development of activities aligned with net zero and digitalisation globally.



Social care (SC)

Across Health and Social care, there are over 3,500 employers in the region with the Adult social care sector alone employing c.24,000 people.
- The opportunity is to catalyse innovation.
- The challenge is attrition, resilience and skills across all levels.

The Social Care sector is facing increased demand for new people, high levels of unfilled existing posts, and an urgent need for technical upskilling and professionalisation, in particular for potential productivity and efficiency impacts of digitalisation. We can become an exemplar region for challenging leadership principles and awareness of sectoral change, improving both the perception and the viability of social care as a long-term rewarding career.



Cross-sector Themes

The cross-sectoral themes of **Digital Transformation** and **Decarbonisation** were selected to give us insight into skills needs that will affect all sectors in the future, whilst also acknowledging the region's leading abilities in these areas and our proposed next phase of activity in our application for Trailblazer status, in creative & tech and the need to decarbonise infrastructure.

In our Trailblazer region, these sectors have strong clusters of employers and employer support bodies. They are also potentially key to addressing some of the region's significant skills challenges, including:

- A high proportion of NEETS
- 141,800 people aged 16-64 without a L2 qualification
- A decreasing take-up of apprenticeships with employers struggling to understand the range of education and skills assets in the region

Post Covid, these challenges are amplified and need urgently addressing through the LSIP and other mechanisms, to ensure that technical training and skills interventions are not only appropriate, but allow the region to lead in to education and training provision fit for expected future needs.

1.5 Audience Engagement

1.5.1 Overview

Throughout the trailblazer project, we have completed more than 163 directly applicable engagements with individual companies, with in-depth participation continuing right until submission deadline, and expected to continue following project end.

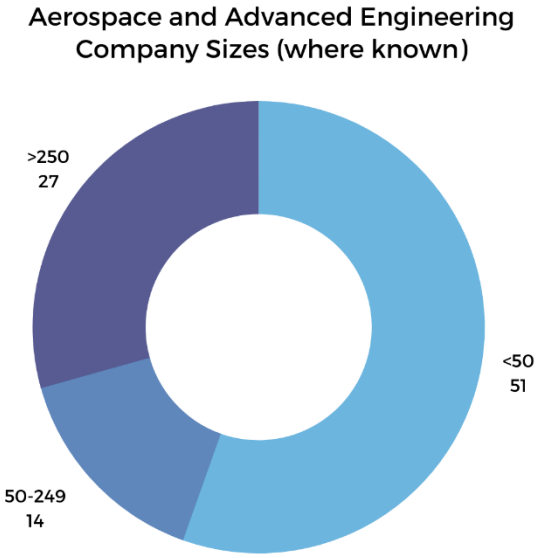
This engagement total figure excludes multiple in-depth engagements with more than one person or role within a company, and engagements that we did not consider to be of a level

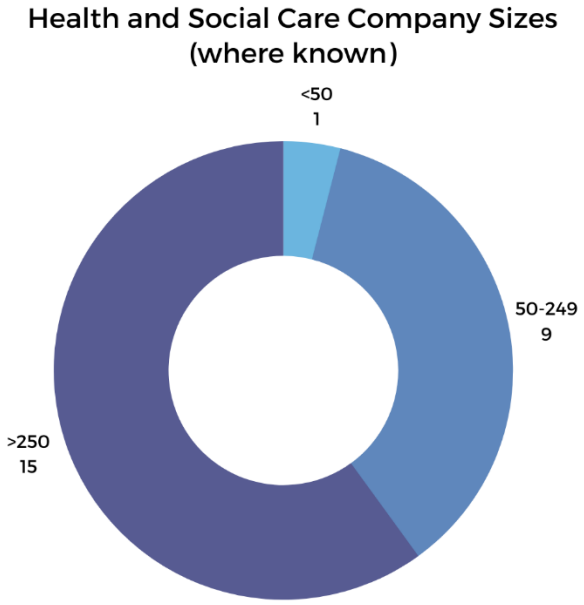
of robustness to include in our research methodology (set approximately at 45 minutes plus of in-depth discussion opportunity, but frequently much longer).

If including this category of lighter touch engagements and multiple in depth engagements within a single company, we estimate around 300 engagements during this project. This includes:

- those who have attended sessions focussed on presenting data and findings, such as the audience for the 'JetZero, Hydrogen and Skills' event (70 registered attendees);
- attendees of Skills Advisory Panel meetings, who were not engaged again outside of this format;
- engagements or interviews with multiple people across an organisation.

Of these in-depth engagements, 18% were either current or previous chambers & initiative members, highlighting Business West and the Bristol Chambers of Commerce's ability to engage with a significantly larger and more varied audience than just its membership, and illustrating how we are able to represent the views of businesses more widely across the region, in terms of sectoral footprints, geographic spread and sizes.





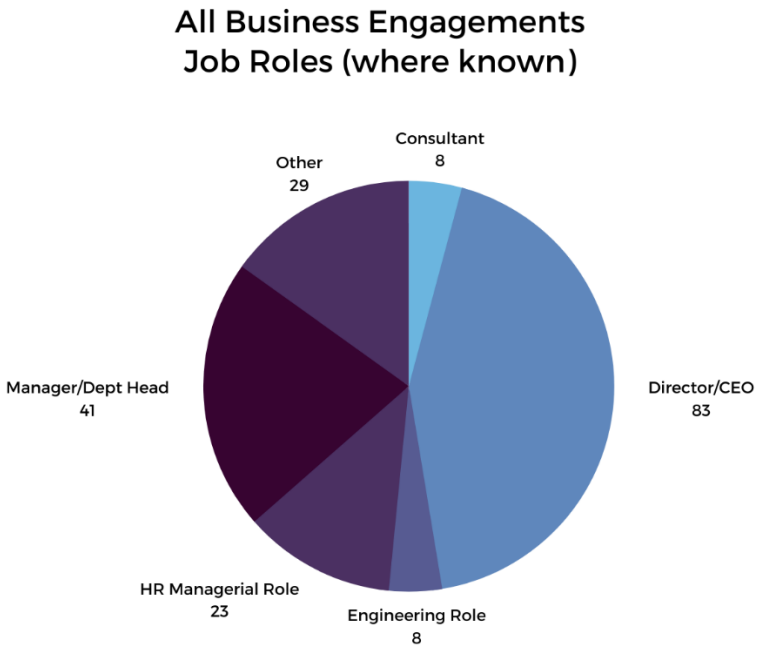
Whilst the sizes of the organisations spoken to are a good mixture, and we believe representative voices of the region's businesses, we note that micro and small enterprises are still under-represented, particularly in social care. We faced a consistent challenge in arranging interviews within the social care sector, hearing repeatedly that the impacts of both Covid and Brexit (and the resulting changes to the sector and workforce) left employers struggling to cover tomorrow's shifts, let alone feeling able to engage more meaningfully with future skills needs. This highlighted the ongoing longer-term issues within this sector, currently facing huge challenges with shortages of staff and ongoing issues within recruitment. Within interviews, we found that 'people needs' were often highlighted prior to any conversation about 'skills needs'. Almost all companies we spoke to noted the shift towards the recruitment market nationally favouring jobseekers rather than employers, with resulting changed expectations in work packages, salaries and work-life balance, including hybrid working, a lot of which is often hard to achieve in engineering and social care roles.

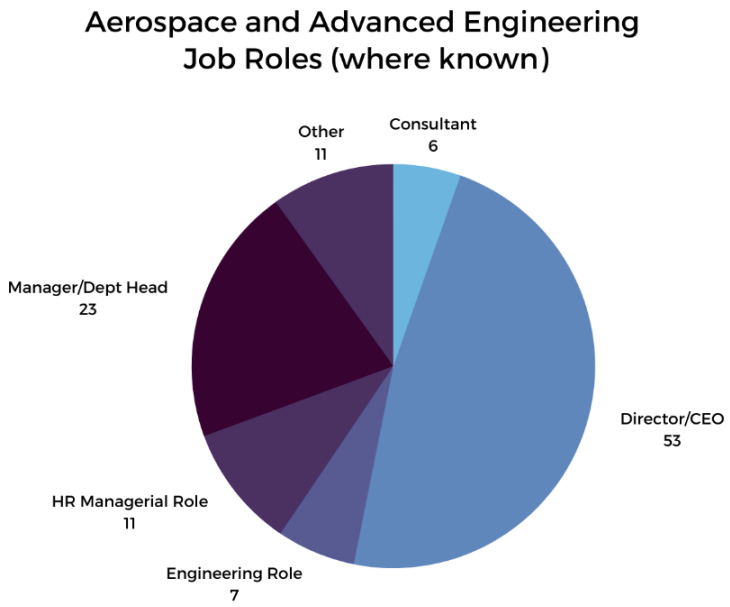
Whilst Aerospace and Advanced Engineering companies faced similar issues with recruitment and retention, their ability to deliver core business outputs was not highlighted so explicitly as within the Care sector, with Social Care organisations during the December Omicron peak reporting vacancy levels as high as 40%, whilst still trying to meet sustained service provision at normal levels.

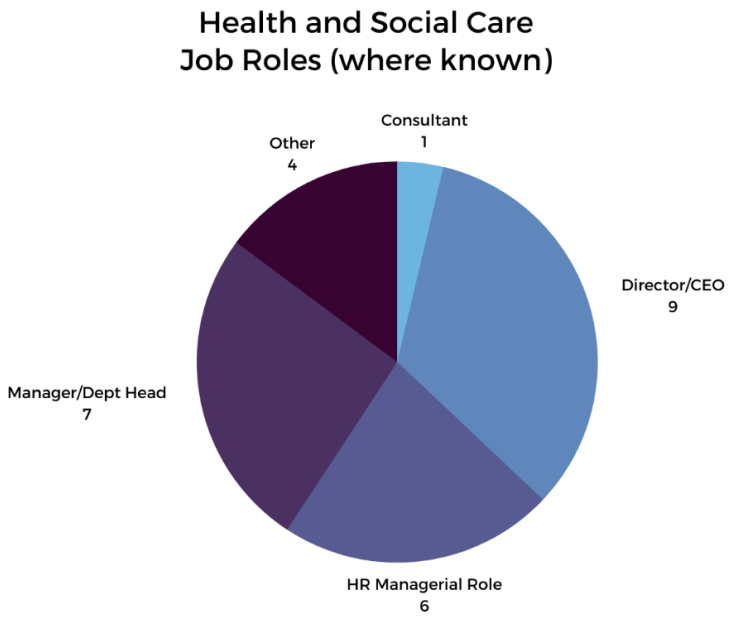
The expectation initially for this Trailblazer was that HR-aligned job functions may have more foresight into future needs, with operational roles more focussed on current needs, and C-Suite roles containing some knowledge of both, with smaller companies having directors closer to issues overall.

In practice, we are unable to meaningfully distinguish responses at this level any more than colloquially at present; but believe that the ideal engagement scenario going forward is to

attempt to engage with representatives across internal functions where possible for a fuller picture of skills needs. Where businesses were able to commit to engage in an in-depth manner, it was most likely that Directorial and Executive roles were our directed points of contact, and who felt that there was benefit in engaging in this shift towards employer voice for provision.

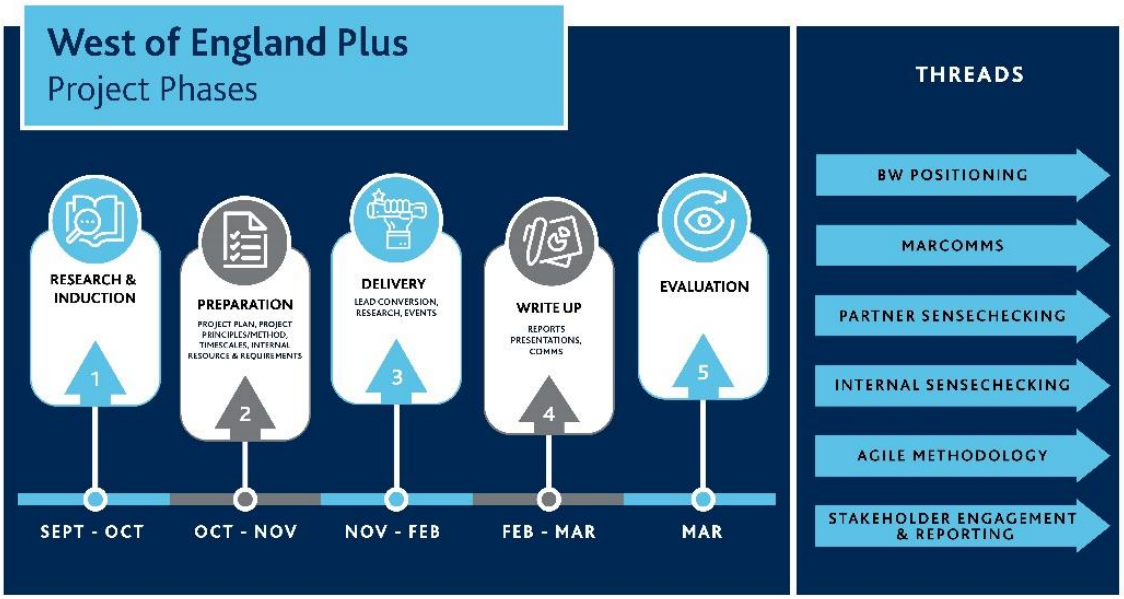






These more than 160 in-depth business engagements were achieved with a strong direct correlation to our research proposal and sectors, ensuring a robust research base for continuation activities. Of these engagements, 65 were individual interviews and 90 via focus groups, immersion events and collaborative co-design sessions. The remainder were via less formal methods, including LSIP-focussed (but not exclusive) calls, and presentation-led discussion sessions within bodies such as Skills Advisory Panel (SAP), Skills Officer Group (SOG) and MAC Managers briefings, which helped to ensure the LSIP was on the radar of a wider range of key stakeholders.

Contacts and feedback with stakeholders and other businesses that did not cross the internal threshold for 'in-depth' engagement have also informed the report, but have not been included in the primary methodology analysis (for example, engagements with Skills Advisory Panels that were progress reports but contained an element of feedback and/or evaluation).



1.5.2 Delivery Team

Our contractual partners for this project were:

- MAS Partners as aerospace sector specialists,
- Western Training Providers Network (WTPN) as leads and navigators within independent training provision and FE,
- FutureLeap as a region-wide business network focussed on sustainability and cleantech.

Each were contracted to assist with arranging events and interviews and for their expertise within their fields.

The WoE+ LSIP team was recruited from within business client-facing roles, with the Project Manager an internal appointment (secondment) from both Innovate UK EDGE and Nuclear South West. The engagement team were chosen for their experience across various functions of business support, evaluation and research. Internal resource was allocated towards line management and research development, with a contractor employed to provide additional support in social care expertise and authorship. All internal teams within Business West and the Chambers of Commerce were briefed and relied upon for their areas of expertise, access to existing audiences and for ongoing support when identified through LSIP engagements.

1.5.3 Engagement and Marketing Methods

We developed a multi-channel marketing and communications strategy to approach and align new business contacts for the purposes of input into the LSIP. We found value in both outbound and inbound marketing strategies for the LSIP, using pre-existing stakeholder relationships and channels to engage with warm and poised leads as well as contacting approximately 1,000 businesses through individualised and targeted outbound means (such as organic contact, and paid and organic digital communications). Agile methodologies were

utilised primarily through soft analysis of click-through and open rates to continually tailor core messaging – the narrative early on moved away from 'skills needs' towards 'workforce development' following early A-B testing of response rates. Both sectors also responded well to terminology attached to 'business growth' in early communications, which also helped inform the primary research narrative and questioning route.

The research questioning route went through several iterations with stakeholder, business early-stage testers and internal feedback – the development of the questioning route also following learnings from prior projects such as Sector Skills Statements (see section 5) and the prior internal Quarterly Engagement Surveys. Throughout the project, the trailblazer team also utilised an agile/iterative business and stakeholder engagement and feedback process, engaging as far as possible in the modes and formats identified as most appropriate by each partner or stakeholder – further information on this is within section 1.2 and 1.5.5.

We believe that our phased research methodology – initially focussed on gathering current and robust business voice to then feed into collaborative co-design and evaluative sessions – has left us with a practical and comprehensive set of recommendations and suggestions for education and training providers to guide future content and delivery, as well as significant buy-in from and early knowledge release to education and training providers who have engaged in evaluation and co-design sessions.

1.5.4 Events

EVENTS	
3 NOV	The Changing Landscape of AEAA Skills
26 JAN	Jet Zero Hydrogen and Skills
2 FEB	Guest Speaking: Workforce for the Future Programme
9 FEB	The Digitalisation of the Aviation Sector
10 FEB	Challenges in Home Care
25 FEB	The Future of Sustainable Flight
28 FEB	The Future of a Sustainable Social Care
28 FEB	The Future of Sustainable Advanced Engineering
3 MAR	The Social Care Sector: Recruitment and Retention
7 MAR	West of England Plus Skills Evaluation
10 MAR	Western Training Provider Network Quarterly Stakeholders Meeting
14 MAR	Collaboration, Co-Design and the Future
15 MAR	Collaborative Skills and Co-Design for the Future
17 MAR	Collaboration and Co-Design
24 MAR	Collaborating for the Future of Skills

WoE+ LSIP Trailblazer events (not including internal or external reportage sessions)

15 events were held between November 2021 and March 2022, with the majority held for research purposes as stated:

- 'task and finish' events
- deep dive events guided by prior research findings
- sector-specific focus/immersion groups
- sector awareness events to produce additional leads
- training landscape direct input and provider liaison and evaluation

These events and their topics were both planned in advance and directed by research findings during the project, to reflect needs as reported by businesses or to guide further research discussion.

The Social Care Sector, Recruitment and Retention, 3rd March 2022. Event in partnership with Western Training Providers – collaborative co-design focussed, the audience was made up of both care providers and training providers, to discuss findings so far and potential adjustments.

The Digitalisation of the Aviation Sector, 9th February 2022. Event in partnership with Heart of the South West LEP, Yeovil College and WEAF – immersion event on digital technology and skills needs in the aerospace sector.

Collaboration, Co-design & the Future, 14th March 2022. Event in partnership with West of England Institute of Technology - LSIP trailblazer progress presentation followed by three immersion sessions tailored around social care, aerospace and post-16 training provision.

1.6 Methodology Analysis and Impact

1.6.1 Overview and Principles

We have built upon existing prior work undertaken by ourselves and project partners, and the evidence base provided by the West of England Combined Authority, G First LEP and Heart of the South West LEP, and our other regional partners, including the West of England Local Industrial Strategy and Employment and Skills Plan (see section 6). We have also liaised where we have been aware or been made aware of existing projects that may align with research into skills needs, either sectorally or regionally or both, such as via the Manufacturing the Future Workforce report mentioned above, and through projects such as the South Somerset Place Leadership Group and resulting action plan developed by consultants EiBC.

Our Trailblazer has:

- Utilised the standing, presence and networks of Business West and our key partners and stakeholders, to ensure maximum audience engagement and reach – we have primarily engaged business audiences that, prior to this project, were not currently associated with Business West or existing mechanisms for input into training provision
- Tested out methodologies for ongoing exploration of businesses' current and future needs, to analyse potential methodologies going forwards for future LSIP activities
- Deepened links with the MCA skills programme leads and programmes such as Workforce for the Future, Future Bright and Digital Skills Investment Programme, the Growth Hub & Universal Business Support service, Centralised Intelligence Team, Inward Investment Team and with the MCAs strategic forums, SAP and LEP.
- Developed and reinforced relationships and processes by which business can share intelligence and providers can understand needs
- Stimulated businesses to review their own approach to investing in their staff and have provided additional information, signposting and routes to support when identified via internal and partner knowledge
- Worked iteratively with the SDF project - via the West of England Institute of Technology - which is aimed at trialling known and soon-to-be-known delivery improvements required in these sectors/themes
- Helped to address issues of employers struggling to understand the range of education and skills assets and options in the region and has suggest best methodologies to address this going forward

We believe that for the region and sectors covered in this trailblazer, in-depth, granular and qualitative research was the most appropriate way to add a meaningful level of current business intelligence and to supplement existing LMI, data and working knowledge.

Due to the significant differences in our sectors and the existing knowledge base, we also believe that the methodology of utilising business terminology aligned with growth and workforce development, for subsequent translation into skills needs, is the most appropriate

route to gathering this intelligence for the benefit of planning with employers' needs at the heart.

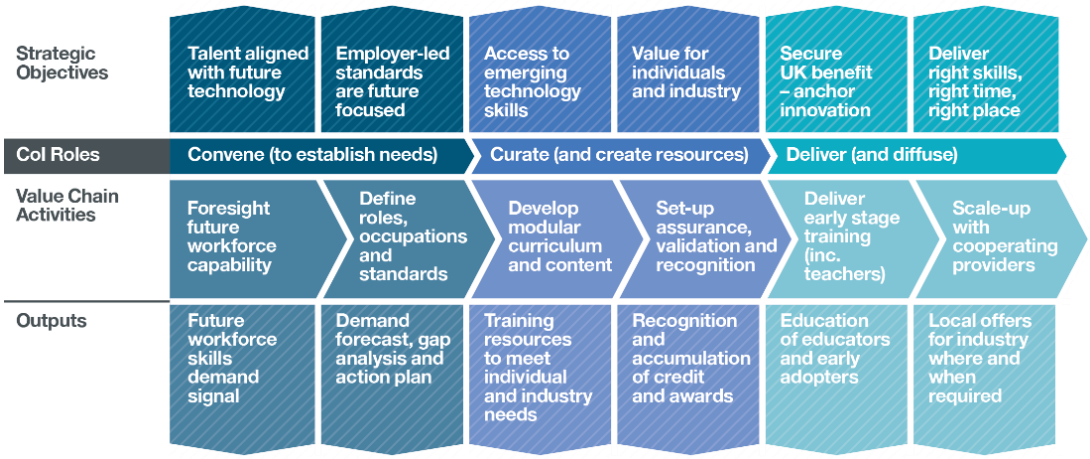
We believe that the potential for LSIPs going forwards is to add to existing work undertaken by combined authorities and LEPs, and have therefore worked closely with existing groups and projects such as the Skills Advisory Panels.

We have kept a sharp focus on the LSIP Trailblazer remit as identified in the Trailblazer application, highlighting additional understanding of current business voice and methodologies for improvements – there is not, therefore, a focus in this report on learners' needs or opinions, training provider input into existing understanding of gaps in provision, the direct input of other stakeholders, or any other potential areas for investigation that are equally important. We also acknowledge that this LSIP Trailblazer has not been set up to replicate or replace SAPs and does not cover nearly the same scope or strategic remit, but rather seeks to provides additional value and granular data/evidence available to work alongside this existing functionality.

Business West is a B-Corp and recognises the wider role business has to play in society and local communities. It works towards a region rich in culture, devoid of inequality and poverty. Whilst both Business West and Bristol Chambers of Commerce recognise the serious and immediate need to identify issues and further support for equality, diversity and accessibility initiatives and changes (to improve both representation within and access to these and other sectors), we are conscious that these are being actively developed and put into action within routes outside of the LSIP, and via other organisations. In order to avoid duplication, and mindful of the limited scope and timescale of the LSIP Trailblazer, the project has focussed on employer needs and subsequent translation, and has not attempted to add additional voice on equality, diversity or inclusion through this route.

https://www.businesswest.co.uk/about/our-story/our-social-responsibility

As mentioned in section 1.2, we opted to utilise a tripartite adoption and integration strategy – business, sectoral representatives and/or stakeholders and education and training providers working together for collaborative analysis and in-depth understanding of differing drivers of change. This has also been highlighted nationally within the HVMC 'skills value chain' methodology attached to 'Manufacturing the Future Workforce' and as a process for further training delivery and provision in the AAE context.



We believe there is an integral importance to robust, current and granular methodologies to put employer narratives at the heart of post-16 technical education and training provision – using the LSIP as a method to reinforce the existing knowledge base rather than attempting to recreate it. The region covered by this trailblazer has an excellent baseline understanding and collaborative approach to skills delivery, as illustrated by existing projects such as DETI and the Certificates of Future Technology. The LSIP rollout can meaningfully add additional resource and provision through our identified methodologies to encourage further SME engagement in skills planning and provision and to supplement bodies such as the IoT's business board and the Skills Advisory Panels.

Where events were held in person, facilitated by colleagues with sectoral and business support/engagement experience, the depth of conversation held was obvious and with levels of granularity hard to replicate in other routes. Virtual roundtables and focus events were also excellent for immersion and in-depth discussion of changes to the business environment, but in virtual research environments it is harder to facilitate consistent and fair input from different parties.

1.6.2 Engagement Methodologies and Analysis

Marketing and Communications

Marketing and communications were coordinated through a multi-channel strategy, utilising internal and existing channels alongside outbound digital and paid-for content. Channels were analysed simultaneously to usage to ensure best value for money and reach into target audiences.

Outbound marketing

Following the methodologies laid out in our trailblazer application, the 20-week marketing plan from November 2021 until March 2022 aimed to boost involvement in the LSIP research trailblazer via:

- direct call-to-actions (CTAs) in the form of events attended and interviews booked

- raising awareness of our deliverables to pre-identified relevant stakeholders and businesses that Business West has not previously engaged with.

Given the aforementioned short timeframe to identify the audience, plan deliverables and implementation, the LSIP Trailblazer team continued to use an agile methodology to discover which platforms provided a better return on investment (RoI). The communications team tested one method of communication at a time and if this channel did not show RoI within a two-week period, this communication method was no longer utilised, and the team focused efforts on other deliverables in hope of gaining better responses.

Our core call to actions for all marcomms include the below, listed in order of priority to the project:

1. Interviews booked
2. Research events registrations booked
3. Higher value content-focused events attended by relevant businesses with an opportunity for direct engagement either during the event (e.g., in the form of breakout sessions) or in pre-event and post event communications (e.g., in the form of an opt-in for interview).
4. A downloadable 'remote Q&A form' in which the interview questions are summarised and listed for businesses to complete and return to the LSIP team at a convenient time
5. A short survey on Smart Survey in which respondents can also opt in to discuss any of their answers further in an interview
6. Awareness of the project to share with key networks that can be pushed towards our core CTAs

Due to the timescales of the initial trailblazer project, our focus in the initial 10-week period was to work with partners and stakeholders in relevant industries to gain multi-party buy-in and robust stakeholder network engagement. For the subsequent 10 weeks we implemented further outbound messaging to new audiences and to improve our current response rate overall.

We undertook significant analysis to develop audience personas – this consisted of platform/channel usage, key messaging impacts, and engagement conversion routes. Tthis led to better attainment, for example re-organising a social care virtual roundtable with the narrative moved from 'technology' towards 'recruitment and retention'. The Project team utilised a number of different desktop research methods alongside existing understanding in the identification and development of potential audiences. The audience persona included decision makers and ground-level operational and HR managers in businesses ranging in size from SME to multinational organisations, with a presence within the LSIP trailblazer region for the Aerospace, Advanced Engineering and Social Care sectors. Within Aerospace and Advanced Engineering, we focussed primarily on businesses in the core aerospace supply chain, and within Social Care focussed predominantly on adult care and domiciliary care.

Our deliverables included:

- **Mass communication** to achieve both awareness of the project to and to deliver methodologies listed in the application (to engage with businesses not already engaged with Business West) and direct CTAs. These took the following formats;
    - **Mailers** to pre-existing Business West organisations listed on our internal CRM and other procured lists, such as Beauhurst contacts
    - **Social media** posts, specifically on LinkedIn and Facebook, using the Business West account for paid and organic advertisements, posts and direct messages to cherry-picked audience members
    - **Website**
    - **Promotional videos**
    - **Press releases**
- **Directed and targeted communication** in the form of direct emails, event invitations, and warm invitations to interview or focus groups;
    - Stakeholder email resource sharing
    - Cross-Project Collaboration (e.g. Newsletters)
    - Via Social Media
    - LinkedIn Sales Navigator
    - Dot Digital and targeted Mailers
    - Client Testimonials

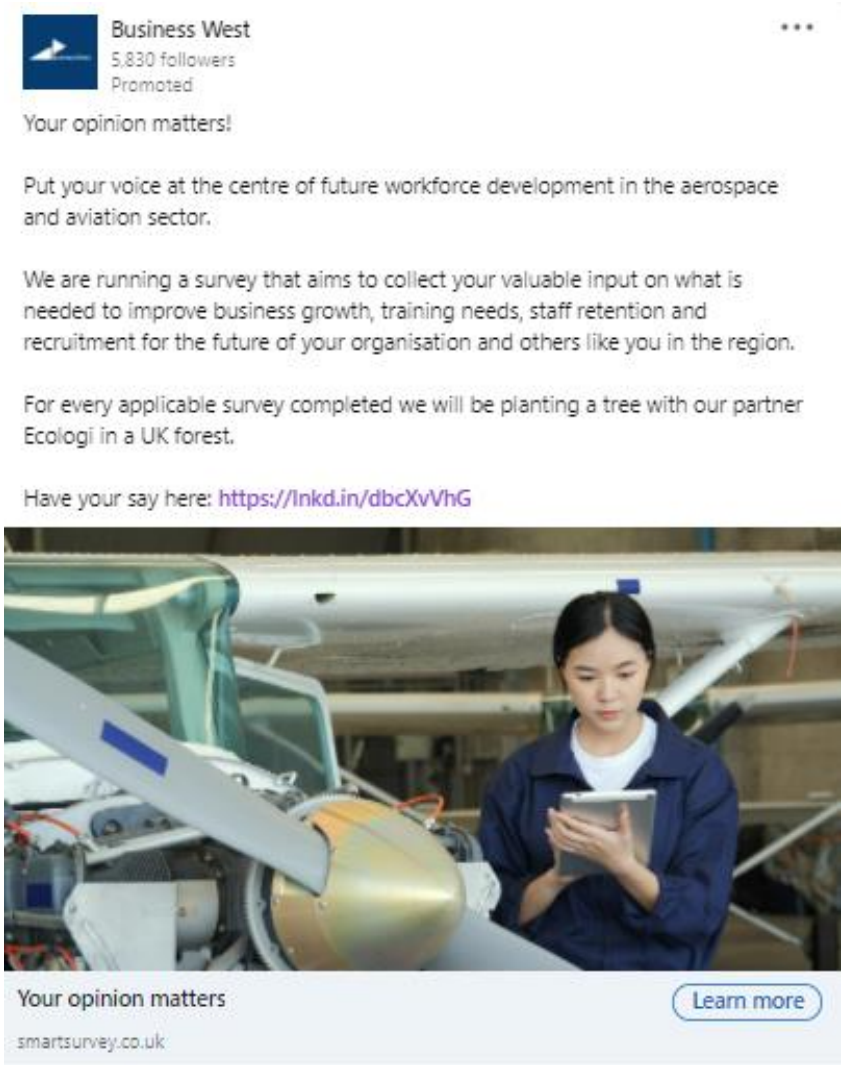
1.6.3 Social Media Marketing and Communication

Based on the initial response to our interviews and focus groups, we believed that via outbound comms we would find it significantly harder to reach those in the social care sector, and would generate more leads within aerospace and advanced engineering. We included the below in our initial persona planning:

	Social Care	**Aerospace**
Barrier	Very busy, often working 14-hour days	Hesitant to collaborate with other 'competitors' in the industry or government funded projects
Format Requirements	Quick, to-the-point comms	Need to show clear value that aligns with their project objectives
Channels	More likely to use Facebook, but also strong presence on LinkedIn	More likely to use LinkedIn
Tone and underpinning messages	Strong opinions on current government initiatives Focus on lack of funding / pay for workers	Strong opinions on sector content / politics surrounding hydrogen and advancement of the sector Focus on foresighting skills
Pull factors	Word of mouth is important for this sector	Big names (e.g. Aerospace Primes and Tier 1 suppliers) have gravitas

However, our findings were contrary to these hypotheses.

LinkedIn was the platform that received the most engagement - we believe this is partly due to Business West's strong existing presence on this channel. Interestingly, our Health and Social Care targeted posts tended to perform better than our Aerospace and Advanced Engineering.



Through Facebook we had a poor response for both sectors. For organic posts we believe that this is also due to the lack of Business West presence but also, we must consider that Facebook is not primarily a business focused platform, despite sometimes being used for recruitment advertisements. We trialled a set of organic posts on the platform which reached an average of 60 people – however, because these were shared by members of the LSIP team, we cannot be certain whether they reached the right people.

Based on early conversations and existing experience that many Care Homes use Facebook to promote vacancies via ads, we decided to move forward with a paid campaign to attempt to overcome Business West's lack of presence on this channel and within the sector. We spent £60, and received 26 landing page views and 53 unique clicks on the link, which is a notable

return on investment for this platform and for Business West's usage of it. This vast difference between the number of those landing on the page and the number of people clicking in the first place could be due to the speed of the journey from link click to destination. The loading speed of our LSIP trailblazer web presence was slow so this could explain the loss in conversions, however we also attribute the lack of business focus of the channel to these figures.

In addition to paid Facebook advertising, we allocated marketing budget spend to LinkedIn targeting, which as expected performed much better. Simultaneously we found it easier to target the sector and individuals via LinkedIn Campaigns Manager compared to both Facebook and Twitter. We attempted a range of different styles of advertisement including 'newsfeed placement', 'messenger ads' and 'event boosting'. The most successful ad formats were newsfeed and event boosting.

We tested a variety of different styles of content, including participant testimonials, targeted copy, content thread focused and graphic-centric. Somewhat surprisingly, an industry leader talking-head video describing their LSIP engagement with a £200 spend only raised 5 clicks on the link, compared to boosting the same testimonial quote using a still image (this received 38 clicks on an equal spend). We believe that this is due to the lack of time individuals within the social care sector have to watch video content, however, we would be inclined to continue trialling this method in the next iteration.

We felt that Twitter campaign performance was good. The top tweet during this period across the Business West-wide account was one of the LSIP trailblazer promotional tweets, which obtained 826 impressions at time of writing:

1.6.4 Direct Communications

Mailers sent via Dot Digital did not perform as well as expected in some circumstances but had a clear split between the two sectoral audiences, with top performing mailers all for Aerospace and Advanced Engineering audiences, and worse performance from mailers targeted specifically to the Social Care sector or a generic LSIP Trailblazer audience.

In terms of overall performance, our mailers hit high levels of open rates in comparison to other Business West projects, and when targeted to specific audiences reached higher levels of click-throughs.

We found that cutting content down improved open rates to the Social Care sector whereas top performing mailers for the aerospace sector tended to include further content on specific sectoral themes, such as Hydrogen as an aviation fuel. We decided to reduce the content journey time from 'mailer' style to 'call-to-action' action and particularly within the Social Care sector. Because of this, we decided not to continue to advertise the survey or other content-heavy CTAs via the mailer system, but instead focus on mailers for event outputs, as this is where Business West marketing channels performed best.

We would recommend only using email for those in more senior positions within Social Care industries, who are predominantly more office based, due to lack of engagement and reported ability to review. However, this is harder to strategically manage within SME communications due to there being a less clear office/on-the-floor divide.

Direct and personal communications were widely better at securing in-depth engagement overall, although this is of course the most onerous and resource-intensive methodology. Overall, the project converted significantly higher buy-in through conversion of existing affiliated project audiences (such as Workforce for the Future's Social Care project) and giving them the option to engage with the LSIP Trailblazer by highlighting the potential tangible benefits.

Confidentiality in Engagement

All businesses were guaranteed anonymity for research findings, with no direct attribution unless explicitly requested in follow-up. The ability to have fully confidential discussions about commercially sensitive topics and needs analysis meant that businesses could discuss openly their current and expected issues with an impartial business representative organisation. The LSIP project team also had a meaningful understanding about potential ongoing support available across the support landscape.

1.6.5 Other Key Call-to-Actions

LSIP Trailblazer Survey

An initial three-minute completion incentivised survey was created as a lowest possible impact opportunity to engage with the LSIP and as a route to opt in. This created 56 total entries, with 12 completed, giving us 5 new opt-ins via this route, while another 5 were engaged via other routes (such as opt in from event attendance). Due to low conversion and uptake (and potentially the at the time widely discussed 'survey fatigue') we dropped the survey from our ongoing methodology, to focus on other routes to encourage engagement.

LSIP 'Portal'

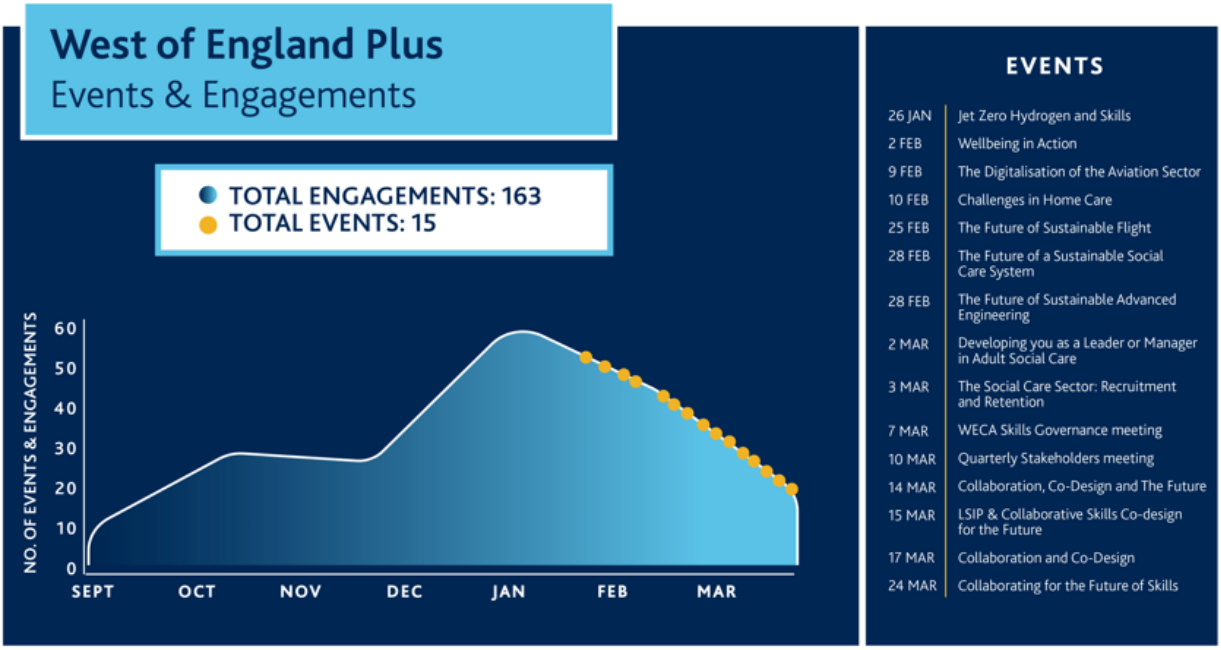
A number of businesses requested a 'self-service' LSIP portal so that they could better engage when appropriate and convenient. In response, the LSIP team developed a light-touch portal on the Microsoft Forms platform that could be shared when a response was received. This portal allowed self-reportage, via a tailored written interview sheet, an open-ended forum/focus invite and the option to rearrange an interview directly. Through this we received one request to arrange interview and a small number of registrations for notification of upcoming events. A more sophisticated portal may have led to better engagement/completion, such as the incorporation of the ability to book meetings directly with the LSIP engagement team.

Events

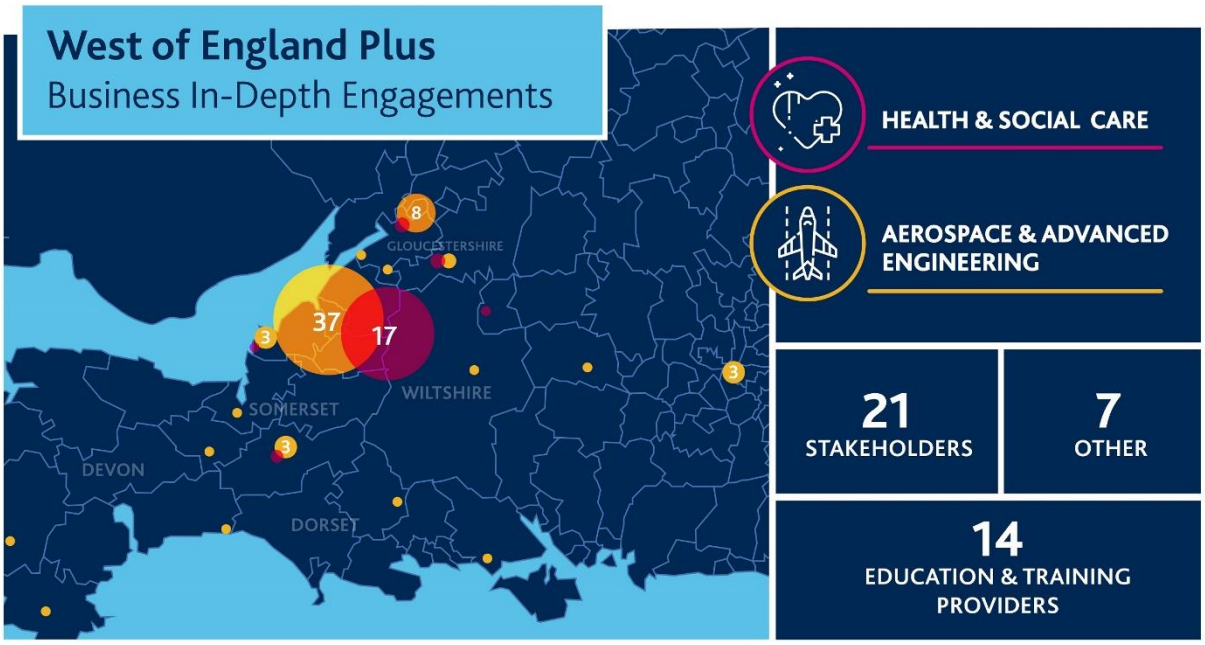
We believe that (outside of the research and evaluation events) the hydrogen and aerospace event was essential as a galvanic intervention to encourage greater engagement and awareness raising within the target audience, leading both to further engagement in the research directly and to ongoing conversations attached to both the skills needs and the development of a hydrogen ecosystem itself. In future LSIPs (and without the limitations imposed by Covid) we would suggest these as a key method for galvanising change and engaging audiences in technologies for which skills needs need to be identified.

Towards the end of the trailblazer period in March, events for research purposes were highly impacted by the resurgence in covid infections, with some events towards the end showing dropout rates up to 40%, which had not previously been seen.

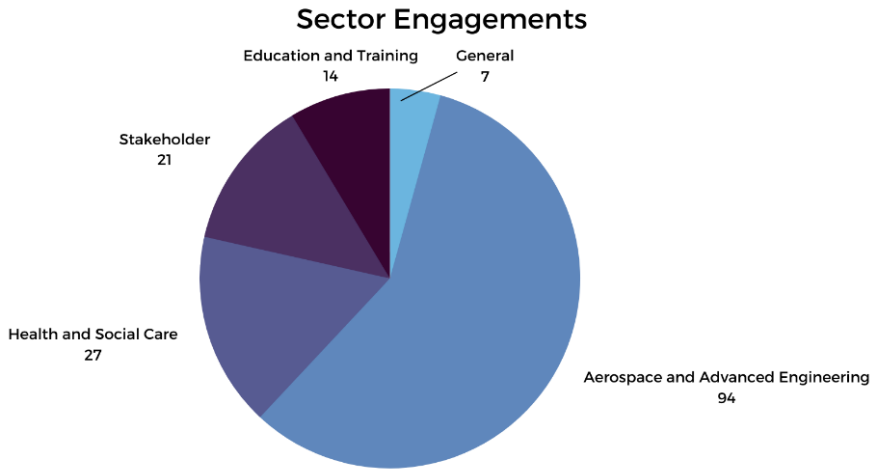
1.6.6 Project Outputs and KPIs



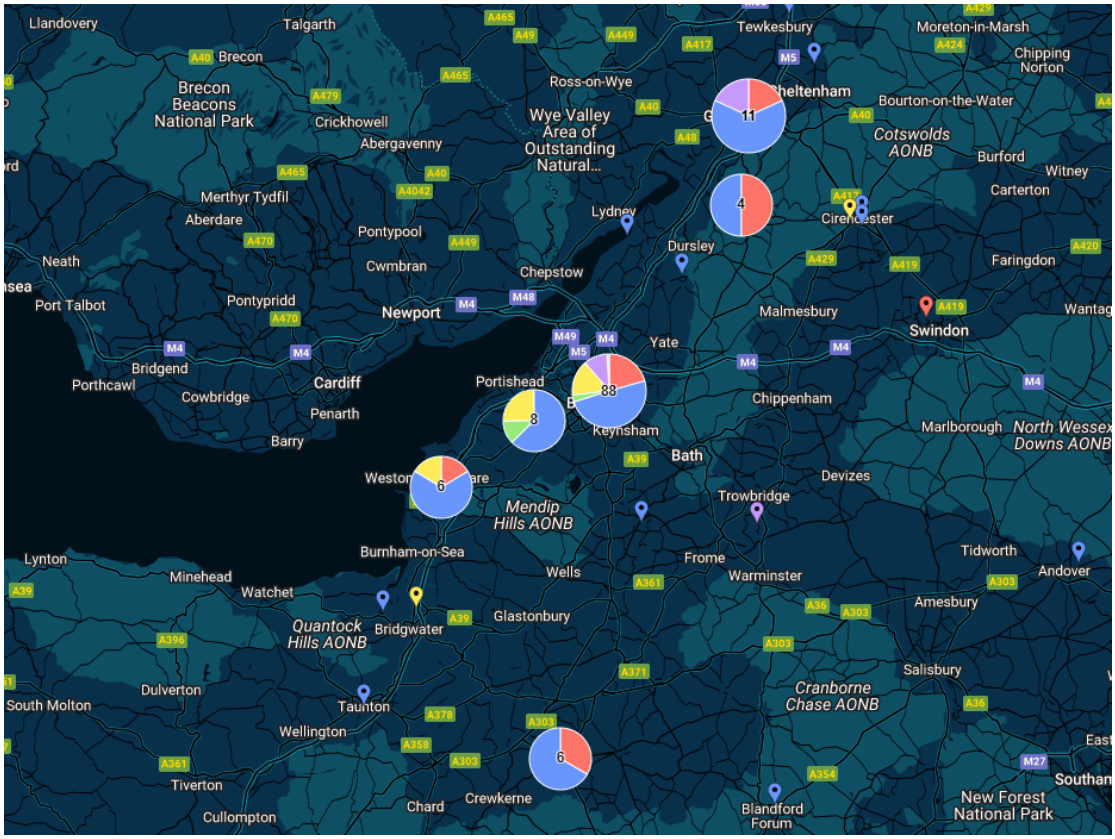
WoE+ LSIP Trailblazer Engagement Profile



Map of Sectoral Business Engagements (regional and in-depth only)



Breakdown of engagement, sectoral alignment



Map illustrating geographic remit of in-depth engagement (some adoption of 'travel to work, travel to learn' integrated). Some businesses with regional representation but no business address in region not shown.

- Aerospace
- Health & Social Care
- Stakeholder
- Education & Training Providers
- General

1.6.7 Key Partners and Stakeholders

Business West has been well placed to utilise existing collaborative relationships with partner organisations, and nationally important institutions within the region. Kay partners are outlined below:

- The **West of England Combined Authority** is the recognised Mayoral Combined Authority for this LSIP trailblazer –we have liaised on a regular basis (covid permitting) throughout development of the project to ensure alignment and that the principle of 'truing the wheel' has remained within research methodologies. The MCA has supported the trailblazer by ensuring senior skills leads supported the process, promoted surveys and events via the Growth Hub/delivery partners, facilitated attendance at the SAP Panel and other forums as part of the consultations and the central LMI team has supported with provision of data and intelligence.

- The **West of England Institute of Technology** and constituent colleges are key delivery partners and have been engaged on a primarily bi-weekly basis, not least as the

Strategic Development Fund (SDF) activities are tied to LSIP findings and activity in the Skills for Jobs White paper.

- **Western Training Providers Network** have been commissioned as a contractual delivery partner to engage with Independent training Providers and educational establishments for LSIP outputs. Three events were held with WTPN co-facilitation and input.

- **G First & Heart of the South West LEPs** (Local Enterprise Partnerships) have been engaged due to their partial inclusion in the geographic remit of this project, with events held with representatives of each during the project and additional work with sub-regional partners, such as the Yeovil Place Leadership Group, supported by Yeovil College.

- **MAS Partners** were contracted to lead on some aerospace sector engagement activities and as lead for Business West on some continuation activities, such as the development of the Hydrogen Skills Consortium and the Regional Skills Collaboration project with WEAF.

- **FutureLeap** have been commissioned as a contractual delivery partner for further reach into business audiences engaged with sustainability and clean-tech. FutureLeap arranged and hosted three focus groups and arranged a number of interviews directly outside of this.

- We have engaged with many other regional, sectoral and national stakeholders during this project too, such as **DWP, JCP,** initiatives such as **Bristol Talent** (representing a joint apprenticeships initiative between SGS College and City of Bristol College) **and sectoral ERBs** and nationally significant assets like the **National Composite Centre**.

- **FE providers** have been engaged and given opportunities to engage via the above partnerships, through mechanisms such as the IoT and SAPs, in direct liaison and with events tailored towards the evaluation of business findings for FE providers. Follow-up activities have already been planned following the digital release of the LSIP report April onwards.

2 Employer Needs: Research Findings

The two sectors we have engaged through the course of this LSIP process are in many ways extremely different in nature, reflected along a number of dimensions including technical skills profiles within employers in each sector, job design and job profile across each sector, their relationship with FE and HE providers, and of course the nature and content of formal skills provision and career pathways.

Nonetheless, perhaps surprisingly, the themes that emerged from our engagement with employers across the two sectors showed a high level of resonance and alignment with each other.

This section sets out first an overview of the key demographic and thematic features of the two sectors (generated through a desk-based review of data, and other recent relevant research and policy papers) then moves into the primary research findings from our extensive qualitative engagements across industry partners from both sectors, and training providers across FE colleges and independent providers.

2.1 Background and Overview

2.1.1 Overview: Demographics and Sectors

Population:

The total population in the WoE+ LSIP trailblazer geographical area is c. 1,824,700, of which 1,138,700 are within the 16-64 age band and 750,300 of these within the West of England CA area. [1] Concentrations of deprivation are highest in Bristol, with 41 LSOAs (Lower-layer Super Output Areas) in the most deprived 10% of LSOAs in England for Multiple Deprivation including 3 LSOAs in the most deprived 1% in England. Sedgemoor has 4 LSOAs in the most deprived 10% of LSOAs nationally for Multiple Deprivation, including Highbridge South West which is the most deprived area of Somerset.[2] Bath and North East Somerset has 2, South Somerset and Mendip have 1 LSOA respectively in the bottom decile, while South Gloucestershire has none.[3]

Advanced Engineering & Aerospace:

The LSIP Trailblazer geographic area does not align directly with most existing summaries of AAE industry key data, but the data for the West of England region gives an illustrative, indicative overview. In this geography, the industry is worth over £7 billion, and hosts 14 of the country's 15 Primes. The region is home to the National Composites Centre (NCC) which is one of seven world-class centres comprising the UK's High Value Manufacturing Catapult (HVMC) research centre.

[1] ONS – Nomis/Business Register and Employment Survey
[2] Somerset Intelligence
[3] English Indices of Deprivation 2019

In the wider LSIP area, there are c. 2,975 businesses in the advanced engineering & aerospace sector, employing about 36,000 people (2020 ONS figures)[1], accounting for c. 5 % of jobs in the region. The top 3 Unitary Authorities employing the most people within this sector are South Gloucestershire (14,000), City of Bristol (9,000) and South Somerset (6000).[1]

Health & Social Care

Within the LSIP Trailblazer area, the Health and Social Care sector includes 1,640 businesses, employing 37,000 people.[1] The top 3 Unitary Authorities employing the most staff within this sector are City of Bristol (11,000), South Gloucestershire (6,000), and North Somerset (5,000).[1]

Care workers were in the top 5 occupations being advertised over the course of the pandemic according to WECA analysis of unique job postings.

2.1.2 National and Local Priorities

The scope of the LSIP trailblazer is not to duplicate the wide and exhaustive range of existing excellent secondary and data-based analysis of challenges within both the sectors of focus. Rather, our focus has been on testing methodologies for industry engagement and building collaboration between skills providers and industry; and exploring granular, experience led insights into the challenges and potential solutions facing the sector. However, we include here a summary of the core recurring themes across the sector specific analysis we reviewed as part of the LSIP process, and include a range of secondary research documents at the end of this report for further reading, which we used to inform our research methodology, and analysis.

2.1.2.1 Aerospace and Advanced Engineering

Many of the concerns raised through the LSIP primary research activity reflect themes on which there is already an existing body of reflection, analysis and insight.

The 2020 Engineering UK report into Educational Pathways[4] (compiled based on a national analysis) highlighted concerns around the reputation and knowledge of the sector within the younger potential pipeline of employees, but indicated some progress on lack of diversity in the sector. Key findings included:

- In 2019, only 23.5% of 11- to 19-year-olds had heard about engineering careers from careers advisors and 47% of them said they knew little or almost nothing about what engineers do
- Engineering-related apprenticeships made up 26% of all apprenticeship starts in 2018 to 2019
- In 2018 to 2019, 30% of engineering and technology HE entrants were from minority ethnic backgrounds, which is higher than among the overall student population (26%)
- Since 2009 the proportion of female engineering and technology entrants has increased by 5 percentage points but gender disparities remain stark

[4] Engineering UK 2020 – Educational Pathways into Engineering
https://www.engineeringuk.com/media/232298/engineering-uk-report-2020.pdf

- Women and people from minority ethnic backgrounds remain severely underrepresented in engineering-related apprenticeships

The nuances of the impact of the shift towards new technologies has also been well documented, with clear awareness in the sector and in policy circles of the pressures this will create on the skills base. As explained in the HMV Catapult 2020 report, Manufacturing the Future Workforce[5],

> *"Many manufacturers are turning to the potential of new industrial digital technologies, such as artificial intelligence and automation. For some these will offer a short-term remedy but, despite the determined media association between new technologies and job losses, the likelihood is that these technologies will increase pressure on the skills base by boosting demand for the skills manufacturers are already struggling to find, as well as those that will be needed to complement the new technologies being developed by Centres of Innovation (CoIs) like the High Value Manufacturing (HVM) Catapult, National Physical Laboratory (NPL) and TWI."*

Green skills are also well recognised as an area of immediate future need in the sector, with WECA's Green Skills Report 2021 report highlighting that over 45,000 new 'green jobs' will be required at all skills levels and across all sectors by 2030.[6]

2.1.2.2 Social Care

The challenges and opportunities in the Social Care sector are also already well recognised and well documented, with primary research findings closely echoing existing national bodies of insight generated in recent years. Regionally, the 2022 West of England Annual Skills report[7] highlights challenges including

- Ageing population and the pandemic driving up demands for skills in health and social care
- Recruitment challenges exacerbated by pandemic
- Dramatically high staff turnover rates (30.8% within social care, with some roles higher .g. support workers (39.5%) and domiciliary roles (43.7%)
- Anticipation that health employment in the region will increase by 10,200 (0.9% annually) with the highest number of job openings in the region forecast to be in Caring personal service occupations
- Anticipated concurrent pressure on health services with 271000 new jobs forecast by 2036 to meet pressures and recover from pandemic.
- Acknowledgement that social care sector is substantial (501 CQC providers in West of England alone) but not currently seen as 'a career sector of choice'.

[5] HMV Catapult 2020 – Manufacturing the Future Workforce - https://hvm.catapult.org.uk/mtfw/
[6] West of England Combined Authority Skills Advisory Panel (SAP) – January 2022 report - https://www.westofengland-ca.gov.uk/wp-content/uploads/2022/01/West-of-England-Skills-Advisory-Panel-SAP-Report-Full-Report.docx
[7] ibid

- Acknowledgement that care sector has had significant difficulties recruiting and retaining the right skills regionally

The Heart of the South West Local Skills Report 2022-2024 echoes these themes for the HotSW region. It highlights amongst other things:[8]

- Increasing challenges with matching skills supply and demand
- High and rising vacancy rates
- Notes that only 13% of qualifications held regionally are in health and social care despite it comprising approximately 20% of employment
- Urgent need for good quality careers advice, education and training to provide skills needed by employers

Nationally and regionally, Skills for Care remains an incredibly comprehensive, responsive and nuanced repository of sector information. Its most recent regional report, The State of the Adult Social Care Sector and Workforce 2021 South West[9], echoes these regional concerns across the national picture, also pointing out that over 10,000 registered managers are due to retire from the sector over the next 15 years, and emphasising the need for urgent investment in CPD within the sector.

[8] Heart of the South West Local Skills Report 2022-2024 - https://skillslaunchpad.org.uk/wp-content/uploads/2022/03/2022-Local-Skills-Report-for-Heart-of-the-South-West.pdf

[9] Skills for Care 2021, The State of the Adult Social Care Sector 2021 South West - https://www.skillsforcare.org.uk/adult-social-care-workforce-data-old/Workforce-intelligence/documents/Regional-reports/The-State-of-the-Adult-Social-Care-Sector-and-Workforce-2021-South-West.pdf

2.2 Research Findings

Whilst the key challenges manifest differently in each sector, we identified a clear pattern of five cross-cutting thematic headings relevant to both, which this section sets out.

Training and Skills is the main and most comprehensive area of findings. The three next themes - Recruitment/ Retention; Changing demands on sector; and Leadership / Management – all showcase driving pressures and levers for change that impact on the themes explored under 'Training and Skills. Underpinning all of these is the longer term and structural challenge of climate change and decarbonisation, which we specifically set out to explore as a topic within our research, but on which in some senses we found much less rich or comprehensive awareness than on the other four thematic areas.

Under each thematic area below, we break down what is cross-cutting as well as how specific needs and challenges manifest in ways specific to each sector; and offer some level of comparison where this is possible, particularly in considering questions around quality and effectiveness of the relationships between employers, training providers, and local and regional strategic bodies.

2.2.1 Training and Skills

A range of insights emerged around the need for training provision itself that is able to:

- Be modular
- Be bespoke
- Be Industry led

- Be certified
- Rapidly adapt to technological shift
- Build ongoing collaborative relationships
- Offer hybrid models for upskilling alongside recruitment
- Evidence retention strategies attached to industry-led upskilling
- Improve recognition of pathways, including those considered vocational, and the perceived benefits
- Deliver wider recognition of benefits to businesses, learners, sector and society
- Professionalise social care and improve retention via pathways to health care

As this thematic area was one of the most nuanced, detailed and complex, we have it in this section into three sub-themes. These cover the *content* of the training businesses have reported a greater need for; the *quality* of the training they feel is currently on offer, and finally the *delivery models* through which training and skills are provided, and the challenges and opportunities for change in these to tailor them to industry needs.

2.2.1.1 Training Content

Whilst the LSIP research questions set out primarily to understand technical skills needs, it became rapidly evident across both sectors that 'soft' skills were deemed equally important, not just as a baseline in facilitating good working practices but increasingly recognised as a set of technical skills in their own right - relating to management, customer engagement, digital skills and adaptation to rapid change - as well as a clear indication of the ongoing importance of foundational and core skills.

2.2.1.1.1 Technical

<u>Aerospace and Advanced Engineering</u>

In general, businesses within this sector perceive technical skills as critical, with a greater need to be educated at degree level or equivalent, dependant on the area in which you want to enter the sector.

Technical skills mentioned as priorities in a meaningful way include:

- Skills attached to expected changes within 'industry 4.0':
    - CAD and multi-faceted digital and design engineering: 'a machinist is no longer just a machinist and a fitter no longer a fitter'
    - Quality Assurance and testing (and technologies attached to this such as sensor integration and IoT)
    - Digitalisation and integration of systems in their widest senses, from billing, CRM and procurement through to 3D modelling and machine learning
- Electrification (both in motive and systems replacement mechanisms, such as hydraulics)
- Skills attached to the wider 'net zero' narrative, with the understanding that output is primarily demand-driven within the supply chain, and with recognition that hydrogen is a leading but unknown expected method for delivery (*see Hydrogen Skills Consortium case study for further information, 4.2.2*)

- Losses of 'legacy' engineering skills and knowledge for non-current systems attached to wide early retirement during the pandemic, often specific to individual businesses and within maintenance and repair operations

However, many organisations we spoke to feel that degree programmes offer too narrow a focus on specific skill areas, meaning that once in employment, workers need further training that is specific to the project in hand. With these skills needs tending to be very job specific, there are often no applicable 'off-the-shelf' training courses. This leaves companies having to create bespoke training on a project-by-project basis, which can prove difficult when having to manage constraints in terms of time and cost.

As most training is conducted on the job, the content tends to be structured around company processes and projects. This is mostly machine-based, practical training. Formal, off-the-shelf training that is available and used, tends to be for more foundational skills such as Health and Safety, forklift operation etc., where certification is required by law. Businesses reported that legislated requirements for qualifications and certification remains a key driver of training.

There is therefore the potential for new legislation to drive training for new technology, however companies reported their view of a lack of legislation currently in place for new technology, and expressed a view for a need to create a new set of 'rule books'. They also commented on a time lag between the skills requirement for developing and using new technology, and the training to produce these skills.

Social Care:

Within Social Care, the picture is somewhat different in terms of the baseline of skills workers tend to come into the sector with. Whilst most care sector roles tend not to require formal/professional training beyond level 2 (and even then, there is a high proportion of entry level Care Workers who do not have level 2 qualifications yet) we heard from companies that there is a wide range of technical skills that they need their workforce to be competent to deliver, ranging from physical handling of clients through to medication management.

There was clearly a wide variation in how companies address this. Larger employers will tend to bring in bespoke, on the job, modular training from independent trainers, and/or invest in in house training teams. This training may or may not be accredited and may or may not be able to count towards longer term, more formal qualifications. Generally, feedback was that this type of training is not as portable between employers as the sector would ideally like.

Smaller scale employers - who do not have the resource to commission bespoke training of this kind - rely either on workers having already received similar training elsewhere, or on their ability to develop skills over time through experience and peer support rather than formal training. While there are some concrete positive aspects to workers being able to be 'trained up' by more senior colleagues, who are often able to provide a much more tailored and hands-on quality of knowledge transfer than through a training course, this system is of course fragile and increasingly under pressure in times of acute staff shortage – when there is far less time available to dedicate to training new staff on the job. It is also at threat from

the rapid aging of the workforce, as those retiring or leaving the sector outnumber those coming in at entry level.

Key technical skills that were reported as particularly needed going forward, in light of the increasing acuity of health needs in the care client population, included mental health, dementia support, various acute / complex health needs, re-ablement support including physio and occupational therapy, medication management, wound dressing, hoisting, catheterisation and phlebotomy, amongst others.

A range of learning modules do exist to upskill employees further on specific disabilities and health conditions, largely provided through independent providers, and tending to be a mix of online assessments and on-the-job training. Much of these skills are also covered within more formal training pathways available in FE institutions, for example many of these skills would be included in nursing, pharmacy or physiotherapy skills pathways. However, a clear and repeated message particularly from smaller scale providers was that not all Care Workers are able or willing to embark on these longer-term programmes and that if they did, there is a perceived risk that upon qualifying they may choose to leave the Care sector for the NHS anyway. What is clearly lacking within the care sector is a wider, more modular, but equally high quality, accredited and standardised versions of these training areas, that can skill up care workers to deliver the parts of these services that are urgently needed by clients they are supporting with increasing health needs, to support them out of hospital.

Digital skills and general IT knowledge were also identified as a common area of skills need amongst the current workforce regionally, particularly as many employees in social care are older. Depending on the size of the organisation, it was noted that the uptake of apps for recording data on residents or for employees to see their work rota has been minimal for the smaller social care businesses.

2.2.1.1.2 Softer Skills

Aerospace and Advanced Engineering

As technology is developing and shifting all the time, the need for this sector to be adaptable is paramount. Businesses emphasised to us that the ability to learn as you go and be open to new challenges is critical to all their workforces. Additionally, as in all sectors, we heard that soft skills around people and project management, problem-solving and leadership are generally lacking in their staff and that they are not cohesively aware of dedicated formal training to develop this. We think this is an interesting insight to note, given that there are in fact a wide range of available accredited pathways on offer within the FE sector around leadership and management – including apprenticeship pathways – but evidently this is either not translated fully into sector specific versions of this type of training, and/ or simply not being communicated as effectively as it could be to industry partners.

There is also clearly an even more urgent need for these types of skills in smaller companies that do not have dedicated departments for marketing, HR, organisational development, client management etc. SMEs we spoke to recognised a need specifically for business development, marketing and sales skills. This included not just internally focussed

management, or business development planning, but also the real-time ability to communicate better with clients and understand their needs.

Social Care

In the social care sector even more so, we heard a clear and consistent reflection of the fundamental and critical role that relationship skills play in the functioning of the care sector overall. This was felt by all employers we spoke to, without exception, to be the most important skillset in any new recruit – over and above any technical skills. However, whilst awareness of this skills need was clearly very well embedded into existing values-based recruitment models across the sector, there was a strong sense again across almost all those we spoke to that people management, leadership and workforce / skills planning capabilities, were severely underrepresented within the care sector workforce. Whilst some of the larger employers had capacity and infrastructure to offer internal CPD to develop these skills formally, many of the smaller organisations do not have formal training provisions in place for these skills to be developed and are more reliant on external provision – which they currently are not accessing in a consistent way, or at all, across the sector.

Alongside this, particularly within the Care Sector we heard from many employers that they see a significant gap in foundational and core skills (including numeracy, and confidence with maths particularly) which is a barrier for many staff accessing more formal apprenticeship pathways.

2.2.1.2 Training Quality

Aerospace and Advanced Engineering

The companies interviewed for this project reported a mixed quality of apprenticeship training providers / FE institutions delivering apprenticeships. Particularly for SMEs within the supply chain, we heard that a major barrier to supporting apprenticeships is the burden of training placed on the company. This was particularly around foundational and core skills, with some reporting frustration with lack of communication from training providers to employers about the actual capacity that is required within the employer to support the apprentice, versus how much is provided as a wraparound by the training provider.

We heard from several smaller employers that they felt there had been a discrepancy between the content they expected staff to be trained in, and the content they were actually trained in, and also that the quality of communication between employers and training providers was quite varied. Other concerns shared regarding apprenticeships included the length of the course. Overall, whilst some companies reported success and satisfaction with the apprenticeship process, they felt this had relied on a heavy amount of input from the business to make the apprenticeship training work well.

As in Social Care, the AAE sector expressed a need for flexibility of modules, breadth of content, and improved communication between business and training provider.

Conversely, the insights we received from larger companies who take on many apprenticeships and to high levels (e.g. Leonardo) were slightly different. With a bigger employer, the sense was that it was more straightforward to directly shape and influence the design and content of the courses, with some describing a process of 'co-development' of courses with training providers and also with FE institutions.

There is generally considered to be a lack of training provision for manufacturing skills in the South West, and businesses report a lack of time to invest in looking for training and funding. Industry associations are regarded as a good source of external training courses as they can recommend training providers or provide training themselves. Business coaches, or individual trainers are often used for softer skills, but we also heard that on the job training can be a challenge as company staff do not necessarily have adequate teaching skills.

For smaller scale employers, the cost of providing bespoke training was cited often as a perceived barrier, with very varied knowledge of where funding for training can be sought and found, and what training might be covered by central government budgets versus bespoke, 'employer-commissioned' training. Some respondents also shared concerns about the quality of new-starter, younger apprentices in terms of aptitude and attitude: this theme bears further investigation as it varies across the supply chain, but reflects a wider perception that younger people entering the workforce may not bring the right core and foundational skills, or expectations and aptitude, that employers are expecting.

Social Care

Similarly in Social Care, we heard from a range of experiences of quality of training provision ranging from employers who worked very closely with independent training providers and were hugely satisfied with the quality of the relationship and of the training, to those who cited poor experiences with trying to support staff to access skills and training with providers or colleges that didn't match the expectations of the timing of delivery, content covered or burden to backfill staff time on the employer. It should be noted though that the majority of those we spoke to who actively engaged with training providers felt that training quality was high: for social care the issue seems to revolve more around smaller employers not feeling able to access appropriate training provision for their needs in the first place, or concerns covered in the next section about the lack of suitability of the delivery models, to their needs.

A much stronger theme throughout the Social Care section conversations was around the desire for a more accessible and standardised accreditation system so that skills and training their workforce access can be accredited in a way that is recognised and trusted by different employers within the sector, and, critically, by NHS colleagues with whom they work closely. An interesting view was shared by a local government commissioner in one roundtable that from a commissioner's perspective, the usefulness of investing in accreditation is questionable as it's not clear that it necessarily correlates with better outcomes for clients or higher wages for staff. This view was shared in the context of an agreement that this is an unhelpful tension, given that accreditation is clearly desirable for a range of reasons, and more importantly, their point reflected a status quo in which large parts of the care workforce are delivering quality and experience that is beyond their pay level and beyond their official

accreditation level. 'Retrospective' accreditation doesn't then deliver a further change in either outcomes or pay – rather, it corrects an anomaly in the system and enables the individual to potentially progress – but, critically, there may be a drag in the system against investing in accreditation because of the pressures that care commissioners are under. We believe this provides an even greater argument for the need of industry led, and skills provider led, investment in skills and training design within the social care sector – and have drawn some analysis in later sections about the complex relationships that exists in this sector between commissioners, training providers, employers and NHS / primary care partners.

2.2.1.3 Training Delivery Models

Aerospace and Advanced Engineering

We heard an interesting range of insights from companies at different parts of the supply chain spectrum. As already referenced, there is clearly a notable difference in the training delivery of large companies compared to small. Larger companies, such as Rolls Royce, have formal graduate schemes, offer longer work placements, sandwich years, and multiple levels of apprenticeship. In general, the view was that most CPD training in smaller scale companies is delivered on the job, for example when teaching staff to use machines and processes unique to each company. Suppliers of machines may be involved in this training. During the pandemic, home working was deemed to be detrimental to on-the-job training.

Online training was seen as useful for softer skills such as management, sales, business development, negotiation and communication; and convenient as it involves less time away from the office. Shorter courses are preferred for these types of skills. Whilst many smaller companies reported having tried apprenticeships, as noted above there was a general feeling that both apprenticeships and school placements were viewed as being of limited success in their current form.

An interesting point was also raised that while schools are still measured on university routes, and not apprenticeships outcomes, delivery of apprenticeships will still be deemed lower skilled and therefore can affect university rankings.

Social Care

In the social care sector, given the current acute and extraordinary pressures the sector has been faced with recruitment and staffing during the period of this LSIP research, unsurprisingly we heard a consistent message that training courses that require relatively inflexible blocks of attendance either within classroom-based learning, or in placements away from the employer, are simply impractical. However, equally it was clear from all discussions that there is no 'one size fits all' training delivery method: different training providers and institutions offer different models and we heard that many employers find they work with a number of training providers to allow for a combination of different learning methods. Whilst online learning is helpful in its flexibility both in terms of timing and location, this is not equally accessible to all learners, and for those with limited digital access, in person training is better. The travel to work area for employers is also a factor in working with FE colleges who may not

be particularly easy for some of the employers' workforce to physically access, particularly if relying on public transport and trying to combine college visits with domiciliary care provision shifts.

2.2.2 Recruitment and Retention

The second grouping of insights is within the area of recruitment and retention. Both sectors are currently facing a variety of recruitment challenges, but in this area, there are greater differences in the reasons for this and therefore the sense of what might need to change. However – both sectors are grappling with three similar sets of issues which we have grouped accordingly: the image or reputation of the sector; the challenges around recruiting the right people and skills sets into the sector; and the challenges around retention and turnover.

2.2.2.1 Sector Brand / Reputation

Aerospace and advanced Engineering

Interestingly, we heard from a wide range of employers that they feel the aerospace and engineering sector has an image problem for young people. Whilst the higher tech ends of the industry remain attractive particularly in the areas of green technology, but also more generally in being able to offer high skilled and well-paid career pathways, there is a substantial supply chain that sits behind this undertaking much more granular, manufacturing based works that is perceived as less skilled, physically hard, and dirty. Companies spoke about the need to engage at an early stage, with schools pre-16, to myth-bust and build an understanding of the range of jobs within this supply chain. Some of the smaller supply chain companies we spoke to felt that larger and higher-skill end companies have more capacity and margin to invest time and energy into engaging with schools to promote careers within their end of the industry.

The other insight emerging consistently across all parts of the sector was the reflection that there is a persistent lack of both gender and ethnic diversity which is an issue. Larger companies especially are conscious that there is a need to encourage women, and a need for more female role models in STEM. Robotics is a good example of where women are being attracted to the sector through psychology, sociology and biology disciplines. However, across the wider sector, there is still a prevalent lack of diversity at all levels.

Social Care

Employers spoke passionately of their despondency about how negatively the care sector has been portrayed, as 'a horrible place to work' and 'a sector in crisis' – when in fact, despite all the challenges around pay, progression, and the intensity of the work, care was felt to be such a potentially enormously rewarding, stimulating and long-term values driven career. A large part of the problem was felt to be the persistently negative portrayal of care as a dead-end, low paid job which was off-putting to people who might in fact thrive in the sector. Whilst there was also plenty of discussion (expanded below) about the very real challenges these issues constitute in the sector, and the need for them to change systemically, there is a huge

interest in how to also invest in changing the 'image' of the sector, and the value and esteem it is held in within the wider public. Not all of this is reliant or linked to the training and skills offer, but a large part of the role it was felt skills providers, particularly colleges, could play in supporting this image shift, was around the pitching of the sector as a place to build a career, and to expand people's baseline understanding of the range of skills involved in care.

Many employers shared their perception that colleges and also schools, pre-16, would advise people against considering care as a career. Whilst energy is being invested in this from a variety of sources, not least Skills for Care's 'Proud to Care' campaign, and various regionally led efforts to promote the care sector, including from some of the major FE providers, it's clear that the longer-term job of investing in the skills and training provision for the care sector will be closely bound up in overall work to shift the value and status and perception of the sector as a whole.

A lot of good work is clearly already underway to drive this shift, particularly the 'Proud to Care' campaign, as well as a range of more locally driven programmes to support care sector to recruit and market their roles more effectively, not to mention work with DWP on sector based Work Academies, etc.

2.2.2.2 Recruitment

Aerospace and engineering

Employers told us there is a recruitment shortage in aerospace and advanced engineering, particularly within the SME supply chain end, which they are concerned is in part due to the perception of the sector. As in care, the sector feels it is often competing with other jobs that are less skilled but similarly paid (for example in retail or customer service) and many employers reported difficulty in finding people with the right aptitude and attitude, which – again similarly to the care sector – was felt in general to be more important than technical skills, although some smaller specialised companies noted that they prefer graduates over school leavers as they have limited resources in-house to train entry level workers up.

We heard in general that recruitment is largely undertaken either through companies' own networks, or advertising on generic job platforms such as LinkedIn and Indeed – but that recruitment companies are less widely used. Similarly to the care sector, we heard from the small and micro enterprises in the sector that there is an overall sense that they lack knowledge and capacity around recruitment and employment law, and that this was deemed to be a skills gap.

Social Care

Recruitment was, unsurprisingly, a huge and concerning topic for almost all the LSIP research and focus groups conversations. Against the backdrop of existing pre-pandemic challenges with low wages, unsociable hours, limited career progression opportunities, as well as a low ability in most care employers to offer any wraparound benefits such as childcare support; the pandemic has added huge additional pressures to the intensity of the job, level of pressure, sense of responsibility and real legal liability risks when things go wrong. This has

been compounded by the concurrent dramatic and sudden shrinking of the available workforce resultant from Brexit. As a result, we heard time and again of the intolerable stress and burnout driving high turnover out of social care, and the challenge of persuading new workers to join the workforce whether at entry level or mid-career.

Whilst during the course of the LSIP research, the peak of recruitment shortages began to ease within the South West (at the last two or three focus groups / roundtables in early March, we heard reports that vacancy rates were finally starting to come down as more people overall were returning to job hunting post pandemic) there remains a long term and systemic challenge with recruitment into the sector. Employers suggested this was in fact a compounded set of distinct recruitment problems: a shortage of junior / entry level prospective candidates at the younger age of the workforce, meaning overall a dwindling pipeline of people entering the sector; a shortage of mid-career workers who are have historically been a critical part of the sector, which has the potential to attract people who have some degree of life experience and unpaid care experience, and an interest in a more flexible and rewarding, human centred job after some years in other careers / jobs; and also, a shortage of people able to apply for the more senior and skilled roles within the sector such as Registered Managers, Senior Care Workers, and nursing staff – in particular because of the exit from the sector of experienced but burnt-out workers who might otherwise be considering moving up into these roles at this point in their careers.

2.2.2.3 Retention

AAE

Whilst we heard from smaller employers that some had experienced a low retention of apprentices, due to a combination of candidate suitability and a discrepancy between their expectations of the role and its realities; in general employers shared the view that across the sector, retention is relatively strong. The challenges are far more concentrated in the areas of bringing in a new pipeline of younger workers as older workers near retirement.

Social Care

Conversely, the Social Care sector, as indicated above, reported significant challenges with retention. Some of these have already been elucidated in the two sections above; over and above these, other retention related challenges include a real lack of internal career progression opportunities across the care sector. Connected with points reported in the Training and Skills section above, we heard that whilst a huge and varied range of skills is required in the sector, which, if addressed well, can in theory make for an interesting progression of skills and training over a period of several years working in the sector – as things stand, there is still a very limited range of roles and seniority levels to match this gradual accumulation of skills and experience. For those not seeking a nursing career pathway, the roles available in most providers will tend to revolve around Care Worker, Senior Care Worker, and Registered Manager. The 'pyramid' of the staffing structure within most business models means there is a limited number of the more senior roles in any organisations; and we heard many times of examples of workers with huge amounts of

experience over 10 or 15 years, with a range of excellent skills, still working as a Care Worker on much the same salary as those just starting out. Whilst not everyone is keen to progress through a hierarchy, nonetheless there was a widespread consensus amongst those we spoke to that this lack of meaningful status and pay progression within the sector was a driving factor for many in leaving after investing substantial time building up experience.

A further issue which surfaced several times was the degree to which people felt the flexibility of hours within the sector was managed well, or poorly. Whilst the sector has the potential to offer quite attractive flexible work options, it also has the potential to end up providing a combination of anti-social shift patterns, and un-predictable or even zero hour working patterns which again, was cited as a retention challenge. Alongside the challenge of more experienced, long serving workers leaving the sector at a certain point due to lack of progression opportunities, there were also some reports of a challenge in retaining entry level workers within the first 2-3 months of starting – after significant investment in their recruitment and initial induction – because of the intensity of the role, and the sense that the hours cannot be made to fit easily around other life commitments. Strong interest was expressed in access to HR and management support for the sector to support leaders to adopt more innovative and creative approaches to time management, and induction processes to tackle this challenge more systemically.

2.2.3 Changing Demands on Sector

This section focuses on insights gathered about where the two sectors felt the biggest challenges lie for their skills and training needs, as a result of changing pressures on the sector. We have divided it into those points that relate to the future challenges anticipated resulting from changes in the world outside the sector, which will directly impact on it (such as climate, and ageing population); and then separately, the points that relate to the changing structures within each sector, of how work is organised (including technological shifts, or the way that new systems for managing health care provision overall may impact on care).

2.2.3.1 Structural Challenges Around Changing Demands on Sector

<u>Aerospace and Advanced Engineering</u>

Clearly, the drive towards net-zero was a critical factor across conversations with the AAE sector. The lack of hydrogen-related knowledge was highlighted early on by some stakeholders and business interviews, and the decision was made to arrange a larger physical event focussed on hydrogen, using a narrative of its application and skills needs from design and R&D through manufacture, ground operations and maintenance to civil aviation operations. Whilst the Omicron variant put paid to the physical format (originally to be hosted in GKN's Global Technology Centre or the new Engineering facilities at UWE) and the direct research element (the intention was to hold morning plenaries and afternoon immersion forums), attendance was still strong, with 70 unique attendances and one registrant saying that they used the live session as a teaching block for their FE engineering students. This event also led to a high level of conversions for further in-depth engagement sessions, and the

resultant (non-listed) video upload has been viewed more than 150 times at the time of writing. This has also galvanised a number of other conversations about potential replications of format for additional elements of the decarbonisation of aerospace, including in electrification. General awareness of the expectant needs on the sector to decarbonise are high, but to a degree the feeling was that Primes and Tier Ones need to 'stick flags in sand' to guide the supply chain in preparation.

Employers also shared concerns that as technology progresses, greater automation of the business could result in deskilling of current roles. It was felt that there is a critical need for different job design and workforce planning to adapt to further automation. On the one hand, an ageing workforce particularly in the supply chain employers, are leaving potential for skills gaps that will be hard to fill as the sector transitions between old and new technologies; on the other, there is a time lag between how swiftly new technological requirements (e.g. hydrogen) are emerging in the wider sector and being used by the Primes, versus when they reach the SME supply chain. Greater cohesion is needed across the sector to ensure that the supply chain businesses also receive the up-front investment to adopt new technologies that will soon be demanded by the primes, as otherwise there is a real risk that the Primes demand outstrips what the supply chain is able to supply. Further to this point, some suggested that larger companies have a responsibility to cascade training and skills development down through their supply chains, with the LSIP discussions prompting further exploration of how this could be formalised and incentivised.

Social Care

As already touched on above, employers confirmed that they see an increasing pressure for higher skilled roles, to support more acute health needs within the ageing population, and as a result of the last decade of pressures on the NHS – compounded by the last two years. There is a huge shift in thinking within NHS partners, local authority commissioning partners, and CCG / ICS commissioning strategy, ongoing at the moment, which care sector employers are keen to engage in but also conscious will represent a significant shift to what the care sector is expected to deliver within the wider health system.

At root, this is a discussion about how to build up a range of skillsets within the care sector that will enable it to meet the rising acuity of health needs in its clients, but also to increase the degree to which it supports people to continue to live independently for longer, including both in how it designs and delivers home based support, and how care technology is deployed innovatively. Some employers expressed a concern that the pace of this increase and change in needs may already be outstripping the pace of designing and delivering what are often minimum 3-4 year training programmes – again, this contributed to the desire for shorter, modular, accredited training provision to enable the sector to be more agile and adaptable to change.

2.2.3.2 Structural Challenges Around How Sector is Organised Currently

Advanced Engineering and Aerospace

Interestingly, whilst engineering companies can be quite hierarchical, we heard from SME sector employers in the supply chain that there was limited resource and attention devoted to structured progression and workforce planning. This was cited as a concern with regards to succession planning, due to the age profile of existing workforce (both for entry level and for management), and the perceived lack of appeal of this part of the sector to young people. There is a general lacking of training budget in SME's and a common attitude of 'crossing that bridge when they get to it' rather than taking an advance strategic planning approach.

Closely linking to the points made in the 'Training and Skills' section around the requirement for soft skills, we heard insights from several employers within these smaller SMEs, that many of them have Engineers and technical staff also shouldering the responsibility for HR, managerial, and business development roles – for which they may not have the right support, training and capacity to do easily, and which is a challenge to manage alongside the rest of their direct delivery.

Social Care

As already set out above particularly under the 'Retention' theme, employers told us repeatedly that one of the primary underlying challenges structural in the sector was the low level of wages across all roles compared to other parts of the health sector. Whilst other sections above have explored some of the insights relating to how this translates into skills and progression challenges, it is crucial to also recognise this as a fundamental structural challenge for the sector in its own right: one that is deeply entrenched and connected with a much wider societal issue with the valuation of care, whether unpaid or paid, and whether in the social care sector, or other care sectors such as childcare, mental health, etc.

The other specifically structural challenge that clearly persists in the sector internally, related to the recruitment challenges outlined above, is the pressure on frontline and care delivery workforce members to absorb administration and IT functions as well; and for managerial staff to have to absorb significant amounts of frontline delivery. Whilst the larger employers we spoke to tend to be in a better position in terms of separate HR and IT functions, many of the smaller providers – like the SME end of the AAE sector – find these roles merging together; and even in larger employers the current acuteness of staffing shortage has still resulted in managerial staff having to undertake frontline duties to make up for staff shortages.

2.2.4 Leadership, Management and Workforce Planning

As has been demonstrated already, many of the underlying challenges expressed by employers in both sectors, around the capacity to both plan for, and then logistically manage, the development and delivery of skills and training across their workforce, come back to the question of the capacity within employers to undertake high quality leadership, management and workforce planning: this in itself is a skillset that is critical to the high functioning of the wider sector and, according to all the employers we spoke to without exception, an area in which industry would like to see more investment and provision. There are two core areas of business and skills development that would benefit from an increase in skills and capacity around leadership and workforce planning.

2.2.4.1 Workforce Planning and Capacity / Succession Planning

Aerospace and Advanced Engineering

As set out in sections above, a clear difference emerged between the larger scale Primes, and smaller scale supply chain businesses. The former in general appear to have a strong skillset and organisational capacity to undertake workforce planning internally and in the area of graduate level skills; but would welcome the opportunity to coordinate more closely with supply chain partners, and use the infrastructure in place for workforce planning to also tackle future skills needs (e.g. hydrogen) effectively.

Social Care

Conversely, in Social Care, there is an acute need for the sector to have capacity to tackle the rapid changing pressures on the sector in terms of skills needs, combined with the acute challenges around recruitment and retention, through a much more robust and sustainable workforce planning capacity both within the sector, and across the care and health sectors collaboratively.

2.2.4.2 Business Growth and Development

Advanced Engineering and Aerospace

Roles and skills that are specifically required by the smaller SMEs we engaged with include bid writing support, understanding the future landscape to know how best to prepare for it, as well as good leadership to navigate through. It was pointed out that many managers are in post following promotions based on length of experience and service within a technical role, but without accompanying support, training or experience in actual business development.

Social Care

The Social Care employers we spoke to shared a real awareness of the shifting landscape around them which may fundamentally impact on their business models – but urgently need support to tackle this head on. For example, commissioning models are already starting to shift away from contracts based on a set or predictable number of care packages per year, and towards more outcomes based, reablement focussed and flexible support provision; there is a sense of a shift away from residential care and towards home-based care in general but in the short term also an awareness of an immediate backlog in the NHS meaning that residential care providers are looking at moving towards more nursing-based homecare. There are clearly huge opportunities for the care sector in working much more closely with health sector partners, and – with an increased skill and accreditation level in the care sector – being in a position to bid for, and take on, a greater range of service provision contracts as well as evolving models of support for privately funded clients.

At the same time, national changes in care funding models present their own challenges to pre-existing care sector business models that, along with the continued downward pressure on local authority commissioning budgets (social care precept notwithstanding) present

significant threats to many employers' medium- and long-term resilience. Against this backdrop, we heard particularly from the smaller care employers that they have an urgent need for high quality business development, business growth and business planning / business model strategy support, and internal capacity. Already, it's clear that managers are struggling with the burden of paperwork, bid writing, form-filling involved in generating grants, investment, internships and apprentices, to keep at 'status quo' levels of income and staffing – let alone engaging in the investment of time and resource to grow and move to more innovative models of delivery.

2.2.5 Sustainability, Climate Change and Decarbonisation

Climate and decarbonisation was one of the central themes we set out to explore through the LSIP, and we embedded both specific questions to this end in the individual research interviews and roundtables, as well as coordinating specific events around discussion of this theme. Interestingly, but perhaps not unexpectedly, the level of existing thinking around the impact of climate and decarbonisation is much more sophisticated within the AAE sector than within Care. This in itself is a useful finding, as we expand on below; but equally, smaller scale SMEs in the AAE sectors proved also surprisingly disengaged in long-term strategic thinking about the impact of climate and decarbonisation on their sectors. In discussions, two clear distinct areas of interest emerged which we use to structure the comments below: on the one hand, employers' views on managing the impact of climate and decarbonisation on their day-to-day operations; on the other, the longer-term projected impact on the nature of the business their industry delivers.

2.2.5.1 Managing Impact of Climate Change on Operations

<u>Aerospace and Advanced Engineering</u>

In the aerospace and engineering sector there is an understanding of the need to decarbonise and practical steps in place but a lack of formal knowledge or formal plans. On a local level, most companies we spoke to had plans for their premises such as recycling, using alternative energy sources, and responsible sourcing.

Many of the companies in this sector are at the forefront of new green tech and therefore more aware and more driven to influence. However, some expressed concern that rhetoric and awareness of these issues is not always translation into action yet.

Compliance with environmental standards was seen as the key driver of decarbonisation, demonstrating again that legislation drives behaviour. Compliance also comes with a cost, and companies envisage needing skilled staff to oversee compliance. Many already had invested in dedicated roles to oversee and take responsibility specifically for transitional work on operations and keep abreast of changing policies.

<u>Social Care</u>

Amongst those we engaged there was some awareness of sustainability, particularly in the homecare sector, where employers have buildings management as a core part of operation. Some good practice is already underway with individual employers working with dedicated

decarbonisation specialists to develop carbon and waste reduction plans – one of these programmes that was shared in more detail with us involved plans for adapting day-to-day operations such as areas like food waste, meat vs plant-based catering, heating and energy management. Overall, even with those companies not specifically engaging in this kind of dedicated programme, we found a general live concern within homecare employers about the poor insulation and heating /cooling systems within much of their housing stock.

However overall, there was a general sense from those we spoke to that there is limited capacity and awareness of, or formal attention to, decarbonisation strategies in terms of operations, with only a handful of the employers we spoke to having, for example, allocated a dedicated staff member to this role.

For domiciliary care providers, there was real concern around fuel cost increase. Some frontline staff have commented that the current extra pay to support petrol costs does not cover the full amount. Beyond this observation and some concern about the impending worsening of this situation, though, employers shared mainly a concern that they had no real sense of how they might tackle this in the medium and long term – both in terms of the skills and knowledge they may need, or the energy and time to undertake strategy and planning – but also the financial resources to invest in, for example, transitioning to electric vehicles or building up their own fleet in the first place (which by no means most domiciliary care providers currently have, relying instead on workers to drive their own cars to home visits.)

2.2.5.2 Managing Impact of Climate Change on Nature of Product / Service

Aerospace and Advanced Engineering

Clearly, for the AAE sector, the wider implications of climate change and the drive to net zero are hugely influential for the day-to-day nature of the work of the industry. For companies developing new technology, we heard a strong emphasis on specific skills needs relating to this around for example electrification of vehicles/aircraft, hydrogen, and new digital technology. As noted in the Training section above, there is a concern around the ability of the training and skills provision to keep up with the rapid pace of change of technology and demand on the sector overall.

A further point made by several employers was that increasingly, young people are aware of and care deeply about the carbon and environmental credentials of industry. This matters to recruitment and to the choices young people are making about skills pathways at an earlier stage.

Alongside these challenges, companies acknowledged a need for investment in softer skills such as change management, in order to bring staff along with digital and net zero changes.

Social Care

In general, the most noticeable insight around the social care sectors' skills needs in relation to changing climate and decarbonisation was the absence of capacity and engagement currently with this issue. Some employers we spoke to had given some thought to the impending impact of weather change on older people's care needs (superfluous seasonal deaths in summer and deaths in winter directly attributable to extreme weather conditions,

for example). However, it was clear that without some support and investment into the time, capacity and access to technical expertise and knowledge, the care sector will struggle to plan ahead for these wider changes, in the face of the huge array of even-more-immediate challenges currently being faced.

2.2.5.3 Digitalisation

Advanced Engineering and Aerospace

Many companies report recent and ongoing introduction of electronic processes (MRP, CRM systems, SAGE etc), and the fact that these new electronic systems generate data, which in turn requires new data management skills as well as updates in cyber security as more systems are introduced.

In general, we heard that companies are investing in machinery to make processes more automated which means that employees will require the capacity to work across multiple roles. These developments all require new and broadened skills.

With the development of new technology comes the increasing need for programming, modelling, and simulation skills. Whilst it was noted that younger generations often have a greater aptitude for this work through early experience in gaming, coding and making robotics, nonetheless this still needs some resource and time to translate into practical engineering skills.

Social Care:

Digitalisation is clearly a process which different sizes of care sector organisations are grappling with at different levels. Whilst larger companies and many SMEs have now moved entirely to electronic records, some of the smaller SMEs are still using hybrid systems including paper-based records, and keen to accelerate the move to full digitalisation. However we heard a consistent concern that a barrier to this is in core digital and IT skills and confidence of particularly older parts of the workforce. Naturally, the pandemic has accelerated use of and confidence with many tools e.g. MS Teams, Zoom for client conferences, and greater use of apps in general to record time, medication, communicate with clients' families etc. But there was a consensus that investment in support and training around core digital skills would be valued.

On a more strategic level, we also heard from some SME employers engaged in innovative uses and development of new digitally assistive care-tech – recognising that there are huge advantages in effectively building digital tools into and alongside face-to-face care provision (such as digital monitors for clients' homes to monitor patterns of behaviour and identify early health warning signs; through to specific apps to support care workers to monitor blood pressure). Investment in supporting care employers to grow and develop new approaches and tools has the potential to drive further uplifts in the value and skill level associated with different areas of current provision.

2.3 Summary of Core Challenges

In summary, we have been interested to discover that the granular, experience-driven approach we have taken through the LSIP to generate practical and change-oriented understandings of the biggest challenges facing industry partners, has shown a surprising alignment between sectors that do not, on the face of it, appear similar either in nature of services or structure of sector. These centre on the following recurring themes:

- The difference between the experience of larger scale businesses and SMEs
- The critical, underpinning need for strong capacity to undertake future skills planning and workforce development, as a precursor to any meaningful collaboration with skills providers to design bespoke training
- The challenges in combining in-work training and capacity building, with tight delivery margins, particularly in SME business models
- The time-lag between the speed of change in demand for new skills, and the speed in designing and delivering appropriate training
- The value of close working relationships between employers and training providers
- The importance of reputation and knowledge of the sector and pathways within it, within the wider public and pre-16 education

3 What Needs to Change and Why

The themes unpacked in section 2 above cover a range of challenges for both sectors under review. These include various different aspects of how skills and training can better support industry. But they also include challenges that might not be as obviously 'skills' related – but which on closer reflection turn out to be deeply enmeshed in how industry interacts with skills provision.

Even more importantly, focusing on skills development within industry at a systemic level offers potential long-term and systemic solutions to many of these wider issues (for example, recruitment challenges, business planning and growth challenges, and how SMEs can function better within larger scale supply chains) that are critical to the shorter-term attempts to solve them.

This section sets out what needs to change to address these challenges, and can be read as three layers of change:

1) The primary, end-goal desired changes around **training and skills design and delivery**, and **workforce planning** (unpacked in 3.1 and 3.2 below)

2) A secondary set of changes required to achieve that: a **shift in the level of leadership and management skills** within sectors; a **shift in how industries are understood as attractive places to work** within the wider population, in turn tackling systemic recruitment and retention challenges; and **a shift in paradigm** within industry partners and wider public alike, that job design is about **'a career' not 'a job'** – building the commitment and culture of training and skills into the heart of business models and job design; (unpacked in 3.3, 3.4 and 3.5 below)

3) Underpinning these shifts must be the **development of a solid support infrastructure** across sectors that facilitates the necessary joint working, leadership and business growth support that can unlock the new approaches to skills, training and workforce development accordingly; and **the development of much closer and more consistent interaction** between regional economic strategy and policy, industry led skills and workforce planning; and central government led design of skills funding. (unpacked in 3.6 and 3.7 below)

3.1 A New Approach to Skills Training Design

The primary focus of all research findings, and the core research question underpinning this LSIP, naturally centres on how the actual skills and training on offer to learners pre-employment, and to existing employers in need of CPD opportunities, needs to change to meet employers' needs. Whilst the findings above show some of the nuances between what different employers felt they needed and the degree to which this related to the quality of the experience they may already have had with either FE institutions or Independent Training Providers, for this section we have identified the overriding elements around which there is

most resounding and consensus based agreement across employers in large and small businesses, and training providers themselves as well.

3.1.1 Content, Modularity, and Connections Between Courses

By far the most urgent and consistent call, across both sectors of interest in this LSIP Trailblazer, is for a sea-change in how technical and further education is designed to enable modularity and portability. This requires a significant change in how the majority of existing pathways are designed and delivered, particularly how apprenticeship pathways are designed and funded but also more widely how FE based provision in particular is currently structured. Employers spoke passionately about the desire to be able to work creatively with training providers to design bespoke and tailored pathways in terms of the modules required, the length of overall training, the intensity of time commitment of the individual employee / learner; but also to be able to achieve a far greater standardisation of portability of qualifications both across employers, but also across accredited programmes – for example enabling someone to cumulatively undertake a variety of modules spread out over time, and end up being able to 'top up' into an accredited diploma or degree programme if desired at a later stage.

In addition, particularly in the case of social care, employers and skills providers alike are acutely aware that the skills required in the sector, and the long-term ability of employers in that sector to sustain a higher skilled workforce within their staffing models, is heavily directed by local government commissioning teams, and by the way in which NHS workforce and commissioning is shifting over time. With the opportunities presented by the new Integrated Care System to join up much more effectively across workforce development between NHS and Care Sector partners, there needs to be a rapid change in how both the Care Sector employers *and* commissioning partners in local government and NHS, can directly influence and inform the design and content of Care Sector focussed skills and training to ensure that this training aligns with standards, is portable between, and enables close dovetailing between workforce across, NHS and Care sector partners. Again – modularity and the ability to break down existing pathways into smaller, 'bite-size', accredited provision was seen as key; as was the opportunity to work with NHS partners to make elements of health sector training available in a modular way to the Care Sector workforce.

Clearly, there would need to be a substantive shift in how courses are able to be designed and funded in order to enable this new approach. As things stand, our findings indicate that where larger employers have the resources, and are able to build strong long term relationships with Independent Training Providers, many are already working to design this type of more flexible, modular, approach to training – practice which carries excellent examples and learning – but which is currently still very much restricted to a small subset of employers, who can afford to self-fund, and is still restricted by inflexible requirements around recognised training accreditation pathways, and ends up generating a patchwork of employer-specific courses which are not portable. It also necessarily sits in general outside of the framework that FE institutions are able to offer altogether.

Connected to this are the findings on specific technical and soft-skill training content employers would like to see represented within the training offer which currently is not felt

to be sufficient – such as hydrogen related skills within the AAE sector, or capabilities to appropriately use new assistive care technology in the care sector. These are set out in more detail above in section 2, and some illustrative examples given below in section 4 on possible new pathways needed; certainly it is clear that employers are keen to see a shift in how the content of training courses is designed to be both much more immediately reactive to changing sector needs, but also – critically – able to better pre-empt future sector needs where it is clear where overall trajectories for changing sector demands are going – but where this is not currently translating through to immediate demand (for example, hydrogen tech).

3.1.2 Delivery Methods, Tailored Provision Design

The second major change seen as critical is around the methodology of training delivery. Whilst this may in part connect with flexibility around modularity of course, largely this is a question of logistical and practical considerations for how even the existing available programmes can be delivered. A clear recurring theme within the findings set out in section 2 is the desire for a greater ability to deliver training on location within the workplace, and to be able to design sufficient flexibility into any college-based learning that this can be managed around the individual requirements of especially SME sector employers for whom staff absence from day-to-day operations can be much harder to accommodate within existing business models than larger scale employers. There is a clear appetite emerging from research in both sectors for greater opportunities for employers to co-design training courses to be able to be delivered flexibly around employees and learners' needs, requiring the development of long-term trust-based working relationships between employers and training providers. Examples of innovative and excellent practice are in evidence across both sectors of where this is working well on the basis of long-term relationships that have developed between some FE institutions, and a larger range of Independent Training Providers with more flexibility, and a selection of the larger employers in each sector who have been able to dedicate in house HR and training resources to this work to both design and deliver bespoke provision. However, this only serves to exemplify the gap and urgent need for change in the system to enable all businesses – especially those at the smaller scale end of the spectrum in both sectors – to access this kind of opportunity.

Whilst this relates mainly to on-the-job or CPD training, this theme also shows up strongly in the context of industry engagement in the pipeline for younger learners, for example the design and offer of industry placements, and the involvement of industry in pre-16 engagement around career planning and sector understanding.

3.2 System Approaches to Workforce Planning

The second major 'end-goal' for desired change, which emerged very clearly across both sectors, is how industry engages more systemically in workforce planning. In order to effectively design the right training content - but also in order to logistically manage release of workers for delivery of training, or arrangement of on-the-job training placements for learners including new trainees or apprentices - employers have to have some degree of

capacity, resource and skill to undertake clear and strategic plans for what skills they may need in the short and long term; how they can align their day to day business model with the direct and indirect costs of training (including backfilling time spent on training) and what their long term workforce needs will be as older workers retire and younger workers join the sector.

3.2.1 Cross-sector: Planning Ahead

A large part of what clearly requires quite substantial culture change, across both sectors, around the role industry perceives it should be playing in workforce planning – as a sector, and at individual business level. A surprisingly consistent finding across both AAE and Care Sector SMEs was the insight that there is extremely limited time available for managers to undertake any strategic review of skills needs, to plan ahead for workforce transition; and where this time is taken, that SME sector businesses feel under-skilled and under-supported to undertake high quality, strategic workforce planning. This stood out as a contract to larger scale employers in which an in-house HR team, Organisational Development function and perhaps even learning and development team undertakes this type of work as a matter of course. Clearly, a key to unlocking huge potential in the productivity and resilience of the SME sector – which makes up the vast majority of almost all industry within the UK, after all – is a sustainable and at-scale investment in support to drive up the capacity and time spent on this kind of strategic skills and workforce analysis and planning.

3.2.2 Cross-sector: Short-, Medium- and Long-term Industry Needs vs Length of Training Pathways Required

Similarly, but with a slightly different focus, this would also enable SME businesses to better engage in wider industry-led processes to review the future skills needs at industry level, to inform the provision of the skills and training pathways required to support industry not only with 'just in time' pipelines of skilled workers, but 'just in case' – a workforce trained to be ready to meet a wide predicted range of skills needs for the medium term future, recognising the time lag between industry planning for a future skill need, and the relevant new training provision being designed, delivered over a set period of time, and accredited – and the likelihood of skills needs having evolved further in that timeframe. For training and skills provision to therefore be 'ahead of the game' in meeting evolving industry needs, employers need to be able to work much better as whole sectors to iteratively and collaboratively inform this longer term, industry wide future skills planning – which requires this much higher and deeper level investment in workforce planning at the individual business level. This relates both to meeting the changing demands on industry over time (such as the move towards green energy, within the AAE sector, or the increase in acuity of health needs faced by the care sector) and also the changing pressures on business growth and resilience over time (for example the impact of Brexit and the pandemic on the care sector workforce, or of rapidly evolving technology reducing the demand for certain jobs within the supply chain within the AAE sector.)

3.2.3 Care Sector: Planning Across Health and Care

Within the Care Sector specifically, there is a further critical need for a bolstered capacity for strategic workforce planning at business level - in the current context of rapid movement towards integration between the health and the care sector, there is a huge demand for strategic, long term collaborative workforce planning across these two parts of what is now being increasingly seen as a joined-up system overall. If NHS and primary care partners at regional level are seeking opportunities, for example, to support the care sector to increase the prevalence of certain skillsets that facilitate a faster level of hospital discharge into the community or into care homes; or to work more closely with health partners on early intervention to reduce hospital admissions amongst an ageing population – the training pathways associated with many of the medical, clinical or administrative skillsets required, require the Care Sector to be able to engage in similarly medium and long term workforce planning as its NHS and primary care partners.

3.2.4 AAE Sector: Planning Across Supply Chains

Conversely in the AAE sector, whilst larger scale Primes tend to have robust infrastructure to support this kind of long term workforce planning, we found a surprisingly widespread and consistent consensus that there is an urgent need to change how SME sector businesses further down the supply chain can proactively engage with those they are supplying to avoid significant problems for the sector as a whole if parts of the supply chain struggle in the near future, with an ageing workforce nearing retirement and a clear challenge in bringing in an appropriate large and skilled pipeline of younger workers to replace them.

3.3 Leadership and Management Skills

Having established the above primary end-goals for what needs to change, we have pulled out two initial steps that must be tackled and changed in the short term to move towards the longer-term end-goal changes outline above. Firstly, and closely related to the need to establish a better base of workforce planning skills, there is a cross-sector recognition that overall, a change is needed in the quality and confidence of leadership and management within small businesses across both industries, to facilitate and unlock the level of support and vision required to identify and encourage wider parts of the workforce to undertake further professional development, and to bring younger workers into work environments that are focussed on consistent career progression.

3.4 Shifting Reputations, Driving up Recruitment

Secondly, in order to unlock the pipeline into these sectors, as well as the level of retention possible to facilitate a step change in the approach to CPD across both sectors, is a serious change in the external reputation of both sectors, and how this plays out in recruitment. On the surface, the critical recruitment challenges faced by especially the care sector, but also,

surprisingly, by much of the lower-productivity, smaller scale supply chain businesses within the AAE sector, are a challenges distinct from the design of skills and training – in the case of the care sector, the immediate impact of Brexit and the Pandemic, combined with a long term problem with low wages, job security and status in the sector, for example, most approaches to recruitment currently are focussed on the representation of the sector publicly and investment in coordinated recruitment efforts. However, the more we unpick the connection between the quality of skills provision and the potential career pathways this could translate to, in both sectors, the more it is clear that the current recruitment challenges show up the huge changes also required in how skills and training providers develop and invest in learners' understanding of sectors post 16 and also pre-16; and in how training providers can support industry and other stakeholders (including local and regional government) to radically increase interest in, and diversity of applicants to, both sectors.

3.5 Changing the Paradigm: a Career Not a Job

Closely connected to this point is the change that the LSIP research has demonstrated is needed in the overall paradigm held across both sectors in thinking about how recruitment and skills needs are tackled as twin challenges. Bringing together the idea of entering into a job, with the idea of progressing through a career pathway, requires a step change in treating recruitment as advertising 'a career' not 'a job'. For this to be more than a marketing slogan, this requires training providers to be able to work very closely with employers to coordinate recruitment to training pathways (such as a potential series of apprenticeship levels, especially if these could be delivered in a modular and flexible way as detailed above) with recruitment to immediate vacancies, which are less attractive as a stand-alone job but much more attractive as a starting stepping-stone on a longer career pathway. Again – for this to then really sustain through into the journey of individual learners and employees in each sector, these progression routes must have come out of robust workforce design and business model planning.

3.6 Building the Coordination Infrastructure

In the final part of our analysis of 'what needs to change', businesses have of course indicated a fundamental set of elements that need to be in place to underpin the above suggested changes, and simply aren't currently in the shape they need to be.

For SMEs in particular, there is a huge gap in the presence and strength of industry led networks that can coordinate, convene and advocate at sector level for employers. Within the care sector this is particularly apparent – whilst care sector networks / sector bodies do exist in some form and in some areas more so than in others, they are under-resourced and with a varied level of connection into strategic planning at regional level. Within the AAE sector, whilst larger scale employers are well connected into regional and national sector led bodies, again the SME sector end of the supply chain is still not always as well represented as it could be. Bringing these businesses together more effectively is critical in the immediate term to enable employers to access the level of offer already available within the further

education and independent training provider sector more generally. But in the medium and longer term this change would also unlock the sectors' ability to shift the level of joined up, sector wide innovation and workforce planning set out above.

3.7 Better Industry Led Skills Planning with Central / Regional Government Strategy

3.7.1 Funding

The LSIP research has consistently highlighted aspects of how funding is currently organised for training which urgently need to change:

Firstly, there needs to be a far greater join-up between existing funding streams at regional level that support various aspects of economic and workforce development, but sit within diverse bodies, for example adult education budget (AEB), levelling up funding, various specific skills and training programmes, job brokerage and unemployment programmes, apprenticeship levies, and sector specific investment and workforce development funding. These funding streams sit across a range of stakeholders including local government, combined authority, LEPs, sector bodies, and DWP, just to name a few. Changing how these funding streams are able to be aligned and strategically brought together behind a consistent and joined up set of goals at regional and sub-regional level would make a huge difference in how investment into skills and training could be undertaken in line with industry needs, and with wider economic development strategies.

Secondly, in a drive to move towards a much more industry led approach to skills, a significant challenge is posed by the fact that industry partners neither control nor even shape the design and deployment of existing skills funding. Training providers – whether independent, or Colleges – have consistently reflected a struggle they face in the middle between the content, design and delivery methods that are being requested by employers, versus the parameters within which they have to work, imposed by how funding is designed. For example: current rules around transferring apprenticeship funding from an old to a new employer, if the learner changes jobs mid-way through an apprenticeship, hugely interfere with the desire for more modular, portable and standardised training; as well as with individuals' abilities to access apprenticeships particularly within sectors with large concentrations of SMEs and a high level of workforce casualisation / insecurity.

Enabling industry and skill sector partners to have a stronger voice in shaping the central design of these schemes, or devolving much more of the conditionality around them, would be interesting to explore.

3.7.2 Connection Between Economic Strategy, and Skills Planning

Connected to the above point, there is a real and reported tension between the drive FE institutions feel they face, to pursue institution-led design that seeks to maximise uptake of courses that must be attractive to the current pipeline of the learner population based on

their existing knowledge of industries – rather than targeted at meeting new emerging skills needs within industry for jobs that don't yet exist and which learners may not be familiar with.

The Combined Authority and local government partners should continue to explore and facilitate greater flexibility in funding delivery (where funding rules allow) to ensure provision coordinates and aligns closely with both industry and learner needs, and ultimately continues to ensure that the strategic priorities that directly shape funding streams such as AEB, and more indirectly drive the regional focus for regionally devolved programmes (e.g. Bootcamps and Multiply) aligns both with wider economic development policy and with industry driven skills needs. This would help to further develop partnerships and collaborative approaches in which industry partners work closely with skills providers to design training and skills programmes differently.

It is important also to note here that there is a huge range of existing activity and infrastructure in place within the region which can underpin, facilitate, and amplify many of the suggested new and strengthened activities of the LSIP going forward. The Digital Skills Investment Programme can support investment in SMEs in the care sector around care technology and skills; Digital Bootcamps also present an opportunity to drive skill and innovation across all sectors in this area, just as the Workforce for the Future Clean Skills for Growth, and Green Boot camp delivery can support the evident need for an urgent increase in capacity across industry to tackle climate change and decarbonisation. The Good Employment Charter, a newly launched initiative within WECA, includes a pillar on supporting employers with recruitment and retention, and of course can offer a useful channel through which to embed a range of best practice and innovation the LSIP may support employers and providers to develop. Workforce for the Future (WfTF) is a clear tool to build on in developing the kind of bespoke recursive capacity to undertake workforce development and skills planning within industry which we heard time and again was a top priority across all SMEs. The Careers Hub and Growth Hub are already institutions through which the key LSIP partners collaborate actively, and through which new initiatives and programmes the LSIP stimulates could be delivered. Further information on some of these programmes is included in the appendix, and can also be found at www.westofengland-ca.gov.uk.

Lastly, we also note that for many years, Business West has been able to deliver consistent in depth work across a range of sectors that has enabled us to maintain a detailed picture the skills needs, challenges and gaps in the region as a result of funding through the European Social Fund investment priority focussed on 'Improving the labour market relevance of education'. With this funding now obsolete, there is potential for a significant gap in provision and information gathering.

4 Roadmap

The findings from the LSIP research, and the analysis of what needs to change, indicate a number of clear action point areas that Business West, skills providers and FE institutions, local industry partners and industry networks, and the West of England Combined Authority and neighbouring LEPs can take forward.

Framing these recommendations is the LSIP partnership's collective, overarching analysis of how the LSIP for our region should ultimately be both **driving changes** in our skills system, and **interlocking productively** with other parts of the region's skills, industry and economic development systems in future.

We believe it is realistic, within a **five-year time frame**, to **radically improve** the ability of skills providers on the one hand, and industry on the other, to **engage consistently, collaboratively and effectively** to **transform how skills and training** is delivered for the region, and how it **drives economic development, social mobility / inclusion, and workforce development**.

The roadmap towards this type of high functioning system revolves around three key components that currently either don't exist, or need investment to strengthen:

1) **Capacity and resource within skills sector:** Colleges and independent training providers to have both clear **mandate and responsibility**, but also the **necessary funding and infrastructure** in place to facilitate the level of engagement, co-design and coordination across local industry partners

2) **Capacity and culture within Industry:** Employers – in particular SMEs, who make up the most significant proportion of both the sectors under review for this LSIP, and the regional business base more broadly – have the confidence, capability and culture to do **high quality consistent workforce planning**; and the **necessary infrastructure** itself (networks, industry voice etc) to **effectively coordinate with wider stakeholders** to drive how they support and deliver elements of that workforce development.

3) **Infrastructure that connects stakeholders**: not just ensuring the right forums, networks, working groups are in place; also ensuring that the right **agreements are in place to give mandat**e to key stakeholders to lead and represent; and to clarify exactly how **commissioning / strategy setting relationships** connect with each other.

4.1 Proposed Actions

In light of this longer-term clarity of direction, the section below sets out a number of specific recommendations, showing where we feel Business West can play the most useful role, and where other stakeholders within the system should be supported directly to drive and grown elements of the work outlined.

Underpinning the recommendations below is the principle that the medium-term priority for Business West and the Combined Authority collaboratively is threefold:

1) **To support colleges and independent training providers** to increase capacity and resources for building their longer-term business engagement infrastructure, through **existing starting point of the IOT,** and excellent existing good individual relationships between providers and industry partners. The Combined Authority can play a central role in ensuring engagement, design and delivery links into the wider skills ecosystem and adds value rather than duplicating or destabilising existing successful delivery. Additionally, the Careers Hub and individual programme delivery can help to link employers with the next generation of workers and to address skills leakage out of the sector.

2) **To support industry partners** – especially SMEs – to **develop their capacity** (business support, recursive workforce development) and **ability to generate strong coordinated sector voice** through supporting the growth and strengthening of existing networks eg Care Support West; supporting new specific forums / working groups; and building on the existing provision through Workforce for the Future, the Growth Hub programmes, Digital Skills Investment Programme (DSIP), and a range of other strategic business programmes and support coordinated by the Combined Authority which Business West also already plays a core part in delivering. Embedding the LSIP and its findings into the wider skills eco-system will ensure that, where SMEs do not have the confidence, capability or culture, existing strategic programmes such as Workforce for the Future (funded through WECA and ESF until 2023) and other stakeholder delivery can support them with this. The Combined Authority plays a central role in bringing all of this together, identifying strategic gaps and where commissioning flexibilities are required.

3) **To work collaboratively with the combined authority and other regional stakeholders** to develop the **appropriate infrastructure system** to enable **consistent join-up between different elements of devolved economic development and skills planning**. This includes specifically an exploration of how the LSIP can best amplify and support wider regional structures such as the Skills Advisory Panels, for which we see the LSIP providing a critical tool in embedding employer voice into a wider decision-making infrastructure, as well as providing a conduit into industry for the iterative production of real-time data and insight into industry needs to inform policy making. Adding granular intelligence gathered as part of the LSIP will strengthen pre-existing knowledge and intelligence, further informing the West of England Combined Authority economic and skills priorities and plans. This industry- and sector-focused intelligence will help to ensure that changing industry needs are reflected in and help to shape funding priorities. This will ensure there is a strong system in place to ensure WECA economic and skills priorities are in part informed by, and align with, industry needs in order to effectively skills funding and economic development programmes; ensuring there is a strong set of agreements in place to facilitate how the ICS system

directs the relationship between local government commissioners and NHS stakeholders – and the health and care outcomes they are seeking to priorities - and social care providers, around long term system workforce planning that will dictate which types and forms of skills and career pathways are built to enable the sector to effectively deliver against those outcomes.

4.1.1 Next Steps at Regional Strategic Partnership Level

The LSIP process has already begun to generate a range of new forums and momentum across businesses, and between key regional stakeholders. The LSIP Trailblazer partnership is keen to keep this momentum alive as the Trailblazer finishes, and will be pursuing a number of the emerging themes and conversations in coming months to shape wider regional conversations, and move towards the anticipated longer term LSIP infrastructure.

This includes amongst other things close working with WECA to link LSIP insights, and the development of stronger coordination infrastructure between industry and skills partners, into the wide range of existing strategic forums in the region including the Skills Advisory Panels, Skills Officer Group, Economic Development Managers, Good Employment Charter and the WfTF delivery partner network.

WECA and Business West are also already working closely to ensure the LSIP links into the forthcoming development of the UK Shared Prosperity Fund investment plans, including the delivery of Multiply; close continued working with the IOT on the roll out of the SDF interventions; and careful review of the priorities for Business West in its short- and medium-term investment in sector voice infrastructure, and delivery of business support including through Workforce for the Future.

4.1.2 Next Steps Within the AAE Sector

Within the AAE sector, the LSIP process has clarified Business West's focus on working to support the regional IoT, which already has good foundation of relationship with industry partners with bigger companies, to deepen and extend its reach into SME sector. There are three areas of intervention which Business West would be keen to pursue through the next phase of LSIP work:

1. **Delivery of capacity building to directly support workforce development planning**. This could include direct delivery, building on models such as Workforce for the Future; and/ or brokering or supporting others to deliver support and/ or training on leadership and management / business growth / workforce planning / HR capacity.

2. **Convening and supporting SME end of AAE sector to build up its voice and advocacy within the sector.** This could include convening forums / networks directly, and / or supporting other industry networks and partners to engage SME partners effectively in existing structures. It could also include provision of navigation and signposting support.

3. **Brokerage to generate and support new initiatives, models and relationships**: working as a strong bridge between skills providers and industry, to support development of relationships and new skills and training programmes; as well as facilitating SME sector-led networks to advocate for SMEs within wider supply chain.

4.1.3 Social Care

Within Care, the LSIP process has clarified Business West's focus on investing in the development of stronger infrastructure for the sector, working with a range of key stakeholders likely to include Care & Support West and other employer networks, as well as local and national bodies including Skills for Care, Local Government Commissioners, existing partnerships between care employers and skills partners, etc. Business West is keen to support the sector to be able to engage and innovate much more systemically with both FE / Training providers, but also with NHS and local gov partners via ICS. Ultimately, we are conscious of the need to identify where the lead role best sits for this sector, in terms of for driving employer/ skills provider engagement. Whilst IoTs may have a much-expanded role to play, there is less foundation for this in the care sector than in AAE; and a clear need for the NHS, ICS and local government commissioning partners to be much more invested in this space as well. The three areas Business West would be keen to pursue through future LSIP work within the Care sector would include:

1. **Supporting the growth of a strong care sector voice**, through supporting Care and Support West and other key employer networks with resources and time to help build up capacity of care provider network (convening)

2. **Direct capacity building for SMEs within the Care sector:** Direct training and support to develop workforce and skills planning and development capacity, either through direct provision (building on Workforce for the Future model) and/ or working with partners to develop and deliver programmes for SME sector; supporting coordination of SMEs to participate in larger scale programmes through building cohorts across SMEs; and work to support SMEs both to convene and to be better represented on existing forums and networks

3. **Brokerage to generate and support new initiatives, models and relationships**: Support the development of some specific pilots and interventions which bring together skills providers with SME and larger care sector employers, as well as NHS partners where appropriate, to develop and test out new approaches to career pathways and recruitment into these; Proactively work with sector to develop constructive relationship with ICS as it evolves as new coordinating vehicle for integration between health and social care in the region

4.2 Expected Benefits

Proper, long-term investment to develop the infrastructure through which to meaningfully and qualitatively engage partners across industry, skills and policy, in co-creative, aligned and long-term vision work, is the key to unlocking a wide set of changes. Without wishing to pre-

judge the outcomes and outputs of what by nature would need to be an industry-led, co-productive, system and process, we anticipate the following impacts, and give an indicative sense of the types of networks, interventions and potential new approaches to skill pathways that could emerge – based on the impact already of the short but intensive Trailblazer phase.

4.2.1 Overview of Impacts Within Sectors

4.2.1.1 AAE:

Immediate benefits:

- Improved ability of existing businesses and workforce to adapt to changed and changing systems through existing workforce development and upskilling/ reskilling/CPD
- Utilisation of ongoing improvements in efficiency and productivity to drive continued global competitiveness,
- Further incorporation of digitalisation as pre-cursor to wider I4.0 initiatives
- Retention of the ability to provide high value services in manufacture, Research & Development and innovation to the world's aerospace industry

Longer term impacts:

- Uptake of understanding for the imminent sector requirements for further work towards net zero in manufacture and usage
- Better recognition of sector and opportunities for high value, lifelong career opportunities
- Better fluidity between companies and across related and affiliated sectors, such as nuclear and rail
- Potential to avoid further disruption to supply chains through better flexibility and ability to onshore and adjust

4.2.1.2 Social Care:

Immediate benefits:

- Using skills improvement to directly alleviate intense recruitment and retention pressures on sector
- A clear and consistent mechanism to feedback to the providers of post 16 technical education – providing an agile education system that responds quickly to changes skills needs at a pace that aligns with industry changes
- Immediate opportunities to use improved delivery of skills provision to tackle immediate skills needs in dealing with impacts of pandemic on acuity of domiciliary and home care users' health needs
- Strengthening of currently fragile sector as a whole, through building infrastructure to connect with other parts of system

Longer term impacts:

- Increasing the value of services the sector offers, as part of driving up the ability of the sector to offer greater job security, status and above all pay

- Enabling the sector to tackle the shifting and increasing demands it faces
- Driving up job quality within Care
- Driving up quality as well as scope of Care outcomes, and supporting whole-system approach to reduce pressures on health services accordingly
- Stronger more robust relationships between employers and FE institutions
- Technical education that is responsive to employer demands
- A workforce that has skills relevant to sector demands

4.2.2 New Projects: Already Underway, and Emerging

Through the work of the LSIP Trailblazer, there are already several emerging collaborations emerging, including networks, projects and initiatives. These include, but are not limited to:

- **West of England Institute of Technology and SDF specific activities**

  Alongside the ongoing, in-depth liaison with the West of England Institute of Technology (and the continuing development of modular training delivery against currently identified business needs) there is clear potential benefit to supplementing the existing business board and internal mechanisms with additional granular intelligence for further skills needs analysis and foresighting on expected regional needs, additional SME engagement and access to wider business audiences. We are hoping to continue with the momentum of the work through a SDF Phase 2 led by the IoT, involving all seven regional colleges, to enable greater realisation of the LSIP Phase 1 findings.

  The WoE+ LSIP team worked with the Institute of Technology to promote its Certificates of Future Technologies modular training delivery to appropriate businesses throughout the project lifespan and has helped shape upcoming delivery, including imminent hydrogen principles modules. We expect the trailblazer findings within the Health and Social Care sector to assist in the development introduction of modules designed for this sector too.

  During the LSIP Trailblazer we jointly hosted a co-design event, worked within partner colleges and the IoT+ group, arranged sessions for the IoT director to present frequently and there is an expectation we will continue to work together proactively in engagement and foresighting activities for the benefit of the region's businesses.

- **AAE Sector networks emerging:**
  - The South West Hydrogen Ecosystem Partnership (with Business West on steering committee)
  - SWH2SC - South West Hydrogen Skills Consortium, including development of new modules for pan-sector upskilling and professional learning for the hydrogen economy
  - Equivalent consortium in development/discussion for electrification, with pan-sector foci
  - Aerospace Digitalisation Forum with HotSW LEP, Yeovil College (as part of the WEIoT) and Leonardo

- Social Care sector networks emerging
  - Sustainable Leadership group (potential for recurring forum of larger scale care sector organisations convened through LSIP, as longer-term insight and peer support forum)
  - Western Training Providers Network + Employers group: potential for recurring forum
  - Care Support West: currently exploring options for Business West to collaborate more closely with this existing and well-established regional Care employer network, to strengthen and expand its capacity

CASE STUDY: HYDROGEN SKILLS CONSORTIUM

The WoE+ LSIP trailblazer held a number of engagement activities that both highlighted and investigated hydrogen as an important part of the aerospace cluster's remit towards Net Zero, whilst also recognising that aerospace as a sector is likely not a large scale early adopter, but needed to raise awareness within advanced engineering overall and the benefit of having some 'flags in the sand' as vital encouragement prior to direct tangible supply chain requirement.

A large scale event titled "Jet Zero: Hydrogen & Skills" (eventually held online due to Omicron's impact) secured signficant buy-in both from speakers (Easyjet, Airbus, ATI and Bristol Airport) and registrants, with 70 log-ins used on the day, multiple particiapnts reported on single logins from a college lecturer, and the resultant video viewed more than 150 times at time of writing across two uploads.

These activities helped shape the format of the South West Hydrogen Ecosystem Partnership, of which Business West became a founding member and also established the Hydrogen Skills Consortium, whose vision is "to develop a pipeline for a highly trained hydrogen focused workforce [and] to enable […] the West of England to become a regional Centre of Excellence for the infrastructure and application of Hydrogen as part of the need to decarbonise the regional economy."

Currently being developed through this group is the first roadmap of upskilling needs and transitional requirements for hydrogen adoption, incorporating:

Module 1 - General hydrogen context & overview, including molecular knowledge, production, and distribution

Module 2 – Energy conversion, fuel cells and thermal engines

Module 3 – Storage, vectors, cryogenics

Module 4 – Health & Safety (hydrogen specific)

CASE STUDY: DIGITALISATION

A theme discussed within the interview narrative for the LSIP with advanced engineering and aerospace companies was to what extent the sector has digitalised and the impacts this has had. It quickly became clear that *digitalisation* was a bigger issue than expected initially and created an opportunity for follow up events to take place on this theme.

Activities directly arranged via the LSIP project included an initial planning meeting with Yeovil College and Heart of the South West LEP, a roundtable forum at the soon-to-be-opened iAero Centre in Yeovil and a follow-up discussion with some of the key partners following to plan next steps and activities. These events were successful in driving forward a number of useful elements to continue to hold meaningful conversations about skills needs, with plans subsequently drawn up for continuation activities and development of sectioned roadmaps including 'Factory Floor 4.0', 'Aviation Design and Planning 4.0', 'Business Enterprise' amongst others.

Companies in the sector are keen to join collaborative skills discussions around sustainable adoption, understanding of both their internal knowledge gaps and sectoral gaps and ideas around future skills foresighting, with an agreement that continuous engagement allows for the sharing of good practise that the whole supply chain can benefit from. With the right infrastructure in place bringing together the key stakeholders with the right mandate and ability to shape design, a number of specific approaches can hopefully be deployed to drive forward skills development work meaningfully within the aerospace sector.

4.2.3 Examples of New Approaches to Course Design

The proposed level of infrastructure and capacity to work together would also enable the skills sector and industry to collaborate practically to generate a range of employer driven careers pathways.

Many of these require further investment in the co-design process to develop, which we believe should be the focus of future LSIP work. As an illustration, however, we have pulled out four indicative examples of what some of these types of new programmes could look like, that we've begun to see emerging already from the discussions we have set up and hosted through the LSIP process:

	Social Care - Health	**AAE**	**Modular**	**Workforce development**
Role	*Re-ablement Specialist*	*Hydrogen*	*Digital skills*	*Leadership and Management within SMEs*
Skills	Skills and qualifications to support 'discharge to assess' patients in care homes with no registered	Knowledge to retrain and adjust existing roles, unique requirements for relatively unused potential fuel, ranging from L3	Digital skills within care sector, both foundation but also to support digitally assistive care tech; Digital	Workforce planning, organisational development, HR, business growth, in house learning and development, different approaches to wage systems within business models

	nurse, or domiciliary care including physio, medication, diagnostic, wound treatment	mechanics and Electrical engineering and maintenance and repair through to design and foresighting	skills within AAE that are rapidly evolving with new technology	
Course Type	Degree level apprenticeship; combined on-job and some college based time	Required from L2 (ground operations and awareness) through to L7	Modular, on-the job delivery, portable, standardised, able to function equally as module for longer term programmes or standalone	CPD – modular mix of on job, online, and peer group / 1-2-1 business support led
Funding route	Levy	AEB (for level 3); industry /	AEB / industry	AEB / industry. Could feed into longer term business / leadership apprenticeship pathways

4.3 Whole Systems Approach

Whilst the action points above set out how the necessary infrastructure and connections might begin to be shaped, and how delivery of key interventions might flow from this, it is critical also to reflect on how future LSIPs could most usefully work to provide concrete and transformational levers to enable the wider range of skills and workforce strategy, programmes, interventions and innovation at regional level both to lock into a more iterative dialogue with business voice, and to drive change in industry in an effective and joined up way. Reflecting on the activities which could drive this wider systems approach for the LSIP model, this section sets out three areas in which the LSIP approach could be developed to drive systemic change across a range of processes: overall at regional level across a wider range of sectors in future LSIPs; as well as within each sector considered in this LSIP.

4.3.1 Alignment with Wider Regional Strategies and Programmes

The recommended actions in section 4.1 relate specifically to the scope of the LSIP research into how to better build in employer voice to skills and training design and delivery.

The success of future LSIPS will also need to be underpinned by a clear set of structures through which both the activities within the LSIP, and the results thereof, can be clearly integrated into wider regional structures and strategies. This includes (as mentioned in the sections above) linking into existing forums and networks, adding granular intelligence to existing LMI and not least, ensuring businesses which engage with the LSIP are directed towards existing skills programmes which can support them (e.g. Workforce for the Future, FutureBright, Skills Support for the Workforce, Growth Hub, Digital Skills Investment Programme, to name but a few).

Throughout the current Trailblazer, the regional Skills Advisory Panels provided a regular sounding board and strategic contact point between the LSIPs and wider regional economic and skills strategy, and there is clear consensus that the LSIP will provide a critically useful iterative evidence base and source of granular intelligence for the SAPs going forward, as well as for other combined authority led strategic functions. There are a number of clear current connections between the LSIP findings and recommendations and current strategies and programmes in the region, including but not limited to:

- The Workforce for the Future business support programmes, which provide a useful model for further development of business support and leadership development investment in both sectors to support workforce planning – the significant links between WfTF and findings of the LSIP are highlighted within this report.

- The development of 'business centres' within FE colleges through the IOT infrastructure provides a useful model for further development of FE college-based capacity to engage proactively and reactively with industry

- Alignment with the work of Western Training Providers Network, bringing together the unique and often quite innovative offer of independent training providers meaningfully with the wider FE institution-based offer

- A number of West of England Strategic Plans and Strategies have priorities and objectives which link directly across to the LSIP findings such as the Local Industrial Strategy, Employment and Skills Plan and the Recovery Plan. For example, these key West of England Strategies and the priorities and objectives therein, prioritise workforce development, equality of employment opportunity for all residents, sector developments (both sectors within this report are key sectors in the WoE), supporting business growth and supporting upskilling and reskilling, all of which are highlighted within the LSIP findings.

- A number of specific programmes underway including the recently announced new national numeracy programme 'Multiply', under which Combined Authorities will be given a regional allocation for activity starting in the 2022/23 academic year. The provision will support individuals (unemployed and employed) who are 19+ and do not already have a Level 2 in maths. There is no single approach being prescribed as delivery will address our regional numeracy issues. Provision will also support employers to address skills shortages/issues in relation to maths. Clearly this programme allows scope for regional responsiveness to the need expressed by many employers for more support for core foundational skills.

- Other Combined Authority skills funding and programmes such as the Adult Education Budget (AEB), Digital Skills Investment Programme (DSIP), offer the opportunity to take the LSIP findings and use them to shape future provision. For instance, AEB funding already commissions delivery which supports functional skills gaps. This pre-

existing provision can be mapped with the business needs identified as part of the LSIP – helping to direct businesses towards existing training and/or also helping to inform future funding decisions.

In addition, it is clear from the findings in this LSIP that there is huge appetite for a greater level of flexibility and devolution of ability and mandate to shape the funding for education and training to meet regional priorities and industry needs. This is not only helpful in unlocking key barriers outlined by businesses in engaging effectively with skills and training providers, but also as a key precursor to unlocking the space and capacity in the system to innovate and tackle some of the biggest and most rapidly changing challenges quickly enough. With the pace of change so much faster on so many counts (technology, changing needs and pressures on sectors etc) than the current speed of change possible within skills and training design, there is huge value in enabling regions to have the flexibility to creatively pool resources across often siloed funding streams from different central government departments, as well as industry partners, at a meaningful scale linked to functional economic areas.

4.3.2 Connections Across Sector Systems

In both sectors, it is clear that the LSIP could hugely support the necessary development of systemic connections across different parts of the same sector. In AAE, for example, this would focus on the connections between Primes and supply chains, as explored above in sections 2 and 3 of this report.

In Social Care, perhaps even more urgently, there is a huge opportunity for the impact on the connection between Health and Care sectors, of undertaking change activities as outlined above. The impact alone of supporting the currently fragmented, largely SME based Care Sector, to develop a much stronger and joined up sector voice, would be wide ranging on the sector's ability to engage proactively with key regional and local government stakeholders, with training providers, and with Health sector partners to collaborate on a range of interventions into workforce development.

Intervention to support the sectors' ability overall to undertake workforce planning and business model development to build a much stronger system for workforce development and training into their business delivery model, would impact significantly on the scale and volume of the sector's engagement with training providers; it would also feed directly into the sector's ability to meaningfully contribute and add value to rapidly shifting approaches to health and care commissioning, the growing integration of Health and Care through the new ICS system, and the drive to improve the job quality, job security and pay for care workers who make up a critical and substantial proportion of the region's workforce.

4.4 SDF Specifics

Alongside the ongoing in-depth liaison (and the continuing development of modular delivery against currently identified business needs) there is further potential benefit to

supplementing the existing Institute of Technology's business board and internal mechanisms, with additional granular intelligence for further current needs analysis and foresighting on expected regional needs, and more generally additional SME and wider business audience engagement. The West of England Institute of Technology provides access to a collaborative network of seven colleges in the West of England Plus region and therefore facilitates effective and representative engagement with the FE sector.

Events organised during the trailblazer in partnership with the Institute of Technology were well-received and timely interventions into business needs – conversations are underway to ensure that meaningful collaboration can continue where necessary in this respect.

Both the internal LSIP team and the aerospace specialist working within the LSIP have provided ongoing summative assessments of needs and are working towards further integration within the IoT college group.

4.5 In Summary

Within the current system, the quality of engagement between industry and skill providers contains many pockets of excellent and innovative practice, but is not systematically meeting either business needs for skills, or skills providers needs for clear information and engagement to develop well-functioning and sustainable training provision based on business workforce planning. The proposals above set out a roadmap to a new system in which industry and skills providers have

- additional engagement mechanisms, complimenting and adding weight to their own pre-engagement activities e.g. Industry Advisory Boards, through which to effectively communicate and collaborate;
- the ability to link into and help shape access to flexible and industry responsive funding mechanisms for training and skills;
- a high level of capacity within industry to undertake workforce and skills planning
- a strong set of links back into regional economic strategy and wider related investment and programmes.

We recognise that this transition is not without sensitivities and challenges, not least around the relationships and mandates between different sections of industry sectors (larger versus smaller employers), different types of training providers, and the many tensions between supply and demand, between learner interests and business needs, amongst other things.

Nonetheless, it is clear there is a huge appetite across all regional stakeholders to work together towards a transformed system, and that there is a clear role for Business West in facilitating and convening the brokerage, convening and business support elements of this effort. There is interest in how LSIPS going forward could support:

- actual innovation work led by industry and training providers together (such as practical innovation, trials, tests, evaluation and roll out of new career pathways across diverse sectors). This 'test and learn' approach could link into and help to further shape existing provision;

- the infrastructure, forums, processes set out above to underpin this,
- further resource to research in depth workforce planning and skills needs regularly at sector level to plan training delivery in real time (this will not duplicate but add additional evidence to pre-existing workforce development planning programmes such as Workforce for the Future.)
- further resource to work through system challenges such as how best to integrate college-based provision and business engagement leadership, with innovation and tailored provision within the independent training provision sector, within the new evolved skills landscape

5 ANNEX Further Process Analysis

The LSIP Trailblazer has been a huge learning experience for all concerned. We have made some observations that sit beyond the scope of the main questions and brief of the LSIP as set out in the report above, but which we believe would be helpful for DFE Colleagues to be aware of in designing next LSIP phases.

5.1 Engagement Activities and Analysis

The overarching reflection we have taken from this process is that it has only been through real in-depth conversation where we have been able to meaningfully identify prioritised differences to the existing knowledge base of technical and other skills needs within these sectors. We welcome the chance the LSIP Trailblazer has provided to do this, and look forward to this being embedded and deepened in the LSIP system going forward.

The most important process-based reflections we made around engagement include:

- Utilising a **series of in-depth engagement methodologies** allowed us to **make changes to the script as understanding of sectoral challenges and needs grew**, which we do not believe is feasible in a similar way with outsourced research resource.

- Some businesses (both sectoral and training providers) feel that they have seen **numerous and similar short-term changes to the provision landscape and have been burnt before – ongoing confirmation of continuation and expected impact** is required to assuage some fears.

- Future LSIPs need to ensure they are able to **appropriately engage with national and regional stakeholders** without countrywide projects taking precedence.

- From an industry perspective it can feel **artificial to distinguish between technical skills and soft skills**. The line between the two is far more blurred in the context of business need, than when thinking about training programme design. It made sense within our direct engagement to support businesses to think through all their needs in the round, and then retrospectively work with skills providers to break down how these could be addressed through different types of training intervention. Even then, what are traditionally seen as 'soft skills' are often more helpfully understood as components of technical skills (for example adaptability to new tech; or customer service skill and techniques)

5.1 Timescales, Comms, and Project Management

- We made a conscious choice to **extend the WoE+ LSIP's engagement period until almost the contractual deadline**, so as to achieve as high an impact and robustness as possible. We feel this maximised the depth and quality of our findings to the greatest degree possible, but was not without its challenges, and put enormous pressure on the process of write-up and analysis which undoubtedly restricted the depth of collaborative, multi-stakeholder forward planning we could build in to the

tight timeframe. We relied heavily on the high quality of our existing relationships across the partnership and the willingness of all parties to work swiftly and efficiently with a high level of trust and delegation. However, we sincerely hope that the next phases are **more generous with timescales and requirements**, and allow for a much more in-depth and **well-paced phase for analysis and building findings into policy and programmes**, without this having to come at a cost of limiting the time for engagement and co-design with businesses.

- Connected to this: Business West will be allocating further time following the submission of this report to **produce more tailored and accessible reports on the outputs and findings to communicate these effectively** to industry partners. We would suggest that LSIPs – where deadlines are due in future phases - should be submitted initially in the formats of **executive summary, sectoral summaries, and a post-16 education facing report** in first instance rather than an overarching report. (The WoE+ LSIP trailblazer team wanted originally to return 6 shorter reports prior to the guidance release; aerospace current needs, aerospace future needs and the social care counterpart reports, plus one report on changes to delivery mechanisms and modes and one report on methodology evaluation.)

- The **timescale of the LSIP Trailblazer** didn't lend itself especially helpfully to **alignment with the SDF mechanisms** running concurrently. Whilst we were able to manage this through excellent relationships with the IoT partners, it would be useful if future LSIPs have more generous timelines overall, and if timeframe design does **seek to align** at least with some of the larger scale other national programmes the LSIP will naturally need to align with including **UKSPF / Multiply, Levelling Up funds, SDF, and AEB cycles**.

- Naturally, the **pandemic has had a huge and continuous impact** on the ability of all stakeholders to undertake the LSIP Trailblazer work. It impacted in every possible way ranging from the need to revert in person events to online (changing the nature of engagement in the process); the ability of business partners to participate at all in interviews and events (particularly in social care); the capacity of team members across the partnership (with almost all team members being incapacitated directly by covid themselves, for anywhere between 2 and 6 weeks at a time during the course of the Trailblazer, not to mention disruptions to childcare through schools and nurseries closing at various points). The project management of an already tight schedule had to continuously flex and adapt to constant disruptions to capacity as a result.

5.2 Readiness for Change/Uptake

We believe that 'galvanic' (awareness-raising) events are a vital part of this process for non-immediate skills needs and have significant importance in reinforcing the introduction of new technologies, peer leadership examples and recognition of opportunities to engage and learn meaningfully, via routes such as Global Business Innovation Programmes via UKRI and the IoT's Certificates of Future Technology.

Similarly, we perceived significant benefit to 'flags in sand' recognition events such as within hydrogen, to bring a business audience along with expected and potential changes without necessarily imposing technological, strategic and policy requirements for adaptation.

Businesses, training providers and stakeholders are all keen to investigate and prepare for skills needs differently and it is not necessarily for want of will this does not occur on a regional basis – there is a clearly identified need for the addition of capacity and mechanisms to support this transitional process.

There were some minor difficulties with some expected stakeholder engagement both due to timescales aligning with financial year end and their explicit desire to bid into future rounds of LSIP activity, which they saw as being less likely if they were contractually obligated to deliver within this project.

5.3 Suggested Alternative Structures and Content for Future LSIP Phases

Horizontality

The appears to be significant potential to investigate skills needs along the lines of 'horizontals' and technological drivers of change rather than sectorally or within verticals – colloquially and nationally there is some impetus and recognition that we are reaching several points of convergence, and this was reinforced within interview and evaluation sessions (such as by reports of IT tutors having to teach within motor technician courses and the expected continuation of this trend).

Regionally, initial identified themes that would benefit from this horizontal approach across sectors include:

- Hydrogen
- Electrification
- Digitalisation
- Robotics, Cobotics, Automation and Tele-operation
- IoT and Sensor technologies
- AI / ML

As well as researching business needs in these areas, it would also be helpful to allow space in future LSIPs to incorporate meaningful conversation guided by sector commonality in some of these identified technological opportunities, to maximise potential for sectors to cross-invest. Aerospace, for example, will most likely be one of the last adopters of hydrogen technologies, but one of the forerunners in considering it. If the LSIP can support affiliated clusters of sectors and partner industries together, there would be real scope for coordinated investment and development of skills and training provision that would leverage existing resources much more efficiently.

Internationality

Whilst not asked explicitly in the trailblazer questioning route, it appears that there is still some consternation attached to explicitly taking advantage of opportunities in Uk export and

trade, potential for some additional knowledge around import/export, global opportunities and additional requirements within SMEs for international trade.

Duplication

An internal and easily accessible database of knowledge of existing and upcoming government and government-funded projects (such as the Manufacturing the Future Workforce project and the formation of the 'future skills' department) should be part of core briefings for LSIP teams to avoid replication and to successfully absorb prior learnings for regional delineation and adaptation.

The explicit structure suggested in the LSIP trailblazer guidance may have impaired some creativity in report flow and structure as it was presented early on as the requisite method rather than suggestion.

6 Further Reading and Resources

6.1 Key Devolved Programmes Information (WECA Programmes)

Digital Skills Investment Programme

Future Bright

Workforce for the Future

6.2 Reports

West of England Skills Advisory Panel (SAP) Report January 2022

Heart of the South West Local Skills Report 2022-2024

Gloucestershire Skills Strategy 2022-2027

Business West Local Sector Skills Statements 2019

Manufacturing the Future Workforce Report 2020

EiBC - South Somerset Place Leadership Statement

ADS Industry Facts & Figures 2020 - Guide to the UK's aerospace, defence, security and space sectors

Engineering UK 2020 report

Bristol & Bath Invest – Key Sectors – Aerospace and Advanced Engineering

The State of the Adult Social Care Sector and Workforce – South West 2021

Skills for Care – Workforce Intelligence

The State of Health Care and Adult Social Care in England 2020-2021

Weston College – West of England Institute of Technology Skills for our Digital Future

All Change: Why Britain is so prone to policy re-invention, and what can be done about it – The Institute for Government, 14 March 2017

Unchartered: How to map the future together by Margaret Heffernan 2020 – Excerpt from OECD Forum

It's about Work... – Commission on Adult Vocational Teaching and Learning 2013

6.3 Event Recording

Jet Zero: Hydrogen & Skills Event 26 January 2022 (Recording)

6.4 Organisations

Business West – West of England Plus LSIP

West of England Combined Authority

West of England Institute of Technology

G First Local Enterprise Partnership

Heart of the South West Local Enterprise Partnership

Western Training Provider Network

Future Leap
West of England Aerospace Forum
National Composites Centre
Aerospace Technology Institute
Make UK (formerly Engineering Employers Federation)
Aerospace Growth Partnership
EngineeringUK
Tomorrow's Engineers
Workforce for the Future
High Value Manufacturing Catapult
Skills for Care
West of England Academic Health Science Network
Care and Support West
South West Manufacturing Advisory Service
City of Bristol College
South Gloucestershire and Stroud College
University of Gloucestershire
Cabot Learning Federation
Bath College
Weston College
Gloucestershire College
University of Bristol
Northern Council for Further Education
University of the West of England
Yeovil College
Coursera
Bath Spa University
University of Bath
Hartpury University and Hartpury College