WEST OF ENGLAND PLUS TRAILBLAZER LOCAL SKILLS IMPROVEMENT PLAN

Aerospace & Advanced Engineering Statement

BusinessWest

West of England Plus LSIP Trailblazer: Skills in the Aerospace and Advanced Engineering Sector

In 2021/2022, the Department for Education has funded eight 'Trailblazer' projects to test a new approach to developing employer-led regional skills strategy, with the intention to roll out a new system of 'Local Skills Improvement Plans' nationally. The 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. It focussed on two sectors: Social Care, and Aerospace and Advanced Engineering.

*This report draws out the **learnings and strategy recommendations for the Aerospace and Advanced Engineering sector** that the LSIP process produced. It sits alongside the corresponding [Sector Report for Social Care](#).*

The full LSIP Trailblazer report submitted to DfE is also available [here](#) and includes a methodology report, research findings on skills needs across two sectors, and a set of recommendations for changes needed, and actions possible, in driving forward collaborative approaches to skills design and delivery bringing together employers, skills providers and regional strategy bodies. This full report will inform DfE's design of the national roll out. It is also 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.

1   Background

What is the Local Skills Improvement Plan Trailblazer?

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.

What area did the research cover?

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 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.

Who was involved?

The WoE+ LSIP Trailblazer project gathered and reviewed in-depth and current business voice; to translate business needs into an understanding of skills needs. Our methodology was grounded in an in-depth and open-format discussion of business growth and needs, to provide input into how training provision can be designed and delivered.

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). We also ran awareness-raising events and communications, light-touch surveys and benefited from a great deal of partner collaboration.

We have worked in close partnership with two further bodies to lead and oversee the LSIP Trailblazer project:

- the West of England Institute of Technology, with who's **Strategic Development Fund (SDF)** programme the LSIP area aligns geographically. 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 West of England Combined Authority, which has acted as the recognised Mayoral Combined Authority for this LSIP Trailblazer and closely supported its development. The LSIP will inform a range of WECA-led strategies and programmes including the ongoing work of the Skills Advisory Panels, as well as imminent skills and economic development funding plans including the UK Shared Prosperity Fund, the DfE's new Multiply programme (focussed on adult numeracy), amongst others.

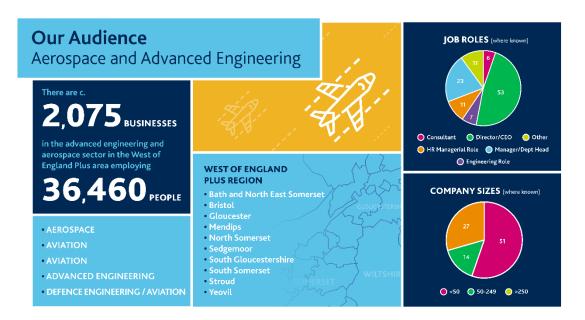We also worked with several important contracted partners including:

- MAS Partners as aerospace sector specialists (not engaged in the social care sector research)
- 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.

2 The Aerospace and Advanced Engineering (AAE) Sector: overview and current challenges

> The largest aerospace cluster in the UK (second 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 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.

Within the West of England, the sector is worth over £7 billion. The region is also 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. In the wider LSIP area, the sector

includes 2,975 businesses employing about 36,000 people (2020 ONS figures)**Error! Bookmark not defined.**, accounting for 5 % of jobs in the region.

What key challenges is the sector currently facing?

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, including for example the 2020 Engineering UK report into Educational Pathways[1], the HMV Catapult 2020 report, Manufacturing the Future Workforce[2], and the WECA's Green Skills Report 2021[3]. Key challenge points these and other research has reflected include:

- The impact of the shift towards new technologies on the sector, and pressures this will create on the skills base
- The opportunities of the rapidly growing 'green jobs' for the sector, particularly around green energy
- The low rate of awareness of the sector amongst 11-19 year olds (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)
- The relatively high ethnic diversity amongst the current pipeline into the industry from university (higher proportion of BAME entrants into sector at 30% than in student population at 26%) – but much lower within apprenticeship based starts
- The continued low rate of gender diversity in the sector, despite a gradual increase in past decade of female engineering and technology entrants
- Sector accounts for 26% of all apprenticeship starts in 2018 to 2019

[1] Engineering UK 2020 – Educational Pathways into Engineering
https://www.engineeringuk.com/media/232298/engineering-uk-report-2020.pdf
[2] HMV Catapult 2020 – Manufacturing the Future Workforce - https://hvm.catapult.org.uk/mtfw/
[3] 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

3 Research Findings

The in-depth insight shared by employers and skills providers can be grouped into five overarching themes:

- **Training and Skills** (including three sub-themes: Training content; Training Quality; and Training Delivery Methods.)

Driving forces shaping Training and Skills:

- **Recruitment/Retention;**
- **Changing demands on sector;**
- **Leadership / Management.**

Underpinning this:

- **Climate change and decarbonisation**

Theme 1: Training and Skills

A range of insights emerged around the need for training provision itself that can:

- 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

Training Content

Technical

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)

- o 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
- 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

Many organisations felt that degree programmes offer too narrow a focus on specific skill areas, meaning that once in employment, workers need further training 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 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.

Softer Skills
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 lacking in their staff and that they are not cohesively aware of dedicated formal training to develop this. Given that there are a wide range of available accredited pathways on offer within the FE sector around leadership and management – including apprenticeship pathways – this is either not being translated into sector specific versions of this type of training, 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 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.

Training Quality

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 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.

Several smaller employers felt there had been a discrepancy between the content they expected staff to be trained in and the content they were trained in, and that the quality of communication between employers and training providers was 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.

Conversely, the insights we received from larger companies who take on many apprenticeships and to high levels (e.g. Leonardo) were slightly different. Within bigger employers, 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 with FE institutions.

The AAE sector expressed a need for flexibility of modules, breadth of content, and improved communication between business and training provider.

There is a reported lack of training provision for manufacturing skills in the South West, and businesses also 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 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 shared concerns about the quality of new-starters and younger apprentices in terms of aptitude and attitude: this theme bears further investigation as it varied across the supply chain. This 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.

Training Delivery Models

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 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 also raised was 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.

Theme 2: Recruitment and Retention

Sector Brand / Reputation

A wide range of employers felt that the aerospace and engineering sector has an image problem for young people. whilst the higher tech end of the industry remains attractive particularly in areas of green technology, but also 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 earlier 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.

Another insight consistent across the sector was the reflection that there is a persistent lack of both gender and ethnicity. 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, often through psychology, sociology and biology disciplines. However, across the wider sector, there is still a prevalent lack of diversity at all levels.

Recruitment

There is a recruitment shortage in aerospace and advanced engineering, particularly within the SME supply chain end, in part due to the perception of the sector. The sector is often competing

with other jobs that are less skilled but similarly paid (for example in retail or customer service) and many employers report difficulty in finding people with the right aptitude and attitude, which was felt in general to be more important than initial technical skills, although some smaller specialised companies noted 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.

Retention

Whilst smaller employers experienced some 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 strong. The challenges are far more concentrated in the areas of bringing in a new pipeline of younger workers as older workers near retirement.

Theme 3: Changing Demands on Sector

We have divided this section into changes in the world outside the sector, which will directly impact on it (such as climate); and changing structures within the sector, of how work is organised (including technological shifts).

External pressures and changes

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 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. Attendance was strong, and this event led to a high level of conversions for further in-depth engagement sessions and continuity activities outside of direct LSIP activities. This also galvanised other conversations about potential replications of format for additional elements of the decarbonisation, 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 shared concerns that as technology progresses, greater automation of the business could result in deskilling of current roles and it was felt that there is a critical need for different job design and workforce planning, to adapt to further automation. An ageing workforce is leaving potential skills gaps that will be hard to fill as the sector transitions between old and new technologies.

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 supply chain businesses receive up-front investment to adopt new technologies that will soon be demanded by primes, otherwise there is a real risk that prime 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 prompting further exploration of how this could be formalised and incentivised.

Digitalisation

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 resource and time to translate into practical engineering skills.

Internal pressures and changes

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 and the perceived lack of appeal of this part of the sector to young people. There is a general lack of training budget in SME's and a common attitude of 'crossing that bridge when they get to it' rather than taking an advanced strategic planning approach.

Insight from several employers within smaller SMEs was that many of them have engineers and technical staff whom also shoulder responsibilities for HR, managerial and business development roles, for which they may not have the right support, training and capacity to do , and which is an additional challenge to manage.

Theme 4: Leadership, Management and Workforce Planning

To plan for, and logistically manage, the development and delivery of skills and training across a workforce, employers must have fundamental capacity for high quality leadership, management and workforce planning. This is a skillset critical to the high functioning of the wider sector and,

according to 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:

- **Workforce Planning and Capacity / Succession Planning**

As set out in sections above, a clear difference emerged between the larger scale primes, and smaller scale supply chain businesses. Primes in general appear to have strong skillsets 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 infrastructure in place for workforce planning to also tackle future skills needs (e.g. hydrogen) effectively.

- **Business Growth and Development**

Roles and skills that are specifically required by smaller SMEs include bid writing support, understanding the future landscape to know how best to prepare for it, and good leadership to navigate through. Many managers are in position based on length of experience and service within a technical role, but without accompanying support, training or experience in actual business development.

Theme 5: Sustainability, Climate Change and Decarbonisation

Climate and decarbonisation were one of the central themes explored through the LSIP. Two distinct areas emerged:, employers' views on managing the impact of climate and decarbonisation on their day-to-day operations; and the longer-term projected impact on the sector overall.

Managing Impact of Climate Change on Operations

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 .

Compliance with environmental standards was seen as the key driver of decarbonisation, demonstrating 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.

Managing Impact of Climate Change on Nature of Product / Service

The wider implications of climate change and the drive to net zero are hugely significant for the day-to-day work of the industry. For companies developing new technology, we heard a strong emphasis on specific skills needs relating to this, 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 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 early stage.

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

4   What Needs to Change and Why

Two key areas of change are clearly needed:

1) A New Approach to Skills Training Design
    *   Fundamental change in how technical and further education is designed to enable **modularity** and **portability**.
    *   Significant change in how **existing pathways** are **designed and delivered**, particularly how apprenticeship pathways are designed and funded
    *   **Employers being able to work creatively with training providers to design bespoke and tailored pathways** (in terms of modules required, length of overall training, intensity of time commitment of the individual employee / learner);
    *   A far greater **standardisation of portability of qualifications** across employers and also across accredited programmes (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)
    *   **Funding flexibility** so that all employers can develop training in this way, not just those with resources to directly commission it through independent training providers
    *   **Speed and agility –** so that training providers can identify and design new skills and training as fast as the technology develops to be more reactive to changing sector needs
    *   **Greater flexibility of training delivery methods** including more on the job training, and flexible delivery around both learner and business needs

2) System Approaches to Workforce Planning
    *   Much better capacity, time and confidence within employers (especially SMEs) to undertake workforce planning, and align day-to-day business models with the direct and indirect costs of training
    *   Culture change in the industry around its own role in leading on workforce planning, as a sector and at individual business level
    *   Delivery of 'just in case' pipelines of skills, not only 'just in time' – i.e. sector able to work together to make sure training pathways cover skills that are not currently needed by industry, but will be soon
    *   Much better support for SMEs within supply chains to engage with Primes to nurture and sustain their workforce resilience, technological and skills adaptations

How can these changes come about?
Three foundational steps will be needed to make these shifts possible.

*   **Leadership and Management Skills:** improving the quality and confidence of leadership and management within small businesses across the sector, to facilitate and unlock the

level of support and vision required to encourage wider parts of the workforce to undertake professional development, and to bring younger workers into work environments that are focussed on consistent career progression.

- **Shifting Reputations, Driving up Recruitment:** to unlock the pipeline into the lower productivity, smaller scale supply chain businesses within the AAE sector, and retain staff long enough to sustain career progression routes in that part of the sector

- **Changing the Paradigm: A Career Not a Job:** bringing together the idea of entering into a job with progression through a career pathway requires step change in treating recruitment as advertising 'a career' not 'a job'. This is a joint task for training providers and employers to coordinate recruitment to training pathways with recruitment to immediate vacancies, which are less attractive as a stand-alone job but much more attractive as a stepping-stone on to a longer career pathway.

How can industry drive all of this in practice?

All this can only happen with strong infrastructure in place to bring employers together across the sector; to ensure SMEs and micro-providers are able to engage; and to create partnerships and long-term relationships with training providers.

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. Resourcing infrastructure needed to bring employers together effectively and create mechanisms for training providers and employers to collaborate is critical.

How does this all fit with central and regional government strategy?

There is a huge range of existing activity and infrastructure in place within the region already 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 repeatedly 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 can be found at www.westofengland-ca.gov.uk.

There are also some significant challenges that industry partners, training providers and local and regional government face in doing this work:

- **Funding -** industry partners neither control nor shape design and deployment of skills funding, whilst training providers – whether independent or colleges – have consistently reflected the struggle faced between the content, design and delivery methods that being requested by employers, and the parameters within which they have to work and how funding is designed. 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.
- **Connecting different funding streams -** regional and local funding available for economic development and for skills is spread across many different funding streams (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 etc). These funding streams sit across many stakeholders including local government, combined authority, LEPs, sector bodies, and DWP, just to name a few. Joining these funding streams up strategically 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.
- **Training provider business model pressures -** FE institutions face a real tension between the drive to maximise uptake of course that are attractive to students based on their existing knowledge of industries, versus the drive to meet emerging new skills needs from industry and jobs that do not yet exist

5   Roadmap: recommendations and next steps

We have focussed our report back to Department for Education on three priorities we recommend they consider within future LSIP funding rounds:

Issue	Steps needed
Capacity and resource within skills sector: Colleges and independent training providers need 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	*There is an existing starting point within 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.*
Capacity and culture within Industry: Employers – in particular SMEs – 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.	*We are keen to support **the growth and strengthening of existing networks** e.g. Care Support West, as well as new specific forums / working groups, and build 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.*
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.	*Working collaboratively with the combined authority and other regional stakeholders, this includes making sure the LSIP can amplify and support wider regional structures such as the Skills Advisory Panels, providing a conduit to inform policy making. The granular intelligence gathered as part of the LSIP directly inform the West of England Combined Authority economic and skills priorities and plans, including shaping funding priorities. This will ensure there is a robust system in place to ensure WECA economic and skills priorities are informed by, and align with, industry needs to effectively skills funding and economic development programmes.*

What happens next?

Next steps at sector level

Business West will continue to support the regional IoT, which already has good relationships with bigger industry partners, to deepen and extend its reach into SMEs. There are three areas of intervention which Business West will focus on 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 SMEs to build up voice and advocacy within the sector.** This could include convening forums / networks directly, and / or supporting other industry networks and partners to engage SMEs 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.

Examples of New Approaches to Course Design

With further resources to strengthen joint working across industry and training providers, future LSIP work could support practical collaborations to generate a range of employer driven careers pathways.

The LSIP Trailblazer project already began to explore what new programmes could look like, for example around how to embed Hydrogen skills into existing pathways, and how to drive forward workforce development skills within the supply chain:

	AAE	Workforce development
Role	*Hydrogen*	*Leadership and Management within SMEs*
Skills	Knowledge to retrain and adjust existing roles, unique requirements for unused potential fuel, ranging from L3 mechanics and Electrical engineering and maintenance and repair through to design and foresighting	Workforce planning, organisational development, HR, business growth, in house learning and development, different approaches to wage systems within business models
Course Type	Required from L2 (ground operations and awareness) through to L7	CPD – modular mix of on job, online, and peer group / 1-2-1 business support led
Funding route	AEB (for level 3); industry /	AEB / industry. Could feed into longer term business / leadership apprenticeship pathways

The LSIP process has already begun to generate a range of new forums, momentum across businesses, and between key regional stakeholders. Throughout the current Trailblazer, the regional Skills Advisory Panels provided regular sounding boards and strategic contact point between the LSIPs and wider regional economic and skills strategy.

There are a number of clear current connections between the LSIP findings and recommendations and current strategies and programmes in the region, including:

- **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 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

- **Various West of England 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.

- **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, will support individuals (unemployed and employed) who are 19+ and do not already have a Level 2 in maths.

- **Other Combined Authority skills funding and programmes** such as the **Adult Education Budget (AEB)** and **Digital Skills Investment Programme (DSIP),** offer the opportunity to take the LSIP findings and use them to shape future provision.

WECA and Business West will continue to work closely to

- ensure the LSIP links into the forthcoming development of the UK Shared Prosperity Fund investment plans, including the delivery of Multiply;
- work with the IOT on the roll out of the SDF interventions;

- review 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.
- Identify opportunities to align and pool funds across the many different funding streams and programmes to achieve as much join-up as possible on skills and workforce planning investment

In Summary

Within the current system, engagement between industry and skill providers contains many pockets of excellent and innovative practice, but it does not systematically meet business needs for skills, or skills providers' needs for clear information and engagement, to develop well-functioning and sustainable training provision. 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.

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, 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 and business support elements of this effort. There is interest in how LSIPS going forward could support:

- 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
- 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